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Determination Report

UAB COWI Baltic

DETERMINATION OF THE JI-PROJECT:

Nitrous Oxide Emission Reduction Project at GP Nitric Acid Plant in AB Achema Fertilizer Factory

REPORT NO. 1029455

Dezember 16, 2008

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

Industrie Service

Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
1029455	2008-03-11	3.0	2008-12-16	-

Subject: Determination of a JI Project

Accredited TÜV SÜD Unit:	**TÜV SÜD Contract Partner:**
TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199, D-80686 Munich Federal Republic of Germany	TÜV SÜD Industrie Service GmbH Carbon Management Service Westendstr. 199, D-80686 Munich Federal Republic of Germany
Client: AB Achema Jonalaukio village, Ruklos county, LT-55550 Jonavos region municipality, Lithuania	**Project Site(s):** AB Achema GP nitric acid plant Jonalaukio village, Ruklos county, LT-55550 Jonavos region municipality, Lithuania

Project Title: Nitrous Oxide Emission Reduction Project at GP Nitric Acid Plant in AB Achema Fertilizer Factory in Jonava, Lithuania

Applied Methodology / Version: AM0034 version 02 **Scope(s):** 5

First PDD Version:		**Final PDD version:**	
Date of issuance:	2007-06-29	Date of issuance:	2008-12-12
Version No.:	0.1.	Version No.:	10.0
Starting Date of GSP	2007-07-03		

Estimated Annual Emission Reduction: 563,562 tons CO_{2e}

Assessment Team Leader:	**Further Assessment Team Members:**
Thomas Kleiser	Nikolaus Kröger

Summary of the Determination Opinion:

☒ 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 JI. Hence TÜV SÜD will recommend the project for registration under track 2 of the JI 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.

☐ 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 and will inform the project participants and the JI Supervisory committee on this decision.

Abbreviations

ACM	Approved Consolidated Methodology
AM	Approved Methodology
AOR	Ammonia Oxidation Reactor
BASF	BASF is a multinational company producing chemicals, plastics, performance products, agricultural products, fine chemicals, crude oil and natural gas
CAR	Corrective Action Request
CR	Clarification Request
DOE	Designated Operational Entity
DNA	Designated National Authority
DP	Determination Protocol
EIA / EA	Environmental Impact Assessment / Environmental Assessment
EN	English
ER	Emission reduction
GHG	Greenhouse gas(es)
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
KP	Kyoto Protocol
LoE	Letter of Endorsement
LoA	Letter of Approval
LT	Lithuanian
MP	Monitoring Plan
N/A	not applicable
NGO	Non Governmental Organisation
PDD	Project Design Document
PP	Project Participant
SC	Supervisory Committee
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 determination objective is an independent assessment by a Third Party (Accredited Independent Entity = AIE) of a proposed project activity against all defined criteria set for the registration under the Joint Implementation Mechanism (JI). Determination is part of the JI project cycle and will finally result in a conclusion by the executing AIE whether a project activity is valid and should be submitted for registration to the JI-SC. The ultimate decision on the registration of a proposed project activity rests at the JI Supervisory Committee and the Parties involved.

The project activity discussed by this determination report has been submitted under the project title: “Nitrous Oxide Emission Reduction Project at GP Nitric Acid Plant in AB Achema Fertilizer Factory”.

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 JI project activities the scope is set by:

- The Kyoto Protocol, in particular § 6
- Decisions 3/CMP.3, Decision 2/CMP.2 and Decision 3/CMP.2, Decision 9/CMP.1 and 10/CMP.1
- Furthermore relevant aspects of Decision 12/CMP.1 and Decision 13/CMP.1
- Decisions by the JI-SC published under http://ji.unfccc.int
- Specific guidance by the JI published under http://ji.unfccc.int
- Guidelines for Completing the Project Design Document (JI-PDD), and the Proposed Baseline and Monitoring Methodology, also with reference to CDM - 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 determination 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 JI-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 determination is its use during the registration process as part of the JI project cycle. Hence, TÜV SÜD cannot be held liable by any party for decisions made or not made based on the determination opinion, which will go beyond that purpose.

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, 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 determination 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 Determination protocol serves the following purposes:

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

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

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

Determination Protocol Table 1: Conformity of Project Activity and PDD				
Checklist Topic / Question	***Reference***	***Comments***	***PDD in GSP***	***Final PDD***
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.	*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.*	*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*	*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 Determination team has identified a need for further clarification.*	*Conclusions are presented in the same manner based on the assessment of the final PDD version.*

As for this specific project the final PDD was applying a different version of the methodology than the first one, a table 1a and a table 1b are presented reflecting the changes by the revision of the methodology.

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

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

Determination 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***
If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.	*Identifier of the Request.*	*This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion.*

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 Determination 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
Thomas Kleiser	**ATL**	☑	☑	☑
Nikolaus Kröger	GHG-A	☑	☑	

Thomas Kleiser is head of division CDM and JI at TÜV Industrie Service GmbH. In this position he is responsible for validation, determination, verification and certifications processes for GHG mitigation projects as well as trainings for internal auditors. As assessment team leader he already conducted numerous validations and verifications of CDM and JI projects. Before entering this department he worked as expert on air quality measurements and emissions inventories as well as on environmental auditing within the environmental branch of the company. Reflecting on earlier projects he is familiar with political, economical and technical random conditions in host country

Nikolaus Kröger is environmental engineer and expert for emissions monitoring and quality assurance at the department "TÜV SÜD Carbon Management Service". He is located in the TÜV SÜD Hamburg office and is also engaged as personally accredited verifier in the EU-ETS serving the Northern German market and being Regional Manager for carbon business development in the Middle East (MENA region) and Central Asia. Being ghg auditor for sectoral scopes 1, 4, 5, 8, 9, 10, 11, 12, 13 and assessment team leader for CDM and JI projects he has already been involved in multitude of JI and CDM activities with a special focus on industrial non-CO2 projects. Constitutive on 13 years experience at the department "Environmental Service" he verified many metallurgical plants, refineries, chemical plants, waste treatment and power plants and process engineering in many types of facilities. One of his former focal points had been implementation and calibration of complex automatic Environment-Data-Systems.

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 Determination process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report.

2.3 Follow-up Interviews

In the period of July 3~4, 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 this on-site visit.

Name	Organisation
Mr Vaidotas Kuodys	UAB COWI Baltic, project manager
Mr Juozas Tunaitis	AB Achema, Technical director
Mr Andrejus Sostakas	AB Achema, manager of innovation centre
Mr Tadas Kastanauskas	UAB Koncernas Achemas Grupe, ecologist
Mr Ramunas Pilsudskas	AB Achema, deputy hand of nitric acid plant
Mr Stasys Pakstys	AB Achema, instrumentation department managing engineer

2.4 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the Determination 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 Determination process, the concerns raised and responses that have been given are summarised in chapter 3 below and documented in more detail in the Determination protocol in annex 1.

2.5 Internal Quality Control

As final step of a Determination the Determination report and the protocol have to undergo and 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 requesting registration by the JISC or not.

3 SUMMARY OF FINDINGS

As informed above all finding are summarized in table 2 of the attached Determination protocol. In total the assessment team expressed 15 Clarification Requests and 10 Corrective Action Requests.

One of the key findings was discussion about additionality and consistency with current laws and regulations. Using methodology AM0034 “Catalytic reduction of N2O inside the ammonia burner of nitric acid plants” requires the identification of baseline scenario using procedure for identification of the baseline scenario described in the approved methodology AM0028 “Catalytic N2O destruction in the tail gas of Nitric Acid Plants” version 03. Related to the aforementioned the assessment team required further information about identification of all feasible baseline scenario alternatives and discussion of all technically feasible alternatives to handle NOx emissions (at least all scenarios listed under step 1 in AM0028, vers.3). Further TÜV SÜD asked to identify and exclude those options not in line with regulatory or legal requirements, to develop a complete list of barriers developed that prevent alternatives to occur, to make transparent and document the evidence provided on the existence and significance of these barriers same as show transparently that at least one of the alternatives is not prevented by the identified barriers (step 3b).

The discussion of issues related to CAR2 to CAR7 was relatively simple as there was no incentive to invest for N2O abatement technology in the host country other than revenue from CERs. The PP updated the required discussion and information as given in the revised final version of PDD. To the more complex issue of regulatory and legal requirements TÜV SÜD received a comment during GSP from German DNA (DEHSt). By request of TÜV SÜD the PP had initiated intense communication with the local authority – the Ministry of Environment of the Republic of Lithuania – to clarify authorization with focus onto N2O regulations in general in Lithuania and in detail at AB Achema. Please refer to following section 4 of this report wherein this topic is widely discussed. To view of the assessment team the discussion about this issue was settled.
To sight of TÜV SÜD assessment team it’s very notable for the project’s confidentiality, that the PP started a local stakeholder meeting held at AB Achema in Jonava where representatives of AB Achema have discussed with officials of regional environmental protection department. As result the conclusion was made that installation of the secondary catalyst is not to be considered as economic activity as it does not alter production level nor makes modification to production lines and finally therefore no environmental impact assessment (EIA) is required.

Another one of key findings was about the way of determining permitted operating range as historical. AM0034 requires to determine the normal ranges for operating conditions for the following parameters: (i) oxidation temperature; (ii) oxidation pressure; (iii) ammonia gas flow rate, and (iv) air input flow rates. During on-site mission it became apparent that available datasets were limited because neither legislation in Lithuania nor the internal regulation of AB Achema requires keeping records of the concerned data longer than for 1 year. AB Achema took historical data in concern which are available from 01.04.2005 in records for every 12 hours. The revised PDD updated in section B in table 3 *Permitted data range based on historical data*. Additional parameter AFR had been added to the revised PDD with an analogue approach on data sets as mentioned above. The given estimation is reproducible and substantiated by verified data and assumptions.

The version 02 of AM0034 requires strict monitoring on baseline and project emissions and the PDD addressed those requirements generally satisfactorily following the EN14181. Nevertheless the result of monitoring including QAL2 result will be the most important issue at later verification. To ensure that the monitoring meets the requirements according EN14181 BASF as PP assigned an accredited independent Third Party for a conformity check of measurement instrumentation. The report of declaration about conformity dated June 29 had been submitted to the assessment team at July 12, 2007 and ensures the meeting of any EN14181 related requirements.

Further during the analysis of historic data sets an obviously differing length in campaign No.1 and No.2 compared with campaign No.3 and No.4 was noted. On request AB Achema clarified that due lack of experience with new technology shorter lifespan gauzes were ordered for first campaign. Stopping and launching of the plant for maintenance negatively affects the gauzes. For the first campaign it was needed quite often. While having more experience, gauzes for the second and third campaign were ordered with gradually longer lifespan. The campaign length was also planed to have maintenance period during the summer as it was not possible to stop the plant during the cold season because many lines might frozen in such case. TÜV SÜD assessment team crosschecked in detail -between others- installation dismantling reports for campaign No.1 to 4, reception protocols for campaign No.1 to 4 same as operation ordinances of AB Achema GP plant and GP operation schedule. Additional hard proofs had been requested for the gauze use at burner 1, 2, 3, 4 at campaign No.1, burner 3, 4 at campaign 2 and burner 1, 2 at campaign No.4. Though detailed crosschecks of campaigns are considered to be part of later verification the result of this first spot check due determination was considered sufficient. Nonetheless the later verifier will have to discuss this issue within his verification report for to settle it finally.

For any further detail about submitted CR or CAR please refer to Annex 1 Table 2 *Resolution of Corrective Action and Clarification Requests* of the Determination report.

A first Determination Report No. 1029455 was issued on March 11, 2008. During the upload process some inconsistencies between PDD and Determination Report had been identified. In this context the TÜV SÜD assessment team identified necessary corrections relating to length and dates of the crediting period and requested corrections in the PDD. Subsequent to this clarification the PP updated the PDD and submitted its revision 10.0 at December 12, 2008 to the TÜV SÜD assessment team. Afterwards TÜV SÜD issued this final report dated December 16, 2008.

The length and dates of the crediting period have been corrected to 4 years and 4,5 months (August 16, 2008 to December 31, 2008). The consistency of the indication of the crediting period throughout the whole submission, in particular in PDD sections A.4.3.1. and C.3., was crosschecked. The annual average of emission reductions over the crediting period has been corrected from a previous basis of a 5 years crediting period to a basis of 4 years and 4,5 months crediting period. The total estimated emission reductions over the crediting period is 2,465,585 tCO2e and the annual average of estimated emission reduction over the crediting period is 563,562 tCO2e. The aforementioned estimation are arithmetic correct calculated and based on a plausible assumption. All changes are consistent throughout PDD revision 10.0.

In general there are two issues that have a potential to affect the emission projection. These are a) IPPC regulation and b) possible inclusion of N_2O into the EU Emission Trading Scheme. Nevertheless, the baseline under the JI mechanism is affected by the IPPC regulation and has to be evaluated. In this context it had to mention that after the first issue of the Determination Report No. 10295455 on March 11, 2008 the IPPC permit was updated on April 30, 2008. Previous the IPPC permit of AB Achema was issued on December 28, 2004 by the Kaunas Regional Department for Environmental protection. The aforementioned IPPC permit from December 2004 had been the ground laying information at the determination visit in June 2007.

The TÜV SÜD assessment team requested a recalculation of the estimated baseline and project emissions taken into account the IPPC permit revision from April 2008. In table 4 of the updated PDD version 10.0 from December 12, 2008 the yearly N_2O limit values for the GP plant are stated as follows: 3174,5 t N_2O in 2008, 2009 and 2010, of 2926 t N_2O in 2011, 2040,5 t N_2O in 2012 and 1256,5 t N_2O in 2013. The revised IPPC limit values were considered as a new level in cases where these limits were lower than the estimated baseline, namely in year 2012. In years 2008, 2009, 2010 and 2011 the projected N2O emissions are below the allowable emission level. All figures which are presented in Chapter A.4.3.1 of the PDD reflect this impact of the IPPC regulation on the estimated emission reductions.

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:

<table>
<tr><td colspan="2">webpage:
http://www.netinform.de/KE/Wegweiser/Guide2_1.aspx?ID=3288&Ebene1_ID=26&Ebene2_ID=994&mode=1</td></tr>
<tr><td colspan="2">Starting date of the global stakeholder consultation process:
2007-07-03</td></tr>
<tr><td>Comment submitted by:
2007-07-20
Dr. Karsten Karschunke
Umweltbundesamt
Deutsche Emissionshandels-stelle (DEHSt)
Verfahrenssteuerung, Quali-tätssicherung, JI/CDM
Bismarckplatz 1
D-14193 Berlin
Federal Republic of Germany</td><td>Issues raised:
On page 6 (A.4.3) in the second paragraph, it is stated that "…N2O is not considered as a pollutant in Lithuania nor it is regulated by any Lithuanian environmental legislation." Based on this statement, on page 14 under Sub-step 1b), it is concluded that the scenario "C) Continuation of the current situation (no project activity or other alternatives under-taken - i.e. no secondary catalysts are installed in the oxidation reactors" is the only option expected to take place in the absence of the JI project and considered in determining the baseline.
Since Lithuania is a member state of the European Union the "Acquis Communautaire" should be reflected in the reference scenario of any proposed project activities according to Article 11b of the Emission Trad-ing Directive (2003/87/EC and 2004/101/EC), we are missing a refer-ence to the IPPC-Directive (96/61/EC).
Nitric acid plants are listed in Annex I Nr. 4.2 b) of the IPPC-directive and nitrous oxide (N2O) is listed as an air pollutant in Annex III Nr. 2. There-fore according to article 9 of the IPPC-Directive, BAT based emission limit values should be set in the permit by the competent authority. The production of nitric acid is dealt with in detail in Chapter 3 of the BAT Reference Document "Large Volume Inorganic Chemicals - Ammonia, Acids, Fertilizers" (BREF LVIC-AAF), prepared by the European Inte-grated Pollution Prevention and Control Bureau (EIPPCB) of the Euro-pean Commission.
We kindly ask you to include in your determination report a thorough analysis of the legal requirements for nitric acid plants in Lithuania with taking the European requirements in consideration.</td></tr>
<tr><td colspan="2">Response by TÜV SÜD:
TÜV SÜD and DEHSt (Dr. Karschunke) discussed by phone at 2007-09-17 the issues raised by DEHSt and came to conclusion that DEHSt will not abide receiving a written response by TÜV SÜD.
TÜV SÜD ensured to clarify with project participants same as with Ministry of Environment of the Republic of Lithuania the state of authorization in Lithuania with a special focus on N2O and embedding of Lithua-nian legislature towards EC legislature.
The following offsets deliberate the current state of legal requirements for nitric acid plants in Lithuania with taking the European requirements in consideration:
AB Achema operates according to the permit No. 4/15-04, issued December 28, 2004, revised November 04, 2005 and revised April 30, 2008. The revised permit approved by the Kaunas Regional Department for</td></tr>
</table>

Environmental Protection, is based on the requirements of the IPPC-Directive (96/61/EC), being in force since 2004 when Lithuania entered the European Union. The directive was transposed to the national IPPC regulation from February 27, 2002.

The nitric acid plant, listed in Annex I Nr. 4.2.b of the IPPC-directive, is exclusively used for the production of inorganic fertilizers. The nitric acid plant is a section of the fertilizer plant, listed in Annex I Nr. 4.3 of the IPPC-directive. Nitrogen compounds are listed as an air pollutant in Annex III No. 2 of the IPPC-directive. Therefore according to article 9 of the IPPC-Directive, BAT (best available techniques) based emission limit values were taken into consideration in the permit by the authority for NH3 and NOx to control the production of nitric acid.

Chapter 3 of the BAT Reference Document “Large Volume Inorganic Chemicals - Ammonia, Acids, Fertilizers” (BREF LVIC-AAF), prepared by the European Integrated Pollution Prevention and Control Bureau of the European Commission describes the best available techniques for the production of nitric acid in detail. AB Achema’s process is designed, built, maintained and operated according to the best available techniques bearing in mind the likely costs and benefits of a measure and the principles of precaution to prevent and to reduce emissions. The accessible and implemented techniques were selected under economically and technically viable conditions, taking into consideration the costs and advantages.

The emission limit values to control the production of nitric acid set in the permit take into account the technical characteristics of the installation concerned, its geographical location and the local environmental conditions. In all circumstances, the conditions of the permit contain provisions on the minimization of long-distance or transboundary pollution and ensure a high level of protection for the environment as a whole. Therefore no further legal obligation to limit emissions of nitrogen compounds NO, NO2 and N2O is in force in Lithuania and AB Achema has no legal obligation and no financial incentives to install an additional nitrogen compounds destruction or abatement technology.

AB Achema has initiated a comprehensive stakeholder process on the issue of IPPC regulation and JI baseline related to N2O reduction projects in AB Achema. A number of meetings were held during the period of November 2007 to February 2008. The representatives of the following organizations participated in the meetings: authorities, AB Achema, association of industries, consultants and other stakeholders. The following official institutions were involved: Ministry of Environment, Environmental Protection Agency and Regional Department for Environmental Protection.

The aim of the stakeholder process was to clarify the IPPC requirements for N2O limit values, its impact on the baseline of N2O reduction projects and the position of the authorities towards the issue.

The current IPPC permit issued to AB Achema sets restrictions related to N2O. These restrictions are reflected in the updated baseline and estimated emission reductions of the project.

5 DETERMINATION OPINION

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

"Nitrous Oxide Emission Reduction Project at GP Nitric Acid Plant in AB Achema Fertilizer Factory"

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 JI. Hence TÜV SÜD will recommend the project for registration by the JISC under track 2 of the JI.

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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 Determination is based on the information made available to us and the engagement conditions detailed in this report. The Determination 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 JI project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the Determination opinion, which will go beyond that purpose. This report had been submitted on basis of the latest publicly available regulations in the host country. This excludes assertive any mandatory requirement which will be appointed belated.

Munich, Dezember 16, 2008

Javier Castro

Head of the Certification Body "Climate and Energy"

Munich, Dezember 16, 2008

Thomas Kleiser

Assessment Team Leader

Industrie Service

Annex 1: Determination Protocol

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A. General description of project activity				
A.1. Title of the project activity				
A.1.1.1. Does the used project title clearly enable to identify the unique JI activity?	3, 4, 5	The project title clearly enables the identification of the CDM activity. No second JI activity exists with a similar title at the same site. Nevertheless a second JI activity according to Nitrous Oxide Emission Reduction in same site exists with a different name. **Clarification Request 1** Please change in project title from GP Nitric acid aggregate to GP nitric acid plant.	~~CR1~~	☑
A.1.1.2. Are there any indication concerning the revision number and the date of the revision?	3, 4, 5	The revision number and the date of the issuance of this revision are correctly indicated. The available PDD is indicated as version 01 submitted June 29, 2007.	☑	☑
A.1.1.3. Is this consistent with the time line of the project's history?	3, 4, 5	So far we know for the moment the given dates are in consistency with timeline of the project development. Nevertheless the possibility of a future delay in change of the secondary catalysts (gauze) had been identified. Proximately the gauzes will be changed in September 2008 instead of July 2008.	☑	☑
A.2. Description of the project activity				
A.2.1.1. Is the description delivering a transparent overview of the project activities?	3, 4, 5	Yes, it is.	☑	☑
A.2.1.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	3, 4, 5, 9	Yes, it is.	☑	☑
A.2.1.3. Is the information provided by these proofs consistent with the information provided by the PDD?	3, 4, 5	Yes, it is.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A.2.1.4. Is all information pr3, 4, 5esented consistent with details provided by further chapters of the PDD?	3, 4, 5	Yes, it is.	☑	☑
A.3. Project participants				
A.3.1.1. Is the form required for the indication of project participants correctly applied?	3, 4, 5	Yes, it is.	☑	☑
A.3.1.2. Is the participation of the listed entities or Parties confirmed by each one of them?	3, 4, 5	Yes, it is. **Clarification Request 2:** During on-site audit the LoE from Lithuanian side had not been available. Please submit the acquired documents to hand of Assessment team leader.	~~CR2~~	☑
A.3.1.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	3, 4, 5	Yes, it is.	☑	☑
A.4. Technical description of the project activity				
A.4.1. Location of the project activity				
A.4.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	3, 4, 5	Yes it is. The project location could be clearly identified according to the PDD. The address of the plant is given as well as corresponding maps. The project activity is located within AB Achema in Kaunas region, Rukla county, Jonalaukis village, Lithuania. **Clarification Request 3:** Please provide detailed coordinates (e.g. GPS) on the location within the PDD for easier identification of the project site.	~~CR3~~	☑

CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS	PPD in GSP	Final PDD
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.)?		The legal status of implementation of the project at this site had been ensured by submitting cover page and key pages of the contract between AB Achema and BASF.	☑	☑
A.4.2.	*Technology(ies) to be employed, or measures, operations or actions to be implemented by the project activity*				
A.4.2.1.	Does the technical design of the project activity reflect current good practices?	3, 4, 5	Yes, it does.	☑	☑
A.4.2.2.	Does the description of the technology to be applied provide sufficient and transparent input/ information to evaluate its impact on the greenhouse gas balance?	3, 4, 5	Yes, the description of the technology to be applied provides sufficient and transparent input/ information to evaluate its impact on the greenhouse gas balance.	☑	☑
A.4.2.3.	Does the implementation of the project activity require any technology transfer from annex-I-countries to the host country(ies)?	3, 4, 5	Yes, the implementation of the project activity requires technology transfer from annex-I-countries. AB Achema is using a new type of gauzes for N2O abatement from annex-I-country-provider Johnson & Matthews.	☑	☑
A.4.2.4.	Is the technology implemented by the project activity environmentally safe?	3, 4, 5	The additional catalyst is made of precious metals and does not create significant negative environmental effect. Obsolete catalyst is to be recycled.	☑	☑
A.4.2.5.	Is the information provided in compliance with actual situation or planning?	3, 4, 5, 9	The information provided is in compliance with actual situation and planning. During on-site inspection, the presentation materials related to the project technology, which are provided by catalyst suppliers, were confirmed.	☑	☑
A.4.2.6.	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?	3, 4, 5	Yes, it is a state of art technology providing significant N2O emission reduction with simple “end of pipe technology”	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A.4.2.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	3, 4, 5	Not likely as it is expected to reduce 80-90% of N2O emission.	☑	☑
A.4.2.8. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	3, 4, 5, 9, 10	Extensive training is required in the context of monitoring. This is correctly described by the PDD. During on-site inspection, it was confirmed that experienced instrument technician are employed in this project and that plant employees and responsible person for monitoring received intensive training. Training had been conducted by BASF Prozessanalysentechnik in May 2007. See: BASF training schedule and additional Item 16 of project implementation schedule	☑	☑
A.4.2.9. Is information available on the demand and requirements for training and maintenance?	3, 4, 5	After placing of the secondary catalysts the internal QA of Achema requires special training in maintenance. Information on this issue is available.	☑	☑
A.4.2.10. Is a schedule available for the implementation of the project and are there any risks for delays?	3, 4, 5	A schedule is available but so far we know yet Achema's schedule is very ambitious and there are serious risks for time line delays of implementation. The biggest risk would be at schedule of new AMS delivery and at a result of QAL2 test on existing AMS. However they will affect on verification, but they are not immediate issues of validation.	☑	☑
A.4.3. Brief Explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reduction would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
A.4.3.1. Is there a brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reduction would not occur in the absence of the proposed project, taking	3, 4, 5	Yes, it is.	☑	☑

CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS	PPD in GSP	Final PDD
	into account national and/or sectoral policies and circumstances?				
A.4.3.2.	Is the explanation transparent, feasible and – if based on calculations – mathematical correct calculated?	3, 4, 5	Yes, it is. The explanations are transparent and feasible.	☑	☑
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?	3, 4, 5	The PDD uses the correct form in chapter A.4.4	☑	☑
A.4.4.2.	Are the figures provided consistent with other data presented in the PDD?	3, 4, 5	All figures which are presented in the PDD are consistent with other data.	☑	☑
A.4.5.	*Project approval by the participants*				
A.4.5.1.	Is the state of endorsement or approval by the host party clearly defined and a Letter of Endorsement (LoE), Letter of Approval (LoA) or any alternative statement of authorization available?		Yes, it is. Please see above CR2 at A.3.2.	☑	☑
A.4.5.2.	Is the state of endorsement or approval by any other parties e.g. investing parties clearly defined and a Letter of Endorsement (LoE), Letter of Approval (LoA) or any alternative statement of authorization available?		Yes, it is. Please see above CR2 at A.3.2.	☑	☑
A.4.6.	*Public funding of the project activity (not required in JI; here: just additional information)*				
A.4.6.1.	Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	3, 4, 5	**Clarification Request 4:** As in PDD its considered that assent from the Lithuanian Environmental Investment Fund was taken into consideration in the decision making procedure, please explain the current situation of	~~CR4~~	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		public funding.		
A.4.6.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?	3, 4, 5, 11	So far we know baseline (Annex 2) started June 30, 2007. Baseline monitoring data is expected to be available in summer 2008. To confirm the current situation the auditor analysed DCS-Printscreens of graphic trend June 26, 2007 to July 03, 2007	☑	☑
B. Baseline				
B.1. Description and justification of the baseline chosen				
B.1.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	3, 4, 5	Reference number, version number, and title of the baseline and monitoring methodology are clearly indicated.	☑	☑
B.1.1.2. Is the applied version the most recent one and / or is this version still applicable?	3, 4, 5	The PDD applies AM0034, version 02 and refers in the baseline section to AM0028, version 04.1. For both methodologies the referred version is the most recent one.	☑	☑
Justification of the choice of the methodology and why it is applicable to the project activity				
B.1.1.3. Is the applied methodology considered the most appropriate one?	3, 4, 5	AM0034 is solely addressing the destruction of nitrous oxide by secondary measures. Hence it is considered that AM0034 is the appropriate choice for this project activity also applying a secondary technology in the ammonia burner of a nitric acid plant.	☑	☑
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.1.1.4. 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	3, 4, 5	Applicability checklist / Yes / No Criterion discussed in the PDD? Yes Compliance provable? Yes Compliance verified? Yes	~~CR5~~	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
capacity is applied for the process with the existing ammonia oxidization reactor where N2O 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.		**Clarification Request 5:** What proofs are available that there has already been regular operation on Dec 31, 2005? During on-site mission AB Achema confirmed that commercial production started in January 2004. Nevertheless fitting documents e.g. production log sheets from 2004 had not been available on-site. Please present fitting documents for some representative month.		
B.1.1.5. Criterion 2: The project activity will not result in the shut down of any existing N2O destruction or abatement facility or equipment in the plant.	3, 4, 5	Applicability checklist / Yes / No Criterion discussed in the PDD? / Yes Compliance provable? / Yes Compliance verified? / Yes During on-site audit, no such equipment was seen. And there is no indication in schematic drawing either.	☑	☑
B.1.1.6. Criterion 3: The project activity shall not affect the level of nitric acid production	3, 4, 5	Applicability checklist / Yes / No Criterion discussed in the PDD? / Yes Compliance provable? / Yes Compliance verified? / Yes BASF (secondary catalyst supplier) guarantees that no impact to level of nitric acid production will take place. Nevertheless by explanation of Achema project management a very small pressure drop of up to 19 mbar might be possible. Anyway this will not harm the level of nitric acid production.	☑	☑
B.1.1.7. Criterion 4: There are currently no regulatory requirements or incentives to reduce levels of	3, 4, 5	Applicability checklist / Yes / No	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
N2O emissions from nitric acid plants in the host country.		Criterion discussed in the PDD? Yes Compliance provable? Yes Compliance verified? Yes During on-site inspection, it was discussed and confirmed that there are currently no regulatory requirements or incentives to reduce levels of N_2O emissions from nitric acid plants in Lithuania.		
B.1.1.8. Criterion 5: No N2O abatement technology is currently installed in the plant.	3, 4, 5	Applicability checklist: Yes / No Criterion discussed in the PDD? Yes Compliance provable? Yes Compliance verified? Yes During the monitoring check it has been verified that there is no abatement technology installed.	☑	☑
B.1.1.9. Criterion 6: The project activity will not increase NOx emissions.	3, 4, 5	Applicability checklist: Yes / No Criterion discussed in the PDD? Yes Compliance provable? Yes Compliance verified? Yes NOx monitoring is already performed due to requirements by the environmental authority. No increases should occur. The concentrations will be monitored anyway.	☑	☑
B.1.1.10. Criterion 7: NOx abatement catalyst installed, if any, prior to the start of the project activity is not a Non- Selective Catalytic Reduction (NSCR) DeNOx unit.	12	Applicability checklist: Yes / No Criterion discussed in the PDD? Yes Compliance provable? Yes Compliance verified? Yes	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		During on-site inspection, it was confirmed that there is no NOx abatement catalyst installed. It had been confirmed that, if any prior to the start of the project activity is not a Non-Selective Catalytic Reduction (NSCR) DeNOx unit. The proof was taken from general description of SCR technology submitted by provider Environmental Catalysts & Systems		
B.1.1.11. 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.	3, 4, 5	Applicability checklist / Yes / No Criterion discussed in the PDD? Yes Compliance provable? Yes Compliance verified? Yes There is no further impact on greenhouse gas emissions by this kind of technology.	☑	☑
B.1.1.12. 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 catalyst for one campaign, and - After the installation of the secondary catalyst throughout the chosen crediting period of the project activity	3, 4, 5	Applicability checklist / Yes / No Criterion discussed in the PDD? Yes Compliance provable? Yes Compliance verified? Yes During the monitoring check it has been verified that the required measurement equipment is installed.	☑	☑
The baseline scenario shall be identified using procedure for Identification of the baseline scenario described in the approved methodology AM0028 "Catalytic N2O destruction in the tail gas of Nitric Acid Plants" version 03.				
B.1.1.13. 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 discussed by the PDD? Why can this list be	3, 4, 5, 33, 34,	Using methodology AM0034 "Catalytic reduction of N2O inside the ammonia burner of nitric acid plants" requires the identification of baseline scenario using procedure for Identification of the baseline scenario described in the approved methodology AM0028 "Catalytic N2O destruction in the tail gas of Nitric Acid Plants"	~~CAR1~~	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
considered as being complete?		version 03. **Corrective Action Request 1:** Please identify and discuss all feasible baseline scenario alternatives (at least all scenarios listed under step 1a in AM0028,vers.3)		
B.1.1.14. Have all technically feasible alternatives (at least all scenarios listed under step 1a in AM0028, vers.3) to handle NOx emissions been identified and discussed by the PDD?	3, 4, 5, 33, 34,	**Corrective Action Request 2:** Please identify and discuss all technically feasible alternatives (at least all scenarios listed under step 1a in AM0028, vers.3) to handle NOx emissions (Please see also CAR1 at B.4.1)	~~CAR2~~	☑
B.1.1.15. Does the project identify correctly and exclude those options not in line with regulatory or legal requirements?	3, 4, 5, 33, 34,	**Corrective Action Request 3:** Please identify and ex-clude those options not in line with regulatory or legal requirements? (Please see also CAR1 at B.4.1)	~~CAR3~~	☑
B.1.1.16. Have applicable regulatory or legal requirements been identified?	3, 4, 5, 33, 34,	The existing regulation in Lithuania does not require implementation any technologies for N2O abatement. There are no subsidies or other support available for such technologies. Hence the installation of different N2O abatement technologies (other than secondary catalysts) is not feasible as any of the existing N2O abatement technologies imply additional costs and no revenues outside the JI mechanism.	☑	☑
B.1.1.17. Is a complete list of barriers developed that prevent alternatives to occur (step 3a)?	3, 4, 5, 34	**Corrective Action Request 4:** Please develop a complete list of barriers developed that prevent alternatives to occur (step 3a). (Please see also CAR1 at B.4.1)	~~CAR4~~	☑
B.1.1.18. Is transparent and documented evidence provided on the existence and significance of these barriers?	3, 4, 5, 34	**Corrective Action Request 5:** Please make transparent and document the evidence provided on the existence and significance of these barriers.	~~CAR5~~	☑
B.1.1.19. Is it transparently shown that at least one	3, 4,	**Corrective Action Request 6:**	~~CAR6~~	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
of the alternatives is not prevented by the identified barriers (step 3b)?	5, 34	Please make show transparently that at least one of the alternatives is not prevented by the identified barriers (step 3b)?		
B.1.1.20. Does the PDD include an appropriate discussion if and how any alternatives generate financial or economic benefits? (step 4)	3, 4, 5, 34	Although it is not presented explicitly it can be concluded from the previous steps that no alternative is remaining that would generate financial or economic benefits.	☑	☑
B.1.1.21. In case of Option I: Is the least costly alternative clearly identified?	3, 4, 5, 34	The continuation of the recent situation is clearly identified as the least costly option.	☑	☑
B.1.1.22. In case of Option II: Is the most suitable financial indicator clearly identified?	-	Not applicable	☑	☑
B.1.1.23. In case of Option II: Is the calculation of financial figures for this indicator correctly done for all remaining alternatives?	-	Not applicable	☑	☑
B.1.1.24. In case of Option II: Is the investment analysis presented in a transparent manner providing public available proofs for data?	-	Not applicable	☑	☑
B.1.1.25. In case of Option II: Is the sensitivity analysis evidencing the robustness of the financial attractiveness of the selected baseline scenario?	-	Not applicable	☑	☑
B.1.1.26. In case of Option II: Have reasonable variations been applied in critical assumptions?	-	Not applicable	☑	☑
B.1.1.27. In case of a re-assessment in the course of the project's lifetime: Are there any new or modified NOx-emission regulations, which may address the project baseline?	-	Not applicable	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
B.1.1.28. 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?	-	Not applicable	☑	☑
B.1.1.29. In case of a re-assessment in the course of the project's lifetime: Are there any new or modified N2O-emission regulations, which may address the project baseline?	-	Not applicable	☑	☑
B.1.1.30. 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?	-	Not applicable	☑	☑
B.2. Description of how the anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the JI project (assessment and demonstration of additionality):				
B.2.1.1. In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?	3, 4, 5, 34	As in chapter B.2 the investment analysis has been selected as the appropriate choice of possible methods.	☑	☑
B.2.1.2. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than JI income?	3, 4, 5, 34	It is clearly shown that there is no economical benefit by the reduction of the nitrous oxide concentration other than the CDM revenues.	☑	☑
B.2.1.3. 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	☑	☑
B.2.1.4. In case of Option III (benchmark analysis): Is the most suitable financial indicator	-	Not applicable	☑	☑

CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS	PPD in GSP	Final PDD
	clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?				
B.2.1.5.	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	☑	☑
B.2.1.6.	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	☑	☑
B.2.1.7.	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	☑	☑
B.2.1.8.	In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?	-	Not applicable	☑	☑
B.2.1.9.	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	☑	☑
B.2.1.10.	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)?	-	Not applicable	☑	☑
B.2.1.11.	If similar activities are occurring: Is it demonstrated that in spite of these simi-	-	See above	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
larities the project activity would not be implemented without the JI component (step 4b)?				
B.2.1.12. 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)?	3, 4, 5, 34	As there is no other incentive than the JI this criterion is fulfilled.	☑	☑
B.3. Description of how the definition of the project boundary is applied to the project				
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.3.1.1. Source: Waste stream exiting the stack of the Nitric Acid plant (Burner inlet to stack) Gas(es): N2O Type: Baseline Emissions and Project Emissions		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.3.1.2. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the PDD?	3, 4, 5, 34	The boundaries as verified at the monitoring check comply with the discussion in the PDD	☑	☑
B.4. Further baseline information, including the date of baseline setting and the name(s) of the person(s)/entity(ies) setting the baseline:				
B.4.1.1. Are the name(s) of the person(s)/entity(ies) whom setting the baseline available?	3, 4, 5	The baseline study was prepared by consulting company UAB Ekostrategija and completed June 01, 2007.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
B.4.1.2. Is the date of baseline setting available?	3, 4, 5	The baseline for the project activity had not been set yet. The PDD presents preliminary estimates of the baseline and project emissions. AB Achema intends to start baseline at the beginning of 5th campaign. Hence – after 4 available historic campaigns – the 5^{t}th campaign will be the baseline campaign.	☑	☑
C. Duration of the project activity / crediting period				
C.1. Starting date of the project:				
C.1.1. Is the project's starting date clearly defined and reasonable?	3, 4, 5	Yes, it is. The installation for secondary catalyst is envisioned for July 2007.	☑	☑
C.2. Expected operational lifetime of the project:				
C.2.1. Is the expected operational lifetime of the project clearly defined and reasonable?	3, 4, 5	Yes, it is. The expected operational lifetime of this project is 20 years.	☑	☑
C.3. Length of the crediting period:				
C.3.1. Is the assumed crediting period clearly defined and reasonable?	3, 4, 5	Yes, it is. The length of the crediting period is 4 years and 4,5 months.	☑	☑
D. Monitoring plan				
D.1. Description of monitoring plan chosen:				
D.1.0.1 Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	3, 4, 5	The discussion under section B.6.1 is referencing all formulae and emissions in compliance with the applied methodology and the project boundaries as presented earlier in the PDD.	☑	☑
D.1.0.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	3, 4, 5	Yes, it does.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
D.1.0.3. Is the operational and management structure clearly described and in compliance with the envisioned situation?	23, 26	The operational and management structure is clearly described and in compliance with the envisioned situation.	☑	☑
D.1.0.4. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	23, 26	Responsibilities and institutional arrangements for data collection and archiving are clearly provided.	☑	☑
D.1.0.5. Does the monitoring plan provide current good monitoring practice?	23, 26,	The monitoring plan provides current good monitoring practice.	☑	☑
D.1.0.6. Will the monitoring system be installed using the European Norm 14181 (2004)?	23, 26, 13	The monitoring system installed using the European Norm 14181 (2004). A consistency Check according to the needs of AM0034 had been carried out by an independent Third Party as submitted June 29, 2007.	☑	☑
D.1.0.7. Will the three quality assurance levels been met by the planned Automated Measuring System (AMS) according to the EN14181?	23, 26, 13	Three quality assurance levels will been met by the planned Automated Measuring System (AMS) according to the EN14181	☑	☑
D.1.0.8. Are the specific performance characteristics of the monitoring system chosen by the project listed in the PDD?	23, 26, 13	The specific performance characteristics of the monitoring system chosen by the project are listed in the PDD.	☑	☑
D.1.0.9. Is information on the margins of errors and the cumulative error for the complete measurement system provided in the PDD?	23, 26, 13	Information on the margins of errors and the cumulative error for the complete measurement system is provided in the PDD.	☑	☑
D.1.0.10 Is the inclusion of external accredited services providers for calibration and function tests foreseen in the planning of the project?	23, 26, 13	The inclusion of external accredited services providers for calibration and function tests is foreseen in the planning of the project.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
D.1.0.11 Are the requirements on the treatment of downtime of the AMS clearly reflected in the envisioned calculation routines?	23, 26, 13	The requirements on the treatment of downtime of the AMS are clearly reflected in the envisioned calculation routines.	☑	☑
D.1.0.12 If applicable: Does Annex 3 provide useful information enabling a better understanding of the envisioned monitoring provisions?	23, 26, 13	Yes, it does.	☑	☑
Date of completion of the application of the baseline study and monitoring methodology an the name of the responsible person(s)/entity(ies)				
D.1.0.13 Is there any indication of a date when the baseline was determined?	3, 4, 5	The date is clearly indicated in PDD. The baseline should be started at July 01, 2007.	☑	☑
D.1.0.14 Is this consistent with the time line of the PDD history?	3, 4, 5	It is consistent with the time line of the project development.	☑	☑
D.1.0.15. 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?	3, 4, 5	The information is consistent with the actual situation.	☑	☑
D.1.0.16 . Is information provided whether this person / entity is also considered a project participant?	3, 4, 5	The information is consistent with the actual situation.	☑	☑
Option 1 – Monitoring of the emissions in the project scenario and the baseline scenario:				
D.1.1. **Data to be collected in order to monitor emissions from the project and how these datas will be archived:**				
D.1.1.1. Is the list of parameters collected in order to monitor emissions from the project in chapter D.1.1. considered to be complete with regard to the requirements of the applied methodology?	3, 4, 5	Yes, it is.	☑	☑

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td>D.1.1.2. Parameter Title:
CL_{BL},
Baseline campaign length</td><td>17 to 24,
26 to 32</td><td>
<table>
<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>N/A</td></tr>
<tr><td>Has this value been verified?</td><td>N/A</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>
The character of a GP plant campaign is that the complete plant with ALL 4 reactors will shut down for maintenance and gauze change and just started up again after ALL 4 gauzes are changed simultaneous. A single shut down of a single reactor is technical not possible because of a combined mixing chamber.
The value is to be verified later by the verifying entity.</td><td>☑</td><td>☑</td></tr>
<tr><td>D.1.1.3. Parameter Title:
CL_{normal}
Normal campaign length</td><td>17 to 24,
26 to 32</td><td>
<table>
<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>
Please see above to CR6 and CR7 at B.6.2.4. We repeat them in identical diction as follows:</td><td>~~CR6~~
~~CR7~~</td><td>☑
☑</td></tr>
</table>

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td></td><td></td><td>AB Achema confirmed: Historical datas are available. The Plant started operations in January 2004. Oral confirmed data are:
Campaign 1: 4901h (204d)
Campaign 2: 6031h (251d)
Campaign 3: 8361h (347d)
Campaign 4: started in September 2006 with an estimated duration of 8000h (333d); Note: So far we know this campaign is ongoing until end of August 2007. Nevertheless AB Achema asked for cutting off this campaign (without gauze change) end of June and using the final months of campaign 4 as first months of baseline campaign.
<u>Clarification Request 6:</u>
Please show proofs about the historical Operating hours for to define the permitted range of OH during baseline campaign.
<u>Clarification Request 7:</u>
Please explain the obviously differing length in campaign 1 and 2 compared with campaign 3 and 4</td><td></td><td></td></tr>
<tr><td>D.1.1.4. Parameter Title:
NAP_{BC}
Nitric acid (100% concentrated) over baseline campaign</td><td>17 to 24,
26 to 32</td><td><table><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>N/A</td></tr><tr><td>Has this value been verified?</td><td>N/A</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>The value is to be verified later by the verifying entity.</td><td>~~CR8~~</td><td>☑</td></tr>
</table>

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		AB Achema confirmed: Historical datas are available. The Plant started operations in January 2004. Confirmed data are: 1005 tHNO3/24h based on average HNO3 production in 2004 of 41,862kg/h (stream number 309); Oral confirmed data are: 330000 tHNO_3/328d (or 7828h/a of production) from design data based on 100% production; 1000t/24h; 11month production + 1month maintenance; The value is to be verified later by the verifying entity. **Clarification Request 8:** Please show proofs about the historical Nitric acid production for to define the permitted range of NAP during baseline campaign.		
D.1.1.5. Parameter Title: TSG Temperature of stack gas	17 to 24, 26 to 32	<table><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>N/A</td></tr><tr><td>Has this value been verified?</td><td>N/A</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>The value is to be verified later by the verifying entity. N/A (not applicable) because TSG is not needed for the moment because temperature of stack gas is still only an estimated number from design data; During baseline campaign TSG will be measured continuously; **Clarification Request 9:**	~~**CR9**~~	☑

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td></td><td></td><td>Please explain why historical data for TSG are not available and please confirm this non-availability. Please add proofs that TSG of the historical campaigns had been inside design data range.</td><td></td><td></td></tr>
<tr><td>D.1.1.6. Parameter Title:
PSG
Pressure of stack gas</td><td>17 to 24,
26 to 32</td><td><table><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>n/a</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>The value is to be verified later by the verifying entity.
N/A (not applicable) because PSG not needed for the moment because pressure of stack gas is still only an estimated number from design data;
During baseline campaign PSG will be measured continuously ;

<u>Clarification Request 10:</u>
Please explain why historical data for PSG are not available and please confirm this non-availability. Please add proofs that PSG of the historical campaigns had been inside design data range.</td><td><s>CR10</s></td><td>☑</td></tr>
<tr><td>D.1.1.7. Parameter Title:
AFR
Ammonia gas flow rate to the AOR</td><td>17 to 24,
26 to 32</td><td><table><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></td><td><s>CR11</s></td><td>☑</td></tr>
</table>

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		Source clearly referenced? Yes Correct value provided? N/A Has this value been verified? N/A Choice of data correctly justified? Yes Measurement method correctly described? Yes The value is to be verified later by the verifying entity. In PDD v.01 nether neither a fixed value nor a range for AFR is provided as requested. It is necessary to indicate a range for setting the permitted Ammonia gas flow rate to the AOR based on historical data or if not available on design data. Confirmed design datas are as follows: Parameter F101302 NH3 Kiekis; Range: 10700-16750 m³/h **Clarification Request 11:** Please explain why historical data for AFR are not available and please confirm this non-availability. Please add proofs that AFR of the historical campaigns had been inside design data range.		
D.1.1.8. Parameter Title: AIFR Ammonia to Air ratio	17 to 24, 26 to 32	Data Checklist / Yes / No Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? In PDD v.01 nether neither a fixed value nor a range for AIFR is provided as requested. It is necessary to indicate a range for set-	~~CR12~~	☑

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td></td><td></td><td>ting the permitted Ammonia to Air ratio.
Confirmed design datas are as follows: Parameter SANTYK NH3-oro santykis; Range: 9.5-10.6 %

<u>Clarification Request 12:</u>
Please explain why historical data for AIFR are not available and please confirm this non-availability. Please add proofs that AIFR of the historical campaigns had been inside design data range.</td><td></td><td></td></tr>
<tr><td>D.1.1.9. Parameter Title:
OT_h
Oxidation temperature for each hour</td><td>17 to 24,
26 to 32</td><td><table><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>AB Achema confirmed: 4 Temperatur Parameters are available (KA tinklu temperature D101A, …B, ….C, …D); Range:750-778°C
So far we know by confirmation of Achema plant operator this range is reality, but design datas are higher e.g 850°C. Achema confirms that operational conditions at all reactors 750°-780°C
<u>Clarification Request 13:</u>
Please explain why historical data for OT are not available and please confirm this non-availability. Please add proofs that OT of the historical campaigns had been inside design data range.</td><td><s>CR13</s></td><td>☑</td></tr>
<tr><td>D.1.1.10. Parameter Title:</td><td>17 to</td><td></td><td><s>CR13</s></td><td>☑</td></tr>
</table>

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
OT_{normal} Normal operating temperature	24, 26 to 32	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 Please see above to CR13		
D.1.1.11. Parameter Title: OP_h Oxidation Pressure for each hour	17 to 24, 26 to 32	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 AB Achema said that oxidation pressure OP is not available and instead measures continual the air pressure before the mixing chamber of the 4 reactor. AB Achema confirmed this air pressure: Parameter Oro slegis PT09002; Range: MPa 0.21-0.28 **Clarification Request 14:** Please explain why historical data for OP are not available and please confirm this non-availability. Please add proofs that OP (or in analogy the air pressure before the mixing chamber of the 4	~~CR14~~	☑

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td></td><td></td><td>reactor of the historical campaigns had been inside design data range.</td><td></td><td></td></tr>
<tr><td>D.1.1.12. Parameter Title:
OP_{normal}
Normal operating pressure</td><td>17 to 24,
26 to 32</td><td><table><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>Please see above to CR14</td><td>~~CR14~~</td><td>☑</td></tr>
<tr><td>D.1.1.13. Parameter Title:
GS_{normal},
Normal gauze supplier for the operation condition campaigns</td><td>17 to 24,
26 to 32</td><td><table><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>Yes</td></tr></table>AB Achema confirmed: The gauze supplier for historic campaigns No.1 to No. 4 was Johnson Matthey PLC-Noble Metals (JM)
Note: For information supplied by AB Achema JM changed the composition of the gauzes after end of campaign No.2; Campaign No.1 and No.2 used the same type of gauze and analogue cam-</td><td>☑</td><td>☑</td></tr>
</table>

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td></td><td></td><td>paign No.3, No.4 and the baseline campaign used and will use the same type.</td><td></td><td></td></tr>
<tr><td>D.1.1.14. Parameter Title:
GS_{BL}
Gauze supplier for baseline campaign</td><td>17 to 24,
26 to 32</td><td><table><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>Yes</td></tr></table>AB Achema confirmed: The gauze supplier for baseline campaign will be Johnson Matthey PLC-Noble Metals</td><td>☑</td><td>☑</td></tr>
<tr><td>D.1.1.15. Parameter Title:
GC_{normal}
Gauze composition during the operation campaign.</td><td>17 to 24,
26 to 32</td><td><table><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>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided?</td><td>No</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>For the operation, baseline and project campaign Johnson Matthey PLC-Noble Metals will not wish information to be provided.
The data of gauze composition during the operation campaign are defined confidential by the gauze provider but available on re-</td><td>~~CAR7~~</td><td>☑</td></tr>
</table>

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td></td><td></td><td>quest to TÜV SÜD assessment team and AB Achema.
The assessment leader reviewed confidential datas in full details and took copies for confidential use.
AB Achema operates 4 burners each one with 6 gauzes in total means at each burner 4 gauzes of type with Platinum (Pt) and 2 gauzes of type with Palladium (Pd);
<u>During on-site visit in Jonava only limited proofs of gauze change had been available. Documents for Burner 1, 2, 3, 4 at campaign No.1, for Burner 3, 4 at campaign No.2 and Burner 1, 2 at campaign No. 4 are outstanding.</u> Additional - as shown already in item B.6.2.18 - Johnson Matthey PLC-Noble Metals changed the composition of the gauzes after end of campaign No.2.
<u>Corrective Action Request 7:</u>
Please show proofs for the gauze use at burner 1, 2, 3, 4 at campaign No.1, burner 3, 4 at campaign 2 and burner 1, 2 at campaign No.4.</td><td></td><td></td></tr>
<tr><td>D.1.1.16. Parameter Title:
GC_{BL},
Gauze composition during baseline campaign</td><td></td><td><table><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>n/a</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>AB Achema confirmed that campaign No.4 started in September 2006 with an estimated duration of 8000h (333d). So far we know this campaign is ongoing until end of August 2007. Nevertheless</td><td><s>CAR7</s></td><td>☑</td></tr>
</table>

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		AB Achema asked for cutting off this campaign (without gauze change) end of June and using the final months of campaign 4 as first months of baseline campaign. So far we know by confirmation of AB Achema campaign No. 4 and baseline campaign will use the same type of gauzes with identical compositions data. Like this – pending from answer to CAR7 – the gauze composition during baseline campaign will be available.		
D.1.2. **Description of formulae used to estimate project emissions (for each gas, source etc.; emissions in units of CO_2 equivalent**				
D.1.2.1. Are the formulae required for the determination of project emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	3, 4, 5	The formulae required for the determination of project emissions are correctly presented enabling a complete identification of parameter to be used and monitored: $PE_n = VSG * NCSG * 10^{-9} * OH (tN_2O)$ (3)	☑	☑
D.1.2.2. Are the formulae required for the derivation of a moving average emission factor correctly presented, enabling a complete identification of parameter to be used and / or monitored?	3, 4, 5	The formulae required for the derivation of a moving average emission factor are correctly presented enabling a complete identification of parameter to be used and monitored: $EF_n = PE_n / NAP_n (tN_2O/tHNO_3)$ (4) $EF_n = PE_n / NAP_n (tN_2O/tHNO_3)$ (4) If $EF_{ma,n} > EF_n$ then $EF_p = EF_{ma,n}$ (6) If $EF_{ma,n} < EF_n$ then $EF_p = EF_n$	☑	☑
D.1.2.3. Are the formulae required for the determination of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	3, 4, 5	No leakage calculation is required.	☑	☑
D.1.3. **Relevant data necessary for determining the <u>baseline</u> of anthropogenic emissions of greenhouse gases by sources within the project boundary, and how such data will be collected and achieved:**				

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td>D.1.3.1. Is the list of parameters monitored in chapter D.1.3. considered to be complete with regard to the requirements of the applied methodology?</td><td>3, 4, 5</td><td>Yes, it is.</td><td>☑</td><td>☑</td></tr>
<tr><td>D.1.3.2. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?</td><td>3, 4, 5</td><td>The data provided in this section are in consistency with data as presented in other chapters of the PDD?</td><td>☑</td><td>☑</td></tr>
<tr><td colspan="5">Integrate the required amount of sub-checklists for monitoring parameter and comment on any line answered with “No”</td></tr>
<tr><td>D.1.3.3. Parameter Title:
$NCSG_{BC}$
N2O concentration in the stack gas</td><td>17 to 24,
26 to 32</td><td><table><tr><th>Monitoring 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 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>Yes</td></tr></table>The verification of value will be earliest available after QAL2 had been carried out. At the time of the on-site mission, project participants confirmed about pre-check procedures after AMS setup.
The value is to be verified later by the verifying entity.</td><td>☑</td><td>☑</td></tr>
<tr><td>D.1.3.4. Parameter Title:
VSG_{BC}
Volume flow rate of the stack gas</td><td>17 to 24,
26 to</td><td><table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr></table></td><td>☑</td><td>☑</td></tr>
</table>

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td></td><td>32</td><td>
<table>
<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>Yes</td></tr>
<tr><td>QA/QC procedures described?</td><td>Yes</td></tr>
<tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr>
</table>
The verification of value will be earliest available after QAL2 had been carried out. At the time of the on-site mission, project participants confirmed about pre-check procedures after AMS setup.
The value is to be verified later by the verifying entity.</td><td></td><td></td></tr>
<tr><td>D.1.3.5. Parameter Title:
OH_{BC}
Operating hours</td><td>17 to 24,
26 to 32</td><td>
<table>
<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>Yes</td></tr>
<tr><td>QA/QC procedures described?</td><td>Yes</td></tr>
<tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr>
</table>
The value is to be verified later by the verifying entity.</td><td>☑</td><td>☑</td></tr>
</table>

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td>D.1.3.6. Parameter Title:
NAP_{BC}
Nitric Acid production (100% concentrated)</td><td>17 to 24,
26 to 32</td><td><table><tr><th>Monitoring 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 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>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>The value is to be verified later by the verifying entity.</td><td>☑</td><td>☑</td></tr>
<tr><td>D.1.3.7. Parameter Title:
TSG
Temperature of stack gas</td><td>17 to 24,
26 to 32</td><td><table><tr><th>Monitoring 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 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>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>The verification of value will be earliest available after QAL2 had</td><td>☑</td><td>☑</td></tr>
</table>

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td></td><td></td><td>been carried out. At the time of the on-site mission, project participants confirmed about pre-check procedures after AMS setup.
The value is to be verified later by the verifying entity.</td><td></td><td></td></tr>
<tr><td>D.1.3.8. Parameter Title:
PSG
Pressure of stack gas</td><td>17 to 24,
26 to 32</td><td><table><tr><th>Monitoring 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 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>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>The verification of value will be earliest available after QAL2 had been carried out. At the time of the on-site mission, project participants confirmed about pre-check procedures after AMS setup.
The value is to be verified later by the verifying entity.</td><td>☑</td><td>☑</td></tr>
<tr><td>D.1.3.9. Parameter Title:
CL_{normal}
Normal campaign length</td><td>17 to 24,
26 to 32</td><td><table><tr><th>Monitoring 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 for estimation?</td><td>N/A</td></tr><tr><td>Has this value been verified?</td><td>N/A</td></tr></table></td><td>☑</td><td>☑</td></tr>
</table>

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		Measurement method correctly described? Yes Correct reference to standards? Yes Indication of accuracy provided? Yes QA/QC procedures described? Yes QA/QC procedures appropriate? Yes Although data about of this parameter had been on-site available - e.g. historic campaign No.1 to 3 - the value is to be verified later by the verifying entity.		
D.1.3.10. Parameter Title: CL_{BL} Baseline campaign length	17 to 24, 26 to 32	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? Yes QA/QC procedures described? Yes QA/QC procedures appropriate? Yes The value is to be verified later by the verifying entity.	☑	☑
D.1.3.11. Parameter Title: $GS_{project}$ Gauze supplier for the project campaigns	17 to 24, 26 to 32	Monitoring Checklist / Yes / No Title in line with methodology? Yes Data unit correctly expressed? Yes Appropriate description of parameter? Yes Source clearly referenced? Yes	☑	☑

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td></td><td></td><td>
<table>
<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>Yes</td></tr>
</table>
Although data about of this parameter had been on-site available the value is to be verified later by the verifying entity.
</td><td></td><td></td></tr>
<tr><td>D.1.3.12. Parameter Title:
$GC_{project}$
Gauze composition during project campaign</td><td>17 to 24,
26 to 32</td><td>
<table>
<tr><th>Monitoring 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 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>Yes</td></tr>
</table>
Although data about of this parameter had been on-site available the value is to be verified later by the verifying entity.
</td><td>☑</td><td>☑</td></tr>
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<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td>D.1.3.13. Parameter Title:
OP_h
Oxidation Pressure for each hour</td><td>17 to 24,
26 to 32</td><td><table><tr><th>Monitoring 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 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>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>The value is to be verified later by the verifying entity.</td><td>☑</td><td>☑</td></tr>
<tr><td>D.1.3.14. Parameter Title:
OT_h
Oxidation Pressure for each hour</td><td>17 to 24,
26 to 32</td><td><table><tr><th>Monitoring 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 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>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>The value is to be verified later by the verifying entity.</td><td>☑</td><td>☑</td></tr>
</table>

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<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td>D.1.3.15. Parameter Title:
AFR
Ammonia gas flow rate</td><td>17 to 24,
26 to 32</td><td><table><tr><th>Monitoring 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 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>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>The value is to be verified later by the verifying entity.</td><td>☑</td><td>☑</td></tr>
<tr><td>D.1.3.16. Parameter Title:
AIFR
Ammonia to Air Flow Ratio</td><td>17 to 24,
26 to 32</td><td><table><tr><th>Monitoring 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 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>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>The value is to be verified later by the verifying entity.</td><td>☑</td><td>☑</td></tr>
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<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>PPD in GSP</th><th>Final PDD</th></tr>
<tr><td>D.1.3.17. Parameter Title:
EF_{reg}
Emissions level set by incoming policies or regulations</td><td>17 to 24,
26 to 32</td><td><table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</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></table>Hence the current absence of any regulatory requirements for N2O in Lithuania had been discussed in PDD adequate the parameter EF_{reg} had not been integrated in parameter list especially. Any future change of the regulatory requirements is to be verified later by the verifying entity.</td><td>☑</td><td>☑</td></tr>
<tr><td>D.1.3.18. Parameter Title:
UNC
Overall measurement uncertainty of the monitoring system</td><td>17 to 24,
26 to 32</td><td><table><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>At the time of the on-site mission, project participants confirmed</td><td>☑</td><td>☑</td></tr>
</table>

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		about pre-check procedures after AMS setup. The UNC will be part of the pre-check report. The value and its mathematical corrected use for baseline calculation is to be verified later by the verifying entity.		
D.1.4. **Description of formulae used to estimate <u>baseline</u> emissions (for each gas, source etc.; emissions in units of CO_2 equivalent)**				
D.1.4.1. Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	3, 4, 5	The formulae required for the determination of baseline emissions are correctly presented enabling a complete identification of parameter to be used and monitored: $BE_{BC} = VSG_{BC} * NCSG_{BC} * 10^{-9} * OH_{BC}$ (tN_2O) (1) $EF_{BL} = (BE_{BC} / NAP_{BC}) (1 – UNC/100)$ ($tN_2O/tHNO_3$) (2)	☑	☑
D.1.4.2. Are the formulae required for the determination of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	3, 4, 5	No leakage calculation is required.	☑	☑
D.1.4.3. Are the formulae required for the determination of emission reductions correctly presented?	3, 4, 5	The formulae required for the determination of emission reductions are correctly presented: $ER = (EF_{BL} – EF_P) * NAP * GWP_{N2O}$ (tCO_2e)	☑	☑
E. Estimation of greenhouse gas emission reduction				
E.1. Estimate project emissions:				
E.1.1. Are the GHG calculations documented in a complete and transparent manner?	3, 4, 5	The calculation of the emission projections are presented in a transparent and complete manner.	☑	☑
E.1.2. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	3, 4, 5	The data provided in this section is consistent with data as presented in other chapters of the PDD.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
E.1.3. Are the estimated project emissions transparent, feasible and mathematical correct calculated?	3, 4, 5	Yes, they are.	☑	☑
E.1.4. Is the projection of estimated project emissions based on the same procedures as used for future monitoring?	3, 4, 5	The projection is done by the same algorithms as used for later monitoring.	☑	☑
E.2. Estimated leakage:				
E.2.1.1. Is the estimated leakage transparent, feasible and mathematical correct calculated?	3, 4, 5	As established in the approved methodology AM0034, no leakage calculations are necessary for this type of secondary catalyst.	☑	☑
E.2.2. Is the projection of estimated leakage based on the same procedures as used for future monitoring?	3, 4, 5	The projection is done by the same algorithms as used for later monitoring.	☑	☑
E.3. The sum of E.1. and E.2.:				
E.3.1. Is the sum of E.1. and E.2. mathematical correct calculated?	3, 4, 5	As there are no leakage emissions (i.e. E.2.= 0), the sum of E.1. (estimated project emissions) and E.2. (estimated leakage) equals E.1. (estimated project emissions)	☑	☑
E.4. Estimated baseline emissions:				
E.4.1. Are the estimated baseline emissions transparent, feasible and mathematical correct calculated?	3, 4, 5	Yes, they are.	☑	☑
E.4.2. Is the projection based on the same procedures as used for future monitoring?	3, 4, 5	The projection is done by the same algorithms as used for later monitoring.	☑	☑
E.5. Difference between E.4. and E.3. representing the emissions reductions of the project:				
E.5.1. Is the difference between E.4. and E.3. mathematical correct calculated?	3, 4, 5	Yes, it is.	☑	☑

CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS	PPD in GSP	Final PDD
E.6. Table providing values obtained when applying formulae above					
E.6.1.	Will the project result in fewer GHG emissions than the baseline scenario?	3, 4, 5	The project activity will result in emission reductions	☑	☑
E.6.2.	Is the form/table required for the indication of projected emission reductions correctly applied?	3, 4, 5	The form/table required for the indication of projected emission reductions is correctly applied.	☑	☑
E.6.3.	Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	3, 4, 5	The projection is in line with the envisioned time schedule.	☑	☑
E.6.4.	Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	3, 4, 5	The data provided in this section are in consistency with data as presented in other chapters of the PDD?	☑	☑
E.6.5.	Are the obtained values for estimated project emissions, estimated leakage, estimated baseline emissions and estimated emissions reductions provided in the table of E.6. transparent, feasible and mathematical correct calculated when applying formulae submitted in section E.?	3, 4, 5	Yes, they are. The obtained values in the table of E.6. are transparent, feasible and mathematical correct calculated.	☑	☑
F. Environmental impacts					
F.1. Documentation on the analysis of the environmental impacts, including transboundary impacts					
F.1.1.	Has the analysis of the environmental impacts of the project activity been sufficiently described?	3, 4, 5, 9, 15, 25	**Clarification Request 15:** Please show the project's Documentation on the analysis of the environmental impacts, including transboundary impacts (EIA) or submit a proof why an EIA within this project will not be applicable	~~CR15~~	☑

F.1.2.	Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	3, 4, 5, 9, 15, 25	Please see above CR15	~~CR15~~	☑
F.1.3.	Will the project create any adverse environmental effects?	3, 4, 5, 9, 15, 25	Please see above CR15	~~CR15~~	☑
F.1.4.	Were transboundary environmental impacts identified in the analysis?	3, 4, 5, 9, 15, 25	Please see above CR15	~~CR15~~	☑
F.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					
F.2.1.	Have the identified environmental impacts been addressed in the project design sufficiently?	3, 4, 5,	Please see above CR15	~~CR15~~	☑
F.2.2.	Does the project comply with environmental legislation in the host country?	3, 4, 5, 34	Please see above CR15	~~CR15~~	☑
G. Stakeholders' comments					
G.1. Brief description how comments by <u>local</u> stakeholders have been invited and compiled					
G.1.1.	Have relevant stakeholders been consulted?	-	An EIA is not required by Lithuanian laws. Nevertheless a discussion between representatives of Lithuanian ministry of environment, AB Achema, Lithuanian environmental investment funds, Ekostrategija, Kaunas regional department for environmental protection took place June 19, 2007	~~CAR8~~	☑

		Corrective Action Request 8: We appreciate the discussion about impact on the GHG balance between the representatives. Nevertheless this fact finding meeting is not published for outstanding readers of the PDD. Please add some notes, topics, protocol of meeting or results of the June 19, 2007 meeting.		
G.1.2. Have appropriate media been used to invite comments by local stakeholders?	-	Not applicable; Please see above CAR8	~~CAR8~~	☑
G.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?	-	Not applicable; Please see above CAR8	~~CAR8~~	☑
G.1.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	-	Not applicable; Please see above CAR8	~~CAR8~~	☑
G.2. Summary of the comments received				
G.2.1. Is a summary of the received stakeholder comments provided?	-	Not applicable; Please see above CAR8	~~CAR8~~	☑
G.3. Report on how due account was taken of any comments received				
G.3.1. Has due account been taken of any stakeholder comments received?	-	Not applicable; Please see above CAR8	~~CAR8~~	☑
H. Annexes 1 – 3				
H.1. Annex 1: Contact Information				
H.1.1. Is the information provided consistent with the one given under section A.3?	5	Yes, it is;	☑	☑

H.1.2.	Is the information on all private participants and directly involved Parties presented?	5	Yes, it is;	☑	☑
H.2. Annex 2: Baseline information					
H.2.1.	If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	5	Not applicable (n/a) at determination;	☑	☑
H.2.2.	Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	5	Not applicable (n/a) at determination; Baseline monitoring data are expected to be available in summer 2008	☑	☑
H.2.3.	Does the additional information substantiate / support statements given in other sections of the PDD?	5	Not applicable (n/a) at determination;	☑	☑
H.3. Annex 3: Monitoring information					
H.3.1.	If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	5	Yes, it is;	☑	☑
H.3.2.	Is the information provided verifiable? Has sufficient evidence been provided to the validation team?	5	Yes, it is;	☑	☑
H.3.3.	Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	5	Yes, it is;	☑	☑

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
Using methodology AM0034 "Catalytic reduction of N2O inside the ammonia burner of nitric acid plants" requires the identification of baseline scenario using procedure for Identification of the baseline scenario described in the approved methodology AM0028 "Catalytic N2O destruction in the tail gas of Nitric Acid Plants" version 03. **Corrective Action Request 1:** Please identify and discuss all feasible baseline scenario alternatives (at least all scenarios listed under step 1a in AM0028, vers.3)	B.1.1.13	Description added to B2. The AM0034 states: "The baseline scenario shall be identified using procedure for Identification of the baseline scenario described in the approved methodology AM0028 "Catalytic N2O destruction in the tail gas of Nitric Acid Plants". Step 1a of AM0028 lists the following alternatives: A) The continuation of the current situation, where there will be no installation of technology for the destruction or abatement of N2O. B) Switch to alternative production method not involving ammonia oxidation process C) Alternative use of N2O such as: a. Recycling of N2O as a feedstock for the plant; b. The use of N2O for external purposes. D) Installation of a Non-Selective Catalytic Reduction (NSCR) DeNOx unit. E) The installation of an N2O destruction or abatement technology: a. Tertiary measure for N2O destruction; b. Primary or secondary measures for N2O destruction or abatement.	The issue has been clarified.
Corrective Action Request 2: Please identify and discuss all technically feasible alternatives (at least all scenarios	B.1.1.14.	Description added to B2.	The issue has been clarified.

listed under step 1a in AM0028, vers.3) to handle NOx emissions.			
Corrective Action Request 3: Please identify and exclude those options not in line with regulatory or legal requirements.	B.1.1.15.	Description added to B2. Sub-step 1b. Consistency with mandatory laws and regulations: The existing regulation in Lithuania does not require implementation any technologies for N2O abatement. The Lithuanian Integrated Pollution Prevention regulation does not list N2O as a pollutant nor there plans for its limitation. There are two issues widely discussed in Europe that have a potential to affect the project. These are: inclusion of N2O into EU Emission Trading Scheme and Draft Reference document on Best Available Techniques for the "Manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers". The report under the project "Review of EU Emissions Trading Scheme" by the European Commission Directorate General for Environment and Ecofys on "Inclusion of Additional Activities and Gases into the EU-Emissions Trading Scheme" (Ecofys, October 2006) generally states that EU ETS for N2O could be more cost effective measure than IPPC scheme. It also states that "Competition with non-EU-producers is a potentially serious issue as the products are widely traded." The Directive 2003/87/EC states that: "From 2008, Member States may apply emission allowance trading in accordance with this Directive to activities, installations and greenhouse gases which are not listed in Annex I, provided that inclusion of such activities, installations and greenhouse gases is approved by the Com-	The issue has been clarified.

		mission (…)" . Lithuanian National Allocation Plan for 2008-2012 under EU ETS does not contain any provisions for inclusion of N2O into EU ETS in Lithuania for the period 2008-2012. During the stakeholders meeting of 19th of June 2007, representatives of Ministry of the Environment, National Greenhouse gas registry, Kaunas Regional department for environmental protection and AB Achema made a conclusion that the JI mechanism is more effective measure to curb N2O emissions than the application of the IPPC directive requirements. The participants of the meeting came to the conclusion that the limit values for N2O emissions in the nitric acid production should not be introduced before year 2013 (more details in F1). Before/if N2O is included into EU ETS, Joint Implementation mechanism could be an option for N2O reduction. The JI mechanism has two advantages compared to other measures - more N2O emissions would be reduced in total and EU producers would not be disadvantaged against non-EU fertiliser producers. Higher emission reductions would be achieved due to the fact that under the JI mechanism emission reductions can be started generating already at the beginning of 2008 while other measures would take at least several years to introduce. Another argument is that under IPPC regulation N2O emissions would be reduced only to the required technical level while under JI mechanism it would be reduced to economically reasonable level which would be lower than the IPPC required technical level. Considering competitiveness issue – under the JI mechanism, EU fertiliser producers would be under similar business conditions considering potential revenues from the ERU sales.	

Corrective Action Request 4: Please develop a complete list of barriers developed that prevent alternatives to occur (step 3a).	B.1.1.17.	Added to B2 step 3. Sub-step 3a. Alternative B is not feasible as currently there are no commercially available technologies for nitric acid production other than ammonia oxidation. Earlier used Glauber method (saltpetre reacting with sulphuric acid) and Birkland & Edye method (electrical discharge on air) proved to be costly and inefficient. Thus, this alternative is not feasible. Alternative C is not feasible as it is not possible produce nitric acid from N2O, therefore there is no reason to keep it as a feedstock. Also, there no case studies of N2O recovery as a feedstock. N2O use for external purposes is not profitable economically as N2O concentrations are very low compared to the amount of tail gas and thus recovery of it requires many efforts. Alternative D is not feasible as AB Achema is already operating a selective catalytic reduction De NOx unit and complies with the existing NOx regulation. There is no economic reason to use more costly and les effective Non-selective catalytic reduction unit. Alternative E is not feasible as N2O emission reduction in the HNO3 production process is a costly procedure and does not give any revenues, except from ERU sales. This implies that the project can be implemented only under the JI mechanism. Moreover, if abatement technology is not correctly designed and installed it can influence production level and product quality.	The issue has been clarified.
Corrective Action Request 5: Please make transparent and document the evidence provided on the existence and sig-	B.1.1.18	Added to B2 step 3a. Please also see B.1.1.4 of the protocol above. The protocol of stakeholder meeting held in Achema was submitted to the validator on 14.09.2007 as a supporting	The issue has been clarified.

nificance of these barriers.		document.	
Corrective Action Request 6: Please make show transparently that at least one of the alternatives is not prevented by the identified barriers (step 3b)?	B.1.1.19	Added to B2 step 3b. Sub-step 3b. Alternative A is feasible as any of the existing N2O abatement technologies imply additional costs and no revenues outside the JI mechanism. There are no subsidies or other support measures available for N2O abatement technologies in Lithuania. The existing regulation does not demand N2O emission reductions either, hence the producer has no incentive for N2O emission reductions.	The issue has been clarified.
Corrective Action Request 7: Please show proofs for the gauze use at burner 1, 2, 3, 4 at campaign No.1, burner 3, 4 at campaign 2 and burner 1, 2 at campaign No.4.	D.1.1.10	Installation-dismantling protocols contain list of gauzes and list of burners, where they are installed (PDF file name: "Installation-dismantling protocols".) Reception protocols contain gauze composition e.g. Pt/Rh/Pd – 90/5/5 %. (PDF file name "Reception protocols). Email from Mr. Michael Lambson (Johnson Matthey) to Mr. Tausche (TÜV SÜD) – contains weight of each compound in gauzes.	The issue has been clarified.
Corrective Action Request 8: We appreciate the discussion about impact on the GHG balance between the representatives. Nevertheless this fact finding meeting is not published for outstanding readers of the PDD. Please add some notes, topics or results of the June19, 2007 meeting.	G.1.1	Description added to the section G. The protocol of stakeholder meeting held in Achema was submitted to the validator on 14.09.2007 as a supporting document. On 19th of June 2007, a discussion among stakeholders was held in the premises of Achema Group in Vilnius. The meeting was attended by representatives of the Ministry of the Environment, National Greenhouse gas registry, Kaunas Regional department for environmental protection, AB Achema and several consulting companies involved in the JI project development. During the meeting, the N2O reduction JI project in GP	The issue has been clarified.

		plant was presented to the participants. The discussion involved issues related to the Directive 96/61/EC "concerning integrated pollution prevention and control" and draft reference document on Best Available Techniques for the "Manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers". The conclusion was made that JI mechanism is more effective measure to curb N2O emissions than the application of the IPPC directive requirements. Therefore, participants of the meeting came to the conclusion that the limit values for N2O emissions in the nitric acid production should not be introduced before year 2013.	
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Clarification Request 1: Please change in project title from GP Nitric acid aggregate to GP nitric acid plant.	A.1.1.	The title as well as in the text it is changed from "aggregate" to "plant".	The issue has been clarified.
Clarification Request 2: During on-site audit the LoE from Lithuanian side had not been available. Please submit the acquired documents to hand of Assessment team leader.	A.3.2.	Lithuanian LoE submitted on 14.09.2007 to the validator.	The issue has been clarified.
Clarification Request 3: Please provide detailed coordinates (e.g. GPS) on the location within the PDD for easier identification of the project site.	A.4.1.1.	X Y coordinates added to A.4.1.4. Geographic coordinates of the factory site centre are: x=6105343 y=521432.	The issue has been clarified.
Clarification Request 4: As in PDD its considered that assent from the Lithuanian Environmental Investment Fund was taken into consideration in the decision making procedure, please explain the current	A.4.6.1.	Explanation added to A.5. The ordinance no D1-183 of the Minister of Environment of the Republic of Lithuania on 1 April 2006, appoints Lithuanian Environmental Investment Fund to perform activities of the National Agency.	The issue has been clarified.

situation of public funding.		According to the JI regulation: 10. In order to make the decision specified in Par. 9, the Ministry of Environment shall submit the concept to the National Agency for evaluation. 11. The National Agency shall take into account the criteria for the joint implementation of feasible priority projects listed in the Strategic Tracks, the preferences of the national strategic documents and conditions listed in the Regulations; further it shall evaluate the concept and, within 45 (forty-five) days, provide the Ministry of Environment with the conclusion concerning acceptability of the concept of the provided Project and its further development.	
Clarification Request 5: What proofs are available that there has already been regular operation on Dec 31, 2005? During on-site mission AB Achema confirmed that commercial production started in January 2004. Nevertheless fitting documents e.g. production log sheets from 2004 had not been available on-site. Please present fitting documents for some representative month.	B.1.1.4.	There are 3 documents available, that confirm start of the operation: 1. Operation ordinance – PDF file name “Operation ordinances”. 2. Gauze reception protocol -PDF file name “Reception protocols I campaign 2004” 3. Installation protocol - PDF file name: “Installation-dismantling protocols I campaign 2004”	The issue has been clarified.
Clarification Request 6: Please show proofs about the historical Operating hours for to define the permitted range of OH during baseline campaign.	D.1.1.3.	The start/end dates are stated in the operation ordinances (summary in excel file). However start/end dates do not reflect the exact number of operating hours as during the operation some maintenance stops are also made. Email from Mr. Michael Lambson (Johnson Matthey) to Mr. Tausche (TÜV SÜD) contains exact number of operating hours of each campaign. This number is consistent with records in Achema’s Regeneration unit operator’s book. The book is available on	The issue has been clarified.

		request; however, it does not contain any signatures or approvals as it is made only by the operator's initiative.	
Clarification Request 7: Please explain the obviously differing length in campaign 1 and 2 compared with campaign 3 and 4	D.1.1.3.	Due to lack of experience with new technology shorter lifespan gauzes were ordered for first campaign. Stopping and launching of the plant for maintenance negatively affects the gauzes. For the first campaign it was needed quite often. While having more experience, gauzes for the second and third campaign were ordered with gradually longer lifespan. The campaign length was also planed to have maintenance period during the summer (all campaigns). It is not possible to stop the plant during the cold season – because many lines are frozen in such case.	The issue has been clarified.
Clarification Request 8: Please show proofs about the historical Nitric acid production for to define the permitted range of NAP during baseline campaign.	D.1.1.4.	The documents on historical nitric acid production were submitted to the validator on September 14, 2007.	The issue has been clarified.
Clarification Request 9: Please explain why historical data for TSG are not available and please confirm this non-availability. Please add proofs that TSG of the historical campaigns had been inside design data range.	D.1.1.5	TSG is available from January 20, 2005, measured once a month in 2005, and once a 2 months in 2006-2007. Earlier data was not recorded. The electronic version of the data was produced from the paper data sheets and was submitted to the validator on September 14, 2007. Paper data sheets are available onsite at AB Achema. It should be noted that historical data for this parameter is not required by AM0034.	The issue has been clarified.
Clarification Request 10: Please explain why historical data for PSG are not available and please confirm this non-availability. Please add proofs that PSG of the historical campaigns had been inside design data range.	D.1.1.6.	PSG is available from January 20, 2005, measured once a month in 2005, and once a 2 months in 2006-2007. Earlier data was not recorded. The electronic version of the data was produced from the paper data sheets and was submitted to the validator on 14.09.2007. Paper data sheets are available onsite at	The issue has been clarified.

		AB Achema. It should be noted that historical data for this parameter is not required by AM0034.	
Clarification Request 11: Please explain why historical data for AFR are not available and please confirm this non-availability. Please add proofs that AFR of the historical campaigns had been inside design data range.	D.1.1.7.	AFR is added to the D.1.1.3 table, and also historical data including AFR together with permitted range calculation was submitted to the validator on 14.09.2007. Description added to B.1 of the PDD: The AM0034 requires determining the normal ranges for operating conditions for the following parameters: (i) oxidation temperature; (ii) oxidation pressure; (iii) ammonia gas flow rate, and (iv) air input flow rates. To calculate the "permitted range" for oxidation temperature and pressure, a historical data method was chosen. It should be noted that neither legislation in Lithuania nor the internal regulation of AB Achema requires keeping records of the concerned data longer than for 1 year. Therefore, historical data in concern is available from 01.04.2005 in records for every 12 hours. According to the AM0034 methodology, the permitted range of operating temperature and pressure is assigned as the historical minimum (value of parameter below which 2.5% of the observation lie) and maximum operating conditions (value of parameter exceeded by 2.5% of observations).	The issue has been clarified.
Clarification Request 12: Please explain why historical data for AIFR are not available and please confirm this non-availability. Please add proofs that AIFR of the historical campaigns had been inside design data range.	D.1.1.8.	AIFR together with other parameters is available from 2005/ 04/01 – i.e. mid of the 2 campaign. Earlier data was recorded but not preserved as under the internal rules, records must be kept only for 1 year. The electronic version of the data was produced from the paper data sheets and together with permitted range calculation was submitted to the validator on 14.09.2007. Paper sheets are available onsite at AB Achema. Description added to B.1 of the PDD (see also B.6.2.8. of the	The issue has been clarified.

		protocol for more information).	
Clarification Request 13: Please explain why historical data for OT are not available and please confirm this non-availability. Please add proofs that OT of the historical campaigns had been inside design data range.	D.1.1.9	OT together with other parameters is available from 2005/ 04/01 – i.e. mid of the 2 campaign. Earlier data was recorded but not preserved as under the internal rules, records must be kept only for 1 year. The electronic version of the data was produced from the paper data sheets and together with permitted range calculation was submitted to the validator on 14.09.2007. Paper sheets are available onsite at AB Achema. Description added to B.1 of the PDD (see also B.6.2.8. of the protocol for more information).	The issue has been clarified.
Clarification Request 14: Please explain why historical data for OP are not available and please confirm this non-availability. Please add proofs that OP (or in analogy the air pressure before the mixing chamber of the 4 reactor of the historical campaigns had been inside design data range.	D.1.1.11	OP together with other parameters is available from April 01, 2005 – i.e. mid of the 2 campaign. Earlier data was recorded but not preserved as under the internal rules, records must be kept only for 1 year. The electronic version of the data was produced from the paper data sheets and together with permitted range calculation was submitted to the validator on 14.09.2007. Paper sheets are available onsite at AB Achema. Description added to B.1 of the PDD (see also D.1.1.7 of the protocol for more information).	The issue has been clarified.
Clarification Request 15: Please show the project's Documentation on the analysis of the environmental impacts, including transboundary impacts (EIA) or submit a proof why an EIA within this project will not be applicable	F.1.1.	Description added to F1. No negative environmental impacts are envisioned. Lithuanian Law on Environmental Impact Assessment (EIA) requires EIA to be carried out for the planned economic activity. Planned economic activity is described in the law as "…modification of the production process and modernisation or replacement of the technology, modification of production method, alteration of production quantity or production type…" Representatives of AB Achema have had discussions with officials of regional environmental protection department. The	The issue has been clarified.

		conclusion was made that installation of the secondary catalyst is not to be considered as economic activity as it does not alter production level nor makes modification to production lines. Therefore no EIA or selection procedure for EIA is required.	

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
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Annex 2: Information Reference List

Reference No.	Document or Type of Information
1	UNFCCC homepage http://www.unfccc.int including the Joint Implementation section ji.unfccc.int
2	Approved methodology AM0034 / Version 02
3	Approved methodology AM0028 / Version 04.1
4	Tool for the demonstration and assessment of additionality / Version 03
5	Project Design Document for CDM project "Nitrous Oxide Emission Reduction Project at GP Nitric acid plant in AB Achema in Lithuania", dated June 29, 2007, as available http://ji.unfccc.int/JI_Projects/DB
6	On-site interviews conducted on July 03-04, 2007 in Kaunas region, Rukla county, Jonalaukis village, Lithuania by TÜV SÜD Determination team: Mr Nikolaus Kröger — TÜV SÜD, ghg lead auditor, technical expert (on-site mission) Mr Thomas Kleiser — TÜV SÜD, assessment team leader (backoffice HQ) Interviewed persons in Jonavas, Lithuania: Mr Vaidotas Kuodys — UAB COWI Baltic, project manager Mr Juozas Tunaitis — AB Achema, Technical director Mr Andrejus Sostakas — AB Achema, manager of innovation center Mr Tadas Kastanauskas — UAB Koncernas Achemas Grupe, ecologist Mr Ramunas Pilsudskas — AB Achema, deputy hand of nitric acid plant Mr Stasys Pakstys — AB Achema, instrumentation department managing engineer
8	AB Achema homepage http://www.achema.com/
9	Project implementation program "Preliminari BI projekto …" incl. time schedule submitted by Achema July 03-04, 2007
10	Confirmation of Receipt: AB Achema / BASF Prozessanalysentechnik about e.g. briefing personal Achema on monitoring system, briefing sample preparation of N2O etc. submitted by BASF May 05, 2007
11	Printscreen of graphic trend June 26, 2007 to July 03, 2007
12	General description of SCR technology submitted by provider Environmental Catalysts & Systems
13	Declaration of conformity of measurement Instrumentation with the methodology AM0034 dated June 29, 2007 and submitted by

Reference No.	Document or Type of Information
	BASF July 12, 2007.
14	Lithuanian Letter of endorsement, LT/EN, submitted to TÜV SÜD on September 14, 2007
15	Project implementation program incl. time schedule submitted by Achema July 03.2007
16	Contract between AB Achema and BASF (for confidential insight on behalf of TÜV SÜD only), submitted by Achema July 03, 2007
17	Gauze depreciation reports 2004 to 2007, submitted to TÜV SÜD on July 27, 2007
18	Protocol on further operation of PT gauzes with catchments system of “Grande Paroisse”LT/EN, submitted by Achema July 21, 2004 (including associated documents), submitted to TÜV SÜD on September 04, 2007
19	Applications for Purchase (file: ”Gauzes_orders.rar”) LT (for confidential insight on behalf of TÜV SÜD only), submitted to TÜV SÜD on September 04, 2007
20	Gauze receptions acts, LT (for confidential insight on behalf of TÜV SÜD only) , submitted to TÜV SÜD on September 04, 2007
21	Installation Dismantling Reports for I to IV campaign, LT, submitted to TÜV SÜD on September 04, 2007
22	Reception protocols for I to IV campaign, LT, submitted to TÜV SÜD on September 04, 2007
23	Operation ordinances AB Achema Grande Paroisse Agregao, LT, submitted to TÜV SÜD on September 04, 2007
24	GP operation schedule, EN, submitted to TÜV SÜD on September 04, 2007
25	Stakeholder meeting protocol, LT/EN, submitted to TÜV SÜD on September 14, 2007
26	GP Management regulation, LT/EN, submitted to TÜV SÜD on September 14, 2007
27	Historic production data - oxidation, with permitted range calculation (file: ”GP historical_data”), submitted to TÜV SÜD on September 14, 2007
28	Historic production data - stack gas, EN (file: “GP_historical_data_stack_gas”), submitted to TÜV SÜD on September 14, 2007
29	Updated operation ordinances with IV campaign LT/EN (file: “Operation-ordinances”, updated with the last ordinance concerning end of IV campaign and beginning of V campaign), submitted to TÜV SÜD on September 14, 2007
30	Dismantling protocols for IV campaign, LT (updated file “Installation-dismantling protocols IV campaign 2007” with 2 dismantling protocols), submitted to TÜV SÜD on September 14, 2007
31	Reception protocols V campaign, LT (file “Reception protocols V campaign 2008”) , submitted to TÜV SÜD on September 14, 2007
32	Installation protocols for V campaign, LT (file: “Installation-dismantling protocols V campaign 2008”), submitted to TÜV SÜD on September 14, 2007
33	Comment to JI-Project 0064, submitted July 20, 2007 by Dr. Karschunke of Umweltbundesamt, Deutsche Emissionshandelsstelle (DEHSt), Bismarckstrasse 1, D-14193 Berlin, Federal Republic of Germany
34	1996 Revised IPCC Guidelines

Reference No.	Document or Type of Information
35	IPCC Good Practice Guidance and Uncertainty Management 2000
36	Final Project Design Document for CDM project “Nitrous Oxide Emission Reduction Project at GP Nitric acid plant in AB Achema in Lithuania”, version 10.0 dated December 12, 2008
37	Excerpt of revised IPCC Permit No 2/15 (IPPC Permit issue date December 28, 2004; IPCC Permit revision date April 30, 2008) submitted by AB Achema at October 27, 2008 (official translations)