



Environmental Protection Act 1986

**Hon Stephen Dawson MLC
Minister for Environment**

MINISTER'S APPEAL DETERMINATION

APPEAL AGAINST AMENDMENT OF LICENCE L5099/1974/14: PORT OF ESPERANCE THE ESPLANADE AND BOWER AVENUE, ESPERANCE

Purpose of this document

This document sets out the Minister's decision on an appeal lodged under section 102(2) of the *Environmental Protection Act 1986* in objection to the amendment of a licence. 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:	Ms Michelle Crisp
Licence Holder:	Southern Ports Authority
Proposal description:	The amendments made to the licence authorise the port operator to ship (through bulk loading) up to 1.1 million tonnes per annum of metal concentrates, including 800,000 tonnes per annum of nickel sulfide concentrate and 300,000 tonnes per annum of copper sulfide concentrate using a rotating tipping frame (Rotabox) open materials loading system at Berth 2.
Minister's Decision:	The Minister allowed in part the appeal
Date of Decision:	7 June 2019

REASONS FOR MINISTER'S DECISION

Prior to June 2012, nickel sulfide was exported from the port using bulk handling. Since that time, it has been exported in sealed containers. At the time bulk handling of nickel was last authorised under an *Environmental Protection Act 1986* licence, the approved throughput was 200,000 tonnes per annum. The current amendment therefore represents a significant change to the way nickel sulfide is handled at the premises since 2012, and is of a significantly higher volume than when bulk handling of the material was last approved.

Risks to public health and the environment from activities at, and associated with, the Port of Esperance have been the subject of significant scrutiny following the lead contamination incidents that the appellant was instrumental in bringing to the public's attention a decade ago. The Environment Minister is committed to ensuring the failings identified in the regulatory oversight of the facility are not revisited.

In summary, the appellant's concerns with the amended licence relate to the health risks posed by nickel and silica dioxide (silica), and submitted that the controls applied to the licence are insufficient to protect the community. The appellant particularly sought for nickel concentrate to continue to be handled in a fully containerised system and additional controls be applied to manage the health risks associated with bulk handling of nickel concentrate.

As part of the Department of Water and Environmental Regulation's (DWER) assessment of the risks posed by the recommencement of bulk export of nickel sulfide at the Port of Esperance, it considered the results of air quality monitoring conducted during trial shipments between June 2017 and March 2018 and sought advice from the Department of Health (DoH). On the basis of the results and advice from the DoH, DWER considered the controls placed on the licence were sufficient to adequately mitigate emissions and ambient levels of nickel should not pose a health risk to the Esperance community.

DWER additionally noted that the type of nickel approved to be handled at the premises is primarily pentlandite, a type of nickel sulfide that has no statistical evidence of causing lung cancer in humans. DWER noted, however, that nickel subsulfide has been tested on animals, and tumours were consistently produced.

As a result of its analysis, DWER considered it appropriate to apply conditions to the licence requiring the licence holder to ensure annual representative samples of nickel exported through the port are tested to ensure they do not contain nickel subsulfides.

However, the Minister considered there is merit in the requirement for annual sampling to be extended to require the licence holder to confirm the percentage of nickel disulfide (vaesite) in exported nickel. It is the Minister's expectation that as part of the DWER's review of annual monitoring data that a comparison is undertaken against the range set out in the supporting decision report, namely 1-2% of total volume. Should the results be higher than those in the decision report, the Minister expects that DWER will review its risk assessment.

Aside from the above amendment, the Minister considered the assessment undertaken by DWER, and the conditions applied to the amended licence in respect to nickel, are appropriate to protect human health and the environment. The Minister noted in this regard that the method of handling is significantly more enclosed than was the case when bulk loading was previously approved at the premises, and requirements relating to moisture content during loading activities will, on the advice of DWER, ensure that dust levels are acceptable.

In relation to the application of air quality monitoring and emission limits, the Minister considered the information available, and agreed with the Appeals Convenor that the regime put in place by DWER is appropriate, and consistent with advice from the Department of Health. The Minister acknowledged, however, that the amendments have authorised bulk handling of material that has not been bulk handled for many years, and therefore expects DWER to maintain close oversight of the premises, and act quickly to investigate exceedances of the 24-hour limits and the annual World Health Organization guideline levels endorsed by the Department of Health, should they occur.

In relation to respirable silica, and for the reasons given above in respect to vaesite, the Minister was of the view that the licence should be amended to require annual sampling of the nickel concentrate. As noted for vaesite, any discrepancy between the results of the annual sampling and the results relied on as part of the risk assessment should be expeditiously investigated by DWER.

On the issue the appellant raised about the change of air quality monitoring from total suspended particles (TSP) to PM₁₀, DWER has advised that the 24-hour limit (0.14 µg/m³) was originally determined against PM₁₀ by a toxicologist in the Department of Health, and as such, was amended for consistency with that advice.

In regard to other dust emission controls, DWER advised the Minister that it reviewed monitoring data from the trial shipments and considered the emissions were adequately managed by the controls which include moisture limits, operating misting sprays during loading, and monitoring and reporting for nickel concentrations.

It follows from the above, that the Minister has allowed the appeal to the extent that the licence is amended to require annual sampling of a representative sample of nickel concentrate for vaesite and silica content. The Minister otherwise considered the conditions applied to the licence are appropriate, and dismissed these elements of the appeal consistently with the recommendations of the Appeals Convenor in her report.

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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