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AP Ref: 132034

Ref: MP06_0228 Mod 33

The Director
Attn: Rasmus Altenkamp
Industry Assessments
Department of Planning, Housing and Infrastructure
Via email: rasmus.altenkamp@dpie.nsw.gov.au

SUBJECT: RESPONSE TO ISSUES RAISED BY EPA

SHOALHAVEN STARCHES EXPANSION – MODIFICATION DDG DRYERS 4 AND 5 - MP06_0228 MOD 33

Dear Rasmus,

This response has been prepared on behalf of Shoalhaven Starches in response to correspondence from the Department of Planning, Housing and Infrastructure (DPHI) dated 1 April 2026, which requested that matters raised by the Environment Protection Authority (EPA) in relation to noise impacts associated with Modification 33 (Mod 33) be addressed.

In response, the proponent has prepared a Noise Mitigation Options Assessment to systematically evaluate potential noise mitigation measures associated with DDG Dryers 4 and 5, having regard to noise reduction effectiveness, feasibility, and cost, including the additional mitigation option requested by the EPA.

Noise Mitigation Options Assessment

The Noise Mitigation Options Assessment considers the following options:

Option A – Do Nothing

Option B – Mitigation 1 (Proposed under Mod 33)

- Vapour fan and associated pipework lagging
- Scrubber tank enclosure
- Cooling tower fan VSD reduction

Option C – Mitigation 2 (EPA Request)

- Enclosure of eastern façade openings to DDG Dryers 4 and 5, including mechanical ventilation

Summary of Noise Mitigation Options

Option	Description	Indicative Noise Outcome	Indicative Cost Commentary	Proponent response
Option A – Do Nothing	No additional mitigation beyond existing operations.	No change to cumulative site-wide noise levels.	No capital cost.	Not supported
Option B – Mitigation 1 (Proposed – Mod 33)	Vapour fan and pipework lagging, scrubber tank enclosure, and reduced cooling tower	0.13 dBA cumulative (site-wide) noise reduction relative	Low to moderate capital cost (estimated \$60,000); readily constructible	Supported and proposed. Represents reasonable and feasible



	fan speeds via VSD changes.	to existing operations.	within Mod 33 scope with minimal operational risk.	mitigation aligned with Mod 33.
Option C – Mitigation 2 (EPA Request)	Enclosure or partial enclosure of eastern façade openings, including mechanical ventilation to maintain process and safety requirements.	0.26 dBA cumulative (site-wide) noise reduction, representing a marginal improvement beyond Option B at the most affected receivers.	High capital cost estimated at \$787,688, with significant engineering complexity and operational constraints.	Not supported. The marginal additional noise benefit is disproportionate to the cost which represents 11% of the total MOD 33 project capital cost and would place project viability at risk.

Response to EPA Matters

The Noise Mitigation Options Assessment demonstrates that while Option C – Mitigation 2 may provide an additional site-wide noise reduction when compared to the mitigation proposed under Mod 33 (Option B – Mitigation 1), the incremental improvement is minor. Specifically, the cumulative site-wide noise reduction increases from 0.13 dBA under Option B to 0.26 dBA under Option C, with only a marginal additional benefit at the most affected receivers.

Disproportionate Cost for Limited Noise Benefit

When this marginal improvement is considered in the context of the estimated capital cost of \$787,688, equivalent to approximately 11% of the total Mod 33 project capital cost, the additional noise benefit achieved by Option C is clearly disproportionate. The cost associated with this option is significant relative to the limited reduction in noise levels and does not represent an efficient or reasonable outcome.

Furthermore, the magnitude of noise reduction associated with Option C is unlikely to be perceptible, while introducing a high level of engineering complexity, and operational risk. Implementation of this option would therefore place the overall viability of Mod 33 at risk.

By contrast, Mitigation 1, as proposed under Mod 33, provides a demonstrable improvement in site-wide noise levels, directly targets the modified infrastructure, and represents a balanced and reasonable response to EPA guidance to reduce noise where feasible. On this basis, the mitigation measures proposed under Mod 33 are considered reasonable and consistent with regulatory expectations for a modification of this nature.

Engineering and Operational Constraints of Building Enclosure

From an engineering perspective, the DDG Dryers 4 and 5 are industrial thermal processing units that inherently require a high degree of natural airflow to allow for effective heat dissipation, safe operation, and ongoing maintenance access. The existing open building configuration supports passive ventilation, limits heat build-up, and enables operational staff to safely undertake inspection, cleaning, and maintenance activities.

Enclosing the eastern facade openings, either in part or in full, would fundamentally alter the building's ventilation characteristics. To maintain safe operating temperatures and prevent the potential build-up of fumes, a large-scale mechanical ventilation system would be required. This would introduce additional engineering requirements including the installation of high-capacity ventilation fans and ducting, increased ongoing energy demand, higher maintenance obligations, potential new failure points, and the need to integrate ventilation systems with existing process safety controls.

It is also noted that the indicative cost estimate for Option C includes only the capital cost of the enclosure works. The ongoing operational costs associated with running mechanical ventilation systems have not been included, and would further increase the long-term financial burden of this option.

From both an engineering and industry practice perspective, it would be uncommon for high-temperature DDG dryers of this type to be located within a fully enclosed building, given the operational need for effective heat rejection, ventilation, and unobstructed access for maintenance and emergency response. Open or semi-open structures are commonly adopted to manage these requirements safely and efficiently.



For these reasons, retaining an open building configuration with targeted, source-based noise mitigation—as proposed under Mitigation 1—provides the most appropriate balance between noise reduction, operational safety, constructability, and ongoing site functionality. Enclosure of the eastern facade would introduce disproportionate engineering and operational constraints that are not justified by the marginal additional noise reduction achievable.

We trust that the information provided in this response addresses the matters raised and allows the planning assessment to proceed to a favourable determination. Should you require any further clarification, please do not hesitate to contact our office on 44216544 or consultants@allenprice.com.au

Yours sincerely,

Sebastian Tauni
Director – Town Planning
Allen Price Pty Ltd

Enclosures:

Attachment A – Noise Mitigation Options DDG Dryer 4 and 5 - prepared by GHD dated 8 March 2026

Attachment B – Cost Estimate Summary prepared by Shoalhaven Starches dated 8 April 2026