

Actions from GISERA NT Regional Research Advisory Committee Meeting 10 June 2021

Key

Action Open	
Action Due/overdue	
Action complete/in train	

	Item	Action	Owner	Due	Status
1.	10-06-21 Item 3	Action 1: The research proponent to adjust terminology of 'evaporation ponds' to 'treatment ponds' in Project Order.	Research proponent	20 June 2021	
2.	10-06-21 Item 3	Action 2: The research proponent to remove terminology around indigenous 'environmental monitors' and engagement on a 'voluntary basis' in the Project Order.	Research proponent	20 June 2021	
3.	10-06-21 Item 3	Action 3: The research proponent to invite representatives from the NT Government to participate in the project's Technical Reference Group.	Research proponent	Upon project commencement	
4.	10-06-21 Item 4	Action 4: The research proponent to engage with members of the NT RRAC (especially NT Government and their extension officers for Agriculture and NT Cattlemen's) prior to implementation of any communication activities, in order to map out best approach, messaging and most suitable timing.	Research proponent	August 2021	
5.	10-06-21 Item 4	Action 5: The research proponent to consider and address any alignment and overlap with NT Government's NR Maps (Natural Resource Maps) platform as part of stage two.	Research proponent	August 2021	



	Item	Action	Owner	Due	Status
6.	10-06-21 Item 5	Action 6: The GISERA Executive Officer to prepare a paper providing background and explanation for suggested variation for the RRAC's consideration and approval out of session.	Research proponent	15 June 2021	



Minutes GISERA NT Regional Research Advisory Committee Meeting No. 6 Thursday, 10 June 2021 Via Webex

OPENING

The meeting of the GISERA Northern Territory Regional Research Advisory Committee (RRAC) was called to order at 2.37 pm (ACST) on Thursday, 10 June 2021.

PARTICIPANTS:

Damian Barrett: GISERA Director (CSIRO)

Greg McDonald: Manager, Minerals & Energy (Northern Land Council)

Julie-Ann Stoll: Independent Representative retired, formerly Central Land Council
Will Evans: Chief Executive Officer (Northern Territory Cattlemen's Association)
Jenny Davis: Co-Director, Research Institute for Environment and Livelihoods (CDU)
James Pratt: Senior Executive Director- Energy Development (Department of Industry,

Tourism and Trade, NT Government)

Matt Kernke: Environmental Approvals Lead-Growth Assets (Origin)

Joshua Gilroy Studies Coordinator (Santos) – for Paul Wybrew Chris Chilcott: Research Leader Northern Australian (CSIRO)

David Dewhurst: Geoscience Research Leader (CSIRO)

Other participants:

Cameron Huddlestone-Holmes: GISERA NT State Leader (CSIRO)

Jizelle Khoury: GISERA Executive Officer (CSIRO)

Apologies:

Greg Ireland: Chief Executive Officer (Chamber of Commerce Northern Territory)

Greg Owens: Industry Development Manager (Northern Territory Farmers Association)

Cathy Robinson: Research Group Leader, Land & Water (CSIRO)



ITEMS FOR DISCUSSION

ITEM 1. WELCOME, APOLOGIES AND ADOPTION OF AGENDA

The agenda was unanimously approved as distributed. The GISERA Director welcomed all members to the meeting. Apologies were received from Greg Ireland, Greg Owens and Cathy Robinson.

ITEM 2. ACTION FROM PREVIOUS MEETING

The NT RRAC noted progress with all actions now completed.

ITEM 3. PROPOSAL

Methane Fate of hydraulic fracturing fluids/chemicals and geogenic hydrocarbons in surface facilities and in the subsurface

The GISERA Director provided a summary of the project proposal.

Key points raised:

- This project will look at the fate of chemicals associated with hydraulic fracturing fluids and aims to:
 - o understand subsurface movement and abiotic degradation of key chemicals used in hydraulic fracturing fluids in the shale reservoirs of the Beetaloo sub-basin.
 - understand the fate (abiotic and biotic degradation) of key chemicals used in hydraulic fracturing fluids when they return to the surface in flow-back waters that are held in tanks and treatment ponds.
 - understand and forensically characterise the unknown fractions of geogenic hydrocarbons produced during hydraulic fracturing in the Beetaloo sub-basin and their fates in surface facilities (tanks and evaporation ponds).
- In addition, this project responds to NT Government's 'Scientific Inquiry into Hydraulic Fracturing' final report Recommendation 5.5 That prior to the grant of any further exploration approvals, in consultation with the gas industry and the community, the Government develops a wastewater management framework for any onshore shale gas industry. Consideration must be given to the likely volumes and nature of wastewaters that will be produced by the industry during the exploration and production phases; and Recommendation 7.10 That prior to the grant of any further exploration approvals, the following information about hydraulic fracturing fluids must, as a matter of law, be reported and publicly disclosed before any exploration activities and production activities are carried out.
- The term 'evaporation ponds' is incorrect use of terminology in the Northern Territory and should be changed to 'treatment ponds'.



- In the Communications Plan, the terminology around traditional owner 'environmental monitors' and engagement on a 'voluntary basis' should be removed from the Project Order.
- It was requested that a representative from the NT Department of Industry, Tourism and Trade and Department of Environment be invited to participate in the project's Technical Reference Group.

<u>Outcome</u>: The RRAC approved this project, subject to the actions below being addressed to the satisfaction of the GISERA Director.

<u>Action 1:</u> The research proponent to adjust terminology of 'evaporation ponds' to 'treatment ponds' in Project Order.

<u>Action 2</u>: The research proponent to remove terminology around indigenous 'environmental monitors' and engagement on a 'voluntary basis' in the Project Order.

<u>Action 3</u>: The research proponent to invite representatives from the NT Government to participate in the project's Technical Reference Group.

ITEM 4. PROJECT STAGE GATE

Putting land management knowledge into practice

Key points raised:

- In June 2020, the NT RRAC approved the project with the inclusion of a stage-gate where the researchers would demonstrate for a limited area the application of the technology and its usefulness in terms of communication and then, on the basis of that, decide whether to proceed to stage two of the project.
- As part of stage one of the project, a study area was determined, an aerial survey was undertaken to derive high resolution vegetation and soil surface elevation maps, and the images were then combined with other data to develop a 'digital twin'. The digital twin could then assist with guiding placement of infrastructure.
- It was noted that in CSIRO's previous experience in communicating complex issues, the use of good imagery, especially imagery of the area of interest, is of great value and can assist during communications between the community, government and other stakeholders.
- Stage two of this project includes: implementation of the communications plan; delivery of a knowledge transfer workshop with GISERA government and industry stakeholders; and completion and public release of a final report.
- It was noted that the research proponent would be required to engage with members of the NT RRAC (especially NT Government and their extension officers for Agriculture and NT Cattlemen's) prior to implementation of any communication activities, in order to map out best approach, messaging and most suitable timing.
- It will be important that any alignment and overlap with NT Government's NR Maps (Natural Resource Maps) platform be considered and communicated as part of stage two.



• It was noted that a scale up survey of a larger area (that included all exploration areas of the Beetaloo) at the same precision would be possible. The RRAC would consider whether there is a value proposition to warrant this after the current project is tested with stakeholders (e.g. NT Cattlemen's).

<u>Outcome</u>: The RRAC approved the project proceeding to stage two of project as detailed in the original Project Order.

<u>Action 4</u>: The research proponent to engage with members of the NT RRAC (especially NT Government and their extension officers for Agriculture and NT Cattlemen's) prior to implementation of any communication activities, in order to map out best approach, messaging and most suitable timing.

Action 5: The research proponent to consider and address any alignment and overlap with NT Government's NR Maps (Natural Resource Maps) platform as part of stage two.

ITEM 5. PROJECT SCOPE AND BUDGET REDUCTION Mitigating fugitive gas emissions from well casings project

Key points raised:

- The aim of project was to evaluate the suitability of novel materials developed by material scientists at CSIRO to help mitigate potential methane gas migration and emission along the microfractures/microannuli behind external well casings.
- A variation is proposed to reduce the project scope and project budget that would see the removal of task 3 that involved the performance evaluation under simulated downhole pressure and temperature condition of the materials passing the benchtop screening (during task 2).

Outcome: The RRAC requested that a paper be provided for their consideration out of session.

<u>Action 6</u>: The GISERA Executive Officer to prepare a paper providing background and explanation for suggested variation for the RRAC's consideration and approval out of session.

ITEM 6. OTHER BUSINESS

No matters raised.

NEXT MEETING

The next meeting of the NT Regional Research Advisory Committee is yet to be scheduled. It is anticipated that a meeting will occur once further proposals are established.



Damian Barrett adjourned the meeting at 4.30 pm (ACST).

Minutes submitted by: Jizelle Khoury

Minutes approved by: Damian Barrett