CDM: Response form for Request for revision of approved methodologies (version 01.1)

Date of Meth Panel meeting:	04 - 08 May 2009
Title and number of Request for revision	Catalytic N2O destruction in the tail gas of Nitric Acid or Caprolactam Production Plants AM_REV_0115

Summary of the query:

Please use the space below to summarize the request for revision on the related approved methodologies.

Project proponent submitted a request for revision previously, AM_REV_0090 that has been rejected. This resubmission includes new clarifications and provisions.

The proposed project is to install deN2O equipment to the relocated Nitric Acid plants being part of chemical fertilizer complex. The fertilizer complex consists of some relocated and some new plants a detailed below:

Ammonia plant	Relocated	Nitro phosphate	New plant
Nitric Acid plants	Relocated	Off site & utilities	New plant
CAN plant	Relocated	Urea	New plant
NPK plant	Relocated		

It is emphasized that the installation of the chemical fertilizer complex including the relocated nitric acid plant was decided to meet the ever growing domestic demand of fertilizer and was regardless of the CDM project activity (installation of deN2O equipment).

The original AM0028 is to be applied to the existing nitric acid plants – commercially operating before 31 December 2005. The proposed revision is to broaden the applicability to include the case in which the exiting Nitric Acid plant was relocated without changing the underlying concept of the methodology and the decision to relocate the plant was made before 31 December 2005.

The project proponents emphasize that the planning for installation of the chemical fertilizer complex was independent of "installation of the deN2O equipment". Therefore, concerns specified in the "Note on expansion of methodologies for project activities on recovery and destruction of industrial gases to include new facilities" (Meth 34, annex 11) are not relevant to this case.

However, the Meth Panel's comment on the previous submission relied on the concern of this independence. Namely, the Meth Panel considered that the establishment of the chemical complex may have been influenced by the attractiveness of installing the deN2O equipment as shown below in the previous response:

"The Meth Panel cannot accept the request for revision for the following reasons.

1. There is no mention in methodology on how the demand for Nitric Acid is going to be satisfied in the previous location (or country) for the plant. A detailed analysis regarding Nitric Acid production and GHG emissions in the previous location as well as in the new location is necessary.
2. There is no mention about whether the country from where plant is imported is an Annex I or non Annex I country. This is particularly significant from the point of view that, if an Annex I country transfers its plant from their country to non Annex I country and still imports nitric acid from the plant, it's a clear case of displacement of nitric acid production in Annex I country.
3. Determination of the baseline scenario (and consequently the Specific N_2O emissions per unit of output of nitric acid) would require an additional consideration. It should be noted that one of the alternatives available for the project proponent would be to install a new plant with a much lower level ratio of N_2O emissions per unit of output of nitric acid. The baseline scenario determination procedure included in the methodology can only be used for existing capacity. The baseline alternatives evaluated differ only in the level of destruction of produced N_2O, but all of them assume the same specific N2O ratio.
4. There has to be a proper definition of baseline scenario for the case of relocated second hand plants. The baseline scenarios should be defined for both the locations (seller and buyer of the plant).
5. There has to be an applicability condition stating that the second hand plant cannot be less energy intensive and more N_2O emitting than the common practice plant (without N_2O abatement unit) in the country of relocation."

Project proponent sustains that the establishment of the chemical complex and the proposed project activity (deN2O equipment installation) are completely independent of each other. In view of this, some of the items above are no more applicable for this case. The emissions associated with the activity (except the N_2O emissions) do not depend of the CDM project and are common for the baseline and the project scenario and can be cancelled in the calculation of emission reductions. It is not appropriate to consider the baseline scenario options for the seller-side (according to the project proponent), as well as the option where the buyer of the chemical fertilizer complex would not by the complex. However, nothing is said about exporting the production to an Annex I country.

For the item 5, it is worth to clarify that the preferred method to calculate emission reductions in AM0028, is to monitor the decomposed amount of N2O in the tail gas

The rationale proposes that the main issue to allow relocated plants to use AM0028 is on how to demonstrate the independence between the installation of the complex and the project activity.

The additional applicability conditions

The company has made a huge investment of USD900 million only for the installation of the chemical fertilizer complex whereas the installation cost on CDM is only 6 million Euro which is quite small in comparison with the cost o the fertilizer complex. In addition, selling CERs is not the core business of the host fertilizer company. Rather, the real business is to sell nitric acid related final products like Nitro phosphate, calcium ammonium nitrate and NPK in the domestic market.

Therefore, it is not correct to assume that the installation of the chemical fertilizer complex is driven in any way by the return of the DeN2O equipment installation.

As the guidance to be added to the applicability condition, it is suggested the inclusion of procedures to verify or demonstrate such condition.

1. The proposed project (installation of the DeN2O equipment) is not the essential driver economically to relocate the chemical fertilizer complex. In addition, it is a well-established fact that relocation of such plants is much easier and cost effective than construction of a new chemical fertilizer complex. For this demonstration, the procedures (b) and (c) are added:

   (b) The cost of the relocation of the chemical fertilizer complex/nitric acid plant is much larger than the cost of the DeN2O equipment and associated CER revenues, and
   (c) The cost of new chemical fertilizer complex/nitric acid plant is much larger than the cost of relocation.

2. Not only economical aspects above, it is needed to check the legal aspects as follows:

   - The installation of the proposed project is not required by law of the host country where chemical fertilizer complex/nitric acid plant is relocated.

3. In addition to the above conditions, the evidences of the decision making strongly supports the logics concerning the economical rationally and legal rationality provided above:

   - The evidences that the decision-making of relocation of the chemical fertilizer complex/nitric acid plant, which was taken no later than 31 December 2005, was done independent of the DeN_2O equipment installation shall be provided with chronological explanation. The evidences shall be based on (preferably official, legal and/or other corporate) documentation that was available at, or prior to, the start of the project activity;
   - The nitric acid plant was on sale in the market;
   - There is no capital relationship between the owners of the original and new plant sites;

If the Meth Panel considers the above condition insufficient, the following conditions may be added:

- The potential demand of the final product (NP, CAN and NPK) is much larger in the host country in order to avoid the gaming, which is to produce excess of the products to obtain more CERs than the market demand. This can be demonstrated that the import is much larger than export of the product; or
- The originated country of the nitric acid plant does not re-import the nitric acid from the targeted country (host country of the project).

Recommendation by the Meth Panel:

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

The Meth Panel cannot accept the request for revision for the following reasons. The Meth Panel agrees that the decision to invest in a chemical complex could be made independently of the installation of a N2O destruction unit, but the complex, or at least the Nitric Acid plant, can not be considered outside the project boundary for a CDM project because the Nitric Acid plant itself, will influence the baseline emissions. For this reason project proponent has to address the issues raised in the previous recommendation regarding the same project activity, AM_REV_0090.

1. There is no mention in methodology on how the demand for Nitric Acid is going to be satisfied in the previous location (or country) for the plant. A detailed method for analysis regarding Nitric Acid production, trade and consumption patterns in the previous location as well as in the new location is necessary.
2. There is no mention about how to address the possibility of the country from where plant is imported being an Annex I or non-Annex I country. This is particularly significant from the point of view that, if an Annex I country transfers its plant from their country to non-Annex I country and still imports nitric acid from the plant, it's a clear case of displacement of nitric acid production in Annex I country.
3. Determination of the baseline scenario (and consequently the Specific N_2O emissions per unit of output of nitric acid) would require an additional consideration. It should be noted that one of the alternatives available for the project proponent would be to install a new plant with a much lower level ratio of N_2O emissions per unit of output of nitric acid (technological trends). The baseline scenario determination procedure included in the methodology can only be used for existing capacity. The baseline alternatives evaluated differ only in the level of destruction of produced N_2O, but all of them assume the same specific N2O ratio.
4. There has to be a proper definition of baseline scenario for the case of relocated second hand plants. The baseline scenarios should be defined for both the locations (seller and buyer of the plant).
5. There has to be an applicability condition stating that the second hand plant cannot be less energy intensive and more N_2O emitting than the common practice plant (without N_2O abatement unit) in the country of relocation. Further, a method to analyze the technological trends or to determine a benchmark baseline emission factor should be provided.

It is important to mention that methodology AM0028 is applicable to existing plants that started commercial operation before 31 December 2005, this condition is in the methodology because (but not only) it is very difficult for existing plants to change the operating conditions. In the case of new or even relocated plants, the Meth Panel is of the opinion that the baseline emissions could be lower than the IPCC reference values because the plants can either be retrofitted or arranged in such a way that they can have a lower emission factor for the baseline scenario.

(b) Please use the space below for providing guidance, as per Para 93 of EB25 Report, on what type of projects need to revise the PDD as a consequence of the suggested revision, if the recommendation is to revise the methodology.
The recommendation is not to revise methodology. Project proponents should refer to the "Guidelines on expansion of industrial gas recovery methodologies to new facilities" when submitting new request of revision of AM0028. The guidelines can be found in the following link <http://cdm.unfccc.int/EB/046/eb46_repan10.pdf>
Answer to authors of the request for revision by the Meth Panel : Please use the space below to provide an answer to the authors of the above query
Please see above.

Signature of Meth Panel Chair ……..
Date: 08/05/2009 *(Philip Gwage)*

Signature of Meth Panel Vice-Chair ……..
Date: 08/05/2009 *(Pedro Martins Barata)*

Information to be completed by the secretariat	
F-CDM-AM	AM_REV_0115
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