

Submission: re Application for Licence Amendment: 'Chemical manufacturing: Yara Pilbara Fertilisers Pty Ltd (Yara Pilbara Fertilisers) Lot 564 Village Road, BURRUP (L7997/2002/11) and (W4701/2010/11)'.

Advertised by the Government of Western Australia, Department of Environment Regulation on 11 July 2016.

Submission by:

Friends of Australian Rock Art Inc. (WA)

c/o Conservation Council (WA)

Lotteries House

2 Delhi St

West Perth

WA 6005

Email: fara@gmail.com.au

<http://fara.com.au/>

Grounds for submission:

1. Proposed quantity and concentrations of emissions are excessive for rock art, the unique vegetation on Burrup Peninsula and human health
2. The application is inadequate to effectively judge: a) the quantity of all proposed emissions, b) limits to emissions and c) amendments sought to licences L7997/2002/11 and W4701/2010/11
3. The company has a bad record of fugitive gas and liquid leaks which add to the risks to rock art and human health
4. The company has provided incomprehensible results for air-quality measurements in Compliance Assessment Report for MS 870, and not scientifically credible analysis of rock art site colour and mineralogy results
5. The Western Australian government should consider its Precautionary and Intergenerational Equity principles when determining limits for emissions from the Technical Ammonium Nitrate Production Facility (TANPF) and Yara Fertiliser plant.

Outcomes sought:

1. The application for amendment to licences L7997/2002/11 and W4701/2010/11 currently under consideration not be granted
2. Additional information and a revised application for consideration and for public comment are required. This revised application for a licence to operate TANPF is made available for public comment for at least five weeks
3. Strict quantitative limits must be set for combined emissions from Yara fertiliser plant and TANPF to regulate total acid load to far less than 25 meq/m²/yr and totally prevent PM₁₀ ammonium nitrate particles from entering the air. These restricted emissions can be achieved by adding additional scrubbers and other processes. These strict limits are required to ensure public health is maintained and the unique rock art on Burrup Peninsula is available for future generations under the Precautionary and Intergenerational Equity principles of the Environmental Protection Act 1986 – Section 4A
4. Real time and continuous defined air-quality measurements including PM₁₀ dust and ammonium nitrate particulate matter, NH₃, NO_x, SO_x, must be made at points of emissions, boundary fences and the five air-quality monitoring stations described in the Compliance Assessment Report for MS 870. Consideration should be given to adding carbon monoxide (CO) to this list.
5. The air quality monitoring systems are to have alarms set at the maximum limit allowable and the alarms' triggering must be sent in real time to an independent person or body in addition to company personnel.

Friends of Australian Rock Art (FARA) was established in 2006 as an advocacy group to campaign for better protection of the rock art of the Dampier Peninsula, including the Burrup Peninsula/Murujuga. Successive State and Federal Governments have been negligent in their management of this area by facilitating the establishment of a major industrial node in the middle of the world's oldest and largest outdoor rock art gallery, which contains a continuous record of human history in stone over 40,000 years, making it one of the most significant archaeological sites in the world. Its importance is borne out in a wide range of archaeological studies and a 2012 report by the Australian Heritage Commission into the outstanding universal values of the area presented by Dr Carmen Lawrence.

The significance to local Aboriginal people of the site is also highlighted in a submission to DER by the Murujuga Aboriginal Corporation, the peak body representing Aboriginal custodians of Murujuga. Deep concern about the health and heritage impacts of Burrup industrial emissions was expressed by senior Aboriginal custodians from MAC's Circle of Elders, during meetings with FARA in April and July this year. As an indicator of the poor overall technical quality of the Yara/Pilbara application and its negligence and ignorance in relation to the company's impact on rock art, the MAC submission to DER has highlighted the fact that the Yara/Pilbara has wrongly identified Deep Gorge as the closest rock art to the plant (1200m from the plant), when in fact the nearest rock art is located only 400m away.

The authors of this submission have read an edited draft of Professor John Black's confidential submission to DER on this matter. We are deeply alarmed by the compelling high level scientific evidence presented in this document which suggests that industrial emissions are in fact likely to be producing a major effect on the rock art, as well as potentially threatening the health of residents of Karratha and Dampier. It is clear to us that the failure by BRATWG, the CSIRO, Yara Pilbara and the State and Federal Governments to discharge their legal responsibilities to properly monitor these emissions constitute a scientific and legal scandal.

The effects of the 'acid rain' from Burrup industrial emissions referred to in the edited version of Professor Black's confidential submission are spectacularly evident in the following photographs:

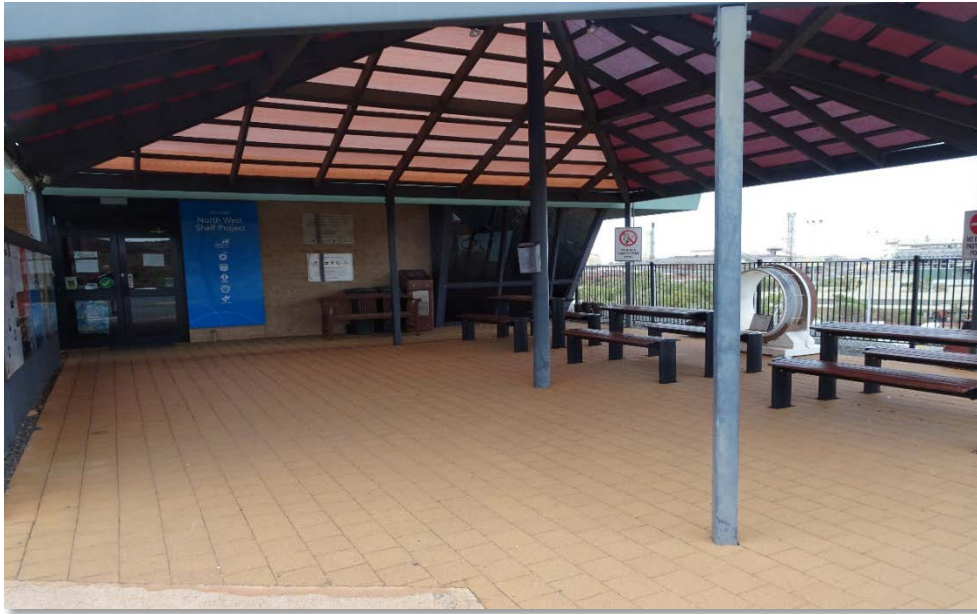


Figure 1: Verandah of Woodside Visitor Centre, Karratha



**Figure 2: Effect on brickwork of 'acid rain' from gap in roofing at Woodside Visitor Centre,
July 2016**



**Figure 3: Effect on brickwork of 'acid rain' from gap in roofing at Woodside Visitor Centre,
July 2016**

Since 2007, FARA has conducted an annual Rock Art Bus Tour to the Burrup Peninsula, during which participants have documented the rock art. The following photos show graphically the cumulative effect of additional nutrients in the atmosphere from industrial emissions which have increased algal and vegetative growth in watercourses between 2010 and 2016:



Figure 4: Emu Face Valley waterhole, July 2010



Figure 5: Geo's Gorge waterhole, July 2016

FARA is confident that DER will follow due process as a regulator and compel Yara/Pilbara and the State Government to comply with their obligations under the EPBC Act and all other relevant environmental legislation. However, should this not be the case, FARA is certainly committed to pursuing every available means to ensure that these important matters are subject to appropriate media, legal and parliamentary scrutiny.

Judith Hugo, BA (Natal University, SA), H.Dip.Ed (Univ. Cape Town). H.Dip. Librarianship (Univ. Cape Town), Adv.Dip Arts Management (Central TAFE), ex President of Guides of Art Gallery of WA.

Dr Stephen Bennetts, BA Hons (ANU), Grad Dip (Communication) (UTS, Sydney), MA (Sydney University), PhD (UWA), Fellow, Australian Anthropological Society

Co-convenors, Friends of Australian Rock Art, Inc. (WA).