

Consenting the Pohokura Development under the Resource Management Act

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Abstract

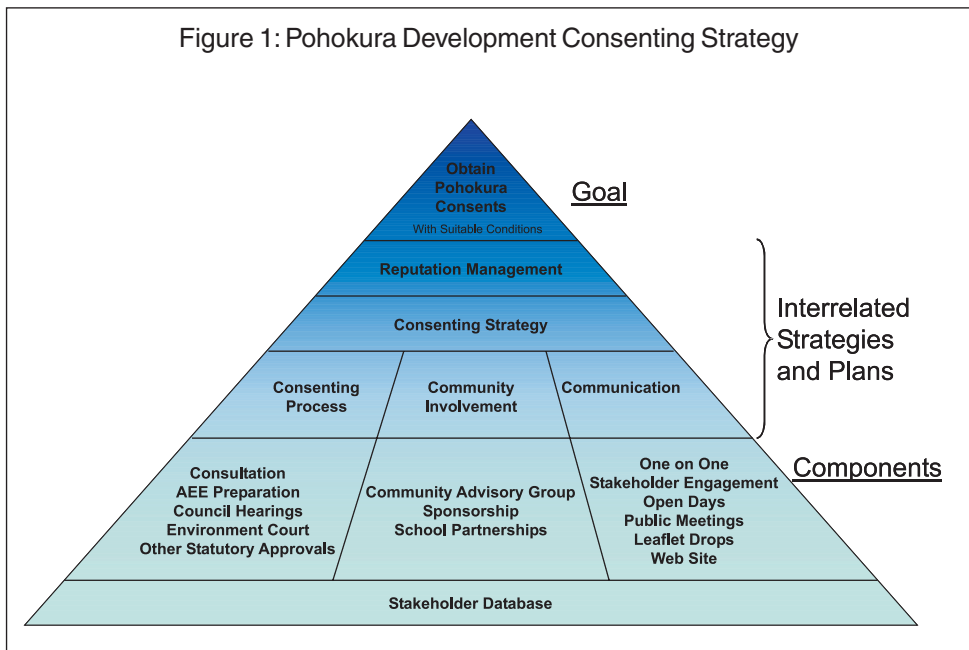
The Pohokura Gas Field Development took only 19 months to progress through the consenting process under the Resource Management Act (RMA), from commencement in October 2001 until the issue of the Environment Court decision in June 2003. The typical schedule for the consenting process for projects of this magnitude is approximately 27 months. This outcome is due to the development and implementation of integrated consenting, communication and community involvement strategies which addressed process risks and minimised costs. These recognised that the community would essentially provide the development with its licence to operate through the RMA. Consultation and communication were critical components in the process and allowed views to be exchanged, project modifications to occur and generally positive relationships to be established with key stakeholders and the wider community.

Introduction

The Pohokura Gas Field represents the most significant proven reserve and is expected to come on-stream in mid-2006. Shell Todd Oil Services Ltd (STOS), as Operator for joint venture parties Shell, OMV and Todd, was responsible for obtaining the necessary statutory approvals for the development.

The consenting process for Pohokura commenced in October 2001, in parallel with concept selection and the early stages of the front end engineering and design (FEED) process. Starting the consenting process **before** the concept was fully developed presented some unique challenges for both the consenting team, within the project, and the consent authorities.

Figure 1: Pohokura Development Consenting Strategy



A key element of the overall process was the development of an overarching Consents Strategy, and the sub-strategies that were developed for key elements of the process including preparation of the Assessment of Effects on the Environment, consultation and stakeholder engagement, the consent hearings, and subsequent Environment Court appeals and hearing. The strategy also identified other non- RMA statutory approvals that would be required for the development. Interrelated communication and community involvement strategies were also developed. The strategies allowed risks to be managed and the key components of each are shown in Figure 1.

A further key element was having a focused team within the project drawn from project management, joint venture party liaison, external affairs, engineering, resource management and legal backgrounds. This team was augmented by the on-site resources from the FEED team and specialist sub-consultants, the bulk of which could be accessed in New Plymouth.

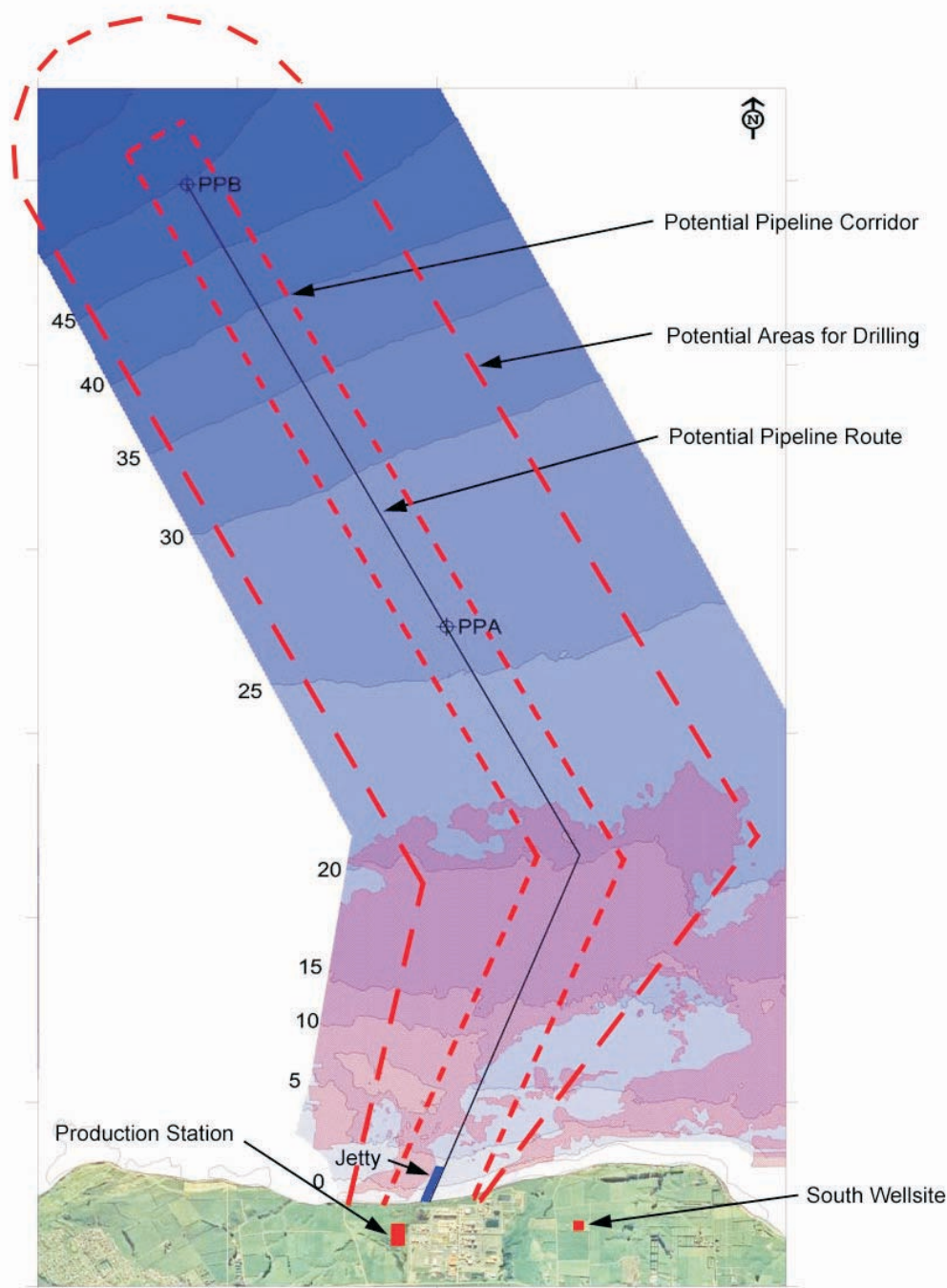
While a large project, all of the principal components were already represented in the Taranaki region, including offshore platforms and pipelines, onshore production stations and pipelines, and LPG storage and load-out facilities. The corollary of this was that in general terms, the potential effects on the environment of the proposed Pohokura facilities were well understood by consenting authorities.

The Envelope Approach

The envelope approach assumed a maximum credible development with the following principal elements (Figure 2):

- Up to three offshore wellhead platforms;
- An offshore pipeline bundle including a multiphase pipeline, gas return line, services umbilical line and communications lines;
- An onshore production station with the capacity to produce up to 120 PJ per annum, with a product stream of natural gas, condensate and gas liquids;

Figure 2: Environmental Envelope – Offshore and Onshore Production Components



- An onshore wellsite, close by the production station, to access the field; and
- A natural gas line to tie-in to the North Island gas reticulation network, a condensate line, and two LPG pipelines to bulk storage at either Port Taranaki or the Omata Tank Farm.

The potential effects of this development scenario on the surrounding natural and physical environment was then characterised. From this point it was then possible to examine a range of alternative configurations for the development that would in aggregate terms avoid or minimise adverse effects to the extent that consenting the project would be viable.

By commencing with the largest conceivable development there was reasonable certainty that the management of change would result in a narrowing or reduction in potential adverse environmental effects. The risk associated with this approach was that it could be overly conservative.

The management of change as the concept developed became critical, as the project gradually coalesced into a form that the consent authorities could evaluate with some degree of certainty. The applications were prepared and assessed on the basis of the environmental effects of the maximum credible development to provide for development flexibility.

The location of the field in relation to the North Taranaki coast and existing onshore petrochemical development (Methanex Motunui) and existing energy and utilities infrastructure was a significant advantage. The proposed site for the onshore production station for example was immediately to the west of the Methanex facilities on land zoned for industrial purposes.

This also meant that some cumulative or synergistic effects also needed to be taken into account, principally noise.

A total of 34 applications for resource consents were made in April 2002. Some of the applications for relatively minor activities could have been non-notified (i.e. limited public process), however a decision to publicly notify all the applications was made by the applicant to allow for maximum community input. An application for a temporary jetty to trench the inshore section of the pipeline bundle was made in July 2002.

Stakeholder Engagement

A fundamental part of the RMA process is stakeholder engagement through the consultation process. At the very start of the project a Communication Strategy was developed, which provided the tools and methods that would be used to communicate the project to the wider community. This strategy was integrated with the consenting consultation strategy.

The key stakeholders were identified as being:

- The communities living in the immediate vicinity of the proposed onshore production station and the proposed LPG storage facilities at Omata or Port Taranaki;
- Tangata whenua, principally the Ngati Rahiri hapu of Te Atiawa, but also including all of the recognised hapu of Te Atiawa, Ngati Mutunga, and Ngati Tama to the north-west, and the Nga Mahanga A Tairi hapu of the Taranaki iwi in the Omata area;
- Commercial and recreational fishing groups;
- Recreational users of the coast;
- Landowners and occupiers along the pipeline routes;
- Environmental groups and organisations; and
- The consent authorities.

This strategy was based on a commitment to three core principles, **honesty**, **integrity** and **transparency**. This approach necessitated communication on a one-to-one basis with the local community and the key stakeholder groups, accompanied by a free flow of information. Obviously commercial development details were not for public dissemination, however these were addressed in general terms in the resource consent applications.

An example of this was the provision of independent advice to tangata whenua. Arete Ltd provided an independent assessment of the concept and its components and assisted tangata whenua to form an opinion of how and to what degree they were affected by the development.

Consultation techniques included one-on-one discussions, open days, static displays, leaflet drops and web-site material.

The strategy also acknowledged that consultation and communication would be on-going for the life of the project, so structures and process that were initiated in the consenting phase had to be robust and durable yet flexible.

A component of the community involvement strategy was the provision of support for community activities in the form of limited sponsorship. A number of projects were supported and there is ongoing provision for community involvement throughout the life of the project.

An existing community advisory group (CAG) that had been set up by Fletcher Challenge Energy in the North Taranaki area to facilitate communication with the local community was re-configured, with community support, as the Motunui CAG. The schools partnership programme, where industry and local schools work together on projects of mutual interest, was also undertaken.

Consultation undertaken by a well-resourced energy sector company with local communities and stakeholder groups is however, almost inevitably perceived by those being consulted as an unequal process.

The principles of consultation are well known, and rely on the free flow of information. For a consultation process to be

successful both the applicant and those parties being consulted need to approach the process in good faith. Stakeholders almost invariably feel intimidated by the applicants access to technical expertise, and the weight of material that the process generates in terms of technical reports, Assessments of Effects on the Environment (AEE) and evidential material for consent hearings. The employment of staff that were well known by the community greatly assisted the consultation process.

Consent authorities may or may not have access to sufficient in-house technical resources to adequately evaluate the applications and the technical data that underpins the AEE. For example, the New Plymouth District Council commissioned consultancy assistance to prepare officer's reports and to evaluate key issues such as traffic effects, noise and the use, storage and transportation of hazardous substances.

A key element of the engagement process was early identification of the key resource management issues. This was actually assisted to some degree by the fact that the development was to be undertaken within an area and a community already sensitised to large scale petrochemical development.

The key issues were:

- Potential adverse effects of pipeline installation on kaimoana resources, sea bed and foreshore stability, and recreational use of the coastal marine area;
- Potential adverse effects of spill events as a result of pipeline rupture or wellhead platform failure;
- Potential adverse effects on waahi tapu (sacred) sites immediately adjacent to the proposed onshore production station and along the onshore pipeline routes;
- Potential adverse effects associated with emissions from the onshore production station, including discharges to air, disposal of stormwater and produced water;
- Potential adverse effects associated with noise from the plant and wellsite, and cumulative effects of noise associated with the Methanex Motunui plant;
- Potential adverse effects on visual amenity, including the loss of the buffer area around the western end of the Methanex Motunui plant;
- Potential adverse effects associated with heavy vehicle traffic movements during both the construction and operational phases; and
- Potential adverse effects associated with the storage of LPG at the Omata Tank Farm, including effects associated with hazard risk, noise, traffic generation, and visual effects. (Omata LPG storage was later withdrawn from the envelope following development review).

An important element of the stakeholder engagement process was the development of a close and constructive relationship with the consent authorities. This process commenced at

the very start of the consent process and resulted in weekly meetings to keep both the project team and the consent authorities aware of each other's progress.

This was also useful in terms of getting feedback on the various drafts of the AEE, the way in which the project sought to avoid or mitigate adverse effects, and possible consent conditions. It was also useful in terms of coordinating and sharing the outcomes of the consultation processes being undertaken by the project team and the consent authorities.

The key lessons derived from the Pohokura experience in respect of consultation are:

- Start early;
- Maintain a consultation and stakeholder database;
- Recognise that this is the first stage of a critical relationship building process;
- Ensure senior staff are involved and all staff must have appropriate communication skills;
- Maintain the engagement process for the life of the project, which requires energy and resources;
- Be open and accessible to the community at all times;
- Maintain regular contact with consent authorities;
- Be as transparent as possible and listen;
- Consider resourcing the process for tangata whenua where this will be of significant benefit in terms of obtaining a cultural impact assessment;
- Make information as simple and accessible as possible, and avoid techno-babble; and
- Be prepared to compromise.

Avoiding or Mitigating Adverse Effects

The Taranaki Regional Council Regional Plans and the New Plymouth District Council Proposed District Plan (PDP) are effects based planning documents, in particular the PDP. Therefore the incentive existed to try and get the project components and their installation and operation to generally fit within the development standards of the various planning documents, and where thresholds were exceeded, to mitigate and minimise adverse effects.

There are two examples of this, one offshore and one onshore.

In the offshore context the installation of the offshore pipeline presented both technical difficulties and consenting issues that needed to be resolved. During concept selection there were a range of potential pipeline installation methodologies with different combinations of potential adverse effects considered. The consenting process therefore had to go forward on the basis of uncertainty, and hence the applications were couched in terms of a broad corridor within which the pipeline route would be located and the offshore platforms installed (Figure 2).

Pipeline installation was constrained by the location of onshore waahi tapu sites, along the cliff top in close proximity to potential pipeline launch sites, and near shore laharic reefs of value to tangata whenua for kaimoana gathering.

Various iterations were run looking at potential pipeline alignments through the near shore zone. Eventually a feasible alignment was arrived at that recognised the technical difficulties of launching 5 km pipe strings from onshore while avoiding areas with relatively high ecological value when compared to the balance of the North Taranaki coast.

In the onshore case, the location of the onshore production station and its components underwent a series of iterations in response to further development of the concept, feedback from consultation and research into potential adverse effects.

These iterations basically resulted in the progressive relocation of the main building platform for the plant closer towards the north-eastern corner of the site. As the footprint of the onshore production station became rationalised it was also possible to examine different locations and configurations for the flare stack, the onshore well site, vehicular access and circulation and LPG storage.

This process was driven by a number of consenting issues. Tangata whenua in particular wanted to avoid potential adverse effects on the tributary of the Waipapa Stream that runs through the site. In addition they also wanted to ensure that the location of the well site and the cliff cut for the pipeline launch did not compromise waahi tapu sites.

Local residents wished to ensure that the noise effects of the onshore production station could be internalised within the site boundary and the cumulative effects of noise managed. A detailed noise model of the plant was constructed and calibrated. Terrain effects were also modelled which assisted in the design of the landscape treatment for the balance of the site. It was able to be demonstrated that the plant could meet a strict noise control of 45 dBA L₁₀ at the site boundary required by the PDP.

The relocation of the plant also allowed existing ground mounding and landscape planting that shields the Methanex Motunui plant to remain largely intact. An iterative process was undertaken to develop landscape mounding and planting for the OPS site that would enhance what had been retained, reduce the amenity effects of the plant and contribute to noise attenuation.

The philosophy was that the project would seek solutions satisfactory to all parties. This resulted in the “final” form of the project as presented to the Joint Hearing Committee differing in certain significant respects from that which appeared in the AEE. This reflects the outcomes of the consultation process and the fact that iterations of the project were being re-run right up until the hearings. However, stakeholders are usually unwilling to commit to signing off on solutions until they have been tested through the consent hearing process.

Consent Hearings

Given the scale and nature of the project it was inevitable that the consent applications would be publicly notified, and that the various resource management issues involved would be tested through consent hearings and probably the Environment Court.

Both the Taranaki Regional Council (TRC) and the New Plymouth District Council (NPDC) undertook an extensive series of pre-hearing meetings to help focus the issues that would be discussed in front of the Joint Hearing Committee. STOS participated fully in the pre-hearings process, which in effect became an important adjunct to the consultation process.

The consent applications were heard before a Joint Hearing Committee comprised of representatives from the TRC (lead authority), NPDC, and the Minister of Conservation (a number of the applications were for restricted coastal activities).

This phase of the project is a good example of how the various stages of the project were the subject of quite rigorous strategic analysis and planning.

The overarching Consents Strategy developed at the start of the project formed the basis for commissioning a range of sub-consultants to prepare various parts of the AEE, and technical reports and studies. Examples were various noise modelling studies, offshore bathymetry and ecological studies, met-ocean studies, visual effects assessments, and air emissions dispersion modelling.

As discussed above the consultation and engagement process was predicated by a Consultation and Communication Strategy. The hearings phase required the same level of preparation in terms of the structure of the applicants case, the evidence to be called, the integration and consistency of the evidence, the sequence in which it would be called, and the rebuttal of submissions that would be made by submitters.

This approach was vital for the following reasons:

- It was critical that the project be able to sell the environmental effects envelope approach;
- The effects envelope approach had to be credible, and therefore needed robust technical support;
- The project, notwithstanding the consultation process, still faced opposition;
- The project was still vulnerable on a couple of key issues; and
- The project was faced with a savvy neighbourhood, sensitised by the Synfuels experience and the ongoing relationship with Methanex.

Another key aspect was the ability to go into the hearing with proposed conditions of consent that had the broad support of Council officers. This was one of the most

significant outcomes of the later stages of the engagement process with the consent authorities.

Despite the wide disparity in resources available to energy industry applicants and the stakeholders that they engage with, it would be naïve to assume that local residents and community groups cannot significantly influence the outcome of consent hearings, even when complex technical issues are being discussed. The evidence presented by a local resident in respect of noise issues was a firm reminder of this. Having been through the Synfuels hearings in the 1980's and met with Methanex over noise issues at Motunui, the resident had a very good grasp of the technical basis of noise measurement and monitoring and a healthy disrespect for its veracity and the accuracy of its outcomes. This had an obvious impact on the hearing committee and the manner in which it addressed noise related issues.

The key lessons to be learned from the Pohokura development in the consent hearings phase are:

- Have a clear strategy with which to approach the hearings;
- Be clear about the messages that you wish to convey;
- Attempt to crystallise and focus on the key issues;
- Where possible, enter the consent hearings with an agreement, at officer level, on appropriate conditions of consent, should consent be granted;
- Have the flexibility to respond to issues raised in presentations of evidence by submitters and present adequate rebuttal; and
- Reinforce key messages in closing.

Environment Court

It was perhaps inevitable that the project would go on appeal to the Environment Court (EC). The consent hearing sub-strategy had anticipated this outcome and the key element of the strategy in respect of appeals was to seek a priority fixture before the EC. This was critical in terms of the critical path for the project.

There were four appeals against the decisions handed down by the Joint Hearing Committee. While it had been a joint hearing, the decisions of the TRC and the NPDC were issued separately.

STOS was one of the appellants on behalf of the Pohokura Joint Venture, principally to enable consent conditions to be rationalised and clarified.

Whilst the EC granted a hearing on the basis of urgency it was not simply a matter of going directly to the EC and the Court first encouraged the parties to reach a settlement of their own, a process that the applicant supported and had planned for.

A vigorous process of consultation and negotiation with appellants was undertaken in the wake of the appeals. The

outcome of this process was the reduction of the number of appeals from four to one. The primary outcome was an improvement in the accuracy of the NPDC consent conditions, and setting the framework for monitoring the implementation of the project. This became the central focus of the appeals by tangata whenua, principally to protect both known waahi tapu sites and the management of potential disturbance of waahi taonga (sacred treasures) or koiwi (skeletal remains).

This negotiated approach resulted in a series of consent orders agreed to between the various parties. An important element of this was strict adherence to the policy of negotiating on the avoidance or mitigation of adverse effects. There were no deals based on payouts to parties so that appeals would be withdrawn.

The last remaining appeal was brought by a tangata whenua group Te Ohu O Pohokura in relation to aspects of the RMA and its application by the TRC. The appeal was subsequently dismissed and the consents confirmed on 16 June 2003.

Conclusions

The Pohokura Project demonstrates that major energy infrastructure projects can be consented within reasonable timeframes. There are key lessons to be learned from the Pohokura development experience:

- Set up a properly integrated consenting team;
- Recognise early that the community essentially provides the development with its licence to operate through the RMA and seek to establish positive community relationships;
- Manage development risks and costs through clear and integrated consenting, communication and community involvement strategies;
- Develop sub-strategies for key parts of the process including AEE preparation, pre and post lodgement consultation, consent hearings and appeals;
- Recognise the environmental envelope approach provides certainty for the community and consent authorities and flexibility for the development;
- Employ appropriate resources, preferably local, to complete the various phases;
- Commence stakeholder engagement and consultation early in the project and use senior staff;
- Be as transparent as possible and listen;
- Be open and accessible to the community at all times;
- Do not under-estimate the parties with whom you engage;
- Be prepared to compromise;
- Seek to have officer agreement and draft consent conditions sorted before the hearing commences;
- Ensure that key messages are clearly communicated to the decision makers;
- Retain the flexibility to respond to submissions and appeals;

- Assertively manage the appeals phase; and
- Recognise the ongoing maintenance of positive community relationships will greatly assist, through the RMA, any future unforeseen development changes or new developments in New Zealand.

Acknowledgements

It should be acknowledged that the delivery of the resource consents for the Pohokura Development was a team effort involving joint venture party representatives, project and STOS staff. Special recognition is afforded the community we engaged with for their willingness to make their views known and for the positive relationships that have developed from the consultation process. Finally the pragmatic manner in which the RMA was administered by the TRC and NPDC is acknowledged.

Authors

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NIGEL DEE is the Onshore Facilities Manager for the Pohokura Project. Nigel coordinated all of the engineering inputs to the consenting process and presented all of the technical evidence at the Joint Hearing and before the Environment Court. Nigel was also actively involved in the consultation and stakeholder engagement process.

FRED McLAY was the STOS Head of External Affairs during the consenting phase, having previously been the Consents Manager for the Taranaki Regional Council. Fred developed and managed the implementation of the Consent, Consultation, and Communication Strategies and had a key role in consultation with tangata whenua. Fred has subsequently returned to the Taranaki Regional Council as Director-Resource Management.

JOHN AULD is a principal in the New Plymouth law firm of Auld Brewer Mazengarb and McEwen, and has had a long association with the oil and gas industry in Taranaki. John had a pivotal role in managing the consents hearings component of the project and negotiations with landowners along the pipeline route.

RHYS ARMSTRONG is a Director of TRM Consultants Ltd, a resource management consultancy based in New Plymouth. Rhys was consents coordinator and principal author of the resource consent applications and AEE. He also prepared and presented the planning evidence to the consent hearings.