



## CDM: Recommendation Form for Small Scale Methodologies (version 01)

*(To be used for presenting questions/proposals/amendments to the simplified methodologies for small-scale CDM project activity categories)*

<b>Date of SSC WG meeting:</b>	29 April–02 May 2009, SSC WG 20
<b>Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):</b>	Applicability of AMS-III.H to project activity involving flaring/combustion and utilization of recovered biogas
<b>Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.</b>	AMS-III.H
<b>Name of the authors of the query:</b>	Niroj Mohanty Institution: Core CarbonX Solutions Pvt Ltd <a href="mailto:nmohanty@corecarbonx.com">nmohanty@corecarbonx.com</a>

### **Summary of the query:**

Please use the space below to summarize the query related to SSC methodologies/categories SSC Modalities and Procedures provide recommendation/analysis of the SSC WG.

Original text from PP:

#### **Baseline:**

The project activity is a Common Effluent Treatment Plant for the tannery industries. CETP has the capacity to treat a total of 42,000 cubic meters of effluents per day. The plant is speeded over an area of 6 hectare.

The existing scenario is treatment of wastewater in an anaerobic reactor and recovery of the biogas from the effluent. Its design is based on Upflow Anaerobic Sludge Blanket (UASB) technology along with aerobic post treatment process. The project proponent is procuring power from a rented NG based gas engine.

The aim of the treatment of wastewater is the decrement of the organic load of the wastewater. The figures presented below describe value for the parameters of the CETP.

#	Parameter	Unit	Value
1	Average Flow to anaerobic reactor	m <sup>3</sup> /day	35,750
2	Maximum Flow	m <sup>3</sup> /hr.	2,184
3	COD in	ppm	1,618
4	COD out	ppm	404

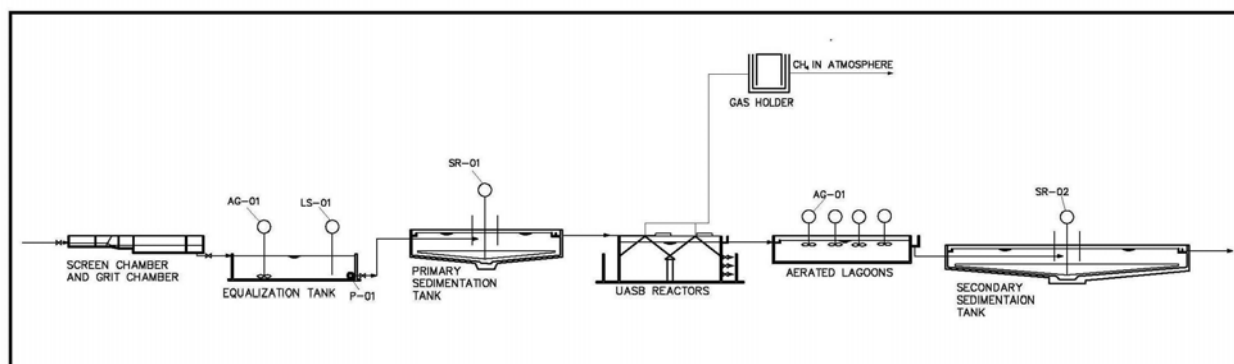
The project activity recovered biogas (4000 m<sup>3</sup>/day) is vented into the atmosphere in the existing scenario.

The initial plan for the combined effluent treatment plant (CETP) was consist of flaring equipment for flaring of biogas and Biogas engine for combustion of biogas. However, due to shortage of funds the project proponents revised the project plan and constructed only essential parts of the Combined Effluent Treatment Plant (CETP). The revised plan excluded the procurement, installation of flaring equipment and biogas engine. Currently, the methane enriched biogas is vented into the atmosphere and the electricity is produced from a rented Natural Gas based gas engine. The project proponent is procuring

power from the rented NG based gas engine due to absence of fund for the initial investment cost.

The venting of the biogas is also meeting all the regulatory conditions as per the country law and regulations which does not mandate flaring of the biogas. The venting of the biogas does not also lead to any odour problem due to remote location of the CETP.

The figure below describes the baseline (existing) scenario:



### Project activity

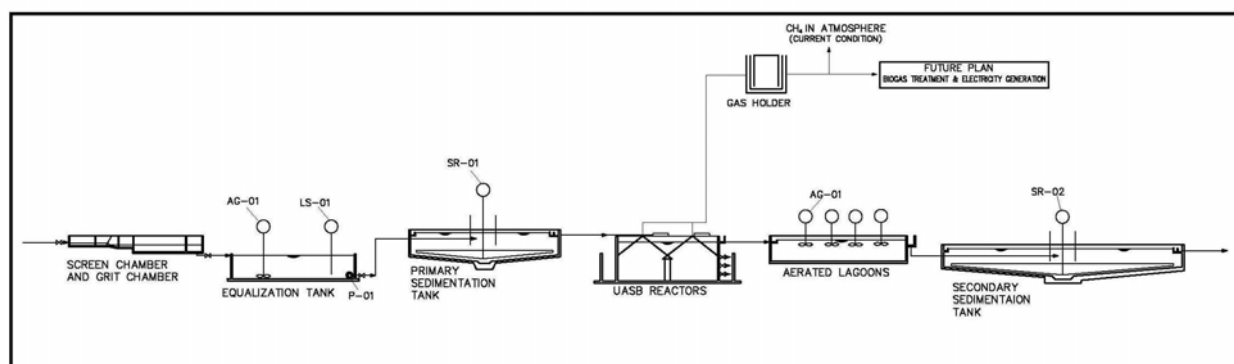
The project activity involves the installation of flaring equipment for flaring of the biogas and biogas engine for combustion of the recovered biogas. The generated electricity from the biogas engine will replace part of the electricity that is being produced from the existing NG gas engine. The biogas will be flared in the enclosed flaring system during the shutdown of the biogas engine.

The procured biogas is not being flared and combusted in the flaring equipment and biogas engine due to lack of access to finance for the procurement of all the equipments and absence of regulation for the flaring/combustion of the biogas.

The proposed project activity will reduce the anthropogenic GHG emissions into the atmosphere by the following complementary activities:

- Firstly, flaring or combusting recovered methane enriched biogas the project will reduce CH<sub>4</sub> emission that would otherwise emit from the existing system in the absence of the project activity.
- Secondly, the methane-enriched biogas would be used for electricity generation thereby decreasing the anthropogenic emissions of greenhouse gases (GHGs) into the atmosphere associated with the fossil fuel burning which would have happened in the absence of the project activity.

The figure below describes the project activity scenario:



Our clarification is:

According to its paragraph 1 (iv) the methodology AMS-III.H, version 11 is applicable to project activities which introduce a biogas recovery and combustion to an existing anaerobic wastewater

treatment system such as anaerobic reactor, lagoon, septic tank or an on site industrial plant.

The existing system is only having methane recovery system and is not an inter related and integral activity of methane recovery and methane combustion. We kindly request guidance on the applicability of current version of AMS-III.H to the situation mentioned above, where the wastewater treatment and biogas recovery takes place in the baseline and the project activity will introduce flaring/combustion and utilization measures to the recovered biogas. Furthermore if expedient and in conjunction with the project activity illustrated above we are seeking guidance on potential subsequent steps to be undertaken on the AMS-III.H (e.g. deviation/extension/revision of the AMS-III.H.).

#### **Recommendation by the SSC WG:**

Please use the space below to provide amendments/change (in your expert view, if necessary).

Please refer to paragraph 3- of the meeting report of the SSC WG 20  
([http://cdm.unfccc.int/Panels/ssc\\_wg](http://cdm.unfccc.int/Panels/ssc_wg)).

#### **Answer to authors of query by the SSC WG:**

Please use the space below to provide answer to the authors of the above query

The small-scale working group of the CDM Executive Board would like to thank the author for the submission.

The SSC WG would like to clarify that AMS III.H aims at the introduction of biogas recovery and combustion and that it does not apply to the situations where biogas recovery is already taking place, as is the case of the submission. The situation where there is already an anaerobic digestion system in combination with biogas capture is not considered to be a credible baseline scenario under AMS-III.H.

If the project activity meets the CDM requirements, the project proponents might still use a Type I methodology for the biogas utilization component.



Signature of SSC WG Chair .....

(Hugh Sealy)

Date: 02/05/2009



Signature of SSC WG Vice-Chair .....

(Peer Stiansen)

Date: 02/05/2009

#### **Information to be completed by the secretariat**

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