

RESPONSE TO REQUESTS FOR ISSUANCE

BUREAU VERITAS CERTIFICATION have performed the verification of the CDM Project “Bentong Biomass energy power plant in Malaysia”. The request for issuance was completed on Request for issuance. The reference number of the project activity is UNFCCC No 501.

Subsequently, there have been requests for review

We give below our response to the requests for issuance.

No	Comments from CDM Team	Response from BVC
1	<p>The monitoring report, pages 34 and 35, indicates that the amount of EFB fed to the boiler is 30,571.56 tonnes for year 2008 and 13,092.15 tonnes for year 2009. Further, on page 36, it states that 2008 is the first year that EFB is removed from wastes accumulating since 2003. According to the applied methodology, ASM III E version 08 paragraph 7, the baseline emissions are the amount of methane from the decay of the biomass content of the waste treated in the project activity. However, in the submitted spreadsheet “Bentong CER from 2008 removal” it appears that Baseline Emissions from avoidance of EFB decay in 2008 are calculated based on a total amount of 183,426 tonnes of EFB fed to the boiler (i.e the sum of yearly amounts of 30,571 tonnes: 2003-2008). Likewise, in the submitted spreadsheet “Bentong CER from 2009 removal”, it appears that Baseline Emissions from avoidance of EFB decay in 2009 are calculated based on a total amount of 91,644 tonnes of EFB fed to the boiler (i.e the sum of yearly amount of 13,092 tonnes – 2003-2009).</p> <p>The DOE is required to further substantiate how it assessed the calculation of baseline emissions from avoidance of EFB decay, In doing so, the DOE is requested to further clarify how it verified the application of the values of amount of biomass which decay was avoided through controlled combustion by the project activity (Aj,x) in the calculation of baseline emissions. Please refer to VVM version 01.2, paragraph 208(c); AMS III.E version 08, paragraph 7.</p>	<p>The amounts of accumulated waste removed for combustion in 2008 and 2009 from the disposed EFB wastes at the palm oil mill is treated as specified in AMS.III-E, version 8, para. 7, which states that the "Yearly Methane Generation Potential is calculated using the first order decay model based on discrete time estimated method of the IPCC Guidelines...". The EFB was deposited since 2003, as validated by DNV during the validation in mid-2006 and confirmed by Mr. Biswas in the e-mail in 2010 that was attached to the submission for Issuance. EFB is a rapidly decomposing waste, as detailed in the various co-composting PDDs registered after this PDD, where the half life of EFB decay is 10 weeks. We also attach a research paper that indicates EFB decays to half its mass in less than 15 weeks, and this is with one layer of EFB, where the temperature will not increase to the thermophilic range experienced in deeper piles - thermophilic decay rate is normally at least double that of mesophilic decay rates. If this latter data is used for conservativeness, the mass of EFB is reduced to 1/16 of its mass after one year of decay. Thus, when EFB is deposited in a landfill of over 5m, decay is rapid and after 4 years, the mass of deposited EFB stabilizes and amounts removed, say in 2008, from a pile of EFB that has accumulated since 2003 is the same mass as removed in 2008 because of the rapid decay. We attach a picture of the EFB being removed from an accumulation that shows the removal is as a slice from the entire accumulation since the original placement - that is why we can claim that the first order decay model has methane generation from the wastes deposited in 2003, 2004, 2005, etc. included in the amount removed in 2008 and 2009. When you look at the results of the methane generation from the wastes deposited since 2003, you can see the amounts of methane released in 2003, 2004, 2005, etc before the wastes were removed for burning in 2008 and 2009. That is why the mass of</p>



		<p>EFB accumulated decreases from each year deposited and the amount removed in 2008 and 2009 is, in fact, the total mass removed since deposited in 2003. The ex-ante projections show that the accumulated EFB was burned in the first year of operation, then fresh EFB used after the first year. Since only one boiler was installed, the EFB burned annually is less, so the accumulation will take more than the year to remove.</p> <p>One other reference for the method used to calculate methane avoided is found in later versions of AMS.III-E, namely version 12, para. 12 deals with how to calculate methane avoided from using decayed wastes and this procedure is also what we followed in calculating the methane avoided.</p> <p>We trust this addresses the questions posed.</p>
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