THE SCIENTIFIC INQUIRY INTO HYDRAULIC FRACTURING

IN THE NORTHERN TERRITORY



Katherine Mining Services Association – Hearing Transcript

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8 March 2017

Knotts Crossing Restaurant, Katherine

Speaker: Geoff Crowhurst

Geoff Crowhurst: My name is Geoff Crowhurst and I'm appearing here today as the Chair of the

Katherine Mining Service Association.

Hon. Justice

Rachel Pepper: Was that Crowhurst?

Geoff Crowhurst: Yes.

Hon. Justice

Rachel Pepper: Thank you very much. Thank you, Mr. Crowhurst. We're ready when you are, thank

you.

Geoff Crowhurst: Okay. Firstly, thank you for the opportunity today to provide an insight from a different perspective and as a service-providing organisation that was put together in 2012, we've been involved with the oil and gas industry right through from preseismic as a service provider through to exploration and the process so far, where it's at now. Our organisation is supportive of safe industries as service providers. That's what we're here for and to promote and to be a part of and to provide an information share from a service provider's perspective as well in our Katherine region.

> Early days, 2012, and probably prior to that, we were fairly unclear and unsure as to oil and gas and how it happened and what happened and that ... We wanted to find more out about it. Over the last four to five years, we've gone to events and held our own events ... We actually hold our own Katherine Mining Exploration Forum every year, which is held in May, for share of information between mining and oil and gas and all sorts of companies that's developing into areas of other services as well. On the oil and gas, keep it to that ... We've had presenters at that forum to present to us on fors and againsts of oil and gas exploration. We've attended the anti-fracking presentations as well, to hear a balanced side to what is seen. It's always good to hear it from both sides. We've had guest speakers at dinners that we've put on ourselves, that are open to the public, to better get ourselves understanding the processes and generally the industry itself.

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Brought us to a point of understanding of the science and risk controls and benefits and opportunities that lie in this industry. As service providers of many industries, including defence, pastoral, construction, [inaudible 00:03:12] mining ... Never seen a better and more rigorous policies and procedures when I and others have gone out onto the sites so far over the last few years. My background is from farming industry, born and bred on stations and then moved through all sorts of industries, including the mining and oil and gas. 52-year-old, yeah, I've seen a lot of stuff and been very impressed to go to a site and see how the control measures and the policies and procedures are actually administered and those driven down into our businesses here in Katherine to help develop us as well take us for the ride.

The experience today is right through from the clearing of the seismic lines and the revegetation of those seismic lines, the exploration ... How well they've been managed and engaged with the local service providers, which have ... In flowing down to helping our education, apprenticeships, tertiary education, and most businesses in the region. To have opportunity to be part of it if they choose to be so.

Now having an understanding of the engineering explained has reduced the risk significantly and I think that was the big turning point for me as a person not understanding the processes to inform yourself at forums and events that the engineering is shown how this is actually carried out. I think that probably hasn't been done very well for the general public. More share of information and having people understand what this is and how it happens ... Because probably a lot of people don't realise ... We get very hung up on this horizontal fracking. Horizontal drilling more so, sorry, than fracking, but horizontal drilling is performed on a daily basis for all sorts of other service provisions. We have fibre optic line running right up through the territory that's drilled with directional drilling under rivers, under roads.

We've just watched directional drilling done under our highway here in Katherine to put water and sewage services to a growth area of our town for more housing availability. This is the same process that's done in a lot of cases with the same chemicals and the same requirements. Obviously at not as deep a level in the ground, but it's a very common process to see if you're driving around and you see these machines alongside the road and wonder why they're drilling on a funny angle, that's exactly what they're doing. They can pop those things out in about a 4-inch circle of where they want to be. That's how controlled they are. It's exactly the same for the oil and gas. It's used, yeah, for fibre optics and piping and all sorts of infrastructure.

I think we need to understand the benefit of the horizontal drilling in that it reduces the surface area that we have to disturb because we can drill and head out from one position in quite large directions, so the impact to the surface area is minimised. We end up with a drill-pad site every four kilometres, which is very similar to what we have in the ... and want this to be put forward as a comparison and eventually I'll come to the coexistence of the cattle industry and the gas industry. There's a foraging of the cattle industry presently to have a similar sort of footprint every four kilometres for watering points for cattle to look after our stock and husbandry of our cattle. This, we know, improves mortality rates, of carving rates, all sorts of things. A bore has to be put in at certain point and then that water has a poly pipe ripped in the ground and

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a trough and a tank and that sort of process put in place to utilise our country better and have our cattle looked after better, so I think that's a great thing.

What I'm trying to do here is just give a similar comparison of what you're going to see on top of the ground from two industries that I think are actually going to have a fairly similar outcome over time. I'm talking about the surface ... what it looks like at the end ... or not the end but through the process. This pattern of four-kilometer watering points is spreading across the territory. There's been stations that have done a lot of work on it. It's very successful. The one difference in that is that we're very accepting of the cattle industry and what they're doing out there and not really ... We're not having an inquiry into something that looks similar in the end. And yet, our gas industry has a raft of people here today and a gallery and yes, it's gas. It does have some other risks that probably have control measures to those, but it just amazes me if someone that ... for me ... and their organisation that can sit and watch two different industries that happen in the same area and one gets very scrutinised and one has a certain amount of scrutiny as well. When a bore is put down for water, has to be logged and mapped and everything as well, which is a good thing to do. We need to know that we can get data from those bores as well.

As service providers, and I'm talking KMSA, we do service the cattle industry and it is part of our businesses and we want to stay with that industry. I got brought up on cattle stations. I have a feeling for them as well.

Water usage. We're talking volumes of water ... for fracking a well ... of eight Olympic swimming pools and so forth. And a portion of that, depending on the well, will be reused. Once again, the cattle industry would use a lot more water and no reuse, so .. I don't want this to be about attacking the cattle industry, because I'm very supportive of the cattle industry just the same as I'm supportive of the gas industry. I'm just trying to ... The ultimate outcome for Katherine, I think, is that both can work together.

The chemicals that we speak about are used as documented quite well in a lot of our normal life. Certainly, any chemical that we put anywhere should be controlled, but a lot of these chemicals we use on a daily basis in our own life with no control measures whatsoever. We pour them down the sink; do whatever we like with them. The focus of alarm and attention to one and not the other is, for me, and for our group, been quite surprising. I've been in the territory for 30-odd years and the territory requires industry to support our growth and our youth. We're feeling that presently in our businesses. I usually run five to six apprentices and I'm down to one. I don't see any future to put any on this year with the way things are, which is pretty disappointing for a business to be reducing in that area. We need our apprentices to be grown here ... Not only apprentices, all training in Katherine and growth our youth and give our youth opportunity. Whether that be in the food industry, the cattle industry, mining, oil and gas ... Opportunity is respective, self-regulation is a dangerous game and it shouldn't be allowed.

Dr. David Jones:

Just on that question of rehabilitation of land disturbance. You said you were involved with that. What kind of-

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Geoff Crowhurst: As a service provider. We help put in safety cages and stuff like that on the clearing

equipment so that the operators were in a safe area. Yeah, we weren't involved in the actual clearing as such. There's a lot of local companies in Katherine and the Katherine region that do land clearing and some of those got involved. I think it was a bit disappointing that there weren't more local contractors involved in that part of it, because they actually had a better understanding of the vegetation that they would have been working with. The outside contractors that came in did struggle with the

vegetation, but our local contractors actually know it. There's some pretty different

vegetations out there.

Dr. David Jones: Thanks.

Hon. Justice

Rachel Pepper: Yes. Dr. Beck, then Ms. Coram

Dr. Vaughan Beck: Just following up on this land clearing issue. Are any of your members involved in the

land-clearing exercise or is that outside of your membership?

Geoff Crowhurst: Yeah, it's outside of our membership but-

Dr. Vaughan Beck: Right.

Geoff Crowhurst: Our membership would support those companies in looking after their equipment for

them, as diesel fitting or welding or machining ... all sorts of things like that.

Dr. Vaughan Beck: Right. Okay.

Geoff Crowhurst: That's where, in our organisation ... In a lot of cases, we're not direct called fights.

We're a supportive organisation.

Dr. Vaughan Beck: Yes.

Geoff Crowhurst: And we support right through from tourism to essential services to all different types

of industry. There's no limit. These companies apply across all industries.

Dr. Vaughan Beck: Right.

Geoff Crowhurst: We need all those industries to spread our risk.

Dr. Vaughan Beck: And in your business ... You'll have to go on site, obviously, in some cases-

Geoff Crowhurst: Yes.

Dr. Vaughan Beck: What's the policy procedure in respect to notifying the land owner of your intention

to go on site. Is there any requirements at all or do you-

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Geoff Crowhurst:

Yeah, there's a whole paperwork system of weed and seed control before we go out. This is some of the documentation that happens to a fairly high degree when we're asked to go to site. Then there's a backwards and forwards of paperwork to cover who the people are going to be, a map of where they've got to go, showing that they aren't to go outside of those directions, what channel they'll be operating on the radio, Sat phone numbers, fatigue management, so that if they've driven a certain distance, there's a requirement to stop and have a break. That is something that we would have in our business anyway, but it's very well documented. So yeah, it's not just a phone call, "Come out and do this." There's a whole raft of control measures to make sure that when we go out, we fit the criteria for the company and then some of that criteria would be driven between the land owner and the gas company as well.

Once again, we've probably stepped away, but that happens more between the land owner and the operator and us as a service provider given the information from the operator.

Dr. Vaughan Beck:

Thank you.

Hon. Justice

Rachel Pepper:

Yes, Ms Coram.

Ms Jane Coram:

Mr. Crowhurst, you made some interesting comparisons between the surface disturbance footprint and the water usage of the gas sector compared with the cattle sector. You also touched upon the chemical footprint of the gas sector and I was just wondering if you had anything to contrast with the cattle sector. What chemicals are used. Is that a similar footprint or in your opinion, is it greater or less?

Geoff Crowhurst:

That would depend on the process of the cattle or the station itself, I suppose. If they're spraying weeds or not. Or they slash their weeds, there are a lot of different ways to do it, so that would be an individual basis, I think.

Hon. Justice

Rachel Pepper:

Yes. Dr. Andersen.

Dr. Alan Andersen:

Thanks, Mr. Crowhurst. I've just got some questions about the land clearing for seismic exploration. I just wondered if you're able to give us a little bit more information about that and maybe describe how wide the strips are, how much land clearing might have occurred in the broader Katherine region and then the rehabilitation requirements of that.

Geoff Crowhurst:

I probably would have liked them wider so they didn't knock our machines around so much when we went out there. It was minimal. There was hardly enough room to get the equipment they needed down there. To the point they had to, quite often, a lot of radio control as to who was coming, who was going, because you couldn't get two machines past each other in some of the cases. I was amazed how quick they pulled the material back over the seismic areas. It happened straight after, so the seismic information was collected and then the machines went back in and re-vegetated straight after.

Dr. Alan Andersen: Can you give us an indication of the extent of land clearing associated-

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Geoff Crowhurst: I couldn't tell you what that was. It's the business of the operator to ... Yeah, I don't

know. Once again, as a service provider, you only get called out there when they're in trouble and need some help from your business, whether that be our business or any other member of KMSA for what they provide. So you only see parts of it, where we're required at the time. We don't see the full picture, as in how much area they covered.

You can see a certain amount just driving around the highways.

Hon. Justice

Rachel Pepper: One last question. Yes.

Dr. David Ritchie: You painted the ideal picture where you have the pastoral industry ... The two biggest

industries, the mining and pastoral industry would be working really compatibly. You said also you've had a background in both. The evidence we've been getting is pretty

polarised and so that's how it's been presented to us. Do you see that in the

community and does that affect the relationships within a small town? How do you

see that resolving?

Geoff Crowhurst: Yeah, I think there's certainly an effect on our town. Most definitely. Like anything

that you have, you have people for and people against and that's how you get a balanced outcome to the task at hand. I think it's very much education of the

community is where we're going to get on top of that.

Dr. David Ritchie: Okay.

Geoff Crowhurst: Everyone actually knowing what is going to happen, how it happens, and the risks, and

how the risks are going to be controlled. The four years, as I spoke of, that KMSA members have had information shared to us in for and against has helped us get to a position where we have our taking on it, and I think that's not probably quite finished

with yet for the public along the way.

Dr. David Ritchie: Thank you.

Hon. Justice

Rachel Pepper: Thank you very much, Mr. Crowhurst, for your presentation today.