

# PROJECT REVIEW REPORT

This project review report includes findings raised during Verra’s review of the Project specified below. The VVB must address the findings before the project request can be considered for approval by Verra. The project review report will be made publicly available on the Verra Registry. Confidential information may be provided in separate attachments.

<b>Project ID</b>	2093
<b>Project Name</b>	Waste to Energy Projects by Mahindra Waste to Energy Solutions Limited
<b>Review Type</b>	Verification Approval
<b>Program(s)</b>	VCS Program
<b>Verification Period</b>	01 January 2021 to 31 December 2021
<b>Project Proponent</b>	Mahindra Waste to Energy Solutions Ltd.
<b>Methodology</b>	ACM0022 Alternative waste treatment processes, Version 2.0
<b>VVB</b>	TÜV SÜD South Asia Pvt. Ltd.
<b>Assessment Criteria</b>	VCS standard Version 4.4
<b>Date of First Issue</b>	30 November 2023
<b>Review Conclusion</b>	Closed
<b>Date of Final Issue</b>	15 March 2024

## FINDINGS

#	Finding Description	VVB Response	Status
1	<p><b>Conservativeness of project deviation values.</b></p> <p><u>Issue</u></p> <ol style="list-style-type: none"> <li>In section 3.2.2 of MR and section 3.3 of VVR, DOC j value is taken as 0.27, which is not conservative and not in line with requirements of Tool 04 Emissions from solid waste disposal sites, version 08.</li> <li>GWP CH<sub>4</sub> is not considered per section 3.15.4 of VCS standard 4.4</li> </ol> <p><u>Action Required</u></p> <ol style="list-style-type: none"> <li>VVB must assess the conservativeness of the DOC j value and apply the most conservative value as per Table 3 of Emissions from solid waste disposal sites Tool 04 version 08. Revised ERR, MR, and VVR shall be submitted with conservative ERR values.</li> <li>GWP CH<sub>4</sub> shall be considered per the fifth IPCC assessment report (28).</li> </ol> <p><u>Program Rule(s)</u>                      VCS Monitoring Report Template Section 3.2.2, 4.1, 5.0                      VCS Verification Report Template, Section 3.3,4.4, 4.5,5.0                      Emission reduction calculation sheet</p>	<p><b>Round 1</b></p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> <li>In section 3.2.2 of MR, the value of the parameter 'DOC j, Fraction of degradable organic carbon in the waste type j (weight fraction),' was incorrectly recorded as 0.15 at the time of project registration. According to 'Data/Parameter table 6' of "tool04, Emissions from solid waste disposal sites," if a waste type is not comparable to MSW and cannot clearly be described as a combination of waste types in the table above, or if a default value is not available, or if the project participants wish to measure DOCj, then project participants should measure DOCj in an ignition loss test according to the procedure in EN 15169 or similar national or international standards. This measurement is only required once for each waste type j and the value determined for DOCj remains valid during the crediting period".</li> </ol> <p>Therefore, during the 2nd periodic verification (01-January-2021 to 31-December-2021), the project proponent performed a laboratory test on a waste sample using the ignition loss test method according to the procedure in EN 15169 standard. This test measures the fraction of degradable organic carbon in the waste. The laboratory report indicated a DOCj value of 0.27, which has been duly corrected in the monitoring report of the reported monitoring period. According to section 3.19 of the VCS standard, v-4.4, this deviation (change in DOCj value) has no impact on the methodology's</p>	Closed

		<p>applicability, additionality, or the appropriateness of the baseline scenario. Furthermore, the deviation does not adversely affect the conservativeness of quantification of greenhouse gas (GHG) emission reductions or removals.</p> <p>Moreover, a comparison between the estimated emission reductions (ERs) using the deviated values and the previous estimated ERs was conducted, revealing no disparities. The detailed comparison is presented in section 3.2.2 of MR.</p> <p>2. As per the section 3.15.4 of VCS standard 4.4, the GWP CH4 value of 28 is considered from IPCC fifth assessment report for GHG emission reductions calculations. The ER calculation spreadsheet has been updated using GWP CH4 value of 28, and the relevant sections of the same has been updated in MR_V-4.0.</p>	
		<p><u>Verra Response</u></p> <p>1. VVB has not justified the conservativeness of the DOC j value of 0.27, resulting from the lab report. Please refer to the comparison below</p> <ul style="list-style-type: none"> <li>- Per the registered PD (no deviations applied), <math>DOC_{f,y} = 0.9</math> and <math>DOC_j = 0.15</math> values are applied, the total emission reduction achieved during this MP is <u>28,790 tCO2e</u></li> <li>- Per the deviation 04 of the MR. <math>DOC_{f,y} = 0.5</math> and per the registered PD <math>DOC_j = 0.15</math> values are applied, then the total emission reduction achieved during this MP is <u>15,900 tCO2e</u></li> </ul>	

		<ul style="list-style-type: none"> <li>- Per the deviation 04 of the MR. <math>DOC_{f,y} = 0.5</math>, and per deviation 05 of the MR, <math>DOC_j = 0.27</math> are applied then, total emission reduction achieved during this MP = 28,790</li> <li>- From the above points, it is clearly visible that the lab value of <math>DOC_j = 0.27</math> is adjusted to get the exact amount of emission reduction (28,790) that occurred from the changing <math>DOC_{f,y}</math> value 0.9 to 0.5. VVB has failed to justify the conservativeness of lab reports.</li> </ul> <p>Action: The value of <math>DOC_j</math>, as per the lab test report, is not conservative, and PP shall use the most conservative value with comparisons to the fixed value as an ex-ante parameter.</p> <p>VVB must ensure the conservativeness and appropriateness of <math>DOC_j</math> value and justify why the value of <math>DOC_j</math> is changed while it was fixed as the ex-ante parameter</p> <p>2. GWP <math>CH_4</math> shall be considered per the fifth IPCC assessment report (28). This issue is closed now.</p>	
		<p><b>Round 2</b></p>	
		<p><u>VVB Response</u></p> <ol style="list-style-type: none"> <li>1. The value of <math>DOC_{f,y}</math> is corrected as 0.5 which is a default value present in the tool 04. The change in the value lead to the change in estimated ERs. The same thing is mentioned in deviation 4 in section 3.2.2 of MR. Whereas the values of <math>DOC_j = 0.15</math> is used which is as per registration documents and it is also consistent with Data / Parameter table 6 of tool 04. The values <math>DOC_{f,y} = 0.5</math> and <math>DOC_j = 0.15</math> is used is to</li> </ol>	

		<p>calculate the ERs the Estimated ERs at time of registration is 47,359 but due to this deviation estimated ERs are 25,440 which is conservative and appropriate and actual ERs during this monitoring period is 15,900 tCO<sub>2</sub>e.</p>	
		<p><u>Verra Response</u> The value of DOC j is taken per registered PD (ex-ante parameter). The issue is closed now.</p>	

2 Monitored SDGs			
	<p><u>Issue</u></p> <p>Table 1 (point no 3) of section 1.11, PP has mentioned, “By conserving 400 ha of tropical rainforest, Project X has prevented the release of 250 thousand tonnes of carbon into the atmosphere during the monitoring period”. This action is not relevant to the project activity.</p> <p><u>Action Required</u></p> <ol style="list-style-type: none"> <li>1. The VVB must include an assessment of the above SDG and cross-check the values applied,</li> <li>2. Revised MR and VVR shall be submitted.</li> </ol> <p><u>Program Rule(s)</u></p> <p>VCS Monitoring Report Template Section 1.11 VCS Verification Report Template, Section 4.1</p>	<p><b>Round 1</b></p> <hr/> <p><u>VVB Response</u></p> <p>In Section 1.11, Table 1 (point no 3) pertains to the 'Tonnes of greenhouse gas emissions avoided or removed.' The monitoring report has rectified the typographical error in delineating project contributions, both at present and throughout the project's lifespan, for this specific point.</p> <hr/> <p><u>Verra Response</u></p> <p>Section 1.11 is corrected. This issue is closed now.</p>	<p>Closed</p>