



**Port Hedland Industries Council**  
Community Industry Meeting

**Minutes**

11 November 2020

3.00 pm

**VENUE**

The WEB Business Hub, Port Hedland  
& Zoom, Videoconference

<b>Attendees</b>	<b>Organisation</b>
Kirsty Danby (Chair)	PHIC
Deirdra Tindale	PHIC / Pilbara Ports Authority
Morag Lowe	Community
Gloria Jacob	Community
Stephen Stewart	Kariyarra Aboriginal Corp
Tracey Garbin	Community
Roger Higgins	PH Progress Assoc
Michelle Kivits	Ashburton Aboriginal Corp
Joseph Bassford	Pilbara Meta Maya
John Carter	North Regional Tafe
Clinton Smith	Community
Claire Boyce	Community
Joel Schreiber	Community
Jaylan Smith	PHIC / Fortescue
Jeanette Hasleby	PHIC / Roy Hill
Patrik Mellberg	PHIC / BHP
Chantel Cullen	PHIC

<b>Apologies</b>	<b>Organisation</b>
Kevin Michel, MP	Member for Pilbara
Trish Barron	PDC
Sam Arif	Care For Hedland
Georgia Wells	Community

<b>Invitees</b>	<b>Organisation</b>
Karlene Bylund, Managing Director	Hedland Maritime Initiative

<b>Item</b>	<ul style="list-style-type: none"> <li>Meeting opened by Kirsty Danby 3.09pm</li> <li>Acknowledgement of Country and recognition of the Kariyarra people as the Traditional Custodians of the land on which the CIF meets.</li> </ul>
<b>1.1 Introductions</b>	<ul style="list-style-type: none"> <li>CIF members provided an introduction of themselves and who they are representing (if applicable). <ul style="list-style-type: none"> <li>Introduction of new members representing community: Gloria Jacob, Joseph Bassford.</li> <li>Introduction of new members representing Kariyarra Aboriginal Corporation Stephen Stewart</li> </ul> </li> </ul>
<b>1.2 Confirmation of Minutes</b>	<ul style="list-style-type: none"> <li>Confirmation of PHIC CIF Minutes 12 August 2020 confirmed by Joel Schreiber and seconded by Morag Lowe</li> </ul>
<b>1.3 Governance</b>	<ul style="list-style-type: none"> <li>Discussion on Terms of Reference – proxies are acceptable for organisations only. Community members own their seats at the table</li> <li>Deputy Chair nomination – Tracey Garbin Unanimously accepted</li> </ul>
<b>2.0 Annual Report</b>	<ul style="list-style-type: none"> <li>Ms Kirsty Danby presented an overview of the AAQMN Annual report: <ul style="list-style-type: none"> <li>Noted that PHIC had hoped the report would be released publicly today but the release has been delayed for a few days.</li> <li>Opted to provide a summary of key findings to Community Industry Forum prior to public release.</li> <li>Discussed the process for release established by the Dust Taskforce which is to send the report to JTSI (who had responsibility for Taskforce), followed by the Minister for Environment and DWER.</li> <li>Taplin St inconsistent reading means that monitor will only be reported on from 1 January – 30 June 2020.</li> <li>1 January to 30 June 2020, there were three exceedances of the air quality guideline for PM<sub>10</sub> of 70 µg/m<sup>3</sup> averaged over 24 hours.</li> <li>Two were in January and one was in May. It is understood the two January events were from Cyclone Blake, and that the May event was the result of local light industry nearby.</li> <li>The audited reports will accompany the annual report</li> </ul> </li> </ul> <p><b>Questions and Answers from Members:</b></p> <ul style="list-style-type: none"> <li>Discussion around the process of sending the Annual Report to Government departments before release to the public. CEO explained that as JTSI was the lead agency for the Dust Taskforce and established the process. Their role is to review the report to ensure it covers all reporting areas directed by the Taskforce. The CEO confirmed that the process was not due to any political sensitivities and that there would not be any hold ups from the process through JTSI.</li> <li>A member queried: Is PHIC aware that despite the PHIC annual reports reporting exceedances in 2017/18/19 that Minister Dawson presented reports by the National Environment Protection Council that showed there had been no exceedances in Port Hedland. The Minister expressed that his information came from DWER. Suggestion from member that PHIC request clarification from DWER and report back to CIF at the next meeting.</li> <li>Question from a member directed to BHP: Is Taplin Street Monitor part of your license? Response: Yes, Taplin Street Monitor is a reporting point</li> </ul> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>Jim Henneberry to provide the NEPC reports discussed for PHIC to approach DWER on behalf of CIF</li> </ul>
<b>3.0 PHIC Update</b>	<ul style="list-style-type: none"> <li>Ms Kirsty Danby led a presentation on the use of LiDAR technology (note that during the presentation the CEO drew from notes for the discussion given the scientific nature of LiDAR to ensure accurate information presented to the group). <ul style="list-style-type: none"> <li>Like many organisations monitoring air quality, PHIC has debated and trialed the benefits of Light Detection and Ranging (LiDAR) technology in Port Hedland.</li> <li>While PHIC acknowledges that LiDAR is a useful tool or technique, trials have identified limitations, which appear to be exacerbated where there are multiple dust sources and other particulate matter in the air, which is the case in Port Hedland.</li> <li><b>What is LiDAR and what is it used for?</b></li> <li>Light detection and range - developed in the early 60s for remote sensing, vehicle automation and atmospheric studies.</li> <li>The basic principle behind atmospheric LiDAR is relatively simple.</li> <li>The instrument (transmitter) releases rapid pulses of laser light along a path (to a receiver) and measures the time it takes for each light pulse to return. This is a similar principle to radar, except it</li> </ul> </li> </ul>

uses a laser beam. The laser pulse signal strength is reduced as it reflects on larger particles in the atmosphere, such as pollen, water droplets, dust etc. The light that is not reflected by particles continues.

- **What did PHIC want LiDAR to measure?**

- PHIC was hoping that LiDAR would be a useful tool to measure dust particles, in particular PM10 and PM2.5 for Port Hedland.

- **How did PHIC assess if it is a useful tool for Port Hedland?**

- Three trials have applied LiDAR to assess dust in Port Hedland and gain appreciation on whether the LiDAR is a useful tool.

- The trials were carried out by researchers, government and industry for varying purposes between 2011 and 2017.

- The trials included (1) CRC CARE (2011), (2) PHIC LiDAR trial (2014-2016), (3) Department of Water and Environmental Regulation (DWER) (2017).

- FIGURE 1 in the presentation - LiDAR measures all particulate matter in the atmosphere including, dust, pollen, salt, water vapour and other suspended particles. The measurement doesn't differentiate between types of particulate matter, it provides relative concentration bands of matter. This can lead to a misinterpretation of the data.

- This also means that as the distance from the LiDAR increases the area contained within the scan also increases, which decreases the spatial resolution.

- FIGURE 2 in the presentation - LiDAR only operates at the level it has been set. The return signal only monitors either elevated sources or plumes that have reached the scan height.

- This also means that LiDAR may not provide an accurate representation of source locations. Plumes from elevated sources could be over-represented in the LiDAR scan, giving the skewed impression that these are the only dominant sources within the Airshed. Plumes from ground level sources could be ignored, or underrepresented. There is also the potential for plumes from co-located sources to merge.

- PHIC supports DWER's position around LiDAR limitations and that LiDAR is not suitable for regulatory purposes, which is also outlined in the DWER factsheet on the DWER website which states:

- There is no Australian Standard for the operation of LiDAR
- LiDAR is not acceptable technology or methodology for point source monitoring
- Pre-processing of LiDAR monitoring is required before usable imagery can be developed so it won't show real time monitoring scenarios
- LiDAR can't be used to measure PM10 in isolation
- The visual representation of LiDAR is only two-dimensional representation of three-dimensional movement in particles in the atmosphere
- LiDAR cannot distinguish between dust, smoke, water, bushfires, buildings or trees. This means that "red" indicators may be interpreted as dust when it could be a range of other factors (buildings, water, trees etc)
- The reliability of data is best at close proximity, not in general atmosphere (Port Hedland Airshed) and the instrument reduces reliability at distance
- Calibrating LiDAR against AS technology such as BAMs to confirm correlations is technical challenging and potentially unreliable

- Presentation included links to three studies and other information sources for Members

- **Questions and Answers from Members:**

- Member's statement - Can it be assumed that LiDAR is not going to be used by DWER as a tool to gather information when the network is handed over. Their findings mean it won't be used a regulatory tool.

- Query from member - has there been much feedback from community?

- CEO Response – Recognised that some members in the community believe that LiDAR should have a place, but it may be that those community members do not appreciate understand the limitations that LiDAR presents. You can see those discussions on social media. CEO advised that like most science and technology, there will always be an argument for and against. In this case PHIC, like DWER, is not supportive of LiDAR as a regulatory tool.

- Member's statement – This means during rainy season or pollen days could be huge exceedances if LiDAR is used.

- CEO response – agreed that it could capture rain and pollen and present as dust.

<p><b>4.0 An overview of the PHVBS</b></p>	<ul style="list-style-type: none"> <li>• Presentation from Karlene Bylund, MD Hedland Maritime Initiative.</li> <li>- <b>Discussion following the presentation:</b></li> <li>- Discussion around the change in the open property market and an increase in values. People are welcome to sell on the open market or to the HMI, it is a voluntary scheme.</li> <li>- The Maritime Precinct Masterplan is still being created but without knowing how many houses will be sold to the PHVBS and when they will be acquired then there is no certainty on what can be developed.</li> <li>- Explanation that WAPC has responsibility for the planning and zoning, and HMI has responsibility for the PHVBS and planning for the development of HMI acquired land. The PHVBS has had in-principle approval since June 2020 and final approval is imminent (in November and subsequently received).</li> <li>- Discussion around finding alternative housing for tenants to relocate as a priority for Government as rentals are now in high demand and rental prices are increasing rapidly. Karlene advised there would be several solutions to avoid displacement of existing West End residents, including options for extended settlement periods and leasing homes back to residents for a specified time. Community would like to see a Government policy or strategy around developing alternative housing as part of this scheme now as surety.</li> <li>- The HMI website will be live before Christmas which will have regular updates, FAQs and factsheets</li> <li>- Members requested Karlene to continue to update Community Industry Forum as the PHVBS continues to progress</li> <li>- <b>Action:</b></li> <li>- PHIC to invite WAPC to present at the next meeting</li> <li>- PHIC to provide the WAPC West End Improvement scheme documentation</li> </ul>
<p><b>Future Agenda Items</b></p>	<ul style="list-style-type: none"> <li>• How do we support the PHVBS strategic plan for the West End – offer ideas.</li> <li>• WAPC overview on Improvement Scheme 1</li> <li>• Transport themed presentations – ANL, Pilbara Port Authority, QUBE - Member suggested we could also invite representation from ToPH regarding road transport planning</li> </ul>
<p><b>5.0 Action Items</b></p>	<ul style="list-style-type: none"> <li>• Jim Henneberry to provide the NEPC reports</li> <li>• PHIC to invite WAPC to present about the Improvement Scheme overview</li> <li>• PHIC to provide the WAPC West End Improvement scheme documentation</li> <li>• PHIC to invite transport representatives to present at next meeting</li> </ul>
<p><b>6.0 Other Business</b></p>	<ul style="list-style-type: none"> <li>• Roger Higgins, Chairman of the Sea Farers: Thanked Industry and the Pilbara Ports Authority for their contribution and continued support to keep the launch service going around the Harbour even though they have not brought sea farers to shore due to COVID. The centre has been able to set up an online system for sea farers to order items they require. A new vision has been created for the centre.</li> <li>• Next Meeting: 10 February 2021</li> </ul>