

# EXECUTIVE SUMMARY, FINDINGS AND RECOMMENDATIONS

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## EXECUTIVE SUMMARY

1 Between 25 May and 1 July 2010, seven petitions were tabled in the Legislative Council requesting that the Legislative Council take immediate action to stop dust and odour emissions from Cockburn Cement Limited's (CCL) operations at Russell Road, Munster (**Munster Plant**). Upon tabling, the petitions stood referred to the Standing Committee on Environment and Public Affairs (**Committee**) for inquiry and reporting. After making preliminary inquiries, the Committee resolved, on 15 September 2010, to inquire formally into the Munster Plant, on the following terms:

*The Committee is to inquire into and report on:*

1. *health, environmental, dust, odour, property and other concerns arising out of the operation of the Cockburn Cement Ltd plant, Munster;*
2. *the adequacy of action to address the above concerns;*
3. *the process of issuing and amending licences; and*
4. *any other relevant matter.*

2 Chapters 1 and 2 of this Report provide the context for the inquiry.

3 Chapter 3 contains a discussion of the nature, causes and impacts of the different types of emissions emanating from the Munster Plant. The most common complaints which were made in submissions to the Committee related to dust and odour emissions and the alleged effect of these emissions on the health of surrounding residents and their properties. The Committee has made findings and recommendations relating to these issues (see Findings 1 and 3 and Recommendations 1 and 2 below).

4 In Chapter 4, the Committee discusses some of the actions aimed at addressing the concerns with the Munster Plant. CCL's licence, which is issued and enforced by the Department of Environment and Conservation, emerged as the most significant means of addressing the concerns. Accordingly, two of the Committee's findings and the bulk of the Committee's recommendations relate to CCL's licence (see Findings 4 and 5 and Recommendations 1, 3 to 21 and 23 below). Recommendation 16 is particularly important.

5 The following matters are also discussed in Chapter 4 of this Report:

- The Kwinana Air Quality Buffer and planning issues associated with the Munster Plant (see Findings 6 and 7 and Recommendation 22 below).
  - CCL’s complaints handling processes and community engagement (see Finding 2 below).
  - The role of other governmental bodies, such as the Department of Health.
- 6 Chapter 5 of this Report deals with other suggested actions to address the concerns about the Munster Plant. Recommendation 23 arose out of that discussion.

**FINDINGS AND RECOMMENDATIONS**

- 7 Findings and Recommendations are grouped as they appear in the text at the page number indicated:

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**Recommendation 1: The Committee recommends that the Government amend the licence relating to Cockburn Cement Limited’s Munster plant to require the plant to be staffed at all times to receive, investigate and respond to residents’ complaints in a timely manner.**

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**Finding 1: The Committee finds that the dust emitted from Cockburn Cement Limited’s Munster plant is a contributing, if not the primary, cause of amenity-related dust complaints in the surrounding communities.**

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**Finding 2: The Committee finds that Cockburn Cement Limited’s attitude towards its role and responsibility in the Munster and surrounding communities has, at times, been complacent.**

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**Finding 3: The Committee finds that the dust emitted from Cockburn Cement Limited’s Munster plant is a contributing, if not the primary, cause of property-related dust complaints in the surrounding communities.**

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**Recommendation 2: The Committee recommends that the Government commission suitably qualified experts to conduct a comprehensive, rigorous and peer-reviewed health study of the residents living in the vicinity of Cockburn Cement Limited’s Munster plant. One of the aims of this study should be to identify whether emissions from the plant have caused any of the substantiated health complaints.**

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**Recommendation 3:** The Committee recommends that the Government amend the licence relating to Cockburn Cement Limited's Munster plant to require the stack emission levels of hydrogen fluoride, hydrogen chloride and mercury to be manually monitored on a quarterly basis.

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**Recommendation 4:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether, pursuant to condition 52 of the licence relating to Cockburn Cement Limited's Munster plant as at 12 September 2011, the company is displaying, on its website, the real time Continuous Emission Monitoring System data for total suspended particulate stack emissions levels at every operative kiln at the plant. If not, the Minister should explain why, and provide details of any enforcement action which will be undertaken as a result.

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**Finding 4:** The Committee finds that, when there is a breach of licence conditions due to technical difficulties, the Department of Environment and Conservation is prepared to exercise some discretion with respect to enforcing the licence.

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**Recommendation 5:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether, pursuant to condition 42 of the licence relating to Cockburn Cement Limited's Munster plant as at 12 September 2011, the Continuous Emission Monitoring System is operational for measuring:

- (a) the stack emission levels of total suspended particulate matter, nitrogen oxides and sulphur dioxide; and
- (b) the volumetric flow rates,

on Kilns 3, 4, 5 and 6 at the plant. If not, the Minister should explain why, and provide details of any enforcement action which will be undertaken as a result.

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**Recommendation 6:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether the licence relating to Cockburn Cement Limited's Munster plant requires the company to measure and record oxygen levels when stack emission levels of other parameters are measured. If not, the Minister should explain why.

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**Recommendation 7:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether, pursuant to condition 68 and Table 10, Improvement Requirement 5, of the licence relating to Cockburn Cement Limited's Munster plant as at 12 September 2011, the company has installed and is operating the additional ambient air quality monitors, and if so, the particulars of these monitors. If the additional monitors have not been installed or are not operational, the Minister should explain why, and provide details of any enforcement action which will be undertaken as a result.

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**Recommendation 8:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether, pursuant to condition 74 of the licence relating to Cockburn Cement Limited's Munster plant as at 12 September 2011, the company submitted the Emission Modelling Audit Report. If the report was submitted, the Minister should summarise the findings made in the report. If the report was not submitted, the Minister should explain why, and provide details of any enforcement action which will be undertaken as a result.

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**Recommendation 9:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether, pursuant to condition 75 of the licence relating to Cockburn Cement Limited's Munster plant as at 12 September 2011, the company submitted the Monitoring and Reporting Audit Report. If the report was submitted, the Minister should summarise the findings made in the report. If the report was not submitted, the Minister should explain why and provide details of any enforcement action which will be undertaken as a result.

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**Recommendation 10:** The Committee recommends that the Government commission an independent expert to investigate the setting of stack emission level targets and limits for all of the parameters which Cockburn Cement Limited is required to monitor at its Munster plant pursuant to condition 38 and Table 6 of the licence relating to the plant as at 12 September 2011, except for total suspended particulates.

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**Recommendation 11:** The Committee recommends that the Minister for Environment advise the Legislative Council on the reasons why the licence relating to Cockburn Cement Limited's Munster plant should or should not use the phrase 'total particulate matter' instead of 'total suspended particulates' with respect to stack emissions levels.

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**Recommendation 12:** The Committee recommends that the Government amend the licence relating to Cockburn Cement Limited's Munster plant as at 12 September 2011 by deleting condition 11(b).

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**Recommendation 13:** The Committee recommends that the Minister for Environment advise the Legislative Council why there are no apparent requirements in the licence relating to Cockburn Cement Limited's Munster plant for the company to report on how the surrounding community will be, or is likely to be, impacted by:

- (a) electrostatic precipitator failures (or 'ESP trips'); and
- (b) specified exceedences of stack emission targets and limits for total suspended particulates caused by other means (or 'other high dust emission events').

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**Recommendation 14:** The Committee recommends that the Government amend the licence relating to Cockburn Cement Limited's Munster plant by including the company's compliance with condition 22 ("*Sulfur Dioxide Emission Limits - Plant (Environmental Protection (Kwinana) (Atmospheric Waste) Policy 1992*") as a matter to be covered in the monthly compliance reports required under condition 21A.

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**Recommendation 15:** The Committee recommends that the Government amend the licence relating to Cockburn Cement Limited's Munster plant to clearly impose a 30 mg/m<sup>3</sup> limit on total suspended particulate emissions at the stack discharge point of Kiln 6.

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**Recommendation 16:** The Committee recommends that the Government amend the licence relating to Cockburn Cement Limited's Munster plant to impose a 30 mg/m<sup>3</sup> limit on total suspended particulate emissions at the stack discharge point of every kiln while it is being used to produce lime.

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**Recommendation 17:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether:

- (a) Environmental Improvement Requirement 8 (the lodgment of a report detailing the results of the full calibration of the Continuous Emission Monitoring System on each kiln); and
- (b) Environmental Improvement Requirement 11 (the lodgment of a report investigating the benefits and possible methods for preventing the discharge of shell-sand transport water to land),

in condition 68 and Table 10 of the licence relating to Cockburn Cement Limited's Munster plant as at 12 September 2011 have been satisfied. If they have not been satisfied, the Minister should explain why and provide details of any enforcement action which will be undertaken as a result.

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**Recommendation 18:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether, pursuant to condition 68A of the licence relating to Cockburn Cement Limited's Munster plant as at 12 September 2011, the company implemented the outcomes of the reports required by the Environmental Improvement Requirements in condition 68 and Table 10. If the outcomes were implemented, the Minister should provide a summary of what has been done. If any of the outcomes were not implemented, the Minister should explain why and provide details of any enforcement action which will be undertaken as a result.

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**Recommendation 19:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether Cockburn Cement Limited has submitted a Process Trip Audit Report in compliance with condition 71 of the licence relating to the company's Munster plant. If the report was submitted, the Minister should summarise the findings made in the report. If the report was not submitted, the Minister should explain why and provide details of any enforcement action which will be undertaken as a result.

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**Recommendation 20:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether Cockburn Cement Limited has submitted the reports relating to shell-sand transport and process water in compliance with condition 68 and Table 10, Environmental Improvement Requirement 11, and condition 72 of the licence relating to the company's Munster plant. If the reports were submitted, the Minister should summarise the findings made in the reports. If the reports were not submitted, the Minister should explain why and provide details of any enforcement action which will be undertaken as a result.

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**Recommendation 21:** The Committee recommends that the Minister for Environment advise the Legislative Council on whether Cockburn Cement Limited has submitted a Landfill Impact Audit Report in compliance with condition 73 of the licence relating to the company's Munster plant. If the report was submitted, the Minister should summarise the findings made in the report. If the report was not submitted, the Minister should explain why and provide details of any enforcement action which will be undertaken as a result.

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**Finding 5:** The Committee finds that the Department of Environment and Conservation and its predecessors have not adequately:

- ensured Cockburn Cement Limited's compliance with the licence relating to the company's Munster plant; and
- enforced the licence.

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**Finding 6:** The Committee finds that the Kwinana Air Quality Buffer has not been well implemented.

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**Finding 7:** The Committee finds that the relevant decision-makers and governmental bodies have failed to appreciate and address the complex planning issues associated with Cockburn Cement Limited's Munster plant and the surrounding areas.

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**Recommendation 22:** The Committee recommends that the Government establish a health impact assessment process for planning proposals and planning schemes similar to the process for environmental impact assessment.

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**Recommendation 23:** The Committee recommends that the Government amend the licence relating to Cockburn Cement Limited's Munster plant to require the company to clean, at its own expense, any excessive amounts of dust emitted from the plant and deposited onto surrounding properties.