

**Shoalhaven Starches Development Consent 06_0228 Independent Odour Audit 2023 -
Response to Audit Recommendations**

Table 1 – Audit Non-compliances

Cond. No.	Condition and Requirement	Audit Report Non-compliances	Shoalhaven Starches (SS) Response	Timeframe	Status
22/23-NC-6C	The Applicant shall conduct quarterly odour monitoring from the DDG exhaust stack and report the results in the independent odour audit required under Condition 5 of Schedule 3.	The quarterly and annual emission testing is summarised in Table 8. It is observed that EPA ID 46 (DDG Pellet Plant Stack) was not tested during Q3 and Q4.	<p>The construction of the new Co-Generation Plant and DDG Dryer 5 in the immediate vicinity of EPA 46 sampling point has resulted in restricted access for the required Elevated Work Platform (EWP) meaning no sampling could take place.</p> <p>In the interim, odour samples have been taken from the known major individual sources (3) that contribute to EPA 46 to provide an indicative measure of the odour concentration.</p> <p>Sampling to be conducted in Quarter 3 2023.</p>	Dec 2023	Complete. Sampling conducted in Dec-23.

Table 2 – Audit Recommendations

Audit Reference	Audit Report Recommendations	Shoalhaven Starches (SS) Response	Timeframe	Status
22/23-REC-A	Complaints logged, including 069, 071 and 075 are attributed to a biogas leakage from the BVF due to excessive COD loading in the incoming wastewater from the factory. The complaint records document various controls being implemented to manage this issue, including those included as MOD 22, including various additional capacity measures as described at complaint 075. It is therefore a recommendation of this independent odour audit that those measures are implemented as expediently as possible to resolve this identified capacity shortfall and identified source of uncontrolled odour discharge.	<p>Since the series of odour complaints related to the BVF and biogas leakage a number of actions have been implemented and no further complaints attributed to the wastewater treatment plant have been received since Jan 2023.</p> <p>Actions include:</p> <ul style="list-style-type: none"> • New pressure sensor installed to better monitor BVF cover for minor changes, allowing faster reaction time to high COD load • New blower installed to increase biogas suction capacity • Improved automation and control of food loads into BVF with the ability to divert to storage Pond 4 during high load periods. <p>MOD 22 once approved will significantly increase WWTP capacity and biogas handling.</p>	-	<p>Complete.</p> <p>No further action required.</p>
22/23-REC-B	The biofilters are not achieving the de facto 500 OU standard and are not achieving a satisfactory degree of odour control (measured as 8 % efficiency). It is acknowledged that Manildra are currently constructing a duplicate set of biofilters to redistribute the flow to achieve the design capacity flow rate through all biofilters. The performance of the biofilters remains an unresolved issue and it is recommended that it is resolved at the earliest opportunity.	The new Biofilter C currently under construction and due for commissioning in January 2024 will double our current odour treatment capacity in this area. By spreading the incoming air flows over a significantly larger surface area it anticipated to significantly improve biofilter performance.	January 2024	In progress.
22/23-REC-C	It is recommended that the access limitations preventing EPA 46 (DDG Pellet Stack) are resolved to ensure that EPA 46 is available to be tested during the following testing periods.	<p>The construction of the new Co-Generation Plant and DDG Dryer 5 in the immediate vicinity of EPA 46 sampling point has resulted in restricted access for the required EWP meaning no sampling could take place.</p> <p>In the interim, odour samples have been taken from the known major individual sources (3) that contribute to EPA 46 to provide an indicative measure of the odour concentration.</p> <p>Access to be re-instated in December 2023.</p>	Dec 2023	<p>Complete.</p> <p>Access has been re-instated.</p>
22/23-D	With regard to flow measurements at EPA ID 8 the odour monitoring reports state: “Sampling was undertaken at the exit of the stack as it was the only accessible area for the samples to be taken. No temperature or flow rate readings could be taken due to access issues.” It is recommended that the access restrictions to EPA ID 8 are resolved to enable compliant odour monitoring to be performed.	The exit for this stack was recently fitted with a replacement silencer to reduce noise coming from this source, as a result the existing sampling point can no longer provide sufficient access for flow rate readings. Investigation into the relocation of this sampling point is currently underway.	Jun 2024	In progress.