

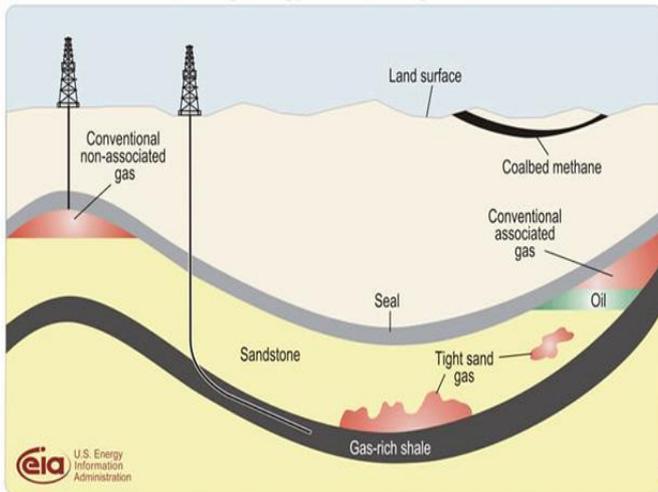
# Unconventional Gas mining planning in the South East

## What are the roles of Government bodies in this issue?

### What is unconventional gas mining?

The difference between conventional and unconventional gas refers to where the gas is found and how it is extracted. Unconventional gas includes shale gas, tight gas, and coal seam gas.

Schematic geology of natural gas resources



### What is the SENRM Board's role in this issue?

- The SENRM Board does not have the authority to approve or reject unconventional gas mining in the South East.
- The Board is government appointed and works closely with the Minister for Sustainability, Environment and Conservation; the Board is able to inform the Minister of landholder and community opinion and concerns on this issue.
- The SENRM Board is a conduit from the region to the Minister and can be used to collect community or landholder views/ opinions or concerns through consultation to present to the Minister.
- The SENRM Board will be one of the key stakeholders that mining or energy companies must consult with during mandatory public consultation if fracking were to happen. Here the Board can also convey community and landholder sentiment and express their own views or concerns to potential negative impacts in the region of our natural resources ranging from water to native vegetation and threatened species.
- The SENRM Board develops water allocation plans to determine sustainable water use in the region and these plans include and make provision for a range of mining activities.
- Can conduct studies and assessments on the impact mining may have on water resources in the region. These results can then be used to develop policy or shape current policy set by the Minister.
- Conduct or input into base line studies or research into our natural resource assets

### What is fracking?

One of the methods used to extract the gas is hydraulic fracturing; commonly known as "fracking."

This involves perforating or leaving an open hole in a well's cemented steel casing within the target formation, then pumping fracking fluid down the well at high pressure, creating small cracks or fractures in that formation to release the gas. The fracking liquid usually contains chemicals that are toxic and banned in several states and countries. The chemicals used are often found in some items such as anti-freeze, cleaning chemicals and detergents.

### What is the risk?

The potential environmental impacts of fracking include:

- Contamination of water resources through the leaking of chemicals or gas into aquifers.
- Sustainability of water resources used for the fracking process as huge volumes of water are required in this process.
- Productivity and poisoning of agricultural land, which may be affected by the disposal or evaporation of fracturing fluids.
- Longevity of well integrity after any companies have left the area - whose is responsible for them?

### What is the Ministers role?

- Administering the National Parks and Wildlife Act 1972, Marine Parks Act 2007, Adelaide Dolphin Sanctuary Act 2005, River Murray Act 2003, Native Vegetation Act 1991, Natural Resources Management Act 2004 and Environment Protection Act 1993
- The Minister for Sustainability, Environment and Conservation does not grant or approve mining licences unless they are in National or Conservation Parks or Marine Parks, Regional Reserve, the River Murray Protection Area or the Adelaide Dolphin Sanctuary. The Minister for Mineral Resources and Energy must seek his approval

- The Minister for Sustainability, Environment and Conservation approves the issuing of water licences for water taken from prescribed resources. This would include source water for fracking operations.
- The Minister for Sustainability, Environment and Conservation approves the issuing of water affecting activity permits to drill water wells. Petroleum wells are approved by the Minister for Mineral Resources and Energy.

- A permit is needed to construct, repair or backfill a well. These permits are administered by the Department of Environment, Water and Natural Resources on behalf of the Minister of Sustainability, Environment and Conservation.

DEWNR undertakes technical assessment and provides advice on the adequacy of:

- The proponent's environmental risk identification and assessment;
- The environmental objectives to be achieved;
- The risk mitigation and operational management strategies that will be used to achieve those outcomes; and
- The proposed monitoring program.

## What is DMITRE's role?:

- Gas exploration and production activities, including those that involve hydraulic fracturing, are regulated by the Department of Manufacturing, Innovation, Trade, Resources and energy. (DMITRE)
- DMITRE is the lead agency in the administration of 'mining operations' and 'regulated activities' in South Australia. The Minerals Resources and Energy Resources Divisions manage the activities administered under the Mining Act 1971, the Petroleum and Geothermal Energy Act 2000 and the Regulations associated with both of these Acts on behalf of the Minister for Mineral Resources and Energy (MMRE).

## What is DEWNR's role?

The Department of Environment, Water and Natural Resources (DEWNR) is involved in the licensing and approval of unconventional gas activities in relation to:

- Informal consultation in the project planning stage
- Statutory consultation on licences to authorise regulated activities.
- Statutory consultation on Statements of Environmental Objectives
- DEWNR is the lead agency responsible for providing policy advice and leadership on a diverse range of issues including sustainable land management, built and cultural heritage, water security and the management of parks and public lands. DEWNR also assists DMITRE in fulfilling its environmental obligations under mineral and petroleum legislation irrespective of tenure.
- The Department of Environment, Water and Natural Resources (DEWNR) has responsibility for the administration of authorisations, issuing water access entitlements and allocations (licensing), water trade, works and site use approvals and compliance activities. The Department and NRM Boards work closely together to ensure appropriate management of water resources.

