



Australia's National
Science Agency

GISERA | Gas Industry Social and Environmental Research Alliance

Progress report

Exposure assessment of identified chemicals used in the coal seam gas activities at a study site in the southern Surat Basin, Queensland.



Progress against project milestones

Progress against milestones/tasks are approved by the GISERA Director, acting with authority in accordance with the [GISERA Alliance Agreement](#).

Progress against project milestones/tasks is indicated by two methods: Traffic light reports and descriptive Project schedule reports.

1. Traffic light reports in the Project Schedule Table below show progress using a simple colour code:

- **Green:**

- Milestone fully met according to schedule.
- Project is expected to continue to deliver according to plan.
- Milestone payment is approved.

- **Amber:**

- Milestone largely met according to schedule.
- Project has experienced delays or difficulties that will be overcome by next milestone, enabling project to return to delivery according to plan by next milestone.
- Milestone payment is withheld.
- Milestone payment withheld for second of two successive amber lights; project review initiated and undertaken by GISERA Director.

- **Red:**

- Milestone not met according to schedule.
- Problems in meeting milestone are likely to impact subsequent project delivery, such that revisions to project timing, scope or budget must be considered.
- Milestone payment is withheld.
- Project review initiated by GISERA Director.

2. Progress Schedule Reports outline task objectives and outputs and describe, in the 'progress report' section, the means and extent to which progress towards tasks has been made.

Project schedule table

TASK NUMBER	TASK DESCRIPTION	SCHEDULED START	SCHEDULED FINISH	COMMENT
1	Prescreening of ~50 chemicals for further assessment	Feb-23	Feb-23	This milestone will be completed in August 2023.
2	Screening assessment of high-risk chemicals	Mar-23	Apr-23	Completed
3	Microbial degradation trial of screened high-risk chemicals	May-23	Aug-23	
4	Communication product	Sep-23	Oct-23	
5	Desktop exposure assessment	Sep-23	Sep-23	
6	Sampling logistics	Oct-23	Oct-23	
7	Sampling campaign – exposure assessment	Nov-23	Feb-24	
8	Chemical analyses	Mar-24	Mar-24	
9	Project reporting	Feb-23	Jul-24	
10	Communicate findings to stakeholders	Feb-23	Jul-24	

Project schedule report

TASK 1: Prescreening of ~50 chemicals for further assessment

BACKGROUND

Prescreening of chemicals to determine potentially hazardous chemicals to take forward.

TASK OBJECTIVES

Critical appraisal of the H.2 chemicals list (~50) by the project team through chemical toxicity reviews, evaluation of exposure potential, evaluation of persistence and bioaccumulation in soil environments, and known CSG usage (concentration of chemical used, recent usage, widespread usage) and other industrial usage. The chemicals will be triaged, and high-risk chemicals will be identified for further investigation.

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

Brief technical report providing the list of high-risk chemicals to be taken forward in this project and methods of evaluation.

PROGRESS REPORT

The remaining 36 chemicals from the original list have been provided to an external contractor for screening to determine whether international agencies classify them as hazardous to human health. This screening will use data available in seven databases arising from schemes to determine the human hazard status of a chemical by relevant organisations.

Pre-screening of chemicals has been completed by the project team and a list of potentially hazardous, high-risk chemicals for further investigation has been provided to the external contractor for appraisal (Task 2). From a starting list of 54 chemicals (coming out of the 'Potential health impacts from CSG' project), eighteen chemicals were identified as requiring further investigation. The brief technical report is in preparation.

TASK 2: Screening appraisal of potentially hazardous chemicals

BACKGROUND

This task will be carried out by an external contractor following the Health Study Framework and will identify any additional chemicals for further investigation.

TASK OBJECTIVES

- Desktop appraisal of potentially hazardous chemicals identified from Task 1.
- This appraisal will follow the GISERA Health Study Framework.

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

Report providing screening appraisal of high-risk chemicals through the Health Study Framework

PROGRESS REPORT

This task is complete.

The external contractor has completed and finalised the screening appraisal report. The assessment from the report found that two chemicals were estimated to pose a potential risk based on available industry information on their use, and that these two chemicals required further assessment. These two chemicals were naphthalene and Dazomet, and these chemicals will be taken forward in Task 3 for microbial degradation trials.

The external contractor has carried out an appraisal, following the Health Study Framework, of the eighteen chemicals identified in Task 1. A draft report has been provided for comment and is currently being reviewed.

Variations to Project Order

Changes to research Project Orders are approved by the GISERA Director, acting with authority, in accordance with the [GISERA Alliance Agreement](#). Any variations above the GISERA Director’s delegation require the approval of the relevant GISERA Research Advisory Committee.

The table below details variations to research Project Order.

Register of changes to Research Project Order

DATE	ISSUE	ACTION	AUTHORISATION

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Contact us

1300 363 400
+61 3 9545 2176
csiro.au/contact
csiro.au

For further information

1300 363 400
gisera.csiro.au

GISERA is a collaboration between CSIRO, Commonwealth and state governments and industry established to undertake publicly-reported independent research. The purpose of GISERA is to provide quality assured scientific research and information to communities living in gas development regions focusing on social and environmental topics including: groundwater and surface water, greenhouse gas emissions, biodiversity, land management, the marine environment, and socio-economic impacts. The governance structure for GISERA is designed to provide for and protect research independence and transparency of research.