METGASCO

Kyogle Council

Residents Questions

6/8/2011

Contents

1. Who pays to restore/rehabilitate once the site is left?

The exploration company (in our lease areas Metgasco) is responsible for all rehabilitation and restoration required as a result of their activities.

Prior to commencing activities, the company is required to lodge a bond with the State Government which is only released once the site has been restored and the Government is satisfied that the restoration has been properly completed. To establish that the rehabilitation has been properly carried out the company is required to lodge specified documentation and certain declarations with the Government including an acceptance by the landholder. The Government carries out periodic inspections both during and subsequent to the rehabilitation.

In the event of a default by the exploration company the Government uses the bond to restore the site.

The petroleum and general mining industry has operated this system over a long period of time.

2. How can contamination of soil and water be fixed?

There is almost no potential for significant contamination of soil or water from CSG activities. Methane and the remaining components in the gas only have a very low solubility in water and are not retained in soils. Any quantities that are released to soil or water are very quickly released to the atmosphere. Nevertheless our operating practices attempt to reduce releases of CSG because of its potential to contribute to Greenhouse Gas Emissions.

Based on all the analysis we have of the water associated with our coals it does not contain toxic components. However, because of the concentration of various salts in the water, it is not suitable for some flora and fauna. The two most suitable methods to respond to an unexpected discharge of this water is containment followed by removal to storage and dilution. As the water contains no toxins, dilution reduces the salt concentrations to levels that are not harmful to sensitive flora and fauna.

Potential contamination is therefore limited to materials that are bought onto sites as part of our operations. Again the potential for and the extent of any contamination is limited by the small quantities of materials that are used in our operations.

The four primary means of preventing and cleaning up contamination are as follows: -

- Use of systems and designs that minimise both the opportunity and the extent of any contamination. The volumes of materials used are reduced to the minimum possible to limit the extent of any contamination. Containment devices such as bunds and impermeable liners are constructed and "spill kits" are kept on site during operations. In the case of drilling, the design of the wells is such that they isolate the production fluids and solids from any other fluids and solids. Production fluids (gas and water) and solids are then kept separate.
- Monitoring for the signs of contamination. Regular soil and water sampling and analysis is undertaken to monitor for signs of contamination.
- Once contamination has occurred or been observed, contain any further spread. This can involve isolating or shutting down the source of the contamination to prevent any further contamination and bunding of the contaminant.
- Selection of appropriate clean up techniques.

All these techniques can be applied in the case of soil and water but in the case of releases to the atmosphere only the first three techniques can be adopted. The most likely form of soil and water contamination from our operations is spillage from the machinery we use: fuel, lubricants or other liquid hydrocarbons.

2.1 Clean up Techniques

There are a number of techniques to clean up soil and water, but as indicated above, the likelihood of contamination is very low. Should an incident occur, an emergence response plan will be activated and steps taken to immediately improve the situation. The response will be geared to deal with the nature of the incident and appropriate measures taken to remediate the site. The incident would be investigated later and recommendations developed to prevent future occurrences.

3. How are leaks of gas from wells and pipelines to be monitored?

The potential for leaks and the practices used to monitor them are different for wells and pipelines.

Pipelines are fully welded and pressure tested in excess of their operating pressure prior to being brought into service. Pipelines are therefore inherently “leak free” and any leaks are due to damage to the pipeline itself.

Wells consist of a number of components that are screwed and bolted together. They are also pressure tested before being placed into service. Wells and Flowlines

Daily checks are conducted on producing wells to check the operation and monitor for any leaks. Industry standard gas detectors which can detect small quantities of gas in air are used to monitor for any leakage.

Non producing wells are checked on a regular basis with the same equipment.

3.1 Pipelines

A number of different methods are used for monitoring for leaks in pipelines.

Meter stations are provided to measure the flow of gas to and from a pipeline. This provides a record for sales purposes and also provides a mechanism for leak detection. Meter stations will be installed at any point where gas enters or leaves the pipeline. Meter stations include equipment to measure the volume of gas transferred and, at off-take points, equipment to adjust temperature and pressure.

Pipelines are also generally patrolled twice each year to monitor for any changes and to carry out leakage surveys or detect any damage to the pipeline and its protective system.

4. What is the spacing and distance between wells?

4.1 General

To date, we have only been drilling exploration wells and the wells have been on very wide spacing as we are trying to investigate the nature of the coals and other reservoirs over a very wide area with a small number of wells.

The spacing for more permanent wells depends entirely on the nature of the coal in a specific area. There are three typical styles of wells for producing gas: -

- Vertical wells that then use horizontal laterals within the coal seam to access the gas. Each vertical well may have a single or multiple laterals.
- Simple vertical wells that may be under reamed (an expanded section excavated within the coal) but not fracced. These may access single or multiple coal seams.

Vertical wells that are fracced. Again these wells may access single or multiple coal seams. Each of these styles of wells have a different preferred spacing and for coal of the same type, simple vertical wells are the most closely spaced, followed by vertical fracced wells which would be located on a wider spacing and the wells with horizontal laterals would have the widest spacing. The actual spacing in each case is highly dependent on the type of coal and all three types of wells are not suitable for all coals.

There are two different drilling programs for these more permanent wells, pilot production wells and development wells.

4.2 Pilot Production Wells

Pilot production wells are generally a small number of wells (typically up to 5, but does vary substantially) which are drilled in a single cluster to drain gas from a small area of coal to prove the commercial viability. In the case of vertical wells, typically there may be up to 5 wells within 1 km2 whereas for horizontal laterals it is more likely to be single or multiple wells on an approximate spacing of 1 km2.

4.3 Development Wells

Development wells are drilled when sufficient understanding of the coal and the gas resource has been obtained and are then expected to be in place for 15 to 20 years.

The only development for which we have completed a detailed well layout is for the Richmond Valley Power Station and that envisages the drilling of up to 40 CSG wells and 15 conventional wells across 15 to 20 sites in a 1500 hectare Production Lease. This nominally results in typically 3 to 4 wells per site and a well site every 60 to 100 hectares.

Currently when we negotiate an Access Agreement with a landholder we seek to obtain a site approximately 110 metres by 110 metres so that we have the capacity to drill up to six wells from a single site. We work with individual landowners to optimise the location of each drilling site so that we can reduce the impact on the landholders operation and the visible impact as much as possible. There is obviously a wide range of issues when considering the selection of the site. Because horizontal laterals can access coals at a significant distance (at least 1 kilometre) from the actual well site, they offer the most flexibility in terms of well location.

4.4 Future

Until more drilling has been conducted there is uncertainty over the full extent of the coal in our leases. However, we have carried out a conceptual study associated with an LNG development. Based on our current knowledge the nominal well site spacing used in that analysis was: -

- a number of locations were assumed to be unavailable for reasons such as existing developments, environmental reasons or other constraints;
- multi well pad sites (110 metres by 110 metres) were located on a 2.5 kilometre spacing; and
- smaller single well sites were located on an 800 metre spacing.

This project required the development of only a small percentage of our current lease areas. This either allows the wells to be grouped in clusters or for an increase in the spacing between wells.

5. How far away from houses and creeks can wells be sited?

There are a number of Acts, Regulations and Guidelines which impact on the location of exploration and development wells.

1. Section 72 of Petroleum (Onshore) Act 1991 requires that:

   The holder of a petroleum title must not carry on any prospecting or mining operations or erect any works on the surface of any land:

   (a) on which, or within 200 metres of which, is situated a dwelling-house that is a principal place of residence of the person occupying it, or

   (b) on which, or within 50 metres of which, is situated any garden, vineyard or orchard, or

   (c) on which is situated any improvement (being a substantial building, dam, reservoir, contour bank, graded bank, levee, water disposal area, soil conservation work, or other valuable work or structure) other than an improvement constructed or used for mining or prospecting operations,

   except with the written consent of the owner of the dwelling-house, garden, vineyard, orchard or improvement (and, in the case of the dwelling-house, the written consent of its occupant).

2. Prior to the drilling of any well in NSW (exploration or production) there are a number of prerequisites that must be met, including an environmental review. In the case of exploration wells this is carried out as part of the Review of Environmental Factors and for development wells it is normally part of the Environmental Assessment. The NSW Government can then also impose additional restrictions on locations of the wells as part of the approval process.

3. NSW has also produced guidelines on how close other developments can be constructed to existing or planned CSM wells.

   The Department of Infrastructure, Planning and Natural Resources released guidelines on *Development in the Vicinity of Operating Coal Seam Methane Wells* to provide guidance to consent authorities across NSW in assessing proposals for development in the vicinity of existing and future operating CSM wells. Based on a risk analysis these guidelines nominated the following recommended separation distances: -

   - early in the development life of wells, separation of between 5 and 10 metres for Residential Use and 10 to 20 metres for Sensitive Use;
   - the recommended separation distances for Sensitive Use are reduced to between 8 and 10 metres typically after 2 years of operation.

The detailed requirements can be found in the following Act and Regulation for Onshore Petroleum Development in NSW.

http://www.legislation.nsw.gov.au/maintop/view/inforce/act+84+1991+cd+0+N

http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+422+2007+cd+0+N

6. Who pays for damage to aquifers caused by horizontal drilling should damage occur?

Horizontal drilling does not pose any greater potential for damage to aquifers than does any other style of drilling and provided drilling is carried out in accordance with industry standards no damage to aquifers is likely. Any potential for a horizontal well to connect with any aquifer is avoided as connection to another water source would render the well unsuitable for the production of gas.

Should a problem unexpectedly occur while drilling, action can be taken at the time to isolate the well from the aquifer and avoid the potential for any contamination or cross flow from one aquifer to another.

Clearly, any activities necessary because of problems caused by a CSG well would be carried out at the CSG Company's cost.

6.1 Hydraulic Fracturing

There is no evidence that hydraulic fracturing (fraccing) impacts groundwater aquifers.

Hydraulic fracturing, (or fraccing) is a process that uses the hydraulic pressure of fluid pumped into gas wells to open coal seams and increase gas production. There is a great deal of misinformation on the internet with respect to the impact of hydraulic fracturing.

Fraccing has been used safely around the world for more than 50 years and in Australia for several decades.

The practice has been extensively researched around the world and found to be a safe, environmentally sound method of extracting gas from unconventional reservoirs.

- In 2004, the US Environment Protection Authority (EPA) conducted an extensive investigation into the impacts of fraccing in coal seams on groundwater and concluded that *"the injection of hydraulic fracturing fluids into coalbed methane wells poses little or no threat to underground sources of drinking water"*
- The US EPA announced in June 2010 that *"Natural gas plays a key role in our nation's clean energy future and hydraulic fracturing is one way of accessing this vital resource."* The US EPA is currently reviewing the impact of fraccing in shales given the significant expansion in shale gas (as distinct from CSG) drilling activity. This report will be completed in 2012.
- In the US, environmental regulation of the oil and gas industry is conducted by the States, as it is in Australia. The US Ground Water Protection Council (GWPC) is a non-profit organisation comprising state environmental and resource protection regulatory agencies. On June 25, 2010 the GWPC issued a statement refuting assertions in the Gasland movie and stating "In recent months, the states have become aware of press reports and websites alleging that six states have documented over one thousand incidents of ground water contamination resulting from the practice of hydraulic fracturing. Such reports are not accurate." In fact, a number of US states have conducted investigations into the impact of hydraulic fracturing on groundwater resources and the environmental regulators of Ohio, Pennsylvania, New Mexico, Alabama, Texas, Louisiana, and Oklahoma have all advised that despite considerable investigation they have not documented a single incident involving contamination of groundwater attributed to hydraulic fracturing.
- Most recently the UK Energy and Climate Change Parliamentary Committee conducted an investigation into the development of shale gas and found;

"Mitigation of the risk to water aquifers from hydraulic fracturing relies on companies undertaking the proper measures to protect the environment from pollution. However, there is no evidence that the hydraulic fracturing process itself poses a direct risk to underground water aquifers. That hypothetical and unproven risk must be balanced against the energy security benefits that shale gas could provide to the

UK. We conclude that, on balance, a moratorium in the UK is not justified or necessary at present".
Refer to:

http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenergy/795/79505.htm#a4

Refer to the following additional sources of information:

- Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs, US EPA 2004a. This can be downloaded from:

http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/wells_coalbedmethanestudy.cfm

- GWPC website: http:// www.gwpc.org
- Detailed testimony related to Hydraulic Fracturing can be found at:

www.gwpc.org/e-library/documents/general/KellHouseTestimony6-4-2009.pdf

www.strongerinc.org

6.2 Metgasco works to protect groundwater resources

Metgasco takes its environmental responsibilities very seriously and has a water management framework in place that:

- Avoids any impact on groundwater and aquifers;
- Manages produced water from coal seams;
- Manages fluids produced as a by-product of our activities (such as drilling fluids, process water, process plant area run off and collected rain water).

We take great care to protect groundwater resources with steel casing which is cemented into place. We regularly track and test water production from our wells to confirm its quality and source.

Metgasco CSG wells do not tap groundwater resources in use in the Northern Rivers region. There are nearly 500 existing water bores within 10km of Casino which are tapping groundwater resources. Metgasco CSG wells extract gas and low volumes of non-potable water from coal seams which are hundreds of meters below aquifers and are not used as an agricultural water source.

CSG wells in the northern rivers region produce low volumes of water compared to CSG wells in Queensland. Typically our wells produce 50 – 70 bbls of water per day compared to some Queensland CSG wells producing water at around 1500 bbls per day. The produced water from our wells is high in bicarbonate and lower in chlorides and sulphates and is not toxic.

There are a number of techniques available to manage the water produced with the gas. For current pilot wells Metgasco is storing the water in lined ponds built specifically for this purpose, relying on evaporation or subsequent later treatment.

For our proposed Richmond Valley Power Plant, our environmental approval requires no discharges outside of our water holding ponds. These ponds are designed to prevent over-topping in the one in 100 year storm event.

There are a number of means of treating produced water that are applied in the industry. Metgasco is reviewing a number of these to determine the best options for future water treatment.

7. Can damage to aquifers be repaired?

In the unlikely event that all the methods adopted above fail and an aquifer is damaged or cross flow is allowed to occur between two aquifers, the damage can be repaired. There are multiple methods of repair depending on the type and severity of damage.

If the damage is caused by the injection of an incompatible fluid, the fluid can be removed by pumping down from the source of the contamination. By reducing the pressure at the source of the contamination the contaminated fluid is drawn back into the well. In very severe cases it would be possible to drill a number of additional wells around the source of contamination and reduce the pressure in a particular area to ensure that it did not spread. Connections between reservoirs can be repaired typically by placing or squeezing cement into the connection path.

These can be simple or complex repairs depending on the severity of the incident, but again, there is a very low likelihood of any contamination.

8. What chemicals are used?

The industry uses a full range of industrial chemicals. This includes common items such as:

- Fuel, lubricants, industrial and welding gasses;
- Solvents;
- Biocides to prevent algae growth;
- pH buffers;
- Neutralisers; and
- Cleaning agents.

There are also speciality chemicals such as:

- Corrosion inhibitors;
- Friction modifiers to improve the drilling process; and
- Viscosity modifiers to enable drilling fluids to more effectively carry solids.

To obtain a better understanding of the operation of the industry refer to:

http://www.aboutgas.com.au

For a list of chemicals typically used in fraccing refer to:

http://www.appea.com.au/images/stories/Policy_CSG/APPEA_Fraccing_chemicals_-_FINAL.pdf

9. What chemicals are produced/ brought to the surface?

In addition to the coal seam gas which primarily consists of methane, two other components are brought to the surface in association with the gas and these are:

- Coal fines – generally in very small quantities; and
- Water

The coal fines are in very small quantities and are generally removed and disposed of as a solid waste. The quality of the water varies from as good as normal drinking water supplies to about 50% the salt content of sea water. While sea water primarily consists of common salt – sodium chloride, water from CSG operations consists primarily of sodium bicarbonate or baking soda. The water also contains a range of other dissolved salts in smaller concentrations. All the salts found in the water are also commonly found in normal drinking water supplies but are normally at lower concentrations in normal drinking water supplies.

Sodium bicarbonate is an important industrial chemical and the sole Australian producer, Penrice Soda, has recently entered into a consortium with the aim of recovering the sodium bicarbonate produced in association with CSG production commercially. See:

http://www.penrice.com.au/pdf/110607%20Penrice%20GE%20Consortium%20Announcement.pdf

9.1 Where do you source water used in extracting the gas?

As part of the process for producing gas we also need to produce the water associated with the gas in the coal seam. In the formation of the coal seam the coal captured the gas onto the surface of the coal and water then sealed the gas in place. We do not seek the water but in order to release the gas it is necessary to remove the water from the coal to free the gas.

A CSG Company also uses water in the drilling process. Depending on the type of coal the water used is generally either fresh water or water produced from other CSG wells.

10. How much “waste” water is produced, and what becomes of it?

Because the water is produced as part of an industrial process it is designated as “waste” water even though it may not have harmful properties.

The quantity of water produced depends very much on the type of coal, with the rate of water production higher in the early life of a well reducing to very low amounts at the end of the well’s life. Typically our wells produce lower quantities of water with a maximum of 55 litres of water per 1000 standard cubic feet of gas early in the life of the well.

There are a range of potential treatments and uses for the water produced. In some cases the quality is suitable for irrigation or stock use without further treatment. If it is of lower quality it can be upgraded through reverse osmosis and/or injected into other water aquifers to offset drawdown from other bores.

Because we are currently producing relatively small quantities of water it is being stored in evaporation ponds. The water will be allowed to evaporate and the salt recovered.

Also refer to the discussion in Section 9.

11. What effect does flooding have on waste water storage ponds?

None.

All evaporation ponds are designed so that they have sufficient freeboard so that they will not overflow in the heaviest expected rainfall.

In addition, as part of the conditions of approval for the Richmond Valley Power Plant it is a requirement that the walls of all the evaporation ponds are above the 1 in 100 year flood level. This will mean that in a major flood the safest place may well be standing on the bund wall of an evaporation pond.

The location of the ponds will also be checked to ensure that they do not impede the flow of the water forming part of the flood.

12. Does drilling and associated noise and lighting occur 24 hours a day?

Every activity must comply with the current requirements in NSW for operating and construction noise. These requirements are different for construction (or short term activities) and ongoing activities such as operation. Typically drilling will be assessed under the Construction Noise Guidelines prepared by the Department of Environment and Climate Change. Requirements are also imposed as part of the Development Approval for a project and the types of restrictions imposed can be viewed in the Development Approval for the Richmond Valley Power Station which can be found at:

https://majorprojects.affinitylive.com/public/b80b339a74192b63804b232ed96e5320/Instrument%20of%20Project%20Approval.pdf

Drilling generally must occur 24 hours a day as many of the operations cannot be interrupted because of the potential for damage to the well. Site lighting is required to ensure the safety of personnel.

Lighting is readily adjusted to minimise any overspill and impact on adjacent residents.

The noise requirements are quite complex but the general requirement is that residents are not to be exposed to noise exceeding 5 dB over the Reasonable Background Level outside of standard working hours. Standard working hours are specified to be 7am to 6pm Monday to Friday and from 8am to 1pm on Saturday.

13. Who will pay for damage to roads caused by increased traffic from trucks?

Normal operations result in minor increases in road traffic generally reflecting the population increase due to employees and additional services associated with the gas production. The majority of the vehicles used in the operation are light four wheel drives. Any damage will be minimal.

The will be some increase in heavy traffic during the construction of major facilities such as the pipeline. The Environmental Assessment will include an estimate of this increased traffic and methods to minimise its impact.

While the actual transport methods and routes have not been defined for the pipeline they are likely to be predominantly by road particularly in NSW. Transportation of all equipment and heavy vehicles required for the pipeline construction is not expected to generate any special transport requirements. Road transport of pipe would be on extendible semi-trailers, carrying up to 23 tonnes per vehicle, and will involve no more than 3 to 12 loaded truck movements per day (depending upon the size of the pipe). Depending upon the pipe diameter and the maximum operating pressure the total trucks on NSW roads would vary between 74 and 264. The threshold for notification to the RTA under Schedule 1 of the State Environmental Planning Policy (Infrastructure) 2007 (SEPP Infrastructure) would be 200 trucks. Thus for the minimum sized pipeline and operating pressure the action would not be notifiable but if the maximum size and pressure is adopted (a detailed design decision based on market and engineering requirements) the action would need to be notified to the RTA.

A specialist transport logistics firm will be contracted to manage the heavy equipment movements, and will handle all permitting and approvals through the RTA.

An inventory of road conditions in and around the construction area will be carried out, in consultation with the relevant authorities, prior to construction commencing. The Project will manage road access and potential deterioration directly with relevant authorities and any damage on gazetted roads that can be proven as being caused by the Project will be made good. It is expected that selected locations will require minor upgrades prior to construction and that water and maintenance grading (at the Proponent's expense) will be required during concentrated construction periods. Impacts of pipe and equipment transportation during the construction period include slow moving traffic on roads and subsequent disturbance to local traffic and motorists and periods of closure of the Lions Road. Traffic will increase near any given location of the construction spread with transport of pipe, materials, fuel and construction personnel. These impacts will be managed through procedures, in consultation with the relevant authorities and further specific mitigation measures provided.

14. Other Issues

14.1 Impact on water quality

There is not expected to be any impact on the quality of any existing waters as a result of CSG production.

Refer to the discussion under Section 9.

14.2 General degradation and erosion of the soil, and decreased viability of farming (especially those using organic practices)

Following the short construction period a pipeline has no impact on farming practices and makes no change to the viability of farming. It can provide some benefits in terms of providing better access into some paddocks.

Payments made to landholders associated with well sites provide consistent regular payments to landholders and improve the viability of farming.

Neither the pipeline nor well sites are incompatible with organic farming practices.

14.3 Pollution of soil and air

Refer to the discussion under Section 2.

14.4 Destruction of wildlife habitat

All drilling and development is subject to environmental studies and restrictions on destruction of important wildlife habitats.

14.5 Destruction of the landscape which will have a negative effect on tourism

The pipeline when constructed has virtually no visual impact. Well sites and above ground facilities will be constructed to have the minimum visual impact and will not be constructed in areas of high tourism value.

Roma in Queensland has developed a tourist industry by showcasing the oil and gas developments in that area. Refer to the following link:

http://www.150mustdos.com.au/must_dos/big_rig,_roma

14.6 Destruction of our lifestyle and freedom to move around our own properties

On the contrary, a CSG development or pipeline is likely to improve the lifestyle of the majority of people in the area through a general increase in the level of services, increased employment opportunities and reduced energy costs.

The Access Agreements that we negotiate with landholders for well sites do not limit landholders movements other than within the fenced compounds of the wells themselves. Access roads constructed between well sites are built after discussion with the landholder and generally improve the landholders access around his property.

The Easement Agreements that we negotiate with landholders for the pipeline will not restrict movement on their properties after the pipeline has been constructed other than for movement

directly over the pipeline of vehicles heavier than legal road loading. During construction of the pipeline we work with landholders to ensure that the construction activities do not impede their normal movements.

Neither the gas field development nor the pipeline will detract from the current lifestyle of people in the area. There may be a minor increase in activity during construction but there will not be a significant visual impact during operation. Pipelines and gas fields do not involve a high degree of industrialisation, do not occupy large portions of land and are a good fit with existing agricultural activities in the area.

14.7 Lowering of land values

Many pipelines have been built in Australia since 1969 and there is no evidence that they have a negative impact on value of the land. However they do act to increase in the value of industrial land that they pass close to.

Landholders that agree to either an Easement for the pipeline or an Access Agreement for a well site receive reimbursement for the impact of the facility. The value of the reimbursement is generally determined by registered valuers and then negotiated between the landholder and the Company.

The amount of the payments depends on the level of impact or disruption by project activities and the extent of the impact on the property. It is designed to economically compensate the landowner for the losses to him for granting access to the property.

14.8 Danger of leaking gas, explosion, fires etc from underground pipelines

Underground pipelines are very safe.

Unlike most pipelines that people will know, the buried sections of these high pressure gas pipelines are fully welded. Unless there is a major failure they do not leak. The pipelines are inspected regularly and even very minor leaks are treated as a very serious issue because they potentially indicate a structural failure and are quickly fixed. Leaks can develop when the coating has been damaged, for instance by overzealous drilling for fence posts. In Australia, and overseas, pipelines have withstood major earthquakes as they have the flexibility to withstand major soil movements. In major floods there have been instances where pipelines have been washed out and become exposed but they continue to operate until the flood goes down. It is obviously not desirable and repairs generally need to be undertaken fairly quickly but it does indicate the built in safety margins for gas pipelines. A lot of the early design work associated with pipelines involves examining all the possible eventualities and providing as much protection as possible to cater for every event. We are already aware that some sections of the pipeline route could be subject to slips and we have completed sufficient design work to ensure that the pipeline can be installed and operate safely in those areas.

14.9 Noise, dust and increased traffic making rural roads dangerous

There will be three separate activities that impact on the Kyogle Council. The main impact will be during the construction of the Lions Way Pipeline with subsequent impacts associated with the drilling of wells and then operation and maintenance of the pipeline and well facilities.

The additional impacts during operation are small. Refer also to Section 13.