

## Shoalhaven Starches Development Consent 06\_0228 Independent Odour Audit 2022 - Response to Audit Recommendations

**Table 1 – Audit Non-compliances**

Cond. No.	Condition and Requirement	Audit Report Non-compliances	Shoalhaven Starches (SS) Response	Timeframe	Status
-	None	None	None	-	-

**Table 2 – Audit Recommendations**

Audit Reference	Audit Report Recommendations	Shoalhaven Starches (SS) Response	Timeframe	Status
21/22-REC-A	Whilst it is acknowledged that the biofilters are achieving a reasonable degree of odour control (56 % efficacy), the flow-weighted average odour concentration is not achieving the de-facto 500 OU standard. This matter remains an unresolved issue and it is recommended that it is resolved at the earliest opportunity.	The biofilter media was replaced on Biofilter B in September 2022. Once the new media acclimatizes and odour results are satisfactory, the media will be replaced on Biofilter A. Further quarterly odour monitoring will be undertaken to determine if this resolves the issue.	-	In progress.
21/22-REC-B	It is recommended that the safety issue(s) preventing EPA 20 from being tested are resolved to ensure that EPA 20 is available to be tested during the 2022-2023 period. It is understood that the safety issue is the stability of the dam banks due to the low water levels and the dam is only used when all other dams are full.	It is planned to remove the bank between Dam 1 (EPA 19) and Dam 2 (EPA 20) and convert to a single larger dam. These proposed works will be included in a modification application to the Department of Planning as part of proposed upgrades to the site's wastewater treatment plant.	October 2023	In progress.
21/22-REC-C	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. It is understood that new sampling ports have been installed (Sep 2022) that would be in compliance during the following odour audit period.	New sample ports have been installed. No further action required.	-	Complete.
21/22-REC-D	It is recommended that the difference between reported predicted concentration values as reported in (GHD, Nov 2021) and (GHD, Jan 2022) is clarified so that there is consistency between the modelling reports.	GHD response is shown below (no further action required):  The discrepancy between odour results presented in the MOD21 and MOD23 AQIA's is due to a different method in calculating the one second 99 <sup>th</sup> percentile odour impacts based on hours of operation.  The discrepancy arose as chronologically, the MOD23 AQIA was prepared before the MOD21 AQIA. During preparation of the MOD21	-	Complete.

		<p>AQIA (i.e. the MOD23 AQIA had been completed) the NSW EPA requested a different approach to calculating odour impacts be used.</p> <p>The differing methods are explained in-text in the MOD21 and MOD23 AQIA's (refer to Sections 7.4 of MOD21 [excerpt provided below] and Section 7.3 of MOD23) and are summarised below:</p> <ul style="list-style-type: none"> <li>• MOD21 – odour impacts predicted based continuous exposure 24 hours per day, 7 days per week to align with the hours of operation of the site (this is a new approach requested by the NSW EPA)</li> <li>• MOD23 - based on the hours of operation of the receptors (this is the existing approach adopted for all previous MOD's)</li> </ul> <p><i>“Seven commercial/industrial receptors are included in the assessment. These are all located within approximately 125 m of the site. For previous modifications up to Mod 19, one second, 99th percentile odour impacts have been predicted based on the hours of operation of the receptors as per Section 2.2 (i.e. predicted odour impacts when the sites are not operational have been excluded from the assessment). <u>For Mod 21, a revised approach was adopted where one second 99th percentile odour impacts were predicted based continuous exposure 24 hours per day, 7 weeks per week to align with the hours of operation of the site. It is noted that the commercial receptors may not be occupied for all hours of the day, consequently the predictions in Table 7.2 show the potential worst case odour impacts.</u>”</i></p> <p>Therefore, the requirement to assess odour impacts at commercial receptors based on continuous exposure 24 hours per day, 7 days per week was requested by NSW EPA after the MOD23 AQIA had been prepared and consequently was not included in the assessment.</p> <p>It is noted that adopting the new calculation method only changes the predicted odour concentrations at commercial receptors C1 and C7 (when rounded to 1 d.p.).</p>		
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