

ENVIRONMENT, HEALTH & SAFETY



The Coal Seam Gas (CSG) industry in NSW operates under the toughest controls in Australia, with companies facing fines of up to \$1 million dollars for any environmental breaches.

The NSW Government is in the process of implementing strict regulations to protect the State's important agricultural lands and industries such as farming, fisheries, crops, livestock, horse breeding, wine-making and horticulture from any potential impacts of CSG activity.

The Environment Protection Authority (EPA) can prosecute any company that breaches their Environment Protection Licence, with heavy fines of up to \$1 million able to be imposed by the courts.

Companies that fail to inform the EPA of a serious incident can be prosecuted and fined up to \$2 million.

Safeguards

The EPA is now the lead regulator of environmental and health impacts of CSG activities in NSW, with responsibility for compliance and enforcement.

As the trusted independent watchdog for the environment, the EPA has the power to investigate serious breaches

and enforce conditions of environment protection licences. All exploration, assessment and production titles and activities will be required to hold an Environment Protection Licence.

CSG activity in NSW is also regulated under the following legislation:

- *Petroleum (Onshore) Act 1991*
- *Environmental Planning and Assessment Act 1979*
- *Protection of the Environment Operations Act 1997*
- *Water Management Act 2000; Water Act 1912*

- *Work Health and Safety Act 2011*
- *Threatened Species Conservation Act 1995*
- *Heritage Act 1977*

In addition, the federal government imposes further regulatory controls under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* and the *National Greenhouse and Energy Reporting Act 2007*.

NSW Chief Scientist & Engineer's Review

The NSW Chief Scientist & Engineer, Professor Mary O'Kane will conduct an independent review of CSG related activities in NSW, with a focus on the potential impacts of these activities on human health and the environment. The NSW Government has requested the Chief Scientist to:

- Undertake a comprehensive study of industry compliance involving

- site visits and well inspections;
- Identify and assess any gaps in the identification and management of any potential impacts arising from CSG exploration, assessment and production;
- Explain how the characteristics of the CSG industry compare with the industry in other jurisdictions; and
- Inspect and monitor current drilling activities including water extraction, hydraulic fracturing and aquifer protection techniques.

Water protection

Scientific research by the CSIRO¹ shows that groundwater contamination from CSG operations is considered a low risk because:

- Hydraulic fracturing, when conducted correctly, is unlikely to introduce hazardous concentrations of chemicals to groundwater or to create

- connections between fresh and coal-containing aquifers;
- Water extraction from coal seams makes cross-contamination of aquifers unlikely;
- Long-term monitoring of well bore integrity can help to identify the potential for well leakage into surrounding aquifers; and
- The surface footprint of CSG infrastructure does not prohibit other uses of the land.

All new CSG exploration and production activity will be banned in or within 2 kilometres of existing and future residential areas. CSG activity will also be banned within the areas identified as the Upper Hunter equine and viticulture critical industry clusters.

¹ www.csiro.au

Coal seam gas developments – predicting impacts



CSG is banned from critical industries in the Upper Hunter, including horse studs.