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CERTIFICATION AS

Att: CDM Executive Board

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Your ref.:
CDM Ref 1919

Our ref.:
FEANT/MLEH

Date:
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Response to request for review

“Ramirana Emission Reduction Project of Agricola Super Limitada” (1919)

Dear Members of the CDM Executive Board,

We refer to the request for review raised by three Board members concerning DNV’s request for registration of project activity 1919 “Ramirana Emission Reduction Project of Agricola Super Limitada”, and we would like to provide the following response to the questions raised by these requests for review.

Comment 1: The DOE should explain why the investment analysis was conducted on a ten-year period and clarify the source of the parameters used in the financial analysis to demonstrate that it was the basis for the investment decision.

DNV Response:

During the site visit DNV verified the budgetary input parameters used for the investment analysis, which were established according to Agricola Super previous CDM project “Methane Capture and Combustion from Swine Manure Treatment for Peralillo (0032)”. The analysis was conducted on a ten-year period, which is the typical period used by Agrosuper to develop its investment analyses and is in line with the “Guidance on the assessment of investment analysis” (CDM-EB). DNV acknowledges that the option of a 10- year analysis is a conservative approach compared to the maximum period of 20 years suggested as appropriate by the Guidance, because the project and baseline scenario have both only cash outflows during the complete period, which are greater in the project scenario compared to the baseline scenario. Therefore, a longer assessment period in this case would only increase the difference of the NPV values between the baseline and the project scenario. The fair value of the project activity assets was not included in the original analysis by mistake.

In order to demonstrate the appropriateness of the input parameters provided, the project proponent conducted a new investment analysis considering the real costs of the project. Although the result of the analysis was not the same as the one with the budget values, the project NPV (-US\$ 8 908 241) is still far more negative than the baseline NPV (-US\$ 708 516), which is quite reasonable considering that the investments required to install an anaerobic lagoon are much lower than the investments required to implement a project consisting of a digester and an activated sludge treatment.

The following input values were assessed by DNV:

Baseline scenario:

- Installation costs: US\$ 306 634. Source: Contract with Victor Ricardo Leiva for the construction of the biodigester dated 29 January 2002 (*) ;
- Maintenance costs: US\$ 30 663. Source: 10% of installation costs, which DNV considers reasonable;
- Additional costs: US\$ 553 682. Source: Proposal for sludge removal from Ricardo Leiva dated 19 November 2008.

(*) The baseline installation costs are calculated based on the contracted value for ground movements of the digester, estimating a unitary investment cost considering the total cost and the lagoon volume of the digester. The contracted value is 102 517 US\$ and the lagoon volume of the digester is 67 000 m³, therefore, the unitary investment cost is 1.53 US\$/m³. The volume of the anaerobic lagoon is 200 400 m³ (equal to 1 670 m³/d influent flow * 120 days hydraulic retention time) and investment cost is obtained multiplying the anaerobic lagoon volume by the unitary cost, obtaining a baseline investment cost of 306 634 US\$.

Digester:

- Equipment costs: US\$ 157 486. Source: Perennial Energy (flare + gas management system) invoices 2647, 2648, 2691, 2699, 5553 and 5558.
- Fair value: US\$ 15 749. Source: 10% of investment costs, which DNV considers reasonable;
- Installation costs: US\$ 807 427. Source: Insac (piping) invoice 3950, R. Leiva (ground movement) invoices 5322, 5331, 5369, 5374 and 5400, Gresol (slab and inclined slab) invoices 2678 and 2690, PPP (cover supply and installation) invoices 363939 and 366882 and Emin (liner installation) invoice 9033.
- Maintenance costs: US\$ 15 749. Source: 10% of investment costs, which DNV considers reasonable;
- Additional costs: This item considers electricity cost. Total electricity cost of the digester and activated sludge plant are considered in the item “Additional costs” from the Activated sludge plant.

Activated sludge plant:

- Equipment costs: US\$ 1 126 181. Source: Ecopreneur invoices 2263, 2318 and 2433;
- Fair value: US\$ 112 618. Source: 10% of investment costs, which DNV considers reasonable;
- Installation costs: US\$ 2 380 427. Source: Cavasal (ground movement) invoices 1897, 1909, 1954, 1976 and 1987, and Inarco (Civil Works) invoices 4275 and 4673;
- Maintenance costs: US\$ 112 618. Source: 10% of investment costs, which DNV considers reasonable;
- Additional costs: US\$ 601 743. Source: electric and polymer bills. The project proponent provided a report with electric and chemical expenses related to the project activity in 2008.

Comment 2: The DOE should provide further evidence of prior consideration of CDM.

DNV Response:

DNV can confirm that there are no further incentives than the CDM to implement this advanced technology, nor financial incentives nor legal requirements. Many actions were taken to secure CDM status before and in parallel with the project’s implementation.

The evidences provided for each event has been reviewed by DNV:

1. A letter to CONAMA (Chilean Environmental Agency) dated 10 August 2000 mentions that one of the project objectives is to mitigate climate change.
2. An e-mail message by a potential buyer of CERs in which the buyer proposes to buy CERs from the project, dated 19 July 2001.
3. The contract for construction of the biodigester dated 29 January 2002, representing the starting of the project activity.
4. The formal contract with a consultant to implement a CDM strategy for all Agrosuper’s manure management project, dated 26 February 2003.
5. In the first ERPA negotiated by Agrosuper dated February 2003, Transalta (the buyer) asked for a right of first refusal for the future projects of Agrosuper. Specific provisions were included to regulate this right.
6. An e-mail message from CO2e.com to Agrosuper dated August 2003 asking about the willingness of Agrosuper to sell the emission reductions from future projects that were to be implemented in 2004.
7. The new methodology AM0006 was submitted for public input from 15 September 2003.
8. Term sheet to be signed and finalised by Agrosuper to sell CERs from the future projects of Agrosuper to Japanese buyers, Chubu and Chogaku, dated October 2003.
9. The Environmental Impact Statement presented to CONAMA in October 2004 clearly mentions that the project is sustained economically due to part of its costs can be amortized by the CDM benefits.
10. The original PDD applying AM0006 version 01 was published in 18 August 2005.

11. The original project was rejected at EB 29 meeting due to the non-monitoring of flare efficiency.
12. The new PDD applying ACM0010 was published in 22 June 2007.

Therefore it is DNV's opinion that CDM was seriously considered necessary in the decision to undertake the project activity.

Minor issue: *The DOE should validate that the described monitoring plan has been implemented.*

DNV Response:

On 12 July 2007 DNV conducted a site visit and interviews with project stakeholders to confirm selected information, including the implementation of the monitoring plan. DNV was able to verify that the described monitoring plan has been implemented.

We sincerely hope that the Board accepts our above explanations.

Yours faithfully

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Michael Lehmann

Director

International Climate Change Service