

Administrative Arrangement
between the
South Australian Environment Protection Authority (EPA)
and the
the Department for Energy and Mining, Energy Resources Division (DEM-ERD)
dated 08 November 2022

1. Purpose of the Administrative Arrangement

This Administrative Arrangement has been prepared for the purpose of satisfying the requirements detailed in paragraphs 5.1 and 5.3 of the Memorandum of Understanding (dated 17 August 2012) between the Environment Protection Authority (EPA) and the Energy Resources Division of the Department for Energy and Mining (DEM-ERD) (formerly the Department for Manufacturing, Innovation, Trade, Resources and Energy).

2. Scope of Administrative Arrangement

Prescribed Regulatory Activities under Both Agencies' Legislations

This Administrative Arrangement applies to activities administered by DEM-ERD under the South Australian *Petroleum and Geothermal Energy Act 2000* (PGE Act), referred to herein as 'regulated activities', and the *Petroleum (Submerged Lands) Act 1982* (SA), referred to herein as 'PSL Act activities'.

The following are regulated activities:

- (a) exploration for petroleum¹, geothermal energy, gas storage or another regulated resource²;
- (b) operations to establish the nature and extent of a discovery of petroleum, geothermal energy, gas storage or another regulated resource, and to establish the commercial feasibility of production and the appropriate production techniques;
- (c) production of petroleum or another regulated substance³;

¹ A naturally occurring substance consisting of a hydrocarbon or mixture of hydrocarbons in gaseous, liquid or solid state but does not include coal or shale unless occurring in circumstances in which the use of techniques for coal seam methane production or in situ gasification would be appropriate or unless constituting a product of coal gasification (whether produced below or above the ground) for the purposes of the production of synthetic petroleum.

² A naturally occurring underground accumulation of a regulated substance; or a source of geothermal energy; or a natural reservoir

³ Petroleum, hydrogen sulphide, nitrogen, helium, carbon dioxide, any other substance that naturally occurs in association with petroleum, hydrogen and a hydrogen compound or other substance that is a by-product of the production of hydrogen.

- (d) utilisation of a natural reservoir to store petroleum or another regulated substance (including in a case where a trace element naturally occurs with the petroleum or other regulated substance);
- (e) production of geothermal energy; and
- (f) construction and operation of a transmission pipeline for carrying petroleum or another regulated substance.

This Administrative Arrangement also applies to activities administered by EPA under the *Environment Protection Act 1993* (EP Act). There are a number of activities for which the EPA, by law, has a regulatory role. This includes activities that require environmental authorisations (works approval, licence, and exemption). In addition, the EPA may have a regulatory or advisory role in the development of trial projects associated with regulated activities (e.g. water flood field injection and water disposal trials).

Relevant EPA licensed activities are detailed in Schedule 1 of the EP Act and include (but are not limited to):

- Hydrocarbon storage or production works
- Waste disposal
- Treatment of listed waste
- Activity involving listed waste
- Fuel burning not coal or wood
- Discharges to marine or inland waters

Where environmental authorisations are issued under the EP Act, the EPA is solely responsible for the administration of these authorisations and ensuring that licenses meet the conditions of these authorisations.

Other Co- Regulatory Activities

- Inspections – DEM-ERD and the EPA will inform and liaise on upcoming site inspections of licencees, and carry out joint inspections when considered necessary/appropriate. Outcomes of site inspections will be shared between the agencies⁴.
- Periodic Review of Documents - When necessary, each agency will provide advice to the other agency in relation to documents and processes associated with the regulation of licensees.
- Dealings with the Community – Each agency will inform the other agency on matters relating to local communities and their concerns, particularly in instances where regular contact is made with DEM-ERD or the EPA, and where there is the potential for concerns to escalate (e.g. media exposure, ministerial briefing, etc). Outcomes on the matter will be shared between agencies.

⁴ All information is shared in accordance with relevant data sharing agreement in place between EPA and DEM - ERD and in accordance with the law.

- Exchange of Legal Advice where possible – Where an agency obtains Crown Solicitors advice relating to relevant co-regulatory matters under the P&GE or EP Acts, this advice should be forwarded to the opposing agency for their information upon Crown Solicitors' permission.
- Incident Management - Each agency will inform the other agency on incident reporting and notifications. Details refer to section 6 of this document. Outcome of the incident including enforcement actions taken will be shared between agencies.

2. Co- regulatory Principles:

- Both agencies work to ensure requirements of regulated entities are consistent where reasonable or possible;
- Where relevant provide support to ensure costs associated with advice are recovered;
- Work collaboratively to minimise duplication of regulatory process where reasonable or possible;
- Where possible adopt a lead regulator approach that incorporates requirements of both agencies;
- Exchange information and work in a collaborative and transparent manner.

3. Training Requirements

DEM-ERD and the EPA will undertake any necessary training to facilitate a better understanding of any provisions of the Acts and technical training to which this arrangement applies.

4. Referral and Approval Process

On the basis of the information provided in the Environmental Impact Report (EIR) and in accordance with Section 98 of the *Petroleum and Geothermal Energy Act 2000*, DEM-ERD using a set of publicly developed and disclosed criteria⁵, must classify the level of environmental impact of any proposed activity.

DEM-ERD must review the criteria every 5 years and in doing so will consult with the EPA on any proposed revisions prior to gazettal.

4.1 Impact Assessment of Regulated Activities

Where DEM-ERD has determined through its preliminary environmental assessment of the proposed regulated activity against published assessment criteria, that the regulated activity is low environmental impact, DEM-ERD will:

⁵ [Criteria for classifying the level of environmental impact of regulated activities](#)

1. Provide its preliminary low environmental impact assessment to the EPA for agreement;
2. In support of this assessment, provide a copy of the relevant EIR and draft Statement of Environmental Objectives (SEO) and details of the criteria established for assessment of the environmental impact of regulated activities

The EPA will:

1. Where the EPA does not agree with DEM-ERD's assessment, the EPA will notify DEM-ERD of its concerns in writing as soon as practical, but no later than 10 business days after receipt of the referral, explicitly detailing against the relevant criteria where the EPA disagrees with DEM-ERD; or
2. Where the EPA agrees with DEM-ERD's assessment, the EPA will provide notification of concurrence within 10 business days after receipt of the referral.

4.2 Consultation on EIR and SEO documents

As part of DEM-ERD's EIR and SEO assessment process DEM-ERD will consult with the EPA as follows:

- For activities agreed to be of low environmental impact, DEM-ERD will consult with the EPA on the content of the EIR and draft SEO, in particular the adequacy of the objectives and assessment criteria. The EPA will provide comments and recommendations EM-ERD within 20 business days of receipt of the referral.
- Where a regulated activity is classified as medium impact by DEM-ERD, DEM-ERD will seek the EPA's comments on the EIR and draft SEO during the relevant public consultation process for medium impact activities pursuant to section 102 of the PGE Act. The EPA will provide comments and recommendations to DEM-ERD within 30 business days of receipt of the referral.
- Where a regulated activity is classified as high impact by DEM-ERD, the proposal will be referred for assessment under the *Planning, Development and Infrastructure Act 2016*. DEM-ERD will remain as the principal agency facilitating consultation on the activity proposal unless DPTI advises otherwise. The EPA's comments and recommendations will be as indicated in this document irrespective of which agency (DEM-ERD or DPTI) facilitates the consultation, assessment and approvals process. Subject to the classification of the referral, provisions under the Development Act would define an appropriate consultation period.

When making a referral to the EPA, DEM-ERD will submit the relevant documentation via the electronic General Environmental Information (GENI) module and will specify any required timeframes and scope of the review.

The EPA will:

- Provide a written response to the referral documents to the nominated DEM-ERD contact through GENI.
- Negotiate with DEM-ERD, prior to the agreed timeframe for a response, if an extension of time is needed.

4.3 EPA's Assessment and Response to Referrals

The EPA's assessment and response to referral documentations will cover matters such as (but not limited to):

- Noise
- Waste Management
- Air Quality
- Waste Water Management
- Odour
- Stormwater Management
- Water
- Bunding and Spill Management; and
- Site contamination
- Any additional objectives and assessment criteria that need to be included in the SEO;
- Any significant issues that the EPA is aware of, which have not been raised in the EIR;
- In light of the information provided in the EIR and any other knowledge that the EPA considers relevant, recommended specific conditions of approval and requirements for inclusion in the SEO as part of the objectives and/or assessment criteria.

Following the review of referred documents, the EPA may decide to impose, vary or revoke a condition of an environmental authorisation in accordance with section 45 of the EP Act.

Once an application for a works approval has been made under Section 35 of the EP Act or EPA's approval is sought in relation to Section 54 of the EP Act, the EPA is to notify DEM-ERD and both agencies should establish an agreed work-flow process to ensure both the EP Act and PGE Act are satisfied in a timely manner. Licensees are to notify the EPA to seek approval if a Section 35 or Section 54 C requirement has been triggered, with an understanding that all information provided to DEM-ERD under Regulation 18 or 19 will be reviewed by the EPA as part of the cross agency work flow and timeframe.

5. Petroleum Submerged Lands (PSL) Act Activity Approval Process

For all PSL Act activities regulated by DEM-ERD, DEM-ERD will provide to the EPA for comment a copy of the relevant Environment Plan (EP) prepared and submitted by the licensee as well as DEM-ERD's assessment of the EP. The EPA's comments and recommendations on the EP will be consistent with Section 4 of this arrangement. For PSL Act activities, the EPA will provide comments and recommendations on the EP to DEM-ERD within 20 business days of receipt of the referral.

6. Incident Regulation

6.1 DEM-ERD Incident Regulation

The following table specifies DEM – ERD’s role in incident regulation:

Where DEM has sole regulatory role:	Where DEM has a default lead regulatory role
<ul style="list-style-type: none"> • Land disturbance • Facility and pipeline construction and operation • Heritage impacts • Public safety • Security of gas supply • Vegetation disturbance • Hydrocarbon gas loss of containment • Downhole well incident 	<ul style="list-style-type: none"> • Groundwater contamination (contemporary) • Groundwater contamination (legacy) • Carbon dioxide loss of containment from geological storage • Formation water release • Water flood oil field injection • Oily sludge treatment and disposal • Surface water resource impacts • Hydrocarbon and/or chemical spill • Bioremediation of impacted soils (not EPA licenced)

Section 85 of the PGE Act creates two categories of incidents: Serious and Reportable.

Serious Incidents

Serious incidents need to be reported to DEM-ERD as soon as practicable (typically within 24 hours) and followed up by a detailed report within 3 months of the date of the incident.

Following the occurrence of a serious incident as defined in the SEO that relates to EPA issues of concern (listed under section 6.2) and triggers incident criteria prescribed in the EP Act, DEM-ERD and the EPA will consult and agree on:

- Whether the default lead role is appropriate and whether an investigation, in addition to that undertaken by the licensee, is required;
- The level of any enforcement action required to be taken;

This consultation will occur at the earliest practical time following receipt of the initial report of the incident.

At any point, as agreed between the parties, the lead role can be changed and both Agencies reserve the right to take independent regulatory action where deemed appropriate.

To minimise duplication of any follow-up information requests, where it is agreed that there is no additional investigation, or EPA enforcement action warranted following the initial report and DEM-ERD assume the lead role, DEM-ERD will:

- Provide EPA with the 3-month comprehensive serious incident report submitted in accordance with Regulation 32(4) as soon as practicable after receipt.
- Seek EPA advice (where required) on the adequacy of the report in addressing the requirements in relation to the nature and extent of damage to the environment and the steps taken or proposed to clean up and rehabilitate area affected by the incident.
- Consult with EPA on any further enforcement action deemed necessary to address any breaches resulting from the incident.
- Close the incident with EPA's concurrence.

Reportable Incidents

Reportable incidents must be reported to DEM-ERD on a quarterly basis. The required content of these reports is specified in Regulation 32 of the PGE Act.

Following the notification of a reportable incident as defined in the SEO that relates to EPA issues of concern (listed under section 6.2) and triggers incident criteria prescribed in the EP Act, DEM-ERD and the EPA will meet as required to review the trends, incident response, clean-up, corrective and preventative measures and discuss and agree upon any possible regulatory follow-up, request for further information and/or further enforcement action required.

DEM-ERD will make available to the EPA relevant reportable incident reports submitted by PGE Act Licensees in accordance with Regulation 32(6).

6.2 EPA Incident Regulation

In addition to obligations that exist under sections 83 and 83A of the EP Act, licences issued under the EP Act include a note which requires the licence holder, as soon as reasonably practicable after becoming aware of the environmental harm or threatened harm, to notify the EPA (preferably on EPA emergency phone number 1800 100 833) of the harm or threatened harm, its nature, the circumstances in which it occurred and the action taken to deal with it in accordance with section 83 of the EP Act. In the event that the primary emergency phone number is out of order, the licence holder should phone (08) 8204 2004.

When reporting an incident to the EPA, whether by the licensee, the following information is to be provided:

- name of person reporting and who they represent
- contact details of person reporting
- location of incident
- description of incident
- date and time
- how the incident occurred
- investigations carried out to date
- action taken or proposed action taken to remediate/clean up in the immediate/short term
- action taken or proposed action taken to avoid recurrence

The EPA expects licensees to take immediate actions as soon as they become aware including stop pollution source and pathways and remove contaminated soil and water as much as possible regardless of the future land use value.

The following table specifies EPA’s role in incident regulation:

Where EPA has an advisory role	Where EPA has a default lead regulatory role
<ul style="list-style-type: none"> • Groundwater contamination (contemporary) • Groundwater contamination (legacy) • Carbon dioxide loss of containment from geological storage • Formation water release • Water flood oil field injection • Oily sludge treatment and disposal • Surface water resource impacts • Hydrocarbon and/or chemical spill 	<ul style="list-style-type: none"> • EPA licensed waste management facilities (eg. Landfill/waste processing facility) • Bioremediation of impacted soils (via EPA licenced landfarm) • Radioactive sources and material • Odour • Noise • Air emission

6.3 EPA / DEM-ERD Protocol

Notification

If a regulated or PSL Act activity is licensed solely by DEM-ERD and a licensee reports an incident that is deemed serious or material in accordance with section 83 and 83A of the EP Act, and relates to or is likely to relate to any of the issues detailed below, DEM-ERD will endeavour to advise the EPA as soon as practicable (either direct to the Mining and Radiation Branch or the EPA Hotline 1800 100 833). DEM-ERD will also inform licensees of their obligations to report the incident to the EPA.

Where the EPA is first notified of an incident relating to a regulated or PSL Act activity, the EPA will endeavour to advise DEM-ERD (either direct to the Engineering Operations Branch or via the Serious Incident Report Number 08 8463 6666) of the details as soon as practicable after notification. The EPA may also advise the person reporting to notify DEM-ERD if it is obvious that the incident falls under the PGE Act or PSL Act definitions.

Requirements of section 83 and 83A of the EP Act applies regardless of any incident notification made under PGE Act and PSL Act.

Incident management

Where an incident triggers reporting under both PGE and EP Acts, one Agency will assume the lead regulatory role. It is agreed that the lead regulatory role in terms of this Administrative Arrangement means ensuring that all relevant information is provided by the licensee to satisfy reporting requirements and in the case of non-compliance, taking relevant enforcement action. The lead regulatory role will also involve follow up and tracking of any clean-up, rehabilitation activities and the provision of a pathway to regulatory closure.

Where one Agency takes the lead regulatory role under the Act which it administers, the other may provide technical advice and input on enforcement decisions and/or close-out where relevant.

At any point, as agreed between the parties, the lead role can be changed and both Agencies reserve the right to take independent regulatory action where deemed appropriate.

PSL Act Incidents

In the case of any environmental incidents resulting from PSL Act activities, at the earliest practical time following notification, DEM-ERD and the EPA will consult and agree on:

- Whether the default lead role (outlined in section 6.1 and 6.2) is appropriate and whether an investigation, in addition to that undertaken by the licensee, is required;
- Any possible regulatory follow up and/or request for further information required;
- The level of any enforcement action required to be taken;

6.3 Incident Definitions in SEO to align with EP Act

For regulated and PSL Act activities covered by an SEO, during the relevant consultation process the EPA will suggest any required changes to incident definitions to ensure they reflect the three tiers of environmental harm as defined in the EP Act.

7. Carbon Capture and Storage (CCS) Licensing

CCS is licenced under the Gas Storage Licencing (GSL) provisions of the PGE Act. The gases for storage in underground geological formations as part of a CCS operation may be considered a waste under the EP Act and require an environmental authorisation for waste disposal. To ensure consistent regulation under both these Acts for CCS all relevant provision under section 4 to 6 under this Agreement will apply as relevant for all CCS regulated activities as licenced under the PGE Act.

7.1 Monitoring and Verification

For any CCS project proposal under the PGE Act, a Monitoring and Verification Plan must be provided with the purpose of confirming the long-term containment of a carbon dioxide stream stored underground. The Monitoring and Verification Plan will achieve this by:

- Setting out the measurement of carbon dioxide movement and potential leakage pathways, prior, during and post injection.
- Determining the ultimate stability of the injected carbon dioxide stream.
- Assessing integrity of the underground storage complex.
- Detecting and ensuring necessary response to a loss of containment.
- Implementing and assessing the effectiveness of risk management measures.
- Defining site closure criteria

The various monitoring techniques called up by a plan will include (but are not limited to):

- Surface measurements at the well head of injection data - surface flow rate, pressure and temperature data.
- Downhole reservoir data such as pressures and temperature and log data, that is calibrated and compared against reservoir models.
- Surface and sub-surface environmental monitoring of key environmental receptors.
- Monitoring of annuli casing and tubing pressures in adjacent non-plugged wells.

The Monitoring and Verification Plan must be incorporated into the objectives of a relevant SEO for carbon storage in South Australia and be submitted to DEM-ERD as part of an activity notification under the PGE Act. DEM-ERD will consult with the EPA on all submitted Monitoring and Verification Plans prior to any CCS activities commencing.

The Monitoring and Verification Plan and any subsequent revisions will be made public on the DEM-ERD website once DEM-ERD and the EPA are satisfied with the plan.

7.2 CCS Closure

Under both the PGE Act and EP Act, relevant criteria must be met by a licensee before a licence may be relinquished. For CCS activities, to the extent permissible by the EP Act, and on a case-by-case basis, the EPA may take into account relevant obligations imposed on a proponent under the PGE Act e.g. requirements of any Monitoring and Verification Plan, when making decisions relating to an environmental authorisation under Part 6 of the EP Act or imposing conditions.

Site closure criteria will consider the following:

- The acquisition of an adequate monitoring data set to provide confidence in the storage complex.
- Demonstration that the observed performance of the storage complex and carbon dioxide injection aligns with storage modelling.
- Residual risks for loss of containment from the storage complex is demonstrated to be low and acceptable to DEM-ERD and the EPA.
- All wells intersecting the storage complex are decommissioned (or at a minimum decommissioned over the section covering the storage reservoir and primary seal) and relevant surface infrastructure are decommissioned in accordance with the PGE Act.
- Expected closure timelines.

Both DEM-ERD and the EPA will consult directly with one another prior to any decisions to relinquish licences relevant to CCS.

8. Agreement to Finance

In order to support this Administrative Arrangement with appropriate resources allocation, the DEM-ERD agrees, subject to available approved budget allocation, at DEM-ERD's discretion, to provide annual funding of one full time PO3 position (or other future agreement in writing) to the EPA. The funding is to be received by the EPA prior to the end of each financial year. In the case DEM-ERD do not have the funding for the forthcoming financial year, DEM-ERD will provide EPA with 12-month notice.

ENDORSED and AGREED:



[Nick Panagopoulos \(Nov 22, 2022 13:44 GMT+10.5\)](#)

Nick Panagopoulos

Acting Executive Director, Energy Resources Division, DEM-ERD

DATE:

**Adam
Cartland** Digitally signed by
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Director Science and Information, SA EPA

DATE:

2022D049575 V6 - Update to EPA and DEM ERD Admin Arrangement (1) (004)

Final Audit Report

2022-11-22

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