Question on Notice #1: Transcript

QUESTION

The Hon. Dr PETER PHELPS: The Committee has been travelling around the State seeking baseline data about issues concerning alluvial water supplies. How far back would that data go with a degree of reliability?

Mr O'NEILL: I do not know that figure off the top of my head. I will have to take that question on notice.

ANSWER

The NSW Government started investigating the alluvial groundwater resources of the State in the 1950s. A drilling program operated intermittently up until the late 1990s, which covered all of the alluvial groundwater sources associated with our major river systems.

There is reliable groundwater level and water quality data dating back to the 1980s for many alluvial aquifers.

Private bores constructed in the Great Artesian Basin have been monitored for a much longer period, some extending back to the early 1900s.

Question on Notice #2: Transcript

QUESTION

CHAIR: By way of clarification, does your department have a list or a map that shows the locations of all your monitoring bores in New South Wales?

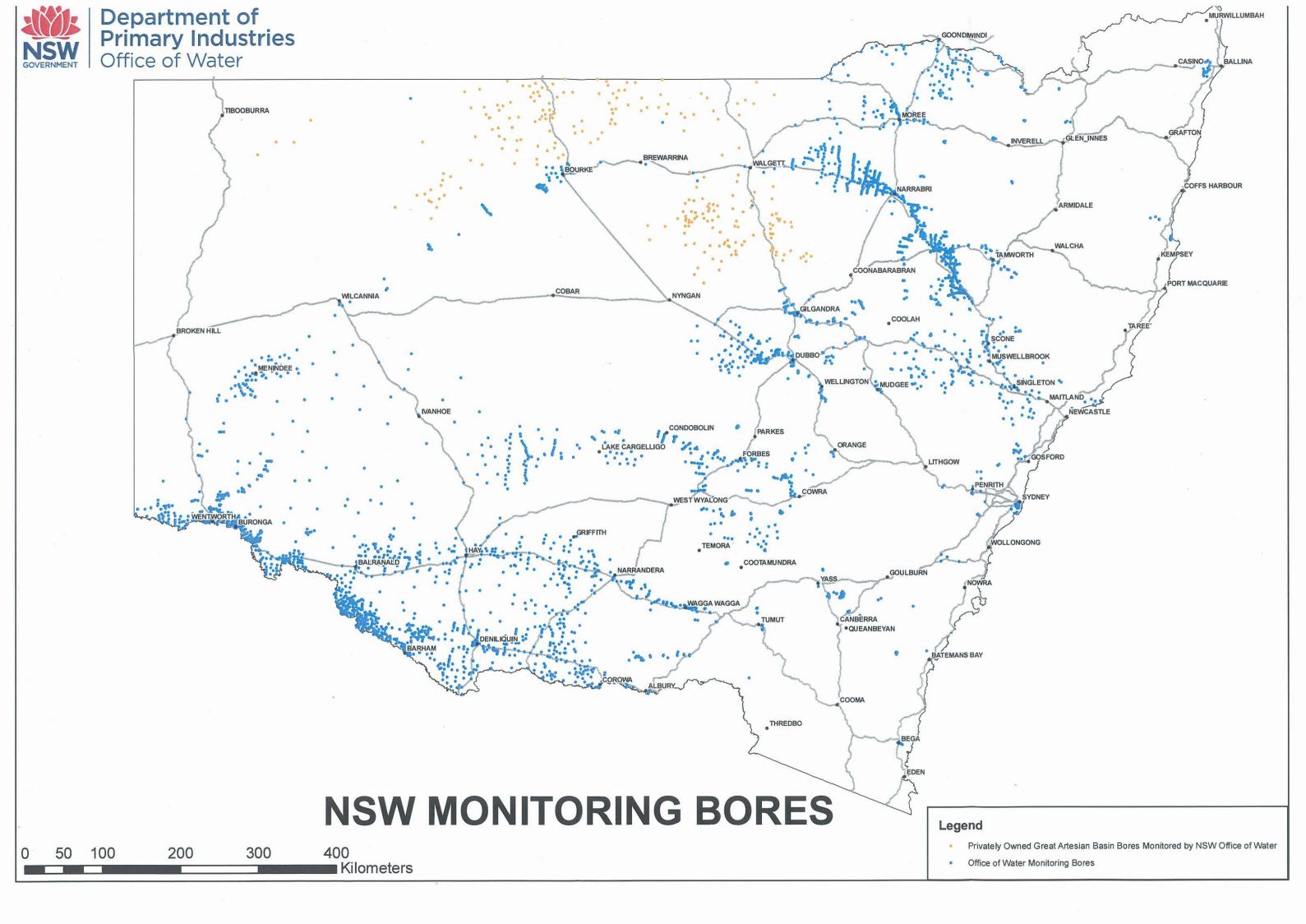
Mr O'NEILL: I have not laid eyes on it personally. I certainly see geographic information system (GIS) layers of water supply bores. I am not sure if we have a GIS layer of water monitoring bores. I can take that question on notice but I would expect that we would have.

CHAIR: Will you take that on notice and if such a document is available will you make it available to the Committee?

Mr O'NEILL: Of course.

ANSWER

The NSW Office of Water maintains a corporate database of bores within NSW. A map compiled from the database and showing the location of NSW Office of Water monitoring bores, as well as privately owned Great Artesian bores monitored by the Office of Water, is attached.



Supplementary question 1

QUESTION

Could you outline the Government resources available to monitor the safety of coal seam gas developments, for example through a regular program of audits of coal seam gas wells and other exploratory and production infrastructure?

ANSWER

As part of the Government's Strategic Regional Land Use Policy the Government made a commitment to audit all coal and coal seam gas exploration licences, to review their current status and ensure that holders are adhering to conditions obtained in their licences. The results of the audit are being compiled, analysed and a report will be provided to Government on the results, together with recommendations for improvements.

The NSW Government has the power to direct companies to undertake independent audits by approved auditors to ensure environmental and safety compliance of coal seam gas activities.

Additionally, the Division of Resources and Energy's Mine Safety Officers regularly monitor safety compliance through reviews of daily driller's reports and regular inspections of coal seam gas wells and other exploratory and production infrastructure.

Inspections may be undertaken at any stage during the life of an operation and the criteria assessed may vary according to the activity. For example:

- 1. Before the borehole reaches the target seam, Mine Safety Officers verify that safety equipment is properly installed at the top of the well to control any pressure and flow of coal seam gas;
- 2. While a company is undertaking a remedial operation on a completed well (also known as a workover), Mine Safety Officers verify that the workover rig and surface safety equipment meet appropriate safety standards; and,
- 3. When the well is plugged and abandoned, Mine Safety Officers verify that prescribed requirements and objectives of the reclamation program have been met.

In addition, a number of activities relating to work outside the immediate gas well, exploratory and production infrastructure, such as the gathering pipelines and gas processing facilities fall under the jurisdiction of the NSW WorkCover Authority.

Supplementary question 2

QUESTION

What arrangements are in place to ensure that the Government takes a coordinated approach to the development and regulation of coal seam gas in NSW, for example coordination between government agencies and ministers?

ANSWER

The NSW Government has committed to the implementation of a Strategic Regional Land Use Policy. The Policy aims to strike the right balance between the State's important agricultural, mining and energy sectors, while ensuring the protection of high value and strategic natural resources.

As part of the implementation of this Policy, significant changes to the approval process for coal seam gas (CSG) exploration have been introduced. The changes mean that a coordinated approach is now undertaken in relation to assessing applications to conduct drilling activities for CSG exploration.

The Department of Trade & Investment, Regional Infrastructure & Services - Division of Resources & Energy (DRE) is the determining authority for CSG exploration that is not State Significant Development. The CSG exploration activity approval process requires the DRE to consult with a number of agencies including the Office of Environment and Heritage (OEH), the NSW Office of Water (NOW) and the Department of Planning & Infrastructure (DP&I), and to consider their recommendations prior to approving any applications for drilling activities.

The Coal Seam Gas Working Group was also formed in 2011 to ensure a coordinated approach to the development and regulation of CSG in NSW. The Working Group involves DRE, OEH, NOW, DP&I and the Department of Premier and Cabinet.

One aim of the Working Group is to promote enhanced cooperation across all relevant departments and agencies in relation to the regulation of CSG drilling activities. The Working Group is tasked with examining the key issues associated with the regulation of the industry to ensure that the CSG industry is operating to the highest safety and environmental standards, while maintaining the protection of the State's important natural resources.

In addition, joint agency investigations are undertaken as appropriate in response to incidents or complaints.

Supplementary question 3

QUESTION

The Committee has become very aware of the divergent scientific views on key coal seam gas issues, such as the safety of "fraccing", and the impact of drilling on aquifers. What role can the Government play in ensuring that there is a firm scientific basis for future Government regulation of the industry?

ANSWER

The Government is taking positive steps to ensure that there is a firm scientific basis for its future regulation of the industry.

For example, the Government has commissioned a technical review of regulatory standards for well integrity, including addressing health, safety and environment risks associated with the loss of well integrity. The review of regulatory standards covers conventional onshore petroleum activities as well as onshore coal seam gas activities in NSW.

As part of the review, current standards, specifications and other key references – both from within Australia and internationally - were analysed. The project also includes the development of appropriate standards where they do not yet exist, or where a minimum standard should be applied.

The Government has also commissioned a consultant to assess existing standards for "fraccing" and to develop an interim standard, pending further regulatory reform (if required). The review is considering Australian material particularly from Queensland, as well as overseas standards (notably US and Canada). This review is also identifying risks to be addressed by particular standards and will recommend a framework for future actions.

Both the Well Integrity Standards and Fraccing Standards are to be reviewed by NSW Chief Scientist and Engineer, Professor Mary O'Kane, prior to implementation.

The NSW Government is also working with the Commonwealth and other jurisdictions to develop a national framework to address concerns around the possible impacts of fraccing and aquifer contamination.

Supplementary question 4

QUESTION

The Government submission (pp 6-7) provides an overview of the coal seam gas industry in NSW, with a short description of three projects approved for production.

- a) Could you provide more information on each of the projects approved for production, as well as a detailed description of the other projects submitted for planning approval?
- b) The overview does not include any information on Exploration Licences. Could you advise how many Exploration Licences have been issued in NSW, who they have been issued to, and what areas are they located in?

ANSWER

- a) As this matter concerns projects that are approved by the Minister for Planning and Infrastructure under the *Environmental Planning and Assessment Act 1979*, this question would be best directed to the Department of Planning and Infrastructure.
- b) The attached table lists titles granted since September 1989. There are currently 47 Petroleum Exploration Licences in NSW.
 - Petroleum Exploration Licences cover both coal seam gas and conventional petroleum as there are no specific licences for coal seam gas

b) The following table lists the titles granted since September 1989, the licence holder and its location.

Petroleum Exploration Licence	ation Licence		
Title	Status	Location	Licence Holder(s)
PEL 3 (1991)	CANCELLED	About 49 km SE of COONABARABRAN	Bow Valley (Australia) Ltd Petroleum Securities Ptv 1td
	CANCELLED	About 111 km WNW of COBAR	Maple Oil & Exploration NL
PEL 9 (1991)	CANCELLED	About 52 km NE of DRAKE	Claremont Petroleum NL Oil Company of Australia NL Pacific Power
			St Barbara Mines Limited
	CANCELLED	About 39 km W of SCONE	Australian Coalbed Methane Pty Limited
- 1	CANCELLED	About 31 km NNW of DUBBO	Metallic Resources Pty Limited
PEL 14 (1991)	CANCELLED	About 15 km NNW of CULCAIRN	Knight Industries Pty Ltd
PEL 15 (1991)	CANCELLED	About 8 km NNE of GRAFTON	Tri-Star Detroloum Company
PEL 17 (1991)	CANCELLED	About 47 km W of TIBOOBURRA	Maxis Corporation 1 to
PEL 18 (1991)	CANCELLED	About 103 km ENE of TIBOOBURRA	Maxis Corporation Ltd
	CANCELLED	About 15 km N of GRAFTON	Agex Pty Limited
PEL 278 (1955)	CANCELLED	About 20 km SW of DENMAN	The Electricity Commission of NSW (Trading as Pacific Power)
PEL 279 (1955)	CANCELLED	About 13 km SSW of GOSFORD	The Electricity Commission of NSW (Trading as Pacific Power)
PEL 282 (1955)	CANCELLED	About 41 km NW of LISMORE	AGL Petroleum Operations Pty Limited Consolidated Petroleum Australia NL
PEL 283 (1955)	CANCELLED	About 22 km NNE of JERILDERIE	Queensland Gas Company Limited Tyers Investments Pty Limited
PEL 284 (1955)	CANCELLED	About 59 km SSW of WARKWORTH	The Electricity Commission of NSW (Trading as Pacific Power)
PEL 286 (1955)	CANCELLED	About 32 km SSW of QUIRINDI	Australian Coalbed Methane Pty Limited
PEL 421 (1991)	CANCELLED	About 56 km WNW of COBAR	Eastern Energy Australia Pty Limited
- 1	CANCELLED	About 95 km NE of WILCANNIA	Eastern Energy Australia Pty Limited
PEL 425 (1991)	CANCELLED	About 116.14 W of WHITE CLIFFS	Black Rock Petroleum NL

PEL 429 (1991)	CANCELLED	About 2 km W of BYRON BAY	Sunoco Inc
	CANCELLED	About 35 km WNW of LISMORE	Sunoco Inc
- 1	CANCELLED	About 17 km SSW of LISMORE	Sunoco Inc
	CANCELLED	About 47.15 NW of DENILIQUIN	Australian Coalbed Methane Pty Limited
J	CANCELLED	About 18.10 E of DENILIQUIN	Applegate Exploration, LLC Pannonian International Ltd
	CANCELLED	About 13.00 ENE of WYEE	Macquarie Energy Pty Ltd
	CANCELLED	About 16 km ENE of JERILDERIE	Greenbase Oil and Gas Pty Ltd
	CANCELLED	About 44 km E of LIGHTNING RIDGE	Norwest Hydrocarbons Pty Ltd
PEL 466 (1991)	CANCELLED	About 71 km NNE of BREWARRINA	Norwest Hydrocarbons Pty Ltd
1 1	CANCELLED	About 35 km SSW of INVERELL	Pangaea Oil & Gas Pty Limited
	CANCELLED	About 46 km ENE of WALGETT	Surat Resources Pty Limited
- 1	CANCELLED	About 79 km W of COONAMBLE	Surat Resources Pty Limited
	CANCELLED	About 24 km NNW of NARROMINE	Surat Resources Pty Limited
PEL 483 (1991)	CANCELLED	About 4 km NNE of PORTLAND	East Coast Power Pty Ltd
PEL 1 (1991)	CURRENT	About 29 km SSE of GUNNEDAH	Australian Coalbed Methane Pty Limited
PEL 2 (1991)	CURRENT	About 10 km WSW of BLACKTOWN	AGI Unstream Investments Dtv Limited
	CURRENT	About 20 km SW of DENMAN	AGI Unetream Investments Dtv Limited
	CURRENT	About 20 km ENE of HORNSBY	ACT Thefrom Investments Fty Limited
	HALI		ACE Obsugant investments Pty Entitled
	CORRENI	About 30 km NE of MOREE	Orion Petroleum Limited Kennedy, Robert Michael Laffer, Philip Leslie
l . i	CURRENT	About 57 km ESE of COONABARABRAN	Australian Coalbed Methane Pty Limited Santos QNT Pty Ltd
l	CURRENT	About 30 km WSW of LISMORE	Metgasco Ltd
- 1	CURRENT	About 17 km W of LISMORE	Metgasco Ltd
	CURRENT	About 35 km SE of NARRABRI	Eastern Star Gas Limited
- 1	CURRENT	About 10 km E of MAITLAND	AGL Upstream Investments Pty Limited
PEL 285 (1955)	CURRENT	About 17 km S of GLOUCESTER	AGL Upstream Investments Pty Limited

PEL 422 (1991)	CURRENT	About 112 km WNW of COBAR	Orion Petroleum Limited	
PEL 424 (1991)	CURRENT	About 41 km SE of WHITE CLIFFS	Orion Petroleum Limited	
PEL 426 (1991)	CURRENT	About 7 km NNE of GRAFTON	Metgasco Ltd	
PEL 427 (1991)	CURRENT	About 37 km WNW of MOREE	Comet Ridge Ltd Orion Petroleum Limited	
PEL 428 (1991)	CURRENT	About 48 km ENE of COONAMBLE	Comet Ridge Ltd Davidson Prospecting Pty Ltd Orion Petroleum Limited	
PEL 433 (1991)	CURRENT	About 47 km E of GILGANDRA	Eastern Star Gas Limited Santos QNT Pty Ltd	
	CURRENT	About 31 km NNE of COONAMBLE	Eastern Star Gas Limited Santos QNT Pty Ltd	
PEL 437 (1991)	CURRENT	About 45 km WNW of ASHFORD	Pangaea PEL 437 Pty Limited	
PEL 442 (1991)	CURRENT	About 5 km NE of DAPTO	Apex Energy NL Sydney Basin CBM Pty Ltd	
PEL 443 (1991)	CURRENT	About 94 km ENE of TIBOOBURRA	Harlow Australia Pty Ltd	
PEL 444 (1991)	CURRENT	About 6 km SW of HELENSBURGH	Apex Energy NL Sydney Basin CBM Pty Ltd	·
PEL 445 (1991)	CURRENT	About 38 km WNW of LISMORE	Arrow CSG (Australia) Pty Ltd B.N.G. Pty Ltd	
	CURRENT	About 5 km NW of COONABARABRAN	Santos QNT Pty Ltd	
	CURRENT	About 36 km SW of QUIRINDI	Santos QNT Pty Ltd	
	CURRENT	About 21 km NW of PICTON	Apex Energy NL Sydney Basin CBM Pty Ltd	
- 1	CURRENT	About 66 km ENE of MUNGINDI	Orion Petroleum Limited	
- 1	CURRENT	About 44 km ENE of ULAN	Macquarie Energy Pty Ltd	
	CURRENT	About 23 km WNW of YAMBA	Clarence Moreton Resources Pty Limited	
	CURRENT	About 19 km NE of RAYMOND TERRACE	Macquarie Energy Pty Ltd	-
	CURRENT	About 22 km WNW of BARRABA	Macquarie Energy Pty Ltd	
- 1	CURRENT	About 47 km E of KANDOS	Macquarie Energy Pty Ltd	
	CURRENT	About 14 km ENE of WYEE	Macquarie Energy Pty Ltd	
- 1	CURRENT	About 43 km W of COONABARABRAN	Santos QNT Pty Ltd	
PEL 463 (1991)	CURRENT	About 6 km ESE of HORNSBY	Macquarie Energy Pty Ltd	
				·

Macquarie Energy Pty Ltd	Leichhardt Resources Ptv I td	Leichhardt Resources Dtv 14d	Leichhardt Resources Ptv I td	Orion Petroleum Limited	Energetica Resources Ptv Limited	Energetica Resources Pty Limited	Energetica Resources Pty Limited	Drequilin Pty Limited	Pangaea Oil & Gas Pty Limited	Clarence Moreton Resources Pty Limited	Clarence Moreton Resources Pty Limited	Orion Petroleum Limited	Oil Company of Australia NL	Australian Gas Light Company Consolidated Petroleum Australia NL	Australian Gas Light Company Consolidated Petroleum Australia NL	Australian Gas Light Company Consolidated Petroleum Australia NL	Australian Gas Light Company Consolidated Petroleum Australia NL	Australian Gas Light Company Consolidated Petroleum Australia NL	Australian Gas Light Company Command Petroleum Holdings NL	Comserv (No 779) Pty Limited	Comserv (No 779) Pty Limited				
About 16 km SE of BOGGABRI	About 40 km NE of KANDOS	About 14 km NW of NOWRA	About 45 km SSE of MOREE	About 108 km WSW of WHITE CLIFFS	About 16 km ESE of GRIFFITH	About 35 km ENE of HAY	About 94 km N of HAY	About 4 km SW of ASHFORD	About 8 km W of GLOUCESTER	About 21 km NW of GRAFTON	About 21 km SW of LISMORE	About 51 km SE of WILCANNIA	About 9 km W of MOREE	About 47 km E of DUNUMBRAL	About 28 km SE of COONABARABRAN	About 6 km S of LIGHTNING RIDGE	About 85 km W of LIGHTNING RIDGE	About 82 km WNW of WANAARING	About 75 km NW of NARRABRI	About 66 km E of MENINDEE	About 55 km NE of MOSS VALE	About 15 km NW of WILCANNIA	About 70 km E of WiLCANNIA	About 43 km NNE of WHITE CLIFFS	About 110 km ESE of BUNDARRA
CURRENT	CURRENT	CURRENT	CURRENT	CURRENT	CURRENT	CURRENT	CURRENT	CURRENT	CURRENT	CURRENT	CURRENT	EXPIRED	EXPIRED	EXPIRED	EXPIRED	EXPIRED	EXPIRED	EXPIRED	EXPIRED	EXPIRED	EXPIRED	EXPIRED	EXPIRED	EXPIRED	EXPIRED
	PEL 468 (1991)	PEL 469 (1991)	PEL 470 (1991)	PEL 471 (1991)	PEL 472 (1991)	1					4		- 1					PEL 228 (1955)							PEL 254 (1955)

DEI 355 /40561	מהמימאר		
rec 255 (1855)	בארות	About 19 km way of MOSS VALE	AGL Petroleum Operations Pty Limited Amoco Australia Petroleum Company
PEL 258 (1955)	EXPIRED	About 10 km W of CASINO	Claremont Petroleum NL
			Oil Company of Australia Limited
			St Barbara Mines Limited
PEL 260 (1955)	EXPIRED	About 10 km WSW of PICTON	AGL Petroleum Operations Pty Limited
į			Amoco Australia Petroleum Company
PEL 276 (1955)	EXPIRED	About 34 km SSW of MOREE	Petroleum Resources Pty Ltd
PEL 277 (1955)	EXPIRED	About 131 km NE of WILCANNIA	Western Gulf Oil and Mining Limited
PEL 280 (1955)	EXPIRED	About 25 km SSE of GUNNEDAH	Goldcharge Mining Pty Ltd
PEL 281 (1955)	EXPIRED	About 18 km NNE of MOREE	Bow Valley (Australia) Ltd
			Petroleum Securities Pty Ltd
PEL 419 (1991)	EXPIRED	About 28 km NNE of MENINDEE	Red Sky Energy Limited
PEL 420 (1991)	EXPIRED	About 103.34 NE of IVANHOE	Red Sky Energy Limited
PEL 432 (1991)	EXPIRED	About 40 km ENE of DRAKE	Bow Energy Ltd
			Constellation Energy Pty Ltd
PEL 436 (1991)	EXPIRED	About 38 km E of HAY	Australian Coalbed Methane Pty Limited
PEL 439 (1991)	EXPIRED	About 37 km SSE of GRIFFITH	Magnum Gold NL
PEL 440 (1991)	EXPIRED	About 44.77 ESE of BALRANALD	Magnum Gold NL
PEL 441 (1991)	EXPIRED	About 12 km WNW of WYEE	Sydney Gas Operations Pty Ltd
PEL 447 (1991)	EXPIRED .	About 25 km SE of MOUNT HOPE	Red Sky Energy Limited
PEL 448 (1991)	EXPIRED	About 56 km W of COBAR	Red Sky Energy Limited
PEL 449 (1991)	EXPIRED	About 75 km E of WHITE CLIFFS	Red Sky Energy Limited
PEL 451 (1991)	EXPIRED		Red Sky Energy Limited
PEL 467 (1991)	EXPIRED	About 44 km SW of WALGETT	Norwest Hydrocarbons Pty Ltd

.

•

.

Supplementary question 5

QUESTION

The Government submission (p 22) says that 'in general, exploration activity, which does not comprise full development ... requires lower order assessment under Part 5 of the EP&A Act'. Why does exploration activity require a lower level of environmental assessment, given that during the Inquiry we have heard from a lot of people who feel that activities involved with exploration may be as invasive as the production phase?

ANSWER

The level of assessment is commensurate with the scale and extent of the activity being assessed.

Generally, smaller coal seam gas exploration activities are assessed under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) As part of the approvals process, proponents are required to submit a Review of Environmental Factors (REF) that addresses all potential impacts of the proposal, including potential impacts on the environment, water resources and the community.

For exploration, the nature of the activities are temporary and tend to be conducted in areas that have been previously disturbed which result in minimal impacts. If the REF identifies significant potential impacts from an exploration activity then the company may be required to undertake an Environment Impact Statement and gain approval under Part 4 of the EP&A Act.

On completion of the activity, the site is usually fully rehabilitated and all impacts remediated.

For larger scale exploration activities, if Part 4 of the EP& A Act is not triggered, a more comprehensive REF may be required that addresses the many more risk factors associated with the activity.

If the Department determines that the activity is likely to significantly affect the environment, then an Environmental Impact Statement is required to be submitted. The preparation of the EIS must follow the process as proscribed by the planning regulation. The EIS must address all the relevant risks and any concerns arising from community consultation.

Any future coal seam gas production proposal is subject to approval under Part 4 of the *Environmental Planning and Assessment Act 1979*. As part of this process, proponents are required to prepare and submit a comprehensive environmental assessment that addresses all potential impacts of the proposal, including potential impacts on water resources. This thorough planning process also allows for community and agency consultation prior to approval.

It is noted that the coal seam gas exploration licences do not permit coal seam gas production.

Overall, the Government is continuing to work to ensure all exploration and mining activities are thoroughly assessed and their environmental impacts are properly regulated and controlled.

Supplementary question 6

QUESTION

Questions on the current initiatives referred to in the Government submission:

- a) The Government submission (p 28) notes that the Government is working with the NSW Farmers' Association, NSW Minerals Council and APPEA to develop a standard access template. Could you provide an update on the progress of the working group, and when the template will be finalised?
- b) The Government submission (p 26) notes that 'a review of access arrangements' is under way and that a Discussion Paper is being prepared. Is this part of the process to develop a standard access template? If it is a separate process, can you update the Committee on this review, including when the process will be finalised?
- c) The Government submission (p 25) notes that Regional Strategic Plans are being developed for each region, starting with the Upper Hunter and New England North West. Could you provide more detail on this process, including when the first plans will be finalised?
- d) The Government submission (p 32) notes that the Government has committed to review just terms legislation. What triggered the review? Could you provide an update on the progress of the review, and when it will be completed?
- e) In July, Minister Hartcher announced a ban on the use of BTEX chemicals as additives during coal seam gas drilling, for new exploration licence applications. The Government submission (p 27) notes that, in relation to BTEX chemicals, 'a position paper has been prepared and will be released for public consultation shortly'. Has the Paper been released? If not, when will it be finalised?
- f) In July, Minister Hartcher announced that the Government is developing a new online resource to provide details of licence approval and conditions documents. Could you describe the new resource, and why it has been introduced?

ANSWER

- a) A working group involving the NSW Farmers' Association and the NSW Minerals Council is currently developing an access agreement template for the *Mining Act 1992*. Both parties are confident of reaching agreement in the near future.
- b) No; the review is a separate process. The review is currently underway and further consultation with relevant stakeholders is expected.
- c) As this matter concerns the development of Regional Strategic Plans, which is being led by the Department of Planning & Infrastructure, this question is best directed to the Department of Planning and Infrastructure.
- d) This question seems to relate to the *Land Acquisition (Just Terms Compensation) Act* 1991, which would be best directed to the Department of Finance and Services
- e) A paper was prepared and circulated to the Strategic Land Use Reference Group.

Following discussions by the Coal Seam Gas Working Group and with industry, all agreed that there would be greater benefit in moving forward with a ban on BETX compounds in hydraulic fracturing (fraccing) activities on petroleum title areas in NSW. The Government considered that the delay by putting the draft position paper out for public consultation was not warranted.

The ban has been implemented.

f) Currently, licence documents for coal exploration licences and petroleum exploration licences, including conditions of each licence, are available through Digital Imaging Geological Systems (DIGS), and additional licence approvals are available on the Department's website.

It is anticipated that future changes to the current website will make this information easier to access.

The Department is also preparing a website which will provide information to the community, landowners and titleholders about coal seam gas activities in NSW. The website will have information about coal seam gas environmental management as well as about how coal seam gas is regulated and what conditions apply to approved activities.

Supplementary question 7

QUESTION

In relation to a moratorium on the Coal Seam Gas (CSG) Industry:

- a) If a moratorium was imposed on the CSG Industry and a broad scientific assessment was conducted on the industry in order to determine a future viability, what would be the impact on the environment and water sources (aquifers and catchments), how long do you believe such a thorough scientific assessment would take?
- b) Does the NSW State Government have the ability to conduct such an assessment?
- c) Would such a scientific assessment require Federal Government intervention or partnership to help the State Government and industry complete an assessment?
- d) Does the Department of Trade and Investment, Regional Infrastructure and Services and/or any other NSW Department, maintain an information sharing arrangement with CSG companies in NSW, including APPEA?

ANSWER

a) A blanket moratorium is not considered to be appropriate and would have a significant impact on the economic viability of the industry. In addition, the data required to undertake such studies does not exist.

Information to assess the impacts of CSG developments is acquired as part of CSG exploration activities. This is the information which is used to assess the deep geology and the interaction between the coal seams and overlying aquifers, quality of water, likely quantities of water to be produced and the type of CSG development and whether CSG resources even exist in any particular location. Any development now requires this information not only to assess the impact of the development on the region but also to take into account cumulative impacts across the region.

The environmental assessment process in place under current legislation is comprehensive. As part of the approvals process under the *Environmental Planning and Assessment Act 1979*, proponents are required to submit an environmental assessment that addresses all potential impacts of the proposal, including potential impacts on the environment, water resources and the community. All potential impacts of the proposal are taken into account prior to approving any proposal. Unacceptable impacts will not be approved.

- b) The Government, in collaboration with the appropriate expert advisers, has the ability to assess company generated information as to the viability and safety of any application for a licence to explore for or produce coal seam gas. However, it would be counter-productive to tie up all specialist personnel in a "broad" assessment that would be unlikely to produce any useful outcomes.
- c) The NSW Government communicates and collaborates with Commonwealth departments and other jurisdictions and agencies on an ongoing basis in relation to the monitoring and regulation of the coal seam gas industry.

d) Yes. Companies are required to report details regarding their exploration activities and production activities as well as incidents that may occur. In addition, the Department consults with stakeholders, including companies and APPEA, on an ongoing basis to inform regulatory and policy changes aimed at improving the overall management of the industry.

Supplementary question 8

QUESTION

The "precautionary principle" as understood in the community means that, if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those taking the action. Does the Department believe that the precautionary principle should be applied to the development of the coal seam gas industry in NSW?

ANSWER

Many definitions of the precautionary principle exist. The current project approval process in NSW requires project proponents to implement the precautionary principle through scientific studies and a comprehensive risk assessment of all the potential impacts of any project development.

The onus is on the proponent to demonstrate to government and the community that the project will not have an adverse impact on the environment. It should be noted that the precautionary principle should not be used as a basis for avoiding all risk.

Consideration also needs be given to the potential risks of not proceeding with projects particularly in terms of the benefits economic development and reducing greenhouse emissions.

Supplementary question 9

QUESTION

Does the Department believe that coal seam gas mining warrants its own specific legislative and regulatory framework?

ANSWER

No. Coal seam gas exploration and production is appropriately regulated by the *Petroleum* (Onshore) Act 1991 and associated regulations, as well as the *Environmental Planning* and Assessment Act 1979 for activity assessment and project approval. The technologies employed and risks (including fraccing, well integrity, drilling and production) are virtually identical to conventional petroleum exploration and production.

If it is considered that the regulations are inadequate for CSG then it would follow that they would be inadequate for conventional petroleum.

It is noted that that *Mining Act 1992* has recently been amended to ensure that the regulation of mining is consistent with contemporary environmental standards and community expectations.

A review of the *Petroleum (Onshore) Act 1991* is also to be undertaken to meet these aims. The review will also encompass the recent experience gained by Queensland and other states in relation to the regulation of coal seam gas.

The Government continues to promote continuous improvement in regulatory reform and the *Petroleum (Onshore) Act 1991* is one such instrument to be reviewed as part of this process.