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Determination Report

DETERMINATION OF THE JI TRACK-1 PROJECT: "CHEMGAS NITROUS OXIDE ABATEMENT PROJECT"

REPORT NO. 600500171

06 February 2012

TÜV SÜD Industrie Service GmbH
Carbon Management Service
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Subject: Determination of a JI track-1 project

Accredited TÜV SÜD Unit:	**TÜV SÜD Contract Partner:**
TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich Germany	TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich Germany
Project Participants: InterAgro - S.C. Chemgas Holding Corporation S.R.L. Romania MGM Carbon Portfolio , S.a.r.l, Sweden	Project Site(s): City of Slobozia, County of Ialomita, Romania

Project title: Chemgas Nitrous Oxide Abatement Project

Applied methodology / Version:	JI specific approach based on AM0034 / version 05.1.0	**Scope(s):** 5 **TA(s):** 5.1 and 5.2

First PDD Version:		**Final PDD version:**	
Date of issuance:	01/12/2010	Date of issuance:	26/01/2012
Version No.:	01	Version No.:	2.2
Publishing date:	25/03/2011		

Estimated Annual Emission Reduction: 538,014 tCO_2e (March – December 2012)

Assessment Team Leader:	**Certification Body:**
Olena Maslova **Further Assessment Team Members:** Constantin Zaharia	Thomas Kleiser

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 as well as all the requirements set by host country (Romania) for approving projects under JI track 1. Hence, TÜV SÜD will recommend the project for further approval and registration by the DFP of Romania.

☐ The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence, TÜV SÜD will not recommend the project for registration by the DFP of the host country as a JI track-1 project and will inform the project participants and the Romanian DFP on this decision.

Abbreviations

AM	Approved Methodology
AOR	Ammonia Oxidation Reactor
CAR	Corrective Action Request
CL	Clarification Request
DFP	Designated Focal Point
DVM	Determination and Verification Manual
EF	Emission Factor
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission Reduction
ERUs	Emission Reduction Unit(s)
FAR	Forward Action Request
GHG	Greenhouse gas(s)
GWP	Global Warming Potential
Heraeus	W.C. Heraeus GmbH
IPCC	Intergovernmental Panel on Climate Change
IRL	Information Reference List
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
KP	Kyoto Protocol
MMP	Ministry of Environment and Forestry of Romania
MP	Monitoring Plan
NDIR	Non-Dispersive Infrared Spectroscopy
NGO	Non Governmental Organisation
PDD	Project Design Document
PP	Project Participant
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change

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Table of Contents Page

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 scheme (JI).

The assessment involves the evaluation of the project basis and design identified in the Project Design Document (PDD) using the defined criteria outlined by the registration under the Joint Implementation scheme (JI). Determination is part of the JI project cycle and results in a conclusion by the executing AIE on whether or not a project activity is valid to be submitted for approval to the Designated Focal Point DFP of the host country. The ultimate decision on the registration of a proposed project activity rests with the Parties involved.

The project activity discussed by this determination report has been submitted under the project title: *Chemgas Nitrous Oxide Abatement Project.*

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
- Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Further COP/MOP decisions with reference to the JI (e.g. decisions 9/CMP.1)
- Decisions by the JISC published under http://ji.unfccc.int
- Specific guidance by the JISC published under http://ji.unfccc.int
- Guidelines for Completing the Project Design Document (JI-PDD)
- The applied approved CDM methodology(s)
- 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 consultancy 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 an initial PDD version, it is made publicly available on TÜV SÜD's website, which initiates a 30 day global stakeholder consultation process. In case of any request a PDD might be revised and the final PDD will form the basis for the final evaluation as presented in this report. Information on the initial and on the final PDD version is presented on 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 applies standard auditing techniques to assess the correctness of the information provided by the PPs. The assessment is based on the latest version of Joint Implementation Determination and Verification Manual. The work starts with appointment of team covering the technical scope(s), sectoral scope(s) and relevant host country experience for evaluating the JI project activity. Once the project is made public available, members of the team carry out the desk review, follow-up actions, resolution of issues identified and finally preparation of the determination report. The prepared determination report and other supporting documents then undergo an internal quality control by the CB "climate and energy" before submission to the DFP of the host country.

In order to ensure transparency, assumptions must be clear and stated explicitly and background material must also be referenced. TÜV SÜD has developed a methodology-specific protocol customized for the project. The protocol demonstrates, in a transparent manner, the project criteria (requirements), discussion on each criterion by the assessment team, and the results from determining the identified criteria.

The determination protocol serves the following purposes:

- To organize the details and provision of clarifications on the requirements of which a JI project is expected to meet
- To elucidate how a particular requirement has been determined as well as to document the results of the determination and any adjustments made to the project design document.

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**	**Initial PDD (published version)**	**Final PDD**
The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further sub-divided. 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 (CL)*** *is used when the determination team has identified a need for further clarification.* ***Forward action request (FAR)*** *to highlight issues related to project implementation that require review during the first verification.*	*Conclusions are presented in the same manner based on the assessment of the final PDD version and further documents including assumptions presented in the documentation.*

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, a Clarification or a Forward action Request, these should be listed in this section.* ** In the latest revision of this Report **Table 2** serves for summurising of Forward Action Requests that require review during the first verification.*	*Reference to the checklist question number in Table 1 where the issue 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 discussion on and revision to project documentation together with the determination team's responses and final conclusions. The conclusions should be reflected in Table 1, under "Final PDD".*

If any forward action request (FAR) rose they are stated in table 2. FARs highlight issues related to project implementation that require review during the first verification

Determination Protocol Table 2: Forward action request		
Forward action request **Id. of FAR 1**	**Ref. to table 1**	**Explanation**
Request has to be substantiated within this column	*Reference to the checklist question number in Table 1 where the issue is explained.*	*If necessary this section should present a detail explanation..*

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/CL 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 with a clear reference to the requirement which is not complied with.*

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectorial 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 (CB) ensuring that the required skills are covered by the team. The CB TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Determiner / Verifier (GHG-DET / GHG-V)
- Greenhouse Gas Determiner, Trainee (T)
- Technical Experts (E)

It is required that the sectorial scope and technical area linked to the methodology as well as host country expertise are 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 technical area	Host country experience
Olena Maslova	**ATL**	☑	☑	☑
Constantin Zaharia	GHG-V	☑	☑	☑

Olena Maslova is assessment team leader and GHG auditor (Determiner/Validator/Verifier) in the "Carbon Management Service" department of TÜV SÜD Industrie Service GmbH in Munich, Germany. She is chemical engineer and focal point for projects in Eastern Europe. Due to her further master degree at the university of applied science in the Federal Republic of Germany she is also familiar with Germany's current environmental legislation. Olena Maslova is specializing in the assessment of CDM / JI projects in the sector of chemical industries and waste handling and disposal. In this project she functioned as project manager and lead auditor.

Constantin Zaharia is environmental engineer and is working as GHG Verifier in the supra regional unit of the scope management for industrial gases in the Carbon Management Service Department of TÜD SÜD Industry Service GmbH, Germany. He has several years of experience in JI/CDM projects with special focus on industrial gases

2.2 Review of Documents

A first version of the PDD was submitted to the AIE in late December 2010. The PDD and additional background documents related to the project design and baseline were reviewed to verify the correctness, credibility and interpretation of the presented information, furthermore a cross-check between information provided and information from other sources have been done 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

On March 17-18, 2011 TÜV SÜD performed interviews and physical site inspection with project stakeholders to confirm relevant information and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in this context:

Name	Organisation
Mr Stefan Dragan	Chemgas, General Manager
Mr Voinea Oprea	Chemgas, Chief of Technical Department
Mr Octavian Tabara	Chemgas, Technical Department, advisor
Ms Iulia Turc	Chemgas, Chief of Environment and Quality Department.

Mr. Gherghe Garbea	Chemgas, Plant Operator
Ms Iolanda Spulber	Chemgas, Environmental Responsible
Ms. Olivia Ticleanu	INTERAGRO, Counsellor
Mr. Ioana Iulian	Chemgas, Engineer
Ms Sergey Klibus	MGM, Senior Technical Expert
Mr Viorel Dudu	Chemgas, AMS Engineer
Mr. Alin Anton	Chemgas Environmental Auditor
Ms. Silvia Barsan	Chemgas, Dangerous Substances Responsible

2.4 Cross-check

During the determination process, the team has made reference to the available information related to similar projects or technologies as the proposed JI track-1 project activity. Project documentation has also been reviewed against the approved methodology applied to confirm the appropriateness of formulae and correctness of calculations.

2.5 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination is to resolve the requests for corrective actions, clarifications, and any other outstanding issues which need to be clarified for TÜV SÜD`s conclusion on the project design. The CARs and CLs raised by TÜV SÜD are 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 documented in more detail in the determination protocol in Annex 1.

The final PDD version 2.2 dated 26/01/2012 serves as the basis for the final assessment presented.

2.6 Internal Quality Control

Internal quality control is the final step of the determination process and is conducted by the CB "climate and energy" who checks the final documentation, which includes the determination report and annexes. The completion of the quality control indicates that each report submitted has been approved either by the head of the CB or the deputy (a veto person is used if necessary). In projects where either the Head of the CB or his/her deputy is part of the assessment team, the approval is given by the one not serving on the project team.

After confirmation by the PP, the determination opinion and relevant documents are to be submitted to the DFP of host country by the client for approval according to the JI track 1 procedure.

3 SUMMARY

The assessment work and the main results are described below in accordance with the DVM reporting requirements. The reference documents indicated in this section and Annex 1 are stated in Annex 2.

3.1 Approval

The dedicated project participants are S.C. Chemgas Holding Company S.R.L. from Romania, and MGM Carbon Portfolio, S.a.r.l from Sweden. The host Party Romania and Investor Party Sweden meet the requirements to participate in the JI.

The Romanian DFP - issued a LoE (IRL8) on 29/09/2009 authorizing S.C. Chemgas S.R.L as a project participant. TÜV SÜD received this letter directly from the PP and considers the provided letter as authentic. TÜV SÜD confirms that the letter refers precisely to the proposed JI project activity, i.e. the title is in line with the title in the PDD.

Romania and Sweden have its officially published national guidelines and procedures for the approval of JI projects.

The PPs are going to apply for LoAs from the Host and Investor parties on the basis of the TÜV SÜD's determination opinion in accordance with the Host and Investor parties' procedures for approving of JI projects (refer to FAR1).

3.2 Participation

The dedicated project participants are S.C. Chemgas Holding Corporation S.R.L. from Romania, and MGM Carbon Portfolio, S.a.r.l from Sweden. The participation of both project proponents as well as their roles in this JI project is confirmed with JI project Master Agreement and Letter from MGM nominating the MGM Carbon Portfolio, S.a.r.l as the entity that will receive the ERUs pertaining to MGM under that agreement (IRL 9).

3.3 Project design document

The PDD is compliant with relevant form and guidance as provided by the UNFCCC JISC.

TÜV SÜD concludes that the guidelines for the completion of the PDD in their most recent version have been followed. Relevant information has been provided by the PP in the applying PDD sections. Completeness was assessed through the checklist included to Annex 1.

3.4 Project description

The following description of the project as per PDD could be verified during the on-site mission:

S.C. Chemgas S.R.L. operates a single line dual pressure plant (medium pressure in AOR - 2.7-3.2 bars, high pressure in Absorption tower – 8.0-9.0 bars) plant for the industrial manufacture of nitric acid at City of Slobozia, County of Ialomita. The nitric acid plant consists of a weak acid plant (HNO_3 < 70%). The following processes based on the Ostwald process take place:

Ammonia is passed through a pipeline from the ammonia plant to the operating unit and transferred to an evaporation system. The evaporated ammonia is heated and conveyed to the ammonia-air-mixer. The mixture formed, which has an ammonia content of about 10% by volume, is oxidized on the platinum rhodium catalyst to nitrogen oxide in the combustion elements, consisting of three AORs, at a temperature of around 850°C. The NO formed is further oxidized to NO2 with the addition of atmospheric oxygen. The nitrous gases formed are absorbed in water with the formation of weak acid.

The project activity aims at GHG emissions reduction of nitrous oxide, N2O, which is an unwanted by-product by the industrial production of nitric acid and at the same time is a green house gas with GWP of 310.

In particular, the installation of the secondary N_2O abatement catalyst system directly in the ammonia oxidation reactors (AORs) underneath the ammonia oxidation catalyst (Pt-Rh catalyst gauze) is envisaged. A secondary catalyst is employed which has a guaranteed abatement efficiency of about 83% (IRL 26).

In order to implement the project, Chemgas will be equipped with a state of the art AMS according to DIN EN 14181 for continuous monitoring of the project key parameters.

The information presented in the PDD on the technical design is consistent with the actual planning and implementation of the project activity as confirmed by:

- Review of data and information (see annex 2) using sectoral knowledge and expertise of the assessment team, cross check the same with other sources available in the respective technical literature, official publications, etc.
- The on-site visit has been performed and relevant stakeholders and personnel with knowledge of the project were interviewed, in case of doubt further cross checks through additional interviews have been done.
- Finally information related to similar technologies or projects as the JI project activity have been used if available to confirm the accuracy and completeness of the project description.

In light of the above, TÜV SÜD confirms that the project description as included to the PDD is sufficiently accurate and complete in order to comply with the requirements of the JI Track-1.

3.5 Baseline and monitoring methodology

3.5.1 Applicability of the selected methodology

It should be highlighted here that PPs have defined a project specific methodological approach (JI-approach) in accordance with Appendix B of the JI guidelines using selected elements of approved CDM methodology AM0034 version 05.1.0. The main differences are:

- In order to take into account the variations in campaign length and its influence on N2O emission levels, the historic campaign lengths was determined. According to the project specific conditions, the CLnormal is defined as an average of the total amount of the nitric acid at 100% concentration produced between the previous 5 plant shutdowns for partial primary gauzes replacement before the start of the baseline measurement (the primary gauzes were partially replaced in all 3 AORs during those stops). This is accepted as project specific approach. In order to be as conservative as possible, the PPs decided to change the historic approach of partial gauzes replacement and replaced the full batch of gauzes in every of 3 AORs at the beginning of the baseline measurement (IRL 12, 20, 44). The applicability of the baseline is subject of the first periodic verification.

- The plant operates with 3 reactors instead of 4, which is different from the original design. For this reason the annual design capacity - 240000 t/year, that is established by Reception Certificate cannot be applied in this project, it is established based on the daily design capacity of the plant with dismounted reactor 1B, which is multiplied by the number of operating days per year. The updated plant design diagram show that after dismounting of reactor 1B the design capacity is 640 metric tons of HNO3 per day. To ensure the conservativeness of the approach it is assumed that the plant operates 306 days per year (the longest observed period of annual activity), instead of 365 days as suggested in the methodology. This gives the annual capacity of 195,840t

The applicability assessment was carried out for each applicability criterion according to AM0034 version 05.1.0 and included, among other checks, a compliance check of the local project setting with the applicability conditions in regard to baseline setting and eligible project measures. This assessment also included the review of secondary sources to demonstrate the compliance with applicability conditions:

- Chemgas' plant limits the application of this project activity to existing nitric acid production;
- The project activity will not result in the shutdown of any existing N_2O destruction or abatement facility or equipment in the plant;
- The project activity will not affect the level of nitric acid production;
- There are currently no regulatory requirements or incentives to reduce levels of N_2O emissions from nitric acid plants in Romania;
- The project activity will not increase NO_x emissions;
- Chemgas' plant has no non-selective catalytic reduction (NSCR) $DeNO_x$ abatement system installed;
- Operation of the secondary N_2O abatement catalyst installed under the project activity does not lead to any process emissions of greenhouse gases, directly or indirectly;
- Continuous real-time measurements of N_2O concentration and total gas volume flow will be carried out in the stack:
  - Before 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.

The methodology-specific protocol, included in Annex 1, documents the assessment process. The results of the compliance check as well as relevant evidence are detailed in the protocol and the information reference list.

TÜV SÜD confirms that the chosen baseline and monitoring project specific approach is applicable to the project activity.

Emission sources, not addressed by the applied methodology and expected to contribute more than 1% of the overall expected average annual emission reductions, have not been identified.

3.5.2 Project boundary

The project boundary was assessed considering information gathered from the physical site inspection, interviews, and secondary evidence received on the design of the project.

Project boundary set in PDD is in accordance with CDM methodology AM0034, version 05.1.0.

Conforming to AM0034, Chemgas plant industrial process covered by the project activity is nitric acid production serving by the existing AORs. The project boundary comprises the complete production process from the inlet to the AORs to the stack, including all compressors and covers the shop of non-concentrated nitric acid production with 1 production line.

Description of emission sources including justification of gases included/excluded in/from the project boundaries is provided in appropriate manner, and can be considered as complete and correct.

The most relevant documentation assessed in order to confirm the project boundary is the following: Elementary diagram of non-concentrated nitric acid production in the plant (IRL 32).

The same have been validated during the determination process using standard audit techniques. For further details on TÜV SÜD observations on-site refer to the Annexes 1 and 2.

Hence, TÜV SÜD confirms that the identified boundary and the selected sources and gases as documented in the PDD are justified for the project activity.

3.5.3 Baseline identification

The AM0034 version 05.1.0 refers to the procedure for identification of the baseline scenario described in the approved methodology AM0028 version 04.1 "Catalytic N2O destruction in the tail gas of nitric acid plants". This procedure is applied in the PDD and provides for a step-wise approach to identify the baseline scenario.

The list of plausible alternative scenarios to the project activity is complete and no reasonable alternative scenarios have been excluded.

As a result of the baseline identification procedure provided in the final PDD the baseline scenario has been defined as "status quo"- the continuation of the current situation with the installation of a selective catalytic reduction unit, which will meet NOx regulations, where there will be no installation of technology for the destruction or abatement of N_2O. The period of installation of the SCR DeNOx unit is inessential, since modern SCR technologies have no influence on GHG emissions.

The information presented in the PDD has been determined by a first document review of all the data, further confirmation based on the on-site visit and a final step by cross checking the information with similar relevant projects and/or technologies. The sources referenced in the PDD have been quoted correctly.

Transparent and documented evidences were provided to assessment team within on-site visit. Based on conservative interpretation of collected audit evidences, TÜV SÜD considers that the identified baseline scenario is reasonable.

TÜV SÜD confirms that all relevant JI requirements, including relevant national and/or sectoral policies and circumstances, have been identified correctly taken into account in the definition of the baseline scenario.

A verifiable description of the baseline scenario has been included to the PDD.

In conclusion TÜV SÜD confirms that:

1. All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
2. All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;
3. Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
4. Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD;
5. The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed JI project activity.

3.5.4 Algorithm and/or formulae used to determine emission reductions

TÜV SÜD has assessed the calculations of project emissions, baseline emissions and emission reductions. There are no leakage emissions. Corresponding calculations were carried out based on calculation spreadsheets as presented via Emissions reductions calculation sheet (IRL 41).

The parameters and equations presented in the PDD and further documentation have been compared with the information and requirements presented in the methodology and respective tools. The equation comparison has been made explicitly following all the formulae presented in the calculation files.

The values presented in the PDD are considered reasonable based on the documentation and references reviewed, as well as, the result of the interviews. Detailed information on the verification of the parameters used in the equations can be found in Annex 1. The algorithms for the determination of the baseline, project, and leakage are discussed in the following sections.

3.5.4.1 Baseline Emissions

For the determination of the baseline emission factor N2O concentration and gas volume flow will be monitored throughout the baseline campaign.

On the base of available monitoring data – continuous monitoring measurements performed between 13.04.2011 and 25.06.2011 – with an analyzer ABB AO2000 URAS 26 which has QAL 1 certificate (IRL 22) an emission factor equal to 13.94 kg N2O/tHNO3 has been used for ex-ante estimation (IRL 42). This emission factor will be subject to check during the first verification.

Permitted ranges of operational parameters are established for the period of measuring the actual N_2O emissions before secondary catalyst installation.

For avoidance of the possibility to modify the operating conditions of the nitric acid plant in such way that increases N2O generation during the baseline campaign, the normal ranges for operating conditions shall be determined as follow:

- For oxidation temperature: historical data for OT values of the 3 reactors separately and, similar during the baseline period, control of OT will be performed for each of 3 reactors separately.

- For oxidation pressure: values from plant design diagram and internal production manual are applied, since no historic data is available.
- For AFR and AIFR: historical data will be applied

The baseline emissions were estimated ex-ante in accordance with formulae set defined in the approved CDM methodology AM0034 ver. 05.1.0. For this estimation following assumptions have been made:

- Chemgas plant road map figures for nitric acid production are applied: 2012 – 180,000 t/year, 2013 – 175,000 t/year, 2014 – 180,000 t/year, 2015 – 180,000 t/year, 2016-2020 – 175,000 t/year

The estimated baseline emissions can be confirmed, as the same have been replicated by the audit team using the information provided (IRL 43, IRL 42).

As already mentioned in chapter 3.5.1 of this report, the baseline is measured with a set of completely new gauzes installed in all 3 AORs, which represents a conservative approach in comparison with the historic approach of partial primary gauzes replacement (IRL 12, 20, 44).

The defined normal operating conditions (the normal OP, OT, AFR, AIFR, GS and GC) will be available at the first periodic verification and have to be verified by the verifying AIE (refer to FAR 6).

The TÜV SÜD assessment team considered that the approach based on continuous measurements for a limited period of time (2 months) proposed by PPs is correct, reasonable and applicable to the specific project. However, the final baseline emission factor will be available only at the end of the baseline campaign and will be a task of the verifying AIE.

Detailed information on the verification of the project specific methodology can be found in the Annex 1 to this report.

3.5.4.2 Project emissions

The project emissions were estimated ex-ante in accordance with formulae set defined in the approved CDM methodology AM0034. For this estimation following conservative assumptions have been made:

- the guaranteed BASF's secondary catalyst abatement efficiency of 83% is used (IRL 26);
- Chemgas plant road map figures for nitric acid production are applied: 2012 – 180,000 t/year, 2013 – 175,000 t/year, 2014 – 180,000 t/year, 2015 – 180,000 t/year, 2016-2020 – 175,000 t/year

The estimated project emissions can be confirmed, as the same have been replicated by the audit team using the information provided (IRL 42, IRL 43). Detailed information on the verification of the parameters used in the equations can be found in the Annex 1.

3.5.4.3 Leakage

The project specific approach does not deviate in respect of leakage emissions from approved CDM methodology AM0034 version 05.1.0. Hence, no leakages are identified.

3.5.4.4 Emission Reductions

The calculation of the baseline emissions, project emissions, and the emission reductions, respectively, can be considered as correct. The baseline and project emissions are calculated in the PDD in transparent manner and using conservative assumptions.

Therefore based on the calculations in the project documentation it is expected that the project activity will lead to a reduction of GHG emissions of 538,014 tCO_2e in the period from March 2012 until December 2012.

In order to set a cap on the annual emissions reductions which can be claimed for by the project, the methodology applied requires an indication of a design (or nameplate) production capacity of the nitric acid plant. By nameplate implies the total yearly capacity (considering 365 days of operation per year) as per the documentation of the plant technology provider.

Since the annual capacity as included in the design documents is no longer applicable because the plant is operating in present with 3 AOR instead of 4, the plant presented to the TÜV SÜD determination team the mass balance calculation with 3 AOR (IRL 32). The result was a maximum daily production of 640 metric tons of HNO3 (725 tons/day was the design capacity with 4 AOR). The calculation has been checked and found correct

The calculation is also in accordance with the historical campaigns – based also on the production with 3 AORs (IRL 14).

Based on 306 operating days per year (the longest historical campaign), this gives the annual capacity of 195,840 t.

3.6 Additionality

Simple cost analysis has been used for demonstrating additionality according to the "Tool for the demonstration and assessment of additionality" (Version 05.2) as it is clearly shown that that there is no economical benefit by the reduction of the nitrous oxide concentration other than the JI revenues. The costs associated with the project activity are summerized in Annex 4 of the final PDD (IRL 43).

The approach used in the PDD has been assessed based on a document review and interviews on-site with plant representatives (for details see Annex 2). All audit evidences have been checked using sectorial knowledge and expertise as well as public available information published in the internet.

Based on this determination steps, the AIE can confirm that the documentation assessed is appropriate for this project.

3.7 Monitoring plan

The assessment team has checked all the parameters presented in the MP against the requirements of the methodology. The monitoring plan (MP) presented in the PDD complies with the requirements of the methodology AM0034 version 05.1.0.

The quality assurance procedures have been audited by the assessment team through document review and interviews with the relevant personnel; this information together with a physical inspection allows the assessment team to confirm that the MP is feasible within the project design. The major parameters to be monitored have been discussed with the PPs especially regarding the location of the meters, the data management, and in general the quality assurance and quality control procedures to be implemented in the context of the project.

Due to importance of the quality assurance and quality control procedure for the future data quality, the project proponents agreed to implement a so called "JI Manual" which will comprise description of the work scope as well as tasks of responsible personnel, qualification requirements and continuous training for responsible staff, procedures on the data treatment acc. to AM0034 rules and requirements (e.g. downtime of AMS), QAL 3 procedures, JI project related documentation procedures, troubleshooting procedures, etc. (refer to FAR 2). During the first periodic verification the PPs will provide the JI Manual to a verifying AIE.

All the audit evidences proving the appropriateness of monitoring provisions undertaken by the PPs were provided to the AIE and have been considered as sufficient. For details please refer to Annex 2 of this report.

Hence, it is expected that the PPs will be able to implement the monitoring plan and the emission reductions achieved can be reported ex-post and verified.

3.8 Local stakeholder consultation

The statement has been provided in the final PDD, chapter G. The DFP (host) and the local authority confirmed a simplified approval procedure for this project due to its obviously positive environmental effects. According to this, the project can be approved without invitation of further local stakeholders.

This fact has also been verified with information obtained during interviews.

3.9 Environmental impacts

In accordance with Government Decision no. 445/2009 on the environmental impact assessment of certain public and private projects, it is not necessary to perform an EIA for this JI project. It is confirmed by Pitesti Regional environmental agency decision 1377/09/03/2011 (IRL 27). No contaminants are released during the operation of the project activity so no negative environmental impacts occur. The BREF (IRL 29) also confirms this view by stating that catalytic N_2O decomposition does not induce cross-media effects.

Nevertheless, for Chemgas an environmental impact study was voluntarily carried out by SC IPROCHIM SA Bucharest in November 2010. As a general conclusion, following the analysis of the evaluation report on the impact on the environment based on the data provided by the company, the impact is placed at an insignificant level.

TÜV SÜD assessment team remarks that the project has a strong positive environmental impact, since the primary object of the project is reduction of N_2O emissions.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOs

TÜV SÜD published the project documents on TÜV SÜD's own website and invited comments by the 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/Guide22.aspx?ID=7139&Ebene1_ID=50&Ebene2_ID=2387&mode=5</td></tr>
<tr><td colspan="2">Starting date of the stakeholder consultation process:
2011-03-25</td></tr>
<tr><td>Comment submitted by:
- (no comments received)</td><td>Issues raised:
-</td></tr>
<tr><td colspan="2">Response by TÜV SÜD:
-</td></tr>
</table>

Industrie Service

5 DETERMINATION OPINION

TÜV SÜD has performed a determination of the following proposed JI project activity:

"Chemgas Nitrous Oxide Abatement Project"

Standard auditing techniques have been used for the determination of the project. Methodology-specific checklists and protocol customised for the project have been prepared to carry out the audit and present the outcome in a transparent and comprehensive manner.

The review of the project design documentation, and further audit evidences and references, as well as subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria in the protocol. In our opinion, the project meets all relevant UNFCCC requirements for the JI as well as all the requirements set by host country (Romania) for approving projects under JI Track 1. Hence, TÜV SÜD will recommend the project for further approval and registration by the DFP of the host country.

An analysis, as provided by the JI approach based on AM0034 version 05.1.0, demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are 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 TÜV SÜD, as well as the engagement conditions detailed in this report. The determination has been performed following the JI requirements. The only purpose of this report is its use during the registration process as part of the JI Track 1 project cycle. TÜV SÜD cannot be held liable by any party for decisions made, or not made, based on the determination opinion beyond this purpose.

Munich, 06/02/2012

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

Munich, 06/02/2012

Olena Maslova
Assessment Team Leader

Industrie Service

Annex 1: Determination Protocol

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
A. General description of project activity				
A.1. Title of the project activity				
A.1.1. Does the used project title clearly enable identification of the unique JI activity?	2	The project title clearly enables the identification of the JI activity. No second JI activity exists with a similar title or at the same site.	☑	☑
A.1.2. Are the sectoral scope(s) to which the project pertains clearly identified? Is this information consistent with further chapters of the PDD?	2	Yes it is. The sectoral scope is identified to be scope 5 (Chemical industry).	☑	☑
A.1.3. Are there any indication concerning the revision number and the date of the revision?	2	The revision number and the date of the issuance of this revision is correctly indicated PDD version 2.1 dated September 21, 2011	☑	☑
A.1.4. Is this consistent with the time line of the project's history?	2,	Yes, it is. The date of the issuance is consistent with the time line of project's history, however see CR below. The Letter of Endorsement for the project was issued at September 29, 2009, the starting day of project activity is January 01, 2011 and the starting date of the crediting period is stated to be March 01, 20110. **<u>Corrective Action Request No.1.</u>** Chapter A.2 of the PDD has to indicate the expected outcome of project scenario and briefly summarize the history of the project including information about implementation schedule of the project according to requirements of the Guidelines for users of the JI PDD form, version 3. Thus please describe the project implementation history in a more traceable way (a table for eg.) starting with early JI consideration, contract with the PDD developer, PIN, LoE, AMS acquisition and installation etc. A graphical representation of the time milestones (historical campaign – baseline – AMS instal-	**CAR**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
		lation – project starting date) can be included. In addition JI project implementation plan has to be provided. In order to demonstrate the early JI consideration, please provide the directorate decision concerning the proposed JI project (minutes of the meeting etc.).		
A.2. Description of the project activity				
A.2.1. Is the description delivering a transparent overview of the project activities?	2	Yes, it is. The description is delivering a transparent overview of the project activities however please refer to CAR above.	**CAR**	☑
A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	2, 11, 32, 10, 13, 17, 26	For demonstrating that the project description is in compliance with the actual situation or planning the following proofs have been provided: - Design documents for non-concentrated nitric acid production including last modernization works performed (IRL 32, 11); - Operating Permit (IRL 15); - Elementary diagram of non-concentrated nitric acid production (IRL 10, 32); - Technical regulations of non-concentrated nitric acid production (operating Manual) (IRL 13) - AMS specifications including QAL 1;(IRL 22) - Techno-commercial proposal for supplying of the secondary catalyst (IRL 26). - Road map demonstrating the nitric acid production plan (IRL 26) - Secondary cat supplier confirmation on the warranted N2O abatement efficiency and safety data sheet (IRL 26) - Valid IPPC permit indicating the N2O and NOx limit values	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		and actions the Nitorporos plant has to undertake in order to comply with Romanian N2O and NOx regulations (IRL 17). - Summary of the project implementation costs and respective evidence (for the confidential insight of the assessment team only) (IRL 31)		
A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?	2	Yes, all information provided by these proofs consistent with the information provided by the PDD.	☑	☑
A.2.4. Is all information presented consistent with details provided by further chapters of the PDD?	2	Yes, all information presented is consistent with details provided by further chapters of the PDD.	☑	☑
A.3. Project participants and project approvals by Parties involved				
A.3.1. Is the form required for the indication of project participants correctly applied?	2, 9	Yes, the form is correctly applied.	☑	☑
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?	9	S.C. Chemgas Holding Corporation S.R.L. Private entity (Romania) and MGM Carbon Portfolio , S.a.r.l. Private entity (Sweden) are named to be the parties involved. However, **Clarification Request No.1** S.C. Chemgas S.R.L. (Romania) and MGM Carbon Portfolio, S.a.r.l (Sweden) are the project participants. To confirm this fact the Emission Reduction Units Purchase Agreement (ERPA) between the project participants have to be submitted to the audit team.	**CL**	☑
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in par-	2	Yes, the information on PPs is consistent throughout the PDD and Annex 1.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
ticular annex 1)?				
A.3.4. Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: - A written project approval by a Party involved, explicitly indicating the name of the legal entity? Or - Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	8	The Letter of Endorsement for the project was issued by Ministry of Environmental Protection of Romania in September 29, 2009. The LoE have been submitted to the audit team. Letter of Approvals from the host and investment parties will be applied for after the determination of the project will be finalized.	☑	☑
A.3.5. Have the DFPs of all parties listed as involved in the PDD provided written project approvals?	8	Please refer to (A.3.2 and A.3.4.).	**CL**	☑
A.3.6. Does the PDD identify at least the host Party as a "Party involved"?	2,8	Yes, the host party- Romania- is identified in the PDD.	☑	☑
A.3.7. Has the DFP of the host Party issued a written project approval?	8	Please refer to (A.3.4.).	☑	☑
A.3.8. Are all the written project approvals by Parties involved unconditional?		The LoA will be issued after the successful determination of the project by TÜV SÜD. **<u>Forward Action Request No.1</u>** The LoAs should be submitted to AIE at least at the moment at the first periodic verification.	**FAR**	**FAR**
A.4. Technical description of the project activity				
A.4.1. **Location of the project activity**				

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
A.4.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	2	Yes, it does. The information provided on the location of the project activity allows for a clear identification of the site.	☑	☑
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.)?	15,	It is ensured by means of the following docs to be provided: • License on the ammonia (nitric acid) production (IRL 15);	☑	☑
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?	2	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?	2, 28, 26	Yes, it does. The project activity aims to reduce the amount of N_2O emitted by catalytically decomposing the N_2O produced in the undesired side reaction during ammonia oxidation. Chemgas is planning to install a secondary catalyst type supplied by the BASF SE. This type of secondary catalyst does not require additional heat or other energy input (electricity, steam etc.). During on-site audit Chemgas submitted the BASF's techno-commercial proposal with description of the secondary catalyst which confirms that no additional greenhouse gases produced during the N_2O decomposition as well as it does not affect the HNO_3 production level and not increase NOx emissions. Furthermore material safety data sheet for the secondary catalyst has been provided. See A.4.2.4. **Corrective Action Request No.2.** According to the preliminary contract between BASF and Interagro, the efficiency of the secondary catalyst will be 83% instead of 80% as considered in ERU estimation. Revision of PDD and Excel calculation is necessary.	**CAR**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
A.4.2.3. Does the implementation of the project activity require any technology transfer from annex-I-countries to the host country(s)?	2, 26	Yes, the implementation of the project activity requires technology transfer from Annex-I-countries and includes secondary catalyst system and monitoring equipment.	☑	☑
A.4.2.4. Is the technology implemented by the project activity environmentally safe?	25	According to information provided by the BASF company (Material safety data sheet for secondary catalyst and the techno-commercial proposal) the additional catalyst is made of non-precious metals and does not create significant negative environmental effect. The obsolete catalyst will be recycled according to the prevailing EU standards.	☑	☑
A.4.2.5. Is the information provided in compliance with actual situation or planning?	2	Yes it is.	☑	☑
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?	2, 29	Yes, it is a state of art technology providing significant N_2O emission abatement.	☑	☑
A.4.2.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	2	Currently there is no reason for PPs to substitute project technology by any other more efficient technology.	☑	☑
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?	30	Yes, it does. Every need for training and maintenance efforts will be followed and ABB, the supplier of AMS, is responsible for these. The extensive training is required in the context of monitoring system, data acquisition and reporting. **Clarification Request No.2** Records of the trainings as well as list of attended personnel have	**CL**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		to be provided to the assessment team.		
A.4.2.9. Is information available on the demand and requirements for training and maintenance?		See above.	☑	☑
A.4.2.10. Is a schedule available for the implementation of the project and are there any risks for delays?	2, 23	See also CAR (A.1.4). **Clarification Request No.3** The secondary catalyst supplier's approval and delivery contract signed (according to project implementation plan) should be provided to the confidential insight of the assessment team. Pls. refer to FAR3 in Table 2.	**CAR** **CL**	**FAR**
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 into account national and/or sectoral policies and circumstances?	1, 2	Yes, a brief explanation on how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project is presented in the PDD.	☑	☑
A.4.3.2. Is the explanation transparent, feasible and – if based on calculations – mathematical correct calculated?	2	Yes, the explanation is transparent and the calculations are correct. However **Clarification Request No.4** The use of 8.4 kg CO2eq/t HNO3 as baseline emission factor in ERs estimation should be clarified. Furthermore the ERs estimate should be based on the production figures specified in the plant's road map.	**CL**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
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?	2	**Corrective Action Request No.3.** The crediting period lasts until the end of 2012. Whether the end of the crediting period can be after 2012 subject to the approval by the host Party. Thus please split the table with the ERs estimates presented in chapter A.4.3.1 and provide the estimates for the first commitment period in complete manner (years of the crediting period, total estimated ERs, annual average of estimated ERs over the crediting period) as required by Guidelines for users of JI PDD Form v.04. Furthermore please refer to CL (A.4.3.2).	**CAR**	☑
A.4.4.2. Are the figures provided consistent with other data presented in the PDD?	2	All figures which are presented in the PDD are consistent with other data. However refer to the CLs and CARs above.	**CAR CL**	☑
A.4.4.3. Is the annual average of estimated emission reductions calculated by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period and multiplying by twelve?	2	Yes, the annual average of estimated emission reductions presented in the PDD is calculated by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period and multiplying by twelve. However see CAR above in A.4.4.1.	**CAR**	☑
B. Baseline				
B.1. Description and justification of the baseline chosen				
B.1.1. Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? - JI specific approach - Approved CDM methodology approach	2	The first version of the PDD mentions the approved CDM methodology AM0034 v. 03.4 to be used as a basis for this project activity. 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 fitting to the baseline and project scenario of this project. Nevertheless it is not directly applicable due to various distinctions between the assumptions of	**CAR**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		the methodology and the real situation at Chemgas plant. **Corrective Action Request No.4.** Taking into account the plant specific gauze replacement (see PDD page 55) – partial replacement - and AM0034 definition "Campaign length is defined as the total number of metric tonnes of nitric acid at 100% concentration produced with one set of gauzes", a clear definition for CLnormal for the project specific case should be included in the revised PDD. After that baseline campaign length and project campaign length should be defined. Furthermore please clearly describe the application of the methodological requirements for re- calculation of the EFbaseline when the project campaign length is shorter than normal campaign length (EB 51 Annex 12). In general, to clearly demonstrate all the deviations from the methodology AM0034, a detailed description of the project specific approach has to be included in revised PDD according to the Guidelines for users of JI PDD form, version 04. In doing so the latest version of AM0034 should be used. A description using a table format with the first column the requirement of the AM0034 and the second one the specific JI approach of this project would be helpful. Furthermore the starting date of the Baseline/Project in terms of primary catalyst age/composition should be included in the revised PDD.		
B.1.2. If JI specific approach is used, does the PDD provide a detailed theoretical description and justification of the baseline chosen in a complete and transparent manner taking into account §23 of DVM v.1?	2	Yes, the PDD provides a detailed theoretical description and justification of the baseline chosen in complete and transparent manner taking into account the DVM requirements. The identification of the baseline scenario was conducted acc. to AM0028 as suggested by the AM0034. However see CAR in B.1.1 above.	**CAR**	☑
B.1.3. If selected elements or combinations of approved CDM methodologies or methodo-	1, 2	Yes, the selected elements of the AM0034 applied are developed in line with DVM requirements (e.g. § 23 DVM v.1).	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
logical tools for baseline setting are used, are the selected elements supplementary developed by the project proponents in line with §23 of DVM v.1?				
B.1.4. Does the PDD provide a justification of the applicability of the methodological approach chosen with a clear and transparent description?	2	Yes, the PDD provides a justification of the applicability of the methodological approach chosen (the selected elements of AM0034) with a clear and transparent description. However please refer to sections B.1.12. - B.1.19. below in this checklist.	☑	☑
Date of completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/entity(ies)				
B.1.5. Is there any indication of a date when the baseline was determined?	2	**Corrective Action Request No.5.** The date of the baseline setting is mentioned in the PDD to be the November 2010. However please amend this date taking into account the format requirements of the guidelines for users of JI PDD form v. 4. The baseline for the project activity has not been set yet. The PDD under determination presents preliminary estimates of the baseline and project emissions.	**CAR**	☑
B.1.6. Is this consistent with the time line of the PDD history?	2	Please refer to comment above.	☑	☑
B.1.7. 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?	2	Yes, it is. The information is consistent with the actual situation.	☑	☑
B.1.8. Is information provided whether this person / entity is also considered a project participant?	2	The baseline study and monitoring methodology was applied by MGM International Group LLC project developer team. The PDD indicated in section D.4 that MGM International Group	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
		LLC is not project participant.		
Approved CDM methodology : justification of the choice of the methodology and why it is applicable to the project activity				
B.1.9. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	2	N/A	☑	☑
B.1.10. Is the applied version the most recent one and / or is this version still applicable (within the grace period) when the PDD is submitted for publication?	2	N/A	☑	☑
B.1.11. Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	2	N/A	☑	☑
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”;				

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
B.1.12. Criterion 1: The applicability is limited to the existing production capacity measured in tonnes of nitric acid, where the commercial production had began no later than 31 December 2005. Definition of "existing" production capacity is applied for the process with the existing ammonia oxidization reactor where 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.	2	Applicability checklist / Yes / No Criterion discussed in the PDD? Yes Compliance provable? Yes Compliance verified? Yes The plant operation history still has to be described in the PDD in a transparent manner, refer to CAR in A.1.4 of this checklist..	CAR	☑
B.1.13. Criterion 2: The project activity will not result in the shutdown of any existing N2O destruction or abatement facility or equipment in the plant.	2	Applicability checklist / Yes / No Criterion discussed in the PDD? Yes Compliance provable? Yes Compliance verified? Yes As there's no N_2O abatement unit in the plant, the project activity will not result in the shutdown of any existing N_2O destruction or abatement facility or any further emission reduction equipment in the plant.	☑	☑
B.1.14. Criterion 3: The project activity shall not affect the level of nitric acid production	2	Applicability checklist / Yes / No Criterion discussed in the PDD? Yes Compliance provable? Yes	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		Compliance verified? | Yes The secondary catalyst applied does not have any impact to level of NO yield.		
B.1.15. Criterion 4: There are currently no regulatory requirements or incentives to reduce levels of N2O emissions from nitric acid plants in the host country.	2, 17	Applicability checklist | Yes / No Criterion discussed in the PDD? | Yes Compliance provable? | Yes Compliance verified? | Yes During on-site visit, it has to be discussed and confirmed that there are currently no regulatory requirements or incentives to reduce levels of N_2O emissions from HNO_3 plants in Romania. This was confirmed at the meeting with Romanian DFP. **Clarification Request No.5** In the IPPC Environmental Permit, there is also an ELV for N2O emissions from nitric acid production: 800 mg/Nm3 for the period up to the installation of the secondary catalyst and 150 mg/Nm3 after. These ELVs shall be used in baseline and project ERU's calculation. Please clarify and amend the PDD accordingly. Pls. refer to FAR4 in Table 2.	**CL**	**FAR**
B.1.16. Criterion 5: The project activity will not increase NOx emissions.	2, 16	Applicability checklist | Yes / No Criterion discussed in the PDD? | Yes	**CL**	**FAR**

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		<table><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table> The BREF (August 2007, p. 124) confirms that NO yields for the ammonia oxidation reaction remain unchanged when operating secondary N_2O abatement catalysts. NOx is a regulated gas in the Romania and it is monitored in the stack gas. The limits on the NOx emissions provided by the plant's valid IPPC permit have been checked. **Clarification Request No.6** According to technical specifications of DeNOx unit, contract Steuler – Chemgas (IRL 16), the NOx outlet concentration could not be less than 200 ppm, but – as set in the IPPC Permit, the plant should comply with a threshold of 150 ppm. A clarification how this DeNOx unit will ensure the plant environmental compliance is needed. Pls. refer to FAR5 in Table 2.		
B.1.17. Criterion 6: NOx abatement catalyst installed, if any, prior to the start of the project activity is not a Non-Selective Catalytic Reduction (NSCR) DeNOx unit.	2, 16	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table> During on-site visit, the project participants confirmed that a De-NOx unit has been ordered and will be installed once delivered. According to the technical specifications stated in the contract	**CL**	☑

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>Pub-lished PDD</th><th>Final PDD</th></tr>
<tr><td></td><td></td><td>with DeNOx supplier, this DeNOx is a Selective Catalytic Reduction unit. However see CL above.</td><td></td><td></td></tr>
<tr><td>B.1.18. Criterion 7:
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.</td><td>2</td><td><table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>There is no further impact on greenhouse gas emissions by this kind of technology. According to the BREF issued by IPPC on August 2007 the application of secondary N_2O catalyst does generally not lead to any process emissions of GHG – direct or indirect.</td><td>☑</td><td>☑</td></tr>
<tr><td>B.1.19. Criterion 8:
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</td><td>2</td><td><table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>During on-site visit the representatives of Chemgas were interviewed by the audit team and they confirmed that continuous real-time measurements of N_2O concentration and total gas volume flow can be carried out in the stack prior to and after the installation of the secondary catalyst. Furthermore preliminary N2O measurements and consultancy regarding the appropriate measuring points for AMS was conducted by the SGS. The SGS report</td><td>☑</td><td>☑</td></tr>
</table>

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		provided to the assessment team confirms the PPs statement.		
The baseline scenario *shall be identified using procedure for Identification of the baseline scenario described in the approved methodology AM0028 "Catalytic N_2O destruction in the tail gas of Nitric Acid Plants" version 05.*				
B.1.20. Are all explanations, descriptions and analyses pertaining to the baseline in the PDD made in accordance with the referenced approved CDM methodology?	2	As mentioned above this project activity is based on the selected elements of the approved CDM methodology AM0034. The identification of the baseline scenario therefore was conducted according to the baseline identification procedure described in the latest version of AM0028 as required by the AM0034. Hence following checklist's questions are also relevant for this project.	☑	☑
B.1.21. Have all technically feasible baseline scenario alternatives (at least all scenarios listed under step 1a in AM0028, vers.5) to the project activity been identified and discussed by the PDD? Why can this list be considered as being complete?	2	Yes, all technically feasible baseline scenario alternatives been identified and discussed in the PDD version 1. The list can be considered as being complete because all options available from known methodologies have been reviewed.	☑	☑
B.1.22. Have all technically feasible alternatives (at least all scenarios listed under step 1b in AM0028, vers.4.2) to handle NOx emissions been identified and discussed by the PDD?	2	Yes, all technically feasible alternatives (at least all scenarios listed under step 1a in AM0028, vers.04.2) to handle NOx emissions been identified and discussed in the PDD. The list was reviewed and can be considered as being complete.	☑	☑
B.1.23. Does the project identify correctly and exclude those options not in line with regulatory or legal requirements (Step 2)?	2	Yes, it does.	☑	☑
B.1.24. Have applicable regulatory or legal requirements been identified?	2, 17	The existing regulation in Romania does not require implementation any technologies for N_2O abatement. See CL 5	**CL**	**FAR**

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
B.1.25. Is a complete list of barriers developed that prevent alternatives to occur (step 3a)?	2	Yes, it does. A complete list of barriers was developed.	☑	☑
B.1.26. Is transparent and documented evidence provided on the existence and significance of these barriers?	2	Yes, it does. The existence and significance of these barriers is discussed in the PDD in transparent manner.	☑	☑
B.1.27. Is it transparently shown that at least one of the alternatives (except the proposed JI project activity) is not prevented by the identified barriers (step 3b)?	2	Yes, it is. Continuation of the status quo, installation of a secondary catalytic DeN2O and new SCR DeNOx are not prevented by the identified barriers.	☑	☑
B.1.28. Does the PDD include an appropriate discussion if and how any alternatives generate financial or economic benefits (step 4)?	2	Yes, it does. There is an appropriate discussion on this question. It can be concluded that no alternatives would generate financial or economic benefits.	☑	☑
B.1.29. In case of Option I: Is the least costly alternative clearly identified?	2	The continuation of of the status quo is clearly identified as the least costly option.	☑	☑
B.1.30. In case of Option II: Is the most suitable financial indicator clearly identified?	-	N/A	☑	☑
B.1.31. In case of Option II: Is the calculation of financial figures for this indicator correctly done for all remaining alternatives?	-	N/A	☑	☑
B.1.32. In case of Option II: Is the investment analysis presented in a transparent manner providing public available proofs for data?	-	N/A	☑	☑
B.1.33. In case of Option II: Is the sensitivity analysis evidencing the robustness of the financial attractiveness of the selected baseline	-	N/A	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
scenario?				
B.1.34. In case of Option II: Have reasonable variations been applied in critical assumptions?	-	N/A	☑	☑
B.1.35. 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?	2, 18	In case of new or modified NOx or N_2O emission regulations a re-assessment of the baseline scenario should be executed as established in AM0028 (Step 5a: New or modified NOx emission regulations, and Step 5b: New or modified N_2O regulation).	☑	☑
B.1.36. In case of a re-assessment in the course of the project's lifetime: Have new base-line scenarios been properly discussed reflecting the altered situation?	-	N/A	☑	☑
B.1.37. 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?	2	In case of new or modified NOx or N_2O emission regulations a re-assessment of the baseline scenario should be executed as established in AM0028 (Step 5a: New or modified NOx emission regulations, and Step 5b: New or modified N_2O regulation).	☑	☑
B.1.38. In case of a re-assessment in the course of the project's lifetime: Have new base-line scenarios been properly discussed reflecting the altered situation?	2	N/A	☑	☑
B.1.39. Is the baseline identified appropriately as a result?	2	Yes, the baseline scenario- the continuation of N_2O emission to the atmosphere (without the installation of N_2O destruction or abatement technologies and technologies that indirectly reduce N_2O emissions) and installation of a new SCR DeNOx unit- is identified appropriately as a result.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
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. Does the PDD indicate which of the following approaches for demonstrating additionality is used? a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to ERs; b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality" or any other method for proving additionality approved by the CDM Executive Board.	2	The additionality of the project activity is demonstrated and assessed using the "Tool for demonstration and assessment of additionality" version 5.2.	☑	☑
B.2.2. Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	2	Yes, it does. Furthermore the AM0034, which elements have been applied in this project activity, requires using the additionality tool for additionality assessment and demonstration.	☑	☑
B.2.3. If the approach (c) was chosen (additionality tool), are all explanations, descriptions and analyses made in accordance with the selected tool/method?	2	Because of the similarity of both approaches used to determine the baseline scenario and the additionality tool, Step 1 of the "Tool for the demonstration and assessment of additionality" was omitted while assessing the additionality. Consistency was ensured between the determination of the baseline scenario and the dem-	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
		onstration of additionality. Furthermore acc. to AM0034 the baseline scenario alternative selected in the previous section shall be used when applying Steps 2 to 5 of the "Tool for the demonstration and assessment of additionality".		
B.2.4. In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?	2	As in chapter B.2 the investment analysis has been selected as the appropriate choice of possible methods.	☑	☑
B.2.5. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than JI income?	2	It is clearly shown that there is no economical benefit by the reduction of N_2O concentration other than the JI revenues. **Clarification Request No.7** According to the additionality tool the costs related to the JI project have to be documented and clearly listed in the PDD. Please amend the PDD accordingly.	**CL**	☑
B.2.6. 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)?	2	N/A	☑	☑
B.2.7. In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	-	N/A	☑	☑
B.2.8. 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?	-	N/A	☑	☑
B.2.9. In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the util-	-	N/A	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
ized data?				
B.2.10. 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?	-	N/A	☑	☑
B.2.11. In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?	-	N/A	☑	☑
B.2.12. 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?	-	N/A	☑	☑
B.2.13. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD ?	2	Yes, other N_2O similar JI projects in Romania are AzoMures and DonauChem.	☑	☑
B.2.14. If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the JI component (step 4b)?	2	Yes, the project would not be implemented without JI component because there are no legal requirements for reduction of N_2O emissions and there are no other revenues except JI.	☑	☑
B.2.15. 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)?	2	As there is no other incentive than the JI this criterion is fulfilled.	☑	☑
B.2.16. Are sufficient additionality proofs provided?	2	Sufficient proofs have been provided to justify the simple cost analysis conducted in order to demonstrate additionality. However see CL in B.2.5.	**CL**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
B.2.17. Is the additionality demonstrated appropriately as a result?	2	Yes, additionality was demonstrated appropriately as a result.	☑	☑
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. If the JI specific approach is used: Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: a) Under the control of the project participants? b) Reasonably attributable to the project? c) Significant?	2	<table><tr><th>Boundary checklist</th><th>Yes / No</th></tr><tr><td>Source and gas(es) discussed in the PDD?</td><td>Yes</td></tr><tr><td>Is a definition of the boundary based on case-by-case assessment acc. to §32 (a) of DVM?</td><td>Yes</td></tr><tr><td>Is the delineation of the boundary described by using a figure/flow chart?</td><td>No, see CAR in B.3.4</td></tr><tr><td>Inclusion / exclusion justified?</td><td>Yes</td></tr><tr><td>Explanation / Justification sufficient?</td><td>No</td></tr><tr><td>Consistency with monitoring plan?</td><td>Yes</td></tr></table> Please refer to the CAR (B.3.4).	**CAR**	☑
B.3.2. If the approved CDM methodology is used: Is the project boundary defined in accordance with the approved CDM methodology?	-	N/A	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
B.3.3. Source: Waste stream exiting the stack of the Nitric Acid plant (Burner inlet to stack) Gas(es): N2O Type: Baseline Emissions and Project Emissions	2	<table><tr><th>Boundary checklist</th><th>Yes / No</th></tr><tr><td>Source and gas(es) discussed in the PDD?</td><td>Yes</td></tr><tr><td>Inclusion / exclusion justified?</td><td>Yes</td></tr><tr><td>Explanation / Justification sufficient?</td><td>Yes</td></tr><tr><td>Consistency with monitoring plan?</td><td>Yes</td></tr></table>	☑	☑
B.3.4. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the PDD (plant specific flow diagram)?	2	Yes, they do. The boundaries as verified on-site are in compliance with the discussion in the PDD. The project boundary covers the shop of non-concentrated nitric acid production from the inlet to the AORs until monitoring points after recovery boilers. There is one stack. **Corrective Action Request No.6.** In order to demonstrate project boundary clearly and transparently revised PDD has to be amended by including a plant specific flow diagram or at least JI related measuring points/equipment shall be identified on the diagram presented in Figure 4 from PDD. Furthermore the situation with the 4th AOR installed on-site should be clarified taking into account its possible impact on the plant's operating parameters.	**CAR**	☑
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. Are the name(s) of the person(s)/entity(ies) whom setting the baseline	2	Yes, the names of the persons and entity that set the baseline emission are available.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
available?				
B.4.2. Is the date of baseline setting available?	2	Yes, November 2010. See CAR in B.1.5.	**CAR**	☑
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 in the PDD and reasonable?	2	Yes, the project starting date is identified in the PDD, 21/04/2008, the date of the signature of the contract with the project developer.	☑	☑
C.1.2. Is the starting date of the project after the beginning of 2000?	2	Yes, the project started after the beginning of 2000 (the starting date of the project is April 24th 2008).	☑	☑
C.2. Expected operational lifetime of the project:				
C.2.1. Is the expected operational lifetime of the project clearly defined in the PDD in years and months and reasonable?	2	The expected operational lifetime of the project is 10 years.	☑	☑
C.3. Length of the crediting period:				
C.3.1. Is the assumed crediting period clearly defined in the PDD in years and months and reasonable?	2	The length of crediting period has been set 10 years and starting date is March 1, 2011. However please refer to CAR below. **Corrective Action Request No.7.** The crediting period shall not extend beyond the operational lifetime of the project. However whether the end of the crediting period can be after 2012 subject to the approval by the host Party. Thus please clarify that and amend chapter C.3 of the PDD by setting the length of crediting period in years and months as required by the Guidelines for users of the JI PDD form, version 4.	**CAR**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
C.3.2. Is the starting date of the crediting period on or after the date of the first emission reductions generated by the project?	2	Yes, the starting date of the crediting period March 1st, 2011, when the secondary catalyst is planned to be installed and the project is expected to generate the first emission reductions.		
C.3.3. Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and doesn't extend beyond the operational lifetime of the project?	2	Yes, it is clearly stated in the section C of the PDD.	☑	☑
C.3.4. If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of ERs presented separately for those until 2012 and those after 2012?	2	Yes, it is clearly stated in the section C.3 of the PDD. The estimates of emission reductions are presented separately for those until and those after 2012 in section A.4.3.1. of the PDD..	☑	☑
D. Monitoring plan				
D.1. Description of monitoring plan chosen:				
D.1.1. Does the PDD explicitly indicate which of the following approaches is used? - JI specific approach - Approved CDM methodology approach	2	The first version of the PDD mentions the approved CDM methodology AM0034 to be used as a basis for this project activity. 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 fitting to the baseline and project scenario of this project. Nevertheless it is not directly applicable due to various distinctions between the assumptions of the methodology and the real situation at Chemgas plant. Please refer to CAR in section B.1.1 and other CLs and CARs in section B of this checklist.	**CAR CL**	☑
D.1.2. If the monitoring plan indicates overlapping monitoring periods during the crediting period, is the underlying project composed of	-	N/A	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
clearly identifiable components for which emission reductions can be calculated independently?				
D.1.3. If the monitoring plan indicates overlapping monitoring period during the crediting period, can monitoring be performed independently for each of these components (i.e. the data/parameters monitored for one component are not dependent on/effect data/parameters to be monitored for another component)?	-	N/A	☑	☑
D.1.4. If the monitoring plan indicates overlapping monitoring periods during the crediting period, does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the JI guidelines and further guidance by the JISC regarding monitoring are met?	-	N/A	☑	☑
D.1.5. If the monitoring plan indicates overlapping monitoring period during the crediting period, does the monitoring plan explicitly provide for overlapping monitoring periods of clearly defined project components, justify its need and state how the conditions mentioned above are met?	-	N/A	☑	☑
D.1.6. Is the uncertainty of key parameters described and, where possible, is in uncertainty range at 95% confidence level for key	2, 27	The uncertainty of the key parameters is clearly described in the PDD. In doing so the PDD explicitly follows the AM0034 (UNC of the AMS, calculation of the 95% confidence level for the meas-	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
parameters for the calculation of ERs provided?		ured values etc.).		
D.1.7. Does the monitoring plan identify a national or international monitoring standard incl. a reference to its detailed description, if such applied to the project?	2	Yes, the monitoring plan identifies all applicable national and international monitoring standards (section D of the PDD) incl. a detailed description (Annex 3).	☑	☑
D.1.8. Are the statistical techniques used in a conservative manner?	2, 3	The statistical techniques used explicitly follow the approved CDM methodology AM0034.	☑	☑
D.1.9. Does the monitoring plan present the QA/QC procedures for the monitoring process (e.g. QA for AMS acc. to EN14181)?	2	On the day of plant inspection the AMS was installed on-site. ABB's declaration of conformity for the gas analyzer of AMS, according to requirements of EN 14956 and QAL1 according to EN 14181 has been submitted to the audit team (IRL 22). Also according to the JI project implementation plan the QAL2 is planned by PPs after installation of AMS. **Forward Action Request No.2** During the on-site visit the quality assurance and quality control procedure have been discussed while TÜV SÜD assessment team underlined the importance of such procedures for the future data quality. The project proponents provided a draft version of a so called "JI Manual" - Procedure PO-231-01 – (IRL 34) which comprises description of the work scope as well as tasks of responsible personnel. The project manager agreed to amend the existing JI Manual by including further information on qualification requirements and continuous training for responsible staff, procedures on the data treatment acc. to AM0034 rules and requirements (e.g. downtime of AMS), QAL 3 procedures, JI project related documentation procedures, troubleshooting procedures, list of the spare equipment, provisions for the data quality in case of data recording in the hand written logbooks and manual data	**FAR**	**FAR**

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
		transfer etc. During the first periodic verification the PPs will provide the JI Manual to a verifying entity.		
D.1.10. Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	2	The PDD (section D.3) provides the operational and management structure as to the proposed JI project. **Corrective Action Request No.8.** The responsibilities chart presented in D.3 contains JISC as one of the responsible authorities within the project cycle; however the national DFP of Romania is not included. Please clarify and correct the responsibilities chart taking into account that the project is a JI Track 1 one. Furthermore several editorial corrections should be conducted in the PDD (replace CDM with JI, correct data units, correct wording used in B.2, parameter tables seem to be doubled in chapter D.1.1 and B.1, the responsibilities diagram on p. 63 does not mention InterAgro etc.)	**CAR**	☑
D.1.11. Is the inclusion of external accredited services providers for calibration and function tests foreseen in the planning of the project?	2	The inclusion of external accredited services providers for calibration and function tests according to the EN14181 is foreseen in the planning of the project.	☑	☑
D.1.12. Are the specific performance characteristics of the monitoring system chosen by the project listed in the PDD	2	The specific performance characteristics of the monitoring system chosen by the PPs are listed in the PDD.	☑	☑
D.1.13. Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type?	2	Yes, the monitoring plan provides current good monitoring practice. However please also refer to CAR (B.1.1.).	**CAR**	☑
D.1.14. Does the monitoring plan provide, in tabular form, a complete compilation of the	2	Yes the monitoring plan provided the relevant data in tabular form (section D of the PDD), however please refer to the CARs below	**CAR**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
data to be collected for its application incl. data that are measured / sampled and data collected from other sources, but not including data that are calculated with equations?		in this checklist.		
D.1.15. Does the monitoring plan indicate that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project?	2	Yes, the monitoring plan indicates that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project	☑	☑
JI specific approach *(project specific methodology or selected elements or combinations of approved CDM methodologies or methodological tools)*				
D.1.16. Does the monitoring plan describe all relevant factors/ key characteristics to be monitored, all decisive factors for the control and reporting of project performance and the period in which they will be monitored?	2	Yes, the monitoring plan describes all relevant factors/ key characteristics to be monitored, all decisive factors for the control and reporting of project performance and the period in which they will be monitored. However please refer to the CARs below in this checklist.	**CAR**	☑
D.1.17. If default values are used: - Are accuracy and reasonableness carefully balanced in their selection? - Do the default values originate from recognized sources? - Are the default values supported by statistical analyses providing reasonable confidence levels? - Are the default values presented in a transparent manner?	2	The PDD demonstrates clearly, transparently and in accordance with AM0034 the provisions for any default values which are applied during the crediting period. However see CARs above (A.4.3.2, B.1.1 etc.).	**CAR**	☑
D.1.18. For those default values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values	2	The PDD clearly specify EFreg- emissions level set by incoming policies or regulations- to be monitored prior to the preparation of each monitoring report, updated every time if new regulations come into force and archive the data during project crediting pe-	**CAR**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
are to be selected and justified?		riod. However, see CAR above for the EF for the baseline (A.4.3.2).		
D.1.19. For other default values: - Does the monitoring plan clearly indicate the precise references from which these values are taken? - Is the conservativeness of the values provided justified?	2	See above.	**CAR**	☑
D.1.20. For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	2	See FAR in D.1.9.	**FAR**	**FAR**
D.1.21. Does the monitoring plan draw on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring"?	2	Yes, it does.	☑	☑
D.1.22. Does the monitoring plan explicitly and clearly distinguish: a) Data and parameters that are not monitored throughout the crediting period, but are determined only once and thus remain fixed throughout the crediting period, and that are available already at the stage of determination? b) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination?	2	Yes, it does. The monitoring plan explicitly and clearly distinguishes such data and parameter as required by the AM0034 which elements have been applied.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
c) Data and parameters that are monitored throughout the crediting period?				
D.1.23. Does the monitoring plan describe the methods employed for data monitoring (incl. its frequency) and recording?	2	Yes, the monitoring plan describes the monitoring methods, frequency and recording in complete manner. However pls. see CAR below.	☑	☑
D.1.24. Is information on the margins of errors and the cumulative error for the complete measurement system provided in the PDD?	2	As AMS has not been performed yet the QAL 2 test, the PDD, version 1, provides preliminary typical measurement uncertainty of the monitoring system required for ex-ante estimation of baseline emissions. Please refer to CAR in B.1.1.	**CAR**	☑
D.1.25. Are the requirements on the treatment of downtime of the AMS clearly reflected in the envisioned calculation routines?	2	**Corrective Action Request No.9.** The PDD should be amended by including information on the data treatment in case AMS downtime.	**CAR**	☑
D.1.26. Is the monitoring plan established appropriately as a result?	2	Yes, the monitoring plan is established appropriately.	☑	☑
Approved CDM methodology approach				
D.1.27. Are all explanations, descriptions and analyses pertaining to monitoring in the PDD made in accordance with referenced approved CDM methodology?	-	N/A	☑	☑
D.1.28. Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	-	N/A	☑	☑
D.1.29. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	-	N/A	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
D.1.30. Is the operational and management structure clearly described and in compliance with the envisioned situation?	-	N/A	☑	☑
D.1.31. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	-	N/A	☑	☑
D.1.32. Has the monitoring system installed using the European Norm 14181 (2004)?	-	N/A	☑	☑
D.1.33. Will the three quality assurance levels been met by the planned Automated Measuring System (AMS) according to the EN14181?	-	N/A	☑	☑
D.1.34. Are the specific performance characteristics of the monitoring system chosen by the project listed in the PDD?	-	N/A	☑	☑
D.1.35. Is information on the margins of errors and the cumulative error for the complete measurement system provided in the PDD?	-	N/A	☑	☑
D.1.36. Are the requirements on the treatment of downtime of the AMS clearly reflected in the envisioned calculation routines?	-	N/A	☑	☑
D.1.37. Is the monitoring plan established appropriately as a result?	-	N/A	☑	☑
D.2. Data and parameters not monitored- determination of the permitted ranges for the operating parameters				
D.2.1. Does the PDD explicitly indicate which of following sources were used for determination of the permitted ranges for the operating parameters:	2, 14	The permitted operation conditions are based on the historical campaigns.	**CAR**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
(a) Historical data from the immediately previous five campaigns. (or fewer, if the plant has not been operating for five campaigns). (b) If no data on historical data is available, the range stipulated in the operating manual for the existing equipment; or (c) If no operating manual is available or the operating manual gives insufficient information, from an appropriate technical literature source?		**Corrective Action Request No.10.** The project proponents are requested to revise the approach of establishing the permitted operating ranges, taking into account the operating conditions of each AOR separately. These permitted operating ranges should be in connection with the present status of operation: 3 AOR instead of 4 AOR as designed. Statistical analysis as described in chapter D.1.1.4 of the PDD has to be applied. The evaluation sheet has to be provided to the assessment team for check. Any documentation confirming the historical data (plant records, operating manual etc.) has to be provided together with the evaluation sheet in order to demonstrate that those ranges are within the specifications of the facility. The PDD has to be revised accordingly.		
D.2.2. In case option (a) is selected, has a proper statistical analysis of the historical data been conducted as required by AM0034?	2, 14	Please refer to the comments in D.2.1.	**CL**	☑
D.2.3. Once the permitted ranges of the operating parameters are determined, is it demonstrated that those ranges are within the specifications of the facility?	2, 14	Please refer to the comments in D.2.1.	**CL**	☑
D.2.4. Parameter: OT_{normal} Normal operating temperature (of line i)	2, 14	Monitoring Checklist / Yes / No Title in line with methodology? — Yes Data unit correctly expressed? — Yes Appropriate description of parameter? — CAR Source clearly referenced? — Yes Correct value provided for estimation? — N/A Has this value been verified? — N/A Measurement method correctly described? — CAR	**CAR**	☑

<table>
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<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>CAR</td></tr>
<tr><td>QA/QC procedures appropriate?</td><td>CAR</td></tr>
</table>
Please refer to the CAR in D.2.1.
The value is to be verified later by the verifying entity.
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<tr><td>D.2.5. Parameter:
OP_{normal}
Normal operating pressure (of line i)</td><td>2, 14</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>CAR</td></tr>
<tr><td>Source clearly referenced?</td><td>Yes</td></tr>
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<tr><td>Indication of accuracy provided?</td><td>Yes</td></tr>
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<tr><td>QA/QC procedures appropriate?</td><td>CAR</td></tr>
</table>
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</td><td>**CAR**</td><td>☑</td></tr>
<tr><td>D.2.6. Parameter:
$AFR_{max,i}$
Maximum ammonia gas flow rate to the AOR (of line i)</td><td>2, 14</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>CAR</td></tr>
<tr><td>Source clearly referenced?</td><td>Yes</td></tr>
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</td><td>**CAR**</td><td>☑</td></tr>
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<tr><td>Measurement method correctly described?</td><td>CAR</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>CAR</td></tr>
<tr><td>QA/QC procedures appropriate?</td><td>CAR</td></tr>
</table>
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The value is to be verified later by the verifying entity.
</td><td></td><td></td></tr>
<tr><td>D.2.7. Parameter:
$AIFR_{max}$
Maximum ammonia to air ratio</td><td>2, 14</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>CAR</td></tr>
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<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>CAR</td></tr>
<tr><td>QA/QC procedures appropriate?</td><td>CAR</td></tr>
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</td><td>CAR</td><td>☑</td></tr>
<tr><td>D.2.8. Parameter:
GS_{normal}
Normal gauze supplier for the operation</td><td>2, 14, 12</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>
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<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>Pub-lished PDD</th><th>Final PDD</th></tr>
<tr><td>condition campaigns (of line i)</td><td></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>
Please refer also to the CAR in D.2.1.
The value is to be verified later by the verifying entity.</td><td></td><td></td></tr>
<tr><td>D.2.9. Parameter:
GC_{normal}
Gauze composition during the operation campaign</td><td>12</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>
Please refer also to the CAR in D.2.1.
The value is to be verified later by the verifying entity.</td><td>CAR</td><td>☑</td></tr>
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<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>Pub-lished PDD</th><th>Final PDD</th></tr>
<tr><td>D.2.10. Parameter:
CL_{normal}
Normal campaign length (of campaign n of line i)</td><td>2</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>CAR</td></tr>
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<tr><td>QA/QC procedures described?</td><td>CAR</td></tr>
<tr><td>QA/QC procedures appropriate?</td><td>CAR</td></tr>
</table>
<u>Corrective Action Request No.11.</u>
As mentioned in PDD, the nitric acid production is monitored with level meters installed in the storage tanks. A possibility of cross-check should be included in PDD (mass balance analysis with NH3 input for the HNO3 flow, ammonium nitrate production, etc). Also lab analysis results for HNO3 concentration should be discussed. Please also refer to the comments in D.2.1.
Please refer to the CAR in D.2.1.
The value is to be verified later by the verifying entity.</td><td>CAR</td><td>☑</td></tr>
<tr><td>D.2.11. Does the PDD explicitly state the design capacity of the plant?
By nameplate (design) implies the total yearly capacity (considering 365 days of operation per year) as per the documentation of the</td><td>2, 10</td><td><u>Corrective Action Request No.12.</u>
The design capacity of 240,000 t/year mentioned in the PDD and used in calculations is based on 4 AOR. If the present situation with 3 AOR in operation is considered to be permanent, a new design capacity should be calculated and used in PDD and Excel calculation. However in “ERUs calculations Chemgas and Nitro-</td><td>CAR</td><td>☑</td></tr>
</table>

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
plant technology provider (such as the Operation Manual).		poros.xlsx" the plant design capacity of 725 t of Nitric Acid per day is used, and calculated for 331 days. Please also specify if this capacity is for 3 or 4 reactors and provide respective evidence. In case no exact figure for annual design capacity is confirmed by the technical documents, please justify the use of 331 days by providing the plant production records for the previous production periods..		
D.3. Monitoring of the emissions in the project scenario and the baseline scenario:				
D.3.1. **Data to be collected in order to monitor emissions from the project and how these data will be archived:**				
D.3.1.1. 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?	2	Yes, it is. All parameters required for monitoring of project emissions, determining of baseline emissions and how these data will be calculated and archived are presented in tables D.1.1.1 and D.1.1.3 of the PDD, respectively.	☑	☑
D.3.1.2. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	2	Yes, it is	☑	☑
Integrate the required amount of sub-checklists for monitoring parameter and comment on any line answered with "No"				
D.3.1.3. Parameter Title: $NCSG_{PC, i}$ N2O concentration in the stack gas (of line i)	2	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	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		Correct reference to standards? Yes Indication of accuracy provided? N/A QA/QC procedures described? Yes QA/QC procedures appropriate? Yes The value is to be verified later by the verifying entity.		
D.3.1.4. Parameter Title: $VSG_{PC, i}$ Volume flow rate of the stack gas in project campaign (of line i)	2	Monitoring Checklist / Yes / No Title in line with methodology? Yes Data unit correctly expressed? Yes Appropriate description of parameter? Yes Source clearly referenced? Yes Correct value provided for estimation? N/A Has this value been verified? N/A Measurement method correctly described? Yes Correct reference to standards? Yes Indication of accuracy provided? N/A QA/QC procedures described? Yes QA/QC procedures appropriate? Yes The value is to be verified later by the verifying entity.	☑	☑
D.3.1.5. Is the application of the methodological requirements for re- calculation of the $EF_{baseline}$ when the project campaign length is shorter than normal campaign length (EB 51 Annex 12) correctly described in the PDD?	2	**Corrective Action Request No.13.** There is confusion between CLnormal and CLn at page 62 of the PDD. Please correct	**CAR**	☑

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<tr><td>D.3.1.6. Parameter Title:
$OH_{PC, i}$
Operating hours
in project campaign (of line i)</td><td>2</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>CL</td></tr>
<tr><td>Source clearly referenced?</td><td>CL</td></tr>
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<tr><td>Indication of accuracy provided?</td><td>N/A</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 oxidation temperature is used for check of plant status.
If hourly oxidation temperature value is lower than 750^{o}C, plant status is treated like OFF for such monitored hour. However:

<u>Clarification Request No.8</u>
The source/control data used for monitoring of operation hours of baseline and project campaigns should be clearly described in revised PDD. Furthermore the on/off criteria for the plant operation (e.g. trip values) should be clearly defined</td><td>CL</td><td>☑</td></tr>
<tr><td>D.3.1.7. Parameter Title:
NAP_{PC}
Nitric acid (100% concentrated) over the project campaign
(of line i)</td><td>2</td><td>
<table>
<tr><th>Monitoring Checklist</th><th>Yes / No</th></tr>
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<tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr>
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<tr><td>D.3.1.8. Parameter Title:
TSG
Temperature of stack gas
(of line i)</td><td>2</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>
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<tr><td>Appropriate description of parameter?</td><td>Yes</td></tr>
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<tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr>
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<tr><td>D.3.1.9. Parameter Title:
PSG
Pressure of stack gas
(of line i)</td><td>2</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>
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<tr><td>D.3.1.10. Parameter Title:
AFR
Ammonia gas flow rate to the AOR
(of line i)</td><td>2</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>
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<tr><td>Measurement method correctly described?</td><td>Yes</td></tr>
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<tr><td>QA/QC procedures described?</td><td>Yes</td></tr>
<tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr>
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<tr><td>D.3.1.11. Parameter Title:
AIFR
Ammonia to Air ratio
(of line i)</td><td>2</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>
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		Correct value provided for estimation? N/A Has this value been verified? N/A Measurement method correctly described? Yes Correct reference to standards? Yes Indication of accuracy provided? N/A QA/QC procedures described? Yes QA/QC procedures appropriate? Yes The value is to be verified later by the verifying entity.		
D.3.1.12. Parameter Title: OT_h Oxidation temperature for each hour (of line i)	2	Monitoring Checklist / Yes / No Title in line with methodology? Yes Data unit correctly expressed? Yes Appropriate description of parameter? Yes Source clearly referenced? Yes Correct value provided for estimation? N/A Has this value been verified? N/A Measurement method correctly described? Yes Correct reference to standards? Yes Indication of accuracy provided? N/A QA/QC procedures described? Yes QA/QC procedures appropriate? Yes The value is to be verified later by the verifying entity.	**CAR**	☑
D.3.1.13. Parameter Title: OP_h Oxidation Pressure for each hour (of line i)	2	Monitoring Checklist / Yes / No Title in line with methodology? Yes Data unit correctly expressed? Yes Appropriate description of parameter? Yes Source clearly referenced? Yes	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		Correct value provided for estimation? N/A Has this value been verified? N/A Measurement method correctly described? Yes Correct reference to standards? Yes Indication of accuracy provided? N/A QA/QC procedures described? Yes QA/QC procedures appropriate? Yes The value is to be verified later by the verifying entity.		
D.3.1.14. Parameter Title: $GS_{Project}$ Gauze supplier for project campaign (of line i)	2, 20	Monitoring Checklist / Yes / No Title in line with methodology? Yes Data unit correctly expressed? Yes Appropriate description of parameter? Yes Source clearly referenced? Yes Correct value provided for estimation? N/A Has this value been verified? N/A Measurement method correctly described? Yes Correct reference to standards? N/A Indication of accuracy provided? N/A QA/QC procedures described? Yes QA/QC procedures appropriate? Yes The value is to be verified later by the verifying entity.	☑	☑
D.3.1.15. Parameter Title: $GC_{Project}$, Gauze composition during project campaign (of campaign n of of line i)	2, 20	Monitoring Checklist / Yes / No Title in line with methodology? Yes Data unit correctly expressed? Yes Appropriate description of parameter? Yes Source clearly referenced? Yes	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		Correct value provided for estimation? N/A Has this value been verified? N/A Measurement method correctly described? Yes Correct reference to standards? Yes Indication of accuracy provided? N/A QA/QC procedures described? Yes QA/QC procedures appropriate? Yes The value is to be verified later by the verifying entity.		
D.3.1.16. Parameter Title EF_{reg} Emissions level set by incoming policies or regulations	2	Monitoring Checklist / Yes / No Title in line with methodology? Yes Appropriate description of parameter? Yes Source clearly referenced? Yes Correct value provided for estimation? N/A Has this value been verified? N/A QA/QC procedures described? Yes QA/QC procedures appropriate? Yes The value is to be verified later by the verifying entity.	☑	☑
D.3.2. **Description of formulae used to estimate <u>project</u> emissions (for each gas, source etc.; emissions in units of CO_2 equivalent**				
JI specific approach				
D.3.2.1. Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of project emissions?	2	Pls. refer to A.4.3.2	**CL**	☑
D.3.2.2. Is the underlying rationale for the algorithms/formulae explained?	2	Yes, the underlying rationale for the formulae is explained. However see A.4.3.2	**CL**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
D.3.2.3. For the equations presented: - Are consistent variables, equation formats, subscripts etc. used? - Are all equations numbered? - Are all variables, with units indicated defined?	2	Pls. refer to A.4.3.2	**CL**	☑
D.3.2.4. Is the conservativeness of the algorithms/procedures justified?	2	Yes, the conservativeness of the algorithms is justified in the PDD. However see A.4.3.2	**CL**	
D.3.2.5. To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	2	In order to consider the level of uncertainty (UNC) for AMS and possible error propagation, the overall UNC will be calculated using the Gauss's law of error propagation. In such way all the relevant uncertainties arising from the individual performance characteristics of the AMSs components will be considered. The resulting UNC will be than used in order to reduce the baseline emission factor. This issue will be checked during the first verification, when QAL 2 result will be available.	☑	☑
D.3.2.6. Is it justified that the procedure is consistent with standard technical procedures in the sector?	2	Yes, it is justified. Furthermore the procedure for estimation/ calculation of the project emissions is based on the one proposed by the AM0034, it was just adapted to the needs of this particular project activity.	☑	☑
D.3.2.7. 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?	2	Yes, however see A.4.3.2.	**CL**	☑
D.3.2.8. Are implicit and explicit key assump-	2	Yes, all key assumptions are described in a transparent and com-	**CL**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
tions explained in a transparent manner?		plete manner. However pls. refer to A.4.3.2		
D.3.2.9. Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncer-tainty is to be addressed?	2	Yes, it is. See also comments to D.3.2.5.	☑	☑
Approved CDM methodology approach				
D.3.2.10. Are the formulae required for the de-termination of project emissions correctly pre-sented, enabling a complete identification of parameter to be used and / or monitored?	-	N/A	☑	☑
D.3.2.11. Are the formulae required for the deri-vation of a moving average emission factor correctly presented, enabling a complete iden-tification of parameter to be used and / or monitored?	-	N/A	☑	☑
D.3.3. **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:**				
D.3.3.1. Is the list of parameters monitored in chapter D.1.3. considered to be complete with regard to the requirements of the applied methodology?	2	Yes, it is.	☑	☑
D.3.3.2. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	2	The data provided in this section are in consistency with data as presented in other chapters of the PDD.	☑	☑
Integrate the required amount of sub-checklists for monitoring parameter and comment on any line answered with “No”				

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>Pub-lished PDD</th><th>Final PDD</th></tr>
<tr><td>D.3.3.3. Parameter Title:
$NCSG_{BC, i}$
N2O concentration in the stack gas in baseline campaign (of line i)</td><td>2</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>N/A</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.3.3.4. Parameter Title:
$VSG_{BC, i}$
Volume flow rate of the stack gas in baseline campaign (of line i)</td><td>2</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>N/A</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>Pub-lished PDD</th><th>Final PDD</th></tr>
<tr><td>D.3.3.5. Parameter Title:
$CL_{BC, i}$
Baseline campaign length (of line i)</td><td>2,14</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>N/A</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.3.3.6. Is the application of the methodological requirements to calculate the EFbaseline when the baseline campaign length is longer/shorter than normal campaign length (EB 51 Annex 12) correctly described in the PDD?</td><td>2</td><td>See D.3.1.5.</td><td>CAR</td><td>☑</td></tr>
<tr><td>D.3.3.7. Parameter Title:
$OH_{BC, i}$
Operating hours in baseline campaign (of line i)</td><td>2</td><td><table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>CAR</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>CAR</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></table></td><td>CAR</td><td>☑</td></tr>
</table>

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		Correct reference to standards? — Yes Indication of accuracy provided? — Yes QA/QC procedures described? — CAR QA/QC procedures appropriate? — CAR Please refer to CAR in D.2.1. The value is to be verified later by the verifying entity.		
D.3.3.8. Parameter Title: $NAP_{BC, i}$ Nitric Acid production (100% concentrated) over baseline campaign (of line i)	2	Monitoring Checklist — Yes / No Title in line with methodology? — CAR Data unit correctly expressed? — CAR Appropriate description of parameter? — CAR 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 Please refer to CAR in D.2.10. The value is to be verified later by the verifying entity.	**CAR**	☑
D.3.3.9. Parameter Title: TSG_i Temperature of stack gas (of line i)	2	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	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	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 The value is to be verified later by the verifying entity.		
D.3.3.10. Parameter Title: PSG_i Pressure of stack gas (of line i)	2	Monitoring Checklist: Yes / No Title in line with methodology? No 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.3.3.11. Parameter Title: $GS_{BC, i}$ Gauze supplier for the baseline campaign (of line i)	2,12	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	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		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.3.3.12. Parameter Title: $GC_{BC, i}$ Gauze composition during baseline campaign (of line i)	2, 12	Monitoring Checklist / Yes / No Title in line with methodology? Yes Data unit correctly expressed? N/A 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.3.3.13. Parameter Title: $OP_{h, i}$ Oxidation Pressure for each hour (of line i)	2	Monitoring Checklist / Yes / No Title in line with methodology? CAR 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	**CAR**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		Correct reference to standards? Yes Indication of accuracy provided? Yes QA/QC procedures described? Yes QA/QC procedures appropriate? Yes Please refer to CAR in D.2.1. The value is to be verified later by the verifying entity.		
D.3.3.14. Parameter Title: $OT_{h, i}$ Oxidation Temperature for each hour (of line i)	2	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.	**CAR**	☑
D.3.3.15. Parameter Title: AFR_{i} Ammonia gas flow rate (of line i)	2	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	☑	☑

<table>
<tr><th>CHECKLIST TOPIC / QUESTION</th><th>Ref.</th><th>COMMENTS</th><th>Pub-lished PDD</th><th>Final PDD</th></tr>
<tr><td></td><td></td><td>
<table>
<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.3.3.16. Parameter Title:
$AIFR_i$
Ammonia to Air Flow Ratio
(of line i)</td><td>2</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.3.3.17. Parameter Title:
EF_{reg}
Emissions level set by incoming policies or regulations</td><td>2</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>N/A</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>
</table>
</td><td>☑</td><td>☑</td></tr>
</table>

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
		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.3.3.18. Parameter Title: UNC_i Overall measurement uncertainty of the monitoring system (of line i)	2	Monitoring Checklist / Yes / No Title in line with methodology? Yes Data unit correctly expressed? Yes Appropriate description of parameter? Yes Source clearly referenced? Yes Correct value provided for estimation? Yes Has this value been verified? N/A Measurement method correctly described? Yes Correct reference to standards? Yes The value is to be verified later by the verifying entity.	☑	☑
D.3.4. **Description of formulae used to estimate <u>baseline</u> emissions (for each gas, source etc.; emissions in units of CO_2 equivalent)**				
JI specific approach				
D.3.4.1. Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline emissions?	2	Pls. refer to A.4.3.2	**CL**	☑
D.3.4.2. Is the underlying rationale for the algorithms/formulae explained?	2	Yes, the underlying rationale for the formulae is explained. However see A.4.3.2	**CL**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
D.3.4.3. For the equations presented: - Are consistent variables, equation formats, subscripts etc. used? - Are all equations numbered? - Are all variables, with units indicated defined?	2, 27	Pls. refer to A.4.3.2	**CL**	☑
D.3.4.4. Is the conservativeness of the algorithms/procedures justified?	2	Yes, the conservativeness of the algorithms is justified in the PDD. However see A.4.3.2	**CL**	☑
D.3.4.5. To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	2	See comment to D.3.2.5	☑	☑
D.3.4.6. Is it justified that the procedure is consistent with standard technical procedures in the sector?	2	Yes, it is justified. Furthermore the procedure for estimation/ calculation of the baseline emissions is based on the one proposed by the AM0034, it was just adapted to the needs of this particular project activity.	☑	☑
D.3.4.7. Are implicit and explicit key assumptions explained in a transparent manner?	1, 2,	Yes, however see A.4.3.2	**CL**	☑
D.3.4.8. Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	1, 2	Yes, it is. See also comments to A.4.3.2	**CL**	☑
D.3.4.9. Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions of the baseline ensured?	1, 2	Yes, it is ensured. Furthermore the procedure for estimation/ calculation of the baseline emissions is based on the one proposed by the AM0034, it was just adapted to the needs of this particular project activity.	☑	☑
Approved CDM methodology approach				

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
D.3.4.10. Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions of the baseline ensured?	2	N/A	☑	☑
D.3.4.11. Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	2	N/A	☑	☑
D.3.4.12. Are the formulae required for the determination of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	2	N/A	☑	☑
***E.* Estimation of greenhouse gas emission reductions**				
E.1. Estimation of baseline and project emissions, leakage and emission reductions as a result				
E.1.1. Does the PDD provide ex ante estimates of - Project emissions - Leakage - Baseline emissions - Emission reductions	2	Please see the comments in A.4.3.2. There are no leakage emissions in the project.	**CL**	☑
E.1.2. Are the estimates given - On a periodic basis? - At least from the beginning until the end of the crediting period? - On a source-by-source basis? - In tones of CO2 equivalent using global	2	The estimates are given from the beginning until the end of the crediting period on monthly basis in tones of CO2 equivalent using global warming potential of N2O defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol?				
E.1.3. Are key factors influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project taken into account, as appropriate?	2	Please see the comments in A.4.3.2	CL	☑
E.1.4. Are data sources used for calculating the estimates clearly identified, reliable and transparent?	2	In principle yes, however see the comments in A.4.3.2	CL	☑
E.1.5. Are emissions factors (incl. default emission factors) used for calculating the estimates selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?	2	Yes, they are. In doing so project developers were guided by the AM0034. However see the comments in A.4.3.2	CL	☑
E.1.6. Is the estimation based on conservative assumptions and the most plausible scenarios in a transparent manner?	2	Please see the comments in A.4.3.2	CL	☑
E.1.7. Are the estimates of project emissions, baseline emissions and leakage consistent throughout the PDD?	2	Yes, the data provided in this section is consistent with data as presented in other chapters of the PDD. However please refer to A.4.3.2	CL	☑
E.1.8. Are the estimates of project emissions, baseline emissions and leakage transparent, feasible and mathematical correct calculated?	2	Please see the comments in A.4.3.2	CL	☑
E.1.9. If the calculation of the baseline emission is to be performed ex post, does the PDD include an illustrative ex ante emissions calcu-	2	Yes, the baseline emissions are calculated ex-ante by the PPs in order to estimate ERs.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Published PDD	Final PDD
lation?				
E.1.10. Is the projection of estimated project emissions, baseline emissions and leakage based on the same procedures as used for future monitoring?	2	The projection of estimated project emissions and baseline emissions is done by the same algorithms as used for later monitoring. Leakage does not exist in this project.	☑	☑
E.1.11. Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	2	No leakage exists in this project acc. to the methodology applied.	☑	☑
E.1.12. If approved CDM methodology approach is used, is the estimation of ERs made in accordance with the approved CDM methodology?	-	N/A	☑	☑
E.1.13. Are the formulae required for the determination of emission reductions correctly presented?	2	Yes, it is correctly presented in the PDD.	☑	☑
E.1.14. Will the project result in fewer GHG emissions than the baseline scenario?	2	The project activity will result in emission reductions.	☑	☑
E.1.15. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	2	Yes, the projection is in line with the project implementation plan.	☑	☑
E.1.16. Is the form/table required for the indication of projected emission reductions correctly applied?	2	Yes, it is.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
F. Environmental impacts				
F.1. Documentation on the analysis of the environmental impacts, including transboundary impacts				
F.1.1. Does the PDD list and attach documentation on the analysis of the environmental impacts (e.g. EIA) of the project, including transboundary impacts, in accordance with procedure as determined by the host Party?	2	**Clarification Request No.9** An EIA study for this project is not mandatory according to Romanian legislation. However an EIA has been conducted by the project participants voluntarily. Please amend the PDD accordingly.	**CL**	☑
F.1.2. Are the respective host Party requirements for an Environmental Impact Assessment (EIA) clearly referenced in the PDD?	2, 17,	N/A	☑	☑
F.1.3. Has the EIA conducted been approved by the host Party?	27	N/A	☑	☑
F.1.4. If the EIA indicates that the environmental impacts are considered significant by the project participants or/and the host party, does the PDD provide conclusion and all references to supporting documentation of an EIA undertaken in accordance with the procedures as required by the host Party?	27	N/A	☑	☑
G. Stakeholders' comments				
G.1. Brief description how comments by local stakeholders have been invited and compiled				
G.1.1. Have relevant stakeholders been consulted?	27	N/A	☑	☑
G.1.2. Have appropriate media been used to invite comments by local stakeholders?	27	N/A	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
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?	27	N/A	☑	☑
G.2. Summary of the comments received				
G.2.1. If stakeholder consultation was undertaken in accordance with procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	27	N/A	☑	☑
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?	27	N/A	☑	☑
G.3.2. If the AIE received comments on the PDD and any supporting information from Parties, stakeholders and UNFCCC accredited observers within the 30-day period, did the AIE promptly acknowledge the receipts of the comments?	-	No comments have been received during the 30-day period of PDD publishing.	☑	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
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?	2	Yes, it is.	☑	☑
H.1.2. Is the information on all private partici-pants and directly involved Parties presented?	2	Yes, it is.	☑	☑
H.2. Annex 2: Baseline information				
H.2.1. Does Annex 2 of the PDD provide key elements of the baseline and any supporting documentation/information?	2	Yes, Annex 2 provides ex-ante estimations of the key baseline parameters. However, **Forward Action Request No.6** Complete information regarding normal operating conditions (the normal OT, OP, AFR, AIFR, GS and GC) shall be provided during the first verification.	**FAR**	**FAR**
H.2.2. If additional background information on baseline data is provided: Is this information consistent with data presented by other sec-tions of the PDD?	2	Please see the comments in A.4.3.2.	**CL**	☑
H.2.3. Is the data provided verifiable? Has sufficient evidence been provided to the vali-dation team?	2	Please refer to A.4.3.2.	**CAR**	☑
H.3. Annex 3: Monitoring information				
H.3.1. If applicable: Does Annex 3 provide useful information enabling a better under-	2	Yes, it does.	**CAR**	☑

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	Pub-lished PDD	Final PDD
standing of the envisioned monitoring provisions?		However please refer to D.1.23.		
H.3.2. If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	2	Please refer to A.4.3.2.	**CL**	☑
H.3.3. Is the information provided verifiable? Has sufficient evidence been provided to the validation team?	2	See A.2.2	☑	☑
H.3.4. Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	2	Yes, it does.	☑	☑

Table 2 Resolution of Corrective Action and Clarification Requests

Corrective Action Requests by audit team			
	Comments and Results	Ref	Conclusion and IRL
Issue	**Corrective Action Request No.1.** Chapter A.2 of the PDD has to indicate the expected outcome of project scenario and briefly summarize the history of the project including information about implementation schedule of the project according to requirements of the Guidelines for users of the JI PDD form, version 3. Please adjust the PDD accordingly. A graphical representation of the time milestones (historical campaign – baseline – AMS installation – project starting date) should be included. In order to demonstrate the early JI consideration, please provide the directorate decision concerning the proposed JI project (minutes of the meeting etc.).	A.1.4	This issue is closed.
Response	Timeline with description of main steps is added to the PDD		
Assessment	The revised PDD v. 2.0, "JI_PDD_Chemgas -15-11-clean.pdf" (IRL 40) includes the project implementation schedule in Table 1 (page 4). The LoE (IRL 8) and the directorate decision concerning the proposed JI project and secondary catalyst supplier- "Chemgas-CAR1-Approval of the Contract with MGM and start up of the project.pdf", "Chemgas-CAR1-Decision about catalyst supplier.pdf" as well as agreements between the project participants - "Chemgas-CAR1-JI contract Chemgas InterAgro.pdf", "Chemgas-CR1-JI InterAgro-MGM agreement.pdf", (IRL 9) were also provided. All the evidence documents provided confirm the project history as described in the revised PDD.		
Issue	**Corrective Action Request No.2.** The minimum abatement efficiency of the secondary catalyst – as checked on site from the preliminary contract with BASF – is 83%. The PDD and Excel calculation files should be amended by taking into consideration the	A.4.2.2	This issue is closed.

	new value. The secondary catalyst supplier's approval and delivery contract signed (according to project implementation plan) should be provided to the confidential insight of the assessment team.		
Response	Corresponding changes have been made in Excel file and PDD. Plant is facing some problem while negotiating some terms of the contract with BASF. The talks are still in progress.		
Assessment	The Excel calculation file "Chemgas-CAR2-ERUs calculations -17-1-2011.xlsx" (IRL 41) and "JI_PDD_Chemgas -15-11-clean.pdf" – section E (IRL 40) have been cross checked. The warranted abatement efficiency of the secondary catalyst as per the BASF offer has been considered in the revised ER estimates.		
Issue	**Corrective Action Request No.3.** The crediting period lasts until the end of 2012. Whether the end of the crediting period can be after 2012 subject to the approval by the host Party. Thus please split the table with the ERs estimates presented in chapter A.4.3.1 and provide the estimates for the first commitment period in complete manner (years of the crediting period, total estimated ERs, annual average of estimated ERs over the crediting period) as required by Guidelines for users of JI PDD Form v.04.	A.4.4.1	This issue is closed.
Response	Tables have been updated		
Assessment	Chapter A.4.3.1, "JI_PDD_Chemgas -15-11-clean.pdf" (IRL 40) has been checked. The ER estimates are now in accordance with the Guidance for users of JI PDD Form v.04		
Issue	**Corrective Action Request No.4.** Taking into account the plant specific gauze replacement (see PDD page 55) – partial replacement - and AM0034 definition "Campaign length is defined as the total number of metric tonnes of nitric acid at 100% concentration produced with one set of gauzes", a clear definition for CLnormal for the project specific case should be included in the revised PDD. After that baseline campaign length and project campaign length should be defined. Furthermore please clearly describe the application of the methodological requirements for recalculation of the EFbaseline when the project campaign length is shorter than normal campaign length (EB 51 Annex 12). In general, to clearly demonstrate all the deviations from the methodology AM0034, a detailed description of the project specific approach has to be in-	B.1.1	This issue is closed.

	cluded in revised PDD according to the Guidelines for users of JI PDD form, version 04. In doing so the latest version of AM0034 should be used. A description using a table format with the first column the requirement of the AM0034 and the second one the specific JI approach of this project would be helpful. Furthermore the starting date of the Baseline/Project in terms of primary catalyst age/composition should be included in the revised PDD.		
Response	Table with clarification of specific approach and clarification regarding definition for CLnormal and some other deviations from AM0034 have been added to PDD. Concerning issues mentioned above, Deviations influence only CLnormal definition because re- calculation of the EFbaseline if necessary is made in accordance with methodology		
Assessment	The Table with comparative analyze between the Methodology AM0034 version 05.1.0 and the Project specific methodology has been included in the updated PDD (IRL 40) in the chapter B.1. The definition of the campaign length, baseline and project campaign is clear now.		
Issue	**Corrective Action Request No.5.** The date of the baseline setting is mentioned in the PDD to be the November 2010. However please amend this date taking into account the format requirements of the guidelines for users of JI PDD form v. 4.	B.1.5	This issue is closed.
Response	Corresponding changes had been made in PDD		
Assessment	Chapter B.4 of the revised PDD (IRL 40) has been checked, the date of the baseline setting is now provided in the correct format.		
Issue	**Corrective Action Request No.6.** In order to demonstrate project boundary clearly and transparently revised PDD has to be amended by including a plant specific flow diagram or at least JI related measuring points/equipment shall be identified on the diagram presented in Figure 4 from PDD. Furthermore the situation with the 4th AOR installed on-site should be clarified taking into account its possible impact on the plant's operating parameters.	B.3.4	This issue is closed. IRL 32
Response 1	Corresponding changes have been made in PDD. Since 4th AOR has been disconnected and the heat exchanger of AOR has been dismounted plant can operate now only with 3 reactors.		

Assessment 1	Chapter B.3 of the revised PDD has been checked. All project specific details are now provided on the figure 4. During the on-site inspection the determiners confirmed that the 4th AOR is completely dismantled and the plant is operating with 3 AORs. However the pipe feeding the AOR 1D with ammonia- air mixture seems to be removed on the drawing. Since the AOR 1D was confirmed to be operational (AOR 1B was dismantled), a clarification is needed. The figure 4 has to be amended, if necessary.		
Response 2	The pipe feeding of AOR 1D is operational. The correspondent changes have been made in the figure 4		
Assessment 2	The new drawing (IRL 32) has been provided and checked. The mistake has been corrected.		
Issue	**Corrective Action Request No.7.** The crediting period shall not extend beyond the operational lifetime of the project. However whether the end of the crediting period can be after 2012 subject to the approval by the host Party. Thus please clarify that and amend chapter C.3 of the PDD by setting the length of crediting period in years and months as required by the Guidelines for users of the JI PDD form, version 4.	C.3.1	This issue is closed. IRL 40
Response	Corresponding changes have been made in PDD		
Assessment	Chapter C.3 of the revised PDD has been checked, the length of crediting period in provided in years and months now.		
Issue	**Corrective Action Request No.8.** The responsibilities chart presented in D.3 contains JISC as one of the responsible authorities within the project cycle; however the national DFP of Romania is not included. Please clarify and correct the responsibilities chart taking into account that the project is a JI Track 1 one. Furthermore several editorial corrections should be conducted in the PDD (replace CDM with JI, correct data units, correct wording used in B.2, parameter tables seem to be doubled in chapter D.1.1 and B.1, the responsibilities diagram on p. 63 does not mention InterAgro etc.).	D.1.10	This issue is closed. IRL 40
Response	Correspondent changes have been made in PDD. InterAgro is not included in PDD since its function is participating in financing of the project		

Assessment	The revised PDD has been checked by the assessment team. The responsibility chart has been updated as requested. It was clarified that InterAgro is financing the project, but is not involved in the project implementation. The editorial corrections have been made as requested.		
Issue	**Corrective Action Request No.9.** Please include in PDD the data treatment procedure in case of AMS failure.	D.1.25	This issue is closed.
Response	Corresponding changes have been made in PDD		
Assessment	The revised PDD has been checked by the assessment team. The revised PDD now states that in the event that the monitoring system is down, the lowest between the conservative IPCC (4.5 kg N2O / ton nitric acid) or the last measured value will be valid and applied for the downtime period for the baseline emission factor, and the highest measured value in the campaign will be applied for the downtime period for the campaign emission factor, as suggested by the AM0034.		
Issue	**Corrective Action Request No.10.** The project proponents are requested to revise the approach of establishing the permitted operating ranges, taking into account the operating conditions of each AOR separately. These permitted operating ranges should be in connection with the present status of operation: 3 AOR instead of 4 AOR as designed. Statistical analysis as described in chapter D.1.1.4 of the PDD has to be applied. The evaluation sheet has to be provided to the assessment team for check. Any documentation confirming the historical data (plant records, operating manual etc.) has to be provided together with the evaluation sheet in order to demonstrate that those ranges are within the specifications of the facility. The PDD has to be revised accordingly.	D.2.1	This issue is closed.
Response	The historical data of the period with 3 operational reactors is applied for calculation of operating conditions. The PDD has been revised and oxidation temperature is defined and controlled for each AOR separately. Evaluation sheet with statistical analysis and some scans from logbooks has been submitted. Corresponding changes have been made in PDD.		
Assessment	The revised PDD and following supporting documents have been checked by the assessment team: - Chemgas-CAR10-plant manual (all parameters).pdf		

	- Chemgas-CAR10- logbooks scans.pdf - Chemgas-CAR10-CAR12-plant diagram (3 reactors).pdf - Chemgas-CAR10-plant manual (OP).pdf The chapter D.1.1.3 now clearly states that the normal operating ranges will be determined based on the historic plant data for every AOR separately, except the OP which is based on operating manual. The values presented are the preliminary ones and will be updated before starting the baseline measurements. The permitted operating ranges are to be verified by the verifying entity.		
Issue	**Corrective Action Request No.11.** As mentioned in PDD, the nitric acid production is monitored with level meters installed in the storage tanks. A possibility of cross-check should be included in PDD (mass balance analysis with NH3 input for the HNO3 flow, ammonium nitrate production, etc). Also lab analysis results for HNO3 concentration should be discussed. Please also refer to the comments in D.2.1. The value is to be verified later by the verifying entity.	D.2.10	This issue is closed. IRL 40
Response	Corresponding changes have been made in PDD. Calculated ammonia consumption for nitric acid production compares with ammonia input that is registered by flow meter and finally with nitric acid production that was registered by the main method.		
Assessment	The revised PDD has been assessed by the audit team. The cross check possibility of the NAP is now described in section D.1.1.1 and clarified to be performed using ammonia consumption figures. The implementation of this cross check and the final NAP value is to be verified by the verifying entity.		
Issue	**Corrective Action Request No.12.** The design capacity of 240,000 t/year mentioned in the PDD and used in calculations is based on 4 AOR. If the present situation with 3 AOR in operation is considered to be permanent, a new design capacity should be calculated and used in PDD and Excel calculation. However in “ERUs calculations Chemgas and Nitroporos.xlsx” the plant design capacity of 725 t of Nitric Acid per day is used, and calculated for 331 days. Please also specify if this capacity is for 3 or 4 reactors and provide respective evidence. In case no exact figure for annual design capacity is confirmed by the technical documents, please justify the use of	D.2.11	This issue is closed. IRL 32, 40

	331 days by providing the plant production records for the previous production periods.		
Response 1	The plant design diagram states that after dismounting of reactor 1B the design capacity is 640 metric tonnes of HNO3. This value is confirmed by historical values of plant performance with 3 reactors from year 2006 and approved by plant internal decision. To ensure the conservativeness of the approach it is assumed that the plant operates 330 days per year (instead of 365 days as suggested in the methodology). This leads to an annual capacity of 211,840t. (330x640=211200) This value is mentioned in updated PDD. Corresponding changes have been made in PDD and in Excel for emission calculations road map. File with production during previous production periods has been submitted. .		
Assessment 1	1. PDD, page 12: “Since the annual capacity is not specified in the design documents” – but only the "design capacity" - 240000 t/year, according to Reception Certificate of the plant, dated 19.11.1974 is specified. (240000t/331days=725 t), according to our calculation. 2. According to the plant design diagram, the capacity is 26250 kg HNO3/h 26250 kg x 24 hours = 630000 kg = 630 t/day. (This is the last table from the diagram. IRL 10). 3. Looking at the historical campaigns, the longest activity period was in 2010: 306 days. Please justify the choice of 331 days for the design capacity and not 306 days. Have the plant operated ever in the past (with 3 AORs) 331 days		
Response 2	We can’t apply "design capacity" value 240000 t/year since the plant operates now with 3 reactors instead of operation with 4 reactors in initial plant design. Since the longest confirmed activity period is 306 days, we’ve taken in account this value and made correspondent changes in PDD. That is lead to annual capacity of 195840 t/year. After revision of design diagram the corrected hourly capacity is equal to 26667 kg HNO3/h 26667 kg x 24 hours = 640008 kg = app. 640 t HNO3/day		

	That is lead to annual capacity of 195840 t/year: 640 x 306 = 195840 t HNO3/year		
Assessment 2	The new design diagram (IRL 32) and the new PDD (IRL 40) have been received and checked. The Plant capacity with 3 AOR is fixed at 26667 kg HNO3/h and the CAP at 195840 t HNO3/year, based on 306 days.		
Issue	**Corrective Action Request No.13.** There is confusion between CLnormal and CLn at page 62 of the PDD. Please correct.	D.3.1.5	This issue is closed. IRL 40
Response	Corresponding changes have been made in PDD		
Assessment	The revised PDD (IRL 40) has been reviewed by the assessment team. The requested correction has been conducted by the PP.		
Clarification Requests by audit team			
	Comments and Results	Ref	Conclusion and IRL
Issue	**Clarification Request No.1** S.C. Chemgas S.R.L. (Romania) and MGM Worldwide, S.a.r.l (Sweden) are the project participants. To confirm this fact the Emission Reduction Units Purchase Agreement (ERPA) between the project participants have to be submitted to the audit team.	A.3.2	This issue is closed. IRL 9
Response	In accordance with service agreement MGM Worldwide S.a.r.l receives their fee by the percentage of emission reductions. The service agreement has been submitted to audit team.		
Assessment	The service agreement “InterAgro_MGM_JI_service_agreement-signed_1.pdf“ has been checked by the assessment team (IRL 9). This document confirms the project participants as indicated in the PDD.		
Issue	**Clarification Request No.2** Records of the trainings conducted by the ABB as well as list of attended personnel have to be provided to the assessment team.	A.4.2.8	This issue is closed. IRL 34

Response	Corresponding documents have been submitted		
Assessment	The ABB training records incl. the list of attended personnel has been provided by the PP and reviewed by the assessment team.		
Issue	**Clarification Request No.3** The secondary catalyst supplier's approval and delivery contract signed (according to project implementation plan) should be provided to the confidential insight of the assessment team.	A.4.2.10	FAR3
Response	Plant is facing some problems while negotiating some terms of the contract with BASF. The talks are still in progress. That is why the BASF offer is used in PDD to estimate project costs.		
Assessment	The offer from the secondary catalyst supplier BASF was available to the audit team and confirms the warranted abatement efficiency and costs of the secondary catalyst. The contract with the catalyst supplier will be checked at the first periodic verification.		
Issue	**Clarification Request No.4** The use of 8.4 kg CO2eq/t HNO3 as baseline emission factor in ERs estimation should be clarified. Furthermore the ERs estimate should be based on the production figures specified in the plant's road map.	A.4.3.2	This issue is closed. IRL 40, 41
Response 1	In updated PDD the preliminary calculations of EF_{BL} on the base of available monitoring data are used.		
Assessment 1	PDD, page 59: 1. "plant design capacity will be 240,000 tonnes". Design with 4 AORs 2. "As baseline emission factor is used IPCC upper limit default emission factor for N2O emissions for medium pressure nitric acid plants that is equal to 13,94 kg N2O/tHNO3". Correction is needed.		
Response 2	The correspondent changes have been made in PDD		
Assessment 2	The new PDD (IRL 40), as well as Excel calculations (IRL 41) have been checked and the correct EF_{BL}, based on preliminary measurements is now used and the capacity based and 3 AORs included.		

Issue	**Clarification Request No.5** In the IPPC Environmental Permit, there is also an ELV for N2O emissions from nitric acid production: 800 mg/Nm3 for the period up to the installation of the secondary catalyst and 150 mg/Nm3 after. These ELVs shall be used in baseline and project ERU's calculation. Please clarify and amend the PDD accordingly.	B.1.15	FAR4
Response	The IPPC Environmental Permit is now under revision. The above mentioned value of 800 mg/Nm3 is not the obligatory limit for the plant in accordance with Romanian legislation; it is only an estimation of current plant emissions by operator. This will be clearly defined in updated Permit. The limit 150 mg/Nm3 will be revised in updated Environmental Permit. The limit will be equal to 392 mg/Nm3 (200 ppm) in accordance with BAT recommendations. The Environmental Permit shall mention that the limit should be achieved by voluntary implementation of this JI project. Updated Environmental Permit will be presented during verification visit.		
Assessment	The updated plant's Environmental Permit IPPC has to be presented to the verifier at the first periodic verification.		
Issue	**Clarification Request No.6** According to technical specifications of the DeNOx unit – Contract between Steuler and Interagro (IRL 16), - the guaranteed ELV for NOx will be 200 ppm, but the legal requirement is 150 ppm (as stipulated in the IPPC permit). A clarification is requested.	B.1.16	FAR5
Response	The design of SCR DeNOx for Chemgas assumes 1000 ppm NOx emissions before installation of SCR DeNOx system and 200 ppm after system installation. Taking in account that actual NOx emissions are at least 2 times lower than 1000 ppm, we could expect that concentration of NOx in stack gas will be much lower than 150 ppm.		
Assessment	The plant's compliance with the NOx requirements has to be verified at the first periodic verification.		
Issue	**Clarification Request No.7** According to the additionality tool the costs related to the JI project have to be documented and clearly listed in the PDD. Please amend the PDD accordingly and provide related evi-	B.2.5	This issue is closed.

	dence.		IRL 40
Response	The corresponding changes have been made in PDD		
Assessment	The revised PDD has been checked by the audit team. The costs related to JI project are now documented in Annex 4 of the revised PDD.		
Issue	**Clarification Request No.8** The source/control data used for monitoring of operation hours of baseline and project campaigns should be clearly described in revised PDD. Furthermore the on/off criteria for the plant operation (e.g. trip values) should be clearly defined.	D.3.1.6	This issue is closed.
Response	Plant operating status is determined on the basis of relay that controls electromagnetic valves of ammonia input before the mixer. If the plant the valve is opened the plant status is ON, otherwise plant status is OFF. Since plant does not keep the records of valve status, the oxidation temperature is used during emission factor and emission reductions calculations for crosscheck of plant status. If hourly oxidation temperature value is lower than 750^{o}C, plant status is treated like OFF for such monitored hour..		
Assessment	The revised PDD now includes the requested information.		
Issue	**Clarification Request No.9** An EIA study for this project is not mandatory according to Romanian legislation. However an EIA has been conducted by the project participants voluntarily. Please amend the PDD accordingly.	F.1.1	This issue is closed.
Response	The corresponding changes have been made in PDD		
Assessment	The information on conducted EIA is correctly presented in the revised PDD.		
Forward Action Requests by audit team			
	Comments and Results	Ref	Conclusion and IRL
Issue	**Forward Action Request No.1** The LoAs should be submitted to AIE at least at the moment at the first periodic verification.	A.3.8	

Response			
Assessment			
Issue	**Forward Action Request No.2** During the on-site visit the quality assurance and quality control procedure have been discussed while TÜV SÜD assessment team underlined the importance of such procedures for the future data quality. The project proponents provided a draft version of a so called "JI Manual" - Procedure PO-231-01 – (IRL 34) - which comprises description of the work scope as well as tasks of responsible personnel. The project manager agreed to amend the existing JI Manual by including further information on qualification requirements and continuous training for responsible staff, procedures on the data treatment acc. to AM0034 rules and requirements (e.g. downtime of AMS), QAL 3 procedures, JI project related documentation procedures, troubleshooting procedures, list of the spare equipment, provisions for the data quality in case of data recording in the hand written logbooks and manual data transfer etc. During the first periodic verification the PPs will provide the JI Manual to a verifying entity	D.1.9	
Response			
Assessment			
Issue	**Forward Action Request No.3** The offer from the secondary catalyst supplier BASF was available to the audit team and confirms the warranted abatement efficiency and costs of the secondary catalyst. The contract with the catalyst supplier will be checked at the first periodic verification. (refer to CR3)	A.4.2.10	
Response			
Assessment			
Issue	**Forward Action Request No.4** The updated plant's Environmental Permit IPPC has to be presented to the verifier at the first periodic verification. (refer to CR5)	B.1.15	
Response			
Assessment			

Issue	**Forward Action Request No.5** The plant's compliance with the NOx requirements has to be verified at the first periodic verification. (refer to CR6)	B.1.16	
Response			
Assessment			
Issue	**Forward Action Request No.6** Complete information regarding normal operating conditions (the normal OT, OP, AFR, AIFR, GS and GC) shall be provided during the first verification.	H.2.1	
Response			
Assessment			

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
-	-	-

Industrie Service

Annex 2: Information Reference List

Ref. No.	Issuance and/or submission date (dd/mm/yyyy)	Title/Type of Document	Author / Editor / Issuer	Additional Information (Relevance in JI Context)
		On-site interviews conducted at March 15-16, 2011 in Slobozia, Romania at S.C. Chemgas Holding Corporation by auditing team of TÜV SÜD. **Determination Team:** Ms Olena Maslova — TÜV SÜD Industrie Service GmbH, GHG Lead Auditor, Project Manager Mr Constantin Zaharia — TÜV SÜD Romania LLC, GHG Auditor **Interviewed persons at Chemgas:** Mr Stefan Dragan — Chemgas, General Manager Mr Voinea Oprea — Chemgas, Chief of Technical Department Mr Octavian Tabara — Chemgas, Technical Department, advisor Ms Iulia Turc — Chemgas, Chief of Environment and Quality Department. Mr. Gherghe Garbea — Chemgas, Plant Operator Ms Iolanda Spulber — Chemgas, Environmental Responsible Ms Olivia Ticleanu — INTERAGRO, Counsellor Mr Ioana Iulian — Chemgas, Engineer Ms Sergey Klibus — MGM, Senior Technical Expert Mr Viorel Dudu — Chemgas, AMS Engineer Mr. Alin Anton — Environmental Auditor Ms. Silvia Barsan — Dangerous Substances Responsible		
0.		UNFCCC homepage http://www.unfccc.int including the Joint Implementation section http://ji.unfccc.int (DVM, Clarification regarding overlapping monitoring periods under the verification procedure under the Joint Implementation Supervisory Committee, Guidance on criteria for baseline setting and monitoring, Glossary of JI terms etc.)		
1.	01/12/2010	Published Project Design Document of JI project “Chemgas Nitrous Oxide Abatement Project”, version 1.		Published PDD
2.	25/07/2011	JI_PDD_Chemgas - 25-07-11-final-clean2.pdf, version 2.0.		PDD version 2.0
3.	13/08/2010	Approved baseline and monitoring methodology AM0034 “Catalytic reduction of N2O inside the ammonia burner of nitric acid plants”, version 05.1.0	UNFCCC	

Ref. No.	Issuance and/or submission date (dd/mm/yyyy)	Title/Type of Document	Author / Editor / Issuer	Additional Information (Relevance in JI Context)
4.	25/02/2010	Approved baseline methodology AM0028 “Catalytic N2O destruction in the tail gas of Nitric Acid or Caprolactam Production Plants”, version 05.1.0	UNFCCC	
5.	26/08/2008	Tool for the demonstration and assessment of additionality, version 05.2.	UNFCCC	
6.		Guidelines for Users of the Joint Implementation Project Design Document Form, version 3.	UNFCCC	
7.	17-18/03/2011	Participant list of on-site interviews.	TÜV SÜD	
8.	29/09/2009	LoE No. 8334/24-09, Letter of Endorsement from Romania (host party).	MMP	Letter of Endorsement - DFP
9.	21/04/2008	Agreement between MGM and INTERAGRO on the development of JI project.	MGM, INTERAGRO	Starting date of the project activity
10.	16/03/2011	Block flow Diagram of plant facilities / Process Scheme of the Project activity	CHEMGAS	
11.	19/11/1974	Design documents for non-concentrated nitric acid production including last modernization works performed and design capacity of the plant	IPUC Bucuresti	Design capacity
12.	17/03/20116	Historic maintenance schedule of primary gauzes and composition data for at least 5 historic campaigns at the nitric acid plant	CHEMGAS	Primary gauzes
13.	28.09/1999	Technical regulations of non-concentrated nitric acid production (operating Manual)	CHEMGAS	
14.	23.07.2011	Historical Data-Chemgas	CHEMGAS	Historical campaigns
15.	22/12/2004	License No. R/2071105 on the fertilizer production.	Ministry of Industry	Operating License
16.	29/09/2009	Specifications of the (SCR) DeNOx abatement unit	Steuler Anlagenbau	
17.	2007	IPPC permit / Environmental Permit	EPA	

Ref. No.	Issuance and/or submission date (dd/mm/yyyy)	Title/Type of Document	Author / Editor / Issuer	Additional Information (Relevance in JI Context)
18.	15-03-2011	Action plan in chemgas-new-15-03-2011.xls	CHEMGAS	
19.	28/04/2011	Equipment for NAP monitoring and cross check possibilities (CAR #11)	Chemgas	
20.	2008-2010	Type of precious metal catalyst gauzes and supplier info (purchasing agreements and invoices)	Chemgas/Umicore	
21.	11/2009	N2O measurement instruments and location of sampling points at the plant	ABB/SGS	
22.	06/2009	Continuous automatic N2O monitoring system (AMS): Specific performance characteristics incl. QAL 1 and concept of emission data processing, purchasing agreement	Chemgas/ABB	AMS
23.	15/01/2008	Secondary catalyst: Financial Proposal from the catalyst supplier	Chemgas/BASF	Secondary catalyst
24.	28/12/2010	Excel sheets with ERs calculations, version 01.	MGM	
25.	02/2011	Material safety data sheet for secondary catalyst	BASF	
26.	02/2011	Techno-commercial proposal for supplying of the secondary catalyst	BASF	
27.	11/01/2010	Letter No. 1377/09/03/2011 concerning non necessity of EIA Chemgas's JI project.	EPA	
28.	29/05/2011	Excel sheets with ERs calculations, version 02.	MGM	
29.	2007	BREF Document: Large Volume Inorganic Chemicals - Ammonia, Acids and Fertilisers, 2007	IPPC	
30.	24/11/2010	Training records	Interagro	Training for Stanciu Victor, Cristea Gabriel, Suciu Ionel, Gavrila Moise, Vasile Gheorghe
31.	15.11.2011	Chemgas-CAR2-ERUs calculations -15-11-2011.xlsx		ER calculation sheet
32.	15.11.2011	Block flow Diagram of plant facilities / Process Scheme of the Project activity	Chemgas	Final Version of Nitric Acid produc-

Ref. No.	Issuance and/or submission date (dd/mm/yyyy)	Title/Type of Document	Author / Editor / Issuer	Additional Information (Relevance in JI Context)
				tion. Plant capacity with 3 AORs.
33.	17.11.2011	Chemgas-CAR2-ERUs calculations -17-11-2011.xlsx	MGM	Final Version of ER calculation
34.	18.03.2011	Procedure PO-231-01 regarding N2O monitoring	Chemgas	JI Manual
35.	21.02.2011	OHSAS Certificate, ISO 18001:2007, no. 347/ S/21.12.2011	AEROQ	
36.	21.02.2011	ISO 14001 certificate, 555/M/21/12/2009	AEROQ	
37.	21.02.2011	ISO 9001 certificate, 1859/21/12/2009	AEROQ	
38.	18.03.2011	Trigger Values for Nitric Acid Production	Chemgas	
39.		Nitric Acid Concentration, National Standard SR 447/1995		
40.	21.09.2011	JI_PDD_Chemgas -15-11-clean.pdf	MGM	PDD, version 2.1
41.	17.11.2011	Chemgas-CAR2-ERUs calculations -17-11-2011.xlsx	MGM	ER calculation,
42.	26.01.2012	Chemgas-CAR2-ERUs calculations -26-01-2012-final.xlsx	MGM	ER calculation, final version
43.	26.01.2012	JI_PDD_Chemgas -26-01-ver 2.2	MGM	Final PDD, version 2.2
44.	08.04.2011	Information on the gauzes replacement bnefore the baseline start	Heraeus	Primary gauzes replacement for the baseline measurement