



Central Petroleum Limited – Hearing Transcript

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Alice Springs Convention Centre, Alice Springs

Speakers: Richard Cottee, Rolf Schulte, David Liddle

Richard Cottee: Richard Cottee, managing director of Central Petroleum.

Rolf Schulte: Rolf Schulte, area operations manager of Central Petroleum.

David Liddle: David Liddle, land access manager of Central Petroleum.

Hon. Justice
Rachel Pepper:

Thank you very much. You have 20 minutes with an additional 10 minutes of questions and answers from the panel. Thank you. Yes.

Richard Cottee: Thank you very much for inviting me to make a submission. I guess we should obviously during the course of your inquiry we'll be hearing scientific evidence. There has been more scientific inquires into fracking than there has been of any other aspect of the industry across the world. Suffice it to say, that fracking first occurred in the industry in 1948 and has been about 60% of the world's natural gas comes from some degree of fracking reservoirs. Obviously, the present environment is somewhat changed since the success of, particularly of Shale Gas and CSG, which has elevated the profile of what is a normal operating process of the natural gas industry.

Suffice it to say, there is very little evidence of any permanent damage done as a result of fracking. However, on surface facilities there may occur primarily through pond leakage and that sort of stuff. Clearly you will hear during the course of your inquiry that presently most fracking fluids, and particularly the ones allowed in the Northern Territory, are generally biodegradable and primarily made up of water, bore water, which is about 90 odd percent of it. 99% of it. The rest is things like guar gum, which is used in ice cream, as well as various other method constituents that are used in the average kitchen in some shape or form.

Essentially, the thing called proppant is a sand or a bead that enables the crack that has been opened by the water injection to remain open. Suffice it to say, we at Central Petroleum operate Mereenie, Palm Valley, and Dingo Fields and have operated Palm Valley and Mereenie since the 1980's. It was first discovered in the 1960's and 70's, and has been a major supply of



natural gas to the Northern Territory, up until 2009 when off-shore gas became the prime source of gas for the Northern Territory.

We sometimes, quite interesting to reflect outcomes, something which used to be considered to be non-contentious is suddenly contentious and it appears to me there are three prime causes. The first is that natural gas has tried to be portrayed as a competitor to renewable energies. The second is whenever you're making a change to the social economic order in the areas in which you operate, one can always see some degree of resistance to that change, as it first gets introduced. So obviously the introduction of a new industry by itself will cause some degree of social dislocation. The third, I believe, is because of the advent more recently of FIFO as a result of the resources boom and the lack of manpower, people power I guess I'm supposed to say, available for the resources sector within the local communities.

We may deal with the first of those three, which is the competition with renewable energies. Whilst there is some area which natural gas has been considered to be a transition field, because of its ability to provide peak electricity when the wind don't blow or the sun don't shine. At the end of the day the prime use of natural gas in Australia is not for electricity generation. Taking the largest state's, New South Wales, statistics, 50% of natural gas is used in a manufacturing process. It's 300 manufacturers employing 300,000 people for which electricity is no substitute to natural gas. It is either because of the high temperatures required, for example, infectious waste from hospitals. Or the evenness of the temperature, for example, in glass manufacturing or brick making.

It's primarily matters by which you cannot substitute electricity for it. New South Wales has 300,000 direct jobs employed because of natural gas being available. You can see the extrapolation across the other states. Could well lead to nearly a tenth of the workforce dependent upon natural gas being available as reliable supply. Hence, the ACCC inquiry and the Vernigan reports to try and curate greater flexibility in the natural gas supply.

Taking the second one I have been privileged enough to have been involved in the natural gas industry since 1982. Not continuously but I can state that I have created over 10,000 full-time equivalent jobs in my working life, a matter of which I'm quite proud. It did appear to me when I was a pioneer in CSG in Queensland in QGC that there was an enormous issue in upsetting the social economic order, particularly in the fact that we went in to the highest unemployed region in Queensland at the time. It was the equivalent of the western districts of Victoria, the southern highlands, that occurred more premiers of Queensland than any other districts. It was always difficult when you moved it from the highest to the lowest, other than the local farmers etc. could no longer get the harvesters at cheap prices, and was therefore competing for labour. It was always going to create some degree of issues.

We at QGC however went lastly before it was taken over by BG in 2008 when I ceased to be relevant to QGC. We used to do such things as drama in



the gas field. That was a cheeky way of presenting it if you like, but we commissioned a playwright to write a play based on the Darling Downs report, a professional theatre company were brought out, and actually performed that play within our gas fields so that people would see that it was a working agricultural property as they drive into it. To ensure that people came a couple of things we did was face painting and free child minding, but importantly what we did was cause the catering to be done by all of the local clubs. Whether it was the netball club, or the rugby club, or the afl club or whatever else. They were all given a franchise and were promised that if they didn't sell all of their produce, the company would buy their produce at retail prices.

That ensured that every person, every mother or father, was eventually rostered on for the major fundraising event. If dad didn't want to turn up to the netball club or the BBQ on his roster he had to face Jenny and her blinking eyes. Inevitably the same happened with the sons or the mothers. They did turn up. The net result was that utilitarian miles at 7000, and 3000 people table population. In the last year we ran, 11,000 people turned up so you can well imagine the importance of that. The last one was FIFO. We took over Mereenie in September of 2015, less than 18 months ago. At that stage 93% of its workforce was FIFO and only 7% was local. You can see that we weren't obviously contributing a lot to the social fabric of Alice Springs at that point in time.

Before we took it over, when we took over Palm Valley and Dingo, we put in three employment philosophies rather than policies. The first was captured under the title "Northern Territory for Northern Territorians". We were trying to ensure that the maximum amount of our workforce did come from the Northern Territory, in particular, the local community. The second one was what we call "Family Values for Working Families". To the extent that Dingo was only 50 k's from Alice Springs, we use modern technology to actually centre it at Brewer's Estate. Just near Alice Springs airport near the jail there, so that our workforce could be based in Alice Springs and turn up by driving at the beginning of their shifts and returning home at night to be with their families.

On the assumption that some of our workforce will commit economic suicide by having children, we assumed that the financial detriment of having a family was more outweighed by the joy of being able to participate in bringing those children up through life, and watching them perform at speech night, or netball, or whatever their sporting activity. That in itself would enable us to be able to be part of that community, because it struck me, as a father of six children, that if I look at my non-working friends they are all the parents of one of my children's friends that I happen to be running up and down the side of a playing field or a debating or whatever else is happened to be as enjoyed the progress of your own children into adulthood. That meant that the company would be seen to be much more local as a result.

The last one we had was "Traditional Values for Traditional Owners". The net result was within 12 months, it literally a bit over 10 months, we



transformed that into having a majority of our workforce from the local community. Half of that was traditional owners. As I speak today, roughly 1/3 of our workforce is local indigenous. 1/3 is local non-indigenous, and 1/3 are what you would classically call FIFO. It does appear to me there is a limit to which you can go totally local, because of some of the specialised jobs that are required to be done. That requires much more of a FIFO mentality as that where it is labour shortage. That has meant that we've had to go on a larger training program today.

Next to me on my left is Rolf. He has relocated with his wife to Alice Springs. He lives in [Capparis inaudible 00:13:21]. David Liddle, his father was with our company for many a long year bob, and was a local there in the 80's. When the Alice Springs country was weaned, as I recall, and one of the first to do so. So he is one of the local traditional families that work in our area, and therefore he's often in public praise from media or other events as part of it. It seemed appropriate to me that I should be represented here, with 1/3 being FIFO myself, 1/3 being local non-indigenous, and 1/3 be local indigenous to represent a proper cross section of our workforce.

It is important to realise that we have been producing since 1982. Presently we do not import water at all. It is all local produced water that we use, so water doesn't wear out. We are not using water in any shape or form from external sources. The last frack well I think we did there was in 1990's or early 2000. We fully understand now the fractures of the rock as have not been having to consider to increase. We have drilled over 60 wells. Presently only 35 are operating due to lack of demand. We anticipate when the Northern Gas Pipeline is commissioned and operating and supplies gas for the domestic market it helps provide the economic anarchy that is clearly going to be created by the lack of energy security and lack of gas. We will bring on some of those wells that are presently not producing, but we still cannot envisaged a situation that we would be using any water external to that, which we have presently onsite that have been produced.

We are a producing at a rise in the kilometres below the ground. It is well and truly beyond the economic ability to use that water for agricultural purposes. It is hard rock and it's deep, and therefore it would not be economic to use it for agricultural or other purposes. I think that in a large extent, Australians need to realise that we are increasingly living in Sydney, Melbourne, and possibly Brisbane and Perth. We are a country the size of continental USA. There is a large degree of economic dislocation occurring in the regional areas of traditional regional employers. Primarily agriculture and resources sector. That provides the employment for those regions, and tourism is a late starter within that same parameters.

Having grown up in a country town myself, the hardest part of it is what I would call the donating of the local community. If you bring up children in a local community in remote Australia. It is a wonderful place to bring children up until the age 14 or 15, but you realise that by the time of 18 no matter how good of parents you may be, your children will leave for employment reasons.



Oils need oils if I may just use that old saying. CSG produces a lot of water because dewatering is very much part of the process. If you take the water out, then the gas has got a pathway to escape. Clearly it has got a different water profile than one that doesn't require dewatering. Given that it is economic suicide for the frack to go outside the producing zone you are trying to create a path of least resistance for the gas to escape being the hole that you've created. The best water you can use is water that is chemically exactly the same as the zone from which you are producing, so there is an enormous preference to ensure that the water that you use for fracking actually comes from the producing zones if you can.

Obviously there is some degree of evaporation that will occur, and there is an initial use, possibly depending on the locale, initial use for about a swimming pool size amount of water per well being required. But once you are producing then that water, 80% of it, comes back to the surface with production. It's not like each well needs a swimming pool size. You start off with a swimming pool, then you need 20% of a swimming pool for the next well. Not only is it sensible to use, from an economic point of view, it's chemically preferable.

Speaker 5: [inaudible 00:19:44]

Richard Cottee: Well because we have already completed our fracks as to say in those wells, 35 of them have been fracked nearly two decades ago, therefore we are no longer importing any water. We're actually evaporating water from our wells rather than useful. If we did require our source to do any more, but we're not Shale Gas. We could mention if we did we would have our own water and not be bringing it in. It's very important to make a distinction between CSG in particular, which is one shallower, and two requires dewatering as part of the production. Anyone who's been involved in coal mining knows that you used to send canaries and Welsh boys down coal mines because of either methane or the water. The drowning for example at Gretley coal mining in Newcastle in the 90's is a classic example of a lot of water being in that coal. Equally, it's important to realise that QGC actually pegged that acreage because of one, naturally occurring methane outbursts, and secondly, what I'd call induced, which was where farmers stupidly tried to harvest the water for the Holsteins and dewatering occurred and gas was released into water wells that had no safety requirements.

It's not like they're coal seam, gas water can actually be used for agriculture, because it's nature, it's a natural phenomenon that when you dewater gas will be released. I can explain that later if you'd like me to. I don't know whether the inquiry needs to go into it.

Hon. Justice
Rachel Pepper: I think Dr. Andersen has a question.

Dr. Alan Andersen: Yeah, Alan Andersen. Thanks Mr. Cottee. So you talked a lot about the experiences and achievements of your company better. I wonder if you took a bit of a step back and looked at the broader issue of development of the industry in the NT, and from your experiences what would you say is the major environmental risks?



Richard Cottee: I would say that the major risks is actually making sure that the well sites were properly fenced to prevent any degree of tampering with the equipment. I think because that can be done by either animals or human, and we should always try and prevent that. The second will obviously be tailing stamps or issues like that, which happens in most resources sectors. The third would be the proper bunding and control of any chemicals or other matter that is brought in and introduced so that if there happens to be any degree of spillage or anything else it goes straight into bunding. But that would be the same sort of bunding that you'd have around crude oil tanks, etc. etc.

I think that provided you ensured that the chemicals in fracking were biodegradable, given that the depth at which they operate, I can't see how they wouldn't be fully biodegraded by the time they migrated anywhere. If they did, clearly you would need to make sure the appropriate regulations on the drills, that you have proper cement casings and various other things. But fairly rare for anything to occur on the cases. Generally speaking most of it is on the surface in my experience. In CSG and you don't have CSG obviously, water disposal becomes a major issue.

Hon. Justice
Rachel Pepper:

Yeah I'll take two more questions yes. Dr. Priestly and then Ms. Coram.

Prof. Brian Priestly:

You mentioned briefly the range of chemicals they used in fracking process. I wonder if you'd be able to expand a little bit on the processes for transport, and onsite storage, and compounding of these chemicals, and whether these processes differ very much across different sites.

Richard Cottee:

You want to handle that Rolf?

Rolf Schulte:

Well most of the chemicals that are transported in by the company that does the fracking, they come in on trucks. Usually comes in on road trains. It's only brought in. They work out what they require, and they only bring in what is required. They don't usually store onsite. It comes in a day or two before the fracking is about to happen. The chemicals are used, and then the trucks are left site. So we don't store chemicals for fracking onsite. They're just brought in when required.

Richard Cottee:

The major issue then is when you start producing, as I said 80% of the water comes back and also 80% of anything you introduce comes back, so you ensure that you have proper lining and bunding, etc. Until it becomes benign through biodegradability.

Hon. Justice
Rachel Pepper:

Yes, Ms. Coram.

Ms. Jane Coram:

We checked a couple of things. You referred a couple of times to using biodegradable fracking chemicals. That's one of the concerns for many people that the chemicals last in the environment. Would you be prepared to make the list of fracking chemicals that you use available to the committee?



Richard Cottee: To the extent we're allowed. A large problem here is because it's a proprietary substance owned by someone else. My own view is that there should be some degree of registration as there are with medical so as to [shamlaji inaudible 00:26:39]. They need to protect their patents is what they argue, and so I don't want to tell you totally how and what component like a Coca-Cola patent is. We've been able to overcome that sort of thing in the medical industry by registration. You don't actually find out precisely what it is, but there is a government body that says, "Yes thalidomide is no longer allowed to be used", and there's a whole host of trials before you're allowed to release medicines on the unsuspecting public. I can't see any reason why we can't invent the same sort of regime without infringing on the intellectual property of the people who've created it.

It's not we don't know precisely what it is. We do get representations and warranties as to biodegradability of various other things that can be made., but they're not going to give us ... just because I drink coke, well I used to I can't I'm too old now makes me too fat, doesn't mean I ever knew what actually went in it. So that's the prime issue, is how do you preserve intellectual property whilst ensuring the public that there's been a proper scrutiny as to its impact, and the kind of registered chemicals or fracking fluids that can be used. Something like that would make a lot of sense to me.

Ms. Jane Coram: [inaudible 00:28:25] over the course of their consultations, we've heard about a leak at Mereenie, and I was just wondering if you could tell us anymore about that. What the extent of the leak was and [inaudible 00:28:36].

Richard Cottee: I'm unaware of the history of the gas leak at Mereenie. We've gone through our records. I can't add anything to that because we have no knowledge. Someone has knowledge that no one at our work sites know about. I [inaudible 00:29:02] we don't believe there is one.

Dr. Alan Andersen: Can I just follow that up because I think you mentioned you took over Mereenie a couple of years ago, is that right?

Richard Cottee: Correct, but when we took over it, and we took over it from Santos so it's been going for years.

Dr. Alan Andersen: Yes.

Richard Cottee: There's an enormous amount of records and filings being made. There's no public or company records. We own all the company records as a transfer of ownership and operatorship; we were given all of the records. Suffice it to say, we've got some employees, one's called Pom who's been here since for 32 years. So there's both human records. Has there been any gas leak in your 32 years here? No. And company records and filings.

Ms. Jane Coram: We're not actually sure if it was a gas leak or a chemical spillage, but it's fairly tenuous, so if you don't know anything about it then we remain unaware.



Richard Cottee: Ok, I'm not discounting the fact that there could have been a diesel leak or something like that at site at some point in time. I went through the company records to gas leaks not where the cooking oil had spilt. I'm not being flippant, I'm just saying there's a limit to your inquiry. That's all I can say.

Ms. Jane Coram: Thank you.

Hon. Justice
Rachel Pepper: Thank you very much Mr. Cottee. Thank you for coming today.