

## **Inquiry into the protection of Aboriginal rock art of the Burrup Peninsula**

I make this submission in my capacity as a heritage expert, having a long term engagement with the rock art of the Dampier Archipelago including Burrup Peninsula. It was late in 1980 that I first came to this area, employed for a two year contract by the Western Australian Museum. Working as one of a number of people engaged to document archaeological features within the development footprint of a liquefied natural gas processing plant being built on Burrup Peninsula at that time. It was through this archaeological project that the true scale and significance of the cultural heritage was realised. Not that this awareness has stopped further destruction, which has continued over the succeeding decades.

In 2003 I returned to live and work in this place, and have been active in the protection and promotion of this world significant cultural heritage since I was elected to President of the Australian Rock art Association (2000-2009). Over the last twelve years I have presented many public talks and written numerous articles, and in 2010 I was awarded a doctorate degree (PhD) for my study into the Dampier Archipelago rock art; establishing a model for the sequence of artistic traditions evident (published in 2015<sup>1</sup>).

It is evident that people have been creating rock art imagery for many tens of millennia, possibly for over 40,000 years in this place now known as the Dampier archipelago. The rock art corpus here represents the longest continual production of rock art in the world; as such it comprises one of the densest and stylistically diverse collection of petroglyphs. This rock art is integrated in to a place imbued with many other cultural features and set within an outstanding nature scape. The Commonwealth Government, as the State Party to the World Heritage Convention, has an international obligation to identify and protect places of Outstanding Universal Value (Tentative List).

I was present on Burrup Peninsula in 1980 when a delegation from the Australian Heritage Commission visited and assessed the place as meriting World Heritage nomination. Some 36 years on, this legal obligation has still to be evidenced. Rock art is included as one of the values in 34 World Heritage properties; the Dampier Archipelago including Burrup Peninsula is a cultural landscape that is demonstrably superior in relation to indigenous cultural heritage including the petroglyphs to any of these World Heritage properties.

My expertise is with the cultural heritage and its scientific and cultural significance; it is not in chemistry or physics. Thus I limit this submission to commenting on just a few of the terms of reference (ToR). Nevertheless, as a resident of the area I can attest to the physical destruction that has already occurred, the increasing threat to the rock art and other cultural heritage features posed by industrial development and the inadequacies of heritage protection to date. I also make some general observations that are pertinent to the matters of this inquiry.

The State government sponsored Burrup Peninsula air pollution studies of air quality monitoring undertaken by CSIRO were conducted from 2004–2005 and 2007–2008. This monitoring ended before the Woodside Pluto LNG plant went into production and was conducted during a time when Burrup Fertilizer was not in full production. It is unlikely that there is an accurate capture of the total pollution load from existing industrial activities (ToR. a, c and d).

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<sup>1</sup> *Murujuga Marni: rock art of the macropod hunters and mollusc harvesters*, Mulvaney 2015.

From the evidence presented by CSIRO, the fumigation experiments were conducted on samples from a single gabbro rock with only a thin weathering rind; not conducted on a range of lithologies known to have rock art (granophyre, dolerite and gabbro, nor on differing surface weathering states)<sup>2</sup>. Again it is problematic to confirm from such an inadequate study exactly what the effects of emissions are having on the rock art or what increased loads may cause (ToR. a, c and d).

It is claimed that “International experts consider the [rock art monitoring] program to be the most thorough and scientific study ever undertaken in Australia of possible impacts on rock art”<sup>3</sup>. The identity of these experts has never been released to the public, or as to the basis of this assertion. It would appear to be extremely unusual for a referee of a scientific report not to comment on the fact that all conclusions in the CSIRO report were made without statistical analyses. Although, I do make the observation that there have been very few such studies in Australia, so it would not be difficult for the Burrup investigation to rank highly regardless of its real worth.

Also promoted by the state government and the Burrup Rock Art Monitoring Management Committee was “that the industrialised areas on the Burrup Peninsula have considerably lower concentrations of air pollutants than cities in Australia”<sup>4</sup>. Considering that at the time of these studies, the Karratha Gas Plant at Withnell Bay and the shipping of iron ore through King Bay, were the only resource industries in operation. Such levels of pollutants being on par with a two-four million population city; surely would raise alarm not complacency over rock art preservation. It may have been an independent committee, however with public statements like these, it raises concern as to whom within the committee may have had sway; the State Development Department perhaps (ToR. c).

All publicly release reports concerning the colour monitoring studies, commenced in 2004, state there has been no measurable change. However, in an internal briefing paper of the Burrup Rock Art Technical Working Group (BRAWG), indicate that in an independent analysis of the data, there is in fact a trend to lightening of colour of the petroglyphs sampled<sup>5</sup>. This reversal of position is reminiscent of when Woodside in March 2003 made a public statement that they had been under reporting for some 20 years by a factor of ten the level of NO<sub>x</sub> emissions from the joint venture Karratha Gas Plant, just prior to the establishment of the government sponsored emissions studies.

The intention of a place being included on Australia’s National Heritage List is in recognition of its values and to safeguard the place for future generations. You can imagine my dismay over continued industrial expansion occurring within Burrup Peninsula, especially this current development by Yara<sup>6</sup>. It is not only the Yara industry that is a potential threat, the state

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<sup>2</sup> *Filed Studies of Rock Art Appearance Final Report: Fumigation & Dust Deposition*, CSIRO 2007, p 17, p. 36 Figure 19.

<sup>3</sup> February 2009 Update- Burrup Rock Art Monitoring Management Committee, [www.dsd.wa.gov.au/burruprockart](http://www.dsd.wa.gov.au/burruprockart).

<sup>4</sup> Ibid. [in an earlier media release the comparison was with the Indonesian city of Jakarta].

<sup>5</sup> Burrup Rock Art Technical Working Group Five year review 11 May 2016.

<sup>6</sup> It is now rumoured that Yara are intending expansion with the proposed development of a solar ammonia plant. This and concern over emissions/safety risk from the existing Yara facilities has resulted in the Murujuga Aboriginal Corporation being directed to relocate their proposed Cultural Centre from the preferred site at Hearson Cove to Conzinc Bay, thus adversely impacting on the cultural heritage of the place and going against the express wishes of the aboriginal custodians of the place.

government has gazetted an additional 21.48 km<sup>2</sup> of Burrup and 9.76 km<sup>2</sup> of adjacent island for industrial growth; a development plan that has remained in place since the 1970s. National Heritage listing of the place has not resulted in a reassessment of the appropriateness of such land use within this ancient and vulnerable cultural landscape.

When I first came to Burrup Peninsula in 1980, frantically working to record the Aboriginal archaeological remains before they were bulldozed to make way for new industry, I thought it would be the last of it. Australia was emerging from our cultural cringe, was becoming proud of our indigenous heritage and understanding the need for its protection and management for future generations. Some 35 years later, the impact of industry is not just the physical footprint destroying cultural heritage, it is the visual, audio and atmospheric pollution that have a much greater reach. Burrup sited industry has grown over the intervening years, unfortunately this is not the same for any heritage management presence or substantive protection (ToR. d).

Value for industry is in the tonnes exported, shareholder dollars, jobs and amount of government tax revenue. However, governments and industry are far less prepared to quantify the economic worth of heritage and environment and their preservation for future generations. In the case of Burrup Peninsula it is this anomaly in values that would appear to be driving state development and decision making. Continuing to facilitate industrialisation of the Burrup while reducing capabilities to manage and protect the environmental and heritage assets. Just recently there have been further staff cuts within the WA Dept. of Aboriginal Affairs, the agency which administers the *Aboriginal Heritage Act 1972* (WA).

Neither the *Aboriginal Heritage Act 1972* (WA) nor the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) afford real protection. There has been an exponential increase in occurrence of graffiti, and unregulated vehicle and people movement across the Burrup. Without any effective control, all are impacting the cultural heritage values of the place.

Time and again I have reported damage to sites and the heritage values, including that of a scrub fire in May 2012 and subsequent cutting of fire-breaks with a machine that bulldozed through a number of sites. Apart from the one case in 2010 of the CEMEX rock quarry<sup>7</sup>, no substantive action has been taken against perpetrators of desecration. Resources (people and money) within the relevant departments are just not sufficient to investigate these incidents, especially while administered from Canberra.

In regard to Yara, one of the conditions of the EPBC 2008/4546 approval concerned the requirement to engage a heritage specialist to survey rock art sites within a two kilometre radius of the project area (condition 8d; 14/9/11). The intention of this condition was to identify the rock art within the area, then to provide advice on the state and any observable changes. This was to occur annually beginning from start of construction. I was aware that no such engagement of a suitably qualified Heritage Monitor or survey had occurred within the original required time period. This breach of the Approval I relayed to the Department in Canberra mid-2012, only later to learn that amendment to the condition had been made to the reporting timeline, not once but twice (18/12/13; 10/2/14). Why; the department's role is to administer the requirements of the act not to facilitate resource company non-compliance.

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<sup>7</sup> *The Sydney Morning Herald* February 13 2010; <http://www.smh.com.au/national/company-fined-over-rock-art-damage-20100212-nxmi.html>

The condition to engage a Heritage Monitor and carry out a survey of the area within a two kilometre radius is still required (now condition 10.c.i; 18/12/13). This is a separate requirement to that of the work by WA Dept. Environment Regulation with the colour contrast and spectral mineralogy monitoring program, despite the title given to this study<sup>8</sup> (condition 10.a, b; 18/12/13). To date Yara have not complied with the requirement, the sampling of just six petroglyphs across the entire area is not an appropriate response to Yara's obligations.

Not only is it a legal requirement, the monitoring of the whole two kilometre radius is essential to gauge impact on the rock art, and should be of sufficiently high scientific standard to be able to measure subtle changes to the rock art. Otherwise, major damage not easily visible to the human eye will occur to the outer patina and the rock art will be destroyed.

Based on Yara's fenced and ground disturbance area, the project footprint is 0.37 km<sup>2</sup>; condition 10(c.i) requires the survey to include an area up to two kilometres radius of the project site. This would encompass approximately 17 km<sup>2</sup>, a conservative estimate of the extent of land characteristically containing rock art is some 10 km<sup>2</sup> that will require investigation by the Heritage Monitor. A number of significant sites are known to occur within this two kilometres radius, Deep Gorge being just one of these.

In view of the documented density of petroglyphs, I estimate that anywhere between 8-15 thousand rock art images exist within the required survey area. It is my experience, that unless you have specific skills in identifying the Burrup rock art, the majority of petroglyphs will not be recognised. It is essential that the DoEE enforce compliance with condition 10(c.i), that Yara immediately engage a professionally qualified and capable person/s to commence the identification and recording of the physical condition of the rock art in the lands surrounding the TAN plant.

The National Heritage listing of the Dampier Archipelago, including Burrup Peninsula recognised the significance of this outstanding and unique cultural landscape. People came to this place some 50,000 years ago while industry arrived just 50 years ago. Back in the 1960s, there was no heritage legislation, nor did Aboriginal people have rights. In the minds of urban white Australia, the Pilbara was a barren and wasted land ripe for development. The twenty-first century has not brought enlightenment; despite awareness of the globally significant cultural heritage of this place, the mindset of WA government agencies in Perth is to continue to promote establishment of industry on Burrup Peninsula simply because back in the 1960s Hamersley Iron came here.

Modern industry can establish nearby on the State Government Gazetted Mainland Industrial Estate; 50,000 years of artistic endeavour and cultural construction is rooted in place. This ancient and world significant cultural landscape is only devalued and at increased risk of destruction by continued industrialisation of Burrup Peninsula. It is obligatory on the Australian Government to progress the entirety of the Dampier Archipelago including Burrup Peninsula to World Heritage nomination.

Dr Ken Mulvaney

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<sup>8</sup> Ramanaidou, E. and Lau, D. 2015. Heritage Monitoring of 6 sites within 2 km of the Yara Pilbara Nitrates Pty Ltd plant site (Western Australia) 2015, CSIRO.