



Planning &  
Environment

# **Pipelines Regulation 2013**

## **Regulatory Impact Statement**

**June 2013**

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## Executive Summary

This Regulatory Impact Statement (RIS) is designed to comply with the principles outlined in the Better Regulation Office's *Guide to Better Regulation* November 2009. The RIS also complies with the provisions applying to a regulatory impact statement contained in Schedule 2 of the *Subordinate Legislation Act 1989*.

This RIS outlines the need for Government action to:

- ensure the safety of members of the public and pipeline industry workers who come into contact with the Licensed Pipelines; and
- ensure the reliability of supply.

The options considered in this RIS are:

- Option 1. remaking the regulation with minor changes;
- Option 2. do nothing;
- Option 3. industry self-regulation; and
- Option 4. amended licence conditions.

Of these, the full impact of options 1 and 2 are considered in detail using a combination of quantitative and qualitative analysis. Where possible the costs and benefits of both option 1 and of option 2 have been quantified.

The RIS outlines initial targeted consultation undertaken with stakeholders on these options and provides a basis for public consultation on the proposed approach.

The analysis conducted as part of this RIS and also the initial targeted consultation undertaken both support option 1, remaking the Regulation with minor changes. The existing Regulation is considered to be an effective and appropriate means of ensuring that the safety and reliability of Licensed Pipelines is maintained.

# 1. Introduction

## 1.1. BACKGROUND TO THE LICENSED PIPELINE INDUSTRY

NSW licensed pipelines can be separated into two categories:

1. Hydrocarbon pipelines (these contain ethylene, ethane, natural gas and petroleum products); and
2. Other pipelines (this category currently includes one water pipeline and one acid pipeline).

The majority of licensed pipelines in NSW transport single and multi-phase hydrocarbons. These pipelines operate at high pressure transporting large quantities of energy that can be highly flammable.

There are currently 35 licenses for pipelines issued in NSW:

License Number	Location	Licensee	Product
1	Wilton to Horsley Park	Jemena JGN Ltd	Natural Gas
2	Wilton to Wollongong	Jemena JGN Ltd	Natural Gas
3	Horsley Park to Plumpton	Jemena JGN Ltd	Natural Gas
4	Botany to Rosehill	The Shell Company of Australia Ltd	Hydrocarbons
5	Botany to Rosehill	The Shell Company of Australia Ltd	Crude Oils
6	Banksmedow to Silverwater	Sydney Metropolitan Pipeline Pty Ltd	Hydrocarbons
7	Plumpton To Killingworth	Jemena JGN Ltd	Natural Gas
8	Killingworth to Kooragang	Jemena JGN Ltd	Natural Gas
9	Plumpton To Killingworth	Newcastle Pipe Line Company Ltd	Hydrocarbons
10	Silverwater to Plumpton	Hunter Pipe Line Company Ltd	Hydrocarbons
11	Killingworth to Wickham	Newcastle Pipe Line Company Ltd	Hydrocarbons
12	Botany to Clyde	Qenos Ltd	Ethylene
13	Not Issued (SARKEM)		
14	Botany to Banksmeadow	Mobil Oil Australia Pty Ltd	Jet A-1
15	Moomba to Botany	Gorodok Pty Ltd	Ethane
16	Moomba to Wilton	East Australian Pipeline Ltd	Natural Gas
17	Young to Lithgow	East Australian Pipeline Ltd	Natural Gas
18	Brewongle to Oberon	East Australian Pipeline Ltd	Natural Gas
19	Young to Wagga Wagga	East Australian Pipeline Ltd	Natural Gas
20	Junee to Griffith	East Australian Pipeline Ltd	Natural Gas
21	Dalton to ACT	East Australian Pipeline Ltd	Natural Gas
22	Brown's Creek to Orange	East Australian Pipeline Ltd	Natural Gas

23	Culcairn to Wagga Wagga	East Australian Pipeline Ltd	Natural Gas
24	Albury to Culcairn	GasNet Australia (NSW) P/L	Natural Gas
25	Marsden to Dubbo	APT Pipelines (NSW) P/L	Natural Gas
		Jemena Eastern Gas Pipeline (1) Pty Ltd/Jemena Eastern Gas Pipeline (2) Pty Ltd	Natural Gas
26	Bomballa to Sydney Dubbo to Tamworth /		Natural Gas
27	Gunnedah	Central Ranges Pipeline P/L	Natural Gas
28	Illabo to Tumut	Country Energy Gas Pty Ltd ACTEW Distribution Ltd /	Natural Gas
29	Hoskinstown to ACT	Alinta CGA Pty Ltd	Natural Gas
30	Rosalind Park to Lic 1	Sydney Gas (Camden) Operations P/L-AGL Production (Camden) P/L	Natural Gas
31	Kooragang Is. to K2 Wharf	Orica Australia Pty Ltd TRUenergy Tallawarra Pipelines Pty Ltd	Nitric Acid Natural Gas
32	Yallah to Tallawarra Bushells Ridge to		Natural Gas
33	Munmorah NPC Dyke berth 1 to	Jemena Colongra	
35	Carrington Runs from Lic 26 to	BP Australia Pty Ltd Lumo Generation NSW Pty Ltd	Hydrocarbons Natural Gas
36	Bamarang ACT Border to Googong		
37	Reservoir	ACTEW Corporation Limited	Water

## 1.2. PURPOSE OF THIS REPORT

This Report is a Regulatory Impact Statement (RIS) for the proposed *Pipelines Regulation 2013* (the Regulation). It applies to licensed pipelines only.

The Regulation is to be jointly made by the Minister for Energy and the Minister for Primary Industries through the NSW Department of Trade and Investment, Division of Resources and Energy, under the *Pipelines Act 1967* (the Act).

The Regulation is to be made in connection with the staged repeal of subordinate legislation under the *Subordinate Legislation Act 1989* and is an amendment of the *Pipelines Regulation 2005*.

## 1.3. NEED FOR GOVERNMENT ACTION

While action in preparing the RIS is prompted by the fact that the current *Pipelines Regulation 2005* is due for automatic repeal on 1 September 2013 under the provisions of the *Subordinate Legislation Act 1989* this is not sufficient grounds on its own to justify creating a new regulation.

It is the view of the Department that Government action is needed due to the potentially significant risks to safety, property, the wider economy, and the environment presented by the operation of licensed pipelines. Further detail on these and other reasons supporting the objective for Government action is provided below:

### **1.3.1. Safety of members of the public and workers**

The transportation of hydrocarbons is inherently dangerous due its highly volatile and combustible nature. The pipelines regulation plays an important role in ensuring the safety of members of the public, pipeline industry employees and other workers. For example the pipelines regulation provides provisions to address a range of public safety issues such as:

- High concentrations of hydrocarbons in the air we breathe can be a health hazard;
- Leaking product from pipelines can lead to explosions and fires which may result in injuries and fatalities;
- If the pipeline leaks it is necessary to establish an exclusion zone to minimise the potential of a catastrophic incident occurring; and
- licensed hydrocarbon pipelines transport products with a considerable amount of energy. While the pipeline is being repaired, this may require major disruptions and evacuations from within an exclusion zone.

### **1.3.2. Reliability and Quality of Supply**

The pipelines regulation plays an important role in ensuring reliable and quality supply of products such as gas and petrol to NSW households and commercial and industrial customers.

Gas supplies are an increasingly important part of the NSW community's energy usage. Expected changes to energy consumption patterns driven by greenhouse gas emission reduction policies will make gas supply even more critical in the future. Secure gas supplies are also becoming increasingly important for electricity generation, as the demand for gas as a feedstock continues to increase. More gas-fired power stations are in the design stage and several new gas-fired stations have been commissioned.

Ensuring that gas supplies are reliable and are delivered safely is important to meet the needs of households, industry and essential services. At present, over 1.3 million customers rely on gas. These customers include services essential to the health and wellbeing of the community, including many of the State's key hospitals and emergency services.

Petrol supplied between regional depots is also performed by pipelines. If transportation via pipeline was stopped the impact would be an increase in transportation of petrol via road using petrol tankers. This would increase the risk with more vehicles on the road and increase in cost.

Interruptions in the pipelines can cause gas supply problems or restrict petrol availability. For example, the Regulation impacts the reliability of air travel in and out of Sydney. Sydney airport is currently reliant on Aviation fuel transported through a licensed pipeline.

### **1.3.3. Environmental need**

Leaking product from pipelines can lead to explosions and fires which result in damage to the environment.

#### **1.3.4. Economic need**

Leaking product from pipelines can lead to explosions and fires which may result in damage to property;

Incidents also impose costs on energy customers, motor vehicles users, and owners of petrol operated machinery.

### **1.4. OBJECTIVE OF GOVERNMENT ACTION**

The second of the seven principles of better regulation is that ‘the objective of government action should be clear’. In addition, any objectives need to be expressed ‘in terms of the ends to be achieved rather than the means for achieving them. One primary objective of government action in this instance is to ensure that the people of NSW are protected from risks to their safety, both as members of the public and as employees of the pipeline industry. Another primary objective of government action is to ensure the technical integrity of the licensed pipelines which are an essential element of providing a reliable supply of gas and petroleum to the people of NSW.

The objectives of the Regulation are:

- To facilitate improvements in the safety performance of licensed pipelines, thereby reducing the risk of escapes and accidents which result in fatalities, injuries, property damage and environmental issues;
- To reduce the risk and incidence of related supply interruptions hence promoting a more reliable supply of licensed pipelines to NSW consumers;
- To provide a regulatory framework that is consistent with nationally acceptable codes & standards;
- To provide a consistent regulatory framework for the management of all technical aspects of the licensed pipelines thereby improving uniformity and transparency;
- To support and be compatible with the *Pipelines Act 1967* and other regulatory instruments.

### **1.5. CONTENT OF THE REGULATION**

The Regulation contains provisions that require:

- the designing, constructing, commissioning, operating, altering, maintaining, decommissioning or recommissioning of licensed pipelines to comply with AS2885;
- development of a Pipeline Management System to be approved by the Licensee that provides among other things;
  - a description of the pipeline and associated equipment; and
  - the Licensees approach to  
§ Management;



- § Planning;
- § Implementation;
- § Measurement and evaluation;
- § Consultation, communication and reporting
- annual independent auditing of the Pipeline Management System to ensure it is in compliance with the Regulation; and
- licensed pipeline performance reporting.

## 2. Consideration of options

The impact of government action should be properly understood by considering the costs and benefits of a range of options, including non regulatory options. This needs to include:

- Developing viable options;
- Assessing the impact of options;
- Developing a plan for implementation and compliance; and
- Considering how performance will be monitored and reported.

The Australian Competition and Consumer Commission (ACCC) regulate the economic aspects for pipelines in Australia such as pricing and access arrangements. The provisions of the current Regulation apply to matters such as licence areas, safety, reliability and pipeline integrity, which are entirely separate to economic considerations. The different nature of these matters (i.e. customer service vs pipeline construction, operation and integrity) was considered when the existing Regulation was originally prepared.

The economic regulation of pipelines is with the ACCC a national regulator.

### 2.1. IDENTIFICATION OF OPTIONS

Consistent with this principle, the following options are identified and assessed for viability:

- Option 1. Remake the Regulation with minor changes
- Option 2. Do nothing;
- Option 3. Industry self-regulation; and
- Option 4. Amend Licence Conditions

These options are discussed below.

#### 2.1.1. Option 1 – Remake the Regulation with minor changes

Under this option the existing Regulation would be remade with minor changes. The changes

are required to adopt the most current versions of AS 2885. Recently AS 2885 has been going through a major harmonisation process with Parts 0, 1, 3 and 5 being reviewed, amended or remade. These changes have made it necessary to alter the way AS 2885 has been nominated, from nominating only Parts 1 and 3 to covering the whole suite of AS2885.

Currently the *Pipeline Regulation 2005* identifies AS2885 as the only standards to be used in designing, constructing, operating and maintaining licensed pipelines. While AS2885 is recognised as the most appropriate standard to cover licensed pipelines conveying single and multi-phase hydrocarbons.

The Regulation is not limited to hydrocarbons and recently two other product type pipelines have been licensed namely water and acid. In these applications AS 2885 was not the most appropriate standard. However the applicant is permitted to apply to the Director General in nominating an alternative standard for the licensed pipeline to any or all stages including design to operation through to decommissioning.

### **2.1.2. Option 2 – Do nothing**

In this RIS, the major alternative considered under the ‘do nothing’ option is the ‘no regulation’ environment. That is, the current Regulation would be allowed to lapse. The consequence of this option would be no requirements on Licensees to prepare a pipeline management system covering matters such as the pipeline design, operation and maintenance, safety and emergency management.

Due to the range of considerations and consequences noted above, it is highly unlikely that the Government would be able to permit major State infrastructure such as licensed pipelines to exist without any form of Government oversight. Therefore, without regulation the Government would most likely be required to have a much greater involvement in the development and operation of the pipelines. For example, the Government may require a team of compliance officers who would need to work directly with the licensee during construction and operation, without the guidance of the Regulation.

The response to any issue would in those circumstances most likely be legalistic and result in prosecutions of the licensee when failures or incidents occur.

### **2.1.3. Option 3 - Industry self-regulation**

Industry self-regulation would be defined as industry development and adoption of voluntary rules or codes of practice, with the industry in question solely responsible for compliance. The Government usually has no formal role under this form of regulation although in some cases it may provide information and advice. Nevertheless, the Government is likely to retain a substantial monitoring role as the licensed pipelines are located in public and private areas and the consequences to the community of pipeline failure is significant. The location of some pipelines also requires Government involvement in compulsory acquisition of areas. Monitoring without the guidance and support of a regulation would be inherently less effective and more expensive.

Under this option industry would design, install, operate and maintain their pipelines under self-designed and administered arrangements. Industry would be free to determine the manner in which they would operate and what (if any) performance data would be collected

and reported. Although it is considered that many of the licensed pipelines would use AS2885 as the most appropriate standard covering minimum best practise there are allowances within AS2885 to move outside the standard.

AS2885 may not be the most appropriate for all licensed pipelines. Depending on what product is transported other guides or standards may be more appropriate and it may not be clear to the Government which standard is adopted by individual pipeline operators. This would make Government monitoring and assessment of operations against best practice difficult.

The self-regulation approach is likely to be most effective “where there is a cohesive industry association that is representative of the industry”, and that “self-regulation will only be effective if the industry is committed to making it work”. There is no question that the pipeline industry is committed to maintaining the safety and technical integrity of licensed pipelines. However, the self-regulation approach is still regarded as posing an unacceptably high risk to the community. The nature of the products transported can be considered essential to the community and the potential for catastrophic outcomes is unacceptably high if safety and pipeline management systems are not properly maintained and adhered to.

For these reasons, this option is not considered in further detail in this RIS.

#### **2.1.4. Option 4 – Amended licence conditions**

Under the *Pipelines Act 1967* the Minister for Resources and Energy (the Minister) may impose conditions on the Licensee in relation to their operations. Under this option the Minister may impose equivalent conditions to that proposed in the Regulation.

Licensing can have an inherent disadvantage regarding transparency and equity. Licence conditions may be less transparent and potentially less equitable than the Regulation due to the fact that different licence conditions may be applied to different licensees.

The licence conditions are issued at the time of the license being granted. The pipelines can have a projected life in excess of 50 years and if the technical safety conditions are solely in the licence this would then require the ability to alter licences. This would allow for more appropriate technical advancements to be implemented covering the life of the pipeline.

For these reasons, this option is not considered in further detail in this RIS.

## **3. Impact Analysis Requirements**

### **3.1. IMPACT ANALYSIS REQUIREMENTS**

The following areas must be considered when assessing the impact of a Regulation:

- Compliance costs including resources, time and financial costs;
- Administrative costs including potential costs and time constraints on government;
- Impact on competition;

- Social costs or impacts on the community;
- Environmental impacts;
- Any distribution impacts across regions;
- Any cumulative impacts of the regulatory options;
- Other costs including both direct and indirect costs; and
- Implementation and compliance.

These areas are addressed in the following analysis and in the analysis of the major alternative to the Regulation.

### **3.2. IDENTIFICATION OF AFFECTED PARTIES**

Stakeholders who will be affected by the Regulation and therefore considered in this impact analysis include:

- NSW Department of Trade and Investment, Regional Infrastructure and Services;
- Pipeline Licensees;
- Pipeline Operators, employees of the operator, contractors and related persons exposed to the operations and maintenance of the Licensed Pipeline;
- Affected members of the public such as landholders or occupants within the vicinity of the pipeline; and
- Consumers of the product being transported in the Licensed Pipeline.

This RIS has taken the above parties into consideration.

### **3.3. APPROACH TO IMPACT ANALYSIS IN THIS RIS**

The approach used to identify the impacts of the Regulation on the affected parties has been to use a mix of quantitative and qualitative analysis. The administrative costs on government and the licensed pipeline operators have been quantified as data on these costs can be readily collected. Where social and environmental benefits have been identified, these benefits have not been quantified due to the wide range of values which can be attributed to these benefits.

The benefits of each option could not readily be quantified a cost effectiveness analysis has been used to identify the preferred option.

## **4. Impact Analysis of Option 1 (the proposed Regulation)**

### **4.1. COSTS**

#### **4.1.1. Compliance costs including resources, time and financial costs**

Compliance costs include direct costs imposed on the licensed pipeline industry as a result of the regulatory requirements. These include the following:

- Developing management systems;
- Implementing and adhering to procedures;
- Measuring against and reporting on management systems; and
- Independent auditing of the management system.

These are likely to be largely unchanged from the situation under the current regulation as the process for preparing management systems, having those systems independently audited, and reporting on pipeline performance are already in place.

For each licensed pipeline operator the annual compliance cost is dependant on the length and location of the pipeline. It is estimated that compliance cost across the entire licensed pipeline industry totals \$450,000 per annum. These cost estimates are based on similar current requirements for licensed pipeline operators to prepare audit reports.

#### **4.1.2. Administrative costs including potential costs and time constraints on government**

Direct administrative costs for Government associated with the proposed Regulation include:

- Provision of guidance on reporting;
- Assessment of pipeline management plans for adequacy;
- Assessment of audit reports;
- Assessment of performance; and
- Occasional site visits to check particular issues.

Administrative costs to Government relate to staff and associated costs. They are estimated to total \$310,000 annually.

#### **4.1.3. Impact on competition**

The proposed Regulation has no inherent impact on competition. The majority of licensed pipelines are economically regulated businesses under the National Gas Law and Rules. The Regulation does not preclude the establishment of new licensed pipelines in NSW and the Regulation would apply equally to any party seeking to establish such infrastructure.

Costs arising from this issue are not relevant and have thus not been quantified.

#### **4.1.4. Social costs or impacts on the community**

No additional major social costs or community impacts have been identified.

#### **4.1.5. Environmental impacts**

No major negative environmental impacts have been identified. All new licensed pipelines go through the planning process and require development approval before a licence is granted.

#### **4.1.6. Cumulative impacts of the regulatory options**

No cumulative impacts across regions have been identified as the Regulation utilises nationally recognised standards as a base, and therefore does not impose differing regional requirements.

#### **4.1.7. Other costs including both direct and indirect costs**

No other direct and indirect costs have been identified.

#### **4.1.8. Implementation and compliance**

The proposed Regulation has minor changes therefore there should be no significant costs to the Licensee.

### **4.2. BENEFITS ASSOCIATED WITH THE REGULATION**

There are three main benefits of the Regulation:

1. Reduced social costs and community impacts;
2. Reduced environmental impacts; and
3. Reliability and quality of supply.

While attempts have been made to quantify these benefits (largely reductions in costs), the analysis below is mainly qualitative due to the wide range of uncertainties associated with measuring and quantifying the social, community and environmental impacts.

#### **4.2.1. Reduced Social Costs and Community Impacts**

The proposed Regulation has the effect of reducing costs to the community regarding:

- Serious accidents including fatalities;
- Property damage; and
- Loss of supply.

The two main causes of social and community impacts related to licensed pipelines are loss of containment and loss of supply. The loss of containment in any circumstance is a potentially dangerous and undesirable event.

Information collected both prior to and since the introduction of the current Regulation has shown there have been no fatalities and a increase in reviewing pipeline integrity with known issues raised and corrective actions identified and instigated.

For example a major pipeline has been identified as having issues with stress corrosion cracking. This is now in a rectification and monitoring program with communication of results and other forecast actions communicated between the licensee and regulator to maintain a safe and reliable supply from this important asset. Without continued operation of this asset supply capability would be greatly reduced and restrictions would be necessary.

The most recent major incidents that have occurred in NSW were in 2002 and 2005.

In 2002 a natural gas pipeline was hit by a third party contractor, the contact punctured the pipeline resulting in a 20mm diameter hole. It is estimated that approximately 78,660 standard cubic metres of natural gas was released by this incident. The operator instigated its emergency plans to rectify the incident. There was no ignition of product and no injuries or damage occurred.

In 2005 a petroleum pipeline was hit by a third party contractor, the contact punctured the pipeline resulting in a 40mm diameter hole. The worker on site reported the possible contact and the operator's SCADA (supervisory control and data acquisition) detected a loss of 0.7kltrs the operator decided to shut down the pipeline and emergency procedures were activated. There was no ignition of product and no injuries occurred. The environmental damage was contained to a small area and spill remediation experts were on site within 2 hours of the first notification.

These results are considered to be direct consequences of the safety regime required under the existing Regulation which will be carried forward.

By contrast, in 2010 a gas pipeline in San Mateo, USA did have a catastrophic event. This incident caused 8 fatalities 51 injuries and had a property damage figure of US\$375,363,000.

As a comparison, data obtained from the PHMSA Office of Pipeline Safety USA, which has an overlapping regulatory system involving the Federal Agency and State Organisations, notes the following:

- The transmission pipelines across the USA total some 48,924 km in length, which is approximately 10 times greater than that of NSW.

- There were 169 incidents recorded in the USA for 2010, of which 11 fatalities, and 65 injuries occurred.
- Over the past 5 years there has been an average of approximately 164 incidents, 4 fatalities and 21.8 injuries per year.

When converted to NSW equivalence, based on the relative size of the pipelines, the United States data suggests that NSW would suffer approximately 32 incidents, 1 fatality and approximately 4 injuries requiring in-hospital treatment from the licensed pipelines every 2 years.

Currently in NSW over the last 5 years there have been 4 incidents these incidents did have loss of containment of a small amount of product, no fatalities and no injuries requiring in-hospital treatment. This demonstrates the relative effectiveness of the current NSW performance based regulatory regime.

#### **4.2.2. Environmental impacts**

As noted in 4.2.1 above, loss of containment poses a threat to the environment due to the leakage of recognised 'greenhouse' gases to the atmosphere and petroleum into the ground, and the potential for fires that consume vegetation and harm native animals. This risk is addressed by the requirements within the Regulation that integrity reports will be requested as identified in AS2885.

It should be noted that the environmental impacts of any fires depend on the pipeline location as licensed pipelines are located throughout NSW in the outback, rural and urban areas. These risks are assessed in the standard AS2885 via location classes.

### **4.3. SUMMARY OF COSTS AND BENEFITS OF THE REGULATION**

The costs of the Regulation are approximately \$760,000 per annum. Although there are clear social and environmental benefits under this option, a cost benefit analysis has not been undertaken as the benefits are not readily quantified. As mentioned above, a cost effectiveness analysis has been undertaken instead.

## **5. Impact Analysis of Option 2 (the major alternative)**

### **5.1. COSTS**

#### **5.1.1. Compliance costs including resources, time and financial costs**

Under Option 2, the 'do nothing' approach, it is likely that most companies would still develop and implement pipeline management systems as part of their risk management procedures, given they are provided for under the relevant Australian Standards. However, the compliance costs associated with submitting these plans to the Government would be avoided.

Reduced compliance costs could also be expected with the removal of the need to report to



the Government on the licensed pipeline performance, pipeline integrity reports as well as conducting the independent audit of compliance with their management system. Once again it is likely companies may still conduct some of these activities for internal business performance / management requirements.

Thus the impact on industry of the 'do nothing' option could vary greatly between firms depending on the policy and processes in place within each organisation.

#### **5.1.2. Administrative costs including potential costs and time constraints on government**

It is expected that the Government would still incur administration costs under this approach. The Government would likely choose to continue to ensure safety standards are met through alternative means such as investigation of licensed pipeline failures, accidents and property damage. A decrease in worker safety performance may also lead to an increase in administration costs for other agencies such as WorkCover NSW which has responsibility for workplace safety.

Should the 'do nothing' approach result in poorer safety outcomes, administrative costs are also likely to be increased as the Government plays a role in investigating incidents and possibly participating in legal proceedings should private parties bring civil actions against the Licensee. This would be expected to lead to higher staffing and operating costs for Government over the life of the Regulation.

Under this option, the administrative costs to the Government would be expected to be much higher and are estimated to be \$500 000 per annum. This would be a net increase of \$200 000 as compared to option 1. This reflects the increased number of employees which would be required to investigate pipeline incidents.

#### **5.1.3. Impact on competition**

The 'do nothing' option is expected to have no impact on competition as it would be at the discretion of each individual Licensee to determine their own safety, technical and performance requirements.

#### **5.1.4. Social costs or impacts on the community**

It is expected that option 2 would involve significant social costs and community impacts. As discussed in section 4.2.1 above the United States of America PHMSA Office of Pipeline Safety overlapping regulatory regime which is not clear in identify which party is fully covering the safety aspects. The 'do nothing' option would have even less obligations on Licensed Pipelines.

The data from the United States suggests that NSW could suffer an increase in the level of failures and incidents on the NSW licensed pipelines each year if a 'do nothing' approach was adopted.

The 'costs' associated with a serious injury or fatality are very difficult to accurately quantify as they can never capture the true social cost of such events which include the pain and suffering of the injured party, as well as the indirect impacts on family members and the

community of a fatality or serious injury. This cost item provides the strongest argument against adopting the 'do nothing' approach in this area.

#### **5.1.5. Environmental impacts**

The main environmental impact associated with a 'do nothing' approach relates to the increased risk of loss of containment with product loss and possible fires affecting vegetation and native animals. Increased numbers of licensed pipelines containment loss are likely to occur because the Regulation imposes an obligation on the licensee to maintain a tightly focussed approach to the risks associated with their licensed pipeline.

The environmental impacts of any loss of containment could be catastrophic as these pipelines contain high quantities of energy with high flammability properties. However, there are other risks posed by loss of containment in the areas that the pipelines pass through (e.g. loss of life and property damage).

#### **5.1.6. Any distribution impacts across regions**

No distributional impacts have been identified.

#### **5.1.7. Any cumulative impacts of the regulatory options**

No cumulative impacts have been identified.

#### **5.1.8. Other costs including both direct and indirect costs**

No other direct and indirect costs have been identified.

#### **5.1.9. Implementation and compliance**

Implementation of a 'do nothing' approach may initially result in some redeployment of both Government and industry persons to other roles. However as previously stated it is inevitable that Government would need additional compliance officers to ensure integrity of the licensed pipeline and public safety. Further, it is forecast that the licensee would also need to allocate increased resources in order to satisfy their obligations to comply with industry generated codes and guides by increasing resources to monitor numerous Australian and International standards and guides and evaluate the most appropriate to maintain. This increased resource would be needed as it is generally accepted that compliance is more difficult for companies to achieve in the absence of Government Regulation.

Industry costs are thus estimated to remain unchanged but not possible to quantify, while Government is expected to require additional compliance officers.

### **5.2. SUMMARY OF COSTS AND BENEFITS OF THE REGULATION**

The costs of the Regulation are at least \$750,000 per annum. This only includes the administrative costs to Government and does not include any additional costs to industry which it has not been possible to quantify. The benefits under this option largely relate to

increased flexibility for business to choose their own methods for ensuring licensed pipelines safety.

## **6. Consultation on options**

The Department of Trade and Investment, Resources and Energy Division maintains close contact with the licensed pipeline industry through its compliance and performance reporting regimes. As a result issues with the existing Regulation are discussed continuously as they arise.

In general, the structure of the existing Regulation is supported by the licensed pipeline industry as reasonable and appropriate.

Finally this Regulatory Impact Statement and the Draft Regulation form the basis for detailed specific consultation on the provisions of the Regulation and the impacts those provisions will have on all stakeholders.

The consultation has been included in Appendix A - Consultation with Stakeholders.

## **7. Preferred option**

It is recommended that Option 1: Remake with minor changes, identified under clause 2.1.1, is adopted as the preferred option.

Under this option, the existing Regulation would be remade with minor changes.

While it does still contain some prescriptive elements, it is primarily a performance based instrument providing industry with considerable scope as to how to best achieve desired safety and management outcomes.

It is consistent with current arrangements, and requires that licensee's prepare pipeline management systems covering issues that relate to their licensed pipelines such as safety, reliability and integrity and implement these procedures. The proposed Regulation also specifies the broad parameters the procedures must cover such as variations of licenses and the design construction and operation of the pipeline. The proposed Regulation does not specify what these parameters must be, but does nominate AS 2885. However the Licensee can apply to the Director General to nominate a specific Standard to set the best minimum practice.

Adoption of the proposed Regulation provides the Government with a satisfactory level of assurance that the interests of the greater community and the environment will be considered, without placing unreasonable obligations on the licensee's that might otherwise stifle innovation and interfere with the normal day-to-day operations of the licensed pipeline itself.

Recorded outcomes of the effect of this regulatory approach show that protection of the asset and its operating personnel are foremost in matters of safety.

While the 'do nothing' option may go some way towards meeting these objectives, it is not only considered less effective but more costly in terms of social and environmental impacts.

The impact (cost effectiveness) analysis indicates that while the two options have similar identified cost impacts, the benefits for Option 1 are likely to be much greater than Option 2.

## 8. Evaluation and review

The performance of the proposed Regulation will be monitored continuously by the Department's Energy Networks Performance Section, which receives and evaluates independent audit and industry performance reports on a continuous basis throughout the period the Regulation will be in effect.

Identified issues will be discussed with stakeholders and any need to review or amend the regulatory framework will be communicated to the Department's Policy Section for action.

## 9. References

The following documents or instruments were referred to in preparing this RIS:

- *Australian Standard AS2885 – Pipelines – Gas and liquid petroleum*
- Better Regulation Office 2009 *Guide to Better Regulation*
- *Pipelines Act 1967*
- NSW Department of Trade and Investment Regulatory Impact Statement *Pipelines Regulation 2013*
- *Subordinate Legislation Act 1989*
- Pipeline and Hazards Material Safety Administration (PHMSA) web site  
<http://www.phmsa.dot.gov/pipeline/library/data-stats>

## Appendix A

### Consultation with Stakeholders

All Licensed Pipeline Operators received the draft regulation and RIS and notification of when public comments would close. The Department received one public comment; the table below indicates the issue raised and the outcome.

Jemena			
Reference	Issue	Comment	Recommended outcome
Clause 3	Definitions	Remove reference to dates for individual elements of AS2885, so that compliance is required with the version of AS2885 that is current at the time (and it is therefore not necessary to amend the Regulation each time AS2885 is revised). Furthermore please note AS 2885.0 – 2008 is redundant and has been replaced by AS2885.0 – 2012. Other elements of AS2885 are currently under review and subject to change on an ongoing basis, potentially making the regulation out-dated relatively quickly	Legal requirement to publish dates of standard.  AS2885.0 is still 2008 dated there was an amendment in 2012 but publish date did not change.
Clause 12	Pipeline Management Plan Licensees to lodge a pipeline management plan	Jemena currently submit a combined Pipeline Management Plan (previously referred to as a Safety and Operating Plan (SAOP) for pipelines 1,2,3,7&8 in NSW  Note:- Other jurisdictions refer to the Pipeline Management Plan, in legislation as Safety Case in Vic and a Safety Management Plan in Qld	Noted  NSW is aligning with AS2885 as the industry had a strong input in the Standard

<p>Clause 18 &amp; 19</p>	<p>Auditing of the pipeline management system</p>	<p>In current legislation <i>Pipelines Regulation 2005</i> Clause 25-32 in Division 3 refer to Safety and Operating Plans, the proposed legislation replaces this in Division 4 with the term pipeline management system. For consistency this could more clearly refer to the Pipeline Management Plan, which incorporates the pipeline management system. Jemena currently and will continue to audit a combined Pipeline Management Plan (previously referred to as a Safety &amp; Operating Plan (SAOP) for pipelines 1,2,3,7&amp;8 in NSW. (This needs to be re-confirmed in the light of the revised legislation).</p>	<p>The auditor will review the pipeline management system. The plan is the documentation of the system.</p>
<p>Clause 20 (1)</p>	<p>Periodical audits of pipeline management systems</p>	<p>There may be a disconnect here if the anniversary of the grant of a pipeline licence occurs before 1 March 2014, however we are not required to submit our pipeline management plan until 1 March 2014. Query whether the savings/transitional provision – Clause 41 – needs to state that this requirement for audits does not commence until we have lodged our plan?</p>	<p>The audit will continue as usual before 1 March the current lodged plan after 1 March or when lodged the audit of the Pipeline Management System</p>

<p>Clause 27</p>	<p>Licensee rights to respond to third party encroachment risks</p>	<p>Jemena seeks the inclusion in this Regulation of provision equivalent to those found in sections 50 and 50A of the <i>Gas Supply Act</i></p> <p>Jemena’s recent experience is that there has been an increase in frequency of third party seeking access to its pipeline corridors. Unlike the <i>Gas Supply Act</i>, which provides network operators with a relatively robust framework in which to handle third party access and unauthorised encroachment, pipeline licences have no express right under the Regulation to serve warning notices, or take enforcement action (and then seek costs recovery) – and must rely on clause 27 which carries with it only a very small penalty where breach is proven in prosecution proceedings under the <i>Pipelines Act</i>. Jemena considers that the framework for dealing this issue currently afforded to network operators under the <i>Gas Supply Act</i> should be extended to pipelines licensed under the <i>Pipelines Act</i>.</p>	<p>The Regulation is unable to make this kind of change</p> <p>Noted would need to be reviewed in the <i>Pipeline Act</i></p>
<p>Clause 31 (b)</p>	<p>Div 2 – Reporting of Operations</p> <p>Routine reports</p>	<p>The AS2885.3 (2012) code refers to “remaining life” assessed and reported at 10 yearly intervals. This clause needs to be aligned to the new code for example; “any investigation of the condition of a pipeline and any limits for its safe operation for an extension to its remaining life carried out in accordance with AS2885</p>	<p>Clause changed to remove time period and align with requirements to AS2885</p>
<p>Clause 41 (3)</p>	<p>Savings</p>	<p>The savings/transitional provision needs to state that , in the case where the anniversary of the grant of a pipeline licence occurs before 1 March 2014, the requirement for audit does nto commence until a pipeline management plan is lodge by 1 March 2014</p>	<p>The audit will continue as usual before 1 March the current lodged plan after 1 March or when lodged the audit of the Pipeline Management System</p>