

	CDM: Form for Submissions on Small Scale Methodologies and Procedures (version 03) <i>(To be used for presenting questions/proposals/amendments related to the simplified methodologies for small-scale CDM project activity categories)</i>
Name:	Tulika Biswas Institution: Carbonmcgroup
Affiliation ¹ :	×DNA ×DOE ×PP ✓Stakeholder
Title/Subject (max. 200 characters):	Applicability of Small Scale Approved Methodology AMS III.P (Version 01) in Petrochemical Industry.
Purpose of the submission:	✓ Query on an approved SSC methodology or small scale procedures ² (Fill in field 1. below) × Request for Revision of an approved SSC methodology (Fill in fields 2. and 3. below) × Proposal for a new SSC methodology (Fill in fields 4. and 5. below)
Approved SSC methodologies ² to which your submission relates to, if applicable.	AMS III.P (version 01) : Recovery and utilization of waste gas in refinery facilities
Contact Information (e-mail addresses to which the answers are to be delivered and phone contacts for possible dialogue on the submission).	tulikabiswas.cmc@gmail.com tulika.biswas@carbonmcgroup.com Mobile : +919432186166
Information for completing the form Describe the questions related to the SSC Methodologies, Modalities and Procedures below. If the questions are related to a project under development or implementation, you may describe the context in which they arose.	
Query on an approved SSC methodology or SSC procedures	
1. If you have questions relating to the application of an approved small-scale methodology (AMS) please specify and provide reference to the exact technology/measure below. If you have questions related to procedures for SSC project activities please clarify below:	
<p>>> Project Activity: Flare gas recovery project at Petrochemical complex in Pata, Auraiya district, Uttar Pradesh, India, reduces the emission of greenhouse gases (GHG) from lean gas used for process heating by replacing them with recovered waste gases that are normally burned in flares.</p> <p>The average amount of waste gas sent to the flares at the petrochemical process is 2727 Nm³/hr and the fossil fuel consumed in the flaring purpose amounts to 224 Nm³/hr. Waste gas is characterized by low pressure for which no useful application is found in the absence of the project. In the project scenario this waste gas is recovered in order to make it useful as a fuel for its own use.</p> <p>It is proposed to recover the flare gases from the Flare Knockout Drum (KOD) of Main Flare system using ejector system. Lean gas compressor discharge will be used as motive fluid to the ejector and flare knock out drum will be connected to the suction of ejector. Final discharge shall go to boiler KOD, from where it will be used in Utility Boilers (UB) as fuel. To facilitate on line hook up of the system, tap off connections are already provided at the outlet of the flare KOD discharge.</p>	

¹ Designated National Authority (DNA); Designated Operational Entity (DOE); Project Participant (PP), and Stakeholder.

² The list of all approved small-scale methodologies (AMS) can be found at <http://cdm.unfccc.int> and go to CDM: small scale CDM methodologies.

LGC outlet and also at the inlet of UB KOD.

The proposed CDM project activity aims to reduce GHG emissions by recovering waste gases before flaring and partly replacing lean gas, used in process heating (Utility Boiler), with the recovered waste gas. It will also reduce emissions by decreasing the amount of fossil fuel (Rich gas) necessary for flaring.

Methodology : Approved small scale methodology AMS III.P (version 01) is for “Recovery and utilisation of waste gas in refinery facilities”. Definition section of this methodology on page 2/6 says that :

“For the purpose of this category the following definitions apply :

Waste gas : Waste gas is a by-product generated in several of the **processing units of the refinery and in normal operational processes is directed to the flares**. The principal constituents of this gas are the same as in refinery gas (methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc). However, waste gas is characterized by a low pressure for which no useful application is found in the absence of the project, because recovering waste gas for energy use is not feasible in the baseline scenario (eg. because of low pressure, heating value or quantity available). In the project scenario, this waste gas is recovered in order to make it useful as a fuel.

Waste gas composition of both refinery and petrochemical industry is given in the following table.

Sl. No.	Parameters	Unit	Petrochemical Complex	Industrial Complex of La Plata Project (refinery) (Methodology AM0055 approved based on the this PDD)	Low Pressure Gas Recovery Project of Shandong Changyi Petrochemical Co., Ltd., China	Low Pressure Gas Recovery Project of Shandong Weifang Hongrun Petrochemical Auxiliary Co., Ltd., China	Recovery and utilization of flare waste gases at the Industrial Complex of Luján de Cuyo
1	Methane	Vol %	34	39.51	32.07	19.07	25.05
2	Ethane	Vol %	1.6	7.58	10.43	10.43	8.09
3	Propane	Vol %	0.3	5.60	0.04	0.04	9.84
4	Butanes	Vol %	0.2	3.17	-	-	-
5	Pentanes	Vol %	0.04	1.15	-	-	-
6	Hydrogen	Vol %	39.98	15.82	24.31	37.31	23.85
7	Ethylene	Vol %	1.1	2.92	13.51	13.51	1.07
8	Propylene	Vol %	0.14	6.84	0.5	0.5	1.56
9	CO ₂	Vol %	0.1	1.49	2.39	2.39	0.26
10	Nitrogen	Vol %	22.54	9.68	13.48	13.48	0.89
Source		-	From PP source	UNFCCC website	UNFCCC website (under validation)	UNFCCC website (under validation)	UNFCCC website (under validation)

Clarification Request 1 :

Clarification is requested, if recovery and utilization of waste gas (methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. – with little variation) in petrochemical complex can use this methodology? The project activity complies with all the other requirement of the methodology including the definition of waste gas, the only thing that is not in compliance with the methodology is the title “refinery”. So we request the SSC-WG to clarify whether if all the other requirement of the methodology is met, a petrochemical industry can use this methodology?

Request for revision of an approved SSC methodology

2. If you are proposing an amendment/revision to an approved small-scale methodology (AMS), please provide justifications below:

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3. If you are proposing an amendment/revision to an approved small-scale methodology (AMS) please provide the draft methodology with changes highlighted.

<p>The following documents have been attached to this form:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Draft methodology with changes highlighted in Word and PDF formats <input type="checkbox"/> PDD in PDF format (optional) <input type="checkbox"/> Additional information (please specify if you are providing any information note, published paper or a report in support of the request for revision of the SSC methodology) 	
Proposal for a new SSC methodology	
4. If you are proposing a new small scale methodology, please provide justifications below:	
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5. For submitting a new small scale methodology a filled in form "CDM: form for proposed new small scale methodologies (F-CDM-SSC-NM)" is required.	
<p>The following documents have been attached to this form:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Completely filled in form "CDM: form for proposed new small scale methodologies (F-CDM-SSC-NM)" in Word and PDF formats³ <input type="checkbox"/> A draft PDD (with sections A to C completed): <ul style="list-style-type: none"> <input type="radio"/> Relevant annexes to the PDD are provided <input type="checkbox"/> Additional information (please specify if you are providing any information note, published paper or a report in support of the new SSC methodology) 	
Date you are delivering the contribution:	
Information to be completed by the secretariat	
SSC-Submission number	

³ The current version of the form (F-CDM-SSC-NM) is available on the UNFCCC CDM website (<http://cdm.unfccc.int>).