



PER community meeting – Bunbury 2 November 2009

MEETING NOTES

A Community Forum was held in Bunbury on 2 November 2009, to provide feedback about the Public Environmental Review (PER) document prepared for Perdaman Chemicals and Fertilisers by GHD consultants. The PER document has been submitted to the EPA and the public submission period will close on 24 November 2009.

This is a summary of the key issues and questions raised by attendees at the Bunbury Community Forum. Responses were provided by Perdaman and GHD. This is not intended to be a comprehensive, verbatim account of the meeting.

If there are further questions, please contact Perdaman on 9429 5111.

Issue	Question/statement	Response
Air quality	How much waste is generated in producing urea as a product?	Emission figures are for coal based emissions, per tonne of coal basis. Emissions are significantly lower than for other comparable coal based industries in the area.
Air quality	Is the accuracy of the air quality data dependent on the coal quality? Will this change if the quality changes? Going forward, will the coal quality change? <i>There is scepticism that the coal quality will be consistent therefore the data is not consistent.</i>	Yes, it could change. The coal agreement stipulates the quality that is required and this has a relatively small range that is to be satisfied. The data presented is based on actual Collie coal. Coal is supplied by the Griffin mine, so this will minimise the range of coal quality. Griffin blends coal from the various locations in the mine in the stockpile to ensure consistent quality.
Air quality	What about heavy metals?	These are largely captured in the solid vitreous slag, which is a product of the gasification product. The metals do not leach out of the slag, as they can do out of flyash in other applications. Any heavy metals in the air emissions are detailed in the PER and are well within acceptable limits and below other commercial coal applications.
Water	What percentage of scheme water will be used?	No scheme water will be used in production.
Logistics	Is there a diagram of the loading facilities at Collie?	No – this has not been designed yet as logistics are still being planned. PCF will have its own siding which will enable urea loading to occur without blocking main



		line access to Premier Coal, which is east of the PCF site.
Logistics	How will urea be transported and why not transport by road?	6200t per day requires trains. We have to ship by rail. There is no way we can move 6200t per day by truck. Not long term operating by trucks.
Logistics	What if rail fails?	The Port warehouse has 2 weeks storage capacity and the Collie warehouse 10 days storage. If the rail fails we will stockpile until it is repaired. If the rail is lost for long enough to fill the warehouses, we will have to shut the plant down. Such a long rail outage is considered very unlikely.
Logistics	What is the growth plan?.	2013 start up. Plant will produce two million tonnes per year only - there is no capacity for growth in the current design.. This would require an expansion programme..
Logistics	Lack of capacity of Picton/Brunswick rail system. Potential of rail route to go through Kemerton.	PCF will generate an additional 4 trips per day to the rail activity, which will take this line to capacity. Sufficient capacity exists for PCF. Upgrading of the Brunswick to Bunbury rail line will be required to accommodate any future new demands for rail services, but this is the responsibility of Westnet, the rail owner.
Infrastructure	Lack of capacity of ocean outfall pipeline and the constraints it may pose on waste water treatment	At the core of the issue is removing salt from Wellington Dam water. Process will concentrate the other products, eg caustic and remove this with the salt. An alternative method is to process the wastewater through a brine concentrator and remove all the water, leaving a solid waste that would go to landfill. Perdaman is currently in discussions with Verve energy regarding access to its outfall pipeline, the understanding being that sufficient capacity can be made available to accommodate PCF. The future expansion of industry makes the pipeline a key piece of infrastructure. Option for Verve may be to upgrade capacity of pipeline not simply reline it.
Greenhouse	Carbon trading. CPRS Carbon trading legislation, impact and planning	<p>The process puts one third of CO2 into product, and two thirds is emitted. PCF is pursuing alternatives longer term. Engaged with Dept of Mines and Petroleum on geosequestration under the Lesueur Ridge. Testing and demonstration work is required. If all goes well, this will be a possibility by 2014 or 2017.</p> <p>An alternative is using algae or biosequestration. The technology is not commercially proven yet.</p> <p>Perdaman is also exploring the trading of carbon dioxide with alumina companies.</p>



Noise	Noise issues, more information on modelling	<p>The Port of Bunbury is currently a busy operating facility with more than 13 million tonnes handled annually. The main exports through the Port are alumina, woodchips and mineral sands, with caustic soda the chief import.</p> <p>Noise from the locomotive idling is predicted to be L_{Aeq} 43 dB at Location 3. This is close to the existing background noise level and is unlikely to result in a significant impact. In addition, assuming two trains being unloaded (one train at night and one during the day) the noise would comply with the 'target' criteria of the State Planning Policy <i>Road and Rail Transport Noise and Freight Considerations in Land Use Planning</i>.</p> <p>The proposed unloading is for the locomotive to constantly pull the wagons at slow speed with the bottom dumping mechanism opening and closing automatically. This technique should eliminate the wagon shunt during unloading. However, it is recommended that the unloading spur line through the unloader, be constructed on a slight upward grade to ensure the wagon tension is maintained at all times.</p>
Noise	Loading and unloading of trains, mechanics	Perdaman will provide further information on the rail wagon dumping mechanism and unloading facility when available
Noise	Noise sources	Unloading will occur inside a building. This activity will contain most of the noise generated. However, some noise emissions will be unavoidable. PCF will comply with statutory requirements.
Water quality	Water treatment and drainage in the port.	PCF will be required to ensure urea does not go into the port. These provisions will be incorporated into the design. Stormwater capture and treatment will be the responsibility of Bunbury Port.
Risk assessment	Risk assessment process and mitigation: risk areas, train crossings to port, spillage, storage facilities, explosion risk, type of locomotives	Discussions on the technology of the loco's to manage the task of continuous unloading. Looked at push/pull system which has some advantages. There are commercial implications of 2 loco's at the front, as PCF will need access to Premier line to turn the loco's. Tight bends in the Darling scarp to be managed. PCF is required to meet Australian standards. Need to have bottom dump rail wagons. Train crossings – electronic train control will be extended to the Shotts Industrial Estate.



	<p>Odour</p> <p>Fire - Is there a risk of ammonia fumes causing a fire if the shed over heats?</p>	<p>Spillage/derailment - urea might have soil contamination but will still be usable for the local market. Suitable spillage retrieval process will be applied. Urea does not require special protection if it spills and can be retrieved using standard earthmoving equipment. This matter should be carried forward to the risk assessment planning.</p> <p>Explosion – there are extensive process controls and safety systems. Despite large volume of urea being stored, the explosion potential is very low. The product doesn't give off explosive gases. There are well established processes in place to manage this type of risk, eg Dept Minerals and Petroleum.</p> <p>Smell – the physical size of the shed and proximity to the road. If the shed is full, will there be an odour? No odour is expected but if any is evident odour controls will be established.</p> <p>No. Ammonia does not burn spontaneously and will not burn even if an external flame is applied and maintained. In this event, some NH3 vapour would be generated.</p>
Air quality	Dust (irritation)	Haven't seen evidence of a dust problem anywhere else. All product will be covered. Dust control will be done as required. Conveyors will be enclosed. Shiploader will be enclosed. The product is not inherently dusty.
	Shed design	Don't need humidifiers. Good housekeeping will maintain humidity. Not anticipating will have to do too much.