

28 May 2015

RE: Request for renewal of the crediting period INCOMPLETE: EnviroServ Chloorkop  
Landfill Gas Recovery Project. (0925)

Dear CDM Team,

This letter is in response to the issues raised during the Information and Reporting check stage with regards to the request for renewal of the crediting period of the registered CDM Project “EnviroServ Chloorkop Landfill Gas Recovery Project (0925).

We have addressed each of these issues in tabular format in the below Annex to this letter.

Trusting to having informed you sufficiently,

Yours sincerely,



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## Annex 1: Project Participant's response to EB comments raised during IR check with regards to request for renewal of crediting period for "EnviroServ Chloorkop Landfill Gas Recovery Project" (0925).

EB Comments	Response
<p>1) The DOE has validated that the project does not imply any change in the waste received at the landfill and has not reduced the amount of organic waste that would have been recycled in the absence of the project activity, assessed based on knowledge of the project from the initial validation, subsequent verifications and the confirmation from the project participant through interview. However, the DOE is required to confirm, through additional sources (such as national/local statistics, interview with authorities and experts on the waste sector in South Africa), that the implementation of the project will not reduce the amount of organic fraction of the waste that would have been recycled by the project activity. Organic fraction of waste to be disposed in the landfill. Please refer to VVS version 07.0 paragraph 359 (b).</p>	<p>The project does not imply any change in the waste received at the landfill and has not reduced the amount of organic waste that would have been recycled in the absence of the project activity. This was confirmed through the following additional sources:</p> <p>An official letter from the division/company responsible for collecting and depositing of waste at Chloorkop Landfill was obtained, confirming that the implementation of the "EnviroServ Chloorkop Landfill Gas Recovery Project" did not and will also continue to not reduce the amount of organic waste that would have been recycled in the absence of the project activity.</p> <p>A review of the South African Waste Information Centre (SAWIC) confirmed that recycling of organic waste is not a common/widely used practice in South Africa and in the region of the project.</p> <p>The PDD, Section B.2., first table, justification of applicability condition (d) ("Do not reduce the amount of organic waste that would be recycled in the absence of the project activity.") was amended to reflect this.</p> <p>In addition, a copy of the official letter has been added to Appendix 3 "Applicability of methodology and standardized baseline" of the PDD.</p>
<p>2) The PP is required to indicate in the PDD and the DOE is required to validate which option (Option A: Apply a default value for flare efficiency; Option B: Measure the flare efficiency) was selected to determine the flare efficiency according to the "Project emissions from flaring" version 02.0. In doing so, the PP shall document in the PDD and the DOE shall validate whether the flare is a low height flare or not and apply the relevant discount factor, if</p>	<p>Section B.6.1. of the PDD "Ex Post determination of <math>F_{CH_4, PJ, y}</math>" was amended in order to:</p> <ul style="list-style-type: none"> <li>• Explain the selection of Option B.1. from the applied methodological tool "Project emissions from flaring" (Version 02.0) to determine the flare efficiency (Biannual measurement of flare efficiency).</li> <li>• Explain that a discount factor of 0.1 is</li> </ul>

<p>necessary. The PP shall also include in the PDD the relevant steps of the tool to calculate ERs.</p>	<p>applicable to the determined flare efficiency as a conservative approach for low height flares.</p> <ul style="list-style-type: none"> <li>• Document the relevant steps of the methodological tool “Project emissions from flaring” (Version 02.0) to calculate the Ex Post Emission Reductions.</li> <li>• Document the required flare specifications as required by the methodological tool “Project emissions from flaring” (Version 02.0), page 10.</li> </ul>
<p>3) The PP is required to indicate in the PDD and the DOE is required to validate which option was selected to determine the basis of the flow-rate of gas and methane concentration (wet or dry) according to the "Tool to determine the mass flow of a greenhouse gas in a gaseous stream" version 02.0.0. In doing so, the PP shall include in the PDD the relevant equations of the tool to calculate the gas flow.</p>	<p>Section B.6.1. of the PDD “Ex Post determination of <math>F_{CH_4,PJ,y}</math>” was amended in order to:</p> <ul style="list-style-type: none"> <li>• Indicate the selection of Option B from Table 1 of the applied “Tool to determine the mass flow of a greenhouse gas in a gaseous stream” (Version 02.0.0) to measure the volume flow of the gaseous stream on a wet basis and to measure the volumetric fraction of <math>CH_4</math> on a dry basis.</li> <li>• Include the relevant equations of the applied tool to calculate the gas flow.</li> </ul>
<p>4) Paragraph 33 (a) of the applied version of ACM0001 requires that "the gaseous stream the tool shall be applied to the LFG delivery pipeline to each item of electricity generation or heat generation equipment <math>j</math>, or the natural gas distribution system, or the trucks". However, the PDD does not indicate whether the measurements will be made for each flare or not and where the instruments will be located.</p>	<p><math>F_{CH_4,sent\_flare,y}</math> is determined directly using the “Tool to determine the mass flow of a greenhouse gas in a gaseous stream” (Version 02.0.0), applying the requirements described in paragraph 33(b), (c), (d) and (e) and where the gaseous stream the tool shall be applied to is the LFG delivery pipeline to the flares. As per paragraph 33 of the underlying methodology (ACM0001, Version 15.0), the following requirements apply:</p> <ol style="list-style-type: none"> <li>(a) The gaseous stream the tool shall be applied to is the LFG delivery pipeline to the flares</li> <li>(b) <math>CH_4</math> is the greenhouse gas for which the mass flow should be determined.</li> <li>(c) The simplification offered for calculating the molecular mass of the gaseous stream is valid (equations (3) or (17) in the tool).</li> <li>(d) The mass flow should be calculated on an hourly basis for each hour <math>h</math> in year <math>y</math>.</li> <li>(e) The mass flow calculated for hour <math>h</math> is 0 if the equipment is not working in hour <math>h</math> (<math>O_{pi,h}</math> = not working), the hourly values are then summed to a yearly unit basis.</li> </ol>

	<p>As per the applied “Tool to determine the mass flow of a greenhouse gas in a gaseous stream” (Version 02.0.0), the mass flow of CH<sub>4</sub> in a gaseous stream (<math>F_{CH_4, sent\_flare, y}</math>) is determined through measurement of the flow and volumetric fraction of the gaseous stream.</p> <p>Measurements will be made for each flare and instruments are located as following:</p> <ul style="list-style-type: none"> <li>- Flowmeters are fitted to the gas inlet and the main burner gas train and measure the flow rate of the gas.</li> <li>- The gas data analyser is connected to the outlet of the extraction fan and measures the methane concentration.</li> </ul> <p>Section B.6.1 of the PDD “Ex Post determination of <math>F_{CH_4, PJ, y}</math>” was amended in order to reflect this.</p>
<p>5) The PP is required to include in the monitoring plan the monitoring system of the parameters required to measure the moisture of the gas, if applicable, and the flare efficiency.</p>	<p>Option B from Table 1 of the applied “Tool to determine the mass flow of a greenhouse gas in a gaseous stream” (Version 02.0.0) to measure the volume flow of the gaseous stream on a wet basis and to measure the volumetric fraction of CH<sub>4</sub> on a dry basis, was selected.</p> <p>Measurement of moisture content is not applicable as “<i>Option 2: Simplified calculation without measurement of the moisture content</i>” from the “Tool to determine the mass flow of a greenhouse gas in a gaseous stream” (Version 02.0.0) was selected for determining the absolute humidity.</p> <p>Section B.6.1. of the PDD was updated to reflect this.</p> <p>And as per requirement in the applied methodological tool “Project emissions from flaring” (Version 02.0), Section B.6.2. was updated to include the parameter “SPECflare”.</p> <p>As per requirements in the applied methodological tool “Project emissions from flaring” (Version 02.0) and the “Tool to determine the mass flow of a greenhouse gas in a gaseous stream” (Version 02.0.0), Section B.7.1. of the PDD was amended in order to include all the relevant parameters.</p>

<p><b>Additional comment from Project Participant</b></p>	<p>The latest COP/MOP decision (Decision 24/CP.19, paragraph 2) stipulates that “from 2015 until a further decision is adopted by the Conference of the Parties, the global warming potential values used by Parties included in Annex I to the Convention (Annex I Parties) ... shall be those listed in the column entitled “Global warming potential for given time horizon” in table 2.14 of the errata to the contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, based on the effects of greenhouse gases over a 100-year time horizon, as contained in annex III”; This means that from 2015 the value 25 shall be used for the GWP of methane.</p> <p>The value of 25 for the GWP of methane has been applied for the ex ante calculation of emission reductions, applicable to the second Commitment period of the Kyoto Protocol as per the latest COP/MOP decision (Decision 24/CP.19, paragraph 2) and the applied methodology which stipulates that the Global warming potential of CH<sub>4</sub> is 21 for the first commitment period and shall be updated according to any future COP/MOP decisions. The PDD has been updated in Sections B.6.2., B.6.3. and B.6.4. in order to reflect this.</p>
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