

## **Department of the Environment and Energy Submission into the Inquiry into the protection of Aboriginal rock art of the Burrup Peninsula**

### **Introduction**

The *Environment Protection and Biodiversity Conservation Act 1999* provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places defined in the Act as matters of national environmental significance.

Matters of national environmental significance relating to cultural heritage include National Heritage places, such as the Dampier Archipelago (including Burrup Peninsula) National Heritage place. The Department of the Environment and Energy's role in protecting National Heritage places under the EPBC Act includes:

- listing new National Heritage places; and
- regulating the impacts of development actions that are likely to have a significant impact on National Heritage places.

### **Dampier Archipelago (including Burrup Peninsula) National Heritage Place**

On 3 July 2007, the then Minister for the Environment and Water Resources, the Hon Malcolm Turnbull, listed the Dampier Archipelago (including the Burrup Peninsula) as a National Heritage place under the EPBC Act. The listing recognised the extraordinary extent, diversity and significance of petroglyphs, standing stones and circular stone arrangements of the place. Details of the heritage values of the place, and reasons why the place was listed are available on the Department's website at <http://www.environment.gov.au/heritage/places/national/dampier-archipelago>.

At the time of listing, EPBC Act Conservation Agreements were signed by the Minister with Woodside Energy Ltd and with Hamersley Iron Pty Ltd and Dampier Salt Ltd (Rio Tinto). Under the Conservation Agreements these companies provide funding for research, management and monitoring of the National Heritage values of the place. The Murujuga Rangers, governed by the Murujuga Aboriginal Corporation, are supported by the Conservation Agreements to manage the National Heritage values in cooperation with the Australian and Western Australian governments.

The Department is currently in discussions with the companies regarding future funding of conservation and management programs in the National Heritage Place.

The majority of the Dampier Archipelago (including Burrup Peninsula) National Heritage Place is within Murujuga National Park and the Dampier Archipelago island reserves, managed by the Western Australian Government Department of Parks and Wildlife.

The EPBC Act exempts an action from the assessment and approval provisions of the Act where it can be demonstrated that the action commenced prior to 16 July 2000 (being the commencement date of the EPBC Act) and the action was either legally authorised prior to that date, or is a lawful continuation of a use of land, the sea or the sea bed that commenced

prior to the date. Much of the industrial development on the Burrup Peninsula is subject to the exemption provisions of the EPBC.

### **EPBC Assessment and Approval of Yara Pilbara Nitrates facilities**

There were two actions referred to the Department under the EPBC Act by Yara Pilbara Nitrates Pty Ltd (previously Burrup Nitrates Pty Ltd). The liquid ammonia complex (EPBC 2001/199) was referred on 2 March 2001, and on 2 April 2001 the then Minister for the Environment and Heritage, the Hon Robert Hill, determined the action was not a controlled action. This decision precedes the listing of the Dampier Archipelago (including Burrup Peninsula) National Heritage place.

The technical ammonium nitrate production facility was referred on 21 October 2008 (EPBC 2008/4546), and was deemed a controlled action on 20 November 2008 for likely impacts to National Heritage places, listed threatened species and listed migratory species. An assessment of the proposal was undertaken through the bilateral assessment agreement by the Western Australian Environment Protection Authority with an eight week public review period. The assessment reports are publicly available on the Authority's website at: <http://www.epa.wa.gov.au/proposals/technical-ammonium-nitrate-production-facility-burrup-peninsula>.

The projected level of fugitive gas and nitric acid leaks from the nitrate facility and likely impacts on the Aboriginal rock art, human health and the environment was included in the assessment. Consideration was given to sources of atmospheric emissions from the proposed technical ammonium nitrate production facility including nitrogen oxides, nitrous oxide, carbon monoxide, ammonia, methane, ammonium nitrate dust, sulphur dioxide, carbon dioxide, total greenhouse gas emissions, greenhouse gas intensity, as well as wastewater and solid waste.

The Western Australian Government approved the nitrate facility on 7 July 2011. A delegate for the Commonwealth Minister approved the action under the EPBC Act on 14 September 2011 subject to approval conditions. The conditions were varied on 18 December 2013 and 10 February 2014, to tighten monitoring requirements, and to require management responses to any adverse impacts on rock art.

The current approval conditions are attached to this submission. Most of the approval conditions for the technical ammonium nitrate production facility relate to monitoring and mitigating the impacts of the action to the Dampier Archipelago (including Burrup Peninsula) National Heritage place.

### **Overview of relevant EPBC Act Approval Conditions (EPBC 2008/4546)**

The EPBC Act approval includes 15 conditions, of which 7 are standard administrative conditions. Conditions relating to protection of the *Dampier Archipelago (including Burrup Peninsula)* National Heritage place are discussed below.

Condition 7 requires the submission and implementation of:

- a) A Construction Environment Management Plan. This was submitted two months before construction started. This plan relates to Air Quality and Dust, Water Quality,

Erosion Control and Storm Water, Waste, Traffic and Blasting (if required). The CEMP was approved by a delegate of the Minister on 22 November 2012

- b) An Operational Environment Management Plan. This was submitted two months before construction started. This plan relates to erosion control and storm water, water quality, air quality and dust, waste, traffic and blasting. The Department is considering this plan.
- c) An Aboriginal Heritage Management Plan (approved 24 October 2012), Hazardous Materials Management Plan (approved 22 November 2012), and Emergency Response Management Plan (approved 22 November 2012) covering both the construction and operation stages.

The approved management plans are published on the company's website.

Condition 8 requires avoidance measures relating to the rock art sites, including fencing and signage, and personnel access to the National Heritage place. The Department conducted an inspection of the nitrate facility on 28 September 2016, and verified that the management measures required under condition 8 were being implemented. The Department will continue to assess ongoing compliance with this condition as part of its routine compliance monitoring program, and intends to meet with the company in February (see below).

Condition 9 requires air quality monitoring to be undertaken at three sites used in the Burrup Rock Art Monitoring Program. Data that has been monitored includes Ammonia (NH<sub>3</sub>), Nitrogen Oxides (NO<sub>x</sub>), Sulphur Oxides (SO<sub>x</sub>) and total suspended particulates including dust. The baseline data established from the air quality monitoring is to be reported to the Department by 21 February 2017. Annual air quality monitoring at the rock art sites must continue for at least five years after commencement of operations.

Condition 10 requires spectral mineralogy monitoring of rock art sites adjacent to the action in a manner that is consistent with the Burrup Rock Art Monitoring Program. The rock art monitoring must continue for at least five years after commencement of operations and until the approval holder has demonstrated that operation of the facility is not having unacceptable impacts on the rock art sites. Condition 10 also requires the approval holder to provide reporting results to the Department and publish them on the internet.

### **Burrup Rock Art Monitoring Program**

Baseload air pollution data from existing industrial activities and port zone on the Burrup Peninsula in Western Australia and its existing impacts on Aboriginal rock art have been monitored since 2004 under the Burrup Rock Art Monitoring Program.

In August 2002 the Western Australian Government established the independent Burrup Rock Art Monitoring Management Committee which was replaced by the Burrup Rock Art Technical Working Group in 2010. The working group oversees the ongoing studies that are being conducted to establish whether industrial emissions could affect the petroglyphs.

Under the rock art monitoring program, air quality monitoring was undertaken by the Commonwealth Scientific and Industrial Research Organisation in 2004–2005 and

2007–2008. Regular independent monitoring of colour change and spectral mineralogy of the Burrup rock art has also been undertaken by CSIRO since 2004. CSIRO prepares annual reports that compare the results of each year's monitoring program with results since the study's inception in 2004. The working group reviews the annual research reports.

Air pollution and rock art monitoring results from the Burrup Rock Art Monitoring Program are published by the Western Australian Department of Environment Regulation at: <https://www.der.wa.gov.au/our-work/programs/36-burrup-rock-art-monitoring-program>.

Included at the website above is a CSIRO published review of the rock art monitoring from 2004-2014 which was published in October 2015. The report concluded that the industry at Burrup peninsula was not having a statistically significant impact on the rock art in the Burrup Peninsula.

### **Current status of Nitrate Facility Project**

The construction stage is now complete, and the plant is in the commissioning stage. Operations are yet to commence.

Under condition 7, operations cannot commence unless an Operational Environmental Management Plan is approved by the Minister. The Department is currently reviewing a draft of this management plan. The plan will ensure that the Aboriginal rock art in the Dampier Archipelago (including Burrup Peninsula) National Heritage place is protected.

Measures to manage impacts to the Burrup rock art from an accidental explosion are included in the Emergency Response Management Plan approved under the EPBC Act in 2012. An updated version of that plan has been submitted to the Department by the approval holder. The Department is currently reviewing this plan.

### **Compliance monitoring**

The Department's compliance approach under the EPBC Act is described in the *Compliance and Enforcement Policy: Environment Protection and Biodiversity Conservation Act 1999* which is published on the Department's website. Compliance monitoring activities for EPBC Act approvals is outlined in the annual *Compliance Monitoring Program*. These documents are available at the Department's website at: <http://www.environment.gov.au/epbc/publications>

In 2008 the Department became aware that the proposed action had not been referred under the EPBC Act. After the Department contacted Yara Pilbara Nitrates, the company voluntarily referred the action.

There have been instances of potential non-compliance relating to the Yara Pilbara Nitrates (nitrate) facility:

- a) Notification of commencement of construction was not made as required by condition 1. Notification was received two months late. As there were no impacts to matters of national environmental significance of the late notification, the Department recorded the matter.

- b) The 2015 annual compliance report (condition 3) and rock art monitoring report (condition 10) were produced late (one month late). Although there were no impacts to matters of national environmental significance as a result of late production of these reports, the Department issued a formal caution to the company as this was the second breach of EPBC approval conditions.
- c) The company self-reported late production of the 2016 annual compliance report (condition 3), and difficulties in producing the rock art monitoring report (condition 10). The latter report could not be produced on time due to delays with the Western Australian Government's review of the state program part funded through the project.

On 28 September 2016, the Department undertook a routine site inspection of the nitrate facility. The inspection identified the need to revise the Operations Management Plan. The Department is also considering how to improve the capacity of the company to comply with approval requirements in relation to condition 10 (see point c above), and will be meeting with the company on 8 February 2017 to further progress the matters identified above. The Department continues to engage on a regular basis with the company as a part of its compliance monitoring program.

The Department is discussing opportunities for on-going funding for the management and protection of the National Heritage values of the Dampier Archipelago with companies operating on the Burrup Peninsula. The Department plans to include Yara Pilbara Nitrates in these discussions.

**Attachment:** Current EPBC Act approval conditions for the Yara Pilbara Nitrates ammonium nitrate production facility (EPBC 2008/4546)