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Validation Report

Abonos Colombianos SA.

VALIDATION OF THE CDM-PROJECT:
PROJECT FOR THE CATALYTIC REDUCTION OF N₂O
EMISSIONS WITH A SECONDARY CATALYST INSIDE
THE AMMONIA OXIDATION REACTORS OF THE NAN1
AND NAN2 NITRIC ACID PLANTS AT ABONOS CO-
LOMBIANOS SA (“ABOCOL”), COLOMBIA

REPORT NO. 948604

2007, August 14

TÜV SÜD Industrie Service GmbH
Carbon Management Service
Westendstr. 199 - 80686 Munich – GERMANY

Validation of the CDM Project:

Project for the catalytic reduction of N₂O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia



Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
948604	2007-03-09	3	2007-08-14	-

Subject: Validation of a CDM Project	
Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 - 80686 Munich Federal Republic of Germany	TÜV SÜD Contract Partner: TÜV SÜD Industrie Service GmbH Carbon Management Service Westendstr. 199-80686 Munich Federal Republic of Germany
Client: Abonos Colombianos S.A. Via Mamonal km 11/PO Cartagena Colombia	Project Site(s): Abonos Colombianos S.A. Via Mamonal km 11/PO Cartagena Colombia
Project Title: Project for the catalytic reduction of N ₂ O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia	
Applied Methodology / Version: AM0034 version 2	Scope(s): 5
First PDD Version: Date of issuance: 2007-01-17 Version No.: 1.a Starting Date of GSP 2007-01-20	Final PDD version: Date of issuance: 2007-06-06 Version No.: 2.a
Estimated Annual Emission Reduction: 339 688 tons CO _{2e}	
Assessment Team Leader: Javier Castro	Further Assessment Team Members: Nikolaus Kröger (GHG auditor)
Summary of the Validation Opinion: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board in case letters of approval of all Parties involved will be available before the expiring date of the applied methodology(ies) or the applied methodology version respectively. <input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the CDM Executive Board and will inform the project participants and the CDM Executive Board on this decision. 	

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Abbreviations

ACM	Approved Consolidated Methodology
AM	Approved Methodology
AOR	Ammonia Oxidation Reactor
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CR	Clarification Request
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission reduction
GHG	Greenhouse gas(es)
KP	Kyoto Protocol
MP	Monitoring Plan
NGO	Non Governmental Organisation
PDD	Project Design Document
PP	Project Participant
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 INTRODUCTION

1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed project activity against all defined criteria set for the registration under the Clean Development Mechanism (CDM). Validation is part of the CDM project cycle and will finally result in a conclusion by the executing DOE whether a project activity is valid and should be submitted for registration to the CDM-EB. The ultimate decision on the registration of a proposed project activity rests at the CDM Executive Board and the Parties involved.

The project activity discussed by this validation report has been submitted under the project title:

Project for the catalytic reduction of N₂O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia.

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of CDM project activities the scope is set by:

- The Kyoto Protocol, in particular § 12
- Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Further COP/MOP decisions with reference to the CDM (e.g. decisions 4 – 8/CMP.1)
- Decisions by the EB published under <http://cdm.unfccc.int>
- Specific guidance by the EB published under <http://cdm.unfccc.int>
- Guidelines for Completing the Project Design Document (CDM-PDD), and the Proposed New Baseline and Monitoring Methodology (CDM-NM)
- The applied approved methodology
- The technical environment of the project (technical scope)
- Internal and national standards on monitoring and QA/QC
- Technical guideline and information on best practice

The validation is not meant to provide any consulting towards the client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

Once TÜV SÜD receives a first PDD version, it is made publicly available on the internet at TÜV SÜD's webpage as well as on the UNFCCC CDM-webpages for starting a 30 day global stakeholder consultation process (GSP). In case of any request a PDD might be revised (under certain conditions the GSP will be repeated) and the final PDD will form the basis for the final evaluation as presented by this report. Information on the first and on the final PDD version is presented at page 1.

The only purpose of a validation is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based

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on the validation opinion, which will go beyond that purpose.

The first version of the Project Design Document for this project was made with the intention of a baseline certification. This was also the purpose of the first on-site visit made on October 26-27, 2006. The intention has not been continued and the validation process has been followed with a second on-site visit on January 23-25, 2007.

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2 METHODOLOGY

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual (for further information see www.vvmanual.info), an initiative of Designated and Applicant Entities, which aims to harmonize the approach and quality of all such assessments.

In order to ensure transparency, a validation protocol was customised for the project. TÜV SÜD developed a “cook-book” for methodology-specific checklists and protocol based on the templates presented by the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The validation protocol consists of three tables. The different columns in these tables are described in the figure below.

The completed validation protocol is enclosed in Annex 1 to this report.

Validation Protocol Table 1: Conformity of Project Activity and PDD				
Checklist Topic / Question	Reference	Comments	PDD in GSP	Final PDD
<i>The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further subdivided. The lowest level constitutes a checklist question / criterion.</i>	<i>Gives reference to documents where the answer to the checklist question or item is found in case the comment refers to documents other than the PDD.</i>	<i>The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any Request has to be substantiated within this column</i>	<i>Conclusions are presented based on the assessment of the first PDD version. This is either acceptable based on evidence provided (✓), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CR) is used when the validation team has identified a need for further clarification.</i>	<i>Conclusions are presented in the same manner based on the assessment of the final PDD version.</i>

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Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests			
Clarifications and corrective action requests	Ref. to table 1	Summary of project owner response	Validation team conclusion
<i>If the conclusions from table 1 are either a Corrective Action Request or a Clarification Request, these should be listed in this section.</i>	<i>Reference to the checklist question number in Table 1 where the Corrective Action Request or Clarification Request is explained.</i>	<i>The responses given by the client or other project participants during the communications with the validation team should be summarised in this section.</i>	<i>This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final PDD".</i>

In case of a denial of the project activity more detailed information on this decision will be presented in table 3.

Validation Protocol Table 3: Unresolved Corrective Action and Clarification Requests		
Clarifications and corrective action requests	Id. of CAR/CR 1	Explanation of the Conclusion for Denial
<i>If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.</i>	<i>Identifier of the Request.</i>	<i>This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion.</i>

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2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body “climate and energy”. The composition of an assessment team has to be approved by the Certification Body ensuring that the required skills are covered by the team. The Certification Body TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Auditor (GHG-A)
- Greenhouse Gas Auditor Trainee (T)
- Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

The validation team was consisting of the following experts (the responsible Assessment Team Leader in written in bold letters):

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
Javier Castro	ATL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Nikolaus Kröger	GHG-A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Javier Castro is deputy of Certification Body “Climate and Energy”, expert for CDM and JI projects at TÜV SÜD Industrie Service GmbH. He has an academic background in chemical engineering and energy systems. In his position he participates as an expert in energy related projects during the validation, verification and certifications processes for GHG mitigation projects.

Nikolaus Kröger is environmental engineer and expert for emissions monitoring and quality assurance at the department “Environmental Service” of TÜV SÜD. He is located in the Hamburg office and is also engaged as personally accredited verifier in the EU-ETS serving the Northern German market. Being auditor for CDM projects he has already been involved in several CDM activities with a special focus on industrial non-CO₂ projects.

2.2 Review of Documents

The first PDD version submitted by the client and additional background documents related to the project design and baseline were reviewed as initial step of the validation process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report.

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2.3 Follow-up Interviews

In the period of October 26 to 27, 2006 and January 23 to 27, 2007 TÜV SÜD performed interviews on-site with project stakeholders to confirm selected information and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in the context of these on-site visits.

Name	Organisation
Luis Navas	Local N.Serve representative
Christopher Brandt	Project Manager N.Serve
Marten Von Velsen	MD, N.Serve
Nelson Guevara	Process Engineer Abocol
William Ruiz	Maintenance responsible Abocol
Daño Londoño	Instrument engineer Abocol
Johana Rodriguez	Director Process Engineer AbocolKazuki Miura

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2.4 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for TÜV SÜD's positive conclusion on the project design. The Corrective Action Requests and Clarification Requests raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process, the concerns raised and responses that have been given are summarised in chapter 3 below and documented in more detail in the validation protocol in annex 1.

2.5 Internal Quality Control

As final step of a validation the validation report and the protocol have to undergo an internal quality control procedure by the Certification Body "climate and energy", i.e. each report has to be approved either by the head of the certification body or his deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one.

It rests at the decision of TÜV SÜD's Certification Body whether a project will be submitted for re-requesting registration by the EB or not.

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3 SUMMARY OF FINDINGS

As informed above all findings are summarized in table 2 of the attached validation protocol. In total the assessment team expressed 5 Clarification Requests and 21 Corrective Action Requests.

Although the amount of requests is comparatively high, this fact is more related to the aspect that this is the first time of applying this methodology with the new PDD format.

The key findings in the PDD versions were related to the provision of information on the intended monitoring approach and the source of the information given.

Furthermore the surveillance of the introduction of new regulatory thresholds was not ensured by the first PDD version as this aspect of the methodology was not reflected within the document.

The first PDD have used only one campaign for NAN2 for fixing the operational parameters. This has been corrected in the last version. For the final PDD only 2 campaigns have been used, the reasons are clearly explained in the PDD and the same have been confirmed on-site and through documents submitted to the validator.

Before the start of the baseline campaign the project proponent have installed all the monitoring system. The same has been confirmed on-site.

In order to follow the requirements of the methodology it is necessary to demonstrate that the monitoring system complies with the EN 14181. The equipment to measure the pressure, temperature and flow in the stack gas has a QAL1 certification; in the case of the N₂O analyzer it was not possible to confirm this document; moreover at the moment of the installation of the equipment in Abocol facilities no analyzers have obtained the QAL-1 certificate. Additionally the project participant has presented documentation which confirms the intention of the equipment provider to realise the QAL-1 test. With the information provided it is not possible to confirm that the monitoring system complies with the requirements presented in the methodology (EN 14181). This issue has to be confirmed in the verification and with the result of the QALs is possible to determine the final UNC value, which is still considered as an estimation.

The data has been checked but in the state of validation is not possible to confirm the emission factor for the baseline as the uncertainty of the data is not available.

The data provided for the baseline has to be confirmed during verification as only the calculation process, which includes the methods to transfer, store, archive and compile the information, has been validated and not the final values.

The additionality is correctly discussed by the PDD. There is no concern on this discussion as the continuation of the current situation is obviously the most likely scenario as long as there are no legal constraints.

Request for Review: Issue 1:

The PDD states that the NAN2 baseline emission factor has been calculated based on historic data from two campaigns (p.27) while the Validation Report states data from three campaigns have been used (p.11).

Response by TÜV SÜD:

The statement contained in the **PDD is correct**. The revised validation report is attached.

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Request for Review: Issue 2:

Detailed calculation of the baseline emission factor for NAN2 is not made available in the PDD.

Response by Project participant:

At the time the request for registration was submitted to the UNFCCC secretariat via TÜV SÜD, the **baseline data** had **not** been **available**. Thus, the project participants did not provide any more detailed information on the baseline emission factor for NAN2 at that time.

Also, the project participants intend to have the operational parameters and thus the baseline emission factor for both plants audited during the first verification rather than during the validation. This is in line with the clarification provided by the CDM EB in its 32nd meeting (paragraph no. 28).

Response by TÜV SÜD:

As mentioned above during validation the complete baseline data had not been available and following the clarification given in EB report 32, paragraph 28, it is accepted at this stage not to confirm the baseline data. Therefore the detailed calculation of the baseline is not available in the PDD.

Request for Review: Issue 3:

An arithmetic average has been calculated to determine baseline emissions from both plants. Since the capacities of the two plants are different, further clarification is required as to why an arithmetic average has been justified as appropriate to represent the baseline emission factor for the project activity.

Response by Project participant:

At the time the request for registration was submitted, the baseline data had been unavailable. Thus, the NAN2 baseline emission factor is an **estimate only**. The difference in production capacity between the two plants has been taken into account by weighting the known NAN1 emission factor with less significance than the (at that time estimated) emission factor for NAN2.

Response by TÜV SÜD:

The baseline emissions estimation is based on a weighted average, taking in account the forecasted production of each installation. Nevertheless even a direct arithmetic average gives almost the same value as the one used for the estimations and taking into account that the baseline has not been confirmed during validation the used approach has been found acceptable.

Request for Review: Issue 4:

According to the PDD, the effect of pressure drop in operation of NAN2 would be compensated by

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reducing flow air and increasing the ammonia input (p.7). Clarification is required as to how the leakage emissions associated with the increase in ammonia production would be addressed.

Response by Project participant:

The statement only refers to a relative increase in ammonia. By decreasing the air flow whilst keeping the ammonia inflow steady, the ammonia to air ratio increases. So in fact, in absolute terms **ammonia input remains constant**. Therefore, no leakage emissions occur.

Response by TÜV SÜD:

As it is mentioned in the PDD the increment of ammonia is in percentage which is clearly explainable due to the reduction of the air flow and with it, the total amount of gas. Therefore no additional leakage calculation has been required.

Request for Review: Issue 5:

Project participant shall clarify the sharp increase in nitric acid demand which is currently not covered in the methodology.

Response by Project participant:

This may be a slight misunderstanding. The planned increase in production output is due to commercially highly sensitive business plans of Abocol's management. Abocol intends to expand its business activities in the following years and has introduced a detailed business plan to the audit team of TÜV SÜD during the on-site validation visit.

However, the **capacity installed has not been increased** after the 31st December 2005. NAN1 and NAN2 have both been fully operational before the 31st December 2005 as required by the applicability criteria of AM0034. The new plant NAN3 that shall be installed in 2010 is not and will not be part of this CDM project activity.

Response by TÜV SÜD:

The methodology clearly mentions that the total installed capacity should not be increased. The project does accurately comply with this criterion, as the new capacity expansion to be installed is not part of this CDM project.

The increment in the total annual production is due to a current limitation of the productive time due to low demand levels, which Abocol expects to be of transitory nature. The assumed increase in production is feasible on the basis of the presently installed capacity (as required by the methodology). In so far as the planned nitric acid production exceeds the combined capacity of NAN1 and NAN2 (after the installation of NAN3 in 2010), the N₂O emissions due to that additional yield will not be taken into account by the CDM project activity.

Abocol has explained the underlying business plan that was assessed during the on-site audit. The information contained in this business plan is based on confidential marketing information.

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4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on UNFCCC website by installing a link to TÜV SÜD's own website and invited comments by Parties, stakeholders and non-governmental organisations during a period of 30 days.

The following table presents all key information on this process:

webpage: http://www.netinform.net/KE/Wegweiser/Guide2.aspx?ID=24988&Ebene2_ID=740&mode=1	
Starting date of the global stakeholder consultation process: 2007-01-20	
Comment submitted by: -	Issues raised: -
Response by TÜV SÜD: -	

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5 VALIDATION OPINION

TÜV SÜD has performed a validation of the following proposed CDM project activity:

Project for the catalytic reduction of N₂O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia.

The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board.

An analysis as provided by the applied methodology demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

The validation is based on the information made available to us and the engagement conditions detailed in this report. The validation has been performed using a risk based approach as described above. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

Munich, 2007-08-14

A handwritten signature in black ink, appearing to be 'R', enclosed within a circular scribble.

Certification Body "climate and energy"
TÜV SÜD Industrie Service GmbH

Munich, 2007-08-14

A handwritten signature in black ink, appearing to be 'Javier Castro', enclosed within a circular scribble.

Assessment Team Leader

Validation of the CDM Project:
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Annex 1: Validation Protocol

Validation Protocol

Project Title: Project for the catalytic reduction of N₂O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia

Date of Completion: 22.01.07

Number of Pages: 49



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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A. General description of project activity				
A.1. Title of the project activity				
A.1.1. Does the used project title clearly enable to identify the unique CDM activity?		The project title includes the name of the company, therefore is unique.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.2. Are there any indication concerning the revision number and the date of the revision?		The PDD is version 1a dated 17 th January 2007	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.3. Is this consistent with the time line of the project's history?		The date is also the date of submission of the PDD to the validation team	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2. Description of the project activity				
A.2.1. Is the description delivering a transparent overview of the project activities?		The PDD clearly define the typo of project activity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	3	During the onsite visit it was clear that the statements clearly represent the actual situation of the project activities <u>Corrective Action Request No.1.</u> The layout of the PDD includes twice the page number, please correct this layout	CAR 1	<input checked="" type="checkbox"/>
A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?	4, 10	The installation of the monitoring equipment has been confirmed by the audit team	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2.4. Is all information presented consistent with details provided by further chapters of the PDD?	3	The information is consistent. <u>Clarification Request No. 1.</u> Please clarify all the statements related to "Detail information will be added to the final version of the PDD"	CR1	<input checked="" type="checkbox"/>

Validation Protocol

Project Title: Project for the catalytic reduction of N₂O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia

Date of Completion: 22.01.07

Number of Pages: 49



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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A.3. Project participants				
A.3.1. Is the form required for the indication of project participants correctly applied?		The form is correctly applied and mention 2 project participants	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?		It has been confirmed on site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?		The information is consistent.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4. Technical description of the project activity				
<i>A.4.1. Location of the project activity</i>				
A.4.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?		The location of the project is correct and has been confirmed by the audit team	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.1.2. How is it ensured and/or demonstrated, that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?		Abocol is owner of the installations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>A.4.2. Category(ies) of project activity</i>				
A.4.2.1. To which category(ies) does the project activity belonging to? Is the category correctly identified and indicated?	14	The project belongs to category 5 and is correctly stated in the PDD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>A.4.3. Technology to be employed by the project activity</i>				
A.4.3.1. Does the technical design of the project activity reflect current good practices?		The technique use in the project is state of the art technique	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Validation Protocol

Project Title: Project for the catalytic reduction of N₂O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A.4.3.2. Does the description of the technology to be applied provide sufficient and transparent input/ information to evaluate its impact on the greenhouse gas balance?		The description in the PDD clearly shows that such a technology will not increase any impact on the GHG balance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.3. Does the implementation of the project activity require any technology transfer from annex-I-countries to the host country(ies)?		The technology is available in Germany and is transfer to Colombia.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.4. Is the technology implemented by the project activity environmentally safe?		The technology is not wide spread even in annex 1 countries, but it is expected to be environmental safe	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.5. Is the information provided in compliance with actual situation or planning?		The information has been confirmed on site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.6. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?		The project does use project of the art technology that even in annex 1 countries is not widely used.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?		The technology is not expected to be substitute during the crediting period	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.8. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	20	Yes, the project secures initial training. It was confirmed on site that part of the training has been already done <u>Corrective Action Request No.2.</u> Please submit the future training plan for the operators.	CAR2	<input checked="" type="checkbox"/>
A.4.3.9. Is information available on the demand and requirements for training and maintenance?	20	See CAR 2	CAR2	<input checked="" type="checkbox"/>

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A.4.3.10. Is a schedule available for the implementation of the project and are there any risks for delays?		The baseline has been already realised and no delays under than CDM related delays are expected	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.4. Estimated amount of emission reductions over the chosen crediting period				
A.4.4.1. Is the form required for the indication of projected emission reductions correctly applied?		The form is correctly applied. Additional information is presented in this chapter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.4.2. Are the figures provided consistent with other data presented in the PDD?	16	The figures are obtained base on the work plan of the plant which has been confirmed onsite	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.5. Public funding of the project activity				
A.4.5.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?		The project use only private funds	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.5.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?		Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B. Application of a baseline and monitoring methodology				
B.1. Title and reference of the approved baseline and monitoring methodology				
B.1.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	14	The methodology is corrected mention in the PDD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.1.1.2. Is the applied version the most recent one and / or is this version still applicable?		Yes as the date of the first PDD is the most recent one	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.2. Justification of the choice of the methodology and why it is applicable to the project activity														
B.2.1.1. Is the applied methodology considered the most appropriate one?	14	Yes as the project developer has proposed the methodology for approval	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
Integrate the required amount of sub-checklists on the applicability criteria as given by the applied methodology and comment on at least every line answered with “No”;														
B.2.2. Criterion 1: The applicability is limited to the existing production capacity measured in tonnes of nitric acid, where the commercial production had began no later than 31 December 2005. Definition of “existing” production capacity is applied for the process with the existing ammonia oxidization reactor where N ₂ O is generated and not for the process with new ammonia oxidizer. Existing production “capacity” is defined as the designed capacity, measured in tons of nitric acid per year.		<table border="1"> <thead> <tr> <th>Applicability checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Criterion discussed in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance provable?</td> <td>yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance verified?</td> <td>yes</td> </tr> </tbody> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	yes	Compliance provable?	yes	Evidences provided in the PDD?	yes	Compliance verified?	yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	yes													
Compliance provable?	yes													
Evidences provided in the PDD?	yes													
Compliance verified?	yes													
B.2.3. Criterion 2: The project activity will not result in the shut down of any existing N ₂ O destruction or abatement facility or equipment in the plant.		<table border="1"> <thead> <tr> <th>Applicability checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Criterion discussed in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance provable?</td> <td>yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance verified?</td> <td>yes</td> </tr> </tbody> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	yes	Compliance provable?	yes	Evidences provided in the PDD?	yes	Compliance verified?	yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	yes													
Compliance provable?	yes													
Evidences provided in the PDD?	yes													
Compliance verified?	yes													
B.2.4. Criterion 3:	16		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										

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The project activity shall not affect the level of nitric acid production		<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance provable?</td> <td>yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance verified?</td> <td>yes</td> </tr> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	yes	Compliance provable?	yes	Evidences provided in the PDD?	yes	Compliance verified?	yes		
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	yes													
Compliance provable?	yes													
Evidences provided in the PDD?	yes													
Compliance verified?	yes													
B.2.5. Criterion 4: There are currently no regulatory requirements or incentives to reduce levels of N ₂ O emissions from nitric acid plants in the host country.	6	<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance provable?</td> <td>yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance verified?</td> <td>yes</td> </tr> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	yes	Compliance provable?	yes	Evidences provided in the PDD?	yes	Compliance verified?	yes	☑	☑
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	yes													
Compliance provable?	yes													
Evidences provided in the PDD?	yes													
Compliance verified?	yes													
B.2.6. Criterion 5: No N ₂ O abatement technology is currently installed in the plant.		<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance provable?</td> <td>yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance verified?</td> <td>yes</td> </tr> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	yes	Compliance provable?	yes	Evidences provided in the PDD?	yes	Compliance verified?	yes	☑	☑
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	yes													
Compliance provable?	yes													
Evidences provided in the PDD?	yes													
Compliance verified?	yes													
B.2.7. Criterion 6: The project activity will not increase NO _x emissions.		<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>yes</td> </tr> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	yes	☑	☑						
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	yes													

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		<table border="1"> <tr> <td>Compliance provable?</td> <td>yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance verified?</td> <td>yes</td> </tr> </table>	Compliance provable?	yes	Evidences provided in the PDD?	yes	Compliance verified?	yes						
Compliance provable?	yes													
Evidences provided in the PDD?	yes													
Compliance verified?	yes													
<p>B.2.8. Criterion 7: NO_x abatement catalyst installed, if any, prior to the start of the project activity is not a Non- Selective Catalytic Reduction (NSCR) DeNO_x unit.</p>	7	<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance provable?</td> <td>yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance verified?</td> <td>yes</td> </tr> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	yes	Compliance provable?	yes	Evidences provided in the PDD?	yes	Compliance verified?	yes	☑	☑
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	yes													
Compliance provable?	yes													
Evidences provided in the PDD?	yes													
Compliance verified?	yes													
<p>B.2.9. Criterion 8: Operation of the secondary N₂O abatement catalyst installed under the project activity does not lead to any process emissions of greenhouse gases, directly or indirectly.</p>		<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance provable?</td> <td>Yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance verified?</td> <td>yes</td> </tr> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	yes	Compliance provable?	Yes	Evidences provided in the PDD?	yes	Compliance verified?	yes	☑	☑
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	yes													
Compliance provable?	Yes													
Evidences provided in the PDD?	yes													
Compliance verified?	yes													
<p>B.2.10. Criterion 9: Continuous real-time measurements of N₂O concentration and total gas volume flow can be carried out in the stack: - Prior to the installation of the secondary</p>		<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>yes</td> </tr> <tr> <td>Compliance provable?</td> <td>yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>yes</td> </tr> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	yes	Compliance provable?	yes	Evidences provided in the PDD?	yes	☑	☑		
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catalyst for one campaign, and - After the installation of the secondary catalyst throughout the chosen crediting period of the project activity		Compliance verified? <input type="checkbox"/> yes <input type="checkbox"/>												
B.3. Description of the sources and gases included in the project boundary														
Integrate the required amount of sub-checklists for sources and gases as given by the methodology applied and comment on at least every line answered with “No”														
B.3.1. Source: Waste stream exiting the stack of the Nitric Acid plant (Burner inlet to stack) Gas(es): N ₂ O Type: Baseline Emissions and Project Emissions		<table border="1"> <thead> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Source and gas(es) discussed in the PDD?</td> <td>yes</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>yes</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>yes</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>yes</td> </tr> </tbody> </table>	Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	yes	Inclusion / exclusion justified?	yes	Explanation / Justification sufficient?	yes	Consistency with monitoring plan?	yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed in the PDD?	yes													
Inclusion / exclusion justified?	yes													
Explanation / Justification sufficient?	yes													
Consistency with monitoring plan?	yes													
B.3.2. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the PDD?		The PDD includes a diagram of the installations and mention the boundaries of the project	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
B.4. Description of how the baseline scenario is identified and description of the identified baseline scenario														
The baseline scenario shall be identified using procedure for Identification of the baseline scenario described in the approved methodology AM0028 “Catalytic N ₂ O destruction in the tail gas of Nitric Acid Plants” version 03.														
B.4.1. Have all technically feasible baseline scenario alternatives (at least all scenarios listed under step 1a in AM0028, vers.3) to the project activity been identified and dis-		All possible scenarios have been included and the list is considered to be complete as no other technical solutions are available in the market	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										

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cussed by the PDD? Why can this list be considered as being complete?				
B.4.2. Have all technically feasible alternatives (at least all scenarios listed under step 1a in AM0028, vers.3) to handle NO _x emissions been identified and discussed by the PDD?		All the scenarios have been discussed in the PDD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.3. Does the project identify correctly and exclude those options not in line with regulatory or legal requirements?	6	Yes, as no regulation for N ₂ O exists in Colombia	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.4. Have applicable regulatory or legal requirements been identified?		No legal requirements have been found	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.5. Is a complete list of barriers developed that prevent alternatives to occur (step 3a)?		The barriers are clearly explain in the PDD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.6. Is transparent and documented evidence provided on the existence and significance of these barriers?	3	The barriers are based on national situation. <u>Corrective Action Request No.3.</u> Please include a clear reference of the given gas price. <u>Corrective Action Request No.4.</u> It should be clearly explained why it is assumed that extra heat would be necessary in case of the use of NSCR to reduce the NO _x	CAR3 CAR4	<input checked="" type="checkbox"/>
B.4.7. Is it transparently shown that at least one of the alternatives is not prevented by the identified barriers (step 3b)?		Yes, as far as the above CRs and CARs are solved, the status quo does not have any barriers.	open	<input checked="" type="checkbox"/>
B.4.8. Does the PDD include an appropriate discussion if and how any alternatives gen-		As only one alternative is possible no step 4 is presented	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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erate financial or economic benefits? (step 4)				
B.4.9. In case of Option I: Is the least costly alternative clearly identified?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.10. In case of Option II: Is the most suitable financial indicator clearly identified?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.11. In case of Option II: Is the calculation of financial figures for this indicator correctly done for all remaining alternatives?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.12. In case of Option II: Is the investment analysis presented in a transparent manner providing public available proofs for data?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.13. In case of Option II: Is the sensitivity analysis evidencing the robustness of the financial attractiveness of the selected baseline scenario?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.14. In case of Option II: Have reasonable variations been applied in critical assumptions?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.15. In case of a re-assessment in the course of the project's lifetime: Are there any new or modified NO _x -emission regulations, which may address the project baseline?	3	<u>Corrective Action Request No.5.</u> The PDD should include the step 5, related to new or modify regulations, according to the methodology.	CAR5	<input checked="" type="checkbox"/>
B.4.16. In case of a re-assessment in the course of the project's lifetime: Have new baseline scenarios been properly discussed re-		See CAR 5	CAR5	<input checked="" type="checkbox"/>

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flecting the altered situation?				
B.4.17. In case of a re-assessment in the course of the project's lifetime: Are there any new or modified N ₂ O-emission regulations, which may address the project baseline?		See CAR 5	CAR5	<input checked="" type="checkbox"/>
B.4.18. In case of a re-assessment in the course of the project's lifetime: Have new baseline scenarios been properly discussed reflecting the altered situation?		See CAR 5	CAR5	<input checked="" type="checkbox"/>
B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity (assessment and demonstration of additionality):				
B.5.1. In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?		The option I is correctly applied	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.2. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?		It is clear that no other income will be related to this kind of projects	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.3. In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.4. In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.5.5. In case of Option II or Option III: Is the calculation of financial figures for this indicator correctly done for all alternatives and the project activity?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.6. In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.7. In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.8. In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.9. In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.10. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?		Other activities in the region have been identified and the known projects are CDM activities	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.11. If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the CDM component		See comment above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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(step 4b)?				
B.5.12. Is it appropriately explained how the approval of the project activity will help to overcome the economic and financial hurdles or other identified barriers (step 5)?		Yes, as the CERs are the only source of income, the project is totally linked to the CDM process	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6. Emissions reductions				
B.6.1. Explanation of methodological choices				
B.6.1.1. Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	17	The PDD follows exactly the procedure as in the methodology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?		The option adopted is to take the historical data. It was confirmed on site that the campaigns 1 and 3 should not be included in the analysis as they were irregular campaigns. In the case of the length of the campaign the campaign 5 could be not included as it was stopped for CDM reasons and not for technical reasons	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.3. Are the formulae required for the determination of project emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?		The formulae is correctly applied	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.4. Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	23	Yes, all the formulae follows the methodology <u>Corrective Action Request No.6.</u> The campaign length for NAN2 should be calculated as stipulated by the methodology, and not based on assumptions	CAR6	<input checked="" type="checkbox"/>
B.6.1.5. Are the formulae required for the determi-		According to the methodology no leakage has to be taken into	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
nation of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?		account																				
B.6.1.6. Are the formulae required for the determination of emission reductions correctly presented?		Yes the formulae clearly shows how to calculate the emission reductions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
B.6.2. Data and parameters that are available at validation																						
B.6.2.1. Is the list of parameters presented in chapter B.6.2 considered to be complete with regard to the requirements of the applied methodology?		Yes the list is considered complete.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
Integrate the required amount of sub-checklists for monitoring parameter and comment on any line answered with “No”																						
B.6.2.2. Parameter Title: NCSG _{BC} N ₂ O concentration in the stackgas	16, 17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>yes</td> </tr> <tr> <td>Correct value provided?</td> <td>yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>no</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>yes</td> </tr> </tbody> </table> <p>The correct calculation process has been confirmed but the baseline data has to be confirmed by the verifier.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	yes	Appropriate description of parameter?	yes	Source clearly referenced?	yes	Correct value provided?	yes	Has this value been verified?	no	Choice of data correctly justified?	yes	Measurement method correctly described?	yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	yes																					
Appropriate description of parameter?	yes																					
Source clearly referenced?	yes																					
Correct value provided?	yes																					
Has this value been verified?	no																					
Choice of data correctly justified?	yes																					
Measurement method correctly described?	yes																					
B.6.2.3. Parameter Title: VSG _{BC}	16, 17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	Data Checklist	Yes / No			<input checked="" type="checkbox"/>	To be con-														
Data Checklist	Yes / No																					

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
Volume flow rate of the stack gas		<table border="1"> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td>Yes</td></tr> <tr><td>Correct value provided?</td><td>Yes</td></tr> <tr><td>Has this value been verified?</td><td>No</td></tr> <tr><td>Choice of data correctly justified?</td><td>yes</td></tr> <tr><td>Measurement method correctly described?</td><td>yes</td></tr> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier.</p>	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	yes	Measurement method correctly described?	yes		firmed by the verifier <input checked="" type="checkbox"/>		
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	No																					
Choice of data correctly justified?	yes																					
Measurement method correctly described?	yes																					
B.6.2.4. Parameter Title: BE _{BC} Total N ₂ O for baseline campaign	16, 17	<table border="1"> <tr><th>Data Checklist</th><th>Yes / No</th></tr> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td>Yes</td></tr> <tr><td>Correct value provided?</td><td>Yes</td></tr> <tr><td>Has this value been verified?</td><td>No</td></tr> <tr><td>Choice of data correctly justified?</td><td>Yes</td></tr> <tr><td>Measurement method correctly described?</td><td>yes</td></tr> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	No																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	yes																					
B.6.2.5. Parameter Title: OH _{BC} Operating hours	16, 17	<table border="1"> <tr><th>Data Checklist</th><th>Yes / No</th></tr> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>										
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					

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Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	No																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	yes																					
B.6.2.6. Parameter Title: NAP _{BC} Nitric acid (100% concentrated) over baseline campaign	16, 17	<table border="1"> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>yes</td> </tr> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier. Value is based on the flow from raw data and a fix value for concentration taken in a conservative manner</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	No																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	yes																					
B.6.2.7. Parameter Title: TSG Temperature of stack gas	16, 17	<table border="1"> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>								
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
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		<table border="1"> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier.</p>	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	yes	Measurement method correctly described?	Yes												
Correct value provided?	Yes																					
Has this value been verified?	No																					
Choice of data correctly justified?	yes																					
Measurement method correctly described?	Yes																					
B.6.2.8. Parameter Title: PSG Pressure of stack gas	16, 17	<table border="1"> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>yes</td> </tr> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	No																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	yes																					
B.6.2.9. Parameter Title: EF _{BL} Emissions factor for baseline period	16, 17	<table border="1"> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> <tr> <td>Title in line with methodology?</td> <td>yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>yes</td> </tr> <tr> <td>Correct value provided?</td> <td>yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> </table>	Data Checklist	Yes / No	Title in line with methodology?	yes	Data unit correctly expressed?	yes	Appropriate description of parameter?	yes	Source clearly referenced?	yes	Correct value provided?	yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	yes																					
Data unit correctly expressed?	yes																					
Appropriate description of parameter?	yes																					
Source clearly referenced?	yes																					
Correct value provided?	yes																					
Has this value been verified?	No																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					

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		The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier.																				
B.6.2.10. Parameter Title: UNC Overall measurement uncertainty of the monitoring system	16, 17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>Yes</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> </tbody> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier. For the estimation of the value for validation purpose, the actual approach of using manufacturer data is acceptable.</p>	Data Checklist	Yes / No	Title in line with methodology?	yes	Data unit correctly expressed?	yes	Appropriate description of parameter?	yes	Source clearly referenced?	yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	yes																					
Data unit correctly expressed?	yes																					
Appropriate description of parameter?	yes																					
Source clearly referenced?	yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					
B.6.2.11. Parameter Title: AFR Ammonia gas flow rate to the AOR	16, 17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>no</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>yes</td> </tr> </tbody> </table> <p>The correct calculation process has been confirmed but the base-</p>	Data Checklist	Yes / No	Title in line with methodology?	yes	Data unit correctly expressed?	no	Appropriate description of parameter?	yes	Source clearly referenced?	yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	yes	CAR 7	To be confirmed by the verifier
Data Checklist	Yes / No																					
Title in line with methodology?	yes																					
Data unit correctly expressed?	no																					
Appropriate description of parameter?	yes																					
Source clearly referenced?	yes																					
Correct value provided?	Yes																					
Has this value been verified?	No																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	yes																					

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
		line data has to be confirmed by the verifier. <u>Corrective Action Request No.7.</u> The units for AFR should be in kg and not in tones																				
B.6.2.12. Parameter Title: AFR _{max} Maximum ammonia flow rate	16, 17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>no</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> </tbody> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier. See CAR 7</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	no	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	CAR7	To be confirmed by the verifier <input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	no																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	No																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					
B.6.2.13. Parameter Title: AIFR Ammonia to Air ratio	16, 17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>yes</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
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Choice of data correctly justified?	Yes																					
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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
		The correct calculation process has been confirmed but the baseline data has to be confirmed by the verifier.																				
B.6.2.14. Parameter Title: CL _{BL} , Campaign length of baseline campaign	16, 17, 23	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>Yes</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> </tbody> </table> <p>The correct calculation process has been confirmed but the baseline data has to be confirmed by the verifier.</p> <p><u>Corrective Action Request No.8.</u></p> <p>Please use the total amount of acid produced during the campaign.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	CAR 8	To be confirmed by the verifier <input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					
B.6.2.15. Parameter Title: CL _{normal} Normal campaign length	16, 17, 3	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>no</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	yes	Data unit correctly expressed?	yes	Appropriate description of parameter?	yes	Source clearly referenced?	no	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	CR2	To be confirmed by the verifier <input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	yes																					
Data unit correctly expressed?	yes																					
Appropriate description of parameter?	yes																					
Source clearly referenced?	no																					
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Measurement method correctly described?	Yes																					

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		<p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier.</p> <p>Clarification Request No. 2.</p> <p>NAN2 does not use all historic campaigns as reference. Please clarify</p>																				
<p>B.6.2.16. Parameter Title: AIFR_{max} Maximum ammonia to air ratio</p>	16, 17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>yes</td> </tr> </tbody> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
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Choice of data correctly justified?	Yes																					
Measurement method correctly described?	yes																					
<p>B.6.2.17. Parameter Title: OT_n Oxidation temperature for each hour</p>	16, 17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>yes</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
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B.6.2.18. Parameter Title: OT _{normal} Normal operating temperature	16, 17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> </tbody> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	yes	Measurement method correctly described?	Yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
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Choice of data correctly justified?	yes																					
Measurement method correctly described?	Yes																					
B.6.2.19. Parameter Title: OP _h Oxidation Pressure for each hour	16, 17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>yes</td> </tr> </tbody> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
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B.6.2.20. Parameter Title:	16,		<input checked="" type="checkbox"/>	To be																		

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OP _{normal} Normal operating pressure	17	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>yes</td> </tr> </tbody> </table> <p>The correct calculation process has been confirmed but the baseline data has to be confirmed by the verifier.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	yes		con- firmed by the verifier <input checked="" type="checkbox"/>
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Choice of data correctly justified?	Yes																					
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B.6.2.21. Parameter Title: GS _{normal} , Normal gauze supplier for the operation condition campaigns		<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>Yes</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>N/A</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Choice of data correctly justified?	Yes																					
Measurement method correctly described?	N/A																					
B.6.2.22. Parameter Title: GS _{BL} Gauze supplier for baseline campaign		<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
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B.6.2.23. Parameter Title: GC _{normal} Gauze composition during the operation campaign.		<table border="1"> <tr><th>Data Checklist</th><th>Yes / No</th></tr> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td>Yes</td></tr> <tr><td>Correct value provided?</td><td>Yes</td></tr> <tr><td>Has this value been verified?</td><td>Yes</td></tr> <tr><td>Choice of data correctly justified?</td><td>Yes</td></tr> <tr><td>Measurement method correctly described?</td><td>N/A</td></tr> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	N/A	☑	☑
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Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	N/A																					
B.6.2.24. Parameter Title: GC _{BL} , Gauze composition during baseline campaign		<table border="1"> <tr><th>Data Checklist</th><th>Yes / No</th></tr> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td>Yes</td></tr> <tr><td>Correct value provided?</td><td>Yes</td></tr> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	☑	☑						
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Measurement method correctly described?	N/A																					
B.6.2.25. Parameter Title: EF _{reg} Emissions level set by incoming policies or regulations	16, 17	<table border="1"> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> </table> <p>The correct calculation process has been confirmed but the base-line data has to be confirmed by the verifier.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	No	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	<input checked="" type="checkbox"/>	To be confirmed by the verifier <input checked="" type="checkbox"/>
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B.6.3. Ex-ante calculation of emission reductions																						
B.6.3.1. Is the projection based on the same procedures as used for future monitoring?		Yes the procedures are the same that will be used in the future	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
B.6.3.2. Are the GHG calculations documented in a complete and transparent manner?	3	Yes in the main Clarification Request No. 3. It should be clarified with an example how the results will be obtained	CR3	<input checked="" type="checkbox"/>																		
B.6.3.3. Is the data provided in this section consistent with data as presented in other chap-	16, 17	The correct calculation process has been confirmed, the data provided is consistent but will finally be confirmed by the verifier.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		

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ters of the PDD?				
B.6.4. Summary of the ex-ante estimation of emission reductions				
B.6.4.1. Will the project result in fewer GHG emissions than the baseline scenario?		Yes as the plant does not have actually any installation to reduce N ₂ O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?		Yes the table is complete and clear	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?		As confirmed during onsite audit the schedule for the project is in line with the dates used in chapter C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.4. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?		The correct calculation process has been confirmed, the data provided is consistent but will finally be confirmed by the verifier.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7. Application of the monitoring methodology and description of the monitoring plan				
B.7.1. Data and parameters monitored				
B.7.1.1. Is the list of parameters presented in chapter B.7.1 considered to be complete with regard to the requirements of the applied methodology?	3	<p><u>Corrective Action Request No.9.</u> The identification number of the parameter is not always consistent with the methodology</p> <p><u>Corrective Action Request No.10.</u> The gauze composition for the project campaigns have to be included in the monitoring plan</p> <p><u>Corrective Action Request No.11.</u> Please include an statement that assure, the data will be achieved for at least 2 years “after crediting period”</p> <p><u>Corrective Action Request No.12.</u> The historical gauze composition should be available at time of</p>	CAR9 CAR10 CAR11 CAR12	<input checked="" type="checkbox"/>

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		validation and it is not possible to be monitored, please delete this parameter from the monitoring plan.																										
Integrate the required amount of sub-checklists for monitoring parameter and comment on any line answered with "No"																												
B.7.1.2. Parameter Title: NCSG N ₂ O concentration in the stackgas	24	<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided for estimation?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> <tr> <td>Correct reference to standards?</td> <td>Yes</td> </tr> <tr> <td>Indication of accuracy provided?</td> <td>Yes</td> </tr> <tr> <td>QA/QC procedures described?</td> <td>Yes</td> </tr> <tr> <td>QA/QC procedures appropriate?</td> <td>no</td> </tr> </tbody> </table> <p><u>Corrective Action Request No.13.</u> The calibration and maintenance proposed schedule should be included in the PDD or at least a reference to the internal document</p>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	Yes	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	no	CAR13	<input checked="" type="checkbox"/>
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B.7.1.3. Parameter Title: VSG Volume flow rate of the stack gas	24	<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> </tbody> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	CAR13	<input checked="" type="checkbox"/>														
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B.7.1.4. Parameter Title: PE _n N ₂ O emissions of nth project campaign	24	<table border="1"> <tr><td colspan="2">Monitoring Checklist</td><td>Yes / No</td></tr> <tr><td>Title in line with methodology?</td><td></td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td></td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td></td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td></td><td>Yes</td></tr> <tr><td>Correct value provided for estimation?</td><td></td><td>Yes</td></tr> <tr><td>Has this value been verified?</td><td></td><td>Yes</td></tr> <tr><td>Measurement method correctly described?</td><td></td><td>Yes</td></tr> <tr><td>Correct reference to standards?</td><td></td><td>Yes</td></tr> <tr><td>Indication of accuracy provided?</td><td></td><td>Yes</td></tr> <tr><td>QA/QC procedures described?</td><td></td><td>Yes</td></tr> <tr><td>QA/QC procedures appropriate?</td><td></td><td>no</td></tr> </table>	Monitoring Checklist		Yes / No	Title in line with methodology?		Yes	Data unit correctly expressed?		Yes	Appropriate description of parameter?		Yes	Source clearly referenced?		Yes	Correct value provided for estimation?		Yes	Has this value been verified?		Yes	Measurement method correctly described?		Yes	Correct reference to standards?		Yes	Indication of accuracy provided?		Yes	QA/QC procedures described?		Yes	QA/QC procedures appropriate?		no		CAR13	<input checked="" type="checkbox"/>
Monitoring Checklist		Yes / No																																							
Title in line with methodology?		Yes																																							
Data unit correctly expressed?		Yes																																							
Appropriate description of parameter?		Yes																																							
Source clearly referenced?		Yes																																							
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Has this value been verified?		Yes																																							
Measurement method correctly described?		Yes																																							
Correct reference to standards?		Yes																																							
Indication of accuracy provided?		Yes																																							
QA/QC procedures described?		Yes																																							
QA/QC procedures appropriate?		no																																							
B.7.1.5. Parameter Title: OH Operating hours		<table border="1"> <tr><td colspan="2">Monitoring Checklist</td><td>Yes / No</td></tr> <tr><td>Title in line with methodology?</td><td></td><td>Yes</td></tr> </table>	Monitoring Checklist		Yes / No	Title in line with methodology?		Yes		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																														
Monitoring Checklist		Yes / No																																							
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Data unit correctly expressed?	Yes																											
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Source clearly referenced?	Yes																											
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Measurement method correctly described?	Yes																											
Correct reference to standards?	Yes																											
Indication of accuracy provided?	N/A																											
QA/QC procedures described?	Yes																											
QA/QC procedures appropriate?	yes																											
B.7.1.6. Parameter Title: NAP Nitric acid (100% concentrated)	24	<table border="1"> <tr> <th data-bbox="1016 914 1626 946">Monitoring Checklist</th> <th data-bbox="1626 914 1776 946">Yes / No</th> </tr> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td>yes</td></tr> <tr><td>Correct value provided for estimation?</td><td>N/A</td></tr> <tr><td>Has this value been verified?</td><td>N/A</td></tr> <tr><td>Measurement method correctly described?</td><td>Yes</td></tr> <tr><td>Correct reference to standards?</td><td>Yes</td></tr> <tr><td>Indication of accuracy provided?</td><td>No</td></tr> <tr><td>QA/QC procedures described?</td><td>No</td></tr> <tr><td>QA/QC procedures appropriate?</td><td>No</td></tr> </table> <p>See CAR13</p>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR13	☑
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Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											
Source clearly referenced?	yes																											
Correct value provided for estimation?	N/A																											
Has this value been verified?	N/A																											
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Correct reference to standards?	Yes																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
B.7.1.7. Parameter Title:	24		CAR13	☑																								

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TSG Temperature of stack gas		<table border="1"> <thead> <tr> <th data-bbox="1016 416 1626 448">Monitoring Checklist</th> <th data-bbox="1626 416 1776 448">Yes / No</th> </tr> </thead> <tbody> <tr> <td data-bbox="1016 448 1626 480">Title in line with methodology?</td> <td data-bbox="1626 448 1776 480">Yes</td> </tr> <tr> <td data-bbox="1016 480 1626 512">Data unit correctly expressed?</td> <td data-bbox="1626 480 1776 512">Yes</td> </tr> <tr> <td data-bbox="1016 512 1626 544">Appropriate description of parameter?</td> <td data-bbox="1626 512 1776 544">Yes</td> </tr> <tr> <td data-bbox="1016 544 1626 576">Source clearly referenced?</td> <td data-bbox="1626 544 1776 576">yes</td> </tr> <tr> <td data-bbox="1016 576 1626 608">Correct value provided for estimation?</td> <td data-bbox="1626 576 1776 608">N/A</td> </tr> <tr> <td data-bbox="1016 608 1626 639">Has this value been verified?</td> <td data-bbox="1626 608 1776 639">N/A</td> </tr> <tr> <td data-bbox="1016 639 1626 671">Measurement method correctly described?</td> <td data-bbox="1626 639 1776 671">Yes</td> </tr> <tr> <td data-bbox="1016 671 1626 703">Correct reference to standards?</td> <td data-bbox="1626 671 1776 703">Yes</td> </tr> <tr> <td data-bbox="1016 703 1626 735">Indication of accuracy provided?</td> <td data-bbox="1626 703 1776 735">No</td> </tr> <tr> <td data-bbox="1016 735 1626 767">QA/QC procedures described?</td> <td data-bbox="1626 735 1776 767">No</td> </tr> <tr> <td data-bbox="1016 767 1626 799">QA/QC procedures appropriate?</td> <td data-bbox="1626 767 1776 799">No</td> </tr> </tbody> </table> <p data-bbox="1016 847 1167 879">See CAR13</p>		Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No		
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Measurement method correctly described?	Yes																												
Correct reference to standards?	Yes																												
Indication of accuracy provided?	No																												
QA/QC procedures described?	No																												
QA/QC procedures appropriate?	No																												
B.7.1.8. Parameter Title: PSG Pressure of stack gas	24	<table border="1"> <thead> <tr> <th data-bbox="1016 984 1626 1016">Monitoring Checklist</th> <th data-bbox="1626 984 1776 1016">Yes / No</th> </tr> </thead> <tbody> <tr> <td data-bbox="1016 1016 1626 1048">Title in line with methodology?</td> <td data-bbox="1626 1016 1776 1048">Yes</td> </tr> <tr> <td data-bbox="1016 1048 1626 1080">Data unit correctly expressed?</td> <td data-bbox="1626 1048 1776 1080">Yes</td> </tr> <tr> <td data-bbox="1016 1080 1626 1112">Appropriate description of parameter?</td> <td data-bbox="1626 1080 1776 1112">Yes</td> </tr> <tr> <td data-bbox="1016 1112 1626 1144">Source clearly referenced?</td> <td data-bbox="1626 1112 1776 1144">yes</td> </tr> <tr> <td data-bbox="1016 1144 1626 1176">Correct value provided for estimation?</td> <td data-bbox="1626 1144 1776 1176">N/A</td> </tr> <tr> <td data-bbox="1016 1176 1626 1208">Has this value been verified?</td> <td data-bbox="1626 1176 1776 1208">N/A</td> </tr> <tr> <td data-bbox="1016 1208 1626 1240">Measurement method correctly described?</td> <td data-bbox="1626 1208 1776 1240">Yes</td> </tr> <tr> <td data-bbox="1016 1240 1626 1272">Correct reference to standards?</td> <td data-bbox="1626 1240 1776 1272">Yes</td> </tr> <tr> <td data-bbox="1016 1272 1626 1303">Indication of accuracy provided?</td> <td data-bbox="1626 1272 1776 1303">No</td> </tr> <tr> <td data-bbox="1016 1303 1626 1335">QA/QC procedures described?</td> <td data-bbox="1626 1303 1776 1335">No</td> </tr> <tr> <td data-bbox="1016 1335 1626 1367">QA/QC procedures appropriate?</td> <td data-bbox="1626 1335 1776 1367">No</td> </tr> </tbody> </table> <p data-bbox="1016 1415 1167 1447">See CAR13</p>		Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR13	☑
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B.7.1.9. Parameter Title: EF _n Emissions factor calculated for nth campaign		<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>yes</td> </tr> <tr> <td>Correct value provided for estimation?</td> <td>N/A</td> </tr> <tr> <td>Has this value been verified?</td> <td>N/A</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> <tr> <td>Correct reference to standards?</td> <td>N/A</td> </tr> <tr> <td>Indication of accuracy provided?</td> <td>N/A</td> </tr> <tr> <td>QA/QC procedures described?</td> <td>N/A</td> </tr> <tr> <td>QA/QC procedures appropriate?</td> <td>N/A</td> </tr> </tbody> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	Measurement method correctly described?	Yes	Correct reference to standards?	N/A	Indication of accuracy provided?	N/A	QA/QC procedures described?	N/A	QA/QC procedures appropriate?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
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Correct reference to standards?	N/A																											
Indication of accuracy provided?	N/A																											
QA/QC procedures described?	N/A																											
QA/QC procedures appropriate?	N/A																											
B.7.1.10. Parameter Title: EF _{mn,a} Moving average emissions factor		<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>yes</td> </tr> <tr> <td>Correct value provided for estimation?</td> <td>N/A</td> </tr> <tr> <td>Has this value been verified?</td> <td>N/A</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>Yes</td> </tr> <tr> <td>Correct reference to standards?</td> <td>N/A</td> </tr> <tr> <td>Indication of accuracy provided?</td> <td>N/A</td> </tr> </tbody> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	Measurement method correctly described?	Yes	Correct reference to standards?	N/A	Indication of accuracy provided?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
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		QA/QC procedures appropriate?	N/A																										
B.7.1.11. Parameter Title: AFR Ammonia gas flow rate to the AOR	24	<table border="1"> <thead> <tr> <th data-bbox="1014 632 1626 667">Monitoring Checklist</th> <th data-bbox="1626 632 1776 667">Yes / No</th> </tr> </thead> <tbody> <tr> <td data-bbox="1014 667 1626 702">Title in line with methodology?</td> <td data-bbox="1626 667 1776 702">Yes</td> </tr> <tr> <td data-bbox="1014 702 1626 737">Data unit correctly expressed?</td> <td data-bbox="1626 702 1776 737">Yes</td> </tr> <tr> <td data-bbox="1014 737 1626 772">Appropriate description of parameter?</td> <td data-bbox="1626 737 1776 772">Yes</td> </tr> <tr> <td data-bbox="1014 772 1626 807">Source clearly referenced?</td> <td data-bbox="1626 772 1776 807">yes</td> </tr> <tr> <td data-bbox="1014 807 1626 842">Correct value provided for estimation?</td> <td data-bbox="1626 807 1776 842">N/A</td> </tr> <tr> <td data-bbox="1014 842 1626 877">Has this value been verified?</td> <td data-bbox="1626 842 1776 877">N/A</td> </tr> <tr> <td data-bbox="1014 877 1626 912">Measurement method correctly described?</td> <td data-bbox="1626 877 1776 912">Yes</td> </tr> <tr> <td data-bbox="1014 912 1626 948">Correct reference to standards?</td> <td data-bbox="1626 912 1776 948">Yes</td> </tr> <tr> <td data-bbox="1014 948 1626 983">Indication of accuracy provided?</td> <td data-bbox="1626 948 1776 983">No</td> </tr> <tr> <td data-bbox="1014 983 1626 1018">QA/QC procedures described?</td> <td data-bbox="1626 983 1776 1018">No</td> </tr> <tr> <td data-bbox="1014 1018 1626 1053">QA/QC procedures appropriate?</td> <td data-bbox="1626 1018 1776 1053">No</td> </tr> </tbody> </table> See CAR13		Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR13	☑
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QA/QC procedures described?	No																												
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B.7.1.12. Parameter Title: AIFR Ammonia to Air ratio	24	<table border="1"> <thead> <tr> <th data-bbox="1014 1198 1626 1233">Monitoring Checklist</th> <th data-bbox="1626 1198 1776 1233">Yes / No</th> </tr> </thead> <tbody> <tr> <td data-bbox="1014 1233 1626 1268">Title in line with methodology?</td> <td data-bbox="1626 1233 1776 1268">Yes</td> </tr> <tr> <td data-bbox="1014 1268 1626 1303">Data unit correctly expressed?</td> <td data-bbox="1626 1268 1776 1303">Yes</td> </tr> <tr> <td data-bbox="1014 1303 1626 1339">Appropriate description of parameter?</td> <td data-bbox="1626 1303 1776 1339">Yes</td> </tr> <tr> <td data-bbox="1014 1339 1626 1374">Source clearly referenced?</td> <td data-bbox="1626 1339 1776 1374">yes</td> </tr> <tr> <td data-bbox="1014 1374 1626 1409">Correct value provided for estimation?</td> <td data-bbox="1626 1374 1776 1409">N/A</td> </tr> <tr> <td data-bbox="1014 1409 1626 1444">Has this value been verified?</td> <td data-bbox="1626 1409 1776 1444">N/A</td> </tr> </tbody> </table>		Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	CAR13	☑										
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Correct reference to standards?	Yes																											
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QA/QC procedures appropriate?	No																											
B.7.1.13. Parameter Title: CL _n Campaign length	24	<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided for estimation?</td> <td>N/A</td> </tr> <tr> <td>Has this value been verified?</td> <td>N/A</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>No</td> </tr> <tr> <td>Correct reference to standards?</td> <td>No</td> </tr> <tr> <td>Indication of accuracy provided?</td> <td>No</td> </tr> <tr> <td>QA/QC procedures described?</td> <td>No</td> </tr> <tr> <td>QA/QC procedures appropriate?</td> <td>No</td> </tr> </tbody> </table> <p>See CAR 13</p>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR13	<input checked="" type="checkbox"/>
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QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
B.7.1.14. Parameter Title: EF _p Emissions factor used to determine emissions reductions		<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> </tbody> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
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Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											

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Project Title: Project for the catalytic reduction of N₂O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia

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QA/QC procedures described?	N/A																											
QA/QC procedures appropriate?	N/A																											
B.7.1.15. Parameter Title: EF _{min} Minimum emissions factor after 10 campaigns		<table border="1"> <tr><td>Monitoring Checklist</td><td>Yes / No</td></tr> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td>Yes</td></tr> <tr><td>Correct value provided for estimation?</td><td>N/A</td></tr> <tr><td>Has this value been verified?</td><td>N/A</td></tr> <tr><td>Measurement method correctly described?</td><td>Yes</td></tr> <tr><td>Correct reference to standards?</td><td>Yes</td></tr> <tr><td>Indication of accuracy provided?</td><td>N/A</td></tr> <tr><td>QA/QC procedures described?</td><td>N/A</td></tr> <tr><td>QA/QC procedures appropriate?</td><td>N/A</td></tr> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	N/A	QA/QC procedures described?	N/A	QA/QC procedures appropriate?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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QA/QC procedures described?	N/A																											
QA/QC procedures appropriate?	N/A																											
B.7.1.16. Parameter Title: OT _h	24	<table border="1"> <tr><td>Monitoring Checklist</td><td>Yes / No</td></tr> </table>	Monitoring Checklist	Yes / No	CAR13	<input checked="" type="checkbox"/>																						
Monitoring Checklist	Yes / No																											

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Oxidation temperature for each hour		<table border="1"> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td>yes</td></tr> <tr><td>Correct value provided for estimation?</td><td>N/A</td></tr> <tr><td>Has this value been verified?</td><td>N/A</td></tr> <tr><td>Measurement method correctly described?</td><td>Yes</td></tr> <tr><td>Correct reference to standards?</td><td>Yes</td></tr> <tr><td>Indication of accuracy provided?</td><td>No</td></tr> <tr><td>QA/QC procedures described?</td><td>No</td></tr> <tr><td>QA/QC procedures appropriate?</td><td>No</td></tr> </table> <p>See CAR13</p>	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No				
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QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
B.7.1.17. Parameter Title: OP _h Oxidation Pressure for each hour	24	<table border="1"> <tr><td>Monitoring Checklist</td><td>Yes / No</td></tr> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td>yes</td></tr> <tr><td>Correct value provided for estimation?</td><td>N/A</td></tr> <tr><td>Has this value been verified?</td><td>N/A</td></tr> <tr><td>Measurement method correctly described?</td><td>Yes</td></tr> <tr><td>Correct reference to standards?</td><td>Yes</td></tr> <tr><td>Indication of accuracy provided?</td><td>No</td></tr> <tr><td>QA/QC procedures described?</td><td>No</td></tr> <tr><td>QA/QC procedures appropriate?</td><td>No</td></tr> </table> <p>See CAR13</p>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	yes	Correct value provided for estimation?	N/A	Has this value been verified?	N/A	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR13	☑
Monitoring Checklist	Yes / No																											
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B.7.1.18. Parameter Title: GS _{project} Gauze supplier for the project campaigns		<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td>Yes</td></tr> <tr><td>Correct value provided for estimation?</td><td>Yes</td></tr> <tr><td>Has this value been verified?</td><td>Yes</td></tr> <tr><td>Measurement method correctly described?</td><td>N/A</td></tr> <tr><td>Correct reference to standards?</td><td>N/A</td></tr> <tr><td>Indication of accuracy provided?</td><td>N/A</td></tr> <tr><td>QA/QC procedures described?</td><td>N/A</td></tr> <tr><td>QA/QC procedures appropriate?</td><td>N/A</td></tr> </tbody> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	N/A	Correct reference to standards?	N/A	Indication of accuracy provided?	N/A	QA/QC procedures described?	N/A	QA/QC procedures appropriate?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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QA/QC procedures described?	N/A																											
QA/QC procedures appropriate?	N/A																											
B.7.1.19. Parameter Title: GC _{project} Gauze composition during project campaign	3	<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr><td>Title in line with methodology?</td><td></td></tr> <tr><td>Data unit correctly expressed?</td><td></td></tr> <tr><td>Appropriate description of parameter?</td><td></td></tr> <tr><td>Source clearly referenced?</td><td></td></tr> <tr><td>Correct value provided for estimation?</td><td></td></tr> <tr><td>Has this value been verified?</td><td></td></tr> <tr><td>Measurement method correctly described?</td><td></td></tr> <tr><td>Correct reference to standards?</td><td></td></tr> <tr><td>Indication of accuracy provided?</td><td></td></tr> </tbody> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided for estimation?		Has this value been verified?		Measurement method correctly described?		Correct reference to standards?		Indication of accuracy provided?		CAR10	<input checked="" type="checkbox"/>				
Monitoring Checklist	Yes / No																											
Title in line with methodology?																												
Data unit correctly expressed?																												
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		<table border="1"> <tr> <td>QA/QC procedures described?</td> <td></td> </tr> <tr> <td>QA/QC procedures appropriate?</td> <td></td> </tr> </table> <p>See CAR 10</p>	QA/QC procedures described?		QA/QC procedures appropriate?																							
QA/QC procedures described?																												
QA/QC procedures appropriate?																												
B.7.1.20. Parameter Title: UNC Overall measurement uncertainty of the monitoring system	3	<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr><td>Title in line with methodology?</td><td></td></tr> <tr><td>Data unit correctly expressed?</td><td></td></tr> <tr><td>Appropriate description of parameter?</td><td></td></tr> <tr><td>Source clearly referenced?</td><td></td></tr> <tr><td>Correct value provided for estimation?</td><td></td></tr> <tr><td>Has this value been verified?</td><td></td></tr> <tr><td>Measurement method correctly described?</td><td></td></tr> <tr><td>Correct reference to standards?</td><td></td></tr> <tr><td>Indication of accuracy provided?</td><td></td></tr> <tr><td>QA/QC procedures described?</td><td></td></tr> <tr><td>QA/QC procedures appropriate?</td><td></td></tr> </tbody> </table> <p>Corrective Action Request No.14. The parameter UNC should be included in the monitoring plan.</p>	Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided for estimation?		Has this value been verified?		Measurement method correctly described?		Correct reference to standards?		Indication of accuracy provided?		QA/QC procedures described?		QA/QC procedures appropriate?		CAR14	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?																												
Data unit correctly expressed?																												
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B.7.1.21. Parameter Title: EF _{reg} Emissions level set by incoming policies or regulations	3	<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr><td>Title in line with methodology?</td><td></td></tr> <tr><td>Data unit correctly expressed?</td><td></td></tr> <tr><td>Appropriate description of parameter?</td><td></td></tr> <tr><td>Source clearly referenced?</td><td></td></tr> </tbody> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		CAR15	<input checked="" type="checkbox"/>														
Monitoring Checklist	Yes / No																											
Title in line with methodology?																												
Data unit correctly expressed?																												
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QA/QC procedures appropriate?																		
<i>B.7.2. Description of the monitoring plan</i>																		
B.7.2.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?	3	The structure is mainly clear <u>Corrective Action Request No.16.</u> The organisation diagram including responsibilities should be presented.	CAR16	<input checked="" type="checkbox"/>														
B.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	3	See CAR16	CAR16	<input checked="" type="checkbox"/>														
B.7.2.3. Does the monitoring plan provide current good monitoring practice?	19	The discussion about the EN 14181 shows current good monitoring practice.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>														
B.7.2.4. Has the monitoring system installed using the European Norm 14181 (2004)?	19, 3	There is no confirmation of the QAL1 for the N ₂ O analyser and there is no QAL 2 and QAL3 confirmation for any of the equipments installed. <u>Corrective Action Request No.17.</u> Documentation to confirm the proper installation of the equipments and all the requirements from EN 14181 should be submit-	CAR17	<input checked="" type="checkbox"/>														

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		ted to the validator.		
B.7.2.5. Will the three quality assurance levels been met by the planned Automated Measuring System (AMS) according to the EN14181?	19, 3	See CAR 17	CAR17	<input checked="" type="checkbox"/>
B.7.2.6. Are the specific performance characteristics of the monitoring system chosen by the project listed in the PDD?		The information is included in annex 4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7.2.7. Is information on the margins of errors and the cumulative error for the complete measurement system provided in the PDD?	4, 10, 3	The PDD use the manufacturer data, which is acceptable as an estimate. See CAR 14	CAR14	<input checked="" type="checkbox"/>
B.7.2.8. Is the inclusion of external accredited services providers for calibration and function tests foreseen in the planning of the project?		Yes, this will be confirmed during the verification process.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7.2.9. Are the requirements on the treatment of downtime of the AMS clearly reflected in the envisioned calculation routines?	3	<u>Corrective Action Request No.18.</u> The AMS downtime is not correctly address in the PDD	CAR18	<input checked="" type="checkbox"/>
B.7.2.10. If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?		Yes it includes additional information about accuracy for some equipment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8. Date of completion of the application of the baseline study and monitoring methodology an the name of the responsible person(s)/entity(ies)				
B.8.1.1. Is there any indication of a date when the baseline was determined?		Yes the date is clearly express	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.8.1.2. Is this consistent with the time line of the PDD history?		Yes it is the same as for the complete PDD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.1.3. Is the information on the person(s) / entity (ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?		Yes it is correctly mention	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.1.4. Is information provided whether this person / entity is also considered a project participant?	3	<u>Corrective Action Request No.19.</u> Please include that the persons are part of the project participants entities	CAR19	<input checked="" type="checkbox"/>
C. Duration of the project activity / crediting period				
C.1. Duration of the project activity				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?		Yes it is reasonable to have 15 year of operational life	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C.2. Choice of the crediting period and related information				
C.2.1. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?		The project will use a fix crediting period of 10 years and the starting date is clearly mention	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D. Environmental impacts				
D.1. Documentation on the analysis of the environmental impacts, including transboundary impacts				
D.1.1. Has the analysis of the environmental impacts of the project activity been suffi-		The project is expected to have no negative environmental impacts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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ciently described?				
D.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	21, 22	In accordance with the resolution 0454 from the DNA an EIA is not required for this kind of projects	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.3. Will the project create any adverse environmental effects?		No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.4. Were transboundary environmental impacts identified in the analysis?		No the project will not have any transboundary impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party				
D.2.1. Have the identified environmental impacts been addressed in the project design sufficiently?	3	<u>Clarification Request No. 4.</u> It should be clarified where in the methodology it is mentioned that no EIA is necessary	CR4	<input checked="" type="checkbox"/>
D.2.2. Does the project comply with environmental legislation in the host country?		This will be confirmed with the LoA <u>Corrective Action Request No.20.</u> The LoA should be submitted before the submission for registration of the project to the UNFCCC	CAR20	<input checked="" type="checkbox"/>
E. Stakeholders' comments				
E.1. Brief description how comments by local stakeholders have been invited and compiled				
E.1.1. Have relevant stakeholders been consulted?		Yes all relevant stakeholders have been consulted	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.2. Have appropriate media been used to in-		Yes the invitations were made via newspaper and personally	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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vite comments by local stakeholders?					
E.1.3.	If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?		Yes and the project participants have followed the regulations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.4.	Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?		Yes see comment above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.2. Summary of the comments received					
E.2.1.	Is a summary of the received stakeholder comments provided?	3	<u>Corrective Action Request No.21.</u> Please include any positive or negative comments given by the stakeholders	CAR21	<input checked="" type="checkbox"/>
E.3. Report on how due account was taken of any comments received					
E.3.1.	Has due account been taken of any stakeholder comments received?	3	See CAR21	CAR21	<input checked="" type="checkbox"/>
F. Annexes 1 - 4					
F.1. Annex 1: Contact Information					
F.1.1.	Is the information provided consistent with the one given under section A.3?		Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.2.	Is the information on all private participants and directly involved Parties presented?		Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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F.2. Annex 2: Information regarding public funding					
F.2.1.	Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by the project participants?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.2.2.	If necessary: Is an affirmation available that any such funding from Annex-I-countries does not result in a diversion of ODA?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.3. Annex 3: Baseline information					
F.3.1.	If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	3	<u>Clarification Request No. 5.</u> The additional information given in the annex 3 of the PDD is not clear explained.	CR5	<input checked="" type="checkbox"/>
F.3.2.	Is the data provided verifiable? Has sufficient evidence been provided to the validation team?		See CR5	CR5	<input checked="" type="checkbox"/>
F.3.3.	Does the additional information substantiate / support statements given in other sections of the PDD?		See CR5	CR5	<input checked="" type="checkbox"/>
F.4. Annex 4: Monitoring information					
F.4.1.	If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?		Yes additional information is given in this annex	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.4.2.	Is the information provided verifiable? Has		See CARs and CRs above	open	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
sufficient evidence been provided to the validation team?				
F.4.3. Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?		In the main yes but see CARs and CRs above	open	<input checked="" type="checkbox"/>

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Table 2 Resolution of Corrective Action and Clarification Requests

Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
<u>Corrective Action Request No.1.</u> The layout of the PDD includes twice the page number, please correct this layout	A.2.2	Amended according to request.	This has been correctly changed <input checked="" type="checkbox"/>
<u>Clarification Request No. 1.</u> Please clarified all the statements related to "Detail information will be added to the final version of the PDD"	A.2.4.	This has been done. Especially, information on the chosen abatement technology has been provided. Abocol has made its choice on which secondary catalyst to install. The Colombian DNA has sent the Letter of approval for this project. The scheduled DNA-Meeting has been postponed which was the reason for delay.	All documents have been provided <input checked="" type="checkbox"/>
<u>Corrective Action Request No.2.</u> Please submit the future training plan for the operators.	A.4.3.8	This has been sent to the auditor by mail dated 16 th Feb 07. The training plan is referred on page 70 of the PDD.	The training plan is clearly structured <input checked="" type="checkbox"/>
<u>Corrective Action Request No.3.</u> Please include a clear reference of the gas price use as reference.	B.4.6	Amended according to request (see footnote 28).	The reference is reliable <input checked="" type="checkbox"/>
<u>Corrective Action Request No.4.</u> It should be clearly explain why is assumed that extra heat would be necessary in case of a the use of NSCR to reduce the NO _x	B.4.6	Amended according to request (see page 27 and footnotes 27 and 29).	The information included clearly explained this issue <input checked="" type="checkbox"/>
<u>Corrective Action Request No.5.</u> The PDD should include the step 5, related to new or modify regulations, according to the	B.4.15	Amended according to request (see pages 24 and 29).	<input checked="" type="checkbox"/>

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
methodology.			
<p><u>Corrective Action Request No.6.</u> The campaign length for NAN2 should be calculated as stipulated by the methodology, and not base on assumptions</p>	B.6.1.4	<p>Amended according to request. The NAN2 campaign length was calculated based on historic campaigns 2 and 4 (out of a total of five historic campaigns the plant has been operated for.</p> <p>Campaigns 1, 3 and 5 were not considered as representative for how NAN2 campaigns usually are operated. Campaigns 1 and 3 were abnormal due to technical abnormalities and campaign 5 was interrupted prematurely by Abocol management in order to start the baseline campaign.</p> <p>Documentation for these circumstances has been provided during the on-site validation (October 26th to 27th and January 23rd to 25th) and by mail dated 16th Feb 07 ("Declaracion 5 campagna").</p>	<p>The reasons given to not used the other campaigns has been confirmed with documentation provided</p> <p style="text-align: right;">☑</p>
<p><u>Corrective Action Request No.7.</u> The units for AFR should be in kg and not in tones</p>	B.6.2.11	Amended according to request.	<p>This has been correctly changed</p> <p style="text-align: right;">☑</p>
<p><u>Corrective Action Request No.8.</u> Please use the total amount of acid produce during the campaign.</p>	B.6.2.14	<p>Amended according to request. The NAP production for NAN2 was in fact 23,781 tHNO₃.</p> <p>The value previously communicated had been calculated incorrectly.</p> <p>This has been confirmed by Abocol in writing; the scanned document was sent to the validator by mail dated 6th February 07.</p>	<p>The document submitted clearly demonstrate and confirmed the NAP data</p> <p style="text-align: right;">☑</p>
<p><u>Clarification Request No. 2.</u> NAN2 does not use all historic campaigns as</p>	B.6.2.15	Amended according to request, see page 27 and references made on pages 27 and 28. Some footnotes were	The reasons have been confirmed during validation

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
reference. Please clarify		amended accordingly.	<input checked="" type="checkbox"/>
<u>Clarification Request No. 3.</u> It should be clarified with an example how the results will be obtained	B.6.3.2	Amended according to request. The entire sections B.6.3 and B.6.4 have been re-worded in order to explain the data processing procedures and the calculation of reductions achieved during the project campaigns more clearly.	Now is possible to understand the way of calculating the emission reductions <input checked="" type="checkbox"/>
<u>Corrective Action Request No.9.</u> The identification number of the parameter is not always consistent with the methodology	B.7.1.1	Amended according to request.	This has been corrected <input checked="" type="checkbox"/>
<u>Corrective Action Request No.10.</u> The gauze composition for the project campaigns have to be included in the monitoring plan	B.7.1.1	Amended according to request.	<input checked="" type="checkbox"/>
<u>Corrective Action Request No.11.</u> Please include an statement that assure, the data will be achieved for at least 2 years “after crediting period”	B.7.1.1	Amended according to request, see page 57 (section B.7.1).	Correctly included <input checked="" type="checkbox"/>
<u>Corrective Action Request No.12.</u> The historical gauze composition is not possible to be monitored, please delete this parameter form the monitoring plan	B.7.1.1	Amended according to request.	<input checked="" type="checkbox"/>
<u>Corrective Action Request No.13.</u> The calibration and maintenance proposed schedule should be included in the PDD or at least a reference to the internal document	B.7.1.2	Amended according to request. References are contained in footnotes 52 and 56. The documents have been sent to the validator by mail dated 16 th February 07 and can be made available upon request.	The document clearly presents the schedule <input checked="" type="checkbox"/>
<u>Corrective Action Request No.14.</u>	B.7.1.20	Amended according to request (page 67).	The parameter is complete

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
The parameter UNC should be included in the monitoring plan.			and clear <input checked="" type="checkbox"/>
<u>Corrective Action Request No.15.</u> The parameter EFreg should be included in the monitoring plan.	B.7.1.21	Amended according to request (page 69).	The parameter is complete and clear <input checked="" type="checkbox"/>
<u>Corrective Action Request No.16.</u> It should be clearly showed the organisation diagram including responsibilities.	B.7.2.1.	Amended according to request (page 71).	The information is clearly presented in the PDD <input checked="" type="checkbox"/>
<u>Corrective Action Request No.17.</u> Documentation to confirm the proper installation of the equipments and all the requirements from EN 14181 should be submitted to the validator	B.7.2.4.	As agreed with the validator during the on-site validation and in subsequent discussions, the QAL 2 test for the relevant AMS parts will be conducted after the validation and will be checked during the first verification.	This issue has to be checked during the verification <input checked="" type="checkbox"/>
<u>Corrective Action Request No.18.</u> The AMS downtime is not correctly address in the PDD	B.7.2.9	Amended according to request (page 28).	Now is correctly included <input checked="" type="checkbox"/>
<u>Corrective Action Request No.19.</u> Please include that the persons are part of the project participants entities	B.8.1.4	Amended according to request (page 74).	<input checked="" type="checkbox"/>
<u>Clarification Request No. 4.</u> It should be clarified where in the methodology is mention that no EIA is necessary	D.2.1	This was a misunderstanding. N.serve did not mean to say that an EIA is not required due to any explicit statement in AM0034. An EIA for the planned project activity is not required according to Colombian Environmental Law. This has been confirmed by the responsible Colombian Environmental Authority CARDIQUE (see Annex 6.4 of the	It is confirmed that the EIA is not required in Colombia for this type of project <input checked="" type="checkbox"/>

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
		PDD).	
<u>Corrective Action Request No.20.</u> The LoA should be submitted before the submission for registration of the project to the UNFCCC	D.2.2.	The LoA of the Colombian DNA is not yet available. It will be submitted to the DOE prior to mandating the registration request with UNFCCC.	☑
<u>Corrective Action Request No.21.</u> Please include any positive or negative comments given by the stakeholders	E.2.1	Amended according to request (page 77).	The PDD clearly presents the comments given ☑
<u>Clarification Request No. 5.</u> It is not clear the additional information given in this annex 3	F.3.1.	Amended according to request (page 82).	The PDD has been correctly updated ☑

Table 3 Unresolved Corrective Action and Clarification Requests (in case of denials)


Clarifications and / or corrective action requests by validation team	Id. of CAR/CR	Explanation of Conclusion for Denial
-	-	-

Validation of the CDM Project:
Project for the catalytic reduction of N₂O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia




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Annex 2: Information Reference List

Final Report 2007-06-06	Validation of the Project for the catalytic reduction of N ₂ O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia Information Reference List	Page 1 of 2	 Industrie Service
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Reference No.	Document or Type of Information
1	On-site interview at the offices and on site with the project developer and the representatives of Abocol conducted on 26-27 October, 2006 and 23 – 25 January, 2007 by auditing team of TÜV SÜD: Validation team on-site: Javier Castro TÜV SÜD Industrie Service GmbH Interviewed persons: Luis Navas Local N.Serve representative Christopher Brandt Project Manager N.Serve Marten Von Velsen MD, N.Serve Nelson Guevara Process Engineer Abocol William Ruiz Maintenance responsible Abocol Daño Londoño Instrument engineer Abocol Johana Rodriguez Director Process Engineer Abocol
2	Draft PDD "Project for the catalytic reduction of N ₂ O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia", N.Serve, January 2007
3	Final PDD "Project for the catalytic reduction of N ₂ O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia", N.Serve, June 2007
4	Technical data D-FL 200 (flow meter), DURAG, January 2007
5	NO ₂ Analysis result, Universidad Pontificia Bolivariana, Medellin, Dated January 2006
6	Colombian decret "Decreto 02 de 1982" related to the NO _x regulation, submitted January 2007
7	General description of the Selective Catalytic Reduction (SCR) of NO _x , installed in Abocol, dated May 30, 1996
8	Visual Basic routine for electronic transmission of data, submitted January 2007
9	Maintenance plan for Abocol, dated 01.17.2007
10	Technical data Pressure transmitter, ABB, January 2007
11	Servomex 4900C1 QAL1 documentation, dated 09.01.2007
12	Conformity validation by TÜV NORD (0045) for ABB pressure equipment
13	DURAG D-FL100 suitability tested by TÜV Nord, Report No 128CU11650 dated 29. March 1996
14	Approved methodology AM0034: Catalytic reduction of N ₂ O inside the ammonia burner of nitric acid plants, version 02, UNFCCC,

Final Report 2007-06-06	Validation of the Project for the catalytic reduction of N ₂ O emissions with a secondary catalyst inside the ammonia oxidation reactors of the NAN1 and NAN2 nitric acid plants at Abonos Colombianos SA ("Abocol"), Colombia Information Reference List	Page 2 of 2	 Industrie Service
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Reference No.	Document or Type of Information
	2006
15	UNFCCC, CDM: Tool for the demonstration and assessment of additionality" approved by the EB (EB 16, annex 1).
16	Abocol excel files production data, confidential
17	Calculations of historic and baseline data N.Serve Submitted February 2007
18	Stakeholder meeting documentation for meeting performed in Cartagena: Invitation (direct, news papers and via e-mail), meeting report, presentation given at the meeting
19	European Norm EN 14181: Quality assurance of automated measuring systems, 2004;
20	Training documentation, Abocol, presented in the on-site audit
21	Columbian resolution No 0453, dated 27 April 2004
22	Columbian resolution No 0454 dated 27 April 2004
23	Confidential documentation to confirmed the production of the plant, submitted in march 2007
24	Calibration data from Abocol, submitted in March 2007