



ENERGIA AMBIENTAL S.A.  
Rua Mogeiro, nº 1580 - Vl. Perus  
São Paulo - SP - Cep: 05206-240  
CNPJ: 04.131.501/0001-68  
IE : 116.188.672.113

**Att: CDM Executive Board**

**Ref: Request for Review of the 1<sup>st</sup> Monitoring Period from the São João Landfill Gas to Energy Project – SJ (registration number 0373), from 17/04/2008**

Dear Members of the CDM Executive Board,

Please, find below the answers from the Project Proponents to the Request for Review above mentioned. With the explanation provided, we hope that all concerns of the EB have been addressed.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Antônio Carlos Delbin", is written over a light-colored, textured background.

Antônio Carlos Delbin

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**1. The amount of methane concentration in the exhaust gas was monitored periodically, however the tool to determine project emissions from flaring gases containing methane requires continuous measurement if the default value of 90% is not being applied.**

**Hence the DOE is requested to clarify how it has verified (a) operation hours of the flare (b) efficiency of flaring process in accordance with the tool to determine project emissions from flaring gases containing methane.**

*(a) operation hours of the flare*

The revised Monitoring Plan approved by the EB on 18 Feb 08 states that a continuous measurement of operation time of flare will be made (e.g. with temperature) – as per version 02 of ACM0001. Temperature of the flares indicates if gas is being burned or not and, consequently, if the flare is operating or not.

The flares installed at SJ count with an automatic operation system, based on the presence of flame inside the combustion chamber. The detection of flame is made by an UV-sond, which is the responsible to allow the entrance of gas by opening the main valve of the flare (if flame is detected) or stop the flare's operation by closing the main valve.

The monitoring and the control of this temperature is made continuously by the PLC. In case the temperature rises above 1350°C the flare is stopped automatically; in case the temperature drops below 900°C an alarm indicates that the flare is running out of the specified combustion temperature range – please refer to Annex 1.

Data logger of the flares temperature every 5 minutes were verified by the DOE (annexes 2 and 3). Temperature below 900°C indicates the PLC closed the main valve as the UV-sond has not identified the flame and the flare is not operating.

*(b) efficiency of flaring process in accordance with the tool to determine project emissions from flaring gases containing methane.*

The revised Monitoring Plan was developed based on version 02 of ACM0001, which states that “the flare efficiency (FE) is measured as the fraction of time in which the gas is combusted in the flare multiplied by the efficiency of the flaring process. **For this purpose, the methane content of the flare emissions should be analyzed at least quarterly, and where necessary more frequent**, to determine the fraction of methane destroyed within the flare”. The revised Monitoring plan states that methane content in the exhaust gas will be measured periodically (quarterly, monthly if instable), which was indeed made.



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The applicability of the “Tool to determine project emissions from flaring gases containing Methane” is not valid for SJ because the project was registered on 02 July 2006, under version 02 of the methodology ACM0001, and the tool was included in the methodology ACM0001 from version 05 (approved at the EB 38<sup>th</sup> meeting, 12-15 December 2006) on.

According with the paragraph 39 of the Annex from Decision 3/CMP.1:

*“A revision of a methodology shall be carried out in accordance with the modalities and procedures for establishing new methodologies as set out in paragraph 38 above. **Any revision to an approved methodology shall only be applicable to project activities registered subsequent to the date of revision and shall not affect existing registered project activities during their crediting periods**”.*

Thus the efficiency of flaring process was correctly verified by the DOE, based on the quarterly analysis of methane in the flare emissions – procedure which will be followed during the crediting period.

The following files are attached to this answer:

*Annex 1 – Operational Description of Flares.pdf* – statement from the flare manufacturer, explaining how does the flares operates

*Annex 2 – Flares Temperature 2007.06.pdf* – graphic of flares F520 and F540 temperature logged every 5 minutes

*Annex 3 – Temperature 2007.06.zip* – data of flares F520 and F540 temperature logged every 5 minutes