

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Nthabiseng Mahlumba

Date 2025/09/25 Method Email

## Comment

Dear Tetra 4 Team, I'm reaching out to ask if you'll be providing transportation services for attendees to the public event on October 2nd. If so, could you please share details on: - Availability of transportation - Pickup and drop-off locations - Any associated costs This information will help us plan and communicate with the community. Thank you for your time! Best regards

## Response

Good morning \*\*\*\*\*. I refer to your email below that Tetra4 shared with us. May I kindly request that MACUA direct communications regarding the Tetra4 Cluster 2 EIA application process to tetracluster2@eims.co.za in order for relevant correspondence to be adequately captured and addressed by the EAP. With respect to your query regarding transport, please note that in addition to the public meeting in Virginia on 2 October 2025, we have arranged 2 community focus group meetings on 1 October 2025 as follows: MEETING AND VENUE DATE TIME Community Focus Group Meeting - Stilte Community School Hall 1 October 12H00-14H00 Community Focus Group Meeting - Adamsonsvlei Community 1 October 16H00-18H00 Public Meeting - Virginia NG Kerk 2 October 12H00-14H00 By having the community meetings within the communities themselves, we aim to make it easy for community members to attend. MACUA is also more than welcome to attend any or all of the above meetings. Furthermore, we would be happy to arrange an additional focus group meeting with yourselves at a suitable venue should you deem this necessary. Please advise accordingly?

Date 2025/09/30 Method Email

## Comment

Hi EIMS Team, Just a friendly reminder about the transport inquiry for Tetra 4s public participation. Could you please provide an update or respond to our query at your earliest convenience? Thanks,

## Response

Good morning \*\*\*, Further to your mail below, we refer you to our communication below from last week in which we indicated that we are holding focus group meetings within the communities and therefore no transport arrangements are required. We again extend the offer to arrange a meeting with yourselves and await your feedback in this regard.

Date 2025/10/06 Method Email

## Comment

Dear EIMS Team, We are writing to formally accept the invitation to participate in the public participation event scheduled for the community. We confirm that the event will be attended by representatives from the community as a whole, including members from MACUA. As discussed, we propose that the public participation event be held on the 9th of October. We believe this date will allow for adequate preparation and ensure maximum community representation. Please let us know if this date is acceptable and provide further details on the event schedule, venue, and other logistical arrangements. Thank you

## Response

Good afternoon \*\*\*\*. Your below email and the request during last weeks meetings that we arrange a meeting in the Meloding community refers. I am unfortunately unavailable for the remainder of this week and therefore propose holding the Meloding Community meeting on Monday 13 October from 11am to 1pm. As community representatives, could you please suggest a suitable venue for us to consider within the community?

Date 2025/10/06 Method Email

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Nthabiseng Mahlumba

Comment	Response
Good day Regarding the venue, we need to book a place with electricity. Are you covering the costs? Most venues around here aren't free, and the church we usually use doesn't have electricity. Can we discuss the budget for the venue? Best regards	Hi ***. Could you suggest venues that do have electricity and sufficient space and we will make contact with the venue to discuss venue hire?

Mr Gert Oosthuizen

Date	2025/10/13	Method	Email
Comment	Response		
1. RE: COMMENTS ON THE REVISED ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PROGRAMME SUBMITTED IN RESPECT OF AN APPLICATION FOR ENVIRONMENTAL AUTHORIZATION BY TETRA4 FOR THE TETRA4 CLUSTER 2 GAS PRODUCTION PROJECT NEAR VIRGINIA, IN THE MASILONYANA AND MATJHABENG LOCAL MUNICIPALITIES, FREE STATE PROVINCE. I confirm that I am duly authorised to submit these comments on behalf of Optavit Boerdery (Pty) Ltd, the farming entity operating on the following farms and representing the following landowners: 1.1. Portion 1 and 3 of Farm Doornrivier 330 owned by Jacobus Hendrikus Oosthuizen; 1.2. Portion 2 of Farm Doornrivier 330 owned by Mandalay Trust; 1.3. Portion 4 of Farm Palmietkuil 328 owned by Mandalay Trust; and 1.4. Portion 0 of Farm Digito 642 owned by Mandalay Trust (the properties). These comments are submitted in respect of the Revised Environmental Impact Assessment (EIA) and Environmental Management Programme (EMPr) submitted for an Environmental Authorization (EA) by Environmental Impact Management Services (the EAP or EIMS) on behalf of Tetra4 (Pty) Ltd (the Applicant or Tetra4) to undertake a gas production project on various portions of land, including the properties operated on by Optavit. The EIA documentation was released on 10 September 2025 for comment by Interested and Affected Parties ("I&APs") on or before 13 October 2025 and therefore these comments are submitted within the period provided for public comment. We request that a copy of these comments be provided directly to the competent authority in this format in addition to them being included in your comments and response report. Kindly also provide us with the details of the responsible person at the Competent Authority. 2. In respect of its Phase II operation, it is anticipated that Tetra4 will drill a combined total of 48 wells across the properties. Given the extent of the above Optavit activities on the properties, it is evident that undertaking gas production activities will have a significant impact on Optavit's operations. EIMS originally published EIA documentation on 2 December 2022 for comment by I&APs on or before 24 January 2023. I duly submitted comments in respect of the original EIA documentation on 24 January 2023, within the allocated timeframe for public participation. The comments submitted in respect of the original EIA pertained to the following main issues: 1. Gaps and inadequate level of	1. Thank you for providing this clarification with respect to the submission of these comments. We confirm that a copy of these comments in the original format will be submitted to the Competent Authority as part of the final EIAR submission. In addition, this comments and response document as well as the Comments and Response Report (as part of the Public Participation Report) will be submitted. The responsible person at the Competent Authority as indicated on the Environmental Authorisation is: Ms Sinazo Mnyaka **** 2. A response to this comment was solicited from Tetra4 which is as follows: "Tetra4 acknowledges the importance of maintaining the integrity and continuity of existing farming operations on the property and has implemented measures to ensure that drilling activities are conducted with minimal disruption. In accordance with the land access agreements, Tetra4 will consult closely with the landowner prior to undertaking any activities or installing infrastructure on the property, ensuring that the precise location of drilling infrastructure is agreed to in writing and positioned to avoid unnecessary interference with agricultural operations. Where temporary disruptions may occur during critical farming periods such as planting, cultivation, spraying, or harvesting, these impacts are formally recognised and managed through agreed compensation mechanisms. Furthermore, Tetra4 accepts full responsibility for any damage caused by its employees or contractors to property infrastructure, crops, livestock, fences, roads, or water sources, and will promptly remedy or compensate for such impacts. Through this structured consultation, careful siting of infrastructure, and clear accountability for any damages, Tetra4 is committed to ensuring that the farmer's operations can continue with the least possible disturbance while drilling activities are undertaken." 3. While it is acknowledged that points 1 to 3 correctly indicate the required updates as per the Ministers decision on the appeal, kindly note that points 4 and 5 are not reflected as such in the Ministers decision. 4. Thank you for this comment which is noted. Kindly refer to Appendix B10 contained in Appendix 3 of the EIA Report in which the comments and responses referred to in terms of the original EIA report are detailed. It is understood that this comment serves as an introduction to the detailed comments submitted below. As such, please refer to the responses below which address each of these bullets. 5. With reference to Section 6 of the EIA Report as well as the CCA included in Appendix 4 of the EIA Report, according to the		

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information in the EIA; 2. Inadequacy of consultative processes; 3. Negative impact significance for groundwater, farmland and landowners and land value; 4. Inclusion of specific mitigation measures as conditions to the environmental authorization; 5. Impacts on agricultural resources and landowner farming operations not properly considered; 6. Biased Information in the EIA; and 7. Inadequate and deficient consideration of needs and desirability. 3. On 13 July 2023, the Director-General of the Department of Mineral Resources (the Director General) made a decision authorizing the activities applied for by Tetra4. However, by 18 August 2023, several appeals had been lodged against decision to grant the EA. The Minister responsible for environmental affairs (the Minister) handed down their decision on the appeal on 1 August 2024. In terms of this appeal decision, the Applicant was directed to update the EIA and submit same for reconsideration by the Department of Mineral Resources. The Minister directed that the Applicant attend to update the EIA in the following respects: 1. Update the Climate Change Specialist Study; 2. Consider the climate change impacts in the delineation of the 1:100-year floodline; 3. Update the Geohydrological Impact Specialist Study following additional baseline aquifer characterisation; 4. Failure to include and consider new information which has come to light since the initial EIA was published for comment in December 2022; and 5. Inadequate public participation process. 4. While I maintain that the comments that I submitted in respect of the original EIA remain relevant to the consideration of the updated EIA, I acknowledge that the consideration of the EA was remitted to the Director-General for the consideration of limited issues and I accordingly confine these comments to those issues. In particular, these comments and concerns, which are submitted in respect of the updated EIA, relate to the following deficiencies in the EIA: 1. Failure to adequately elaborate on the claim that LNG is a viable “bridging fuel” for reducing greenhouse gas (GHG) emissions as part of expanded Climate Change Assessment (CCA); 2. Failure to adequately assess the impact of climate change on the project; 3. Failure to incorporate climate change considerations into assessment of need and desirability; and 4. Failure to properly assess impact of groundwater and agricultural activities. 5. At paragraph 3.2.2.1 of the Minister’s appeal decision, the Minister specifically directs that the CCA should be expanded to include further information relating to the claim that LNG is a viable “bridging fuel” for reducing GHG emissions. It is apparent from the EIA and the CCA attached thereto that the EAP has not expanded on this consideration in the revised EIA in a manner that would place the decision-maker in a better position to consider this assertion. What remains in the revised EIA is a cursory mention of LNG as a bridging fuel at page 113 where it is stated that “Promotion of gas as a bridging fuel towards South Africa achieving the renewable energy use targets as opposed to the extensive use of fossil fuels in the short to medium term”. It should be noted that this statement is made under the heading of “Potential Project Benefits”. The concept of LNG as a bridging fuel is then again mentioned at page 116 where it is simply stated that “Gas is not regarded as a cleaner energy than “green energy” sources, for example solar, water and wind, but is undoubtedly “cleaner” than coal. As a “bridging” source of energy,

Integrated Resource Plan (IRP) published in October 2025, South Africa will need to significantly expand locally sourced natural gas to meet future energy demands, especially as coal is phased down and renewable integration accelerates. Natural gas is positioned as a transition fuel to complement renewables. Current imports from Mozambique’s Pande-Temane fields will be depleted by 2028, increasing the demand for locally sourced gas to reduce reliance on imports and ensure energy security. The Integrated Resource Plan 2025 (IRP) makes provision to increase the national energy mix natural gas contribution 6 000MW by 2030 (with a projection of 16 000MW in the total energy mix by 2040). While the need and desirability contained in Section 6 of the EIA Report discusses methane as a bridging fuel, it should also be noted that the need and desirability discussion also addresses the global demand for helium (which this project is also targeting). Furthermore, the motivation for the project as a bridge is not based on the EAPs consideration but rather the EAP references existing policy and strategy for South Africa which recognised natural gas as a bridge. The National Development Plan (NDP) envisions that by 2030 South Africa will have an energy sector that promotes economic growth and development through adequate investment in energy infrastructure. At just 2.6% of the country’s total energy mix, South Africa’s natural gas market is small, but with all its inherent benefits, it has the potential to completely change the economy by stimulating economic growth and development, stability, and job creation. The meaningful addition of natural gas to the country’s energy mix will rejuvenate an overburdened, out dated energy infrastructure and reduce cyclical energy shortfalls. Perhaps even more importantly, it will stimulate the economy by allowing business and industry to lower their energy and operational spend while also creating significant numbers of new jobs and skills development opportunities. Considering that nearly 90% of South Africa’s existing natural gas demand is supplied by a single entity, namely Sasol Gas, the associated economic and employment risks of limited supply options, development and sourcing of alternative natural gas resources are high. It is imperative to ensure economic and employment stability within the natural gas sector by introducing more suppliers. Southern Africa’s gas potential has been revealed by major discoveries that, when developed, widen options for greater regional energy trade. South Africa’s gas resource potential remains to be quantified but raises the prospect of possible domestic production in the longer term. Globally the natural gas industry has moved into a supply surplus, favouring a larger role for gas as a clean fossil fuel in many countries’ energy policies. A challenge in developing the gas sector is to bring gas demand and supply on stream at the same time and spread geographically to stimulate broader localized demand through South Africa. Without such localized gas demand, it is difficult to develop distributed gas supply and without such distributed gas supply it is difficult to develop localized gas demand. One way of breaking this impasse is to create significant “anchor” gas demand through the development of a gas-to power programme. In pursuit of adding generating capacity, lowering carbon emissions, enhancing energy security and supporting industrial development, South Africa has taken the first steps in a gas-to-power programme to be executed under the Integrated Resource Plan, aiming to increase the national energy mix natural gas

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there is sufficient cause to rate gas as economically needed and desirable". The only addition to the above in the revised EIA is where the EAP continues on page 117 to elaborate on South Africa's Integrated Resource Plan (IRP) and simply states the following: "The production of thermal energy in SA is expected to decrease by 10.5 GW by 2030, with a decrease of 25% in the current energy generation potential due to the shutting down of coal-fired power stations. Although the aim is to eventually replace fossil fuels completely, there is a strong case to use natural gas in the interim to replace coal for baseload capacity." The EAP then notably does not elaborate on what this so-called "strong case" might be. The above analysis not only falls woefully short of the requirement set by the Minister, but it is also fundamentally flawed. Recent studies contest the assertion that LNG is a viable substitute for coal and other carbon intensive fuels. The primary reasoning for this is that renewable alternatives such as wind or solar power are becoming increasingly cost-effective and accessible. This calls into question whether gas will remain competitive against the renewable energy market. There is also a substantial risk of stranded gas infrastructure as a result due to a predicted global decline in demand for gas<sup>1</sup>. For this reason, gas power is neither needed nor is it desirable and there is no case for LNG to be used as a so-called "bridging fuel". On the basis that the EIA and CCA fails to adequately elaborate on LNG as a viable bridging fuel, I submit that these documents are fundamentally flawed and fall short of what is required by the Minister's directive. 6. It is also noted that, at paragraph 3.2.2.1 of the Minister's appeal decision, the Minister directs that the CCA be expanded upon in order to provide a more detailed analysis of the impacts on climate change on the activities associated with the project. I have obtained legal advice and I am advised that this directive is consistent with the findings of the Court in *Earthlife*,<sup>2</sup> wherein the Court upholds a wide ambit of the climate change impact assessment, which was described as follows: "A climate change impact assessment in relation to the construction of a coal fire power station ordinarily would comprise an assessment of (i) the extent to which a proposed coal fired power station will contribute to climate change over its lifetime, by quantifying its GHG emissions during construction, operation and decommissioning; (ii) the resilience of the coal-fired power station to climate change, taking into account how climate change will impact on its operation, through factors such as rising temperatures, diminishing water supply, and extreme weather patterns; and (iii) how these impacts may be avoided, mitigated, or remedied." To this end, I acknowledge that the revised EIA does include an assessment of the impacts which climate change will have on the project area. In particular, it is noted that climate change will result in the following: 1. Increased heat extremes; 2. Increased risk of flooding; 3. Increased risk of wildfires and 26 increased fire danger days by 2050; and 4. A decrease in groundwater potential; However, despite the fact that the EAP conducts a relatively comprehensive assessment of the potential impacts which climate change may have on the project area, these impacts are not assessed in respect of the project itself. There is no consideration of the resilience of the project to these climate change impacts and there is no consideration of how these impacts might affect the project. Specifically, it is

contribution to 6 000MW of energy production from gas by 2030. With reference to Section 9.14.9.2 of the EIA Report (and the CCA Report), even though CH<sub>4</sub> emissions are 28 times more effective than CO<sub>2</sub> at trapping heat in the atmosphere over a 100-year timescale (US EPA, 2024a), studies show gas has a lower life cycle GHG impact than coal with a lifetime of roughly a decade (PACE, 2015). According to the UK Department for Environment Food & Rural Affairs (DEFRA), natural gas releases 46% less CO<sub>2</sub>-eq lifecycle emissions compared to coal-fired facilities and 49% less than diesel-fired facilities for the same electricity generation rate. The IPCC reports, based on the median value, indicate natural gas to result in less than 51% direct- and 40% lifecycle CO<sub>2</sub>-eq emissions compared to CO<sub>2</sub>-eq emissions from coal (Schlömer S., 2014). Coal extraction generally has a larger overall environmental footprint than natural gas extraction, causing extensive land disturbance, habitat destruction, acid mine drainage, and long-term soil and water contamination. Natural gas extraction on the other hand typically has a smaller surface footprint with subsequent lower environmental impacts (albeit not no environmental impacts as acknowledged, identified and assessed in Section 10 of the EIA Report). It is specifically acknowledged in Section 6.3.1 of the EIA Report that there is more consensus than ever that GHG's cause global warming, that burning of natural gas still emits CO<sub>2</sub> and that methane is a potent GHG. The detailed Climate Change Assessment considered both Scope 1, Scope 2 and Scope 3 emissions. The EAP does not motivate for the project beyond what is required to be included in the NEMA EIA Regulations and the Need and Desirability Guideline. The "need and desirability" section of the EIA Report is intended to contextualise the project within the broader policy goals. It is not the purpose of the "need and desirability" section to reconsider, reassess, and represent the merits of existing government policies nor to extend the assessment of impacts beyond those of the activity for which authorisation is being sought. The Tetra4 Virginia gas resource has been proven through Cluster 1 gas production and therefore it can be assumed that there is a low likelihood of the proposed Cluster 2 becoming a stranded resource. It is acknowledged by the EAP that there is a need to move away from fossil and non-renewable resources however in line with government policy this needs to be undertaken in a controlled scale and pace. The transition is reflected in the climate change policy and associated energy policy. It is also important to note that this project is not only aiming to extract natural gas but also helium which is an important resource globally. Lastly, it should be noted that the requirements for financial provisioning were undertaken, and the scheduled and unscheduled costs were calculated and included in Appendix 6 of the EIA Report. Kindly note that the link provided in the footnote within this original comment submission only provides an abstract to this paper. The associated link to the paper on the website address provided does not work and therefore further consideration of this paper was not possible. 6. The climate change assessment contained in the CCA specialist report was considered by the Hydrologist, Geohydrologist and EAP in determining and modelling the potential impacts on the project infrastructure as a result of climate change. The update Hydrological Assessment includes a revised floodline delineation based on the predicted changes to rainfall as a result of climate change. Figure 75 contained in

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unclear whether the increase in extreme weather events such as flood or heat waves may impact infrastructure and whether this might interrupt operation. It is also unclear whether fires and flooding may increase the risk of unplanned events such as well blowouts. As a result of the failure to assess how climate change may impact the operation, there is also no consideration of how the impacts of climate change may be avoided, mitigated or remedied. This falls short of what is required in terms of the relevant case law and the Minister's directive. I submit that the revised EIA is flawed on this basis. 7. On 13 August 2025, the High Court in the Western Cape handed down judgment in the matter of The Green Connection NPC and Natural Justice v Minister of Forestry, Fisheries and Others. The applicants argued on the third ground of the review in this matter that the motivation for the need and desirability of the proposed project is fundamentally flawed on the basis that: 1. There is no assessment of the climate change impacts which production (i.e., from the burning of fossil fuels discovered as a result of exploration) will have; and 2. This climate change impact is then not weighed against the positive economic impacts which the proposed project will have in the assessment of need and desirability. The Court ultimately found in favour of the applicants on this point, stating that "It makes no sense to rely on the positive consequences of production stage for purposes of considering an application at exploration stage, only to resist considering the negative consequences of the production stage when it comes to consideration of climate change". On the basis of the findings of the Court in the Green Connection judgment, in its consideration of the climate change impacts of the project, the EAP is required to include a consideration of the impact that the burning of gas would have. It is further required that the impacts of the proposed production activities so considered be incorporated into the assessment of need and desirability of the project. 8. It is noted that the current assessment of need and desirability in the revised EIA is asymmetric and seemingly focuses only on the positive economic impacts which the proposed production activities may have. In particular, the EAP includes an entire consideration of the demand for natural gas under its assessment of need and desirability. The EAP highlights the fact that natural gas is required for the following: 1. Electric power generation; 2. Fuel for heating; 3. Residential heating and cooking; and 4. Operation of compressors in the transportation sector. However, despite detailing the demand for LNG, the assessment of need and desirability does not juxtapose these supposed positive impacts with the climate change impacts that will result from the burning of gas as a result of demand. Additionally, on page 117 of the revised EIA, the EAP has inserted new content in which it attempts to show that LNG is needed as part of South Africa's Integrated Resource Plan. However, the EAP notably fails to mention that the IRP only envisages demand for approximately 6 petajoules of new gas utilisation from 2024 and thereafter 19 petajoules per annum from 2027. It has been noted in the media that Phase II of the Virginia Gas Project will increase Tetra4's production output of LNG by 34 000 gigajoules per day. This is the equivalent of more than 12 petajoules per annum. The EAP makes no attempt to account for this gap nor why it is desirable or even permissible to produce gas in volumes which do not accord with the

the updated EIAR presents the baseline (original) 1:100 year floodline delineation overlayed with the climate change adjusted 1:100 year floodline delineation and it is noted that the variation between the baseline floodline projection compared to the climate change floodline projection is minimal and therefore there are no changes required to the impact assessment or water use licencing requirements. The Physical Risks of Climate Change on the Project's Construction and Operations were reported under Section 4.4.3 of the CCA. Well blowouts, as understood, are mainly caused by uncontrolled pressure in the wellbore, with climate-related hazards such as floods and fires only indirectly contributing by compromising safety systems and infrastructure. Impacts from climate change can be avoided/ mitigated through engineering design to ensure equipment can handle heat and temperature increases, and extreme weather conditions such as strong winds, increased humidity and floods. 7. In the matter of The Green Connection NPC and Natural Justice v Minister of Forestry, Fisheries and Others, a distinction must be made that this matter dealt with an application for exploration and not production and it is therefore a fundamentally different application to the current Tetra4 application (which is for production activities). The Climate Change Assessment commissioned for the Tetra4 EIA quantified the GHG emissions from gas flaring both as a result of gas processing and gas productions (refer to Table 12 of the CCA report). Furthermore, the Scope 1, 2 and 3 emissions as a result of production activities were calculated as part of the CCA with the overall impacts of the Scope 3 emissions (downstream emissions from the use of the gas) predicted to have a low negative impact. Based on the low predicted climate change impact as a result of this project, no material change to the economic impacts would be realised. Your attention is further drawn to the fifth ground of appeal which, amongst other, dealt with the need a desirability assessment and specifically the consideration of climate change in the need and desirability assessment. The Ministers evaluation and findings against this ground of appeal was that the "motivation for the Need and Desirability for the proposed development does comply with the 2014 EIA Regulations and the Needs and Desirability Guideline". The Minister furthermore acknowledged that the CCIA report considered Scope 1, 2 and 3 activities in relation to the construction and operational related GHG emissions from the proposed project and the Ministers conclusion was that he was satisfied that the GHG emissions have been considered and evaluated by the DMRE in its decision-making process. 8. Thank you for this comment and kindly refer to the response provided to comment 5 and 7 above which addresses this comment.

The reference to the Integrated Resource Plan (IRP) in the EIA serves only to contextualise the broader role of natural gas within South Africa's evolving energy mix and should not be interpreted as a prescriptive cap on total gas production in the country. The IRP is an electricity sector planning instrument developed by the Department of Mineral and Petroleum Resources to guide future electricity generation capacity and does not regulate or limit upstream natural gas production volumes. Its projections regarding gas demand relate specifically to gas utilised for electricity generation within the national power system and do not account for the broader industrial, commercial, transport, or export markets in which liquefied natural gas (LNG) may be utilised. Tetra4's



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IRP. To the extent that the EAP presents an asymmetric assessment of need and desirability, which specifically does not take into account the full scope of climate change impacts of production, this assessment falls foul of what is required in terms of Item 3(1)(f) of Appendix 3 to the Environmental Impact Assessment Regulations, 2014, promulgated under the NEMA and what is required in terms of the relevant case law. As such, I submit that the revised EIA is flawed. 9. In my initial comments, I highlighted the fact that the hydrogeological study confirms that the most significant impact of the project on the regional groundwater regime is deterioration of the potable Karoo aquifer water quality and that there will be a medium negative impact on water sources with implementation of proposed mitigation measures. The hydrologist further acknowledges that "groundwater is the sole water resource to the landowners and rural communities with[in] the study area". Despite the above, no attempt is made in the hydrogeological assessment or the EIA to consider the significance of this impact specifically in relation to agriculture as well as livelihoods and food security. It is a particular concern to farmers in the area that even a medium impact can have severe ramifications for farming operations. It was therefore incumbent on the EAP to consider how the significance of this impact on agriculture can be avoided, mitigated or remedied. Of concern, the above issue has not been remedied as part of the revised EIA and is a significant gap in the EIA process. In this respect, the EIA falls short of the requirements of Item 2(d)(i) and 3(j) of Appendix 3 to the EIA Regulations which provides that the nature, significance, consequence, extent, duration, and probability of the impacts occurring, as well as their cumulative impacts, must be assessed. 10. As mentioned above, the Minister's decision limits the aspects in respect of which the EIA was required to be updated and in respect of which the Director General is required to make their decision. However, the initial EIA was published for comment on 2 December 2022. This means that over two and a half years have transpired since the initial EIA was first published for comment. In this time, Tetra4 have expanded the scope of their Phase I operations and, based on the experiences gained as part of their activities, it is assumed that Tetra4 would have a better understanding of its proposed activities and that new information would have come to light regarding the impacts which the proposed project may have. We are aware of the fact that Tetra4 has also taken further decisions regarding the technology to be utilised as part of the project, as well as the limitations of this technology, and the project footprint. This new information has incorrectly been excluded from the revised EIA by the project proponent. By way of example, I have been provided with layout maps from Tetra4 which detail the exact position of the wells, pipelines, bunkers and other infrastructure which Tetra4 intends to place on my property as part of its Phase II operation. These layouts, however, have not been included as an annexure to the revised EIA. This illustrates that relevant information has been omitted from this revised EIA. This falls short of what is required in terms of Item 3(1)(l)(ii) of Appendix 3 to the EIA Regulations. Notwithstanding the above, I have also been provided with layout maps from Tetra4 for infrastructure to be placed on the properties apparently under the auspices of the Phase I

proposed Phase II expansion of the Virginia Gas Project is aligned with national policy objectives aimed at diversifying South Africa's energy mix, reducing reliance on imported fuels, and promoting the development of a domestic gas economy. Importantly, the LNG produced at the Virginia Gas Plant is not exclusively intended for electricity generation but is primarily supplied into alternative markets such as industrial fuel switching, transport fuel applications, and other commercial energy uses where LNG provides a cleaner alternative to diesel, heavy fuel oil, and coal. These applications fall outside the scope of the IRP's electricity-generation modelling. The projected Phase II production capacity of approximately 34 000 GJ/day (approximately 12 PJ per annum) must therefore be viewed in the context of total national gas demand, which is expected to grow significantly as South Africa transitions toward a lower-carbon energy system. Various national policy frameworks, including the Gas Utilisation Master Plan (GUMP), recognise the need to expand domestic gas supply infrastructure to support industrial decarbonisation, energy security, and economic development. The Virginia Gas Project represents one of the few domestic sources of natural gas in South Africa and therefore contributes to reducing reliance on imported gas while strengthening national energy resilience. Furthermore, domestic LNG production plays an important transitional role in enabling industries to switch from higher-emission fuels to lower-carbon alternatives. In this regard, natural gas is widely recognised internationally as a transition fuel that supports decarbonisation while maintaining energy reliability and affordability. The scale of production proposed for Phase II is therefore consistent with broader national policy objectives aimed at developing a domestic gas market and supporting the transition toward a more diversified and lower emission energy system. Accordingly, the comparison drawn between Tetra4's proposed LNG production volumes and the IRP projections for gas use in electricity generation is not directly applicable, as the IRP does not represent a regulatory ceiling on gas production nor does it account for the full spectrum of gas demand across the South African economy. 9. It should be noted that all impacts should be viewed as potential impacts which may occur, however no impacts are definite. The medium negative impact rating represents a conservative worst-case estimate, and the residual risk could be rated as low with appropriate implementation of defined mitigation measures. While the geohydrological report confirms that aquifer deterioration is the main risk, it clearly states that the significance of this impact once mitigation is applied is Low to Medium Negative. The assessment applied a worst-case approach to identify the most significant possible outcomes. The impact rating assumes the contaminant enters the aquifer. However, the principal mitigation (adequate well construction) aims to eliminate any chance of leakage. The comment suggests a widespread "regional" deterioration. However, the numerical modelling shows that the impact will be localized. The assessment incorporates an integrated groundwater monitoring program with boreholes specifically sited for early detection. This enables immediate remedial action-such as pumping/treating-prior to the impact reaching the "medium" level of significance at sensitive receptors. A significant conclusion from the hydrogeologist is the recognition that groundwater constitutes the sole water resource for the area. Although the national

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Mr Gert Oosthuizen

authorisation. It is apparent to me that there is a significant overlap between the activities Tetra4 intends to proceed with under the umbrella of Phase I, and the activities which it previously indicated would take place under Phase II. This has significant ramifications for landowners, in particular farmers, who have a commercial interest in the planning for their properties. It is also a significant cause for confusion which makes it difficult to understand the overall scope of impacts and disturbance on my properties. I am advised that Items 3(1)(h)(viii) and 3(1)(p) of Appendix 3 to the EIA Regulations requires that the possible mitigation measures that could be applied to an activity be included in the EIA. However, what is also evident from our experiences from Phase I is that the revised EIA should include mitigation measures which stipulate the minimum distance from staff residences and homesteads from which Tetra4 may drill well heads. At present there is no such recommendation included in the revised EIA. However, as part of its Phase I activities, Tetra4 has proposed to drill wells within a 200m radius of residences which, in turn, has a significant social impact on residents, particularly in respect of security and their enjoyment of the property. Another experience from Phase I is that there will be wells drilled which ultimately need to be capped insofar as they are deemed to not produce the required amount of gas. It is noted that the revised EIA does not provide clarity on if or how these wells will be monitored to ensure that they do not leak or cause any other impact or increased risk to properties nor are any mitigation measures proposed to deal with these risks. This furthermore falls foul of what is required in terms of Item 3(1)(j) of Appendix 3 to the EIA Regulations. As a result of the above, there is relevant information which should have been taken into consideration as part of the EIA which has not been so considered, specifically measures which were required to be included in the EIA in terms of Items 3(1)(h)(viii) and 3(1)(p) of Appendix 3 to the EIA Regulations. A decision granted on the basis of the revised EIA would furthermore fall short of section 24(4)(b)(ii) of the NEMA which requires that mitigation measures be investigated to keep adverse impacts to a minimum. 11. Another experience from which Tetra4 and its EAP should have gained further knowledge, and which information should have been reflected in the revised EIA was the commissioning of an Agricultural Economist Study. The revised EIA recommends "In cases where there the [sic] farmer does not agree with the compensation offered by Tetra4 related to loss of potential income due to exploration, construction or operational activities, Tetra 4 must appoint an agricultural economist at their cost to determine what the actual losses will be to the farmers due to the drilling and trenching activities on their properties". It bears mentioning that this recommendation is listed under the sub-category "mitigation measures" and is repeated on page 484 under "Recommendations for Inclusion in Integrated Decision". Landowners have been engaged by Tetra4 to negotiate the Phase II Land Access and Use Agreements. Pursuant to these negotiations, there was a disagreement between the parties regarding compensation. As such, Tetra4 commissioned a report entitled "An Estimation of the Total Gross Margin for Different Agricultural Enterprises in the Virginia Region of the Free State Province". The Landowners, however, contended that this report was not ostensibly an

hydrogeological map designates the regional aquifer system as a Minor Aquifer, the report explicitly states that local dependence on this resource overrides the broader classification. In the absence of any viable alternative water supply, any impact on the aquifer would effectively elevate its local status to that of a Sole Source Aquifer. This triggers far more stringent protection and management obligations. Consequently, the assessment determines that the project may only proceed if the applicant can conclusively demonstrate both the technical capability and financial capacity to fully safeguard the aquifer, given that any failure would have existential implications for the local community. The comment can be addressed by distinguishing between the hydrogeological scope (resource protection) and the socio-economic scope (livelihoods), while highlighting that the hydrogeologist explicitly prioritized the protection of the agricultural water source. While the hydrogeological report does not calculate financial losses for farmers (which is typically the scope of a Social or Economic Impact Assessment), it explicitly validates the critical nature of the resource for agriculture. The report states that the shallow, intergranular aquifer is important to local groundwater users as it forms the sole source of water supply in the region. By classifying it as a sole source aquifer, the specialist scientifically acknowledges that the loss of this resource would be catastrophic for the users (farmers/communities), thereby validating the concern regarding "severe ramifications." The critique suggests the EAP failed to consider how to avoid impacts on agriculture. However, the mitigation measures are specifically designed to isolate the agricultural water source from the gas operations:

- Well Construction as Mitigation: The report details that the gas wells are constructed to seal off the "shallow potable Karoo aquifers" (used for agriculture) from the deeper gas bearing zones using casing and cement. This is a direct engineering intervention to prevent the impact on the farming water source.
- Avoidance Strategy: The report recommends that "Any development and/or drilling which takes place within the primary porosity aquifer associated with alluvium material... must be avoided where possible". This is a specific avoidance strategy to protect the high-yield zones often used for irrigation and livestock.

The assertion that the EIA falls short of the regulations regarding the assessment of impact nature, significance, and cumulative effects is incorrect. The geohydrological report dedicates an entire section (Section 16) to an impact assessment methodology that explicitly incorporates every criterion listed in the criticism. The "gap" alleged in this comment appears to be a disagreement with the findings of the assessment (i.e., that the residual risk is acceptable) rather than a valid procedural critique. The document provides evidence that the nature, significance, consequence, extent, duration, probability, and cumulative impacts were assessed in strict accordance with Item 3(j) of Appendix 3 to the EIA Regulations. 10. Feedback has been obtained from Tetra4 on this comment and it is understood that Tetra4 have expanded the scope of their Phase I operations and based on the recent experiences, have indeed gained a better understanding of its proposed activities regarding geological lithologies and environmental compliance resolutions. The impacts over the past few years have remained the same as they relate to soil erosion, groundwater quality preservation, air quality, fugitive emissions,

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Mr Gert Oosthuizen

Agricultural Economist Study and, moreover, did not account for the realities of the losses which would be experienced by the individual landowners as the report was not site specific. Landowners accordingly had to commission their own agricultural studies at their own cost, to counter the findings in the Tetra4 report. The primary issues here are that Tetra4 were required to commission a full Agricultural Economist Study and, additionally, this Study should have been subject to public participation so that I&APs were provided with an opportunity to formally comment on same. This is confirmed by Item 1(1)(f) of Appendix 4 to the EIA Regulations, which requires that an EMPR include a description of proposed impact management actions. Under section 23(1)(a) of the EIA Regulations, the EMPR, inclusive of this information, must be subject to public participation. In this instance however, no Agricultural Economist Study was included as an annexure to the EMPR, nor were the specific impact management actions and/or mitigation measures which would have been included therein reflected in the EMPR. This falls short of what is required in terms of the NEMA and its regulations, specifically Items 3(1)(o) and (p) of Appendix 3 to the EIA Regulations. Again, I am advised that the matter of The Green Connection NPC and Natural Justice v Minister of Forestry, Fisheries and Others is relevant here. In this matter, the Court found that the fact that the Oil Spill Contingency Plan and Blow Out Contingency Plan had not been subject to public participation was a fatal flaw in the environmental assessment process, which rendered the decision to grant authorization, and the decision to confirm that authorisation on appeal, reviewable. On the basis of the above, I submit that the failure of the revised EIA to include a full Agricultural Economist Study and subject that Study to a public participation process is a significant flaw in the revised EIA. 12. I am of the view that the EIA in its current form falls short of what is required in terms of the NEMA and its regulations in that the following has not been adequately assessed: 1. The revised EIA and CCA fails to adequately elaborate on LNG as a viable bridging fuel. 2. The revised EIA and CCA fails to assess how climate change may impact the operation, and there is also no consideration of how the impacts of climate change may be avoided, mitigated or remedied. 3. The assessment of need and desirable is asymmetric as it fails to account for the full scope of climate change impacts that production will have. As such, it falls foul of what is required in terms of Item 3(1)(f) of Schedule 3 to the Environmental Impact Assessment Regulations, 2014, promulgated under the NEMA and what is required in terms of the relevant case law. 4. The significance of the impact on groundwater, specifically in relation to agriculture as well as livelihoods and food security, has not been adequately assessed. 5. The revised EIA does not include new information which has come to light in the over two and half years since the initial EIA was published for comment, including proposed layout maps and additional mitigation measures which are required to manage the impacts of the project. 6. The public participation process was inadequate in that a full Agricultural Economist Study was not included for consideration and comment by I&APs. On this basis, I conclude that the EIA is flawed and an EA cannot be granted on the basis thereof as such a decision would fall short of what is required in terms of s240 of the NEMA. Please

vegetation protection and surface water. This is primarily because the activity applied for has remained unchanged. Tetra4 has used a variety of technologies to be utilised as part of the project with regards to locating gas fracture. This includes various software and geological mapping strategies. As with any form of technology, there are inevitable limitations which Tetra4 has attempted to counter act by using a multiplicity of approaches. This approach increases the location of gas bearing structures thereby reducing impact footprint. The aforesaid technologies are not invasive. The revised EIA provides sufficient spatial and technical information to enable the competent authority to assess environmental impacts as required by the EIA Regulations. The layouts referenced in this comment constitute indicative planning layouts rather than final engineering designs. Environmental assessments are undertaken on the basis of development envelopes and disturbance corridors, which ensure that the maximum potential impacts are assessed. The absence of "preliminary" engineering layouts as annexures does not constitute a regulatory omission under Appendix 3 of the EIA Regulations. Final infrastructure siting remains subject to detailed design, environmental constraints, and landowner consultation, ensuring that agricultural activities and land use planning are appropriately accommodated. Feedback has been obtained from Tetra4 on this comment, and it is put forward that large-scale gas field developments such as the Virginia Gas Project are inherently iterative and modular in design, with infrastructure layouts refined progressively as engineering, geological, and operational information becomes available. Phase I and Phase II of the Virginia Gas Project are separate development phases subject to distinct environmental authorisations under NEMA. All current activities are confined to the approved Phase I Environmental Authorisation and EMPR, and no Phase II infrastructure may be constructed until the required approvals are obtained. Infrastructure layouts shared with landowners represent indicative planning envelopes for consultation and engineering refinement, not final infrastructure siting. The apparent spatial proximity between Phase I and Phase II infrastructure reflects the integrated and phased nature of gas field development, where shared access routes and infrastructure corridors are common. The Phase II EIA specifically assesses incremental and cumulative impacts relative to Phase I, while final infrastructure placement on private land is subject to landowner consultation and negotiated access agreements, ensuring agricultural activities are appropriately accommodated. In order to mitigate adverse impacts on residential areas or homesteads, mitigation included in the EIA include: "Drilling site should not be situated near visually sensitive areas or residential areas unless agreed to by the relevant landowner.". The relevant landowner therefore has a say in the distance of drilling from the relevant homestead structures. Numerous other specific conditions are included in the EIAR and EMPR and specifically identified for inclusion in the decision (refer to section 13.4 of the EIAR) to mitigate adverse impacts on landowners and occupiers. A detailed groundwater management plan and monitoring plan has been prepared and included in Section 17 and Section 18 of the Geohydrological Impact Assessment report. As per the responses above, it is incorrect to infer that the EIA falls short of the sections referred to in this comment.



## Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Mr Gert Oosthuizen

confirm receipt of these comments, and that it has been provided to the Competent Authority in this form. Please provide the information of the relevant contact/responsible person at the Competent Authority. We reserve our right to submit further comments in respect of the current EIA, including should further information be provided.

11. The references to the requirement for an Agricultural Economist Study in the case of a dispute as you quote above would become legally binding when the Cluster 2 EA is issued and acted upon. In terms of the Phase II Land Access and Use Agreements being referred to, these would be guided by the current Cluster 1 EA (2017). Accordingly, the concern raised should be directed to Tetra4 under the auspices of the 2017 EA and its relevant provisions. Notwithstanding the above, Tetra4 will be legally obliged to comply with all the mitigation measures and conditions of authorisation for Cluster 2 (including the updated EMPR) if a positive decision is rendered and enacted. Kindly refer to the response directly above. The requirement for this study to be subject to public participation as part of this EIAR is pre-emptive as the study would be property specific (if and when a dispute arises) and furthermore this study would be based upon a specific perceived loss of economic value. Kindly refer to the response directly above. With reference to the above responses, we would respectfully disagree that the referenced finding in the matter of The Green Connection NPC and Natural Justice v Minister of Forestry, Fisheries and Others has similarity to the requirement for a site specific Agricultural Economist Study to settle a landowner dispute in future. Further to our responses above, various specialist studies were commissioned as part of this EIAR including a Social Impact Assessment, Economic Impact Assessment and a Soil and Agricultural Impact Assessment which identified and assessed potential generic impacts across the entire application area. The requirement for an Agricultural Economist Study was included as part of an unforeseen disagreement between Tetra4 and any specific landowners on the final work to be performed on a respective property. 12. The Physical Risks of Climate Change on the Project's Construction and Operations were reported under Section 4.4.3 of the Climate Change Assessment Report (refer to Appendix 4 of the EIA Report). Impacts from climate change can be avoided/ mitigated through engineering design to ensure equipment can handle heat and temperature increases, and extreme weather conditions such as strong winds, increased humidity and floods. As indicated in the updated hydrological impact assessment (Appendix 4 and Section 9.8 of the Final EIA Report) and specifically the updated floodline delineation which considers climate change adjusted rainfall, the overall impact of climate change on the extent of potential flooding is not significantly different to the original floodline delineation. As such, the extent of potential impact on the project infrastructure has been adequately delineated and assessed in the EIA Report. The need and desirability section of the EIA report is informed by and linked to the outcomes of the EIA process and has been compiled in accordance with the Need and Desirability Guideline published by the DFFE. The EIA Report identified and assessed climate change impacts (including adaptation and vulnerability- refer to Section 9.14 and 10.2) and the impact on biodiversity (refer to Section 9.11 and 10.2). Within the groundwater impact assessment (refer to Appendix 4 and Section 9.9 of the EIA Report), it is specifically acknowledged that groundwater is the primary source of water in the area. The relevant impacts identified and assessed in the groundwater report (and Section 10 of the EIA Report) specifically focus on potential impacts on groundwater resources. With respect to the comment on the

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Mr Gert Oosthuizen

revised EIA Report purported to not include new information which has come to light, no specific detail or evidence of what detail was purported to be missing is provided. As such, it is difficult to provide a targeted response to this comment. Kindly note that new information has been considered and included where relevant including but not limited to the latest IRP 2025, updated climate change studies, updated geohydrology including further hydrocensus, etc. With respect to the comment relating to the Agricultural Economist Study, kindly note that this study would be pre-emptive at this stage as the specific impacts of wells and pipelines on a specific farm are to be discussed and agreed with the relevant landowners prior to construction. In the absence of the final landowner agreed project infrastructure, it would not be possible to quantify the exact economic impact on a particular land parcel.

Date 2025/10/13 Method Email

### Comment

Good afternoon \*\* \*\* Attached please find my comments on the revised environmental impact assessment and environmental management programme in regards to the Tetra4 Cluster2 Gas Production Project. Please will you confirm receipt of this email? Kind regards,

### Response

Good day Gert, Your Comments have been received and noted. A response will be forwarded to you as soon as it is finalised. For any further queries please do not hesitate to contact us.

Canny Mothapo

Date 2025/09/26 Method Email

### Comment

Good morning, Thank you for the EIA notification, may you kindly resend the attachments to environment@caa.co.za and delist all other SACAA email addresses on your database. Kindly save and send your environmental impact analysis reports/meeting requests and request for comments to environment@caa.co.za, going forward please. Regards

### Response

Good day, Your email has been noted and the database has been updated accordingly

Ms Nazley Towfie

Date 2024/08/29 Method Email

### Comment

I trust this email finds you well. I would like to register as an I&AP for the proposed Tetra4 Cluster 2 near Welkom/Virginia area. Please add the following two emails on the list:

### Response

Thank you for your email. I confirm that you have been registered as an I&AP for the Tetra4 Cluster 2 project.

Mr Siphesihle Mvundla

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Mr Siphesihle Mvundla

Date 2025/10/07 Method Email

Comment

Hello \*\*\*\*, Thank you sharing these with us. Best

Response

Good day, As requested during the public meetings held in Stilte Community and NG Virginia Kerk on 01 October 2025 and 02 October 2025 respectively, please find attached documents for your perusal. Attached to this email is the Non-Technical Executive Summary of the Environmental Impact Assessment Report in both English and Afrikaans, a copy of the PowerPoint Presentation, and the notification letter. Note that the full Environmental Impact Assessment Report is available on our website (URL provided below). A data-free website is available upon request. Please take note that the public comment and review period ends on Monday the 13th of October 2025. For further information that may not be included as an attachment in this email please refer to our website <https://www.eims.co.za/2025/09/09/1473ea-cluster2-tetra4/>. For any queries and/or comments please do not hesitate to contact us, remember to include the reference number 1473 on all correspondence.

Lola Trollip

Date 2022/04/07 Method Email

Comment

Please send me the documents regarding the above. Kind regards

Response

Good day Lola, Please find the second part to my previous email, as explained. Attached herewith are the Background Information Documents in English and Afrikaans. If you have any comments or queries, please feel free to contact EIMS Kind regards,

Date 2022/04/07 Method Email

Comment

Please send me the documents regarding the above. Kind regards

Response

Good day Lola, Thank you for your email. Due to the size of the attachments, I will send the requested documents in two email parts, apologies for the inconvenience this may cause. Attached herewith are the cadastral maps relating to the proposed project. Please note, you will be notified of any further public participation opportunities for the proposed Tetra4 Cluster 2 project as they become available. If you have any comments or queries, please feel free to contact EIMS Kind regards,

Date 2022/04/26 Method Email

Comment

Good day Please urgently send me the Interested and Affected Parties Registration Documents.

Response

Dear Lola, please find the attached Interested and Affected Party registration form as requested.

## Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

### Lola Trollip

Kindest regards

If you have any queries or comments, please feel free to contact EIMS.

Date 2022/04/29 Method Email

#### Comment

Attached is the Interested and Affected Parties form for Metz Farm Kind regards

#### Response

Dear Lola, Thank you for your correspondence, we have received the attached Interested and Affected Party (I&AP) registration form. Please note that you have been registered as and I&AP for the Tetra4 Cluster 2 project. As a registered I&AP you will be notified of public participation opportunities as and when they become available. Should you have any queries or comments, please feel free to contact EIMS. Kind regards,

Date 2022/06/15 Method Email

#### Comment

Please Can you confirm that we have already registered as I&AP's. Kind Regards L TROLLIP JB KOTZE

#### Response

Good day Lola, We confirm that you have already been registered on the Tetra4 Cluster 2 Gas Gathering and Production Project. Would you kindly confirm Mr. JB Kotze's email address so that we can also add it to our distribution list. Should you have any comments and/or queries, please feel free to contact EIMS. Kind Regards,

### Sibo Mdluli

Date 2022/05/20 Method Email

#### Comment

As per telephone discussion. For Consultation with the DWS Free State Regional Office Upper Orange and Middle Vaal kindly send the documents as follows: Dr T Ntili Provincial Head: Free State Department of Water and Sanitation Private Bag 528 Bloemfontein 9300 For courier our physical address is as follows: Dr T Ntili Provincial Head: Free State Department of Water and Sanitation 2nd Floor Bloem Plaza Building Cnr Charlotte Maxeke and East Burger Street Bloemfontein 9300 You may get clarity on all water use authorization and registration matters from Mr Vernon Blair Kindly send both hardcopy and disc documents.

#### Response

Good day Sibho, Thank you for the clarification. Please note, you will be deregistered as an I&AP for the Tetra4 Cluster 2 project. Further consultation will be conveyed to the Provincial head as per your explanation. Should you have any further comments or queries, please feel free to contact EIMS. Kind regards,

### Mr George Nel

Date 2022/05/20 Method Email

#### Comment

Morning, Please register the Dept Water and Sanitation – Free State as an Interested and

#### Response

Good day, Thank you for your correspondence, we have the Department of Water and

## Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

### Mr George Nel

Affected Party Dept Water and Sanitation 2nd Floor Bloem Plaza East Burger Street Bloemfontein 051 405 9000 Thank you

Sanitation – Free State in our I&AP database. Please confirm if we need to deregister the National Department of Water and Sanitation on this project for further Public Participation opportunities. Should you have any further comments or queries, please feel free to contact EIMS. Kind regards,

### Mr John Geeringh

Date 2022/05/20 Method Email

#### Comment

Please send me a KMZ file of the affected area. Kind regards

#### Response

Dear Mr Geeringh, Please find the attached KMZ file outlining the boundary of the affected area. Should you have any further comments or queries, please feel free to contact EIMS. Kind Regards,

### Ms Natasha Higgitt

Date 2022/06/15 Method Email

#### Comment

Good morning, Please note that all development applications are processed via our online portal, the South African Heritage Resources Information System (SAHRIS) found at the following link: <http://sahra.org.za/sahris/>. We do not accept emailed, posted, hardcopy, faxed, website links or DropBox links as official submissions. Please create an application on SAHRIS and upload all documents pertaining to the Environmental Authorisation Application Process. As per section 24(4)b(iii) of NEMA and section 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA), an assessment of heritage resources must form part of the process and the assessment must comply with section 38(3) of the NHRA. Once all documents including all appendices are uploaded to the case applications, please ensure that the status of the case is changed from DRAFT to SUBMITTED. Please ensure that all documents produced as part of the EA process are submitted as part of the application.

#### Response

Good day Natasha, Thank you for your email. We note the contents thereof. Please note, an application will be created on the SAHRIS platform and all documents pertaining to the environmental authorisation application will be uploaded as indicated in your email below. Should you have any further comments and/or queries, please feel free to contact EIMS. Kind regards,

### Thami Hadebe

Date 2022/05/20 Method Email

#### Comment

Dear Mr Magaqa, Your wayleave application with project reference number Bw/qm/1473 dated 20 May 2022 has reference. Transnet Pipelines, a division of Transnet SOC Limited, is not affected by the proposal. Your awareness of the existence of Transnet's pipeline servitudes

#### Response

Dear Mr Hadebe, We kindly confirm receipt of your email, and your comment has been noted. Should you have any further comments or queries, please feel free to contact EIMS. Kind regards,



## Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

### Thami Hadebe

and concern for their integrity is highly appreciated. This authorisation shall be valid for 48 months from the date - 20 May 2022. Yours Sincerely

### Mr Livhuwani Ndou

Date 2022/08/08 Method Email

#### Comment

Dear Zanele For consideration. NB: Applicant:- Please direct all future correspondences in this regard to Zanele Manyathi. Kind regards Ndou

#### Response

Greetings Livhuwani, Thank you for your correspondence. Please note that you have been deregistered from the Tetra4 Cluster 2 Gas Production project. Should you have any comments and/or queries, please feel free to contact EIMS. Regards,

### Zanele Manyathi

Date 2022/07/29 Method Email

#### Comment

Dear Siba, The email below and the attached are for your attention. Regards Zanele

#### Response

No response was required. The email was forwarded to the relevant case officer internally and EIMS was copied.

### Ms Nadia Hetzel

Date 2022/06/20 Method Email

#### Comment

Dear Mr Magaqa, We refer to the abovementioned matter and confirm that we are acting on behalf of AFGRI Operations (Pty) Ltd herein. Your reference number is 1473. Kindly find attached hereto our client's interested and affected registration form. Please provide us with all the documentation and/or reports in respect of this project in order for us to advise our client. We trust you find the above in order and await your reply. Kind Regards,

#### Response

Dear Ms Hetzel, Thank you for your correspondence. We acknowledge receipt of your filled Interested and Affected Party (I&AP) registration form and confirm that you have been registered as an I&AP for the proposed Tetra4 Cluster 2 Gas Gathering and Production Project. Attached herewith is the Background Information Document (BID) to the aforementioned project. For further available documentation on the proposed project please visit our website (<https://www.eims.co.za/public-participation/>). Please note, as a registered I&AP you will be notified of public participation opportunities as and when they become available for this project. Should you have any comments and/or queries, please feel free to contact EIMS. Kind regards,

Date 2022/08/22 Method Email

#### Comment

Dear Qaphela, We have requested all documents previously in respect of this project, which we

#### Response

Good day Nadia, Please be advised that a response to your initial email was provided as

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Ms Nadia Hetzel

have not yet received. Kindly indicate how AFGRI will be affected by this project. Kind  
Regards,

attached. Kindly advise on the properties owned by AFGRI within or in close proximity to the  
application area. Kind regards,

Mr Paul Lado

Date 2023/05/11 Method Email

Comment

Good afternoon Mr. Magaqa Your Notice dated 6 March 2023, with reference 1473/QM/bw, advising that Tetra4’s Integrated Water and Waste Management Plan is available for public review and comment, refers. Kindly find annexed hereto objections raised on behalf of the Mining and Environmental Justice Communities Network of South Africa (MEJCON-SA) and the Mining Affected Communities United in Action (MACUA). Thanking you Paul Wani Lado Attorney

Response

Dear I&AP, Please see the included link to a downloadable file including responses to your comments. The link and associated file includes a table of responses to the comments noted as well as appendices and other relevant documentation. Should you have any queries, please let me know. Please also confirm receipt of this email and if you have been able to access the documents.  
<https://www.dropbox.com/sh/b8ipztc43jg1g0c/AAA9amWkZon9uLIrc2VCzOyda/CER?dl=0&lst=>

Date 2023/06/20 Method Email

Comment

Good morning Mr. James Thank you for your e-mail. We acknowledge receipt of the contents thereof. In an e-mail to EIMS dated 14 June 2023 we had advised Mr. Magaqa that: “In looking at Appendix 4.5 to the Tetra4 Cluster 2 FEIAR documents (Geohydrology Assessment), we note that the Water Quality Analysis Laboratory Certificate is missing from page 211. We assume that this was excluded in error.” Along with the documents provided, which we are thankful for, would you also be in a position to kindly provide us with the aforementioned Water Quality Analysis Lab Certificate from the Geohydrology Report? Best, Paul

Response

Good morning Mr Lado. As requested, kindly find attached the water quality certificates. Please note that the Cluster 2 application documentation was removed from our website as the consultation periods for the EIA and WULA have been concluded. Kind regards,

Date 2025/10/13 Method Email

Comment

Dear \*\*\* Kindly find attached hereto CER on behalf of MEJCON-SA and MACUA’s comments with regards to Tetra4’s revised Cluster 2 EIA. We trust that our clients’ comments will be duly considered and addressed. Thanking you,

Response

Good day Mr. \*\*\*, Please note that the comments have been received and noted. Please be advised that a response will be forwarded as soon as it is finalised. For any further queries please do not hesitate to contact us.

Date 2025/10/13 Method Email

Comment

1. OBJECTION TO TETRA4’s REVISED CLUSTER 2 EIA OUR CLIENTS: MINING AND ENVIRONMENTAL JUSTICE COMMUNITIES NETWORK OF SOUTH AFRICA AND MINING

Response

1. Thank you for your comment and the clarification provided on behalf of MEJCON-SA and MACUA. It is noted that certain concerns are raised herewith which are addressed in detail in

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Mr Paul Lado

AFFECTED COMMUNITIES UNITED IN ACTION. We refer to your Notice on 09 September 2025 that your client's revised EIA was available for public review and comment. We submit these comments on behalf of the Mining and Environmental Justice Community Network of South Africa (MEJCON-SA) and Mining Affected Communities United in Action (MACUA). MEJCON-SA comprises a network of communities, community-based organisations and community members whose environmental and human rights are impacted by extractives industries. MEJCONSA was constituted in October 2012 with one of its main objectives being promoting and defending the environmental and human rights of communities that are both directly and indirectly affected by extraction. Its members play an active role in fighting for this objective and ensuring the sustainable use of natural resources. MACUA serves as a platform for community members and mine workers find and build solidarity between different forms of struggle in order to ensure a democracy wherein the needs of people are placed before the greed of profits. MACUA affirms that there is no authority that is greater than the will of the people. MACUA works towards respect for human rights, the promotion of and respect for women's rights, economic, environmental and social justice, a participatory democracy that involves inclusive decision-making and solidarity with the working class. Tetra4 (Pty) LTD (Tetra4) seeks to expand its gas and helium production at its current site near the town of Virginia in Free State, South Africa. Tetra4 previously applied for an environmental authorisation (EA) for Cluster 2 and was granted one on 13 July 2023. The granting of this environmental authorisation was appealed and on 1 August 2024 the Minister of Forestry, Fisheries and the Environment set aside the Cluster 2 EA. Tetra4 were ordered to revise the specialist studies in the cluster 2 EIA and ensure that the revised studies were available for public comment. In particular, the Groundwater Impact Assessment report and the Climate Change Impact Assessment (CCIA) were impugned and they were ordered to be revised to address the concerns raised by the experts in the EA appeal lodged in 2023 to the initial Cluster 2 EA. It is our submission that considerable flaws remain in the aforementioned reports, which flaws we detail below and in the attached standalone reports. Our concerns regarding the project thus remain, and they are; (a) the shortcomings in the groundwater impact analysis, (b) the failure to comprehensively consider climate change impacts, (c) the failure to conduct adequate public participation, (d) the lack of necessity and desirability of the project, (e) the impact on agriculture and tourism and (f) the fact that it is irrational and dangerous to authorise projects with egregious impacts when the state lacks the resources and capacity to adequately ensure compliance with the conditions of the EA and environmental laws. These concerns are laid out below. 2. The 2023 Appeal cited numerous deficiencies and failure to adequately consider the project's groundwater impacts in the Groundwater Impact Assessment (the "2022 GWIA") supporting the original EIAR. The 2023 Appeal is attached hereto as Annexure A1. The 2023 appeal included a critique of the 2022 GWIA prepared by Dr. Steven Campbell, Consulting Geologist and Hydrogeologist (the "Campbell Critique") (appended as Annexure A2). The Campbell Critique decried the scarcity of site specific geology

the specific comments and responses provided below. We trust you find this in order. During the public participation process, it was observed that MACUA appeared to engage primarily with its own members or affiliated communities, rather than representing all affected communities. At the Adamsonsvlei community focus group meeting, representatives of MACUA arrived prior to the scheduled start despite the meeting being intended for a different community. Following discussion with the EAP and the public participation team, it was agreed that MACUA would depart so that engagement with the Adamsonsvlei community could proceed as planned. At the Meloding community focus group meeting, which was arranged at MACUA's request, differing views were expressed regarding MACUA's representativeness. Some attendees indicated that MACUA did not represent their interests and suggested that the organisation's focus was primarily on opportunities for its own members. 2. Please note that the responses to these groundwater related comments have been prepared by the EAP in consultation with the appointed groundwater specialist. The Campbell Critique (dated July 2023) relied on the initial EIA and original GWIA. The Revised GWIA (refer to report ref. HG-R-22-004-V5 dated July 2025) explicitly acknowledges the 2023 grounds of appeal and details the new work undertaken to address them. The main objectives addressed as part of the revised report included: i. Gather more site-specific geological and hydrogeological information. Additional site work, i.e., drilling and testing of site characterisation boreholes to determine site specific hydraulic parameters and to inform the conceptual model. ii. The conceptual groundwater model should be refined and updated with newly gathered site-specific information. iii. Potential source terms should be clearly defined, i.e., what is the risk of contamination of potential waste material. iv. Water flow and water qualities between various flow components should be defined more clearly. v. Additional information is required on the mitigation measures of contact water storage facilities i.e., will facilities be lined, where is water sourced from and what will the water quality be. vi. Details of the construction of the gas wells should be addressed. vii. Details of the stratigraphy and hydrogeology of the gas wells are required. viii. Incorporate all newly gathered site characterisation information as well as newly formulated conceptual model into the numerical groundwater flow and pollution plume migration model. The Revised Assessment (2025) explicitly incorporated a new "Phase C: Site Characterisation" to generate more site specific geological and hydrogeological data as requested and entails the following: - 44 (30 = Cluster 1 and 14 = Cluster 2) geophysical traverses were conducted to delineate sub-surface lineaments. The latter equates to a combined total length of >10.0km of geophysical traverses. - Furthermore, two aeromagnetic geophysical surveys were conducted (Xcalibur, 2023) covering the entire Cluster 2 application area, in which regional geological lineaments i.e., fault zones as well as dyke structures were clearly delineated. - Following the geophysical surveys, a total of eleven (11) new boreholes (6 = Cluster 1 and 5 = Cluster 2) were drilled. The latter equates to a combined drilling of 800m and were strategically positioned to specifically target various lithological units within the application area. - Newly established site characterisation boreholes were subjected to hydraulic testing with a total of 12 constant discharge pump tests conducted.

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and hydrogeology, despite data having been presumably gleaned during the Cluster 1 exploration and production phases. Furthermore, the computer-generated groundwater flow model for the Cluster 2 area was deemed to be inadequate and had no regard to the complex nature of fractured-rock aquifers. The contamination simulations for TDS and methane migration were said to be unreliable. 2.1. The Campbell Critique called on Tetra4 to address the data gaps and associated flaws identified in their computer modelling and contamination simulations, to specify a more robust monitoring well network and groundwater monitoring plan and to formulate specific groundwater and remediation plans. The Minister, in his decision of 1 Augst 2024 in which the Cluster 2 environmental authorisation was set aside, ordered Tetra4 to address Dr. Campbell's concerns. 2.2. A report prepared by Dr. Fanie de Lange and Dr. Anton Lukas at Sustainable Surface and Groundwater Solutions look at Tetra4's revised groundwater impact assessment ("the Dr. de Lange report"). The report is attached hereto as Annexure A3. Dr. de Lange's report identified significant concerns with the revised groundwater assessment, particularly regarding its methodology, data interpretation, and numerical modelling. These issues raise doubts about the reliability and accuracy of the findings, which are crucial for decision-making regarding the project's environmental impact. 2.3. The Dr. de Lange report criticised the site characterization process utilised and highlighted flaws in the geophysical survey and drilling activities. Dr. de Lange's report raises concerns about Tetra4's interpretation of aquifer testing data, noting that the chosen analytical solutions lacked justification and were applied without a clear understanding of the aquifer characteristics. This raises questions about the validity of the groundwater parameters used in the numerical model. 2.4. Other numerical modelling aspects were also found to be problematic. The use of constant head boundaries to simulate rivers is considered inappropriate by Dr. de Lange and Dr. Lukas in this context, as it overlooks areas where river infiltration might occur. The model's treatment of known faults and fractures as porous equivalents rather than discrete features is another point of concern, as it could lead to inaccurate predictions regarding contaminant migration. Additionally, the report criticized the inclusion of a dolerite sill layer in the model without supporting data, which could affect groundwater flow and contaminant transport. The modelling also lacked detail on crucial parameters such as diffusion coefficients and failed to incorporate multiphase models necessary for accurate simulation of methane migration. 2.5. Dr. de Lange's report suggests that the revised groundwater impact assessment remains fundamentally flawed and does not provide a reliable basis for decision-making. Given the issues identified in the site characterisation, aquifer testing, and numerical modelling, the report calls for further evaluation and refinement of the groundwater impact assessment. Without these improvements, the groundwater risks associated with the Cluster 2 expansion may not be accurately understood, potentially leading to misguided decisions on the project's environmental impact. 3. Furthermore, the 2023 Appeal cited numerous deficiencies and failure to adequately consider the project's climate change impacts in the Climate Change

Additionally, to these tests, another 9 privately owned boreholes were also tested, bringing the total tested boreholes to 21 boreholes. - Borehole receptors and geosites visited as part of the Cluster 2 application equates to a total of 182 (89 sites visited as part of the 2022 investigation and another 93 sites visited as part of 2025 investigation). Additionally, to this, 26 existing monitoring boreholes were also incorporated into the data evaluation. - The regional groundwater flow behaviour was evaluated by applying data derived from 82 boreholes while the regional groundwater quality was based on a total of 83 boreholes. - The conceptual model was formulated based on all data gathered as part of the site characterisation phase. Furthermore, the conceptual model were informed by review and interpretation of more than 740 exploration boreholes. - Based on the newly gathered data and refined conceptual model formulated, the existing model was updated to better reflect the complex hydrogeology. 2.1. Please note that the responses to these groundwater related comments have been prepared by the EAP in consultation with the appointed groundwater specialist. The applicant provided responses to the Campbell Critique in their responding statements to the appeal. The DFFE then considered these submissions and determined that certain aspects, but not all the Cambell Critique were justified. The revised EIR addressed these shortcomings. The critique called for robust monitoring and specific remediation plans. The Revised Assessment includes a more detailed Groundwater Management Plan and an expanded monitoring network. It is the opinion of the EAP that the revised assessment and resultant EIA Report addresses the shortcomings identified by the DFFE. It is noted that no further submissions were provided from Dr Campbell on the revised GWIA which aimed to address the initial Campbell Critique. 2.2. Please note that the responses to these groundwater related comments have been prepared by the EAP in consultation with the appointed groundwater specialist. The concerns raised by Dr De Lange are addressed in detail in the response report attached. The critique suggests the methodology was insufficient. However, the Revised Assessment demonstrates a comprehensive data gathering process adhering to best practise standards. To address uncertainty, the simulations applied a worst case approach. This ensures that even if minor data gaps exist, the environmental risk is likely overstated rather than understated, providing a safe margin for decision-making. As also stated in the revised report, where model assumptions were made or reference values used, a conservative approach was followed. Groundwater modelling is a decision-support tool, not an exact replica of field conditions. It is designed to simulate key hydrogeological processes as realistically as possible using available data and justified assumptions; however, due to subsurface complexity and data limitations, model outputs cannot be regarded as 100% accurate. Whilst the comments received from Dr De Lange are valuable and appreciated, it is respectfully the specialists and EAPs opinions that the revised assessment does provide reliable and accurate findings which allow for decision-making on this application for environmental authorisation. 2.3. Please note that the responses to these groundwater related comments have been prepared by the EAP in consultation with the appointed groundwater specialist. All site characterisation i.e. borehole citing, drilling and aquifer testing was conducted according to SANS

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Impact Assessment (the “2022 CCIA”) supporting the original EIAR. The appeal included a critique of the 2022 CCIA prepared by Dr. Eloise Marais, Professor of Atmospheric Chemistry and Air Quality at University College London (the “Marais Critique”) (appended as Annexure A4). The revised Cluster 2 EIAR includes a revised CCIA.1 The revised CCIA includes a large amount of new background information on climate change risks drawn from the IPCC 6th Assessment Report and includes a dramatically increased estimates for Scope 1 emissions from the project, but does little to address the numerous deficiencies with the CCIA itself cited in the Appeal and Marais Critique. Dr. Marais reviewed the revised CCIA and prepared an Addendum to her Critique (the “Marais Addendum”) (appended as Annexure A5), describing the ongoing issues in the revised CCIA, as well as new issues involving the increased Scope 1 emission estimates. The Marais Critique noted that the 2022 CCIA failed to include methane fugitive and flaring emissions from operational gas production, the largest source of fugitive methane.2. Likely in response to the critique, the revised CCIA added emissions estimates for gas production flaring and fugitives, and increased the estimates for gas processing flaring and fugitives.3. As explained in the Marais Addendum, “these added emissions drastically increase the total emissions estimates for the project. Scope 1 emissions alone increase by nearly 225% (a 3.2-fold increase), and combined Scope 1 and 2 emissions increased by almost 35%. The gas production and fugitive and flaring emissions excluded in the 2022 CCIA are also the majority (68.9%) of total Scope 1 emissions.” The Marais Addendum observes that, despite the substantial increases in emissions estimates in the revised CCIA, the numerical Impact Significance Rating presented in Section 5.2 remains identical to that of the 2022 CCIA. The Addendum notes that the revised CCIA provides no explanation for why the numerical risk factors, such as magnitude, reversibility, and probability of impacts, are unchanged, even though estimated Scope 1 emissions more than triple. The CCIA should explicitly justify why such significantly higher emissions estimates do not alter the impact significance ratings. 3.1. Dr. Marais further highlights that Section 5.3 of the revised CCIA introduces an “alternative significance rating” system based on tonnes CO<sub>2</sub>e per year, but incorrectly classifies the project’s Scope 1 operational emissions as “Low” significance.4 The revised Scope 1 estimate of 163,748 tCO<sub>2</sub>e clearly falls within the “Medium” qualitative rating category (100,000–1,000,000 tCO<sub>2</sub>e) set out in Table 17 of the revised CCIA. Although this misclassification does not change the “Medium” rating for combined Scope 1 and 2 emissions, “it materially downplays the scale of Scope 1 emissions [and] undermines the credibility of the CCIA’s significance assessment,” according to Dr. Marais. 3.2. Aside from the addition of fugitives and flaring emissions to the Scope 1 estimates, the revised CCIA fails to address any of the concerns raised in the Appeal (Para. 42-58) and the Marais Critique. We therefore incorporate our arguments from the Appeal and the Marais Critique into these comments. Dr. Marais elaborates further on several of the ongoing issues in her Addendum. For example, The Marais Addendum explains that the revised CCIA continues to apply outdated methane global warming potential (GWP) values from the 2001 IPCC Third Assessment Report (GWP of 24 for

10299-4:2003 standards. Contrary to the claim that interpretation lacked justification, the report details that constant discharge tests were performed on boreholes (e.g., RTBH01, RTBH05, RTBH08, RTBH10) and interpreted using recognized analytical methods appropriate for the observed drawdown behaviours. The derived transmissivity values align with regional literature, validating the interpretation. An argument can be made questioning the application of the analytical methods used in the assessment, but as stated previously similar aquifer parameters are reported in available literature and model calibration assumes an effective hydraulic conductivity as opposed to explicit hydraulic conductivities at the positions where pumping tests were conducted. 2.4. Please note that the responses to these groundwater related comments have been prepared by the EAP in consultation with the appointed groundwater specialist. The use of constant head boundaries for rivers can be hydrogeologically justified because the regional drainages (Sandrivier and Doringrivier) are classified as "gaining stream systems" where groundwater discharges into the river. The suggested Cauchy boundary condition can also be applied, however will require assumptions on flow/stage data which, if not available, will add to more model uncertainties. The critique that the model treated fractures as porous equivalents is inaccurate. The model explicitly simulated geological structures (fault zones and dyke contacts) as "permeable linear zones". These zones were assigned significantly higher hydraulic conductivity values compared to the matrix rock to simulate preferential flow. By incorporating fault zones as a discrete fracture will require assigning a certain dimension of these structures which is not available and if assumed, will add to more model uncertainties. The inclusion of the dolerite sill is not an assumption but is based on supporting data and evidence from exploration borehole geological logs (refer to geological logs included in Appendix C of the Geohydrological Report), which confirm its presence at an average depth of >300m. It should be noted that the inclusion of the dolerite sill has been based on evaluation and interpretation of 704 exploration boreholes. The critique regarding a lack of detail on diffusion parameters is addressed in the report’s specific model settings. The report explicitly defines the transport parameters, specifying a longitudinal and transverse dispersivity. These are the governing parameters for dispersion in this type of transport model. Determining these parameters would require calibration against observed data which is not available. It should be noted that the groundwater modelling software applied does make use of specific solute dispersion parameters sorption constants as well as diffusion coefficients which were assigned as part of the contaminant transport simulations. The method followed is considered a conservative worst-case approach. The model assumes methane reaches saturation in water (28 mg/L) and simulates the migration of this dissolved plume. By modelling the transport of the dissolved phase at saturation concentrations, the assessment adheres to a "worst case scenario" approach. This ensures that the potential spread of contamination is not underestimated due to the complexities and uncertainties inherent in multiphase flow parameterization. It should be noted that the model calibration process entails a series of sensitivity analysis in order to evaluate the model behaviour and cater for uncertainties identified. 2.5. Please note that the responses to these groundwater



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methane), rather than the updated IPCC value of 28, which is 17% higher and reflects current scientific consensus on greenhouse gas lifetimes and radiative efficiencies. 5.5 This shortcoming is compounded by applying the outdated GWP to the large additional fugitive and flaring emissions introduced in the revised CCIA. While these additions substantially increase estimated Scope 1 emissions, the totals would be even greater if contemporary state-of-science GWP values were used. 3.4. The Marais Addendum finds that the revised CCIA, like the 2022 version, fails to account for methane emissions from well drilling and testing, even though the project anticipates up to 400 exploration and 300 production wells.<sup>6</sup> While Table 8 of the 2022 CCIA listed CO<sub>2</sub> emissions for these activities, it omitted methane despite available emission factors in the DFFE Guideline. Table 12 of the revised CCIA continues this omission. The CCIA also relied on undisclosed measurements from Tetra4 with no information on methods, equipment, or flaring efficiency, and assumed an unrealistic 100% efficiency rather than a plausible range. Independent calculations in the Marais Critique showed actual well testing emissions could be 5.5 times higher than the 14,517 tCO<sub>2</sub>e reported. The revised CCIA repeats these same estimates, leaving the flaws unaddressed and the omission unsubstantiated. 3.5. The revised CCIA continues to assume unrealistically high flaring efficiency in operational gas processing. Although methane emissions from processing flaring were increased slightly—from 6 tCO<sub>2</sub>e in the 2022 CCIA to 7 tCO<sub>2</sub>e in the revised version—the methods behind this change are not explained. Without evidence to support the efficiency assumption, the estimate cannot be assessed for reasonableness. As the Marais Critique recommended, a more robust approach would apply a range of plausible flaring efficiencies to reflect both best-case and real-world operating conditions. 3.6. The Marais Addendum confirms that the revised CCIA still provides no clear information on the destination or mode of LNG transport, instead relying on the unsupported assumption that 60% of output would be exported to China while the remaining 40% is unaccounted for. This assumption underpins the Scope 3 emissions calculation but is unjustified, incomplete, and ignores both the lack of LNG export infrastructure in South Africa and the need to consider domestic transport. The CCIA also continues to use UK tanker conversion factors while omitting inland transport emissions and failing to assess a range of plausible end-use scenarios or import-to-export ratios, despite the availability of relevant factors. The revised CCIA repeats these same flaws, leaving the Scope 3 analysis vague and incomplete. 3.8. Dr. Marais notes that the revised CCIA repeats the claim from the 2022 assessment that end-use of LNG will reduce indirect GHG emissions by 14.6% on the assumption it will replace diesel, heavy fuel oil, and LPG. Both versions present this substitution for 100% of projected LNG output (Table 10 in 2022; Table 14 in the revised CCIA). However, the Addendum points out that the markets for Tetra4's LNG remain undefined, and no evidence or justification is provided to support this scenario. Without economic or technological backing, the assumption of full fuel substitution is speculative and misleading. The revised CCIA leaves this flaw unresolved and continues to rely on the same unsubstantiated claim of emissions reduction from displacement. It is submitted that Tetra4

related comments have been prepared by the EAP in consultation with the appointed groundwater specialist. It is the groundwater specialist and the EAP's opinion that the assessment is scientifically sound, follows a conservative risk-management approach, and provides a sufficient basis for informed decision making. Dr. de Lange suggests the assessment is unreliable for decision-making however, the assessment adopts a "worst-case approach" to explicitly address uncertainty and ensure that risks are not underestimated. The model simulated catastrophic failure modes, such as unmitigated leaking gas production boreholes over 20, 50, and 100-year periods. Furthermore, Section 17 of the revised hydrogeological report provides a guideline and framework for the applicant to identify, mitigate and minimize potential impacts as part of an integrated groundwater management plan and stipulates mitigation and adaptive controls to be implemented as safety nets if the model and groundwater impact assessment underestimates potential impacts. Conclusion: Groundwater models are often discredited due to their inherent complexity and reliance on assumptions that may not fully capture real-world conditions. These models require extensive data on aquifer properties, recharge rates, and boundary conditions, which are frequently incomplete or uncertain, leading to potential inaccuracies. Simplifications, such as assuming homogeneous subsurface conditions or steady-state flow, can deviate from the dynamic and heterogeneous nature of actual groundwater systems. Additionally, calibration processes may overfit data, masking underlying flaws, while validation against limited or biased datasets can undermine credibility. In order to cater for these uncertainties a "worst-case approach" is applied to explicitly address uncertainty and ensure that risks are not underestimated. It should be noted that the model calibration process entails a series of sensitivity analysis in order to evaluate the model behaviour and cater for uncertainties identified. Where model assumptions were made or reference values used, a conservative approach was followed to identify the most significant possible outcomes. The groundwater model should be a dynamic tool and updated as newly gathered monitoring results become available in order to verify modelling assumptions and confirm uncertainties identified. The latter also form part of the EIA recommendation and are included in the Environmental Management Program. All being said, a groundwater model remains a computer-generated algorithm which mimics on-site conditions as accurate as possible (similar to climate change models), however, it can never fully represent the complexity and nature of heterogeneous fractured-rock aquifers. Thus, the groundwater model should be viewed merely as a supporting tool to be applied for future scenario predictions in order to provide guidance on best practice mitigation and management measures but cannot replace the value of a robust monitoring network and protocol. The latter is incorporated into the dedicated groundwater management plan with continuous monitoring serving as an early warning and detection system for potential impacts. As stated in the revised report, the most significant impact of the project on the regional groundwater regime is the potential deterioration of the potable Karoo aquifer water quality as well as modification of the riparian zone primary porosity aquifer associated with alluvium material deposited in flood plains. Groundwater is the sole water resource to the

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have failed to comply with the Minister's order in his decision of 1 August 2024 in which he advised that Tetra4 should address the concerns raised by Dr. Marais in her critique. 4. The FEIAR describes its approach to public participation, which involved compiling an initial Interested and Affected Parties (I&AP) database based on previous applications, stakeholder databases, and landowner lists. However, the database appears to have largely excluded local communities; those most directly impacted by the project. The public consultation was limited to placing 78 site notices and posters in select areas over a short 4-day period and notifying only pre-identified I&APs. 4.1. The EIA further refers to dates for public consultations in 2022 and 2023. This is surprising as these dates pertain to the previous EIA and not the revised EIA. Notice of consultations that were held subsequent to the revision of the EIA do not reflect in the Public participation Report on Tetra4's website nor any of its annexures. It is thus difficult to ascertain the breadth and scope of the current public consultation process that is underway. The lack of reference to this phase in the Public Participation Report attached to the EIA, and no mention of consultations conducted during this phase in the document's annexures, further undermines the credibility of the public participation process. Furthermore, there is no evidence that documents were provided to attendees at these meetings. Instead, participants were shown posters and given brief presentations, with opportunities to comment on the project on the spot. These meetings should have been used as proper informational sessions given the scale and complexity of the proposed project, but instead, they appear to have been a superficial attempt at consultation. 4.2. The most vulnerable members of the affected communities, those living and working on farms, stand to be the most directly impacted by the expansion. Yet, Tetra4 has still made no effort to ensure that these individuals are properly informed or meaningfully consulted. The Social Impact Assessment attached to the EIA primarily addresses landowners, neglecting to consider the impacts on farm workers who are likely to be disproportionately affected by the project. Ignoring these vulnerable groups will only deepen poverty and exacerbate inequality. 4.3. The Department of Forestry, Fisheries, and the Environment (DFFE) Public Participation Guidelines state that in areas suffering from socio-economic or environmental challenges, extensive consultation should be undertaken with those likely to be affected. Given the context of high unemployment and potential environmental risks in the area, this is a critical oversight by Tetra4. 4.4. The Constitutional Court's decision in Bengwenyama emphasized that consultations for projects that impact land use must be thorough and fair. The Court highlighted that the consultation process must provide landowners and occupiers with sufficient information to make informed decisions. In the case of the Cluster 2 expansion, Tetra4 has failed to adequately identify and consult with those living and working on the affected farms, despite having the means to do so. This failure further undermines the fairness and procedural integrity of the consultation process. 4.5. We submit that Tetra4 has not adequately fulfilled its consultation obligations under the National Environmental Management Act (NEMA) and its regulations. This is especially concerning given the potential socio-economic impacts of the expansion, which

landowners and rural communities within the study area and can be classified as a sensitive sole source aquifer. Thus, the potential impact(s) of the proposed development are not being denied, and it is clearly noted and taken cognizance of. However, it is the geohydrological specialists' opinion that, if the recommended mitigation measures be implemented along with management principals as set out in detail in the groundwater management plan (Section 17 of the revised report), the potential impacts associated with the project can be adequately managed. During the construction phase the environmental significance rating of groundwater quality impacts on down-gradient receptors are rated as medium negative without implementation of remedial measures and low negative with implementation of proposed mitigation measures. During the operational phase the environmental significance rating of groundwater quality impacts on down-gradient receptors are rated as medium to high negative without implementation of remedial measures and low to medium negative with implementation of proposed mitigation measures. During the decommissioning and post-closure phase the environmental significance rating of groundwater quality impacts on down-gradient receptors are rated as medium negative without implementation of remedial measures and low to medium negative with implementation of proposed mitigation measures. An external peer review of the updated Geohydrological Impact Assessment Report was undertaken by Professor S.R. Dennis (attached hereto and included in Appendix 4 of the Final EIA Report) and the external reviewer is of the opinion that the study objectives were met, and the author has shown diligence in investigating aspects related to the geohydrological behaviour of the study area and determining the status quo based on available data. The report is considered on par with industry standard when compared to projects with a similar theme. 3. Please note that the responses to these Climate Change related comments have been prepared by the EAP in consultation with the appointed Climate Change specialist. The increased Scope 1 emissions estimates have been incorporated in the impact calculations as reported under Table 12 of the AQIA Report (July 2025). Even with a 3.2-fold increase in Scope 1 emissions, the significance rating under Section 5.2, Table 16 based on the Environmental screening methodology provided by EIMS remained as Medium because the underlying criteria – magnitude, reversibility, and probability – remain at level 3: • Magnitude (Level 3 – Moderate): The affected environment is altered but natural, cultural and social functions and processes continue albeit in a modified way. • Reversibility (Level 3): Impacts are reversible only by incurring significant time and cost. • Probability (Level 3): The likelihood of occurrence does not increase as a result of higher GHG emissions. Although Scope 1 emissions have increased by a factor of 3.2, the combined Scope 1 and 2 GHG emissions from the proposed Tetra4 Cluster 2 project account for only 0.09% of South Africa's national GHG emissions (excluding LULUCF) and 0.12% of the total emissions from the South African energy sector, based on 2022 data (GN 5850 in GG No. 52067, 7 February 2025). Accordingly, the impact is still assessed as being of Medium significance. The extent of climate change impact is always national or wider, and since the overall consequence and significance are not influenced by the extent, but rather by the intensity of emissions, "extent" was not included in the significance

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could affect the livelihoods of people living and working on farms. Tetra4's Social Impact Assessment, which highlights the significant risks to agricultural livelihoods and food security, fails to mention any consultation with farm workers or compensation plans for those who may lose their homes and livelihoods as a result of the project. 4.6. Based on the inadequate consultation process, the process conducted by Tetra4 does not comply with constitutional principles of fairness and transparency, as well as NEMA's regulations and the Promotion of Administrative Justice Act (PAJA). The consultation process was deeply flawed. 5. Section 24(5) of the National Environmental Management Act (NEMA) empowers the Minister to regulate procedures for preparing, assessing, adopting, and reviewing environmental impact assessments (EIAs). The Minister has implemented the EIA Regulations, which outline the necessary content of an EIA report. Regulation 18 specifies that the "need and desirability" of a proposed project must be considered when evaluating applications for environmental authorisation. As such, an EIA report must include a justification for the need and desirability of the project. 5.1. In accordance with Section 24J of NEMA, guidelines can be published to assist in implementing the need and desirability criteria. Section 24(5) allows the Minister to determine procedures for preparing and evaluating environmental management instruments, including EIAs. The Department of Forestry, Fisheries, and the Environment (DFFE) has issued the "Guideline on Need and Desirability," in line with Section 24J(b) of NEMA, outlining how these criteria should be assessed. 5.2. The assessment of need and desirability also considers spatial plans, such as Integrated Development Plans (IDPs), Spatial Development Frameworks (SDFs), Environmental Management Frameworks (EMFs), and other relevant strategies. The process involves evaluating reasonable alternatives, including a meaningful consideration of the "no-go" option. 5.3. NEMA's Section 2 principles further guide the analysis of need and desirability. These principles must be considered alongside other relevant factors, including the state's responsibility to uphold social and economic rights, particularly for disadvantaged communities. These principles provide a framework for state entities to make decisions related to environmental protection. 5.4. Locking into new gas infrastructure, particularly in the context of the climate crisis, could be economically irrational. Fossil fuel infrastructure risks becoming stranded assets (assets that lose value rapidly as the world transitions away from fossil fuels). The lack of an analysis of these risks means that the relevant economic impacts were not fully considered when the Department of Mineral Resources and Energy (DMRE) made its decision. 5.5. The International Institute for Sustainable Development (IISD) conducted an assessment of whether natural gas is necessary for South Africa. While acknowledging the country's energy crisis and the need for low-carbon energy, the IISD warns that rushing to adopt gas could be a costly mistake. South Africa's commitment to the Paris Agreement, coupled with the increasing understanding of natural gas's climate impact, suggests that transitioning away from fossil fuels is imperative. Internationally, there is growing pressure to phase out gas. The International Energy Agency (IEA) has advised against new investments in oil and gas to limit global warming to 1.5°C. Additionally, over 100

rating. 3.1. Please note that the responses to these Climate Change related comments have been prepared by the EAP in consultation with the appointed Climate Change specialist. Section 5.3 "Alternative Significance rating" Scope 1 now falls in the Medium qualitative rating and not in the Low category, as reported. This makes no difference to the combined Scope 1 and 2 rating which remains at Medium. Also, the conclusion under Section 6 states "Construction- and operational related GHG emissions from the proposed Tetra4 Cluster 2 project cannot be attributed directly to any particular climate change effects, and, when considered in isolation, will have a Low to Medium impact on the National GHG inventory total." – the Construction activities fall in the Low significance rating and operational falls within the Medium significance. It should be noted that the Alternative Significance Rating, on which the comment is based, is used in addition to the EIA significance rating as provided in Table 16 (AQIA Report, July 2025) and intended to be used as guidance. The draft National Guideline for the consideration of climate change implications in applications for environmental authorisations, atmospheric emission licenses and waste management licenses (GN 6759 in GG 53574, 24 October 2025) proposes a Climate Change Significance Rating Framework for assessments. Since this is still out for public comment, this methodology could not be applied. 3.2. Please note that the responses to these Climate Change related comments have been prepared by the EAP in consultation with the appointed Climate Change specialist. With respect to the Marais Critique which was considered by the DFFE Minister in the appeal decision, it should be noted that the Minister only identified certain shortcomings associated with the GHG emissions and did not indicate all of the Marais Critique had merit. The GWP values used in the 2022 and revised 2025 CCIA are based on the DFFE Methodological guidelines for Quantification of Greenhouse Gas Emissions. A companion to the South African National GHG Emission Reporting Regulations. Version No. MG 2022.1. Government Gazette no 47257, MG-2022.1. Pretoria, South Africa: DFFE, published 7 October 2022. As stated on page 1 "The purpose of these Methodological Guidelines is to provide additional guidance and commentary to assist data providers in estimating Greenhouse Gas (GHG) emissions for reporting on the Greenhouse Gas reporting module of the National Atmospheric Emission Inventory System (NAEIS)." It is stated on page 7 of this document "In annexure G please use the 100-year GWP values highlighted in bold." And Annexure G: Global Warming Potential Values. IPCC Third Assessment Report, 2001 (IPCC 2001, Ch6, 388). By applying the ARC6 GWP (as indicated in the table below), Scope 1 emissions increased by 19%, and the combined Scope 1 and 2 GHG emissions increased by 8%. The contribution from the proposed Tetra4 Cluster 2 project to the national GHG emissions will be 0.1% (excluding LULUCF) and 0.13% to the energy sector, based on 2022 data (GN 5850 in GG No. 52067, 7 February 2025). Accordingly, the impact is still assessed as being of Medium significance. SA GG47257 (2022) IPCC AR6 (2021) GWP CH4 23 29.8 a GWP N2O 296 273 Total CO2-e (tonnes) Total CO2-e (tonnes) Scope 1 163 748.3 201 398.0 Scope 2 278 251.1 278 251.1 44999.4 479 649.01 Notes: a 6th Assessment (AR6) indicates GWP as 29.8 (fossil) 27.2 (non-fossil) 3.3. Please note that the responses to these Climate Change related comments have been prepared by the EAP in

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

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countries have signed the Global Methane Pledge to reduce methane emissions by 30% by 2030. Banks, including Nedbank in South Africa, are halting financing for gas exploration, signalling a broader shift away from fossil fuels. These global trends highlight the risks of gas becoming stranded as an asset. Natural gas poses an economic risk. Carbon Tracker initiative warns that gas-fired power plants may not yield returns on investment due to the declining profitability of such projects. In regions like Europe and the United States, a significant portion of existing gas-fired plants are operating at a loss, and this trend is expected to continue. South Africa, with its regulatory gaps and limited capacity to enforce existing laws, is likely to be affected by this decline. Furthermore, Tetra4's plan to export 60% of its gas to China may also face challenges.

5.6. The National Development Plan 2030 advocates for investing early in low-carbon technologies to reduce emissions and position South Africa to compete in a carbon-constrained world. By focusing only on the positive economic impacts of the project without meaningfully considering the risks, Tetra4 fails to provide a comprehensive assessment.

5.7. Under NEMA, the consideration of alternatives is a crucial part of the environmental assessment process. Alternatives should be evaluated based on factors such as the general purpose of the activity, the need to avoid negative impacts, and the need for equitable distribution of benefits. Tetra4 acknowledges the importance of considering alternatives but focuses primarily on natural gas, failing to adequately assess renewable energy alternatives.

5.8. South Africa's lack of infrastructure for a full gas lifecycle, combined with the climate impacts and potential for asset stranding, makes promoting natural gas as a bridging fuel irrational. Additionally, renewable energy alternatives such as solar and wind are faster to deploy and significantly cheaper than gas-fired power. These alternatives should have been assessed from both a need and desirability perspective. Renewable energy is increasingly cost-competitive compared to fossil fuels like gas. Despite rising costs for solar and wind installations, fossil fuel prices have increased even more, enhancing the competitiveness of renewable energy. Battery storage technology has also become cheaper, further reducing the need for gas peaking plants. In countries like Australia and South Africa, renewable battery storage is emerging as a more cost-effective solution than gas.

5.9. Tetra4's assessment of the "no-go" alternative lacks clarity and depth. The company states that the impacts of the no-go alternative are inherently addressed by assessing other alternatives but does not provide a detailed analysis of the indirect impacts associated with maintaining the status quo. The FEIAR assumes that most of the gas will be exported to China, but fails to explain how this will be feasible given South Africa's inadequate infrastructure for such exports.

5.10. The economic benefits touted by Tetra4, including the creation of jobs and the development of a sustainable gas industry, fail to adequately address the long-term impacts on local communities. While short-term employment may be created during the construction and operation phases, these jobs are often temporary and concentrated in specialized sectors that do not necessarily translate into broad-based community development. Furthermore, the reliance on gas infrastructure risks locking South Africa into an economically unstable fossil fuel future, where

consultation with the appointed Climate Change specialist. With reference to Section 1.5 of the updated CCIA Report, the well drilling and testing emissions from construction phase were based on measurements:

- Well drilling – Data obtained from kestrel flow meter while drilling and extrapolated for drilling duration in gas bearing structures (10 days). Average emissions during exploration drilling equals 0.446 tonnes per well for 10 days duration (446.5 kg at 75% CH<sub>4</sub>).
- Well testing – Data obtained from flow measurement during flow testing and flaring of existing exploration wells. Average flowed/flared volume per well is 2 592.3 kg per day (at 75% CH<sub>4</sub> composition with density of 0.73). Total emissions are therefore 181 461 kg for 10 wells over 7 days each.
- Well servicing – Data obtained from fugitive monitoring of both existing production and exploration wells collected by independent third party. Average emissions per well/annum equals 1,1 CO<sub>2</sub> eq tons based on available information. The IPCC Guidelines for National Greenhouse Gas Inventories (Volume 1, Chapter 2) state that measured emissions should be used whenever reliable monitoring data is available, with measured emissions always taking precedence over calculated emissions using emission factors. It is understood that the measured emissions reflect "real-world operating conditions". The reported emissions in Table 12 are only as tonne CO<sub>2</sub> equivalent (at 75% CH<sub>4</sub> composition). When the emission factors as provided in Appendix A, (1.B.2.b.ii), and NGERs GWP as provided in Table 2, are applied, well drilling is 6.76 times lower than the provided data, with well testing 1.3 times higher and well servicing 3.05 times higher. This results in 1.08 times lower total Scope 1 emissions. By applying the ARC6 GWP to these calculations, the total Scope 1 & 2 GHG emissions from Construction are 34 052 CO<sub>2</sub>-e (tonnes/year), thus 1.02 times higher than the initial GHG emissions.

3.4. Please note that the responses to these Climate Change related comments have been prepared by the EAP in consultation with the appointed Climate Change specialist. The emission factors are listed in Appendix A of the CCIA report. These are based on the SA 2022 Methodological guidelines for quantification of GHG emissions, and 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Table 4.2.5: Tier 1 emission factors for fugitive emissions (including venting and flaring) from oil and gas operations in developing countries and countries with economies in transition. In the July 2025 CCA report, the upper range EFs listed below were used for flaring, based on 203,786,670m<sup>3</sup> gas processed. As indicated in the comment above, the revised report used the upper range, thus provided the most conservative estimate based on the IPCC emission factors. The 98% flaring efficiency is what the IPCC EFs are based on, and no other efficiency was assumed.

3.5. Please note that the responses to these Climate Change related comments have been prepared by the EAP in consultation with the appointed Climate Change specialist. The 60/40 split between international end users and local users were provided by Tetra4 at the time and this represents a worst-case scenario assumption. Note that exports of LNG in the volumes represented by this project do not require a dedicated LNG export terminal as these volumes can be exported in LNG ISO containers which are able to be exported via container terminals. The information provided assumed that 40% will be locally used and transported over an average distance of 1 200km per trip. This was accounted for under Scope 1 (see CCA Report



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global shifts towards renewable energy could lead to stranded assets and job losses in the long run. 5.11. Moreover, the economic focus of Tetra4 overlooks the potential for more sustainable, community centred growth through investments in renewable energy. Unlike gas, which carries inherent risks of volatility and climate-related costs, renewable energy sources like wind and solar could create far more permanent and equitable job opportunities. These industries have the potential to stimulate local economies through widespread skills development, entrepreneurship, and the growth of green technologies. By prioritizing fossil fuels, Tetra4 diverts resources away from these more inclusive and forward-thinking alternatives, limiting the broader economic upliftment that South Africa's disadvantaged communities truly need. It is submitted that Tetra4 have not meaningfully addressed the Minister of Forestry, Fisheries and the Environment's question about demonstrating that LNG is a bridging fuel. Natural gas remains an economic risk, to both the economy and local communities and its use cannot be justified. 6. The Free State remains South Africa's "breadbasket" due to its significant role in agricultural production, with the Lejweleputswa region being a key contributor. Maize is the primary crop grown in the area, although the region also supports a diverse range of agricultural activities. Agriculture is essential for the local economy, providing food security, employment, and contributing to the country's GDP through exports. It also serves as a vital driver for rural development, particularly in the context of a climate emergency, where food production is more crucial than ever. The Economic Impact Assessment included in the project's EIA notes that the proposed project could lead to the an erosion of farmland values. However, the assessment still fails to properly evaluate the broader impacts, such as the loss of employment for farm workers, who are already a vulnerable group. Furthermore, the project's effect on local tourism, a sector increasingly important as mining in the region declines, was also not adequately assessed. The Lejweleputswa District Municipality has identified tourism as a key area for economic development, yet the EIA disregards the potential for the project to harm this industry by permanently altering the landscape and disrupting the area's "sense of place," which is central to tourism activities. Given these gaps, the EIA does not provide a comprehensive evaluation of the project's full economic impact on the agricultural and tourism sectors. The lack of consideration for alternative energy options, such as renewable energy, and the failure to properly assess the adverse effects on local communities point to a broader neglect of sustainable development goals. As a result, the proposed project is likely to worsen poverty, unemployment, and inequality in the region, exacerbating the very challenges it purports to address. 7. The Appellants argue that the proposed project should not proceed due to South Africa's current inability to effectively ensure compliance with environmental laws and licenses for gas operations, particularly in terms of monitoring and enforcement. According to Section 50 of the National Environmental Management Act (NEMA), the Minister responsible for Mineral Resources and Energy is tasked with implementing the provisions related to oil and gas operations. The Petroleum Agency of South Africa (PASA), designated under Section 70 of

Appendix A). The remaining 60% was given to be exported to China, as a worst-case scenario and the distance was assumed to be 16 433 km. This has been indicated under CCA Report Section 1.5: Assumptions and Limitations, and Appendix A. Although there are fuel-based emission factors embedded in the National GHG Inventory (2000-2020, as updated in 2022) and in the Green Transport Strategy (2018-2050), there are none specific to the trucks, ships etc. used in the Tetra4 study, and hence use was made of international EFs. According to the Integrated Resource Plan (IRP) published in October 2025, South Africa will need to significantly expand locally sourced natural gas to meet future energy demands, especially as coal is phased down and renewable integration accelerates. Natural gas is positioned as a transition fuel to complement renewables. Current imports from Mozambique's Pande-Temane fields are projected to decline sharply and effectively end around 20287, increasing the demand for locally sourced gas to reduce reliance on imports and ensure energy security. 3.6. Please note that the responses to these Climate Change related comments have been prepared by the EAP in consultation with the appointed Climate Change specialist. The use of LNG is unlikely to be in addition to the use of existing fuels and hence the assumption that it would replace other fuels are regarded feasible. Since it is not known what the ratio replacement of the other fuels would be, the statement was rephrased "As it is assumed that LNG will be replacing other fuels already in use, it could result in a reduction of 14.6% in indirect GHG emissions." According to the Integrated Resource Plan (IRP) published in October 2025, South Africa will need to significantly expand locally sourced natural gas to meet future energy demands, especially as coal is phased down and renewable integration accelerates. Natural gas is positioned as a transition fuel to complement renewables. Current imports from Mozambique's Pande-Temane fields are projected to decline sharply and effectively end around 2028, increasing the demand for locally sourced gas to reduce reliance on imports and ensure energy security. As per the above responses and with reference to the updated CCA report, all concerns were addressed, and in cases where they were not explicitly covered in the report, a justification was provided for retaining the original approach or results. 4. It is noted that the CER also raised concerns about the public participation process in the appeal which were responded to by the applicant. Where your current comments align with those raised in appeal we refer to the applicants responses thereto in the appeal responding statement, as well as the Ministers evaluation thereof. The public participation process was not limited to the placement of notices and posters. Chapter 6 of the NEMA EIA Regulations sets forth the minimum requirements for public participation. A comprehensive public participation process was undertaken which in many respects exceeds the minimum requirement for PPP as set forth in Chapter 6 of the NEMA EIA Regulations. Kindly refer to Section 8 and Appendix 3 of the EIA Report. The I&AP database included in Appendix B1 of the EIA Report contains a number of local community members who were consulted. Focus group meetings were held with local communities (Adamsonsvlei Community, Stilte Community) during the Scoping Phase an original EIA Phase. During the revised EIA Phase consultations community focus group meetings were held in Adamsonsvlei Community, Stilte Community and



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the Mineral and Petroleum Resources Development Act (MPRDA), is responsible for recommending the granting of environmental authorizations and overseeing the monitoring and enforcement of compliance at gas operations. Additionally, the Minister has the authority to designate Environmental Mineral Resource Inspectors (EMRIs) under Section 31BB of NEMA. There are no EMRIs, the persons responsible for ensuring compliance with environmental management at mining operations, designated for the gas sector as of 2023. All 94 current EMRIs assigned to mining activities. Furthermore, PASA operates only one office in Cape Town, with no regional offices to provide oversight across the country. The Appellants contend that both PASA and the Minister responsible for Mineral Resources and Energy lack the resources and capacity to meet their obligations under Section 24 of the Constitution as well as NEMA, which requires the protection of the environment. 8. It is submitted that the revised Cluster 2 EIA does not meaningfully address the concerns raised by Dr. Marais and Dr. Campbell in their critique of the Climate Change Impact Assessment and the Groundwater Impact Assessment. The aspect of providing substantiation on the idea that gas is a bridging fuel has also not been addressed. Thus, together with the flaws in the public participation process, the need and desirability assessment, the impacts on agriculture and tourism and the lack of capacity to ensure compliance, monitoring and enforcement at oil and gas operations in South Africa render the revised Cluster 2 EIA a flawed document. We trust that our concerns will be duly addressed.

Meloding Community. EIMS undertook a comprehensive public notification process to inform stakeholders of this opportunity and responsibility to register. Regulation 42 of the EIA Regulations requires the opening and maintaining of a database of I&AP's who submit written comments, attended meetings, requested to be registered- this was done. The process did not exclude any local communities, or persons impacted by the project, from registering on the database, and consequently participating in the process. Regulation 41(2)(a) of the NEMA EIA Regulations prescribes that 1 site notice be placed however for this application a total of 78 site notices were placed which is substantially more than the minimum requirement. It is further stated in this comment that the site notices were placed "over a short 4-day period" however we wish to correct this misunderstanding in that it physically took 4 days to erect the site notices while the notices remained in place for a few months thereafter. 4.1. Section 8 of the EIA Report provides a description of the previous public participation undertaken since the inception of the application which culminated in an EA decision dated 13 July 2023. The environmental authorisation was appealed and on 1 August 2024 the Minister of Forestry, Fisheries and the Environment set aside the Cluster 2 EA. The Ministers Appeal Decision included the requirement to revise certain specialist studies and ensure that the revised studies were available for public comment. The revised EIA Report was made available for comment from 10 September 2025 to 13 October 2025 as required by the Ministers Appeal Decision. All registered I&APs were notified of the availability of the revised EIA Report, provided with detail on where access to the report could be found, informed of the comment period from 10 September 2025 to 13 October 2025 and furthermore notified of the public meetings and focus group meetings. During the meetings, a detailed presentation was provided which summarised the pertinent contents of the revised EIA report. Hard copies of the revised EIA Reports executive summary were made available at the meetings, and these hard copies included all three relevant languages (English, Afrikaans and Sesotho). No I&APs requested additional hard copies of documentation during the consultation process. The public participation that was undertaken was in line with the principles of the NEMA EIA Regulations. 4.2. As detailed above, specific consultation and focus group meetings with directly affected communities were held. The focus group meetings at the Adamsonsvlei Community, Stilte Community and Meloding Community were well attended and it should be noted that some of the community members at the Adamsonsvlei and Stilte communities indicated that they were farm workers. Kindly refer to Section 10 of the EIA Report (including relevant specialist reports in Appendix 4) where the imp

Mr Gert Oosthuizen

Date 2022/08/30 Method Email

Comment Response

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

## Mr Gert Oosthuizen

Geagte leser. Hiermee vol kommentaar oor die EIMS Scoping Report vir Tetra4 Cluster 2 Gas Projek. Nadat die verslag gelees is het ek as geaffekteerde party (Eienaar Doornrevier 330 dele 1,2 en 3, Palmietkuil 328 deel 4 en Decier 642) 'n paar punte om onder u aandag te bring. Ek voel dat die impak op grondeienaars, in meeste van die spesialis studie afdelings, onderskat is. (Please see table below for Mr Gert's full comments and responses provided).

Good morning Mr Oosthuizen, Kindly find the attached responses to your comments on the Scoping Report that were submitted to EIMS on the 30th August 2022. Should you have any further comments and/or queries, please do not hesitate to contact EIMS. Regards,

**Date** 2022/08/30 **Method** Email

### Comment

Geagte leser. Hiermee vol kommentaar oor die EIMS Scoping Report vir Tetra4 Cluster 2 Gas Projek. Nadat die verslag gelees is het ek as geaffekteerde party (Eienaar Doornrevier 330 dele 1,2 en 3, Palmietkuil 328 deel 4 en Decier 642) 'n paar punte om onder u aandag te bring. Ek voel dat die impak op grondeienaars, in meeste van die spesialis studie afdelings, onderskat is. (Please see table below for Mr Gert's full comments and responses provided).

### Response

Good day Mr Oosthuizen, We hereby acknowledge receipt of your email and response will be provided in due course. Should you have any questions and/or queries, please feel free to contact EIMS. Regards,

**Date** 2023/01/24 **Method** Email

### Comment

2023 / 01 /24 Attention : Qaphela Magaqa RE: COMMENTS ON ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PROGRAMME SUBMITTED IN RESPECT OF AN APPLICATION FOR ENVIRONMENTAL AUTHORIZATION BY TETRA4 FOR THE TETRA4 CLUSTER 2 GAS PRODUCTION PROJECT NEAR VIRGINIA, IN THE MASILONYANA AND MATJHABENG LOCAL MUNICIPALITIES, FREE STATE PROVINCE Dear Qaphela Magaqa Kindly find attached hereto our comments and relevant annexures on the Environmental Impact Assessment and Environmental Management Programme for your consideration. Kindly acknowledge receipt of this email.

### Response

Good day Cindy. We hereby confirm receipt of your below email and your attached comments/documents. EIMS will provide responses to your comments in due course. We also confirm that your original verbatim comments as well as our responses thereto will be submitted to the Competent Authority for their consideration. Kind regards,

**Date** 2023/01/24 **Method** Email

### Comment

2023 / 01 /24 Attention : Qaphela Magaqa RE: COMMENTS ON ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PROGRAMME SUBMITTED IN RESPECT OF AN APPLICATION FOR ENVIRONMENTAL AUTHORIZATION BY TETRA4 FOR THE TETRA4 CLUSTER 2 GAS PRODUCTION PROJECT NEAR VIRGINIA, IN THE MASILONYANA AND MATJHABENG LOCAL MUNICIPALITIES, FREE STATE PROVINCE Dear Qaphela Magaqa Kindly find attached hereto our comments and relevant annexures on the Environmental Impact Assessment and Environmental Management Programme for your consideration. Kindly acknowledge receipt of this email.

### Response

Good day Mr & Mrs Oosthuizen, Further to your email and comments submitted below, kindly find the attached response letter for your attention. Should you have any queries, please feel free to contact EIMS. Kind regards, (kindly see table attached below for comments and responses)

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Mr Gert Oosthuizen

Mr William du Plessis

Date 2023/05/11 Method Email

## Comment

Dear EIMS 1. We refer to the SMS notification we received as registered I&APs on 7 March 2023 indicating that the ‘Water Use Licence technical report for the Cluster 2 Project is available for public review and comment’ until today (attached for reference). 2. As you are aware, we are the registered landowners of several farms that will be directly impacted by Tetra4’s Cluster 2 development, including Farms: Palmietkuil 328 (Portion 5) and Kalkoenkrans 225 (Portions 0 and 2), where we reside and conduct farming operations. 3. We understand from the IWWMP that the uploaded documents form part of Tetra4’s application to amend its Water Use Licence (WUL Amendment) which will impact on our properties and land use. The documents are extremely voluminous (more than 1000 pages, in 12 different categories/folders) - the IWWMP alone consists of 264 pages. As you would appreciate, these reports and documents are of a technical and specialist nature, and it is difficult to identify and understand the direct impacts on our properties, operations, and land use (from these documents). 4. Our preliminary comments/concerns/questions in respect of the WUL Amendment and its process are: 4.1. WUL Amendment Application Form: We have not been able to locate the completed WUL amendment application form that precedes/ accompanies the documents uploaded. We can see the IWWMP and the 12 folders containing its Appendices and the EIA application form, but not the completed WUL amendment application form. Please could you provide it or indicate where we may find it. 4.2. WUL: We don’t have a copy of the WUL that is being amended through this process, please could you provide a copy. 4.3. WUL Amendment process specific consultation: Public Participation documents appear to have been uploaded as part of the WUL Amendment documents on the EAP/your website. However, these seem to relate to the EIA process specifically and our comments and meetings regarding that process, which preceded the WUL amendment documents released on 7 March 2023. Although the IWWMP refers to ‘integrated’ consultation, our recollection is that we’ve discussed/considered project impacts more broadly, and not necessarily focused on the WUL Amendment process/specific water uses contemplated (and have not had sight of the WUL). Based on the IWWMP (released on 7 March 2023) we are struggling to understand the specific water impacts. Is there an intention to conduct specific consultation on the WUL Amendment process covering water impacts specifically? As registered I&APs that will also be affected by this process, we request further consultation to understand the specific impacts emanating from this amendment. 4.4. Clarity request: We’ve perused the IWWMP, but it is not particularly clear to us what specific water

## Response

Dear I&AP, Please see the included link to a downloadable file including responses to your comments. The link and associated file includes a table of responses to the comments noted as well as appendices and other relevant documentation. Should you have any queries, please let me know. Please also confirm receipt of this email and if you have been able to access the documents.  
[https://www.dropbox.com/sh/b8ipzcc43jg1g0c/AACO\\_hl1LGpCMDjrOYDs01mLa/William?dl=0&lst=](https://www.dropbox.com/sh/b8ipzcc43jg1g0c/AACO_hl1LGpCMDjrOYDs01mLa/William?dl=0&lst=)

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Mr William du Plessis

related impacts (contemplated as part of the WUL Amendment) will occur on our properties and how it will/may impact our land use, operations, and activities (which include agricultural/farming activities). For instance, on an initial review it appears that- 4.4.1. There are underground aquifers that may be impacted, but it is not particularly clear where they are located in relation to water use activities/impacts and our land use/operations; 4.4.2. Infrastructure such as pipelines/transmission lines will trigger 21(c) & (i) uses but the locality still needs to be determined; 4.4.3. It seems from the IWWMP that in addition to the 50 x 50m drill rig footprint, further impacted areas may be contemplated for infrastructure (e.g., sumps). We note the listing of properties in Table 6, but it is unclear exactly how the impacts mentioned and discussed in the IWWMP relate to our land use and properties. We would be grateful if you could indicate and clarify the impacts on our properties and the locations and impacts on our properties and land uses contemplated by the IWWMP. 5. In addition to addressing our questions above, please could you to set up a call/online meeting to discuss the WUL Amendment so we may better understand the process and impacts on us so that we are able to adequately consider and comment. 6. Please ensure that our comments are also submitted to the licensing authority as part of the public participation/consultation process record/report. 7. We reserve our rights to submit any further comments or concerns. 8. Please acknowledge receipt.

Thank you and kind regards William du Plessis 082 821 1053

Clarice Arendse

Date 2025/10/09 Method Email

Comment

Dear sir / madam We refer to the above matter and confirm that we act on behalf of Red Rocket Energy (Pty) Ltd, Piscis Energy (Pty) Ltd, Lupus Energy (Pty) Ltd, URSA Energy (RF) (Pty) Ltd, Norma Energy (Pty) Ltd, Fornax Energy (Pty) Ltd, Volans Energy (Pty) Ltd, and K2022579146 (South Africa) (Pty) Ltd. Please see attached hereto correspondence for your urgent attention. We shall be most grateful if you will acknowledge receipt hereof. Kind regards,

Response

Good day Celine, Here with confirmation of receipt of email. We can confirm that the listed I&APs have been added to our database and will receive all notifications regarding the project progression from now going forward. Regarding the request for an extension, could we please get shapefiles or any indicator of the extent of your client's projects locations. This will assist us in providing a more concrete response to your request

Elmar Roberg

Date 2022/04/05 Method Email

Comment

Hi there, on behalf of Palmietkuil 548/1 Thank you -- with kind regards,

Response

Good morning Elmar, Thank you for your correspondence and interest in the Proposed Tetra4 Cluster 2 Project. Kindly note that you have been registered as an Interested and Affected Party (I&AP) in the projects database. As a registered I&AP you will be notified of opportunities to

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Elmar Roberg

participate in the Environmental Authorisation Application Process as they become available. Should you have any queries or comments, please feel free to contact EIMS.

Date 2022/04/05 Method Email

Comment

Hi there, on behalf of Palmietkuil 548/1 Thank you -- with kind regards,

Response

Elma further submitted a Registration document

Date 2023/01/17 Method Email

Comment

Hi Brian (palmietkuil 548 / 1) I was surprised to see in the heritage report that the specialist was denied access. No reason that that should have been . I am struggling to identify exactly where the boundaries of Phase 2 are. Is it possible to provide a KMZ of the the overall project? Thank you.

Response

Good day Mr Roberg, Thank you for your correspondence. Please find the attached KMZ files of the Tetra4 Cluster 2 study area and its associated infrastructure. Should you have any comments and/or queries, please feel free to contact EIMS. Kind regards,

Date 2023/01/18 Method Email

Comment

Dear Qaphela, Can you also send me the outline for the Production Right, Phase 1 and the borehole locations. Appreciate that very much.

Response

Good day Mr Roberg, Thank you for your correspondence. With reference to your email below, please find the attached map showing the Production right area, Cluster 1 boundary and the current application area for cluster 2. I have also attached the proposed infrastructure KML files to this email. Kindly note that the Cluster 2 exploration/production wells cannot be defined at this point, hence the application for 600m wide well transects. Kind regards,

Date 2023/01/24 Method Email

Comment

Dear Qaphela, I trust you were able to establish why I received the notification for the first meeting and not the second? Is it that your system only sends the notifications to one of the two lists? If so, I am representing Palmietkuil 548/1 and thus should be on the farms list. In any event, I would like to be on both. Please also add Mr Sam Monkoe to the list. Thank you. Please also find attached a list of additional questions. Thank you.

Response

Good day Mr Roberg, As your email below refers, kindly find the attached response letter to your comments submitted during the EIA review period. Kindly note, you have been registered on both databases as requested below. Furthermore, we have also added Mr Sam Monkoe to the projects' Interested and Affected Parties database as requested. Should you have any queries, feel free to contact EIMS. Kind regards,

Date 2025/10/06 Method Email

Comment

Response



# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Elmar Roberg

Good afternoon, \*\*\*, \*\*\* & team Thank you for the time on Thursday. Cab you provide a copy of the presentation that was made by Brian, please; plus KMZ's of the maps that are included the ppt Thank you

Good day Elma, Thank you for the reminder. Please find attached a copy of the presentation and a KMZ of the application area. Let us know if you have any additional requests.

Date 2025/10/08 Method Email

Comment

Thank you for the presentation, but I was looking for the kmz 's of the outlines in different colours on slide 6. Also the kmz's for slides 17 (water and corridors) and 18 (effect of activities and boreholes). The reason is that Tetra4 is insisting that they are only interested in where the fissures are. They are objecting to our project. We on the other DO NOT want to mine where there are fissures, since this interferes with out production process. The information requested helps us to understand their issues better. We also do not wish to go the legal way, if it can be avoided.

Response

Good day Elmar, Apologies for the delay. Here with the requested shapefiles, please note that we do not have the shapefiles for slide 18 (hydrocensus) and have requested the Geohydrologist to share such and will then the KMZ/s with you as soon as we are able to. Please do not hesitate to reach out should you have any more requests or comments

Date 2025/10/10 Method Email

Comment

thank you, much appreciated

Response

Good day Elmar, Apologies for the delay, here with the shapefiles from the Geohydrologist. Please do not hesitate to contact us for anything further.

Date 2025/11/04 Method Email

Comment

1. Are these all still within the original EA? 2. Are you able to say what was permitted to be done under the Production Right? 3. as well as under the EA for the green area below? 4. Or Cluster 1? 5. How can one tell under which EA the drilling is done? 6. Have any pipelines been laid down for the new boreholes? 7. If so, are all these covered by an existing EA? 8. Is there any requirement on the part of the company to report this? 9. What was the EA project for the green area? 10. Was it done by EIMS? 11. Did EIMS do the EA the production right? 12. what are the project numbers for all of the Tetra4 projects? 13. Finally, has the Q&A from the most recent meetings been done yet?

Response

1. In the absence of providing specific drilling locations, in general, it is our understanding that Tetra4 are undertaking exploration drilling and associated production activities under the existing Production Right as well as the Cluster 1 EA. 2. The PR included similar activities (wells, pipelines, etc) to what is currently being undertaken in the Cluster 1 area. However since 2014 when such activities required an Environmental Authorisation under the National Environmental Management Act (Act 107 of 1998 - NEMA), Tetra4 obtained an EA for Cluster 1 in 2017 to commence with such activities. It is understood that exploration drilling is permitted within the broader Production Right EMPr area (refer to the green area in your map below) however connecting such wells to the production activities (i.e. pipelines, etc) are limited to within the Cluster 1 approved area. 3. Refer to response to item 2 above. 4. Refer to response to item 2 above. 5. With reference to the response to item 2 above, it is understood that exploration drilling is permitted within the broader Production Right EMPr area (refer to the green area in your map below). 6. In the absence of providing specific “borehole” locations, in general, it is our understanding that gas pipelines have been installed for the current Cluster 1 production wells

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Elmar Roberg

which falls within the ambit of the Cluster 1 EA/EMPr. 7. Refer to the above response to Item 6. 8. It is understood that audit reports are made available on the Tetra4/Renergen website. 9. The green area was the original area covered by the Production Right EMPr. At the time of the application for production right, no environmental authorisation (EA) was required as NEMA only began to govern MPRDA activities in 2014. 10. The Production Right and associated EMPr was undertaken by EIMS however as per the response to item 9 above, there was no requirement at that time for an Environmental Authorisation. 11. Refer to response to item 10 above. 12. Please see below as requested and kindly note that these projects date back to ~11 years ago. 13. Kindly see attachments in the email.

Date 2026/03/25 Method Email

## Comment

Good day, I do not believe that I received a response to this query.

## Response

Good morning Elmar, Apologies for this delay. We have forwarded this enquiry to the EAP to find out what is the hold up, you will receive a response as soon as we have it.

Date 2026/03/25 Method Email

## Comment

Hi, I do not believe I received a response to this either. Further, there was a public meeting 20October I do not recall receiving answers to the quesitons asked at the meeting. with kind regards,

## Response

Good day Elmar, We did respond to the email referenced on Tuesday the 4th of November at 08:14, please find attached email proof. In regard to the questions asked at the public meeting, a response is still being gathered as we received a high influx of comments that needed insight from various stakeholders, please note that you will receive a response to your comments once they are finalised and verified. Kind regards,

Date 2026/04/09 Method Email

## Comment

Good morning, On 25 March I wrote to you about the Tetra4 projects. Can you please advise when I can expect a response? Thank you.

## Response

Good day Elmar, Please find attached a response to all your queries. We hope that is sufficient, should there be a problem further, please do not hesitate to contact us. For convenience, we have reattached the email response containing answers to your questions about project statuses. Kind regards,

Cindy Oosthuizen

Date 2023/05/11 Method Email

## Comment

## Response

## Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Cindy Oosthuizen

Dear EIMS 1. We refer to the SMS notification we received as registered I&APs on 7 March 2023 indicating that the 'Water Use Licence technical report for the Cluster 2 Project is available for public review and comment' until today (attached for reference). 2. As you are aware, we are the registered landowners of several farms that will be directly impacted by Tetra4's Cluster 2 development, including Farms: Doornrivier 330 (Pt 1, 2, and 3), Palmietkuil 328 (Pt 4), and Digo 642 (Pt 0), where we reside and conduct farming operations. 3. We understand from the IWWMP that the uploaded documents form part of Tetra4's application to amend its Water Use Licence (WUL Amendment) which will impact on our properties and land use. The documents are extremely voluminous (more than 1000 pages, in 12 different categories/folders) - the IWWMP alone consists of 264 pages. As you would appreciate, these reports and documents are of a technical and specialist nature, and it is difficult to identify and understand the direct impacts on our properties, operations, and land use (from these documents). 4. Our preliminary comments/concerns/questions in respect of the WUL Amendment and its process are: 4.1. WUL Amendment Application Form: We have not been able to locate the completed WUL amendment application form that precedes/ accompanies the documents uploaded. We can see the IWWMP and the 12 folders containing its Appendices and the EIA application form, but not the completed WUL amendment application form. Please could you provide it or indicate where we may find it. 4.2. WUL: We don't have a copy of the WUL that is being amended through this process, please could you provide a copy. 4.3. WUL Amendment process specific consultation: Public Participation documents appear to have been uploaded as part of the WUL Amendment documents on the EAP/your website. However, these seem to relate to the EIA process specifically and our comments and meetings regarding that process, which preceded the WUL amendment documents released on 7 March 2023. Although the IWWMP refers to 'integrated' consultation, our recollection is that we've discussed/considered project impacts more broadly, and not necessarily focused on the WUL Amendment process/specific water uses contemplated (and have not had sight of the WUL). Based on the IWWMP (released on 7 March 2023) we are struggling to understand the specific water impacts. Is there an intention to conduct specific consultation on the WUL Amendment process covering water impacts specifically? As registered I&APs that will also be affected by this process, we request further consultation to understand the specific impacts emanating from this amendment. 4.4. Clarity request: We've perused the IWWMP, but it is not particularly clear to us what specific water related impacts (contemplated as part of the WUL Amendment) will occur on our properties and how it will/may impact our land use, operations, and activities (which include agricultural/farming activities). For instance, on an initial review it appears that- 4.4.1. There are underground aquifers that may be impacted, but it is not particularly clear where they are located in relation to water use activities/impacts and our land use/operations; 4.4.2. Infrastructure such as pipelines/transmission lines will trigger 21(c) & (i) uses but the locality still needs to be determined; 4.4.3. It seems from the IWWMP that in addition to the 50 x 50m drill rig footprint, further impacted areas may be contemplated for infrastructure (e.g., sumps);

Dear I&AP, Please see the included link to a downloadable file including responses to your comments. The link and associated file includes a table of responses to the comments noted as well as appendices and other relevant documentation. Should you have any queries, please let me know. Please also confirm receipt of this email and if you have been able to access the documents.

<https://www.dropbox.com/sh/b8ipzzc43jg1g0c/AADylieP5fkb2UTb1F80CvUna/Cindy?dl=0&lst=>

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Cindy Oosthuizen

4.4.4. Some of our affected farms have been listed in Table 6 as “Unknown Farm Name” but the names have been provided. We note the listing of properties in Table 6, but it is unclear exactly how the impacts mentioned and discussed in the IWWMP relate to our land use and properties. We would be grateful if you could indicate and clarify the impacts on our properties and the locations and impacts on our properties and land uses contemplated by the IWWMP. 5. In addition to addressing our questions above, please could you set up a call/online meeting to discuss the WUL Amendment so we may better understand the process and impacts on us so that we are able to adequately consider and comment. 6. Please ensure that our comments are also submitted to the licensing authority as part of the public participation/consultation process record/report. 7. We reserve our rights to submit any further comments or concerns. 8. Please acknowledge receipt. Thank you and kind regards

Gabrielle Knott

Date 2022/08/10 Method Email

Comment

Dear Sirs Please find attached my registration form for the Tetra4 Cluster 2 Project. Kind regards

Response

Greetings Mr Knott, Apologies for the delayed response. We hereby confirm receipt of your email containing your signed registration form. Please note that you have been registered as an Interested and Affected Party (I&AP) for the Tetra4 Cluster 2 Gas Production project. Please note that as a registered I&AP you will receive notifications regarding opportunities to participate in the Environmental Licensing process as and when they become available. Should you have any comments and/or queries, please feel free to contact EIMS. Regards,

GP Kriel

Date 2025/09/17 Method Email

Comment

Good day, Kindly register me as an interested and affected party for the above project. Kind regards

Response

Good day, Please note that we have received your request, and you have been registered as an I&AP for the project. Please be advised that there is a public meeting taking place with the following details: Date: 2 October 2025 Time: 12:00pm to 14:00pm Venue: NG Virginia Kerk Address: 69 Highlands Ave, Virginia, 9431 For any future comments or queries, please do not hesitate to contact us.

Mosala Moholo

Date 2024/08/14 Method Email

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

## Mosala Moholo

### Comment

Dear Sir/ madam Please kindly receive my attached CV and relevant documents as I am applying for the available position in your company. Please feel free to contact me as I meet the requirements. Regards Mosala Moholo

### Response

Good day, Thank you for your message. We appreciate your interest, but please note that this channel is strictly dedicated to notifications and engagement with Interested and Affected Parties for the Tetra4 Cluster 2 project. Unfortunately, there are no job opportunities available through this project.

## Hermien Slabbert

Date 2022/05/20 Method Email

### Comment

Good day Brain, We are planning a Solar Power Plant on Portion 2 of the farm Kalkoenkrans 225 near Virginia, your client Renegen has existing exploration gas wells on this farm and is planning phase 2 wells (see attached kmz file for reference). We would like to register as I&APs for the EIA process for the phase 2 exploration wells on the farm in order to understand the planned wells and in order to accommodate it in our layout. Will you please register myself and my colleague on CC as I&APs, see details below:

### Response

Good morning Hermien. Thank you for your email below and your interest in this project. We will register yourself as well as Mr Venter on the I&AP database as requested. You will receive additional correspondence on this project/application process from the project dedicated email address (copied herewith).

## Mr Chris Opperman

Date 2022/04/04 Method Email

### Comment

Hi Please Provide details on how I&APs can register their interest with and submit comments on the project 1473 ENVIRONMENTAL AUTHORISATION APPLICATION PROCESS FOR THE PROPOSED TETRA4 CLUSTER 2 GAS PRODUCTION PROJECT REGARDS

### Response

Greetings Mr. Chris Opperman, Further to your email regarding registering as an Interested and Affected Party (I&AP) for the Tetra4 Cluster 2 Project, kindly note that you have been registered as an I&AP in the projects database. If you have any other contact information you would like us to add, please forward it to us via email to this project dedicated email address. As a registered I&AP you will be notified of opportunities to participate in the Environmental Authorisation Application Process as they become available. Should you have any queries or comments, please feel free to contact EIMS.

Date 2022/06/17 Method Email

### Comment

FYI Regards

### Response

Good day Chris, Thanks for your email. This serves to confirm that you have been registered as an I&AP on the proposed Tetra4 Cluster 2 Gas Gathering and Production project. As an I&AP for the aforementioned project you will be notified of public participation opportunities as and when they become available. Should you have any further comments and/or queries, please feel free



# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Mr Chris Opperman

to contact EIMS.

Peter James

Date 2025/09/10 Method Email

Comment

Appeal to Tetra4 Cluster 2 <https://www.engineeringnews.co.za/article/renergen-finds-9-helium-surprise-in-p12-at-virginia-gas-project-2021-07-12/#:~:text=Natural%20gas%20and%20helium%20producer,this%20discovery%20cannot%20be%20overstated.>

Response

Dear I&AP. We confirm receipt of your submission below. Kindly note that this application is not currently in the appeal phase but is in the EIA Phase comment period. We do, however, taken note of your concerns and will address these as part of the EIA Phase comment period and provide a suitable response in due course. Kindly confirm if you would like to be formally registered as an Interested and Affected Party (I&AP) to ensure that you receive any future notifications (including the reconsideration of the decision). If so, please provide your name and surname for us to include in the I&AP database.

Date 2025/09/10 Method Email

Comment

1. Gas well impact groundwater can result in methane leaks, a potent greenhouse gas that contributes to climate change. 2. Fluid impact groundwater in area. potentially releasing fluids into surrounding groundwater. 3. Impact on plant. Improper management of drilling wastes produced water, and other wastes can lead to soil and water contamination. Volatile organic compounds (VOCs) and other chemicals released from fluids can contribute to air pollution and impact air quality. 4. Noise pollution cause wildlife leave the place, Drilling and production activities can generate noise and light pollution, impacting nearby communities and wildlife. 5. Methane worse greenhouse. These fluids, including water-based, oil-based, and synthetic-based, can contain various chemicals and heavy metals that pose risks to the environment if not properly managed. Runoff from well sites, spills, and leaks can pollute rivers, streams, and other surface water bodies, harming aquatic life and recreational areas.

Response

1. Thank you for your comment which we take note of. We refer you to the comprehensive Geohydrological (groundwater) specialist study was undertaken (refer to Appendix 4 of the EIAr for a copy of this report). Within this study the potential impact from methane leaks was assessed and suitable monitoring and mitigation measures were identified. The well construction methodology is included in Section 4.1.3.1 of the EIAr which includes steel casing and cement grouting from surface to below the deep groundwater aquifers. The casing is installed to prevent interplay between the gas resource and the groundwater resources and furthermore prevents methane from being freely liberated into the atmosphere. Based on the numerical groundwater flow and contaminant transport model contained in the Geohydrological specialist report, the potential impact of groundwater contamination and methane leaks was calculated to have a medium significance after mitigation. A comprehensive climate change impact assessment specialist study was also undertaken which considered the impact of stray methane leaks into the atmosphere (refer to Appendix 4 of the EIAr for a copy of this report). Based on the findings of the climate change specialist study, the potential impact of the projects contribution to climate change was calculated to have a medium significance after mitigation. As none of the above impacts were calculated to have a high significance post mitigation, the potential impacts are considered acceptably mitigated and will not pose a significant detrimental impact on the receiving environment. 2. This comment does not provide further detail to substantiate the basis of the concern and therefore it is our understanding that this comment relates to the potential migration of saline groundwater into the shallower freshwater aquifers and/or the potential for

Peter James

drilling fluids to contaminate the shallow groundwater (freshwater) aquifer. Further to our above response, kindly note that a detailed assessment was undertaken of the potential impact of “fluid” contamination of groundwater as a result of the Tetra4 Cluster 2 gas production activities. Based on the numerical groundwater flow and contaminant transport model contained in the Geohydrological specialist report, the potential impact of groundwater contamination was calculated to have a medium significance after mitigation and therefore the potential impacts are considered acceptably mitigated and will not pose a significant detrimental impact on the receiving environment. 3. Drilling waste and the impact of drilling on both flora and fauna was identified and assessed in the EIA Report (Section 4.1.10.2 and Section 10.2.1.6 respectively) with mitigation measures included in the EMPR (Section 5.3.2). Drilling waste will consist of wastewater and drilling mud which will not be stored more than 90 days on site. This waste will be stored in lined sumps adjacent to the drill rig and once drilling is completed, the waste will be removed from site and adequately disposed of at an appropriately licenced waste disposal facility (refer to Section 4.1.3.1 of the EIA Report and EMPR (section 4.3.2.9.2) Air quality impacts including VOC’s were assessed to have a low negative impact with suitable mitigation measures applied (refer to Section 10.2.1.1 of the EIA Report. Overall, the impact of drilling operations is considered to have a low negative significance with the implementation of mitigation measures (Section 10.3 of the EIA Report). A detailed air quality impact assessment was undertaken and is included in Appendix 4 of the EIA Report. The impact of air quality on the receiving environment was identified as having a low negative significance post implementation of the identified mitigation measures. 4. A detailed noise impact assessment was undertaken and is included in Appendix 4 of the EIA Report. The impact assessment of noise as a result of the project will have a low negative significance post implementation of the identified mitigation measures (refer to Section 10 of the EIA Report). The potential impact of light pollution was assessed as part of the Visual Impact Assessment included in Appendix 4 of the EIA Report. The impact assessment of light pollution on views from local homesteads as a result of the project will have a low negative significance post implementation of the identified mitigation measures (refer to Section 10 of the EIA Report). Light and noise impacts on wildlife in particular was not raised as a potential impact during the original scoping or EIA phase consultations. Noise and light impacts on wildlife would be limited to the site and directly adjacent areas with a short-term duration during the construction phase and a more long-term duration during the operational phase. The magnitude of the potential noise and light impacts on wildlife would be regarded as low (i.e. minor reactions by wildlife in terms of moving away), the impact could be reversible without any time and cost with a low probability of the impact materialising. Various mitigation measures are included in the EIA and EMPr to minimise the impacts caused by lighting and noise. Overall, the significance of the impact cause by light and noise on wildlife would be rated as low largely due to the fact that wildlife tends to move away from such areas and/or becomes habituated to such impacts. 5. A detailed discussion of methane as a greenhouse gas is included in the Climate Change Assessment report (refer to Appendix 4 of the EIA Report). Within

Peter James

the reports, it is acknowledged that methane is a potent GHG. As indicated in Section 4.1.3.1 of the EIA report, although uncommon, blowout or blowback of water and/or gas is prevented using a blowout diverter which is installed in the drill line (on surface) and the blowout diverter valves safely redirect any water and/or gas to a discharge line for safe disposal. All exploration boreholes must be drilled and cased in accordance with applicable international standards and best practice guidelines and will be sealed with a combination of casing and grouting to ensure vertical isolation of the gas and/or any deep saline water from both the surrounding geology and freshwater hydrological regime. In addition to the drill rig, lined sumps will be required to store and recirculate water for the drilling process. With respect to the potential for drilling fluids to pose a risk to the environment if not properly managed, kindly refer to Section 5.3.2 of the EMPr in which mitigation measures are detailed such as drilling fluids should be environmentally friendly to prevent any harm to the environment or groundwater regime and should be kept in a lined mud pit or surface container. The potential impacts of the projects Scope 1, 2 and 3 emissions in terms of climate change were identified and assessed in Section 10 of the EIA Report. With respect to the concern raised that runoff from the site could cause pollution of the surrounding environment, kindly refer to the EMPr which contains a number of mitigation measures to be implemented to prevent such off-site pollution. A sample of such mitigation measures includes but not limited to:

- Runoff from the construction footprint should be controlled on site to prevent concentrated point releases of water into downslope watercourses.
- Care needs to be taken not to initiate or aggravate erosion in watercourses.
- Ensure separation of clean and dirty water and provide for adequate dirty water containment.
- Any water (Incl. condensate) generated from production wells need to be captured in some form of dirty water storage facility. This water must be collected and suitably disposed of as hazardous waste.
- In order to contain non-biodegradable oil and fuel spills, drip pans or PVC lining should be provided for drill rigs and other equipment with a risk potential.

Date 2025/09/19 Method Email

Comment

My name is \*\*\*\* \*

Response

Hi \*\*\*\*, Your name has been noted and the I&AP database has been updated accordingly. You will now receive all further communication regarding the progression of this proposed project. For any queries and comments please do not hesitate to contact us.

Date 2025/09/25 Method Email

Comment

Good day When will person can appeal . Is any other civil organization ens know about this. Sincerely

Response

Good day \*\*\*\*, The proposed project is on the Environmental Impact Assessment Report public review and comment Phase. At this point, we can note your comments/objections and will

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Peter James

include them in the final report that will be sent to the Competent Authority (CA) for their consideration. Detailed responses to your comments/objections will be provided in due course prior to submission to the CA. Once the CA has reached a decision (possibly around February 2026), all I&APs including yourself will be informed of the decision and notified of the opportunity to submit appeals. Relevant civil organisations were included in the I&AP Database and were given notice in all phases of the project. If you are inquiring about a specific Civil Organisation/s, could you please provide the name/s and we will be able to better advise on your query.

Celine Oates

Date 2025/10/10 Method Email

Comment

Dear Sir/Madam With reference to the above matter and below correspondence. Kindly see attached hereto the KMZ file as requested. Kindly confirm whether these suffice for your determination. Kind regards,

Response

Hi Celine. Thank you for sharing the properties for Red Rocket. Can we assume that none of your other clients (other than Red Rocket) have projects or infrastructure falling within the Cluster 2 application area? We take note that 2 of Red Rockets properties of interest extend within the eastern section of the Cluster 2 application area (below screenshot refers). Could you kindly clarify what infrastructure is planned on those two specific properties and more specifically what infrastructure is planned within the Cluster 2 application area of those 2 properties?

Date 2025/10/10 Method Email

Comment

Dear Sir/Madam With reference to the above matter and below correspondence. We are unable to at this stage plot the full extent of the impact of the Cluster 2 project on our client, which is what we seek to do as part of the extra time requested in the below correspondence. Kindly confirm whether you will grant us the extension at your earliest convenience. Kind regards,

Response

Hi \*\*\*. Further to our communications below relating to the granting of extension, we hereby grant a request for extension and please submit your comments by 25 October 2025 as it is understood from your letter that you have had sight of the EIA report since 25 September 2025 (i.e. 30 day comment period).

Date 2025/10/14 Method Email

Comment

Dear Sir/Madam We confirm receipt of the below correspondence. We confirm further that 25 October 2025 falls on a Saturday, and so we will provide our comments to you by the next business day (i.e. 27 October 2025). Kind regards,

Response

Good day Celine, Please accept our apologies for overlooking the date. The 27th of October 2025 is an acceptable due date for us, and will work perfectly. We look forward to hearing from you.

Date 2025/11/07 Method Email

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Celine Oates

Comment	Response
Dear Sir/Madam We refer to the above matter and confirm that we act on behalf of the following entities: 1. Red Rocket Energy (Pty) Ltd; 2. Piscis Energy (Pty) Ltd; 3. Lupus Energy (Pty) Ltd; 4. URSA Energy (RF) (Pty) Ltd; 5. Norma Energy (Pty) Ltd; 6. Fornax Energy (Pty) Ltd; 7. Volans Energy (Pty) Ltd; and 8. K2022579146 (South Africa) (Pty) Ltd. Kindly see attached hereto objections to the Tetra4 Cluster 2 Virginia Gas Production Project, and find the appendices referred to therein by way of the following link: <a href="https://we.tl/t-U7n7jlsr2R">https://we.tl/t-U7n7jlsr2R</a> . Should you have any difficulty accessing the documentation by way of the above link, please don't hesitate to reach out. Kindly confirm receipt hereof. Kind regards,	Good day Celine, Thank you for your comments, they have been received and noted. The EAP is currently drafting a response, and we will get back to you as soon as it is finalised. We hope everything is in order for now. Should you require anything further, please do not hesitate to contact us.

Date	2025/11/07	Method	Email
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Comment	Response
1. RE: OBJECTIONS AGAINST THE REVISED ENVIRONMENTAL IMPACT ASSESSMENT REPORT FOR THE PROPOSED TETRA4 CLUSTER 2 GAS PRODUCTION PROJECT, IN THE MASILONYANA AND MATJHABENG LOCAL MUNICIPALITIES, FREE STATE PROVINCE, SOUTH AFRICA [DEPARTMENT OF MINERAL RESOURCES AND ENERGY REFERENCE NUMBER: 12/4/007]. We act on behalf of the following entities: o Red Rocket Energy (Pty) Ltd; o Piscis Energy (Pty) Ltd; o Lupus Energy (Pty) Ltd; o URSA Energy (RF) (Pty) Ltd; o Norma Energy (Pty) Ltd; o Fornax Energy (Pty) Ltd; o Volans Energy (Pty) Ltd; and o K2022579146 (South Africa) (Pty) Ltd. (referred to collectively as 'our Clients') 2. Our Clients are registered interested and affected parties ('I&APs') in connection with the abovementioned application. Our Clients, in their separate and/or combined capacities, obtained environmental authorisation and/or registration in terms of NEMA for the following renewable energy developments and associated electrical grid infrastructure which fall directly within the Project site and/or within the immediate vicinity of the Project: o Virginia 1 Solar PV Facility and Associated Grid Integration Infrastructure under Department of Forestry, Fisheries and the Environment ('DFFE') reference number 14/12/16/3/3/2/2099 dated 19 May 2022 (attached as Appendices A.1 and A.2). We confirm that this project is currently under construction. o Virginia 2 Solar PV Facility and Associated Grid Integration Infrastructure under DFFE reference number 14/12/16/3/3/2/21000 dated 20 May 2022 (attached as Appendix B). We confirm that this project is currently under construction. o Virginia 3 Solar PV Facility and Associated Grid Integration Infrastructure under DFFE reference number 14/12/16/3/3/2//2101 dated 23 May 2022 (attached as Appendix C). We confirm that this project is currently under construction. o Three 132kV Powerlines for the connection of the Virginia 1, 2 and 3 Solar PV Facilities to the Eskom Theseus Substation under DFFE reference number 14/12/16/3/3/1/2444 dated 21 February 2022 (attached as Appendix D). o 210MW Virginia 4 Solar PV Facility and Associated Grid Integration Infrastructure under DFFE reference number 14/12/16/3/3/2/2283	1. Your statement is noted. 2.We take note of the list you provide of your clients solar facilities, BESS facility and powerline connections to the Theseus substation. It is also appreciated that the property information for each of these facilities was provided which we were able to use to assess these locations in respect to the Tetra4 Cluster 2 application area. Our responses are provided against each bullet below where necessary. Based on our assessment of the property on which the Virginia 1 Solar Facility is located, this property is >13km outside of the nearest point of the Tetra4 Cluster 2 application area. Based on our assessment of the property on which the Virginia 2 Solar Facility is located, this property is >13km outside of the nearest point of the Tetra4 Cluster 2 application area. Based on our assessment of the property on which the Virginia 3 Solar Facility is located, this property is >13km outside of the nearest point of the Tetra4 Cluster 2 application area. Based on the property information you provided, the Theseus Substation is located ~1km outside of the Tetra4 Cluster 2 application area with your client's powerline extending further east from the Theseus substation and therefore neither the Theseus substation nor the powerline fall within the proposed Tetra4 Cluster 2 development area. Based on our assessment of the property on which the Virginia 4 Solar Facility is located, this property is >13km outside of the nearest point of the Tetra4 Cluster 2 application area. Based on our assessment of the property on which the Florida Solar Facility is located, this property is ~8.5km outside of the nearest point of the Tetra4 Cluster 2 application area. The Acamas BESS is located adjacent to the Theseus substation and is ~1km outside of the Tetra4 Cluster 2 application area. Kindly note that the Tetra4 Cluster 2 application area falls outside of your Clients' various project infrastructure locations. Kindly note that you have incorrectly inferred that the green shaded area (in your map) forms the basis of the Tetra4 Cluster 2 application area. The green shaded area in your map is in fact the Tetra4 Production Right area which was approved in 2010 and is therefore not currently under application whereas the Cluster 2 application area falls within the Production Right area as shown in Figure 1 included at



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dated 26 September 2023 (attached as Appendix E). We confirm that this project was awarded preferred bidder status under the Department of Mineral Resources and Energy ('DMRE') Renewable Energy Independent Power Producer Procurement Programme ('REIPPPP') Bid Window 7, and is imminently reaching financial close to begin construction. o 200MW Florida Solar PV Facility and Associated Grid Integration Infrastructure under DFFE reference number 14/12/16/3/3/2/2322 dated 29 November 2023 (attached as Appendix F). We confirm that this project was awarded preferred bidder status under the DMRE's REIPPPP Bid Window 7, and is imminently reaching financial close to begin construction. o Registration of the Acamas Battery Energy Storage System ('Acamas BESS') under DFFE registration reference number BESS/2024/FS/15 dated 4 October 2024 (attached as Appendix G). We confirm that the Acamas BESS is approved. o In terms of the Project's geographical relation to the abovementioned solar facilities, Acamas BESS and associated grid integration infrastructure, see below (reference to figure on pg.3 of the original comment document) o The green shaded area in the above figure illustrates the Tetra Cluster 2 Gas Production application area. The red polygon on the left hand side illustrates the Florida Solar PV Facility, most of which falls within the Project area; the red polygon on the right illustrates the 210MW Virginia Solar PV Facilities and the pink line running from within the green shaded area, through the Florida Solar PV Facility, and into the Virginia Solar PV Facility is the overhead line for the two solar projects that forms part of the grid integration infrastructure. o Our clients' developments that will be most directly impacted by the Project include the overhead powerline ('OHPL'), the Florida PV Facility and the Acamas BESS. However, that is not to say that our clients' other developments are not directly impacted – which means that there will be impacts in a cumulative sense that were not catered for in the Project. o The OHPLs running into the Theseus substation for the Virginia 1, 2, 3 and 4 Solar PV Facility as well as the Florida Solar PV Facility are on properties affected by the Project. Furthermore, the Acamas BESS is on an affected property. None of these projects have been acknowledged, evaluated or assessed as part of the revised Environmental Impact Assessment Report ('EIAR') and associated specialist assessments, which creates significant gaps in impact assessment in terms of specific and cumulative impacts of the Project. 3. At the outset we are instructed to record that our Clients do not object to the Project in principle, and are willing to ensure that the solar energy facilities, Acamas BESS and associated grid integration infrastructure co-exist with the Project infrastructure, provided that the Project's final infrastructure footprint does not overlap in anyway with either the PV Plant or the BESS Facility boundaries. 4. Given the potential for and significant risk of soiling and shading losses on the Florida Solar PV Facility, and in order to avoid significant impact on the renewable energy developments, new combined Liquid Natural Gas ('LNG') and Liquid Helium ('LHe') plant must not be located within a 2 km radius of the Florida Solar PV Facility boundary. This buffer is necessary to mitigate potential operational impacts and ensure optimal solar generation performance. This condition must be accommodated in the final layout planning for the Cluster 1 and Cluster 2 developments, but we nevertheless prepare these comments in

the end of this document as well as shown in Figure 5 contained in the EIA Report. Please note that it is the Cluster 2 application which forms the basis of the current application and the Cluster 2 application area boundary does not overlap with any of your Clients' infrastructure (refer to Figure 2 and Figure 3 included at the end of this document). o Our clients' developments that will be most directly impacted by the Project include the overhead powerline ('OHPL'), the Florida PV Facility and the Acamas BESS. However, that is not to say that our clients' other developments are not directly impacted – which means that there will be impacts in a cumulative sense that were not catered for in the Project. o The OHPLs running into the Theseus substation for the Virginia 1, 2, 3 and 4 Solar PV Facility as well as the Florida Solar PV Facility are on properties affected by the Project. Furthermore, the Acamas BESS is on an affected property. In terms of this comment, please refer to above responses. It is our understand that the proposed PV facilities do not overlap with the proposed Tetra4 Cluster 2 area. In terms of this comment, please refer to above responses. It is our understand that the proposed PV facilities do not overlap with the proposed Tetra4 Cluster 2 area. A comprehensive public participation process was undertaken to identify any interested and/or affected parties (refer to Section 8 of the EIA Report) and according to our records, neither of your clients contacted EIMS to be registered at any time during the application period. It is contended that your Clients' undertook applications for their Solar, BESS and Powerline projects within the existing Tetra4 Production Right area which was already approved in 2010 and therefore existed at the time of your clients application, however, it is unclear whether Tetra4 was identified as a directly affected right holder and consulted during this process as required. In summary it is the EAP's understanding that your clients facility's do not fall within the proposed Cluster 2 area and are consequently not directly affected. 3. With reference to our clarifications provided to your comments above and specifically your apparent misunderstanding about the Cluster 2 application area, kindly note that none of the Cluster 2 infrastructure overlaps in any way with your Client's project infrastructure. 4. With reference to our clarifications provided to your comments above and specifically your apparent misunderstanding about the Cluster 2 application area, kindly note that the Florida Solar PV Facility is located ~8.5km east of the nearest boundary to the Cluster 2 application area. OUTDATED ASSESSMENTS 5. It is the EAP's opinion that these reports are still relevant and do not require amendment. More specifically in the context of your Clients' energy developments which, as clarified above, do not fall within the Tetra4 Cluster 2 application area. Further in the DFFE's decision on appeal, the only specialist studies which were specified as requiring amendment included the Hydrology, Geohydrology and Climate Change studies. It is the view of the EAP, that the specialist baseline, assessments and conclusions of the other specialist studies remain relevant and do not require specific amendment or supplementation. 6. It is the EAP's opinion that these reports are still relevant and do not require amendment. More specifically in the context of your Clients' energy developments which, as clarified above, do not fall within the Tetra4 Cluster 2 application area. 7. With reference to our clarifications provided to your comments above and specifically your

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connection with the EIAR and associated impacts assessments / specialist studies in relation to the Project. OUTDATED ASSESSMENTS 5. The EIAR and specialist reports that assess impacts of the Project are outdated and unable to support the competent authority in making a balanced and informed decision on the impacts of the Project. The outdated assessments include, inter alia: o Cluster 2 Economic Impact Assessment by Strategy4Good dated 26 September 2022; o Tetra4 Cluster 2 Gas Production Project Social Impact Assessment by Equispectives Research and Consulting Services dated September 2022; o Terrestrial Ecology Assessment for the proposed Tetra 4 Cluster 2 Project by Environmental Impact Management Services dated May 2022; and o Heritage Impact Assessment for the Proposed Tetra4 Cluster 2 Gas Production Project by PGS Heritage dated 29 June 2022. 6. There are a number of concerns in this regard: o The effluxion of time between the impact assessments undertaken as part of application for environmental authorisation (granted on 18 May 2023, 'EA') and the publication of the EIAR currently under comment, means that the surrounding context in which the EA was granted has evolved and, consequently, so have the various impacts including social and economic impacts. This has resulted in various impact assessments published under the EIAR being rendered outdated, or lacking key information on which the decision maker may render a rational, balanced and informed decision. o As Virginia, Free State, is a well-known hotspot for energy development, the developer (i.e. Tetra4 (Pty) Ltd, as a wholly owned subsidiary of Renegen Ltd) as part of their due diligence ought to have confirmed and catered for any changes in the surrounding context including but not limited to renewable energy developments, such as those belonging to our Clients, which have been approved and are approaching construction or currently under construction. o These developments ought to have been identified and considered when the EIAR was required by the Minister of Forestry, Fisheries and the Environment ('Minister') in the context of the appeal decision dated 1 August 2024. Notwithstanding this, a myopic focus on the changes required by the Minister in the appeal, combined with an effluxion of time in the context of a rapidly evolving context, has resulted in various gaps and omissions in the EIAR and associated assessments. 7. In light of the above, we confirm that the OHPLs running into the Theseus substation for the Virginia 1, 2, 3 and 4 Solar PV Facilities as well as the Florida Solar PV Facility are on properties affected by the Project. Furthermore, the Acamas BESS is on an affected property. None of these projects have been acknowledged, evaluated or assessed as part of the EIAR and associated specialist assessments, which creates significant gaps in impact assessment in terms of specific and cumulative impacts of the Project. 8. Due to the failure to acknowledge the existence of these renewable energy developments and associated grid integration infrastructure, the full range of impacts (specific and cumulative) for the Project have not been considered, evaluated or assessed as part of the EIAR and associated impacts assessments for the Project, which creates a gap in information preventing the competent authority from being able to make a balanced and informed decision thereon. The EIAR and associated impact assessments must be updated to reflect the accurate cumulative impacts of the Project in light of the surrounding renewable

apparent misunderstanding about the Cluster 2 application area, kindly note that none of the Cluster 2 infrastructure overlaps in any way with your Client's project infrastructure. 8. Please refer to our responses to Items 1 to 7 above. Even though your Clients' developments are outside of the Tetra4 Cluster 2 application area, there may be cumulative socio-economic impacts such as the labour market, in migration etc. It is our understanding that this would not represent a substantive impact as there is already a significant labour market in Welkom, Virginia and the surrounding areas and the workforce required for Tetra4 is unlikely to create a significant cumulative impact. SOCIO-ECONOMIC IMPACTS 9. Please refer to our responses to Items 1 to 7 above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area. In the absence of having access to your Clients' individual EIA reports, it is unclear whether an assessment of the cumulative socio-economic impacts of your Clients' developments in conjunction with the existing and proposed Tetra4 gas production developments was undertaken and which may indicate a greater benefit to the greater socio-economic environment. As per our responses above, this comment is presented on the misunderstanding that there is an overlap in your Clients' projects with the Tetra4 Cluster 2 project. Furthermore, this comment does not explicitly state what impact is of concern and therefore it is difficult to respond in more detail. It is the EAP's understanding that the assessments are neither incomplete nor materially deficient as suggested. As per the earlier responses, your Clients' facilities do not fall within the Tetra4 Cluster 2 application area. The competent authority therefore has the information available to be able to make an informed and rational decision. The NEMA EIA Regulations and guidelines do not require a 'full cost benefit analysis'. The EIA process has been undertaken, and the EIA report compiled, in accordance with the EIA regulations. Further the proposed developments need and desirability has been considered and presented in Section 6 of the EIA Report, in alignment with the DFFE Need and Desirability Guideline. It is the EAP's understanding that the social and economic assessments and resultant EIA provide a substantive, methodological and credible assessment. 10. Please refer to our responses above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area. Furthermore, kindly refer to the Social Impact Assessment report contained in Appendix 4 of the EIA Report as well as Section 10.2 of the EIA Report in which potential impacts on other land-use have been considered. 11. Please refer to our responses to Items 1 to 7 above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area. It is not clear what 'renewable energy externalities' are being referred to; however the EIA Report does undertake a comprehensive social and economic impact assessment (refer to Sections 9 and 10 of the EIA Report as well as Appendix 4). As noted earlier the proposed renewable energy developments do not fall within the Tetra4 Cluster 2 application area and therefore does not present a threat on the renewable energy developments feasibility or sustainability. Consequently, it is not expected that there will be a risk of community members losing employment opportunities in the pursuit of non-renewable gas extraction. 12. Please refer to

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energy developments and grid integration infrastructure, which stand to be directly and indirectly impacted by the Project. Until such a time that the EIAR and impact assessments are updated, and accordingly these significant gaps in information closed, the competent authority cannot render a legally defensible decision on the merits. SOCIO-ECONOMIC IMPACTS 9. The Economic Impact Assessment undertaken by Strategy4Good dated 26 September 2022, read with the Social Impact Assessment by Equispectives dated September 2022, are deficient and do not sustain legally defensible decision-making by the competent authority in terms of NEMA and the EIA Regulations for the following reasons: o There is no substantive, quantitative social and economic impact assessment of the effects of the Project on approved renewable energy developments in the area. o The full range of socio-economic consequences including the negative impacts on our client's projects have not been considered, evaluated, or assessed in the EIAR and associated specialist reports and assessments. o Consequently, the information in the EIAR regarding all potential project-related impacts is materially deficient. As such the current information and assessment reports tabled before the competent authority do not provide a scientifically credible, legally defensible or objective basis upon which a defensible administrative decision can be made by the competent authority in terms of NEMA and the EIA Regulations. o The competent authority is not in a position to exercise its administrative discretion lawfully as the full range of potential environmental, social and economic impacts of the Project - a mandatory requirement in terms of the EIA Regulations published under the National Environmental Management Act 107 of 1998 ('NEMA')- has not been factored into the impact assessment process or the impact mitigation hierarchy. o Our Clients' renewable energy developments contribute to the social and economic upliftment of the area, and serve as direct contributors to the Just Energy Transition. Based on the incomplete assessments and materially deficient information tabled by the Environmental Assessment Practitioner ('EAP'), the competent authority is not positioned to make an informed and rational decision regarding the project-related impacts or the need and desirability of the of the Project, particularly in light of the fact that the impact on our Clients' renewable energy developments is unassessed and unresolved. o The EAP has failed to discharge its obligations to satisfy the threshold of need and desirability in compliance with the EIA Regulations as a full cost benefit analysis of the Project and its impacts is a critical prerequisite to the acceptance of the reports by the competent authority in terms of the EIA Regulations. As there is no credible, objective and comprehensive assessment of the social and economic impact of the expansion of the proposed Project on the surrounding renewable energy developments and associated grid integration infrastructure, an approval on this basis would be flawed and irresponsible. o The lack of a substantive, methodical and credible socio-economic impact assessment is a material deficiency. The assessment should be rejected on the basis of being inadequate and not fit for purpose on this basis alone. 10. Despite renewable energy developments and/or BESS being (directly and indirectly) affected by the Project, the assessments do not quantify the direct and indirect effects of the Project on the

our responses to Items 1 to 7 above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area. It is not anticipated that the proposed Tetra4 Cluster 2 activities will negatively affect the proposed renewable developments due to the fact that their footprints do not overlap. Consequently, the sustainability of the renewable enterprises is not expected to be undermined. The nature of the gas production activities is such that it is not inconceivable that they could come to a co existence arrangement with renewable development where both activities can be accommodated (as you allude to in item 3 above). 13. Please refer to our responses to Items 1 to 7 above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area. 14. Please refer to our responses to Items 1 to 7 above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area. Kindly refer to Appendix 3 of the EIA Report in which the I&AP database is included as well as signed attendance registers for various public and focus group meetings held. A comprehensive public consultation process was undertaken in line with the EIA Regulations with landowners and adjacent landowners notified through various means. It should be noted that your Clients' project sites are not within the Tetra4 Cluster 2 application area and are therefore not directly affected. The statement that only landowners were consulted is a misrepresentation of what was undertaken and presented in the EIA Report. The EIA process and public participation aligned with and exceeded the prescripts of the NEMA EIA Regulations. The participation did not exclude the impacted communities, the vulnerable, or the impoverished. Various opportunities were provided for participation including but not limited to public and focus group meetings. Kindly refer to Section 8 of the EIA Report as well as Appendix 3 which contains detail on the consultation process undertaken. The NEMA EIA Regulations require presentation of Need and Desirability, as well as presentation and assessment of positive and negative impacts. Kinly refer to Section 6 of the EIA Report (Need and Desirability) in which arguments for and against natural gas and helium are discussed. Furthermore, kindly refer to the Social and Economic impact assessment reports contained in Appendix 4 of the EIA Report where both positive and negative impacts are identified and assessed. While some impacts are considered to have a positive impact, others are assessed to have a negative impact with a balanced and impartial assessment undertaken. Kindly refer to Section 1.5 of the EIA Report in which a summary of the impact assessment per discipline is provided. It should be noted that a total of 20 social impacts were identified (6 positive and 14 negative) while 40 economic impacts were identified (20 positive and 20 negative). It is therefore a misrepresentation to state that the negative impacts were not quantified for the project. As stated above, the positive and negative impacts were methodically assessed in line with the NEMA EIA Regulations. 15. Please refer to our responses to Items 1 to 7 above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area. 17. Refer to Section 10 of the EIAR in which the nature and severity of the identified and relevant impacts are assessed and quantified. The impact assessment considers the nature, duration, extent, magnitude, reversibility and probability and a prioritisation factor is also applied where

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current investment in renewable energy development in the Free State, as a direct contributor to the Just Energy Transition. The status of our Clients' projects is as follows: o The Virginia 1 Solar PV Facility is currently under construction; o The Virginia 2 Solar PV Facility is currently under construction; o The Virginia 3 Solar PV Facility is currently under construction; o The Virginia 4 Solar PV Facility was awarded preferred bidder status under the DMRE's REIPPPP Bid Window 7 and is imminently reaching financial close to begin construction; o The Florida Solar PV Facility was awarded preferred bidder status under the DMRE's REIPPPP Bid Window 7 and is imminently reaching financial close to begin construction; o The Virginia 1-3 OHPL is currently under construction; and o The Acamas BESS is approved and under development.

11. Beyond the economic effects, there is also no consideration in the EIAR and associated reports of the renewable energy development externalities that are created by such enterprises in the socio-economic climate in and near a town like Virginia. Due to the Project's threat on the feasibility and sustainability of the abovementioned renewable energy developments, members of the community are at risk of losing employment opportunities in the pursuit of (potentially) non-renewable gas extraction which irreparably damages the environment in which it is extracted from.

12. If the renewable energy developments are negatively affected by the development of the Project, the sustainability of these enterprises will be undermined due to disinvestment from the land-use. This important externality is not considered in detail, especially in terms of the linkage to the economics of the specific land-use. This is also an important consideration of the impact of the Project, but one which is not dealt with at all.

13. Moreover, the dynamics of the employment opportunities created and lost has also not been substantively developed or assessed. The significance of this oversight is that, for example, the negative impacts of disinvestment and job losses in renewable energy development will fall on the more vulnerable members of society which would not naturally find alternative employment. This has not been assessed.

14. The premise of any assessment is that a robust, justifiable and scientific methodology is essential to quantifying effects or impacts in an unbiased and methodical way. This is a critical prerequisite to the credibility of any study as these comments point to serious shortcomings and reservations about the general approach used in the reports. At a high level these concerns include: o The number of affected parties actually consulted during this process is likely to be a gross underrepresentation of the actual parties that will be affected, directly or indirectly by the project and its impacts. This is confirmed by the fact that our Clients, although first in time to obtain environmental authorisation for the above renewable energy developments and associated grid integration infrastructure, were not consulted as part of the EIA process for the Project. This is further confirmed by the fact that the EIAR states that "Not every individual in the community could be interviewed therefore only key people in the community were approached for discussion. These key people include all the directly affected landowners". Only consulting landowners is a gross underrepresentation of the impacted community, particularly considering the fact that those that are most vulnerable to the impacts of the

the impacts are deemed to be cumulative. The impact assessment was undertaken in line with the prescribed requirements within the NEMA EIA Regulations.

18. Please refer to our responses to Items 1 to 7 above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area.

19. Please refer to our responses to Items 1 to 7 above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area. The existing operations being referred to appear to relate to your Clients' approved renewable energy development. As noted above these do not overlap with the Tetra4 Cluster 2 application area and therefore are not expected to significantly affect the sustainability of these operations.

20. Refer to section 10.1 of the EIAR in which the impact assessment methodology was described. The probability distribution is presented in Table 80 and Table 81 of the EIAR where the nature, duration, extent, magnitude, reversibility and probability scores are clearly defined. The determination of environmental risk is presented in Table 82 with a calculation provided as to how the environmental risk is calculated. Lastly, the environmental risk score (significance) is described in Table 83.

21. The impact assessment model (assuming this is referring to the Impact Assessment Methodology in the EIA Report) that we have used has been tried and tested through a significant number of EIA's submitted to various competent authorities and the methodology is based on the DFFE impact assessment guidelines. As such, it is our considered opinion that the assessment methodology is adequate for the purposes of the Tetra4 Cluster 2 EIA.

22. Please refer to our responses to Items 1 to 7 above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area. With respect to the socio-economic impacts that were identified and assessed, as clarified above, it should be noted that a total of 20 social impacts were identified (6 positive and 14 negative) while 40 economic impacts were identified (20 positive and 20 negative). It is therefore a misrepresentation to state that there was "...an attempt to improve the reports...". An impartial and independent assessment was undertaken throughout the EIA process and presented in the Reports.

23. Please refer to our responses to Items 1 to 21 above in which it is clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area and the impact assessment methodology and process is discussed. It is the EAPs opinion is that there are not significant shortcomings in the process or content. The EIA has been undertaken in line with the NEMA EIA Regulations and in many respects exceeded the minimum requirements. The assessment is not based on quantifiable parameters but is rather a qualitative assessment. Refer to the impact assessment in Section 10 of the EIA Report. It is not always possible or reasonable to undertake an assessment based on quantitative predicative models for all aspects. A largely quantitative model was undertaken for the groundwater and air quality assessments, but that even these remain predictive models that have underlying uncertainty. The basis on which the impacts were assessed are clearly articulated in the report and relevant specialist studies are, in the view of the EAP, aligned to the requirements of the NEMA EIA Regulations, and do provide the Competent Authority with the information necessary to make an informed decision.

PUBLIC PARTICIPATION PROCESS

24. Please refer to our responses to Items 1 to 21 above in which it is

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project are likely not owners of land, but rather those more impoverished and without resources. o The weight and significance attributed to positive socio-economic impacts in the reports is a serious shortcoming noted in this process and would skew the assessment of relative socio economic impacts in favour of the proponent thus rendering the entire assessment process as discredited. o Methodologically, the assessment undertaken avoids a substantive, methodical quantification of both positive and negative impacts to objectively demonstrate impact and desirability of the proposed project in light of the impact of the Project on the sustainability of surrounding renewable energy developments approaching construction and/or under construction. o Because the socio-economic report does not methodically quantify the negative impacts of the project, the fullest possible extent of the detrimental impact of the proposed project remains hidden from view and are not weighed against alleged benefits. o A truly objective and independent impact assessment report should objectively determine both the negative and the positive impacts of a project to enable the competent authority to weigh the positive and negative impacts and then to arrive at a decision about the Project. It is inappropriate for an independent assessment to weigh and mediate impacts and their hypothetical mitigation and to motivate in favour of (or against) a development on their own accord. 15. Further to the above, the EIAR fails to take into account the following relevant factors: o An accurate and credible socio-economic impact assessment is central to the evaluation and consideration of the merits of the application as required in terms of inter alia sections 2, 23 and 24 of NEMA. o How the effect of the Project and its impacts implicate the principle of sustainable development (and impacts on the sustainability of our clients' rights and development projects), which remains unassessed and unresolved. o The technical efficacy and competence of the social and economic impact assessments to the extent that the methodology employed in the assessments has simply failed to consider the impacts on the most directly impacted I&APs in question. o The quantification of the adverse socio economic impact on our Clients' rights and development projects is unquantified yet will give rise to and/or cause a material adverse impact on our Clients' operations. o The broader implications for the socio economic impacts on our Clients' operations. 16. The factors referred to above are interrelated in that, taken together, they demonstrate that a precautionary approach must be applied and an external independent peer review should have been required before the competent authority may purport to render a defensible decision. 17. The nature and severity of the Project impacts are neither assessed nor quantified, resulting in the competent authority being ill-placed to identify and quantify the significant adverse socio economic impact on the long-term sustainability of our Clients' operations. 18. The practical and legal effect of the EIAR is to disregard in its entirety the associated impacts on the sustainability of existing and approved developments in the receiving environment and immediate context. In so doing, the EAP misdirected itself by failing to take into account relevant impacts and considerations, and by failing to identify all potential significantly adverse impacts. 19. In discharging its obligations in terms of section 24 of NEMA and the EIA

clarified that your Clients' developments do not fall within the Tetra4 Cluster 2 application area and are therefore not directly affected Interested and Affected Parties. It is therefore put forward that the public participation process was adequate for the purposes of the Tetra4 Cluster 2 EIA application. The consultation process complied with the prescribed requirements of the NEMA EIA Regulations and in many instances, went above and beyond the minimum prescribed requirements. 25. In addition to our response provided above to Item 24, a rigorous public participation process was undertaken since May 2022 for the Tetra4 Cluster 2 application as presented in Section 8 and Appendix 3 of the EIAR. 26. Please refer to our responses to Items 24 and 25 above. 27. Please refer to our responses to Items 24 and 25 above. 28. Please refer to our responses to Items 24 and 25 above. UNACCEPTABLE ASSUMPTIONS AND LIMITATIONS 29. Section 14 of the EIA Report contains the assumptions and limitations as per the prescribed requirements of the NEMA EIA Regulations. It is standard EIA practice that when faced with uncertainty the assessment should be conservative in the assessment rating and additional management and mitigation applied. This selective quotation of this limitation with respect to the air quality and health risk assessment failed to acknowledge that this limitation went on to clarify that emergency flaring was assessed while other non routine releases expected to be minimal. All reasonable and potentially significant routine and non-routine emissions have been identified and included in the assessment. The actual statement in the report is as follows: "Only routine emissions for the operational phase were estimated and simulated. Atmospheric releases occurring as a result of non routine conditions were not accounted for limited to emergency flaring at the plant, with other non routine releases expected to be minimal" (refer to the EIA Report section 14.3) Section 14 of the EIA Report contains the assumptions and limitations as per the prescribed requirements of the NEMA EIA Regulations. This selective quotation of this limitation with respect to the air quality and health risk assessment failed to acknowledge that this limitation went on to clarify that impacts associated with these phases are highly variable and generally less significant than construction and operational phase impacts. Mitigation and management measures recommended for the construction and operational phases are however also applicable to the planning and design, decommissioning, closure and rehabilitation phases. The actual statement in the report is as follows: "Planning and design, decommissioning, closure and rehabilitation phase impacts were not quantified. Impacts associated with these phases are highly variable and generally less significant than construction and operational phase impacts. Mitigation and management measures recommended for the construction and operational phases are however also applicable to the planning and design, decommissioning, closure and rehabilitation phases" (refer to the EIA Report section 14.3). The use of actual measurements provided by Tetra4 is considered more robust than using emission factors and therefore this is considered adequate, and in fact more accurate, for the purposes of the assessment. The full assumption and limitation to which you allude states the following: "Although Tetra4's Cluster 1 production project is in progress (thus there is direct evidence that the enterprise is operational), the Cluster 2 economic impact is based on an intent, namely



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Regulations, the EAP is required to have due regard to the significant detrimental socio economic impacts on our Clients' approved developments. The EIAR contains substantially inaccurate information, as the assessment of impacts on the sustainability of existing operations simply did not occur. 20. The probability distributions for each of the variables used in the impact model are not expressly noted and it is assumed that these distributions are not known. In opining on probabilities in the impact it is important for the report to consider and substantiate the underlying probability distribution for each of the variables. In the absence of any consideration of the probability distribution, any opinion about general probabilities in an impact framework are at risk of being substantially flawed. Any conclusions or recommendations that are borne from these probabilities will suffer the same shortcomings, which issue is compounded by the fact that the Economic Impact Assessment for the Project was based solely on intent or, in other words, "Tetra4's intent to generate the output and employment as is discussed in the economic specialist report". Practically this arrangement is an inaccurate representation of the true structure of the impacts which, in turn, results in an unbalanced and misrepresentation of the impact that then leads to misinformed conclusions and recommendations about the socio-economic impacts. 21. Considering these comments, it is argued that the impact assessment model should be reworked given the range of comments and concerns tabled herein, and then presented again in an improved format for further consideration by the public. 22. These comments form a high-level consideration of the comments submitted in relation the impact assessment reports and other documents submitted in the process demonstrate two important issues. Firstly, the inadequate consideration of the socio economic impacts of the project in an attempt to improve the reports so that a robust and balanced assessment can be placed before decision-makers. Secondly, the competent authority cannot rationally depend on the current assessment reports to make an informed, rational and considered decision about the authorisation of the project or not because of the significant shortcomings and accompanying risks about the impact assessment that have been noted. 23. In conclusion, the reports are seriously flawed as a result of a number of shortcomings in the process and in the content that have been specifically pointed out and which are unaddressed and/or disputed. As a consequence, we are of the view that: o The reports fail to provide a substantively adequate assessment of the impacts of the Project and fail to provide a basis from which the competent authority can assess the impacts in their totality in a balanced and even-handed way and upon which they could arrive at a rational decision. o The conclusions and recommendations made in the various reports are derived from unconvincing processes and methods. Most importantly the assessment cannot escape methodical quantification of both positive and negative impacts at the appropriate level of resolution if it should substantively demonstrate impact. This quantitative assessment is absent in the current reports and in its stead is an untested opinion purely based on intent and not rationally grounded in reality. Consequently, a rational decision cannot be made because of the flaws of the current methodology. o The

Tetra4's intent to generate the output and employment as is discussed in the economic specialist report. The eventuation of these benefits is reliant on an economically viable Tetra4, an assumption that is made in the compilation of the economic specialist report." This is considered adequate as it is the basis of an economic impact assessment for a project that has not yet commenced. The gas multipliers were adjusted as appropriate for this type of project within the confines of South Africa. It is understood that an optimal year represents a reasonable assumption for supply side economic assessments. This is a reasonable geohydrology assumption and in the absence of more detail on the specific concern with regards to this assumption, no further response can be provided. It is standard EIA practice that when faced with uncertainty that the assessment should be conservative in the assessment rating and additional management and mitigation applied. In this instance, the influences from the neighbouring mining developments would likely dilute the potential impacts as a result of the Tetra4 gas production activities. As such, excluding the mining related influences results in a more conservative assessment of impacts. A project of this nature inherently contains a significant number of properties and every effort is made to access as many properties as possible. Where access is restricted this is noted. Furthermore, suitable mitigation measures were identified and included in the EMPr which requires ongoing vigilance during the various phases of the development to mitigate against adverse impacts on sensitive heritage features. Kindly note that there are adaptive controls built into the mitigation measures to account for circumstances where unknown heritage features are present and to avoid uncontrolled impact on such. The data provided to the noise specialist by EIMS was sourced from Tetra4 and includes data acquired through real world scenarios of the Tetra4 Cluster 1 activities. This data is therefore considered adequate for the purposes of the noise assessment. A vibration assessment was not deemed relevant as the proposed Cluster 2 project does not include activities that would generate significant vibration. There are different groups with different interests in the community, and what one group may experience as a positive social impact, another group may experience as a negative impact. Based on our feedback during the various public participation interactions with landowners and other members of the community (occupiers, surrounding communities, etc), it is predominantly the landowners who perceive negative impacts while the other members of the community perceive the project in a positive way (i.e. anticipation of job creation). It is therefore put forward that the social specialist approached the most vocal and directly affected members of the broader community (i.e. the landowners) which is considered appropriate. Further to our above responses regarding the public consultation process that was undertaken, the prescribed consultation process was followed in that all stakeholders were provided with opportunity to participate without fear or favour. It is unreasonable to interview every member of a community. Sample interviews were held to define broad perceptions and concerns, but at no time was any member of the community prevented from participating in the process. As stated above, a project of this nature inherently contains a significant number of properties and every effort is made to access

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EIAR, and specifically the social and economic reports cannot and should not be used for decision making in current its current form because of the gaps and associated risks associated with it. PUBLIC PARTICIPATION PROCESS 24. Our Clients were not consulted as part of the initial and present public participation process ('PPP') and instead found out about the Project and had to reach out to EIMS and the project proponent in order to obtain all relevant information and to be registered and interested and affected parties ('I&APs'). 25. Furthermore, and as a result of the process followed by EIMS, I&APs have effectively been faced with a fait accompli of the Project. Essentially, I&APs are only being provided with an opportunity to comment or interact with the environmental consultants at a stage that is effectively the end, or very close to the end, of the process. In fact, the PPP requirements are the remaining box to tick to fulfil the BA process – but has been left right to the last task to be completed. 26. We submit that no meaningful PPP was undertaken prior to the preparation of the EIAR (initial and revised), and that this is confirmed by our Clients never having been identified as I&APs neither as part of the initial PPP prior to the appeal, nor as part of the current PPP for the EIAR. This means that any opportunity for I&AP issues to feed into the design and planning of the project is negated. In addition, the issues and concerns of I&APs have not informed the scope of the EIAR and specialist studies or been taken into account in the evaluation criteria used to assess the significance of impacts. 27. This amounts to the DAD approach (Decide Announce-Defend) which is defined as “.....a top down, minimally participatory method of public management.”<sup>2</sup> This is counter to the core values that ought to guide public participation as developed by the International Association for Public Participation ('IAP2'), an organisation from which the International Association of Impact Assessment ('IAIA') draws for guidance on PPP. 28. Given these shortcomings, please identify and describe in detail all measures employed to ensure the participation of all interested and affected parties in the application process and how the principles of PPP have been promoted, and all stakeholders empowered to have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, including participation by vulnerable and disadvantaged persons. UNNACCEPTABLE ASSUMPTIONS AND LIMITATIONS 29. The assumptions and limitations disclosed in the EIAR identify significant gaps on which the decision-maker cannot render a rational nor reasonable decision. These gaps include: o Air quality and health risk: “Only routine emissions for the operational phase were estimated and simulated. Atmospheric releases occurring as a result of non-routine conditions were not accounted for”; o Air quality and health risk: “Planning and design, decommissioning, closure and rehabilitation phase impacts were not quantified”; o Climate change: “GHG emissions from the well drilling, well testing, and well servicing were based on measurements provided by Tetra4 and not calculated using emission factors” o Economic: “...the Cluster 2 economic is based on intent, namely Tetra4's intent to generate the output and employment as is discussed in the economic specialist report”; o Economic: “Gas multipliers for a well established gas driven economy will be different to that of SA and for this reason, where

as many properties as possible. Where access is restricted this is noted. The terrestrial biodiversity specialist obtained sufficient data from the site visits undertaken to infer species composition to a high degree of accuracy. Furthermore, suitable mitigation measures were identified and included in the EMP to limit the negative impacts on the terrestrial landscape. Kindly note that there are adaptive controls built into the mitigation measures to account for circumstances where unknown heritage features are present and to avoid uncontrolled impact on such. The footnote to this comment states the following: “This site visit is outdated and could not have taken into account the cumulative visual impact of the Project in light of the surrounding renewable energy developments.”. While your Clients' renewable energy projects fall outside of the Tetra4 Cluster 2 application area (as addressed above), based on the EAPs recent travels to the area, the visual landscape has not improved but is considered to have been further altered by the ensuing renewable energy developments since this visual study was undertaken in 2022. As such, the 2022 visual study represents a worst-case baseline scenario (i.e. largely rural or more rural than current) and therefore a more recent study would likely present a baseline visual environment containing a more mixed use which would dilute the impact assessment findings. 30. As indicated in Section 4.1.11 of the EIA Report, the operational (gas production) timeframe for the project is approximately 20 years. In Section 4.1.2 of the EIA Report, it is acknowledged that: “The gas is presumed to be a mix of both abiogenic gas from the mantle, and biogenic gas originating from ancient fissure waters, coal beds of the Ecca Group of the Karoo Supergroup as well as ancient algal mats within the shallow marine/lacustrine Witwatersrand Supergroup deposits.”. Should this concern relate to a potential stranded asset, it should be noted that the requirements for financial provisioning were undertaken and the scheduled and unscheduled costs were calculated and included in Appendix 6 of the EIA Report. This reference which is quoted from the Framework for a Just Transition in South Africa is a single risk identified in Table A which details the action plan to give immediate effect to a just transition. It is understood that this is a generalised risk identified for non-specific sectors. On the contrary, the Integrated Resource Plan 2025 (IRP), makes provision to increase the national energy mix natural gas contribution 6 000MW by 2030 (with a projection of 16 000MW in the total energy mix by 2040) and as the Tetra4 Virginia gas resource has been proven through Cluster 1 gas production, there is a low likelihood of the proposed Cluster 2 becoming a stranded resource. It is acknowledged by the EAP that there is a need to move away from fossil and non-renewable resources however in line with government policy this needs to be undertaken in a controlled scale and pace. The transition is reflected in the climate change policy and associated energy policy. It is also important to note that this project is not only aiming to extract natural gas but also helium which is an important resource globally. 31. In summary to the responses provided above, while certain limitations have been identified in the EIA Report (Section 14), these limitations are not considered substantive and, in many cases, result in a conservative assessment being undertaken. Adaptive management measures are also included in the EMP where limitations such as site access resulted in certain properties being inaccessible. NEED AND

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possible, multipliers were adjusted to assume a more mature gas industry in SA”; o Economic: “The economic impacts are calculated on the supply side of the economy in an optimal year” (own emphasis); o Geohydrology: “Groundwater divides have been assumed to align with surface water divides and it is assumed that groundwater cannot flow across this type of boundaries”; o Geohydrology: “...influences from neighbouring mining developments were not taken into consideration as part of this investigation”; o Heritage and Palaeontology: “There was also restricted access to certain farm properties (BLAAUWDRIFT No.188 (Portion 3), BRUINTJE HOOGE No.367 (Portion 2, 3), BRYAN No.561 (Portion 10, 21, 28, 29, 30, 31, 38), GLEN ROSS No.734 (Portion 4, 5, 6, 7, 18, 20), JONKERS RUST No.72, KALKOENKRANS No.225 (Portion 3), MOND VAN DOORNRIVIER No.38 (Portion 2), MOOIFONTEIN No.639, PALMIETJUIL No.548 (Portion 1), STILLE WONING no.703, VLAKPAN No.358) due to farm owners not giving permission to access their properties, flooded roads and dangerous game life on the properties”; o Noise: “The source power levels were calculated based on information provided by EIMS. The assumption is that this information is correct and reflects the routine construction and operational phase of the project”; o Noise: “The scope of work did not include a vibration assessment”; o Social: “Not every individual in the community could be interviewed therefore only key people in the community were approached for discussion. These key people include all the directly affected landowners” JUST LANDOWNERS- and yet “Social impacts are not site-specific but take place in the communities surrounding the proposed development”; o Terrestrial biodiversity: “Access to certain portions within the study area was not possible due to the fact that the land owner did not give the go-ahead”; and o Visual: “A site visit was undertaken over a two-day period (21st and 22nd February 2022)” 30. Significantly, the EIAR fails to disclose the following key limitations and assumptions in section 14 of the EIAR, which further misleads the competent authority into having an inflated sense of the perceived benefits of the Project, inter alia: o It has not yet been conclusively determined if the Project’s gas field is biogenic (renewable) or thermogenic (non renewable). This limitation impacts the decision-makers understanding of the lifespan and sustainability of the project, and therefore the cumulative impacts of the Project. o According to the Framework for a Just Transition in South Africa the “push for gas delays and diverts resources from renewable energy build and creates fiscal risk through stranded assets”. 31. In light of the above gaps in information due to the various assumptions and limitations identified in the EIAR, those disclosed and those undisclosed, the decision-maker lacks the necessary informational basis on which to render a rational, balanced and informed decision. These gaps in information bring into question the assessment of cumulative impacts of the Project, and have the effect of inflating the perceived benefits of the projects without adequately catering for the negative impacts thereof. This approach to impact assessment is misleading and cannot serve to inform rational and reasonable decision making. NEED AND DESIRABILITY IN THE CONTEXT OF CLIMATE CHANGE IMPACTS AND THE JUST ENERGY TRANSITION 32. The EAP motivates the Project on the basis that it is a “bridge” between non-renewable energy

DESIRABILITY IN THE CONTEXT OF CLIMATE CHANGE IMPACTS AND THE JUST ENERGY TRANSITION While the need and desirability contained in Section 6 of the EIA Report discusses methane as a bridging fuel, it should also be noted that the need and desirability discussion also addresses the global demand for helium (which this project is also targeting). Furthermore, the motivation for the project as a bridge is not based on the EAPs consideration but rather the EAP references existing policy and strategy for South Africa which recognised natural gas as a bridge. The National Development Plan (NDP) envisions that by 2030 South Africa will have an energy sector that promotes economic growth and development through adequate investment in energy infrastructure. At just 2.6% of the country’s total energy mix, South Africa’s natural gas market is small, but with all its inherent benefits, it has the potential to completely change the economy by stimulating economic growth and development, stability, and job creation. The meaningful addition of natural gas to the country’s energy mix will rejuvenate an overburdened, out dated energy infrastructure and reduce cyclical energy shortfalls. Perhaps even more importantly, it will stimulate the economy by allowing business and industry to lower their energy and operational spend while also creating significant numbers of new jobs and skills development opportunities. Considering that nearly 90% of South Africa’s existing natural gas demand is supplied by a single entity, namely Sasol Gas, the associated economic and employment risks of limited supply options, development and sourcing of alternative natural gas resources are high. It is imperative to ensure economic and employment stability within the natural gas sector by introducing more suppliers. Southern Africa’s gas potential has been revealed by major discoveries that, when developed, widen options for greater regional energy trade. South Africa’s gas resource potential remains to be quantified but raises the prospect of possible domestic production in the longer term. Globally the natural gas industry has moved into a supply surplus, favouring a larger role for gas as a clean fossil fuel in many countries’ energy policies. A challenge in developing the gas sector is to bring gas demand and supply on stream at the same time and spread geographically to stimulate broader localized demand through South Africa. Without such localized gas demand, it is difficult to develop distributed gas supply and without such distributed gas supply it is difficult to develop localized gas demand. One way of breaking this impasse is to create significant “anchor” gas demand through the development of a gas-to power programme. In pursuit of adding generating capacity, lowering carbon emissions, enhancing energy security and supporting industrial development, South Africa has taken the first steps in a gas-to-power programme to be executed under the Integrated Resource Plan, aiming to increase the national energy mix natural gas contribution to 6 000MW of energy production from gas by 2030. With reference to Section 9.14.9.2 of the EIA Report, even though CH4 emissions are 28 times more effective than CO2 at trapping heat in the atmosphere over a 100-year timescale (US EPA, 2024a), studies show gas has a lower life cycle GHG impact than coal with a lifetime of roughly a decade (PACE, 2015). According to the UK Department for Environment Food & Rural Affairs (DEFRA), natural gas releases 46% less CO2-eq lifecycle emissions compared to coal fired facilities and 49% less than diesel-fired facilities for the

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resources, such as coal, and renewable energy resources such as solar and wind. This motivation is misleading and creates a highly skewed portrayal by the EAP of the need and desirability in favour of the Project. The EAP does so by creating the false narrative that the Project is completely different in its impacts when compared to the impacts associated with non-renewable resource extraction and use such as coal mining. The EAP's approach is disingenuous as the Project is in essence an activity which is destructive and extractive in nature, and thus not far different to coal. The need and desirability enquiry in the EIAR is unreasonably and unjustifiably pro-applicant in its bias in favour of the of the Project being authorised. This is tantamount to greenwashing and undermines the independence of the EAP and the credibility of the assessment process. 33. The EIAR for the Project supports the destructive and extractive nature of under-ground resource extraction, and cannot be construed as some halfway point to South Africa's commitments to renewable energy development and the Just Energy Transition. In fact, the 2022 Presidential Climate Commission Report points out that the "push for gas delays and diverts resources from renewable energy build and creates fiscal risk through stranded assets". 34. The EIAR itself concedes that it remains unclear as to whether the

same electricity generation rate. The IPCC reports, based on the median value, indicate natural gas to result in less than 51% direct- and 40% lifecycle CO2-eq emissions compared to CO2-eq emissions from coal (Schlömer S., 2014). Coal extraction generally has a larger overall environmental footprint than natural gas extraction, causing extensive land disturbance, habitat destruction, acid mine drainage, and long-term soil and water contamination. Natural gas extraction on the other

Thandiwe Ntoi

Date 2023/03/07 Method Email

Comment

When Are You Guys Hiring ?

Response

Good day Thandiwe, Thanks for your email. Please note that EIMS has been appointed by Tetra4 as independent Environmental Assessment Practitioners to obtain the required environmental authorisations for the Tetra4 Cluster 2 Gas Production. Kindly visit their website (<https://www.renergen.co.za/contact-renergen/>) for the relevant channels and/or contact details in relation to your email below. Kind regards,

Sityhilelo Ngcatsha

Date 2022/08/31 Method Other

Comment

The SAHRA Archaeology, Palaeontology, Meteorite (APM) Unit notes that an HIA will be undertaken for the proposed development. Further comments will be issued once the HIA along with the draft EIA documents inclusive of appendices has been submitted to the case on SAHRIS.

Response

EIMS noted and captured SAHRA's interim comment.

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**Phumela Madubela**

Date 2025/10/10 Method Email

## Comment

Dear \*\*\* Please can you kindly add me ad an I&AP for project 1473. Kind regards,

## Response

Good day Phumela, Our sincerest apologies for the delay. This email serves as notification that you have been a confirmation of you registration as an I&AP. You will receive all notification updates on the proposed project from this point going forward. For any queries please do not hesitate to contact us

**Sonja Schoombee**

Date 2022/04/28 Method Telephone

## Comment

Request of a copy of notification document and maps of the Tetra4 Cluster 2 project

## Response

Dear Sonja, Please note, there has been a change in the Tetra4 Cluster 2 Project and the call to register process is to be redone. Interested and Affected Parties (I&APs) are to be notified regarding this in due course and the relevant documentation will be made available. Please note, should you wish to register as an I&AP for the Tetra4 Cluster 2 Project, we have also attached an I&AP registration form for you to fill in and return. As a registered I&AP you will be notified of public participation opportunities as they become available. Should you have any comments or queries, please feel free to contact EIMS. Kind regards,

Date 2022/04/28 Method Telephone

## Comment

Request of a copy of notification document and maps of the Tetra4 Cluster 2 project

## Response

Dear Sonja, We have received your request regarding the Tetra4 Cluster 2 Project. Kindly note, the EAP is currently on leave and will be returning to office early next week. You will be provided with a formal response to your request once they are back. Should you have any further queries or comments, please feel free to contact EIMS.

Date 2022/05/03 Method Email

## Comment

Dear Sir We acknowledge receipt of your e-mail below and confirm that we have noted the contents thereof. We kindly request you to furnish our offices with the following documents, namely : 1. Polygon Diagram – Phase 1; 2. Provisional Polygon Diagram – Phase 2; 3. Notice to landowners in respect of Phase 2 with list of farms affected. We trust you find the above in order and look forward to receiving the requested information at your earliest convenience. Kind regards

## Response

Dear Sonja, We kindly acknowledge receipt of your email. Please note, a formal response will be provided to you in due course. Should you have any further queries or comments, please feel free to contact EIMS. Kind regards,

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Sonja Schoombee

Date 2022/05/09 Method Email

## Comment

Dear Qhapela Our e-mails dated 3 May and 5 May refers. We look forward to receiving the Polygon Diagrams for Phase 1 & 2 (provisional diagram) and Notice to landowners in respect of Phase 2 with a list of farms affected, as requested, as well as confirmation whether the following farms form part of the existing rights that Tetra4 already own, namely : 1. Bloemskraal; 2. Spes Bona; 3. Klein Willie; 4. Quaggafontein (not sure whether the spelling is correct?) 5. De Poort; 6. Waterval; 7. Aroma; 8. Die Hoek. Your prompt reply will be highly appreciated. Kind regards

## Response

Good afternoon Sonja, With respect to the email below, we have conducted a property check based on the parent farm names provided below across the Free State and we could not find any farms with the names; 1. "Bloemskraal" but only "Blomskraal" 2. "Klein Wilie" We also noted that within the production right area we have two "De Hoek" properties and not "Die Hoek" as per your mail below. Please advise if the above were spelled correctly or were the correct names. However, with respect to the other properties, none of them fall within the application area nor within the production right area held by Tetra4. Further to the above stated, attached herewith the relevant shapefiles for your convenience: • Production Right Boundary, • Application Area Boundary. Further to your request for copies of the notification documentation, please note that these will be shared in due course once finalised. Lastly, would you kindly confirm if you wish to be registered on our I&AP database to be notified of further involvement in the project? Should you have any further queries or comments, please feel free to contact EIMS. Kind regards,

Velly Aluta Ntsuku

Date 2025/10/13 Method Email

## Comment

Greetings Mejcon SA (mining and enviromental justice community network) is an NGO advocating rights of the communities. We wish to register Mejcon SA as IAP for Tetra 4 cluster 2 Project. Hope our request will receive your positive response and undivided attention. Yours in Partnership,

## Response

Good day Aluta, This mail serves as acknowledgement of receipt and to inform you that you have been added onto our database as a representative of Mejcon SA. For any further queries please do not hesitate to contact us. Please note that the public review and comment period concluded on 13th October 2025.

Mr Willem Scheepers

Date 2022/05/19 Method Email

## Comment

TO WHOM IT MAY CONCERN I WOULD LIKE TO MAKE A PROPOSAL FOR TETRA REGARDING BUILDING MATERIAL. WHO CAN I SPEAK TO REGARDING THE BUILDING PROJECT? JACOB AT THE MAIN ENTRANCE TOLD ME THAT I SHOULD SPEAK TO VUSI. PLEASE LET ME KNOW IF WE CAN MAKE AN APPOINTMENT. KIND REGARDS

## Response

Good morning Willem, Further to our response regarding contractor opportunities for Tetra4, please visit their website (<https://www.renegen.co.za/contact-renegen/>) for the relevant channels and/or contact details. Should you have any further comments or queries, feel free to contact EIMS. Kind regards,



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### Mr Willem Scheepers

Date 2022/05/19 Method Email

#### Comment

TO WHOM IT MAY CONCERN I WOULD LIKE TO MAKE A PROPOSAL FOR TETRA REGARDING BUILDING MATERIAL. WHO CAN I SPEAK TO REGARDING THE BUILDING PROJECT? JACOB AT THE MAIN ENTRANCE TOLD ME THAT I SHOULD SPEAK TO VUSI. PLEASE LET ME KNOW IF WE CAN MAKE AN APPOINTMENT. KIND REGARDS

#### Response

Dear Willem, Thank you for your correspondence and interest in the project. Please note that the project is still in authorisation phase and contractor opportunities are currently unknown. We have forwarded your correspondence to the applicant for their consideration and records. Please confirm if you would like to be registered on the project's I&AP database. Should you have any further comments or queries please feel free to contact EIMS. Kind regards,

Date 2022/05/20 Method Email

#### Comment

DEAR QAPHELA I WOULD LIKE TO BE REGISTERED ON THE PROJECT'S I&AP DATABASE. THANK YOU FOR THE RESPONSE ON MY EMAIL. KIND REGARDS

#### Response

Dear Willem, Kindly note, you have been registered as an I&AP for the Tetra4 Cluster 2 project. As a registered I&AP you will be notified of public participation opportunities as they become available. Should you have any further comments or queries, please feel free to contact EIMS. Kind regards,

### Tsheliso Mofokeng

Date 2022/04/22 Method Email

#### Comment

Good day, We would like to register as an Interested and Affected Party (I&AP) on this project. We would therefore like to be kept informed regarding the project and be afforded an opportunity to participate in the process through the relevant communication processes and all relevant correspondences. Please do send us the registration forms and questionnaires for us to fill in and attend to soonest possible.

#### Response

Dear Tsheliso, Thank you for your interest and correspondence in the proposed Tetra4 Cluster 2 Project. Please find the attached Interested and Affected Party (I&AP) registration form for your attention as requested. Furthermore, kindly note that you have both been registered as an I&APs in the projects database. As a registered I&APs you will be notified of opportunities to participate in the Environmental Authorisation Application Process as they become available. If you have any comments or queries, please feel free to contact EIMS. Kind regards,

Date 2022/04/22 Method Email

#### Comment

Good day, I would like to register as an Interested and Affected Party (I&AP) on this project. We would therefore like to be kept informed regarding the project and be afforded an opportunity to participate in the process through the relevant communication processes and all relevant correspondences. Please do send us the registration forms and questionnaires for us to fill in and attend to soonest possible. Regards,

#### Response

Dear Tsheliso, Thank you for your correspondence and interest in the proposed Tetra4 Cluster 2 project. Kindly note that you have been registered as an Interested and Affected Party (I&AP) in the projects database. As a registered I&AP you will be notified of opportunities to participate in the Environmental Authorisation Application Process as they become available. If you have any comments or queries, please feel free to contact EIMS. Kind regards,

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Andrea Siebritz

Date 2025/09/11 Method Email

## Comment

Dear EAP Can I please request the KMZ for the cluster 2 application area. Kind Regards

## Response

Good day Andrea, Hope you are well. Please refer to our website under Public participation. The project is labeled "1473 Environmental Authorisation Application process for the proposed Tetra4 cluster 2 gas production project". All maps related to the project were uploaded under "Appendix 2: Maps". Attached is the link to make access easier: 1473 ENVIRONMENTAL AUTHORISATION APPLICATION PROCESS FOR THE PROPOSED TETRA4 CLUSTER 2 GAS PRODUCTION PROJECT – EIMS. If you still cannot access the KML you require, please do not hesitate to get back to us.

Date 2025/09/17 Method Email

## Comment

Dear EIMS, Thank you for your email. As the Appendix 2 are JPG files, kindly send us the KMZ as requested. Kind Regards

## Response

Hi \*\*\*, Please excuse the delay in response. Apologies for the confusion. Please see attached the KML of the study area as requested. For any further queries and comments please do not hesitate to contact us.

Ms Boitumelo Melato

Date 2022/07/29 Method Email

## Comment

Good day, Your e-mail below is noted. Kindly send a hard copy of the scoping report to this office for comments. The document must be addressed as follows: Attention: Dr T Ntuli Department of Water and Sanitation Corner Charlotte Maxeke and East Burger 2nd Floor: Bloem Plaza Building Bloemfontein Regards, Boitumelo Melato

## Response

Hi Boitumelo, Thank you for your email, a hard copy of the scoping report will be delivered to your offices. Should you have any comments and/or queries, please feel free to contact EIMS. Regards,

Date 2022/09/01 Method Email

## Comment

Good day, Kindly find attached comments for the Tetra4 Cluster 2. Regards,

## Response

Good day Boitumelo, We kindly note the comments attached in your previous email. Please note, we have commenced with the necessary Water Use License Applications. Regards,

Date 2023/01/25 Method Email

## Comment

Good day, Hope this mail finds you well. Kindly find the attached comments for your further

## Response

Good day Boitumelo, Thank you for sharing the Departments comments on the application.

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## Ms Boitumelo Melato

attention. Regards,

Herewith our responses to the points raised in the letters: ⌚ Most of the Departments points raised in the letter related to activities requiring a licence under the NWA. Kindly note that an application for amendment of the existing Tetra4 Water Use Licence (08/C42K/CI/8861) is currently being undertaken for the proposed Cluster 2 activities within the regulated area of a watercourse. The evaporation pond (21g) will be included in this application or as a separate General Authorisation. The case officer for this application is Mr Terrence Ngilande. ⌚ The following two conditions have been included in the EMPr to cater for potential pollution of water resources: o All fuel and other lubricants must be stored in sealed containers at least 100m from the nearest watercourse and all reasonable precautions must be taken to prevent any possible pollution. o Sanitary conveniences which cause or are likely to cause pollution of a water resource may not be located within the 1:100-year floodline or 100m from any watercourse or boreholes that are used or may be used for abstraction purposes. Thank you once again for your comments and feel free to contact us should you have any further queries. Kind regards,

## Mr Johan Taljaard

Date 2023/01/23 Method Email

### Comment

Good day Hope all is well Please find attached the card of Blaauwdrift. We are currently buzzing with selling the development. There for we are against the drilling as your company requested. Kind regards

### Response

Good day Mr Taljaard. Further to your email below, we acknowledge receipt of the township proclamation and your subsequent objection to any drilling of wells. Kindly note that we have included the following condition into the EMPr (Section 5.3.1 & 5.3.2) as well as included this condition as a recommended condition of decision by the competent authority in Section 13.4 of the EIA Report. • Condition: “A township is proclaimed over Portion 3 of the farm Blaauwdrift 188 (Portion 3), and the township proclamation is dated 12 October 1956. No exploration drilling of any Cluster 2 wells on this property may take place until such time as the legal status of the township and rights of the landowner are adequately addressed. Any new pipelines to be laid on this property must be discussed and agreed with the landowner prior to commencement.” We trust that you find this in order and thank you for your participation in the EIA process. Kind regards,

## Avena Jacklin

Date 2022/06/17 Method Email

### Comment

Dear Tetra Consultant Please add me as an IAP, and keep me updated: Avena Jacklin Senior Manager: Climate and Energy Campaign groundWork, Friends of the Earth South Africa

### Response

Good day Avena, Thank you for your email. Please note you have been added to the I&AP database for the proposed Tetra4 Cluster 2 Gas Gathering and Production Project. As a registered

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Avena Jacklin

I&AP you will be notified of public participation opportunities as and when they become available for the aforementioned project. Should you have any further comments and/or queries, please feel free to contact EIMS. Kind regards,

Mikaella Bodeux

Date 2023/06/15 Method Email

## Comment

Dear Qaphela The above matter refers. Please provide us with a copy of (or a link to) the final maps which were attached the FEIA. We previously tried to access the link which was included on the EIMS website, but it did not work when it was available and it now no longer appears on the website. Please also provide us with the final Public Participation Report, specifically including the comments received by EIMS on the draft EIA and the minutes from the landowners meeting held on 11 January 2023 at Gold Fields Game Farm. We previously accessed this document through the EIMS website but the version which had been uploaded was incomplete/outdated and now also no longer appears on the website. We await your response.

## Response

Dear Mikaella, As requested, herewith a link to the maps: <https://www.dropbox.com/s/a9fdvjul1pumyp0/App2.%20Maps.zip?dl=0> Please note that the Cluster 2 application documentation was removed from our website as the consultation periods for the EIA and WULA have been concluded. Attached the final PPR, landowner focus group meeting minutes and the comments and response report. Kind regards,

Date 2023/06/28 Method Email

## Comment

Dear Qaphela Thank you for your email and the documents/links provided. Please could you also provide the recording taken during the Landowners' Meeting of 11 January 2023 at Goldfields Game Ranch. We await your response.

## Response

Dear Mikaella, Thank you for your email. Please see the included link to the file as requested. <https://www.dropbox.com/sc/fi/nz8mld6fmf3m5d9d0bxbv/T4-landowners-FGM.mp3?dl=0&rlkey=yzsmylvw3bhk6ildhaa9z2k6>

Lisa Opperman

Date 2022/04/06 Method Email

## Comment

Good Day, I trust you are doing well. We are currently undertaking an EIA process on Kalkoenkrans for the development of a solar power plant. Therefore, please can you register myself and Marelle Botha (copied) as part of the I&AP database. Kindly confirm once registration is completed. Also, please let me know should you have any queries on the EIA process being undertaken on our side for the solar power plant. Kind regards

## Response

Good day, Thank you for your correspondence and interest in the proposed Tetra4 Cluster 2 project. Kindly note that you have been registered as an Interested and Affected Party (I&AP) in the projects database. As a registered I&AP you will be notified of opportunities to participate in the Environmental Authorisation Application Process as they become available. Furthermore, may you please provide us with locality details for your solar power plant project. Should you have any queries or comments regarding this project, please feel free to contact EIMS on this project dedicated email address. Kind regards,

## Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Lisa Opperman

Date 2022/04/06 Method Email

### Comment

Good Day Qaphela, Thank you for the confirmation. Please find attached the locality map of the project location and BID, as requested. Kindly advise should you want to also register on the project database for the solar power plant, known as the Oryx Solar Power Plant. I look forward to hearing from you.

### Response

Good day Lisa, Thank you for the information supplied. With regard to I&AP registration for the Oryx PV project, a separate email with contact details will be sent shortly. May you please supply us with the shapefiles of the proposed infrastructure and powerlines for the Oryx Solar Power Plant. Kind regards,

Date 2022/04/07 Method Email

### Comment

Hi Qaphela, Thank you, I received the email from Brian this morning. We will do the registration as per his request and send through a confirmation once completed on our side. Please take note that we have been in contact with the Applicant of the Tetra4 Cluster 2 regarding the PV facility. There also has been correspondence/communication between the two respective Applicants. Regarding the infrastructure of the project, the detailed layout is not available as yet. The EIA process only commenced now with the distribution of the notification for the EIA process. The project is still in its planning phase. Furthermore, the specialist fieldwork results will be considered by the developer/applicant to ensure that areas of high environmental sensitivity are avoided by the planned layout. Due to the early stage of the process, we only have information available pertaining to the EIA area under assessment and the development footprint area (within which the infrastructure is proposed to be placed). We have subsequently distributed a KMZ file to the Tetra4 Cluster 2 Applicant (as attached) so that the technical aspects and challenges can be discussed between both parties. Please see the KMZ file attached which shows the details available at this stage with some locations of proposed infrastructure – this is subject to change depending on the results of the specialist surveys (i.e. consideration of no-go areas where applicable). I kindly request that the KMZ file be treated as confidential as the information has not yet been released formally to the public – it will only become available once the Scoping Report is released for the 30-day review and comment period. Please can you also send through any project information that would have been distributed to the database for the Cluster 2? Do you have a BID available and locality / layout map that we can consider? I look forward to hearing from you. Kind regards

### Response

Hi Lisa. Thank you for your clarification and preliminary shapefiles. We will treat these as confidential for now as requested. The Tetra4 Cluster 2 application is also in the initial stages and the future opportunities to comment on reports will be notified in due course. As requested, please find attached the BID and locality maps as requested. Kind regards,

Date 2022/05/23 Method Email

### Comment

Good Day, Kindly register myself on the I&AP database, and provide confirmation once completed. Thanks in advance.

### Response

Dear Lisa, Thank you for your correspondence, please note that you have been registered as an I&AP for the Tetra4 Cluster 2 project. As a registered I&AP you will be notified of public

# Comments and Responses 1473 Tetra4 Cluster 2 EIA WULA

Lisa Opperman

participation opportunities as and when they become available. Should you have any queries or comments, please feel free to contact EIMS.

Ms Ria Barkhuizen

Date 2022/12/05 Method Email

Comment

Good day Please forward your application to SANRAL Eastern Region erstatutory@nra.co.za, as this falls under their jurisdiction. Kind regards Ria

Response

Good morning Ria, Thanks for your correspondence. Please note that erstatutory@nra.co.za is included in our I&AP database and have been notified of this application. Should you have any further comment and/or query, please feel free to contact EIMS. Regards,

Date 2025/10/06 Method Email

Comment

Good day Please forward your application to SANRAL Eastern Region erstatutory@nra.co.za as this falls under their jurisdiction. Kind regards

Response

Good day Ria, Please note that the scheduled meeting has since passed. We can forward the notes of the meeting to the relevant I&AP once they are available if they are requested. Any comments from the I&AP can still be forwarded to this mailbox until end of day on the 13th of October 2025. The I&AP indicated will be added to our database for any further communication.