



Environmental Protection Act 1986

Hon Stephen Dawson MLC
Minister for Environment

MINISTER'S APPEAL DETERMINATION

APPEAL AGAINST CONDITIONS OF WORKS APPROVAL W6090/2017/1: KWINANA MERCURY TREATMENT PLANT, DONALDSON ROAD, KWINANA BEACH

Purpose of this document

This document sets out the Minister's decision on an appeal lodged under section 102(3) of the *Environmental Protection Act 1986* in objection to the conditions of a works approval. This document is produced by the Office of the Appeals Convenor for the Minister but is not the Appeals Convenor's own report, which can be downloaded from the Appeals Convenor's website at www.appealsconvenor.wa.gov.au.

Appellant:	Contract Resources Pty Ltd
Works Approval Holder:	BMT Australia Pty Ltd
Premises description:	Construction of mercury treatment plant
Minister's Decision:	The Minister dismissed the appeal
Date of Decision:	30 October 2018

REASONS FOR MINISTER'S DECISION

Pursuant to section 106(1)(b) of the *Environmental Protection Act 1986* (the Act), the Minister obtained a report from the Department of Water and Environmental Regulation (DWER) on the matters raised in the appeal. The Minister was advised that the Office of the Appeals Convenor met with the appellant and discussed DWER's response to the appeal, and had also discussed the issues raised in the appeal with the works approval holder.

After considering the appeal, the Appeals Convenor reported to the Minister under section 109 of the Act. This report sets out the background and other matters relevant to the appeal.

In summary, the Minister understood the appeal raised a number of concerns regarding the conditions of the works approval, including in relation to potential spillage or leakage to ground; stack emissions; fugitive emissions from buildings; cumulative mercury emissions; risks associated with cinnabar production; and fire outbreak. The Minister noted that the appellant raised several other matters through the appeal that are not related to the conditions of the works approval and were therefore beyond the scope of the appeal.

In relation to the appellant's concerns that the works approval should specify performance standards for impermeability of the hardstand floor, DWER advised that outcome-based requirements for flooring applied through Condition 2 (Infrastructure and equipment) were appropriate and adequate to manage risks associated with mercury spillage. The Minister noted that the relevant requirements specified in Condition 2 require that the process building and warehouse will be 'designed and constructed to include a sealed hardstand floor which is impermeable to mercury and hydrocarbons'.

The Minister understood that DWER uses outcome-based conditions rather than more prescriptive conditions provided the same goal can be achieved, and that this approach allows the works approval holder to choose appropriate design solutions while also requiring evidence through compliance documentation under Condition 6.

With regards to the appellant's concerns as to the effectiveness of the activated carbon filters specified in the works approval, DWER advised that outcome-based stack emission concentrations have been specified which define filter performance requirements, and no changes to the conditions were recommended. The Minister understood that this is consistent with the Basel Convention, *Technical guidelines on the environmentally sound management of wastes consisting of, containing or contaminated with mercury or mercury compounds* adopted by the United Nations in 2015.

The appellant raised concerns about fugitive emissions of mercury escaping the process and warehouse buildings when doors are open. DWER advised that its assessment of the works approval application identified the need for air extraction and the maintenance of negative pressure in the process building but not the warehouse, as specified in Condition 2, and that this outcome-based condition does not require the specification of additional engineering controls.

In relation to concerns about cumulative mercury emissions, the Minister noted the works approval holder submitted an air modelling assessment as part of the works approval application, which included predictions for ground level concentrations of emissions from the premises in isolation and also the cumulative impacts on existing air quality in the Kwinana area. The Minister understood that modelled ground level concentrations of mercury were below the relevant ambient air quality criteria for the protection of human health. Noting this, DWER advised that there was not an elevated risk to the public from mercury emissions to air from the premises and no changes to the conditions were recommended.

The Minister was advised that the conditions are appropriate and sufficient in the context of the works approval to ensure that the proposed operation with its infrastructure will include adequate emission controls, and that an assessment conducted as part of a licence application may make further determinations about appropriate licence conditions to control air emissions. In this regard, the Minister noted that the licensing process under Part V of the Act provides for public comment on applications for licences, and an opportunity for third party appeals in respect to the conditions applied to any licence where issued.

In responding to the appellant's objection about the production of cinnabar at the premises, DWER advised that infrastructure and equipment requirements set under Condition 2 provide appropriate outcome-based design and construction requirements for the reactor to safely control the process.

In relation to the risks associated with a potential fire outbreak, the Minister noted that DWER's assessment of the works approval application identified the need for an Emergency Response Plan, which includes a risk assessment of hazardous areas and all relevant design and storage details that support the mitigation of risk events. These requirements are specified under Condition 5.

After considering all of the information presented with respect to this appeal, the Minister was of the view that the conditions applied to the works approval are appropriate, and the Minister dismissed the appeal accordingly.

Note: this decision is published pursuant to the terms of section 110 of the *Environmental Protection Act 1986* and regulation 8 of the *Environmental Protection Regulations 1987*.

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