# ECONOMICS AND INDUSTRY STANDING COMMITTEE

## INQUIRY INTO SAFETY-RELATED MATTERS RELATING TO FLNG PROJECTS IN AUSTRALIAN WATERS OFF THE WESTERN AUSTRALIAN COAST

**TRANSCRIPT OF EVIDENCE**
**TAKEN AT PERTH**
**WEDNESDAY, 19 NOVEMBER 2014**

**SESSION TWO**

**Members**

**Mr I.C. Blayney(Chair)**
**Mr F.M. Logan (Deputy Chair)**
**Mr P.C. Tinley**
**Mr J. Norberger**
**Mr R.S. Love**

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**Hearing commenced at 10.31 am**

**Mr RAYMOND BUCHHOLZ**
**General Manager, Marine Safety, Department of Transport, examined:**

**Mr STEVEN WENBAN**
**WA Regional Harbour Master, Department of Transport, examined:**

**The CHAIR**: Good morning. On behalf of the Economics and Industry Standing Committee, I would like to thank you for your appearance before us here today. The purpose of this hearing is to assist the committee in gathering evidence for its inquiry into safety-related matters concerning FLNG projects in Australian waters off the Western Australian coast. You have been provided with a copy of the committee's specific terms of reference. At this stage I would like to introduce myself and the other members of the committee present today. I am the Chair, Ian Blayney. With me is the Deputy Chair, Hon Fran Logan; Peter Tinley; and Shane Love. The Economics and Industry Standing Committee is a committee of the Legislative Assembly of the Parliament of Western Australia. This hearing is a formal procedure of the Parliament and therefore commands the same respect given to proceedings in the house itself. Even though the committee is not asking witnesses to provide evidence on oath or affirmation, it is important that you understand that any deliberate misleading of the committee may be regarded as a contempt of the Parliament. This is a public hearing and Hansard is making a transcript of the proceedings for the public record. If you refer to any documents during your evidence, it would assist Hansard if would you provide the full title for the record.

Before we proceed to the inquiry's specific questions we have for you today, I need to ask you the following: have you completed the "Details of Witness" form?

**The Witnesses**: Yes, we have.

**The CHAIR**: Do you understand the notes at the bottom of the form about giving evidence to a parliamentary committee?

**The Witnesses**: Yes.

**The CHAIR**: Did you receive and read the information for witnesses sheet provided with the "Details of Witness" form today?

**The Witnesses**: Yes.

**The CHAIR**: Do you have any questions in relation to being a witness at today's hearing?

**The Witnesses**: No.

**The CHAIR**: Do you have an opening statement for us?

**Mr Buchholz**: Mr Chairman, we do. Given the questions during your last session, we thought it might be better to read through the statement as opposed to keeping it up our sleeve in case you ask any questions about it.

**The CHAIR**: Thanks for that.

**Mr Buchholz**: So I will just run through it. The first one is that in 2002 there was an intergovernmental agency agreement called "Australia's National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances". That IGA effectively commits the commonwealth and the states to implement and maintain a national plan for maritime environmental emergencies. The maritime environmental emergencies include both maritime

transport emergencies, which is, in layman's terms, ships getting in trouble, and marine oil pollution, which is, in layman's term, ships or facilities actually polluting through oil and noxious substances. The "National Plan For Maritime Environmental Emergencies" was updated in 2014 to better reflect the offshore petroleum industry and its development off the north west coast. The IGA commits the state of Western Australia to nominate a responsible jurisdictional authority to manage marine oil pollution in state waters and nominate a state marine pollution controller. The Emergency Management Act 2005 and associated regulations effectively prescribed the marine safety general manager of the Department of Transport as the hazard management agency for both maritime transport emergencies and for marine oil pollution. In effect, this prescribes the Department of Transport as the jurisdictional authority for those two hazards, and myself as both the HMA and the state marine pollution controller. As the HMA, I am responsible for ensuring, developing, implementing and reviewing both the Westplan MTE and the Westplan MOP. As the HMA, I have overall responsibility for ensuring that MTE and MOP have adequate prevention, preparation, response and recovery arrangements and strategies in place and that they are implemented as required. Those obligations placed upon my position are direct from the State Emergency Management Act and the regulations. When DFES was referring to a number of Westplans and a number of hazard management agencies, each of those hazards has an HMA appointed. For those two, it just so pans out that that is my position.

Floating liquefied natural gas facilities are considered by DOT to be offshore petroleum facilities. A similar definition comes out of the national plan arrangements. In this respect, they are similar to floating production storage offshore facilities. Obviously, they are different in many ways, but in many ways they are very similar. There are many of those such facilities currently operating off the North West Shelf, both in commonwealth and in state waters, so there are offshore petroleum facilities, as the definition would refer to it, in state waters. Our understanding is that the proposed floating liquefied natural gas platforms on the cards are certainly located in commonwealth waters, but it is certainly not inconceivable that they could be in state waters at some point in the future.

In accordance with the "National Plan For Maritime Environmental Emergencies", the National Offshore Petroleum and Safety Environmental Management Authority, or NOPSEMA, is the jurisdictional authority for an environmental incident involving FLNG in commonwealth waters, and the petroleum title holder would be the control agency. In accordance with the same plan, the Department of Transport is the jurisdictional authority for an environmental incident involving such a facility in state waters, and the petroleum title holder would also be the control agency. Whether it is in commonwealth waters or in state waters, effectively, the petroleum title holder would be considered the control agency for that incident. If an oil spill crosses from commonwealth waters into state waters, the jurisdictional authority for the recovery of that oil would be negotiated between NOPSEMA and the Department of Transport. There is a mechanism I will explain later on to achieve that. The control agency in that instance would remain with the spill source unless otherwise determined by the jurisdictional authority. In other words, the jurisdictional authority has the ability at any time to say, "We don't believe you're doing a good job; therefore, we're going to take that responsibility off you", but in doing so, it has to then nominate a new control agency, which I am sure the public would expect would be doing a better job than what they had been doing. There is obviously a fairly big decision-making process associated with that

We do have a Westplan MOP that outlines arrangements in more detail, and we also have a Westplan MTE. I am not sure whether members have had the opportunity to view those Westplans. When I took on this role in December last year, I had some concerns about the effectiveness of those Westplans. In the preceding period we have been conducting a comprehensive review with stakeholders and the like. We have now got to the point where there is a revised draft Westplan MTE and MOP that will be used in an exercise next week. Once that exercise is complete, we will be making any final adjustments, and then we will put it up through the normal processes to become

the formal Westplan MTE and MOP. We can take questions on what is in the old one and what is in the new one later on if you wish.

It is also important to note that at its last meeting of 10 November, the National Plan Strategic Coordination Committee, of which I am Western Australia's representative on that group, noted a draft offshore petroleum incident coordination framework that was being prepared for the commonwealth Minister for Industry by the commonwealth Department of Industry. That framework is part of the government's response to the 2010 Montara commission of inquiry, which recommended the establishment of a central coordination, facilitation and communication body in the event of a similar incident in commonwealth waters. That committee, called the Offshore Petroleum Incident Coordination Committee, would comprise senior government officials who would be responsible for coordinating the Australian government's efforts and resources and communicating matters relevant to the incident. The framework details interactions with states if an incident is or is likely to have an impact on a state or its waters. In this instance, myself as the state marine pollution controller, and potentially other senior state officials, would be included in the membership of that committee to help everything fold out. The framework is expected to be adopted by the Minister for Industry in 2014. It is very much in draft form at the moment, but one of the lessons that came out of Montara was the need for that high-level coordination, not necessarily the incident response because that always needs to be kept separate. The best way to think about it is that you have a tactical response and you have a strategic response. There need to be the two working very closely together.

[10.40 am]

Just how would an incident in commonwealth waters that is likely to impact on state waters fold out? The Department of Transport would be notified of the incident by NOPSEMA or directly by the control agency. The state marine pollution controller, myself, would discuss that situation with NOPSEMA to ascertain the likely impact on WA and possible assistance required from Western Australia. If necessary, I would conduct relevant notifications within WA, including the Minister for Transport. It would be my responsibility to brief the Minister for Transport of a pending situation and possible consequences on the Western Australian state. I would also deploy a liaison officer into the control agency's incident management team. We have recently practised doing just that in an exercise with Woodside. That way, I have got eyes and ears on the ground in situational awareness.

I would then determine and oversee appropriate preparation and response arrangements for any impact on state waters. Often these things occur a long way offshore and with all the projection modelling and things, we get a better idea of if it is going to impact on Western Australia's coastline; and, if so, when and where. So that gives us time to actually do some preparations for that impact if it is going to occur. For a major incident, the state marine pollution controller would establish what we call a strategic coordination group to oversee WA's involvement and preparations as well as coordinate the provisions of assistance to Western Australia to the recovery effort in commonwealth waters. The State Marine Pollution Controller would continue to liaise with NOPSEMA to determine if a handover of jurisdictional authority is likely; and, if so, when. The State Marine Pollution Controller would also ensure arrangements are in place to effect an orderly handover of jurisdictional authority if required.

In the event of becoming the jurisdictional authority, DOT would be seeking to keep the petroleum titleholder engaged as a control agency for as long as possible and only in the event that the State Marine Pollution Controller is of the view that they were no longer capable of providing an adequate response would an alternative arrangement be put in place. In this instance it is likely that DOT would become the control agency with responsibility for managing recovery operations. To give you just a bit of an idea as well, in 2015 Western Australia has put up its hand to host the national plan exercise, and that will be based on an offshore petroleum incident off of Exmouth,

most likely involving a fictional FLNG facility with a coastal impact. The exercise will take place in June and will involve strategic and tactical oversight from Perth as well as field deployments in Exmouth, and the exercise will involve both commonwealth and state agencies, as well as industry. So, that was some notes I had prepared in case you asked the question, but I thought it might be useful given your questions in the last session, and now I am more than happy to take any questions.

**Mr P.C. TINLEY**: No, that is it. That is all we needed!

**The CHAIR**: We cannot let people off so easily!

**Mr R.S. LOVE**: Can we get that as well?

**Mr Buchholz**: Yes.

**Mr R.S. LOVE**: That is not the agreement as such though, is it?

**Mr Buchholz**: No, this is the national plan.

**Mr R.S. LOVE**: Okay.

**Mr Buchholz**: That is just really some notes and some key messages that I had, but that is what I pretty much just read out then.

**Mr F.M. LOGAN**: Can I just ask about the DOT relationship with NOPSEMA. Hopefully, there is a relationship and you have just outlined the reasons why, but in the safety case development that Shell is going through and NOPSEMA then has to tick off on, does DOT or any state agency get asked to comment or is there a discussion between state agencies and NOPSEMA?

**Mr Buchholz**: Yes. There is a requirement for them as a facility titleholder to prepare what is known as—I will just get the wording right here; bear with me for a sec—on a ship context or a port context, it is called an oil spill contingency plan, but in offshore petroleum there is another word for it—oil spill emergency plan, or OPEP. So, if it is in state waters, the Department of Mines and Petroleum approves those plans, obviously in consultation with us, but it is a requirement that that titleholder produces a plan, and it does go through Department of Mines and Petroleum. If it is commonwealth waters, then NOPSEMA is the approving authority. But, once again, we would be asked for comment, particularly if there is any interrelationship between—if they want the state to do something. So, we would have an overall awareness of those plans.

**Mr F.M. LOGAN**: Have you been contacted by NOPSEMA over Shell Prelude?

**Mr Buchholz**: I personally have not, but Steve reports to me and one of his functions is to oversee a team that we have within the Department of Transport called the marine environmental emergencies response unit, and there is a manager of that unit. They often have discussions. Have you had any discussions directly with this particular —

**Mr Wenban**: I have not, but I am reasonably certain that Matt has, in his capacity as the MEER manager, discussed it with NOPSEMA.

**Mr Buchholz**: There are a lot of discussions that take place at that level between NOPSEMA, AMSA and industry. We regularly are notified of and are involved in industry exercises. For example, I participated as an observer of one with Woodside a couple of months ago, so we are very much linked into that whole sort of space.

**Mr R.S. LOVE**: Just to go back to the question you were struggling to answer about the three-mile limit. So your understanding is that that was the old boundary in the 1930s or something, is it not—that three-mile boundary? It is not what we call the state waters, as such?

**Mr Buchholz**: That is quite a complex question in that it depends on what you are referring to. There is the mainland baseline and the coastal baseline—there is a whole range of things. But the way we look at it is it is actually three nautical miles from the coastal waters definition, which is a baseline. For example, it goes around Barrow Island. It is not just three nautical miles off Onslow,

for example. That is why I said that obviously quite a lot of petroleum activities take place around Barrow Island and facilities that are located in state waters. It then extends three nautical miles beyond that boundary. But what tends to happen is that because, thankfully, these types of incidents occur rarely, but when they do they are really big, no state or commonwealth has sufficient resources to manage it by themselves, including the companies, I might add. So, it is very much a collegial response. That is why we regularly conduct workshops and all our training is centralised—our national plan exercises. What tends to happen is that whilst NOPSEMA would be the jurisdictional authority, they are very much getting support instantly from the national response team, from AMSA, from ourselves. There is a whole collegial approach to that arrangement. Within industry themselves, they have their own collegial response mechanism so that if one company has a problem, another company will actually assist them, not only because it is in the interests of everyone to do a good job, but it is actually a good way to get experience as well. So, whenever we get the opportunity to send our people over to New Zealand, like in the *Rena* incident, we will, because, thankfully, we do not get many of these incidents in WA. It is very much a community in that respect.

**The CHAIR**: How would the demands generated by the operation of FLNG facility support vessels in state waters compare with the demands associated with the operation of vessels supporting other petroleum projects that operate in the state waters between Exmouth and Karratha?

[10.50 am]

**Mr Buchholz**: I think it is fair to say that if you look at the North West Shelf, there is a lot of traffic in and out of Dampier, for example, and increasingly out of Exmouth as well with the facility there. It is just more traffic. That area has been identified in the national risk assessment conducted by AMSA as being a high-probability area—that is not the word —

**Mr Wenban**: High-risk.

**Mr Buchholz**: Yes, a high-risk area. But so is Fremantle, the Great Barrier Reef and the Bass Strait. Whilst those areas have greater preparations and stockpiling of equipment and those sorts of things, the increase of vessels, even if it was in the magnitude of a dozen or half a dozen vessels coming out Broome, for example, or Exmouth, is not seen to be a massive escalation in the risk profile of an area that has already got lots of movements all around the place. The department, in consultation with AMSA, has undertaken a number of strategies to help mitigate risks. For example, there was a project called Safe Horizons where we set up corridors or agreed channels where vessels would move around so that you reduce the risk of someone at night-time running into a facility. So, there are a number of things like that. As the traffic increases, obviously the measures put in place to try to separate that traffic increases. If there was, say, another two or three vessel based out of Broome, that would not necessarily cause us any degree of concern. Every vessel operation, whether it is out of Esperance or Wyndham, has risk associated with it. So, hopefully, that answers the question.

**Mr R.S. LOVE**: As you are the lead agency in the MOP plan.

**Mr Buchholz**: In the MTE, yes.

**Mr R.S. LOVE**: That is the one to do with cleaning up things.

**Mr Buchholz**: Oil is MOP—marine oil pollution. MTE is big ships getting in trouble. Often they are linked, but not always the case. Sometimes an MTE—in fact, the exercise that we have got planned next week is an MTE off Fremantle in commonwealth waters, so it is clearly in AMSA's domain. They will notify us and say, "We've got a ship in trouble here. We think that the best course of action here to stop that ship from completely breaking up is to try to enter into a place of refuge." Fremantle is the obvious choice. So, instantly, we start having discussions about whether that is a good idea or not. At that point it may not have dropped a single drop of oil into the ocean, but we are dealing with MTE; if it was to come into Fremantle, we have already got arrangements in place on the assumption that it is going to have oil on it, so the two plans are very closely linked.

**Mr R.S. LOVE**: I live in an area not far from Cervantes, and we had the *Kirki* incident that washed onshore there.

**Mr Buchholz**: Yes.

**Mr R.S. LOVE**: What does that mean, though? What materials do you have at your disposal? What resources do you have at your disposal? And are they adequate to cope with what we see coming in the horizon with FLNG; and, if not, then, as a state agency, how can you express those concerns?

**Mr Buchholz**: I think it is really important to note that the Department of Transport is the lead agency, but that should not be seen that we have an army of people waiting to be deployed to any spot in the state. Just to give you an idea of the resources we have, we have that dedicated team as I mentioned before. There are six individuals in that team, including two training officers, an environmental officer, a research officer, an equipment officer and the manager. One hundred per cent of their task is associated with planning, preparation and training. Within a response themselves, they only form a very small part. In addition to that there are a number of individuals within the organisation who are trained to perform roles in a response, and that is not their key function. So we have that jurisdictional authority responsibility, which is why it is so important the control agency is in place, because they are the people who are best placed to actually provide an initial response and then the resources to continue that response. That is why, for example, Shell or Woodside are pinned with being the control agency. It is expected as part of these plans that they have adequate training, equipment and procedures in place. They are the first on the scene; they deal with it. Our role is really to oversight that, because we have overall responsibility for ensuring an adequate response is provided, and providing as much assistance as they can. But having said that we should not downplay just how important our team is. Because I mentioned the trainers, for example, we are going out and actually training those organisations and assisting with their training.

**Mr R.S. LOVE**: You mean the private companies?

**Mr Buchholz**: The private companies tend to go through the arrangements they have in place with AMOSC and NOPSEMA, and things like that; so the Woodsides mainly get their training, not them. The training that we provide is mainly to the port authorities, because they are our control agency for those types of incidents in a localised basis, because they are best placed. For example, the Pilbara ports just spent $8 million on pollution response equipment to deal with incidents that occur in Port Hedland; whereas, the Department of Transport, we are allocated about $100 000 a year to fund pollution equipment. So that gives you the magnitude. But they are on the spot. They have risks; they have operations; they have responsibilities under the plan; so that makes sense that they provide it. Equally, there are stockpiles of equipment provided by AMSA; there are stockpiles of equipment provided by AMOSC through industry payments. So there is actually—if you went up there to Exmouth today and said, "Right, where are all the responders and equipment?" it is all under the surface; but given adequate time and preparation, suddenly it becomes enacted.

**Mr R.S. LOVE**: Is it part of your role to identify whether or not those are adequate circumstances or collateral or resources, rather; and, if there is not, how would you go about repairing what you would see as a deficiency?

**Mr Buchholz**: I think it is fair to say that no matter what you do in these sorts of large incidents, people are not going to see that as being completely adequate. There is always someone saying that you should have foreseen this, you should have had more boom, you should have had more people trained. It is just simply not possible to have the degree to go, sit back, and say we are actually covered for every single eventuality. So, in those instances that we identify shortfalls, then obviously we will try and address those shortfalls as best we can. Most of the equipment that would be used to combat an incident, say, in an offshore facility, would primarily be the companies in the first instance. If that exhausted their supply, then they would be seeking assistance through AMOSC and other industry players. If that was exhausted, then they could go to AMSA's stockpile, and so on and so on. Keep in mind, too, in a really significant incident, you also have the national

community as well that would also be willing to offer assistance in the same way that Australia offers assistance to them in times of need.

**Mr P.C. TINLEY**: How often do you revisit your risk matrix, if you like?

**Mr Buchholz**: That is a good question. AMSA has its own risk matrix, which mainly relates to maritime transport emergencies and shipping traffic, and those sorts of things. NOPSEMA would do their own risk profile. Our risk assessments tend to be more about—keep in mind that we are the control agency for some areas as well, so outside of a port authority, for example, along the coastline, we are the control agency. In the shipping and pilotage ports like Barrow Island, we are the control agency. So a lot of our energy goes into ensuring that we are as prepared as we can be to fulfil our functions. Yes, there is no sort of set, every year, every two years; it is an ongoing sort of assessment.

**Mr P.C. TINLEY**: When was the last one done?

**Mr Buchholz**: I could not tell you that, to be honest

**Mr P.C. TINLEY**: Could you maybe advise us separately?

**Mr Buchholz**: Yes.

**Mr P.C. TINLEY**: Obviously, if it is not done by a mandated time, are there certain milestones or trigger events? The reason for the question is, everything we have been told to date in relation to FLNG means there is going to be more, not less, going into the future—as many as 10 FLNGs off the coast—and it is not so much the facilities themselves that have identified the immediate controls that are put in place by the operators, but it also means an increase of traffic up and down, and around, the coast, which itself can be a resource, but it can also be a hazard. At what point will you revisit these plans? At what point is there a trigger or a milestone or an event that creates it?

**Mr Buchholz**: I will find out. I believe the last study that was undertaken by AMSA that I mentioned before about the high-risk areas, I am pretty sure it was around 2010–11—it was around that sort of magnitude. I will find that out for you. We would obviously contribute to that risk profile. Whether the state itself, the Department of Transport, said, "Right, we're going to conduct as formal a risk assessment as that," it is unlikely. We would probably use that one.

**Mr P.C. TINLEY**: If you are going to go to Treasury and ask for money for the normal operations that you undertake, you would be revisiting, at least in a budgetary sense, a whole range of things every year, in the normal cycle of this process. Something must inform those budgets, obviously, and the workload into the future that you are looking at potentially of adopting is relative to what is happening in the sector; so that is the point.

[11.00 am]

**Mr Buchholz**: Yes. At the moment the current Westplan MOP has an arrangement in it which is a memorandum of understanding of each of the port authorities that it splits the state's coastline up into segments: so the Kimberley port authority looked after Eighty Mile Beach to the Northern Territory border, and so forth. Subsequent discussions have found that those arrangements are not optimal, and under the new plan, we are going to move away from that to try and lock them into some response that they may not be in a position to do and have sort of false security on that. So we are going back more to realistically what can be provided. So if you have a spill that washes up in a remote area of the Kimberley, realistically what sort of response can you provide? So we are getting back to that sort of thing. That will include a bit more of a risk assessment.

Equally, our approach in regards to the Department of Transport, and the limited money we have to purchase equipment, has been about supplementing the port authorities' equipment. But as you have just heard, the port authority of Port Hedland has access to a lot more resources than we do; they can go out and spend $8 million like that. So instead of us contributing our little bit into there, we have said, "Let's focus our equipment requirements on those gaps that exist between where we can

lever off the port authority's equipment, where we can lever off the commonwealth's equipment," where we are actually sure.

**Mr P.C. TINLEY**: What implication, if any, do you think there might be for the privatisation of our ports from a subsequent sale—either flexibility, capability or responsiveness?

**Mr Buchholz**: I can only answer that question in the context of what has happened in other states, because it has never been raised as an issue for me to consider in Western Australia. But one of the issues that is being felt in places like New South Wales is, where those ports have been privatised, they are now dealing with a private entity and trying to lock a private entity into ensuring that they have got adequate response arrangements in place; whereas, it is much easier, obviously, to do that if it is a state-based agency, such as Mid West Ports or that. We have a really good close working relationship with those port authorities, and they understand their obligations.

**Mr P.C. TINLEY**: Yes; but they can be mandated in what they do and the depth and capacity of what they do, while a company will always be looking at it as a basis of impact on their profit.

**Mr Buchholz**: Potentially, yes. It is an issue that has been raised at that national committee that I talked about, and it is felt that to really try and test those waters, the 2016 national plan will be structured around that scenario—the exercise. The exercise in 2015 off Exmouth will deal with the offshore stuff, they have identified the emergence of private ports, let us give that a test out as well; so that is going to be the subject of the 2016 exercise to see how that will play out.

**Mr F.M. LOGAN**: In our examination one of the areas we are looking carefully at is Prelude's FLNG, and proposed future of FLNGs. As you heard from prior, and as you know, as you have had prior discussions with FESA, this is the first time in the world that these facilities are being put in place, anywhere, and they are the biggest structures in the world. Obviously, it is important that the state and the commonwealth—to ensure that the commonwealth is doing what they are supposed to be doing; but certainly the state—is looking at what is our capacity to respond to incidents with these facilities. When we have talked to Shell about their responsibility as the controlling agency to respond to oil spills, they then point us in the direction of the facility in Darwin where the oil spill equipment apparently is held.

**Mr Buchholz**: Yes; there are various stockpiles around. I believe the industry stockpile may be primarily based in Darwin, yes; whereas, in the commonwealth context, you have got that separation between AMPSA and NOPSEMA, and that is why they have tried to rejig this national plan, because they have recognised that you cannot just have these two entities that hardly talk to each other, so you have to try to bring them together. That is why the 2015 exercise will be so important, because for the first time you are going to have a joint exercise with both of those things. So industry through NOPSEMA and AMOSC have pretty much gone off by themselves and come up with these all arrangements, and AMSA has gone off by itself and come up with these arrangements. The bringing in together of those two under the national plan is really important.

**Mr F.M. LOGAN**: Right.

**Mr P.C. TINLEY**: Can I just ask: there is no guarantee that that exercise next year is going to happen as you have described; is that right, or it is locked?

**Mr Buchholz**: It is locked in, yes. It will happen.

**Mr P.C. TINLEY**: Okay, I thought that we were just making a bid for it.

**Mr Buchholz**: No, in fact, it was meant to go to—I think New South Wales was next, but because the plan came in play and they recognised the need to try and bring those two players together, they looked for a petroleum industry around Australia, and I shot my hand up pretty quickly and said that I think we have got one in the north west that we would love to test out.

**Mr P.C. TINLEY**: There is a small one coming on!

**Mr F.M. LOGAN**: I think it is important that you have obviously chosen Exmouth because of the oil facilities off the coast of Exmouth and the possibility of oil spills onto the reef up there. But that is similar to the Browse area, because you have got the Scott Reef area, which is not world heritage, but should be probably world heritage, but it is certainly world recognised as a superb environmental zone, very close to where some of these facilities are being put in place, so the possibility of, for example, a condensates spill and the impact on that reef would be disastrous. Is the DOT happy with the situation at the moment where if there is a spill, for example, from a facility like Prelude? You have already described the two areas of responsibility—NOPSEMA and AMSA—and the company's referral to us of facilities in Darwin for oil spill response. Would DOT be happy with that response? Would the DOT think that should a spill occur, the timing is such that they would be able to respond in an adequate manner to not impact that reef?

**Mr Buchholz**: I think that with regard to the location of stockpiles, they have to make a determination of where best to put it. There was a lot of discussion, for example, about whether the stockpile in Dampier should have been in Port Hedland, or whether it should be in Dampier. Generally, the large stockpiles, of which one is in Dampier and one in Darwin, are not usually the stockpiles that are drawn upon for that first initial response. Generally the control agencies, through their planning and preparation, have that initial response capability. I am not one hundred per cent sure what they are proposing in those facilities in terms of their initial response, but the access to Darwin, and potentially Dampier, would be that sort of next step. So they may, as part of their plan, choose to have a secondary stockpile closer, in Broome or something like that; but when these things get underway most of those assets are air deployable, prepositioned ready to go either on the back of a truck or on an aircraft, so they are quite deployable. I think in the Montara incident, which I was not involved in—it was before my time—but a lot of that was literally placing response equipment on the back of vessels that then came out of Darwin, and they were deploying dispersant from booms and all those sorts of things. So I suspect they would look to similar sorts of response capability. So the fact that there is not a large—

**Mr F.M. LOGAN**: Hopefully we not have the same response—that was a disaster!

**Mr P.C. TINLEY**: Have not booked it twice.

**Mr Buchholz**: There is also the reality in these things that you are never going to have enough capability to completely respond and ensure there is absolutely no impact; it is just very difficult to achieve in that scenario. If you look at all the oil spill incidents around the world, that would be an incredible exception to the rule: there is always an impact and that impact is always tragic and not good for the environment, and all those things, but it is almost impossible to 100 per cent gate keep that. You can be just as planned and ready as you can to try and do best you can.

**Mr F.M. LOGAN**: That is true, whether it was the *Kirki* off Cervantes, or the *Torrey Canyon* off the UK, or the big one off France. These are the ships that break up and you cannot prepare for that. Well, you can prepare for it, but you do not know where it is going to occur. But here is an incident where the world's biggest FLNG—or world's biggest structure—is being put in place, there are many, many, years of planning, it is not moving, it is staying in the one spot, the state should be prepared; hence the reason for the question.

[11.10 am]

**Mr Buchholz**: I have not personally seen their contingency plans, but I certainly could have a closer look at them. I guess it is difficult. No matter what preparations they put in place, in hindsight they are going to be seen to be inadequate, because it is impossible for them to cover every contingency and be able to recover that pollutant without it having an impact somewhere.

**The CHAIR**: That is if something goes wrong.

**Mr Buchholz**: That is if something goes wrong, yes. It is quite interesting when you go along to a Woodside exercise or something like that, it is interesting that they have similar names for

different areas, but they are called different things. For example, obviously their interest in maintaining shareholder value and public profile and image is really, really important.

**The CHAIR**: But it is: they have got that hierarchy, and people is one.

**Mr F.M. LOGAN**: Environment is two.

**Mr Buchholz**: It is a very similar structure that they set up, because obviously they are dealing with a very similar problem. It is easy for us to parachute into that and see things of familiarity, but there are subtle differences as well. They have a very big interest in trying to ensure that they are providing adequate response and that they are seen to be providing adequate response and they are seen to be prepared, because obviously their reputation and their shareholder value is also linked into that. It is quite interesting when you watch the amount of resources they do throw at it; literally the whole floor of that Woodside building and a cast of thousands descend. It just seems a massive machinery that is suddenly put into place all because they are trying to get on top of this as quickly as possible with minimal impact on their operations and the environment. In that is some, I guess, comfort that they have learnt from experiences elsewhere, that they are not just going to pay this off, so to speak. But we also have an obligation, particularly for those in state waters, to oversight that. One of our ways of doing that is to actually participate in those sorts of exercises, so we have a degree of comfort. If I had walked out of that Woodside operation and gone, "These guys have no idea what they're doing. This is a Mickey-Mouse operation", then, clearly, we would have been putting a lot more effort into saying, "What have you done here? What have you done there?" If it is the opposite, it is the reverse and we go, "Actually, these guys are pretty switched on; they're employing people who, for example, were involved in Deepwater Horizon, and the person who was managing that operation at the time had experience working for Shell, learning all those lessons over there." None of us were involved in that big incident.

**Mr F.M. LOGAN**: The only thing, though, Ray, is that there are so many operators out there, and they are not all Woodside.

**Mr Buchholz**: Yes, that is true.

**Mr F.M. LOGAN**: Hence, Montara was a classic example of that; it was a smaller Thai operator that did not have those capacities in place. As you know, as an adjunct to the FLNG operations, there are hundreds of wells that have to be drilled, and that is going to bring in much, much smaller operators who are in a high-risk area.

**Mr R.S. LOVE**: Can I ask how you work with the Department of Mines and Petroleum? What is the relationship there, because, I mean, they have areas of responsibility which must cross over very much over your own?

**Mr Buchholz**: Yes. We have a formal committee, which is called the State Marine Oil Pollution Committee, and that comprises senior representatives from agencies like the Department of Mines and Petroleum. They have a formal role to play in Westplan MOP by putting the plan together, ensuring that the measures that we identify are put in place. They also have a key role in approving those contingency plans. So there is quite a close connection between the two. Then at an officer level there is quite a lot of connectivity as well. There is a lot of resources that we have jointly developed in terms of modelling and a whole range of things. It is fairly tight. In an incident, obviously, they would be involved either in an advisory capacity or actually amongst the action in the incident management team as well with their expertise.

**Mr R.S. LOVE**: Where does the department of environment fit in with that as well?

**Mr Buchholz**: The department of environment has what is called—I will get the title right—there is a particular individual who, similar to me, has a job title that means he is in the thick of it. He is the environmental scientific coordinator. He resides in the Office of the Environmental Protection Authority and he is a member of that committee I mentioned before, and he is on call, if you like, to provide expert advice to myself, as the state marine pollution controller, as well as the incident

controller on all matters environmental. Particularly, what that means is that you learn very quickly when you do the training that no matter what you do, including nothing, it has an environmental impact, so we have what is called a net environmental impact assessment. You might say, for example, "We're going to remove oil from a mangrove forest." The fact of getting in there with your boots might actually do more long-term damage to that mangrove forest than if you just let the oil stay there and dissipate. We rely heavily on that sort of advice. We have done a lot of mapping along the whole coastline to look at areas and all the different types of sensitivities, so that when the modelling shows that you are going to have oil wash up on Eighty Mile Beach, you are very quickly able to access that and go, "Right; what are we dealing with there? Are we dealing with a sand beach? Are we dealing with mangroves—a whole range of things?" Within an incident management team there is a planning area, and within that planning area there is a dedicated environmental team that would rely heavily on doing those sorts of assessments to make sure that the operations people who just want to go out there and deploy booms and pat down penguins are actually not going to do more harm than good.

**The CHAIR**: Can I ask you a few questions about the port of Broome? Prelude and Ichthys will be the first projects to be serviced out of Broome, I think. Is that right?

**Mr Buchholz**: I am not 100 per cent sure on the exact projects themselves. I am certainly aware of the Prelude one.

**The CHAIR**: As we have said, we expect there will more projects in the Browse Basin, and these future projects will be serviced by vessels also probably operating out of Broome. Have you got any idea of what infrastructure you think would be necessary in Broome to service this increased market, if you like?

**Mr Wenban**: My understanding for the Prelude project is that at this time they intend to have two vessels that will be what they call platform support vessels. My understanding is that they will be operating out of the port of Darwin. Darwin is undergoing some construction of a marine facility up there, so they will be catered there. In addition to that, the Prelude concept, at this stage—my understanding is that they will have three what they call in-field support vessels, commonly referred to as tugs. They will be used on a rotation basis, with basically two on, one off—meaning in port—from Broome. The two that are in field will be used to essentially be tugs to push the LNG carriers and LPG carriers along, side by side, and the condensate tankers in a stern and do a tandem tow and stuff like that. They will be operating in and out of Broome. Given the nature of what they will be doing, coming and going from Broome for things like refuelling themselves, crew change and the like, their own vessel storing, the facilities at Broome are long standing and quite good for that. It is not like those vessels will be carting out all the materiel required to operate and maintain the facilities. That will be done by the PSVs out of Darwin.

**The CHAIR**: Will there be a need to update the Westplan MOP and the Westplan MTE to accommodate an increased probability of an incident somewhere in the vicinity of Broome?

[11.20 am]

**Mr Buchholz**: We are already in the process of updating both of those Westplans now, and the arrangements—we believe, and from having discussions with all the stakeholders and the port authorities—are much more clear and it is a much more workable plan. So we are satisfied with that. Underneath that plan sit contingency plans. For example, the Kimberley Ports Authority will be expected to have an oil spill contingency plan that covers how it is going to deal with a MOP incident inside its port boundary, as well as an incident—we discussed this yesterday—management plan, which is how they deal with a maritime transport emergency within their port boundary. They will have an oil spill contingency plan. In addition to that we will have one for state waters. We currently do have one and we are updating it at the moment, and that is where more of that detail is located. Our response to an incidence off Broome is not a lot different to a response to an incident off Geraldton or Esperance; the mechanisms are largely the same. Obviously, it is just the

magnitude, but even then the possibility of having a large spill off Esperance caused by a ship hitting something in the archipelago there, you are generally going to have that ship's—let us say it is not an oil tanker; let us just say it is a normal sort of ship carting grain or something. There is a certain amount of oil it will have on board to power that vessel, and you are going to be dealing with that primarily. A vessel coming in and out of Broome port carrying sheep—cattle is probably a better example—is going to be carrying a similar sort of amount, so in many ways that is what you are dealing with. With an offshore facility, it is very much dependent on whether there is a breach at the wellhead or whether it is actually the facility itself. Even an FLNG, what is a particular concern to us is that condensate. You have seen the process up at Woodside there. They process the natural gas and they are just storing the by-product, which is the oil condensate, and that is their cream that they are going to put out on a ship and off it goes. If there was some sort of catastrophic failure on board that FLNG and it sank or something, it is that condensate which is more likely to be what is washing up ashore, if it makes shore. So exactly how much is carried and what you can do to that oil on the way between there and the shore, they are all the sorts of things you are going to be dealing with over that time period.

**Mr F.M. LOGAN**: Can I ask you a question, Steven? The FLNG facility is covered primarily by NOPSEMA's jurisdiction in terms of assessing its safety—it is a question about the safety, because really they cover occupational health and safety, but let us broaden it out to safety. Is there a role for AMSA. In terms of jurisdiction and legislation, does AMSA have a jurisdictional role to play with that facility, particularly with the docking, because they will have ships come alongside and a fluid transfer or LNG transfer from one to the other? Is there any jurisdiction that AMSA plays with that facility or is it all passed over to NOPSEMA?

**Mr Wenban**: The FLNG is not a ship; it is a barge. It will have some thrusters to weathervane and that sort of thing, but it is a barge. In a lot of ways it is similar-ish to some of the FPSOs or FSOs that we see off the coast. One that comes immediately to mind is a facility like the Northern Endeavour. Again, it is a barge; it has not got an engine, it is not a ship. In that case, AMSA really do not have much jurisdiction over the activities there. Indirectly, they will have. My understanding of the model, especially on Prelude, is that what they intend to do is to have several master class 1s on board, tanker men, that will be involved both on, if we want to call it, the shuttle tanker—the arriving tanker—and the FLNG facility to oversee the berthing of that one against the other or in the tandem arrangement, and to oversee the cargo transfer and the custody transfer of the cargo and all those sorts of things. Through that mechanism, because they will be class 1 mariners, AMSA issue them their certificates of competency. AMSA also issue them their medical certificates. AMSA issue them their specialties of tanker endorsements, so in this case LNG or petroleum tanker endorsements for the condensate ships. Even, for example, in extremis, if we had a situation where we have foreign masters come in, if they decided to operate with foreign people, AMSA have a mechanism there through a process of certificate of recognition, where they would assess that certificate from that other country to how it would operate within their own jurisdiction.

**Mr F.M. LOGAN**: That is actually the answer to a question I asked Shell, who apparently did not know that when we had them in before. I was trying to get information out of Shell about what the capacities and knowledge and requirements the people who were actually doing the transfer, actually involved in the loading, had to have, and who gave it to them, and they did not seem to know. When a transfer takes place, when a tanker comes alongside, and the skipper of the tanker and the facility boss—because they are not captains—are in charge of the transfer at that point in time, does AMSA have a clear requirement as to how many people should be involved in that transfer? Clearly, they have responsibility for their qualifications.

**Mr Wenban**: I have no visibility of that obviously. I am not trying to dodge that question. That would be a good question to put to probably AMSA or NOPSEMA.

**Mr F.M. LOGAN**: But definitely they would have to have a master class 1 there.

**Mr Wenban**: My understanding is that that is the commitment that Prelude has given.

**Mr P.C. TINLEY**: There is no mandated requirement for them to do that.

**Mr Wenban**: No, that would be, I am sure, written into their suite of documents that would make up their safety case and the subordinate documents of exactly how they are going to do their cargo and custody transfer.

**Mr Buchholz**: But the actual ship itself that it is being transferred to, if there was an accident between that resulted in a breach of the facility, then that incident would be covered by NOPSEMA. If the two have now collided and the ship has gone off, then my understanding is that the ship incident would be dealt with by AMSA, but, interestingly, the control agency would probably be the same; it would be the company associated with it. That is where the relationship at the jurisdictional authority level, the company best placed to deal with that, is the one actually who has put in place all those plans for that very eventuality and what they are going to do if it happens. That is why all the pressure is placed upon them to actually act. Who is ultimately responsible should be clear; and, if not, there are mechanisms in place to actually have that discussion and say, "It could be either one of us; it is going to be you today." Similarly, in the state environment, that is how it would occur.

**Mr F.M. LOGAN**: During the loading process, if something was to happen to the ship as opposed to the facility, would AMSA cover it or NOPSEMA?

**Mr Wenban**: That would be an interesting one, because, currently, as it stands at the moment, for say an FPSO facility, they have an exclusion zone around that facility. Once any vessel enters the exclusion zone, they fall under the NOPSEMA legislation. That is certainly my understanding of how it works. So there is a process they go through with regard to permissions to access that exclusion zone; it is an exclusion zone for a reason. They will obviously go through a checklist to technically satisfy the offshore installation manager, who is the offshore boss, that that vessel is technically okay to come in. A lot of that has to do with: Are your engines working? Your telegraph working? Your communications systems working? Have you got any deficient equipment that might be of interest? Given that all these things are dynamically positioned now, so with these thrusters that allow them to make very controlled and incremental steps in, that can be a very controlled mechanism. But once they get past this arbitrary line in the ocean, inside the exclusion zone, my understanding is that becomes NOPSEMA's bag.

**Mr Buchholz**: I think because they are part of the same operation as the facility itself. I just want to assure the committee that it would not be like AMSA and NOPSEMA are basically just saying, "It's not us. It's not us. It's not us." In any event, the company as the control agency would be busily doing stuff anyway, and it would be very quickly sorted.

**The CHAIR**: Do you see the companies' safety cases?

**Mr Buchholz**: Do you mean incidents where they —

**Mr P.C. TINLEY**: No, do you see their safety case?

**Mr F.M. LOGAN**: Does the company or NOPSEMA provide to you the safety case?

**Mr Buchholz**: They may do, I am not sure. If it did, it would come in to Matt for a look at, particularly if it makes reference to ourselves. But unless it was deemed to be really controversial or, you know, "They are saying what?" it would not make it up to myself. I have not seen any in the past, no.

**Mr Wenban**: The main document, of course, that we are specifically interested in is what they call their environmental plan. Through the NOPSEMA process, part of a compliant environmental plan used to be what was called an oil spill contingency plan and is now called OPEP—oil pollution emergency plan—and both DMP and NOPSEMA would pass those to our MEER team to review and give feedback to them as that agency that would actually do the approval. But they share that

information with us so that we can have a look at it, and we provide feedback to them and from there, that influences their approval process. But that is not a safety case; that is more the OPEP.

[11.30 am]

**Mr Buchholz**: And there are opportunities, too, like the day you went and had a chat to the Shell Prelude.

**Mr Wenban**: We went and spoke to Woodside, actually independent to this hearing. Matt Verney and I went in and spoke to them about the geography, really. Between us we have a reasonable understanding of what an FLNG facility would look like technically and we are aware of that type of infrastructure, but we really wanted to go and have a chat to them about the geography of where they were looking to physically locate them, where their tiebacks were, talk to them about their degree of confidence with regard to their mooring systems and all of that sort of stuff. We are very aware of the fact that the intent is to not evacuate them and not remove them from situ.

**Mr P.C. TINLEY**: So they are a floating port authority?

**Mr Wenban**: I am not sure what you mean.

**Mr P.C. TINLEY**: They are a floating port.

**Mr Wenban**: Yes, they are an offshore terminal, similar in operation to any of the FPSOs that are operating off the Australian coast and the North West Shelf.

**Mr F.M. LOGAN**: Does DOT—it would probably be NOPSEMA—have any capacity to comment on the safety of those vessels with respect to cyclonic activity? Given the fact that they are not de-manning and would be the only facility at the moment that will not de-man given the possibility of a direct hit from a cyclone, is their refuge capacity basically able to withstand a direct hit of a cyclone and people will stay safe? Does DOT have any role to play in that?

**Mr Buchholz**: No, not that I am aware of.

**Mr Wenban**: Because the facilities will not be located in state waters, they are obviously outside of our jurisdiction.

**Mr Buchholz**: Even if they were located in state waters, outside of a port there is limited jurisdictional authority anyway.

**Mr R.S. LOVE**: You mentioned before you were reviewing the Westplan for MOP, is that the MTE as well or just the MOP?

**Mr Buchholz**: It is the MTE as well, both. In fact, the structure that we have come up with, we have all agreed, makes a lot more sense. We are making sure that the two really closely link and look like each other. So, yes, we are very confident about that.

**Mr R.S. LOVE**: So that is the purpose of the review, to bring together those plans?

**Mr Buchholz**: Definitely. The current plans were written long before this and I think we have learnt a lot in the last 12 months or so. The terminology is very consistent now with the nation plan and we are pretty confident that it is a much better plan.

**The CHAIR**: I would like to thank you for your evidence before the committee today. A transcript of this hearing will be forwarded to you for correction of minor errors. Any such corrections must be made and the transcript returned within 10 days from the date of the letter attached to the transcript. If the transcript is not returned within this period, it will be deemed to be correct. New material cannot be added via these corrections and the sense of your evidence cannot be altered. Should you wish to provide additional information or elaborate on particular points, please include a supplementary submission for the committee's consideration when you return your corrected transcript of evidence. It is possible that some other questions might occur to us, is it okay if we just write to you for answers?

**The Witnesses**: Yes, absolutely, happy to help.

**The CHAIR**: Thank you very much for your time.

**Hearing concluded at 11.33 am**