

**RESPONSE OF THE WESTERN AUSTRALIAN GOVERNMENT  
TO THE  
WESTERN AUSTRALIAN LEGISLATIVE COUNCIL  
STANDING COMMITTEE ON  
ENVIRONMENT AND PUBLIC AFFAIRS  
INQUIRY INTO  
COCKBURN CEMENT LIMITED, MUNSTER**

February 2012

Finding Number	Finding	Government Response
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.	Dust emissions most likely to cause dust complaints from the community are from plant upsets and malfunctions, and not from operations conducted in accordance with Cockburn Cement Limited's (CCL) licence conditions set by the Department of Environment and Conservation (DEC).
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.	Noted.
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.	See the response to Finding 1.
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.	DEC considers all of the facts in the case of a breach of licence conditions before determining appropriate enforcement action in accordance with its <i>Enforcement and Prosecution Policy 2008</i> . The policy is a public document published on DEC's website at <a href="http://www.dec.wa.gov.au">www.dec.wa.gov.au</a> .
5	<p>The Committee finds that the Department of Environment and Conservation and its predecessors have not adequately:</p> <ul style="list-style-type: none"> <li>ensured Cockburn Cement Limited's compliance with the licence relating to the company's Munster plant; and</li> <li>enforced the licence.</li> </ul>	<p>Improvements to DEC's enforcement and compliance capability have been made to enhance capacity in this area. However, DEC continues to face challenges in recruiting and retaining skilled technical staff in the current employment market.</p> <p>Dust emissions most likely to cause dust complaints from the community are from plant upsets and malfunctions, and not from operations conducted in accordance with licence conditions.</p> <p>DEC currently has one case before the Courts against CCL and is investigating a further four potential breaches of licence conditions.</p>

Finding Number	Finding	Government Response
6	The Committee finds that the Kwinana Air Quality Buffer has not been well implemented.	<p>The Department of Planning (DoP) considers that, although there have been challenges associated with implementing the Kwinana Air Quality Buffer, the approach to implementation has been well considered. The Metropolitan Region Scheme (MRS) has been an important instrument used to protect the integrity of the buffer and, although over the years amendments have been made to the MRS to facilitate urban and other development, the approach followed has been guided by the principle of restricting urban development to outside the 1500 metre buffer.</p> <p>Changes in industry and emission types, as well as land use constraints and pressures, resulted in a review of the buffer. The review recommended modifications to the existing buffer in several places, but these did not include the area around CCL, meaning that the existing buffer in this area was considered to be appropriate.</p>
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.	<p>CCL's plant is a significant industrial undertaking and, as one of the Government agencies responsible for ensuring that the industry complies with relevant policies and legislation, the DoP recognises its responsibilities and role in ensuring that planning issues are properly addressed to ensure negative impacts on surrounding communities are minimised.</p> <p>Several planning instruments have been used to complement the Kwinana Air Quality Buffer, and through the application of the Metropolitan Region Scheme, the City of Cockburn's Town Planning Scheme and Rural Sub-Division Policy, and the <i>Hope Valley-Wattleup Redevelopment Act 2000</i>, it has been possible to manage the interface between CCL and the surrounding land uses which are largely of a non-industrial nature.</p>

Recommendation Number	Recommendation	Government Response
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.	<p>Under the <i>Environmental Protection Act 1986</i>, DEC can only set conditions related to processes and environmental outcomes.</p> <p>In relation to complaints concerning the impact of emissions, CCL's licence condition No. 5 requires it to respond within 72 hours of receipt of a complaint and, within 10 days, provide feedback on investigation outcomes and action taken.</p>
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.	The Department of Health (DoH) has undertaken two detailed investigations of potential health impacts of CCL's emissions on the surrounding community. The DoH will not be undertaking another health study. However, the DoH has in place a process whereby residents experiencing health effects can be assessed by a public health physician in consultation with their medical practitioner. The DoH and the City of Cockburn have also recommended dust sampling.
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.	<p>Licence condition No. 38 (Table 6) currently requires six-monthly monitoring of hydrogen fluoride, hydrogen chloride and mercury by CCL.</p> <p>DEC has considered this recommendation and advises that historical stack sampling results, which have been modelled to ambient ground level concentrations, showed that these three compounds had a maximum ground level concentration of less than 1% of the relevant ambient air quality standard.</p> <p>Given these very low levels, and consistent with DEC's Policy Statement – Limits and Targets for Prescribed Premises, the current requirement for six-monthly sampling is more frequent than is required under the policy.</p> <p>On this basis, the recommendation is not supported.</p>

Recommendation Number	Recommendation	Government Response
4	<p>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.</p>	<p>CCL has met this condition by displaying on its website real-time (with a short delay) continuous emissions monitoring system data for total suspended particulate emission levels for each stack. These data can be located at:  <a href="http://www.cockburncementcommunity.com.au/environment/operating-licence/cems-data/">www.cockburncementcommunity.com.au/environment/operating-licence/cems-data/</a>.</p>
5	<p>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:</p> <ul style="list-style-type: none"> <li>(a) the stack emission levels of total suspended particulate matter, nitrogen oxides and sulphur dioxide; and</li> <li>(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.</li> </ul>	<p>The continuous emissions monitoring system was operational as at 30 April 2011, as required by CCL's licence conditions.</p>

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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.	<p>The licence conditions already require that oxygen levels are measured.</p> <p>Condition 39(d) specifically requires that CCL measure and record oxygen concentrations during stack testing, using United States Environmental Protection Authority Method 3, and report this as a mass percentage of dry stack gas. Oxygen levels are monitored as required by DEC's Continuous Emission Monitoring System Code.</p>
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.	<p>The three additional monitors were installed and operational by 30 June 2011 as required by CCL's licence conditions.</p> <p>These are Osiris type continuous samplers, which measure total suspended particles, PM<sub>10</sub> and PM<sub>2.5</sub> size particles.</p> <p>These monitors are located on:</p> <ul style="list-style-type: none"> <li>• Water Corporation land adjacent to the southern boundary of the Meve Estate;</li> <li>• the roof of the South Coogee primary school, north of the CCL site; and</li> <li>• the western boundary of CCL's site, near to the Challenger TAFE site.</li> </ul>
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.	<p>The Emissions Modelling Audit Report was submitted to DEC by the required date of 12 December 2011.</p> <p>A copy of the "Licence Condition 74 Review" summary findings of the report is at Appendix 1. The report, together with its findings and recommendations, is currently being considered by DEC.</p>

Recommendation Number	Recommendation	Government Response
9	<p>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.</p>	<p>The Monitoring and Reporting Audit Report was submitted to DEC by the required date of 12 December 2011.</p> <p>A copy of the recommendations of the consultant is at Appendix 2. The report, together with its findings and recommendations, is currently being considered by DEC.</p>
10	<p>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.</p>	<p>In accordance with DEC's policy on limits and targets for prescribed premises, targets and limits are only set for emissions which are significant for human or environmental health. CCL's licence, targets and limits have been set for all the kilns for total suspended particulates (TSP) at 100 milligrams per cubic metre and 150 milligrams per cubic metre respectively.</p> <p>Under its licence conditions, CCL is required to operate Kiln 6 by 29 February 2012 with pollution control equipment designed to achieve an emission of TSP of 30 milligrams or less.</p> <p>Sulfur dioxide emissions are required to meet the sulfur dioxide emissions limits set under the <i>Environmental Protection (Kwinana) (Atmospheric Waste) Policy 1992</i> as a condition of CCL's licence.</p> <p>However, in view of the Committee's recommendation, DEC will review the emissions profile of the CCL plant, and the application of relevant targets and limits, compared with similar facilities in Australia.</p>

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11	<p>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.</p>	<p>The National Pollutant Inventory Emission Estimation Technique Manual states that 'total suspended particulates' are also referred to as 'total particulate matter'.</p> <p>The Victorian Environment Protection Authority's State Environment Protection Policy (Air Quality Management) refers to 'particulate matter'. The USEPA methods 5 and 17 refer to 'particulates'. AS 4323.2-1995 - Determination of total particulate matter and ISO 9096:2003 – Stationary Source Emissions refer to 'particulate matter'.</p> <p>DEC considers that there is no difference in the terminology between 'total suspended particulates' and 'total particulate matter', and this is reflected in the varied terminology used by Australian and international jurisdictions.</p> <p>DEC has used total suspended particulate matter in all its licences, consistent with normal regulatory terminology, as the most descriptive of the variants of this parameter.</p>
12	<p>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).</p>	<p>This recommendation is not supported.</p> <p>Condition 11(b) requires the licensee "to cease feed of raw material to any kiln(s) as required by any management action specified in Table 3. If the licensee cannot identify the cause of two consecutive specified events within seven consecutive days, the licensee shall not recommence feed to the relevant kiln(s) until the problem that triggered the specified event has been rectified."</p> <p>This provides valuable information in assessing compliance and determining the need to amend the licence to reduce the risk of types of plant failures or upsets re-occurring.</p>



Recommendation Number	Recommendation	Government Response
13	<p>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:</p> <ul style="list-style-type: none"> <li>(a) electrostatic precipitator failures (or 'ESP trips'); and</li> <li>(b) specified exceedences of stack emission targets and limits for total suspended particulates caused by other means (or 'other high dust emission events').</li> </ul>	<p>Licence condition No. 74 requires this information to be provided to DEC. The licence conditions also require ambient air quality monitoring to measure actual air quality associated with electrostatic precipitator failure, or exceeding emission targets and limits as air quality associated with these events, as well as normal operating conditions.</p> <p>CCL has modelled the potential impacts of electrostatic precipitator trips on the community. Condition 74 requires the licensee to "submit to the Director a Monitoring and Reporting Audit Report prepared by an independent and suitably qualified professional, which shall review emissions modelling, including trip events, in consultation with the DEC and DoH."</p> <p>This work will inform DEC on the need for any further amendment to CCL's licence.</p>
14	<p>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 ("<i>Sulfur Dioxide Emission Limits – Plant (Environmental Protection (Kwinana) (Atmospheric Waste) Policy 1992</i>") as a matter to be covered in the monthly compliance reports required under condition 21A.</p>	<p>This recommendation is supported.</p> <p>DEC will amend CCL's licence to require it to report compliance with the limits set in the <i>Environmental Protection (Kwinana) (Atmospheric Waste) Policy 1992</i>, as a licence condition in CCL's next licence which is due to be issued before 30 March 2012.</p>
15	<p>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.</p>	<p>This recommendation is supported to the extent that, following the installation and commissioning of the pollution control equipment required under condition No. 70 for Kiln 6, DEC will determine the appropriate application of targets and limits in accordance with its limits and targets policy and the findings of the review outlined in the response to Recommendation 10.</p>

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16	<p>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.</p>	<p>DEC has received a written commitment from CCL to install a bag filter on Kiln 5, providing the same equipment on Kiln 6 operates in accordance with design specifications.</p> <p>Should CCL decide not to honour its commitment, DEC will determine further regulatory controls for Kiln 5. The process set out in the response to Recommendation 15 will be followed when new pollution control equipment is commissioned for Kiln 5. Only Kilns 5 and 6 produce lime.</p>
17	<p>The Committee recommends that the Minister for Environment advise the Legislative Council on whether:</p> <p>(a) Environmental Improvement Requirement 8 (the lodgement of a report detailing the results of the full calibration of the Continuous Emission Monitoring System on each kiln); and</p> <p>(b) Environmental Improvement Requirement 11 (the lodgement 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.</p> <p>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.</p>	<p>The reports required under Improvement Requirements 8 and 11 were lodged by 1 July 2011 and 30 June 2011 respectively, as required by CCL's licence conditions.</p>

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18	<p>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.</p>	<p>The outcomes of the various reports on Improvement Requirements are required to be implemented within 14 days after the reports have been approved by DEC.</p> <p>As at 31 January 2012, none of the reports submitted by CCL were considered to be satisfactory and amendments to the reports have been requested by DEC.</p> <p>Once the amended reports are received by DEC and found to be satisfactory, DEC will ensure that the requirements in those reports are implemented within 14 days of its approval.</p>
19	<p>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.</p>	<p>The process trip audit was submitted as required by condition No. 71.</p> <p>However, the report was inadequate and DEC has required further information to be submitted.</p> <p>Once the amended report is received by DEC, and found to be satisfactory, DEC will ensure that the requirements in those reports are implemented within 14 days of its approval.</p>

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20	<p>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.</p>	<p>The reports required by Environmental Improvement Requirement 11 and condition No. 72 have been submitted in accordance with conditions 68 and 72.</p> <p>The reports are currently being assessed by DEC for compliance with CCL's licence conditions.</p>
21	<p>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.</p>	<p>The audit report required by licence condition No. 73 has been submitted in accordance with that condition. The report is currently being assessed by DEC for compliance with CCL's licence conditions.</p>

Recommendation Number	Recommendation	Government Response
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.	<p>The Inquiry has raised issues in regard to the health impacts on surrounding communities. In terms of its holistic approach to planning, the DoP ensures that a range of planning considerations, including health, are addressed in the decision-making process.</p> <p>The DoH has an existing process within its Environmental Health Directorate (EHD) to provide advice on environmental health matters relating to planning proposals from local government, the Western Australian Planning Commission, DoP, DEC and the Environmental Protection Authority. The critical path is for local government and other government agencies to seek advice from the EHD, and to do so early in the planning process. The DoP will assist in this process to ensure that the land-use planning and health assessment processes are properly aligned and integrated.</p>
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.	<p>This recommendation is not supported.</p> <p>DEC considers that such a licence condition is problematic from a legislative perspective. In addition, the suggested condition is unlikely to be enforceable because of the non-specific nature of the impact.</p> <p>DEC understands that CCL currently has in place a program to clean property surrounding the plant where dust accumulations have unreasonably impacted on the community.</p>