



# FINAL JI DETERMINATION REPORT

GPN S.A.

GPN GRANDPUITS N<sub>2</sub>O ABATEMENT  
PROJECT

**Report No: : 8000376788 – 09/444**

**Date: 2010-02-15**

TÜV NORD CERT GmbH  
JI/CDM Certification Program  
Langemarckstraße, 20  
45141 Essen, Germany  
Phone: +49-201-825-3335  
Fax: +49-201-825-3290  
[www.tuev-nord.de](http://www.tuev-nord.de)  
[www.global-warming.de](http://www.global-warming.de)



Date of first issue: <b>2010-02-15</b>	Project No.: <b>Report No: : 8000376788 – 09/444</b>
Project Type: <input checked="" type="checkbox"/> JI Track 1 (Projet Domestique) <input type="checkbox"/> JI Track 2	Organisational unit: <b>TÜV NORD JI/CDM Certification Program</b>
Client: <b>GPN S.A.</b>	Client ref.: <b>Bertrand Walle</b>
Summary:	<input checked="" type="checkbox"/> positive determination opinion <input type="checkbox"/> negative determination opinion
<p>GPN S.A. has commissioned the TÜV NORD JI/CDM Certification Program (CP) as a Third Party to determinate the project:                      "GPN Grandpuits N<sub>2</sub>O abatement project"</p> <p>with regard to the relevant requirements of the host country France and of the UNFCCC for JI project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria refer to the Kyoto Protocol Article 6 criteria and the Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in the Marrakech Accords.</p> <p>The project applies to the Projet Domestique Methodology: "Catalytic reduction of N<sub>2</sub>O at nitric acid plants", approved and published by the MEEDDAT in July 2009.</p> <p>The review of the project design documentation and additional documents related to baseline and monitoring methodology have provided TÜV NORD JI/CDM CP with sufficient evidence to determinate the fulfilment of the stated criteria.</p> <p>In detail the conclusions can be summarised as follows:</p> <ul style="list-style-type: none"> <li>- The project is in line with all relevant host country criteria (France) and all relevant UNFCCC requirements for JI.</li> <li>- The project additionality is sufficiently justified in the PDD, the monitoring plan is transparent and adequate.</li> <li>- The calculation of the project emission reductions is carried out in a transparent and conservative manner,</li> </ul> <p>so that the calculated emission reductions of 266,442 tCO<sub>2</sub>e (between 2009 and 2012) are most likely to be achieved within the crediting period.</p> <p>The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the determination PDD.</p> <p>Since the LoA will be issued after registration of the project at the DFP, CAR A1 can not be closed at this time. Because of this, the report will be on the status of "Draft" until the LoA are provided.</p>	

Report No.: <b>8000376788 – 09/444</b>	Subject Group: <b>Climate Protection</b>
Report title: <b>GPN Grandpuits N<sub>2</sub>O abatement project.</b>	
Work carried out by: <b>Mr. Rainer Winter Mr. Ulrich Walter Mr. Oliver Bley</b>	
Technical review by: <b>Mr. Eric Krupp Mr. Stefan Winter</b>	Final approval by: <b>Mr. Eric Krupp</b>
Date of this revision: <b>2010-02-15</b>	Rev. No.: <b>0</b>
Number of pages: <b>88</b>	

**Indexing terms**

**Projet Domestique  
JI – Track 1  
Determination PDD**

- No distribution without permission from the client or responsible organisational unit
- Limited distribution
- Unrestricted distribution

## Abbreviations

<b>AMS</b>	Automated Monitoring System
<b>BAT</b>	Best available technology
<b>BAU</b>	Business as usual
<b>CA</b>	Corrective Action
<b>CAR</b>	Corrective Action Request
<b>CDM</b>	Clean Development Mechanism
<b>CH<sub>4</sub></b>	Methane
<b>CL</b>	Clarification Request
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>CO<sub>2e</sub></b>	Carbon dioxide equivalent
<b>CP</b>	Certification Program
<b>DFP</b>	Designated Focal Point
<b>DRIRE</b>	Directions Régionales de l'Industrie de la Recherche et de l'Environnement
<b>DVM</b>	Determination and Verification Manual /Draft)
<b>EB</b>	CDM Executive Board
<b>EIA</b>	Environmental Impact Assessment
<b>ERU</b>	Emission Reduction Unit
<b>EU ETS</b>	European Union Emissions Trading Scheme
<b>FAR</b>	Forward Action Request
<b>GHG</b>	Greenhouse gas(es)
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>JI</b>	Joint Implementation
<b>JISC</b>	Joint Implementation Supervisory Committee
<b>MEEDDAT</b>	Ministère de l'Écologie, de l'Énergie, du Développement durable et de la Mer, France
<b>N<sub>2</sub>O</b>	Nitrous Oxide
<b>NCV</b>	Net Calorific Value of Fuel
<b>PDD</b>	Project Design Document
<b>QC/QA</b>	Quality control/Quality assurance
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>VVM</b>	Validation and Verification Manual



<b>Table of Contents</b>		<b>Page</b>
1	OBJECTIVE / SCOPE .....	6
2	GHG PROJECT DESCRIPTION.....	6
2.1	Project Characteristics	6
2.2	Involved Parties and Project Participants	7
2.3	Project Location	7
2.4	Technical Project Description	8
3	METHODOLOGY AND DETERMINATION PDD SEQUENCE.....	9
3.1	Determination PDD Steps	9
3.2	Contract review	10
3.3	Appointment of team members and technical reviewers	10
3.4	Consideration of Public Stakeholder Comments	11
3.5	Determination PDD Protocol	11
3.6	Review of Documents	12
3.7	Follow-up Interviews	12
3.8	Project comparison	13
3.9	Resolution of Clarification and Corrective Action Requests	13
3.9.1	Definition	13
3.9.2	Draft Determination PDD	14
3.9.3	Final Determination PDD	14
3.10	Technical review	14
3.11	Final approval	15
4	DETERMINATION FINDINGS .....	16
5	DETERMINATION ASSESSMENT SUMMARY.....	25
5.1	General Description of the Project Activity	25
5.1.1	Participation	25
5.1.2	PDD Editorial Aspects	25
5.1.3	Technology to be Employed	26
5.1.4	Type of Project	26
5.2	Project Baseline, Additionality and Monitoring Plan	26
5.2.1	Application of the Methodology	26
5.2.2	Project Boundary	26
5.2.3	Baseline Identification	27
5.2.4	Calculation of GHG Emission Reductions	27
5.2.5	Additionality Determination	28
5.2.6	Monitoring Methodology	30
5.2.7	Monitoring Plan	31
5.2.8	Project Management Planning	31
5.2.9	Crediting Period	31
5.2.10	Environmental Impacts	31



---

5.2.11	Comments by Global Stakeholders	32
5.2.12	Issues for verification	32
5.3	General Description of the Project Activity	32
5.3.1	Participation	32
5.3.2	PDD editorial Aspects	32
5.3.3	Technology to be employed.	32
5.3.4	Small Scale Projects	33
5.4	Project Baseline, Additionality and Monitoring Plan	33
5.4.1	Application of the Methodology	33
5.4.2	Project Boundary	33
5.4.3	Baseline Identification	33
5.4.4	Calculation of GHG Emission Reductions	34
5.4.5	Additionality Determination	34
5.4.6	Monitoring Methodology	35
5.4.7	Monitoring Plan	35
5.4.8	Project Management Planning	36
5.4.9	Crediting Period	36
5.4.10	Environmental Impacts	36
5.4.11	Comments by Local Stakeholders	36
6	DETERMINATION OPINION .....	37
7	REFERENCES .....	38
	ANNEX 1: DETERMINATION PROTOCOL.....	44
	ANNEX 2: ASSESSMENT OF BASELINE IDENTIFICATION.....	79
	ANNEX 3: ASSESSMENT OF FINANCIAL PARAMETERS.....	82
	ANNEX 4: ASSESSMENT OF BARRIER ANALYSIS .....	85
	ANNEX 5: OUTCOME OF THE GSCP.....	87
	ANNEX 6: APPLICATION OF NON APPROVED METHODOLOGIES REQUIREMENTS CHECKLIST .....	88



## 1 OBJECTIVE / SCOPE

GPN S.A. has commissioned the TÜV NORD JI/CDM Certification Program (CP) to carry out a determination of the project:

*"GPN GRANDPUITS N<sub>2</sub>O ABATEMENT PROJECT "*

with regard to the relevant requirements for JI project activities.

The purpose of a determination is to have an independent third party assess of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant host country and UNFCCC criteria are determined in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Determination is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emission reduction units (ERUs).

UNFCCC criteria refer to the Kyoto Protocol Article 6 criteria and the Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in the Marrakech Accords with regard to Track 1 JI project activities.

## 2 GHG PROJECT DESCRIPTION

### 2.1 Project Characteristics

Essential data of the project is presented in the following Table 2-1.

**Table 2-1:** Project Characteristics

Item	Data		
Project title	"GPN GRANDPUITS N <sub>2</sub> O ABATEMENT PROJECT "		
Project size	<input checked="" type="checkbox"/>	Large Scale	<input type="checkbox"/> Small Scale
Project Scope (according to UNFCCC sectoral scope numbers for JI)	<input type="checkbox"/>	1	Energy Industries (renewable- /non-renewable sources)
	<input type="checkbox"/>	2	Energy distribution
	<input type="checkbox"/>	3	Energy demand
	<input type="checkbox"/>	4	Manufacturing industries
	<input checked="" type="checkbox"/>	5	Chemical industry
	<input type="checkbox"/>	6	Construction
	<input type="checkbox"/>	7	Transport
	<input type="checkbox"/>	8	Mining/Mineral production
	<input type="checkbox"/>	9	Metal production
	<input type="checkbox"/>	10	Fugitive emissions from fuels (solid, oil and gas)
	<input type="checkbox"/>	11	Fugitive emissions from production and consumption of halocarbons and hexafluoride



Item	Data
	<input type="checkbox"/> 12 Solvents use
	<input type="checkbox"/> 13 Waste handling and disposal
	<input type="checkbox"/> 14 Afforestation and Reforestation
	<input type="checkbox"/> 15 Agriculture
Applied Methodology	<i>Project specific methodology (Projet Domestique Methodology)</i>
Track	1
Crediting period	<input type="checkbox"/> Renewable Crediting Period (7 y) <input checked="" type="checkbox"/> Fixed Crediting Period (10 y) 2010-04-01 – 2012-12-31
Start of crediting period <sup>1</sup>	Expected beginning of April 2010

## 2.2 Involved Parties and Project Participants

The following parties to the Kyoto Protocol and project participants are involved in this project activity (Table 2-2).

**Table 2-2:** Project Parties and project participants

Characteristic	Party	Project Participant
Host party	France	GPN S.A.
Other involved party/ies	Germany	N.serve Environmental Services GmbH

## 2.3 Project Location

The details of the project location are given in table 2-3:

**Table 2-3:** Project Location

No.	Project Location
Host Country	France
Region	North Central (Ile de France) Département: Seine-et-Marne
Project location address	Commune: Grandpuits-Bailly-Carrois GPN Usine de Grandpuits, BP12, 77720 Mormant, France
Plant coordinates	Plant tail gas stack: Lat: 48°35'52.82"N Long: 2°57'06.05"E Ammonia burner: Lat: 48°35'52.82"N Long: 2°57'06.05"E

<sup>1</sup> As per the published PDD (version 2)

## 2.4 Technical Project Description

The project involves the installation of a secondary N<sub>2</sub>O reduction catalyst of the nitric acid production plant of GPN Grandpuits. The emission reductions are a result of the catalytic decomposition of nitrous oxide. Nitrous oxide which is formed as by-product of the nitric acid production will be removed by the catalyst installed below the ammonia oxidation gauze pack in the ammonia burner. The nitrous oxide would otherwise be emitted through the gas stack into the atmosphere.

The key parameters of the project are given in table 2-4:

**Table 2-4:** Technical data of the project \*)

Parameter	Unit	Value
<b>Ammonia Oxidation Reactor</b>		
Manufacturer	-	GPN S.A.
Diameter	mm	3,660
Start of commercial production	-	1970
Operating conditions as per specifications (trip point values)		
- Temperature (min/max):	°C	930 (max), 920 indirect measurement
- Pressure (min/max):	MPa	0,3 (max in Air flow)
- Ammonia to Air ratio (max)	Vol.-%	8 – 12,50
<b>Ammonia Oxidation Catalyst</b>		
Manufacturer	-	Heraeus
Type	-	HR-SC N <sub>2</sub> O abatement system
Composition:	-	Pt-Rh-Pd
<b>Absorber</b>		
Design capacity per day (100%)	t/d	1,200
Design capacity per day (legal)	t/d	1,250
Annual operation (design)	days	360
Annual operation (practice)	days	340
<b>Secondary Catalyst</b>		
Start of operation	-	app. 2009-12
Manufacturer	-	Heraeus
Type	-	HR-SC N <sub>2</sub> O
Design efficiency N <sub>2</sub> O reduction	%	70% max, 65,4% average
<b>N<sub>2</sub>O Analyzer (stack)</b>		
Manufacturer	-	Finetec
Type	-	Orbital AIT Anafin 5000
Measurement Principle	-	FTIR
<b>Stack volume flow rate measurement</b>		
Manufacturer	-	Sick Maihak
Type	-	Flowsic 100H
Measurement Principle	-	Ultrasonic



### 3 METHODOLOGY AND DETERMINATION PDD SEQUENCE

#### 3.1 Determination PDD Steps

The determination of the project consisted of the following steps:

- Contract review
- Appointment of team members and technical reviewers
- Publication of the project design document (PDD)
- A desk review of the PDD<sup>/PDD/</sup> submitted by the client and additional supporting documents
- Determination planning
- On-Site assessment
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Draft determination reporting
- Resolution of corrective actions (if any)
- Final determination reporting
- Technical review
- Final approval of the determination.

The sequence of the determination is given in the table 3.1 below:

**Table 3.1:** Determination PDD sequence

Topic	Time
Assignment of determination	2009-07-03
Submission of PDD for global stakeholder commenting process	2009-11-18
On-site visit	2009-11-09 to 2009-11-10
Draft reporting finalised	2010-01-25
Final reporting finalised	2010-02-15
Technical review on final reporting finalised	2010-02-15

### 3.2 Contract review

To assure that

- the project falls within the scopes for which accreditation is held,
- the necessary competences to carry out the verification can be provided,
- Impartiality issues are clear and in line with the JI accreditation requirements

a contract review was carried out before the contract was signed.

### 3.3 Appointment of team members and technical reviewers

On the basis of a competence analysis and individual availabilities a determination team, consistent of one team leader and 3 additional team members, were appointed. Furthermore also the personnel for the technical review and the final approval were determined.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the table 3-2 below.

**Table 3-2:** Involved Personnel

	Name	Company	Function <sup>1)</sup>	Qualification Status <sup>2)</sup>	Scheme competence	Technical competence <sup>4)</sup>	Host country Competence	Team Leading competence
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	R. Winter	TÜV NORD CERT, Germany	TL	SA	<input checked="" type="checkbox"/>	Q	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	U. Walter	TÜV NORD CERT, Germany	TM	TE	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	O. Bley	TÜV NORD SYSTEMS, Germany	TM	T	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms.	S. Meyer	TÜV NORD CERT, Germany	TM	TE	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Mr.	E. Krupp	TÜV NORD	TR, FA	SA	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Name	Company	Function <sup>1)</sup>	Qualification Status <sup>2)</sup>	Scheme competence	Technical competence <sup>4)</sup>	Host country Competence	Team Leading competence
<input type="checkbox"/> Ms.		CERT, Germany						
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	S. Winter	TÜV NORD CERT, Germany	TR	TE	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

<sup>1)</sup> TL: Team Leader; TM: Team Member, TR: Technical review; FA: Final approval

<sup>2)</sup> GHG Auditor Status: A: Assessor; E: Expert; SA: Senior Assessor; T: Trainee; TE: Technical Expert

<sup>3)</sup> No team member

<sup>4)</sup> As per S01-MU03 or S01-VA070 A2 (such as A, B, C.....)

### 3.4 Consideration of Public Stakeholder Comments

The draft PDD, as received from the project participants, has been made publicly available on TÜV NORD Website [www.global-warming.de](http://www.global-warming.de) during a 30 days period from 2009-11-18 to 2009-12-18.

In case comments were received, they are taken into account during the determination process. The comments and the discussion of the same are documented in annex 5 of this report.

### 3.5 Determination PDD Protocol

In order to ensure consideration of all relevant assessment criteria, a determination protocol is used. The protocol shows, in a transparent manner, criteria and requirements, means of determination and the results from pre-determination of the identified criteria. The determination protocol reflects the generic JI – Track 1 requirements projects have to meet as well as project specific issues as applicable. The determination protocol serves the following purposes:

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

The determination protocol as described in Figure 1.



<b>Determination Protocol Table A-1: Requirement checklist</b>				
<b>Checklist Item</b>	<b>Determination PDD Team Comment</b>	<b>Reference</b>	<b>Draft Conclusion</b>	<b>Final Conclusion</b>
<i>The checklist items in Table A-1 are linked to the various requirements the project should meet. The checklist is organised in various sections. Each section is then further subdivided as per the requirements of the topic and the individual project activity.</i>	<i>The section is used to elaborate and discuss the checklist item in detail. It includes the assessment of the determination team and how the assessment was carried out.</i>	<i>Gives reference to the information source on which the assessment is based on</i>	<i>Assessment based on evidence provided if the criterion is fulfilled (OK), or a CAR, CL or FAR (see below) is raised. The assessment refers to the draft determination stage.</i>	<i>In case a corrective action or a clarification the final assessment at the final determination stage is given.</i>

**Figure 1:** Determination protocol tables

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

### 3.6 Review of Documents

The published PDD (version 02) and supporting background documents related to the project design and baseline were reviewed.

Furthermore, the determination team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

### 3.7 Follow-up Interviews

The determination team has carried out interviews in order to assess the information included in the project documentation and to gain additional information regarding the compliance of the project with the relevant criteria applicable for JI (Projet Domestique).

During determination the determination team has performed interviews to confirm the provided information and to resolve issues identified in the document review. The main topics of the interviews are summarized in table 3-3.

**Table 3-3:** Interviewed persons and interview topics

<b>Interviewed Persons / Entities</b>	<b>Interview topics</b>
Project proponent representatives	- Chronological description of the project activity with



Interviewed Persons / Entities	Interview topics
(GPN) Project consultant (N.serve) Maintenance staff of AMS (SPIE)	documents of key steps of the implementation. - Implementation status - Technical details of the project realization, project feasibility, designing, operational life time, monitoring of the project - Host Government Approval - Approval procedures and status - Monitoring and measurement equipment and system. - Financial aspects - Crediting period - Project activity starting date - ERU allocation / ownership - Baseline assumptions - Additionality - Monitoring - Roles & responsibilities of the project participants w.r.t. project management, monitoring and reporting - National Legislation - Editorial issues of the PDD

A comprehensive list of all interviewed persons is part of section 7 'References'.

### 3.8 Project comparison

The determination team has compared the proposed JI project activity with similar projects or technology that have similar or comparable characteristics and with similar projects in the host country in order to achieve additional information esp. regarding:

- Project technology
- Additionality issues
- Reasons for reviews, requests for reviews and rejections within the JI registration process.

### 3.9 Resolution of Clarification and Corrective Action Requests

#### 3.9.1 Definition

A **Corrective Action Request (CAR)** will be established where:

- 
- mistakes have been made in assumptions, application of the methodology or the project documentation which will have a direct influence the project results,
  - the requirements deemed relevant for determination of the project with certain characteristics have not been met or
  - there is a risk that the project would not be registered by the UNFCCC or that emission reductions would not be able to be verified and certified.

A **Clarification Request (CL)** will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A **Forward Action Request (FAR)** will be issued when certain issues related to project implementation should be reviewed during the first determination ERU.

### 3.9.2 Draft Determination PDD

After reviewing all relevant documents and taken all other relevant information into account, the determination team issues all findings in the course of a draft determination report and hands this report over to the project proponent in order to respond on the issues raised and to revise the project documentation accordingly.

### 3.9.3 Final Determination PDD

The final determination starts after issuance of the proposed corrective action (CA) of the CARs CLs and FARs by the project proponent. The project proponent has to reply on those and the requests are "closed out" by the determination team in case the response is assessed as sufficient. In case of raised FARs, in which action from the project personnel is requested, the project proponent has to respond on this, identifying the necessary actions to ensure that the topics raised in this finding are likely to be resolved at the latest during the first verification. The determination team has to assess whether the proposed action is adequate or not.

In case the findings from CARs and CLs cannot be resolved by the project proponent or the proposed action related to the FARs raised cannot be assessed as adequate, no positive determination opinion can be issued by the determination team.

The CAR(s) / CL(s) / FAR(s) are documented in chapter 4.

## 3.10 Technical review

Before submission of the final determination report a technical review of the whole determination procedure is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer

---

is not considered to be part of the verification team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the determination opinion and the topic specific assessments as prepared by the determination team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

### **3.11 Final approval**

After successful technical review of the final report an overall (esp. procedural) assessment of the complete determination will be carried out by a senior assessor located in the accredited premises of TÜV NORD.

Only after this step the request for registration can be started (in case of a positive determination opinion).



## 4 DETERMINATION FINDINGS

In the following table the findings from the desk review of the published PDD, visits, interviews and supporting documents are summarised:

**Table 4-1:** Summary of CARs, CLs and FARs issued

Finding:	A1		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	No letters of approval have been provided so far.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The Letter of Approval will only be issued by the French DFP two months following submission by the PP of the application dossier, which includes the preliminary determination report from TUEV NORD.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	The pending letters of approval will be provided only on the basis of the successful conclusion of this determination. Thus this CAR will be closed if the host country issues their LoA.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input type="checkbox"/> The project complies with the requirements		

Finding:	A2		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Indicate the maximum and budgeted annual production output of HNO <sub>3</sub> in A.2 as well as in B.6.3.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The maximum and budgeted annual production quantities are now described in both sections A.2 and B.6.3.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. The budgeted annual production capacity of 393.000 tHNO <sub>3</sub> and the maximum capacity of 425.000 tHNO <sub>3</sub> (340 days of 1,250 t/d) are indicated in the PDD.		





Finding:	A2
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding:	A3		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The information in Annex 1 has to be consistent.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The correct GPN contact name and email address has now been added in the first table of Annex 1.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. Correct information is given in Annex 1.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding:	B1		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Table 7 (part B) and Table 8 (part B) in section B.6.3 need to be corrected to include the full crediting period.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Tables 7 & 8 (part B) have now been corrected to cover the full 10-year crediting period.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. The table covers the full crediting period from 2010 – 2020.		



Finding:	B1
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding:	B2		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Table 3 in section B.3 needs to be completed as per methodology.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Table 3 in section B.3 has been expanded to replicate the corresponding table in the applicable French methodology.		
<b>DOE Assessment #1</b> The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.	OK. The table 3 presents all gases and sources included in the project boundary		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding:	B3		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	In section B.4 and B.5 under common practice barriers an updated statement is needed regarding the industrial trials.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Additional sentences have been added to the 'Common Practice Barriers' sections in B.4 & B.5 explaining that the industrial R&D trials have now been completed.		
<b>DOE Assessment #1</b> The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.	OK. The description of common practice barriers mirrors the current situation, that the R&D trials are closed and a commercial utilisation of the catalyst technology is ongoing.		



Finding:	B3
<p><b>Conclusion</b> <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input checked="" type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>

Finding:	B4		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p><b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	The Investment Cost Sheet is still pending		
<p><b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	The investment cost sheet shall be provided to TUEV NORD as soon as possible following receipt of cost information from the plant.		
<p><b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>Two clear, viewable and unprotected investment cost sheets were provided to TUEV NORD on 2010-01-19.:</p> <ul style="list-style-type: none"> <li>• Investment Excel sheet: "Grandpuits, Summary ERU generation &amp; cost table</li> <li>• Investment Excel sheet calculation of metal losses during project time.</li> </ul> <p>The main types of costs are:</p> <ul style="list-style-type: none"> <li>• Costs for catalyst/leasing or investment</li> <li>• Cost for the loss of noble metals in the catalyst lifetime</li> <li>• Monitoring equipment (Finetech) which is in compliance with the monitoring standards listed in the methodology</li> <li>• Installation and connection</li> <li>• Sampling points, calibration gases, pressure regulators, access platform</li> <li>• Engineering</li> <li>• QAL2 audit (2010)</li> <li>• QAL 3 (maintenance, calibrations etc) (ongoing)</li> <li>• Annual Surveillance Test ( 2011, 2012)</li> <li>• Determination (once)</li> <li>• First Verification</li> <li>• Subsequent Verifications (x 5)</li> </ul> <p>The results of the assessment of the financial sheets are the following:</p> <ul style="list-style-type: none"> <li>• The numbers mentioned in the cost sheets are proved by evidences provided during the on-site visit or during the determination process.</li> <li>• Since the contract between Heraeus and GPN includes a maximum guaranteed performance (70%) over the full crediting period, a technical lifetime assessment should not be</li> </ul>		



Finding:	B4
	<p>undertaken.</p> <ul style="list-style-type: none"> <li>• Taxation (VAT) is excluded from the calculation.</li> <li>• The input values are referenced and proved with contracts or technical offers.</li> <li>• Between 2009 and 2010, the project costs are summarised to 996,033 EUR, the revenues in the same period from the ERUs issued are 2,397,980.</li> <li>• The tax savings caused by less N<sub>2</sub>O-emission are 182,954 EUR between 2009 and 2010. It could be shown, that it is not possible to compensate the costs of the project activity (996,033 EUR) only with profits from the a.m. N<sub>2</sub>O-tax savings.</li> <li>• Since no benchmark is predefined (according to the methodology), a further assessment of the IRR is not required.</li> <li>• The Annex 3 of the Determination Report includes a detailed assessment of financial parameters.</li> </ul>
<p><b>Conclusion</b> <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input checked="" type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>

Finding:	B5		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<p><b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	Table 10 in section B.7.1 should include the measurement frequency for all relevant parameters.		
<p><b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<i>The measurement frequencies for all parameters have been added to table 10 in section B.7.1</i>		
<p><b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	OK. Additional information is given in table 10 in section B.7.1.		
<p><b>Conclusion</b> <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input checked="" type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>		



Finding:	B6		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The measurement/calculation of the parameter NAP <sub>n</sub> (P.5) in Table 10 in section B.7.1 should be described in detail in section B.6.1.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	A step-by-step procedure of the measurement and calculation of the parameter NAP has now been added in section B.6.1 (see 'Measurement of NAP').		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. The automatically determination of HNO <sub>3</sub> -flow rate and the regular check of density and concentration in the laboratory is described in section 6.1..		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding:	B7		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Reference in B.7.2. (AMS/QAL1) should be made to recent EB decisions to QAL1 requirements since the methodology requires the compliance with EN 14181 or an appropriate French standard.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Sections '3. Analyser' and 'QAL1' have now been adjusted to explain more clearly that a QAL2 is sufficient for demonstrating the suitability of the analyser for the project. A footnote has been added referring to the decision by the CDM EB that compliance with EN14181 is not a mandatory requirement of AM0034.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. It was clearly referenced, that a the CAL 2 check by an independent and accredited entity is sufficient to prove the suitability of the AMS for monitoring.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		



Finding:	B8		
<b>Classification</b>	<input type="checkbox"/> CAR	<input type="checkbox"/> CL	<input checked="" type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The processing of the monitoring data should be described step by step in the monitoring report.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The processing of the monitoring data will be described step-by-step in the monitoring report to be provided for the first verification.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. The procedure of processing of the monitoring data needs to be checked by the verifier at the first verification.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input checked="" type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input type="checkbox"/> The project complies with the requirements		

Finding:	B9		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The parameter OT <sub>range</sub> in Table 5 in section B.6.2 has to be changed according to the plant manual.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The parameter OT <sub>range</sub> in Table 5 in section B.6.2 has now been changed to '800 – 930' in accordance with the plant operating manual.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. The mentioned value has been corrected according to the plant manual.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		





Finding:	B10		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	It has to be clarified in section B.6.1 what the plant operational status will be if one of the four ammonia burners is passing the trip point value.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	A sentence has been added to section B.6.1 under 'Measurement during standard plant operation' to explain what happens when the parameters for one burner lie outside the trip point values.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. It was explained, that all four burners will automatically shut down, if one ammonia burner will pass the trip point.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding:	B11		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	It should be clarified in section B.6.1 why the number of tonnes of produced nitric acid will not be adjusted if the plant is considered to be out of operation.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	An explanation has been added in section B.6.1 under 'Measurement during standard plant operation' to explain why the number of tonnes of HNO <sub>3</sub> produced will not be adjusted if the plant is considered to be out of operation.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. It was stated, that in case of shut down of the plant and closing of the ammonia valve, the only remaining HNO <sub>3</sub> will discharged from the plant. The production of additional HNO <sub>3</sub> is not possible.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		



Finding:	B12		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The first bullet point under "Measurement of N <sub>2</sub> O..." in section B.6.1, page 21, needs to be corrected w.r.t. operation hours used in the calculation of project emissions.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Part of the sentence in the first bullet point under 'Measurement of N <sub>2</sub> O data sets for the calculation of project emissions' in section B.6.1 has now been removed so that the sentence is factually correct with regard to the operating hours used in the calculation of project emissions.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. It is clarified, that operation hours are used to calculate project emissions.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input type="checkbox"/> The project complies with the requirements		

Finding:	B13		
<b>Classification</b>	<input type="checkbox"/> CAR	<input type="checkbox"/> CL	<input checked="" type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The verifier has to check the appropriateness of the AMS (with regard to e.g. location of the sampling point, QAL1, QAL 2, uncertainty assessment).		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>			
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>			
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input checked="" type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input type="checkbox"/> The project complies with the requirements		



## 5 DETERMINATION ASSESSMENT SUMMARY

The following paragraphs include the summary of the final determination assessments after all CARs and CRs are closed out. For details of the assessments pl. refer to the discussion of the validation findings in chapter 4 and the determination protocol (Annex 1).

### 5.1 General Description of the Project Activity

#### 5.1.1 Participation

##### LOA

No Letter of Approval (LoA) has been provided from the French DFP so far. A corresponding CAR has been raised. As the LoA will only be issued upon a positive determination opinion, this CAR will be closed upon issuance of host country.

##### Project Participants

The project participants are listed in section A.3 of the PDD and this information is consistent with the contact details provided in annex 1 of the PDD.

No entities other than those intended to be approved or authorised to be project participants are indicated in these sections of the PDD.

For an in depth evaluation of these topics, please refer to section A.1 of the table A-1 of annex 1.

#### 5.1.2 PDD Editorial Aspects

The PDD is in line with the structure and guidance specified in the decree set from March 2<sup>nd</sup> 2007 issued by the "Ministère de l'écologie et du développement durable" <sup>/B-5/</sup> and with the "Projet Domestique" Methodology: Catalytic reduction of N<sub>2</sub>O at nitric acid plants <sup>/B-1/</sup>.

For an in depth evaluation of these topics, please refer to section A.3 of the table A-1 of the annex 1.

### 5.1.3 Technology to be Employed

The description of the project as contained in the PDD is complete and accurate and it provides the reader with a clear understanding of the nature of the project activity.

The technology and know-how used in the project activity is assessed to be environmentally safe and sound.

For an in depth evaluation of these topics, please refer to section A.4 of the table A-1 of the annex 1 and chapter 2 of this validation report.

### 5.1.4 Type of Project

The project qualifies as a Large Scale JI Track 1 Project, scope 5: "Chemical Industry". The host country France fulfils the requirements for Track 1 participation.

## 5.2 Project Baseline, Additionality and Monitoring Plan

### 5.2.1 Application of the Methodology

The project applies to a valid version of a French methodology for Projets Domestiques "Catalytic reduction of N<sub>2</sub>O at nitric acid plants"<sup>/B-1, /B-2/</sup>, published by the Ministère de l'Écologie, de l'Énergie, du Développement durable et de la Mer (French Ministry of Ecology and Sustainable Development)<sup>/mist/</sup>.

The project activity meets all applicability conditions of the applied methodology. Beyond this, the proposed project activity meets all the other possible requirements or stipulations mentioned in all sections of the selected methodology.

Furthermore the project activity is not expected to result in significant emissions, related both to project and leakage, other than those listed in the methodology.

Summarised it is assessed that the project applies a valid version of an approved methodology and the methodology is applicable to the project.

For an in depth evaluation of these topics, please refer to section B.1 of the table A-1 of the annex 1.

### 5.2.2 Project Boundary

The PDD correctly describes the project boundary including the physical delineation of the project activity (all parts of the Nitric Acid Plant Grandpuits) and the description of the emission sources and GHGs that are included in the project boundary for the purpose of calculating project and baseline emissions for this project activity.

No emission sources which are impacted by the project activity but not addressed by the approved methodology have been identified during validation.

For an in depth evaluation of these topics, please refer to section B.2 of the table A-1 of the annex 1.

### 5.2.3 Baseline Identification

The PDD provides a transparent and verifiable description of the identified most plausible baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed project activity.

The procedure to identify the most plausible reference scenario derived from the methodology (para 3 of the methodology) has been applied correctly and is transparently and sufficiently documented in the PDD.

The identification of possible alternatives of the project activity was carried out appropriately. Furthermore the PP has shown that all relevant policies and circumstances have been identified and correctly considered in the PDD in accordance with the guidance by the DFP.

In summary it can be assessed that the identified baseline scenario reasonably represents what would occur in the absence of the proposed project activity and the approved methodology used is applicable to the identified baseline scenario.

For an in depth evaluation of these topics, please refer to the section B.3 of the Annex 1 as well as table A-2 of the Annex 2.

### 5.2.4 Calculation of GHG Emission Reductions

The PDD applies steps and equations to calculate project emissions, baseline emissions, leakage and emission reductions as per the requirements of the methodology.

For the calculation of the GHG emission reductions, the correct equations have been used reflecting the methodological choices. Furthermore all equations are applied correctly.

#### Baseline Emissions:

The baseline methodology takes into account

- A decree of the MEEDAT, setting the benchmark Emission Factors ( $EF_{BM}$ ) for the calculation of the reduction of N<sub>2</sub>O-Emission in future years.

These values/years are:

Year:	2009	2010	2011	2012	
Value:	2.5	2.5	2.5	1.85	[kg N <sub>2</sub> O/t HNO <sub>3</sub> (100%)]

- A plant-specific 'arrêté préfectoral from 4th June 2009, introduced by the local DRIRE (Directions Régionales de l'Industrie de la Recherche et de l'Environnement)', which limits N<sub>2</sub>O emissions at the GPN Grandpuits plant to 4 kg N<sub>2</sub>O/tHNO<sub>3</sub> (100%) from December 2009 onwards

Since the regulatory N<sub>2</sub>O emissions limit will be higher than the benchmark value, these arrêté préfectoral values will not be taken into account for calculating the ERUs.

The baseline emission factor is determined as follows:

These values/years are:

Year:	2009	2010	2011	2012	
Value:	2.5	2.5	2.5	1.85	[kg N <sub>2</sub> O/t HNO <sub>3</sub> (100%)]

### **Project Emissions:**

Taking into account a 65.4 % efficiency of the secondary N<sub>2</sub>O abatement catalyst and an Emission Factor of 3.99 kg N<sub>2</sub>O/tHNO<sub>3</sub> (N<sub>2</sub>O concentration in the stack measured over a period of 12 months from December 2007 to December 2009), the resulting Project Emission Factor was calculated to 1.38 kg N<sub>2</sub>O/tHNO<sub>3</sub>. Note: The campaign from January 2009 on with a new catalyst supplier Johnson Matthew (usually Hereaus is used) shows higher concentrations/emission factor, but as this campaign was used as a single trial campaign, it will not be taken into account for the estimation of project emissions.

For an in depth evaluation of these topics, please refer to sections B5-B6 of the table A-1 of the annex 1.

## **5.2.5 Additionality Determination**

### **Prior consideration of JI**

The plant operator decided to involve in the JI project mechanism, after deep discussions with the French DFP and the issuing of the Projet Domestique Methodology<sup>B-1/</sup>. The N<sub>2</sub>O abatement catalyst was installed at a planned shut down of the plant, the AMS will be properly installed before approval of the Projet Domestique and starting of the project activity.

Hence, the determination team can confirm that the project complies with the requirements regarding prior consideration of JI.

### **Application of Methodology / Methodological Tools**

The discussion of additionality in the PDD was justified and conducted according to the step-by-step- approach of the Projet Domestique Methodology<sup>B-1, B-2/</sup>. A financial barrier assessment, according to the Arrêté du 2 mars 2007 of the «Ministère de l'écologie et du développement durable» was included in the consideration.

---

## Alternatives

The PDD contains a complete list of all realistic alternatives to the project scenario. The list contains inter alia the project activity not undertaken as a JI project activity and the continuation of the status quo.

## Investment Analysis

The PP provided an investment-sheet with all relevant types of costs occurred in the project activity<sup>INV/</sup>. The basis of this cost assessment is a comparison of costs incurred in absence of the project (to fulfill the legal requirements) against the costs of the project activity.

The main types of costs are:

- Costs for catalyst/leasing or investment
- Cost for the loss of noble metals in the catalyst lifetime
- Monitoring equipment (Finetech and others) which is in compliance with the monitoring standards listed in the methodology
- Installation and connection
- Sampling points, calibration gases, pressure regulators, access platform
- Engineering
- QAL2 audit (2010)
- QAL 3 (maintenance, calibrations etc) (ongoing)
- Annual Surveillance Test ( 2011, 2012)
- Determination (once)
- First Verification
- Subsequent Verifications (x 5)

The validation team has conducted a thorough assessment of the parameters and assumptions used in this calculation. The conclusion is that all relevant financial indicators and parameters are determined accurately. This was checked by means of cross-checking the evidences provided by the PP as well as acquired through

background investigation (public regulation, local tax laws, etc.); besides, expertise in relevant accounting practices has been consulted.

It can be confirmed, that none of the N<sub>2</sub>O destruction technology options are expected to generate any significant financial or economic benefits other than JI related income. Therefore, the "Business As Usual" scenario, the installation of just enough secondary N<sub>2</sub>O abatement catalyst to comply with the applicable N<sub>2</sub>O regulation, is considered not to face any significant investment barriers.

### **Barrier Analysis**

The PP has justified the additionality on the basis of

- a) Investment barriers
- b) Technological barriers
- c) Other barriers

Though all barriers are justified to a certain extent, none of the barriers was assessed by the validation team to be a decisive barrier which would have prevented the project from realization.

For an in depth evaluation of these topics, please refer to sections B4 of the table A-1 of the annex 1.

### **Summary**

The procedure to justify the additionality of the project activity derived from the methodology or required methodological tools has been applied correctly and is transparently documented in the PDD.

The validation team is convinced that the JI was seriously considered during the Management Decision for the project.

Considering all statements above, the validation team arrived at the conclusion that the project activity is **additional** because the project is not financially viable without JI revenues, whereas none of the other presented barriers could be considered as a decisive barrier for the project implementation.

### **5.2.6 Monitoring Methodology**

The data measurement, storage, assessment and processing was discussed with the plant operator GPN and N.serve, who will process the monitoring data and it can be

---

confirmed, that the monitoring plan is in line with the methodology *Projet Domestique Methodology: Catalytic reduction of N<sub>2</sub>O at nitric acid plants*<sup>/B-2/</sup>.

For an in depth evaluation of these topics, please refer to section B6 of the table A-1 (annex 1).

### **5.2.7 Monitoring Plan**

The monitoring plan covers all monitoring parameters as stipulated in the applied monitoring procedure of the methodology. The monitoring plan can be implemented and the validation team arrived at the conclusion that all monitoring arrangements are feasible within the project design.

For an in depth evaluation of these topics, please refer to section B6 of the table A-1 (annex 1).

### **5.2.8 Project Management Planning**

The project management planning is appropriate for the purpose of the projects monitoring.

For an in depth evaluation of these topics, please refer to section B.7 of the table A-1 of the annex 1.

### **5.2.9 Crediting Period**

The project starting date will be after the final approval of the DFP, which could be expected by the end of March 2010. The duration of the crediting period extends from end of March 2010 to 2012-12-31, which is deemed realistic and appropriate.

For an in depth evaluation of these topics, please refer to section C of the table A-1 of the annex 1.

### **5.2.10 Environmental Impacts**

The Host Country France does not require an Environmental Impact Assessment (EIA) for the project. This could be proved by the PP with a respective e-mail from the DFP. Furthermore on the basis of document review and the on-site visit the validation team is convinced that negative environmental impacts due to the project are unlikely to occur.

For an in depth evaluation of these topics, please refer to section D of the table A-1 of the annex 1.

---

### **5.2.11 Comments by Global Stakeholders**

The global stakeholder consultation for the project was carried out on the TÜV NORD website [www.global-warming.de](http://www.global-warming.de) for 30 days<sup>/gw/</sup>, in line with the applicable requirements.

For an in depth evaluation of these topics, please refer to section E of the table A-1 of the annex 1.

### **5.2.12 Issues for verification**

The verification should include the checking of the appropriateness of the AMS (with regard to e.g. location of the sampling point, QAL1, QAL 2, uncertainty assessment).

The procedure of processing of the monitoring data needs to be checked by the verifier at the first verification.

## **5.3 General Description of the Project Activity**

### **5.3.1 Participation**

#### **LOA**

The submission of a full project dossier (including the PDD and preliminary Determination report with a positive determination opinion of an Independent Entity) is a prerequisite for the Host Country Approval from the MEEDDAT.

#### **Project Participants**

Project participant involved in the project activity is the PGN S.A. (France) and N.serve Environmental Services GmbH (Germany)

### **5.3.2 PDD editorial Aspects**

A Project Design Document appropriate to the annex 1 („Example illustrating the application of this methodology“) of the Projet Domestique Methodology: “Catalytic reduction of N<sub>2</sub>O at nitric acid plants” has been used.

### **5.3.3 Technology to be employed.**

Within the project, N<sub>2</sub>O emissions from the production of nitric acid at GPN's Grandpuits nitric acid plant will be reduced by installation of a secondary Heraeus N<sub>2</sub>O abatement technology.



The description of the project activity is considered to be accurate, complete, presented in a detailed manner and in line with provided evidences and results of the on-site inspection.

### **5.3.4 Small Scale Projects**

Not applicable

## **5.4 Project Baseline, Additionality and Monitoring Plan**

### **5.4.1 Application of the Methodology**

The used baseline methodology provides an algorithm for identification and justification of the baseline. This algorithm stipulates a step-wise approach which should be followed for elaboration of the baseline scenario and justification of the additionality.

Data sources and assumptions as provided within the developed methodology draw upon the main provisions of the Projet Domestique Methodology: "Catalytic reduction of N<sub>2</sub>O at nitric acid plants", stipulated by the French Designated Focal Point (Le Ministère de l'Écologie, de l'Énergie, du Développement Durable et de l'Aménagement du Territoire (MEEDDAT)<sup>/A-1/</sup>.

### **5.4.2 Project Boundary**

All equipment used within the project activity has been indicated in the PDD including the information about its purpose and the technical specification. Project boundary is clearly described in words and a visualisation of the physical project boundary as well as a table defining all significant GHG gases in compliance with the methodology has been included in the PDD.

In the course of determination the determination team has inspected the whole process of HNO<sub>3</sub>-production. The project boundary begins at the inlets to the ammonia burners and ends at the tail gas stack. It could be verified that all equipment mentioned has been physically installed and is in a good working condition. Furthermore the technical specification of the installed equipment is in line with provided documentation and is in line with the indication in the PDD.

### **5.4.3 Baseline Identification**

The description of baseline identification in the PDD is transparent and verifiable. The procedure to arrive to the baseline is in line with the applied project specific methodology. All plausible alternatives have been identified. Only alternatives were excluded which are assessed not to be plausible alternatives. Within the financial

analysis it could be demonstrated that the identified most plausible alternative (i.e. baseline scenario) is financially more attractive than the project scenario.

#### **5.4.4 Calculation of GHG Emission Reductions**

The calculation has been done as per applied project specific methodology. All data not to be monitored have been assessed as correct. The values for the monitoring parameters assumed within the calculation are plausible. It could be concluded that the estimated emission reductions are plausible and conservative.

#### **5.4.5 Additionality Determination**

##### **Consideration of JI in decision making (if project start before determination PDD)**

The starting date of the project is conducted with the installation of the catalyst and the proper implementation of the AMS and will be end of March 2010. This date is after the determination of the PDD.

##### **Application of methodology / methodological tools**

The project specific baseline methodology provides an algorithm for identification and justification of the baseline. Data sources and assumptions as provided within the developed methodology draw upon the main provisions of the Projet Domestique Methodology: "Catalytic reduction of N<sub>2</sub>O at nitric acid plants", stipulated by the French Designated Focal Point (Le Ministère de l'Écologie, de l'Énergie, du Développement Durable et de l'Aménagement du Territoire (MEEDDAT).

A universal 'Benchmark Emissions Factor' (EF<sub>BM</sub>) will be applied for all French nitric acid plants eligible to undertake Projets Domestiques, regardless of their size, their technical characteristics and their past and present emissions levels.

##### **Alternatives**

The PDD contains a complete list of all realistic alternatives to the project scenario. The project activity not undertaken as a JI project activity and the continuation of the current practice have been identified as plausible and realistic alternatives.

##### **Investment analysis**

Investment analysis shows that the project scenario is not the most attractive alternative or economically feasible without benefits from ERU sales. All parameters applied within the investment analysis have been assessed as plausible.

##### **Barrier analysis**

A detailed barrier analysis has been carried out by PP: In most cases the identified barriers have been assessed as a serious difficulty with reference to the project implementation.

Determination team analysed In the course of the determination a sufficient confidence could be gained that an immense effort has been spent by the project participant to overcome the identified barriers. The justification of the barriers supported by evidence and substantiated. Furthermore the determination team is of the opinion that argumentation as provided by the project participant in this context is convincing.

However the identified barriers could not be assessed as a sufficient to prevent the implementation of this alternative.

### **Common practice analysis**

The common practice analysis provided in the PDD is accurate. The information and data sources used are appropriately references and could be proved in the course of determination.

A sufficient confidence could be gained that the proposed project type (i.e.. technology and/or practice) has not diffused in the relevant sector and geographical area and the time the project started.

### **Summary**

In the course of the determination it be concluded that the baseline scenario has been appropriately elaborated and additionality has been appropriately justified. All conclusions could be supported by the evidences.

### **5.4.6 Monitoring Methodology**

The project specific methodology "Catalytic reduction of N<sub>2</sub>O at nitric acid plants" was provided by the DFP requires the collection of N<sub>2</sub>O emissions data and – in so far as pre-defined trip point values for the plant exist – the monitoring of ammonia and air flow into the ammonia burner during the project's lifetime. The standard of the monitoring equipment and procedures and monitoring methodology are defined I para 6 of the methodology.

### **5.4.7 Monitoring Plan**

The monitoring plan covers all monitoring parameters given in the applied monitoring methodology. The monitoring plan can be implemented and are all monitoring arrangements are feasible within the project design.

---

#### **5.4.8 Project Management Planning**

The project management planning is appropriate for the purpose of the projects monitoring.

#### **5.4.9 Crediting Period**

The project activity will only become eligible to receive ERUs on receipt of the official government LoA, or at the latest two months after submission of the Project Dossier applying for a LoA. For Grandpuits, the final approval could be expected by the end of March 2010 and therefore the crediting period of the project is likely to start at the beginning of April 2010.

The choice of the crediting period is appropriate. The crediting period starting date is appropriate.

#### **5.4.10 Environmental Impacts**

Since there is no negative effect on the air quality, water pollution or other environmental conditions, an EIA is not required from host country for this specific type of project<sup>EIA/</sup>.

#### **5.4.11 Comments by Local Stakeholders**

As the JI project does not have any relevance for local air, water or soil emissions, a local stakeholder consultation is not considered necessary.

## 6 DETERMINATION OPINION

GPN S.A. has commissioned the TÜV NORD JI/CDM Certification Program (CP) as a Third Party to determinate the project:

“GPN Grandpuits N<sub>2</sub>O abatement project“

with regard to the relevant requirements of the host country France and of the UNFCCC for JI project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria refer to the Kyoto Protocol Article 6 criteria and the Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in the Marrakech Accords.

The project applies to the Projet Domestique Methodology: “Catalytic reduction of N<sub>2</sub>O at nitric acid plants”, approved and published by the MEEDDAT in July 2009.

The review of the project design documentation and additional documents related to baseline and monitoring methodology have provided TÜV NORD JI/CDM CP with sufficient evidence to determinate the fulfilment of the stated criteria.

In detail the conclusions can be summarised as follows:

- The project is in line with all relevant host country criteria (France) and all relevant UNFCCC requirements for JI.
- The project additionality is sufficiently justified in the PDD, the monitoring plan is transparent and adequate.
- The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission reductions of 266,442 tCO<sub>2</sub>e (between 2009 and 2012) are most likely to be achieved within the crediting period.

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the determination PDD.

Since the LoA will be issued after registration of the project at the DFP, CAR A1 can not be closed at this time. Because of this, the report will be on the status of “Draft” until the LoA are provided.

Essen, 2010-02-15

Essen, 2010-02-15



Mr Rainer Winter,  
TÜV NORD JI/CDM CP  
Determination Team Leader



Eric Krupp  
Final Approval Person  
TÜV NORD JI/CDM CP  
Final Approval

## 7 REFERENCES

**Table 7-1:** Documents provided by the project participant

	Document
<b>/14001/</b>	ISO 14001 certificate of the plant valid until 2012-05-13
<b>/9001/</b>	ISO 9001 certificate of the plant valid until 2012-05-13
<b>/AP/</b>	Arrete prefecoral n° 09 DAIDD IC 142 limiting the maximum plant capacity on 1,250 t HNO <sub>3</sub> /a, and limiting N <sub>2</sub> O emissions to a maximum of 4kg N <sub>2</sub> O/tHNO <sub>3</sub> from the start of the next production campaign in December 2009.
<b>/ABSORB/</b>	P&I-Flowsheet with instrumentation of the absorption tower
<b>/BREF/</b>	Reference Document on Best Available Techniques for the Manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilizers (August 2007)
<b>/BURNERS/</b>	P&I-Flowsheet with instrumentation of the Ammonia burners
<b>/CONTROL/</b>	ISO 9001 document: control and calibration of flow meter
<b>/COR/</b>	ISO 9001 document: control and calibration of HNO <sub>3</sub> -density meter
<b>/DENS/</b>	Technical description of the Bopp & Reuther density meter
<b>/EIA/</b>	Email from the DFP regarding Environmental Impact Assessment
<b>/EMISS/</b>	<ul style="list-style-type: none"> <li>• Data of N<sub>2</sub>O-emissions of the plant from 2007-12 – 2009-09 as kg N<sub>2</sub>O/t HNO<sub>3</sub></li> <li>• ISO 9001 documents/procedures of the emission determination</li> <li>• Monitoring standard BP X30-331 of the AFNOR-normalisation association of france</li> </ul>
<b>/EQUIP/</b>	ISO 9001 document: list of relevant instruments for product characterisation
<b>/FINETECH/</b>	FINETECH technical and financial proposal of the AMS
<b>/FLOW/</b>	Technical description of the KROHNE Nitric Acid flow meter
<b>/FSTRIP/</b>	Principle P&I-Flowsheet with trip-points measurement-instrumentation and tag-numbers
<b>/HERAEUS/</b>	Heraeus technical proposal of abatement catalyst

	Document
<b>/HERAEUS1</b> /	Heraeus commercial proposal of abatement catalyst
<b>/INSTALL/</b>	Technical drawings regarding the installation of the catalyst basket/catalyst
<b>/INV1/</b>	Investment Excel sheet: "Grandpuits, Summary ERU generation & cost table"
<b>/INV2/</b>	Investment Excel sheet calculation of metal losses during project time
<b>/MONI/</b>	ISO 9001 document regarding the monitoring/measurement of the relevant parameters of the project activity
<b>/NH3AIR/</b>	P&I-Flowsheet with instrumentation of the Ammonia/Air input
<b>/ORGA/</b>	General overview of the company organization
<b>/PHOTO/</b>	Photo of the plant
<b>/PI/</b>	Screenshot of the PI-system –Ammonia/Air-ratio setting and display of current level
<b>/PLAN/</b>	Plant map
<b>/PRES/</b>	General plant presentation, 21 pages
<b>/PROJECT/</b>	Presentation of the project activity, 11 pages
<b>/Scheme/</b>	Scheme block flow diagram of Nitric Acid Plant
<b>/TRIP/</b>	Trip point parameters, listed in a plant-safety document

**Table 7-2:** Background investigation and assessment documents

Reference	Document
<b>/B-1/</b>	Méthode pour les Projets Domestiques Réduction catalytique du N <sub>2</sub> O dans des usines d'acide nitrique (Projet Domestique Methodology: Catalytic reduction of N <sub>2</sub> O at nitric acid plants)
<b>/B-2/</b>	Projet Domestique Methodology Catalytic reduction of N <sub>2</sub> O at nitric acid plants (Translation of /B-1/)



Reference	Document
/B-3/	European Standard DIN EN 14181: "Stationary source emissions – Quality assurance of automated measuring systems"
/B-4/	Projet Design Document (PDD): YARA Ambès N <sub>2</sub> O abatement project Version: 15th June 2009 (Annex 1 of /B-2/)
/B-5/	Arrêté du 2 mars 2007 of the 'Ministère de l'écologie et du développement durable (Implementation of the JI-Guidelines in France)
/B-6/	Reference Document on Best Available Techniques for the Manufacture of Large Volume Inorganic Chemicals - Ammonia, Acids and Fertilisers
/B-7/	Approved baseline and monitoring methodology AM0034: "Catalytic reduction of N <sub>2</sub> O inside the ammonia burner of nitric acid plants", version 3.4



**Table 7-3: Websites used**

Reference	Link	Organisation
/bref/	<a href="http://eippcb.jrc.ec.europa.eu/reference/">http://eippcb.jrc.ec.europa.eu/reference/</a>	Website of the European Commission, Joint Research Centre, Institute for Prospective Technological Studies (Provision of BAT-Reference documents)
/dfp/	<a href="http://www.developpement-durable.gouv.fr/">http://www.developpement-durable.gouv.fr/</a>	Ministère de l'Écologie, de l'Énergie, du Développement Durable et de la Mer, en charge des Technologies vertes et des Négociations sur le climat
/dehst/	<a href="http://www.dehst.de">http://www.dehst.de</a>	German Emissions Trading Authority (DEHSt) at the Federal Environment Agency
/gw/	<a href="http://www.global-warming.de/">http://www.global-warming.de/</a>	TÜV Nord platform hosting projects open for comments at the determination stage
/ipcc/	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>	IPCC publications
/lf/	<a href="http://www.legifrance.gouv.fr/">http://www.legifrance.gouv.fr/</a>	Site of the Legifrance (La service public de la diffusion du droit)
/mist/	<a href="http://www.ecologie.gouv.fr/Methodologies-de-projets.html">http://www.ecologie.gouv.fr/Methodologies-de-projets.html</a>	Ministère de l'Écologie, de l'Énergie, du Développement durable et de la Mer (Ministry of ecology and sustainable development)
/nfg/	<a href="http://www.effet-de-serre.gouv.fr/accueil">http://www.effet-de-serre.gouv.fr/accueil</a>	Mission interministérielle sur l'effet de serre (French Inter-Ministry Mission on the Greenhouse Effect)
/unfccc/	<a href="http://ji.unfccc.int">http://ji.unfccc.int</a>	UNFCCC

**Table 7-4: List of interviewed persons**

Reference	Mol <sup>1</sup>		Name	Organisation / Function
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Bertrand Walle	GPN, Operational manager
/IM01/	V	<input checked="" type="checkbox"/> Mr.	Pascal Fauquet	Grande Paroisse, Measurement and



Reference	Mol <sup>1</sup>		Name	Organisation / Function
		<input type="checkbox"/> Ms		AMS Engineer
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Simon Declaire	GPN, Mid term Production Engineer
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Vianney Robert	GPN, Process Engineer
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Robert Vianney	GPN, Process Engineer
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Benjamin Lefebvre	GPN, Technician for analyser
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Yannick Quenton	GPN, Methodologies development
/IM01/	V	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms	Rebecca Cardani-Strange	N.serve, Project manager
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Albrecht von Ruffer	N.serve, Managing Director
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Fabrice Relmaunay	SPIE, Maintenance Personal for AMS

<sup>1)</sup> Means of Interview: (Telephone, E-Mail, Visit)

# ANNEX

<b>A1:</b>	Determination Protocol
<b>A2:</b>	Assessment of Baseline Information
<b>A3:</b>	Assessment of Financial Parameters
<b>A4:</b>	Assessment of Barrier Analysis
<b>A5:</b>	Outcome of the GSCP
<b>A6:</b>	Application of non approved Methodologies Requirement Checklist

## ANNEX 1: DETERMINATION PROTOCOL

**Table A-1: Requirements Checklist**

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
<b>A. General Description of Project Activity</b>				
<b>A.1. Approval</b> <i>The written approval of the parties involved is a mandatory requirement</i>				
A.1.1. Which Parties and project Participants are involved in the project?	Parties involved are France (as a Host Party) and Germany. The Project Participant of the Host Country is GPN S.A. The Project Participant of Germany is N.serve Environmental Services GmbH (Germany)	/PDD/		OK
A.1.2. Are the parties involved eligible for JI Track 1?	By means of checking the UNFCCC website, it was confirmed that France and Germany are eligible under JI track 1.	/mist/ /dehst/ /unfccc/		OK
A.1.3. Has the project provided written approvals of all parties involved?	The pending letters of approval will be provided only on the basis of the successful conclusion of this determination. Thus this CAR will be closed if the host country issues their LoA.	/PDD/	CAR A1	

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	Nevertheless, a corresponding CAR was raised.			
A.1.4. Are the approvals issued from organisations listed as DFPs on the UNFCCC JI website?	Please refer to the comment under A.1.3.		CAR A1	
A.1.5. Do the written approvals confirm that the corresponding party is a Party to the Kyoto Protocol?	Please refer to the comment under A.1.3.		CAR A1	
A.1.6. Do the written approvals refer to the precise project title in the PDD submitted for registration?	Please refer to the comment under A.1.3.		CAR A1	
A.1.7. Is the information regarding the project participants listed in section A3 and in Annex 1 of the PDD internally consistent to each other?	No, the information regarding the name of the organisation given in Annex 1 is not consistent with A.3		CAR A3	OK
A.1.8. Are all project participants listed in the PDD approved at least by one Party involved?	Please refer to the comment under A.1.3.		CAR A1	
A.1.9. Are any other project participants approved but not listed in the PDD?	Please refer to the comment under A.1.3.		CAR A1	
<b>A.2. PDD editorial aspects</b> <i>The PDD used as a basis for determination shall be prepared in accordance with the latest template and guidance from the JISC available on the UNFCCC JI website.</i>				
A.2.1. Has the latest version of the PDD form been	Since this is a JI Track 1 project activity there are no	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
applied?	<p>mandatory forms that have to be used.</p> <p>A Project Design Document in accordance with the annex 1 („Example illustrating the application of this methodology“) of the Projet Domestique Methodology: “Catalytic reduction of N<sub>2</sub>O at nitric acid plants” has been used.</p>	/B-1/B-2/ /B-4/		
A.2.2. Has the PDD been duly filled in accordance with the latest guidance(s)?	<p>The PDD is in line with the „Example illustrating the application of this methodology“ (Annex 1) of the Projet Domestique Methodology: “Catalytic reduction of N<sub>2</sub>O at nitric acid plants”.</p> <p>The PDD have in general been filled in accordance with the structure and guidance given in the methodology, but minor editorial issues have been discussed with the PPs during the site visit. The following findings have been raised and issued as FAR, CAR, CL as listed below:</p> <p>Indicate the maximum and budgeted annual production output of HNO<sub>3</sub> in A.2 as well as in B.6.3.</p>	/PDD/ /B-1/ /B-2/ /B-4/  /PDD/		OK       OK



<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
<b>A.3. Technology to be employed</b>  <i>Determination of project technology focuses on the project engineering, choice of technology and competence/ maintenance needs. The DOE should ensure that environmentally safe and sound technology and know-how is used.</i>				
A.3.1. Does the PDD contain a clear, accurate and complete project description?	<p>Within the project, N<sub>2</sub>O emissions from the production of nitric acid at GPN's Grandpuits nitric acid plant will be reduced by installation of a secondary N<sub>2</sub>O abatement catalyst.</p> <p>The project description was provided in various parts of the PDD, esp. in the chapters A.2, A.4.2 and A.4.3. The project activity is assessed as clear, accurate, complete and sufficient; the PDD is in line with provided evidences and physical implementation of the project activity.</p> <p>The details including the technical specification of the state of the art catalyst technology for the abatement of N<sub>2</sub>O have been provided in the PDD in a detailed and appropriate manner. During the on-site visit the determination team has inspected the facilities of the HNO<sub>3</sub>-production site and it could be verified that physical implementation of the project activity is in line with the information provided in the PDD.</p> <p>The applicability of the type of installed abatement catalyst (Heraeus HR-SC) under appropriate plant conditions is suitable to decompose N<sub>2</sub>O and the ordered AMS fulfils the</p>	/PDD/ /HERAE US/  /HERAE US1/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	requirement of the methodology regarding the monitoring of the project emissions.			
A.3.2. Is this description in accordance with the real situation or (in case of greenfield projects) is it most likely that the project will be implemented acc. to the project description?	The situation on site was inspected by the determination team and is as described in the PDD and other project documentation documents.			OK
A.3.3. In case the project involves alteration of the existing installation or process, is a clear description available regarding the differences between the project and the pre-project situation?	Within the project, N <sub>2</sub> O emissions from the production of nitric acid at GPN's Grandpuits nitric acid plant will be reduced by installation of a secondary N <sub>2</sub> O abatement catalyst. The N <sub>2</sub> O catalyst will be installed in the Ammonia burner. Prior to the project activity, no N <sub>2</sub> O abatement-technology was used so that the pre-project situation does not envisages any N <sub>2</sub> O abatement measures.	PDD		OK
A.3.4. Does the project design engineering reflect current good practices?	Yes. The project involves the installation of a secondary catalyst in the ammonia burner to abate nitrous oxide. Since this or similar type of catalyst is installed in several nitric acid plants which are involved in CDM and JI-projects, this project reflects current good practices.	/PDD/ /B-6/		OK



<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
A.3.5. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	The employed technology is defined as best available technology acc. to the BREF-Documents of the EU.	/PDD/ /B-6/		OK
<b>A.4. Small scale project activity</b> <i>It is assessed whether the project qualifies as small-scale JI project activity</i>				
A.4.1. Does the project qualify as a small scale project activity as defined by the JISC	Not applicable, because the project activity is a large scale project since the estimated emission reduction of 266,442 tCO <sub>2</sub> e between 2010 and 2012 exceeds the limit of 60,000 tCO <sub>2</sub> e annually.	/PDD/		OK
A.4.2. Does the project apply one of the approved small scale categories and any methodology and tool referred therein?	See A.4.1.			
A.4.3. Is the small scale project activity not a debundled component of a larger project activity?	See A.4.1.			
<b>B. Project Baseline, Additionality and</b>				

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
<b>Monitoring Plan</b>				
<b>B.1. Application of the Methodology</b>				
B.1.1. What kind of methodology has been used?	<p>Name: Méthode pour les Projets Domestiques: Réduction catalytique du N<sub>2</sub>O dans des usines d'acide nitrique (Projet Domestique Methodology: Catalytic reduction of N<sub>2</sub>O at nitric acid plants) from 2009-07.</p> <p>Type:</p> <p><input type="checkbox"/> I: CDM Approved Methodology – latest version</p> <p><input type="checkbox"/> II: CDM Approved Methodology – older version</p> <p><input checked="" type="checkbox"/> III: National Methodology</p> <p><input type="checkbox"/> IV: Combination of Approved Methodologies</p> <p><input type="checkbox"/> V: Project specific Methodology</p>	/PDD/ /B-1/ /B-2/ /B-4/		OK
B.1.2. In case of methodology types I and II: Is the applied CDM methodology identical with the version available on UNFCCC website or -in case of a country or project-cpecific methodology- is the methodology approved by the Host Country?	The proposed project activity applies the French Projet Domestique Methodology: "Catalytic reduction of N <sub>2</sub> O at nitric acid plants", which was approved and published by the French Ministry of ecology and sustainable development in 2009-07. Since this is an JI Track 1 project and an official methodology from the French DFP was used, Annex 6 must	/PDD/ /mist/		OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
In case of methodology types III – V: Annex 6 has to be filled	not be filled.			
B.1.3. Are all applicability criteria in the methodology, the applied tools or any other methodology component referred to therein fulfilled?	Yes, the applicability criteria in the methodology, the applied tools and other methodology components are in line with: <ul style="list-style-type: none"> <li>• French guidelines for the implementation of JI-Projects</li> <li>• Local decrees regarding the limiting of N<sub>2</sub>O-emissions</li> </ul> The methodology is applicable to project activities using secondary and tertiary N <sub>2</sub> O abatement technology.	/PDD/ /B-2/ /B-5/ /AP/	GLA5	OK
B.1.4. Is the project in accordance to every other stipulation or requirement mentioned in all sections of the methodology?	Yes, the project meets all stipulations of the methodology. In this context it has to be mentioned, that there has been a close contact between the project proponents and the DFP regarding the development of the project specific methodology.	/PDD/ /B-1/ /B-2/		OK
<b>B.2. Project Boundaries</b>  <i>Project Boundaries are the limits and borders defining the GHG emission reduction project</i>				
B.2.1. Are the project's spatial boundaries (geographical) clearly defined?	The project boundary includes the nitric acid plant from the inlets to the ammonia burner to the outlet of the stack. All NO <sub>x</sub> and N <sub>2</sub> O abatement-devices and the AMS in the stack are included. According to the methodology, only the emissions of N <sub>2</sub> O as tail gas emission have to be considered in the project boundary.	/PDD/	GAR B2	OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
	<p>This is -according to the methodology- clearly described in words and a visualisation of the physical project boundary as well as a table defining all significant GHG gases has been included in the PDD.</p> <p>A CAR B2 was raised, because Table 3 (Sources and gases included in the project boundary) was not completed in line with to the methodology.</p>			
B.2.2. Are all sources and GHGs included in the project boundary as required in the applied methodology?	The methodology only considers N <sub>2</sub> O as the main emission source in tail gas after the destruction facility. All other gases/sources are not included in the project boundary.	/PDD/		OK
B.2.3. In case the methodology allows to choose whether a source and/or gas is to be included, is the choice sufficiently explained and justified?	See B.2.2	/PDD/		OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
<b>B.3. Baseline Identification</b>  <i>The choice of the baseline scenario will be validated with focus on whether the baseline is a likely scenario, and whether the methodology to define the baseline scenario has been followed in a complete and transparent manner.</i>				
B.3.1. What has been identified as the baseline scenario?	The baseline scenario includes the installation of a N <sub>2</sub> O-abatement-technology (catalyst) to reduce the N <sub>2</sub> O-emissions according to the legal requirements, which limits the N <sub>2</sub> O-emissions to 4 kg N <sub>2</sub> O/t HNO <sub>3</sub> . Considerably less (in comparison to the project activity) of catalyst material would be needed to achieve compliance with the local decree which is 2.5 kg N <sub>2</sub> O/t HNO <sub>3</sub> .	/PDD/ /AP/		OK
B.3.2. What possible baseline scenarios have been considered?	Following alternative to the project activity has been identified: <ul style="list-style-type: none"> <li>• Continuation of the <i>Status Quo</i>, where <ol style="list-style-type: none"> <li>a. there is no N<sub>2</sub>O destruction technology installed</li> <li>b. an N<sub>2</sub>O abatement catalyst has already been installed for a preliminary technical trial, but the catalyst would either be removed at the end of this trial campaign</li> <li>c. only a sufficient amount of secondary catalyst material is installed to ensure compliance with any applicable legal N<sub>2</sub>O regulations</li> </ol> </li> </ul>	/PDD/		OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
	(Business as Usual). <ul style="list-style-type: none"> <li>• Alternative uses of N<sub>2</sub>O, such as: <ul style="list-style-type: none"> <li>a. Recycling of N<sub>2</sub>O for feedstock</li> <li>b. External use of N<sub>2</sub>O</li> </ul> </li> <li>• Installation of a Non-Selective Catalytic Reduction unit (NSCR)</li> <li>• Implementation of a primary, secondary or tertiary N<sub>2</sub>O destruction technology in the absence of the registration of the project activity as a Projet Domestique.</li> </ul>			
B.3.3. In case alternatives have to be considered, are all scenarios supplemental to those provided in the methodology reasonable in the context of the project activity?	No additional scenarios have been considered.			
B.3.4. Has the baseline scenario been determined according to the methodology?	Yes, the baseline scenario was determined according to the methodology. For further information see B.3.5..	/PDD/		OK
B.3.5. Is the list of alternatives complete?	Yes, the list of alternatives is identical with the methodology.			OK
B.3.6. Has the baseline scenario been determined using conservative assumptions where possible?	Yes, e.g. the baseline emissions have been calculated applying the regulatory values/baseline values as presented in B.5.4.	/PDD/		OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
B.3.7. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?	Yes, as explained above, all legal requirements have been taken into account.	/PDD/ /AP/		OK
B.3.8. Is the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced?	The baseline scenario determination is compatible with the available data and literature sources are clearly referenced. The PDD provides references to all relevant literature sources (sources were submitted for determination, too) and data.	/PDD/		OK
<b>B.4. Additionality Determination</b> <i>The assessment of additionality will be validated with focus on whether the project itself is not a likely baseline scenario.</i>				
<b>B.4.1. Methodology</b>				
B.4.1.1. Did the additionality justification follow the requirements of the applied methodology and/or methodological tools?	The additionality has been assessed according to the methodology, which includes a scheme for the assessment of the reference scenario and additionality of the project activity.  Under Step1, the complete list of alternative scenarios to the project activity were identified. Step 2 includes a barrier analysis according to the methodology. Investment, technological and barriers to prevailing practice were identified and assessed. In Step 3, an investment analysis was carried out	/PDD/ /B-1/ /B-2/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	If the Projet Domestique alleviates the identified barriers that prevent the proposed project activity from occurring, then the proposed project activity can be considered 'additional' to the baseline scenario.			
<b>B.4.2. Consideration of JI before project</b>				
B.4.2.1. Is the project starting date reported in accordance with the glossary of JI terms?	Since a country specific methodology has been applied, the accordance with the JI glossary of terms is not necessary. The start of the project activity at Grandpuits will be end of March 2010. At this date, the project activity will become eligible to receive ERUs on receipt of the official government LoA.	/PDD/		OK
B.4.2.2. In case the project start date is before commencing of determination, was the incentive from JI seriously considered and are details given in the PDD?	The project activity will only become eligible to receive ERUs on receipt of the official government LoA, or at the latest two months after submission of the Project Dossier applying for a LoA. For Grandpuits, the final approval could be expected by the end of March 2010 and therefore the crediting period of the project is likely to start at the beginning of April 2010.	N/A		
B.4.2.3. How and when was the decision to proceed with the project?	N/A			
B.4.2.4. Is the project start date consistent with the available evidences?	Since the project start is estimated in March 2010, these date could not be evidenced at this time.	/PDD/		OK
B.4.2.5. Was the decision to proceed with the project taken by a person entity which has the authority to do so?	N/A			-



Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
B.4.2.6. How was the JI involved in the decision making process?	N/A /see B.4.2.2			-
B.4.2.7. Can the JI involvement in the decision be assessed as serious?	N/A /see B.4.2.2			-
<b>B.4.3. Identification of alternatives Step 1</b> (in case of SSC projects pl. skip steps 1 and 2)				
B.4.3.1. Have all realistic alternatives been identified to the project?	<p>Yes, the Step 1 includes all realistic scenarios mentioned in the methodology:</p> <ul style="list-style-type: none"> <li>• Continuation of the <i>Status Quo</i>, where <ul style="list-style-type: none"> <li>a. there is no N<sub>2</sub>O destruction technology installed</li> <li>b. an N<sub>2</sub>O abatement catalyst has already been installed for a preliminary technical trial, but the catalyst would either be removed at the end of this trial campaign</li> <li>c. only a sufficient amount of secondary catalyst material is installed to ensure compliance with any applicable legal N<sub>2</sub>O regulations (Business as Usual).</li> </ul> </li> <li>• Alternative uses of N<sub>2</sub>O, such as: <ul style="list-style-type: none"> <li>a. Recycling of N<sub>2</sub>O for feedstock</li> <li>b. External use of N<sub>2</sub>O</li> </ul> </li> <li>• Installation of a Non-Selective Catalytic Reduction unit</li> </ul>	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	(NSCR) Implementation of a primary, secondary or tertiary N destruction technology in the absence of the registration of the project activity as a Projet Domestique.			
B.4.3.2. Contains the list of alternatives at least the status-quo situation and the project not undertaken as a JI project?	Yes the list of alternatives includes the status-quo situation and the implementation of a primary, secondary or tertiary N <sub>2</sub> O destruction technology in the absence of the registration of the project activity as a Projet Domestique.	/PDD/		OK
B.4.3.3. Do all identified alternatives comply with applicable regulation?	Yes, the alternatives are complying with the legal obligations, which limit the N <sub>2</sub> O-emissions of the plant.	/PDD/		OK
<b>B.4.4. Investment analysis Step 2</b>  <i>In case the investment analysis as per step 2 is chosen to justify the additionality Annex 2 "Assessment of Financial Parameters" has to be used to provide additional details of the the calculation parameters..</i>				
B.4.4.1. Is an appropriate analysis method chosen for the project (simple cost analysis, investment comparison analysis or benchmark analysis)?	<p>It was clarified in the PDD, that no significant financial or economic benefits other than JI related income can be generated by any of the possible N<sub>2</sub>O destruction technologies. According to the methodology, the investment requirements, caused by the implementation of the project activity, should be depicted in an investment cost sheet.</p> <p>Since this financial calculation sheet was not available at the site visit, a corresponding CL B4 was raised.</p>	/PDD/	CL-B4	OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
B.4.4.2. Is a clear, viewable and unprotected Excel spreadsheet available for the investment calculation?	No, see B.4.4.1.		CL-B4	OK
B.4.4.3. Does the period chosen for the investment analysis reflect the technical lifetime of the project activity or in case a shorter period is chosen, is the fair value of the project activity's assets at the end of the investment analysis period (as a cash inflow) included?	No, see B.4.4.1.	-	CL-B4	OK
B.4.4.4. Is the fair value calculated in accordance with local accounting regulations (where available) or international best practice?	According to the methodology, a fair value should not be calculated.	/PDD/ /A-1/ /A-2/		OK
B.4.4.5. Is the book value as well as the expectation of the potential profit or loss included in the fair value calculation?	According to the methodology, a book value should not be calculated.	/PDD/ /A-1/ /A-2/		OK
B.4.4.6. Are depreciation and other non-cash related items added back to net profits for the purpose to calculate the financial indicator?	According to the methodology, a specific depreciation should not be calculated.	/PDD/ /A-1/ /A-2/		OK
B.4.4.7. Is taxation excluded in the investment analysis or is the benchmark intended for post tax comparisons?	see B.4.4.1.	-	-	-

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
B.4.4.8. Were the input values used in the investment analysis valid and applicable at the time of the investment decision?	No, see B.4.4.1.	-	-	-
<b>Investment comparison</b>				
B.4.4.9. In case of project IRR: Are the costs of financing expenditures (loan repayments and interests) excluded from the calculation of project IRR?	N/A: No project IRR (benchmark) is given in the methodology.	-	-	-
B.4.4.10. In case of equity IRR: Is the part of the investment costs, which is financed by equity considered as net cash outflow and is the part financed by debt excluded in net cash outflow?	N/A: No equity IRR (benchmark) is given in the methodology.	-	-	-
B.4.4.11. Is the type of benchmark chosen appropriate for the type of IRR calculated (e.g. local commercial lending rates or weighted average costs of capital for project IRR; required/expected returns on equity for equity IRR)?	N/A, see above	-	-	-
B.4.4.12. Is the benchmark value suitable for the project activity?	N/A, see above	-	-	-
B.4.4.13. Is it ensured that the project cannot be developed by other developers than the PP?	N/A, see above	-	-	-

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
B.4.4.14. Was the benchmark consistently used in the past for similar projects with similar risks?	N/A, see above.	-	-	-
B.4.4.15. Was sensitivity analysis appropriately done by the project participants?	N/A, see above	-	-	-
<b>B.4.5. Barrier analysis Step 3 or SSC additionality assessment</b>				
B.4.5.1. Are there any barriers given whose issues have a clear and definable impact on the profitability of the project?	The identified barriers are: <ul style="list-style-type: none"> <li>• Investment barriers;</li> <li>• Technological barriers, including : <ul style="list-style-type: none"> <li>- Technical and operational risks of the alternative scenarios;</li> <li>- Technical efficiency of the alternatives (i.e. destruction of N<sub>2</sub>O, abatement efficiency);</li> <li>- Lack of qualified personnel;</li> <li>- Lack of infrastructure for implementing the technology;</li> </ul> </li> <li>• Common practice barriers, including : <ul style="list-style-type: none"> <li>- Technology with which project developers are not familiar;</li> <li>- -There is no other similar project in operation in the relevant geographical area</li> </ul> </li> </ul>	-	-	-

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
B.4.5.2. How is it justified and evidenced that the barriers given in the PDD are real?	<p>The PP explained and proved that:</p> <ul style="list-style-type: none"> <li>• None of the N<sub>2</sub>O destruction technology options (including NSCR) are expected to generate any significant financial or economic benefits other than JI related income (Financial barriers)</li> <li>• It is therefore unlikely that any plant operator would install such technologies on a voluntary basis without the incentive of any regulatory requirements (emissions caps) or financial benefits (such as revenues from the sale of ERUs).</li> <li>• In the case where plants are subject to N<sub>2</sub>O regulations and the installation of some catalyst is therefore unavoidable, these plant operators would only be willing to incur costs associated with the operation of such technology in order to comply with these regulations.</li> </ul> <p>A deep evaluation is made in annex A4: assessment of barrier analysis.</p>	-	-	-
B.4.5.3. How is it justified that one or a set of real barriers prevent(s) the implementation of the project activity?	See above	-	-	-
<b>B.4.6. Common practice analysis Step 4</b> (in case of SSC projects skip this step)				
B.4.6.1. Is the defined region for the common	The company GPN starts two similar projects in France,	/PDD/	<del>CL-B3</del>	OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
practice analysis appropriate for the technology/industry type?	reducing the N <sub>2</sub> O-emission with secondary abatement catalysts in 2009/2010. The chosen technology has been implemented in several other project activities (i.e. Spain, France, Germany and Sweden) which are comparable/similar to the GPN Grandpuits project.  This project type is already diffused in the region resp. industrial sector.  Nevertheless, a CL B3 was necessary to clarify that in section B.4 and B.5 under common practice barriers an updated statement is needed regarding the actual state of industrial trials.			
B.4.6.2. To what extent similar projects have been undertaken in the relevant region?	There are two similar projects of GPN in France. All projects are in the phase of determination/registration.			OK
B.4.6.3. In case similar projects are identified, are there any key differences between the proposed project and existing or ongoing projects and what kind of differences are observed?	No, all projects are in the same scope and using the same technology for N <sub>2</sub> O-abatement resp. emission reduction. All projects are referring to the same Projet Domestique Methodology	/PDD/ /B-1/		OK



<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
<p><b>B.5. Calculation of GHG Emission Reductions</b></p> <p><i>It is assessed whether the calculations of project emissions, baseline emissions, leakage emissions are stated according to the methodology and whether the argumentation for the choice of default factors and values – where applicable – is justified. Furthermore calculation of emission reductions shall be assessed.</i></p>				
<p>B.5.1. Are the emission reductions real, measurable and give long-term benefits related to the mitigation of climate change?</p>	<p>The emission reductions are real, measurable and give long-term benefits related to the mitigation of climate change.</p>	<p>/PDD/ /B-1/</p>		<p>OK</p>
<p>B.5.2. Are the equations applied correctly according to the applied approved methodology?</p>	<p>Yes, the equations applied for calculation are correctly applied according to the approved methodology.</p> <p>The formulae to calculate the project and baseline emissions are presented in the section B.6.1. of the PDD in a clear and transparent manner according to the methodology.</p> <p>The calculation of estimated emission reductions has been carried out in the section B.6.2. of the PDD. The calculations as presented in this section strictly follow the algorithm of the monitoring plan.</p> <p>The considering of leakage is discussed in the methodology. In accordance with the methodology, no leakage calculation is required, because the technology used is a secondary</p>	<p>/PDD/I /B-1/ /B-2/ /B-3/</p>		<p>OK</p>



Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.										
	catalysty.													
B.5.3. In case the methodology allows for different methodological choices, are the equations applied properly justified and have they been used reflecting the other methodological choices (i.e. baseline identification)?	The project specific methodology has been developed for the considered project activity. The methodology provides a clear procedure for calculation of the emission reductions. There are no provisions for choices between different methodological approaches.			OK										
B.5.4. Have conservative assumptions been used when calculating the project emissions?	<p>Yes. The baseline methodology takes into account a decree of the MEEDAT, setting the benchmark Emission Factors (EF<sub>BM</sub>) for the calculation of the reduction of N<sub>2</sub>O-Emission in future years.</p> <p><u>These values/years are:</u></p> <table border="1" data-bbox="860 868 1532 948"> <tr> <td>2009</td> <td>2010</td> <td>2011</td> <td>2012</td> <td></td> </tr> <tr> <td>2.5</td> <td>2.5</td> <td>2.5</td> <td>1.85</td> <td>kg N<sub>2</sub>O/t HNO<sub>3</sub> (100%)</td> </tr> </table> <p>In addition to that, a plant-specific 'arrêté préfectoral from 4th June 2009, was introduced by the local DRIRE (Directions Régionales de l'Industrie de la Recherche et de l'Environnement)', which limits N<sub>2</sub>O emissions at the GPN Grandpuits plant to 4kg N<sub>2</sub>O/tHNO<sub>3</sub> from December 2009 onwards.</p> <p>Since the regulatory N<sub>2</sub>O emissions limit will be higher than the benchmark value, these arrêté préfectoral values will not be taken into account for calculating the ERUs, but proves, that the calculations are carried aout in a conservative manner.</p>	2009	2010	2011	2012		2.5	2.5	2.5	1.85	kg N <sub>2</sub> O/t HNO <sub>3</sub> (100%)	/PDD/ /B-1/ /B-2/ /B-4/ /AP/		OK
2009	2010	2011	2012											
2.5	2.5	2.5	1.85	kg N <sub>2</sub> O/t HNO <sub>3</sub> (100%)										

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
B.5.5. Are all data and parameters which remain fixed throughout the crediting period correct, applicable to the project and will lead to a conservative estimation of emission reductions?	Yes, the regulatory limits and benchmark values are fixed over the crediting period. Since the project takes into account a low baseline emission factor instead of historical emission data, the calculation of emission reductions can be rated as conservative.	/PDD/		OK
B.5.6. Is the choice of the value for the data and parameters which have to be monitored reasonable?	Yes, the choice of data is <ul style="list-style-type: none"> <li>• in line with the methodology and</li> <li>• checked to be reasonable.</li> </ul>	/PDD/		OK
<b>B.6. Monitoring of Emission Reductions</b> <i>It is assessed whether the monitoring plan is appropriate for the project activity and in line with the applied methodology.</i>				
B.6.1. Are all monitoring parameters required by the applied methodology contained in the monitoring plan?	A monitoring methodology and description of a monitoring plan is specified in the methodology of the "Projet Domestiques". The parameters required by this methodology are contained in the monitoring plan. A clarification CL B5 was necessary that table 10 in section B.7.1 should include the measurement frequency for all relevant parameters. CL B10 was raised to clarify in section B.6.1 what the plant operational status will be if one of the four ammonia burner is passing the trip point value.	/PDD/ /B-1/	<del>CL-B5</del> <del>CLB10</del>	OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
B.6.2. In case different approaches can be chosen acc. to the methodology, is the selection of parameters justified and correct?	N/A	-	-	-
B.6.3. Are the means of monitoring of all parameters contained in the monitoring plan in accordance with the requirements of the applied methodology?	<p>No, one CAR and one CL were raised.</p> <p>CAR B9: The parameter OT<sub>range</sub> in Table 5 in section B.6.2 has to be changed according to the plant manual.</p> <p>CL B6 was necessary, because the measurement/calculation of the parameter NAP<sub>n</sub> (P.5) in Table 10 in section B.7.1 should be described in detail in section B.6.1</p>	/PDD/	<del>CL B6</del>	OK
B.6.4. Are all parameters appropriately labelled?	Yes, the parameters are labelled according to the methodology.	/PDD/		OK
B.6.5. Is it likely that the monitoring arrangements described in the PDD can properly be implemented in the context of the project activity?	<p>Yes</p> <p>The determination team assessed the implemented and installed AMS at the on-site-visit and came to the conclusion that the application is suitable for the purpose of monitoring the project emissions.</p>	/PDD/		OK
B.6.6. Are the means of implementation of the monitoring plan, including QA/QC procedures sufficient to ensure that emission reductions can be reported without material misstatement?	The monitoring plan presented in chapter B.7. is comprehensive and provides QA/QC procedures to insure the appropriate reporting of emissions and emission reductions. This includes quality measures related to the AMS according to the EN 14181.	/PDD/	<del>CL B7</del> FAR B13	OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	<p>Following CL, FAR were raised:</p> <p>CL B7: Reference in B.7.2. (AMS/QAL1) should be made to recent EB decisions to QAL1 requirements since the methodology requires the compliance with EN 14181 or an appropriate French standard</p> <p>FAR B13: The verifier has to check the appropriateness of the AMS (with regard to e.g. location of the sampling point, QAL1, QAL 2, uncertainty assessment).</p>			
B.6.7. Will all monitored data required for verification and issuance be kept for two years after the end of the crediting period or the last issuance of CERs, for this project activity, whichever occurs later?	Yes, all monitored data required for verification and issuance will be stored in a central data system of the company and kept for two years after the project end.	/PDD/		OK
B.6.8. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining baseline emissions, project emissions, and leakage within the project boundary during the crediting period?	<p><u>Baseline emissions:</u></p> <p>As per the national authorities, baseline emissions should be calculated applying a "Benchmark Emission Factor (EF<sub>BM</sub>), or if lower, regulatory limits of local authorities (see B.5.4.).</p> <p>Therefore, the acquisition of data of N<sub>2</sub>O-emissions in order to determine the baseline emissions is not necessary.</p> <p>However, the monitoring of trip point values and data related to the amount of produced HNO<sub>3</sub> are completely included in</p>	/PDD/ /B-1/		OK



<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>										
	the monitoring plan. <u>Project emissions:</u> According to the methodology, the monitoring plan provides all relevant data necessary for measurement of the project emissions within the project boundary. <u>Leakage:</u> According to the methodology, leakage shall not be monitored. Caused by an increased amount of catalyst, a constant pressure loss in the tail gas reactor occurs, but will not be monitored over the crediting period.													
B.6.9. Are the choices of GHG indicators reasonable and conservative?	Yes, e.g. the reference value (benchmark emissions factor) that will be applied to calculate the emissions reductions from a specific verification period was determined according to French Government decision and Methodology. The violation of these limits will lead to a reduction of ERUs for the relevant period. The included and excluded GHG indicators are listed in a table provided by the methodology: <table border="1" data-bbox="862 1177 1659 1337"> <thead> <tr> <th></th> <th>Source</th> <th>Gas</th> <th>Included / excluded</th> <th>Justification / Explanation</th> </tr> </thead> <tbody> <tr> <td>Reference scenario</td> <td>Benchmark emissions</td> <td>CO<sub>2</sub></td> <td>Excluded</td> <td>N<sub>2</sub>O abatement project does not</td> </tr> </tbody> </table>		Source	Gas	Included / excluded	Justification / Explanation	Reference scenario	Benchmark emissions	CO <sub>2</sub>	Excluded	N <sub>2</sub> O abatement project does not	/PDD/		OK
	Source	Gas	Included / excluded	Justification / Explanation										
Reference scenario	Benchmark emissions	CO <sub>2</sub>	Excluded	N <sub>2</sub> O abatement project does not										



Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)					Ref.	Draft Concl.	Final Concl.	
			emissions						
			N <sub>2</sub> O	Included					
	Project activity	Nitric plant (burner inlet to stack)	CO <sub>2</sub>	Excluded	N <sub>2</sub> O abatement project does not lead to any CO <sub>2</sub> or CH <sub>4</sub> emissions				
			CH <sub>4</sub>	Excluded					
			N <sub>2</sub> O	Included					
		Leakage emissions	CO <sub>2</sub>	Excluded	No Leakage Emissions are expected				
			CH <sub>4</sub>	Excluded					
			N <sub>2</sub> O	Excluded					
B.6.10. Is the measurement method clearly stated for each indicator to be monitored and also deemed appropriate?	<p>Yes, the monitoring plan provides clear measurement methods in for project emissions in chapter B.6.2 of the PDD. Nevertheless, following CL was raised:</p> <p>CL B11: It should be clarified in section B.6.1 why the number of tonnes of produced nitric acid will not be adjusted if the plant is considered to be out of operation.</p> <p>CAR B12: The first bullet point under "Measurement of N<sub>2</sub>O..." in section B.6.1, page 21, needs to be corrected w.r.t. operation hours used in the calculation of project emissions.</p>					/PDD/	<del>CL B11</del> CAR B12	OK	
B.6.11. Is the measurement equipment described and deemed appropriate?	The measurement of project emissions is described appropriate in the PDD and in documents provided during the					/PDD/ /FINE-	FAR B12		



<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
	site visit.  The measurement equipment was ordered but not delivered and installed at the time of the site visit, but appropriate documents could be provided by the PP.  Since the AMS was not available during on site visit, a FAR was issued to clarify, that the verifier has to check the appropriateness of the AMS (with regard to e.g. location of the sampling point, QAL1, QAL 2, uncertainty assessment).	TEC/		
B.6.12. Is the measurement accuracy addressed and deemed appropriate? Are procedures in place on how to deal with erroneous measurements?	As documents/certificates regarding the appropriateness of the AMS for measurement of project emissions could not be provided during the site visit, the verifier has to check the suitability of the AMS with regard to e.g.: <ul style="list-style-type: none"> <li>• location of the sampling point</li> <li>• QAL1, QAL 2</li> <li>• uncertainty assessment.</li> </ul> Regarding these issues, FAR B12 was raised	/PDD/	FAR B12	OK
B.6.13. Is the measurement interval identified and deemed appropriate?	The AMS for project emissions is working as an online- and permanent-measurement device. The measurement of other devices was not described sufficiently in the PDD, and CL B5 was raised.  Table 10 in section B.7.1 should include the measurement frequency for all relevant parameters	/PDD/	<del>CL B5</del>	OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
<p>B.6.14. Is the registration, monitoring, measurement and reporting procedure defined?</p>	<p>The data of the AMS for the calculation of project emissions will be transferred to central data acquisition system of the company and evaluated by N.serve according to the regulations of the methodology.</p> <p>The procedures are described in chapter B.7.2. of the PDD.</p> <p>Since some detailed adjustments need to be made between the GPN plant and n.Serve, a FAR was raised to check the data processing during verification.</p> <p>FAR B8: The processing of the monitoring data should be described step by step in the monitoring report.</p> <p>Following CL were raised in the context of data processing:</p> <p>CL B6: The measurement/calculation of the parameter NAP<sub>n</sub> (P.5) in Table 10 in section B.7.1 should be described in detail in section B.6.1.</p>	<p>/PDD/</p>	<p><del>CL B6</del> FAR B8</p>	
<p>B.6.15. Are procedures identified for maintenance of monitoring equipment and installations? Are the calibration intervals being observed?</p>	<p>The AMS for emission reduction will be maintained using a QA/QC programme which refers to the EN 14181 and through internal measures for quality assurance related to ISO 9001 and 14001.</p> <p>Regarding quality procedures, following CL B7 was made:</p> <p>Reference in B.7.2. (AMS/QAL1) should be made to recent EB decisions to QAL1 requirements since the methodology requires the compliance with EN 14181 or an appropriate</p>	<p>/PDD/</p>	<p><del>CL B7</del></p>	<p>OK</p>





<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
	French standard.			
B.6.16.Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	See B.6.8.	/PDD/		OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
<b>B.7. Project Management Planning</b>  <i>It is checked that project implementation is properly prepared for and that critical arrangements are addressed.</i>				
B.7.1. Is the authority and responsibility of overall project management clearly described?	Yes, the operational structure of the QMS of the plant is certified against ISO 9001 and 14001 requirements. Several quality documents of ISO 9001 regarding maintenance of monitoring equipment and emission determination were provided to the determination team.  The processing of the raw N <sub>2</sub> O-data sets will be carried out by N.serve.	/PDD/ /EMISS/ /EQUIP/ /CONTR OL/ /COR/ /14001/ /9001/		OK
B.7.2. Are procedures identified for training of monitoring personnel?	Specific training measures are not intended, but specific activities related to the JI-project will be carried out by experienced and qualified companies as described above.	/PDD/		OK
B.7.3. Are procedures identified for review of reported results/data?	Yes, all monitoring related data will be sent to N.serve for revision, plausibility check and calculation of the project emissions.	/PDD/		OK
B.7.4. Is the authority and responsibility of overall project management clearly described?	Yes, see above.	/PDD/		OK
B.7.5. Are procedures identified for training of	N/A	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
monitoring personnel?				
<b>C. Duration of the Project/ Crediting Period</b>  <i>It is assessed whether the temporary boundaries of the project are clearly defined.</i>				
C.1. Is the project's starting date and the project duration clearly defined and evidenced?	<p>Yes, project starting date is expected end of March 2010 which is described in B.4.2.1.</p> <p>The Crediting period will start after the registration of the project at the DFP.</p> <p>Nevertheless, the determination team raised a CL B1, because table 7 (part B) and Table 8 (part B) in section B.6.3 need to be corrected to include the full crediting period.</p>	/PDD/	CL-B1	OK
C.2. Is the project's operational lifetime clearly defined and evidenced?	The operational lifetime (efficiently of the catalyst) is estimated at 3 years, which is guaranteed by the catalyst supplier Heraeus, but during the annual downtime for maintenance, an exchange can be carried out, if necessary.	/PDD/		OK
C.3. Is the start of the crediting period clearly defined and reasonable?	The project activity will only become eligible to receive ERUs on receipt of the official government LoA, or at the latest two months after submission of the Project Dossier applying for a LoA. For Grandpuits, the final approval could be expected by the end of March 2010 and therefore the crediting period of the project is likely to start at the beginning of April 2010.	/PDD/		OK

<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
<b>D. Environmental Impacts</b>  <i>Documentation on the analysis of the environmental impacts will be assessed, and if deemed significant, an EIA should be provided to the DOE.</i>				
D.1. Has an analysis of the environmental impacts of the project activity been sufficiently described?	The environmental impacts are sufficiently described in the PDD under Section D.: Environmental Impacts.  Apart from the reduction of emissions of N <sub>2</sub> O, there will be no significant further positive or negative impacts on the environment.	/PDD/ /EIA/		OK
D.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	The host government (France) does not request an EIA.  The PP provided a statement of the DFP, that an environmental impact assessment is not necessary for the project activity.	/EIA/		OK
D.3. Will the project create any adverse environmental effects?	See D.1.	-	-	-
D.4. Are transboundary environmental impacts considered in the analysis?	See D.1.	-	-	-
D.5. Have identified environmental impacts been addressed in the project design?	N/A	-	-	-
D.6. Does the project comply with environmental legislation in the host country?	Yes, the project fully complies with environmental legislation of France. A decree was raised from the local government to limit the emission of N <sub>2</sub> O for the GPN Grandpuits plant to 4	/AP/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	kg N <sub>2</sub> O/t HNO <sub>3</sub> , but since the project benchmark (2.5/1.85 kg N <sub>2</sub> O/t HNO <sub>3</sub> ) is lower then this value, applicable environmental legislations will not be violated.			
<b>E. Stakeholder Comments</b>  <i>The DOE should ensure that stakeholder comments have been invited with appropriate media and that due account has been taken of any comments received.</i>				
E.1. Have relevant stakeholders been invited to consultation?	<p>A global stakeholder consultation was carried out on the TÜV NORD website <a href="http://www.global-warming.de">www.global-warming.de</a> during a 30 days period from 2009-11-18 to 2009-12-18. No comments were received.</p> <p>A local stakeholder process has not been carried out. This is considered to be appropriate for this kind of project activities as no affected local stakeholders could be identified. A local stakeholder process was not requested by French authorities.</p>	/PDD/ /gw/		OK
E.2. Have appropriate media been used to invite comments by local stakeholders?	See E.1.	/PDD/		OK
E.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?	See E.1.	/PDD/		OK



<b>Checklist Item</b> (incl. guidance for the determination team)	<b>Determination Team Comments</b> (Means and results of assessment)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
E.4. Is an appropriate summary of the stakeholder comments received provided in the PDD?	No comments were received during the period of 30 days of the global stakeholder process.	/PDD/		OK
E.5. Has due account been taken of any stakeholder comments received?	See E.1.	/PDD/		OK

**ANNEX 2: ASSESSMENT OF BASELINE IDENTIFICATION**

**Table A-2:** Assessment of Baseline Identification

<input type="checkbox"/>	Baseline alternatives are not identified
<input checked="" type="checkbox"/>	Assessment of alternatives of baseline see below

Baseline Alternatives identified	Inline with the Methodology?	Eliminated	Reasons for elimination / non-elimination from list of alternatives	Evidence used	DOE Assessment	
					Appropriateness of elimination	Assessment of determination team (results and means of assessment)
<i>a) Continuation of the Status Quo (Business as Usual Scenario). The continuation of the business as usual scenario, where: i) there is no N<sub>2</sub>O destruction technology installed.</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The scenario not to install any N <sub>2</sub> O abatement technology is not in compliance with the "Arrêté Préfectoral" which limits the N <sub>2</sub> O emissions to 3.99 kg N <sub>2</sub> O/t HNO <sub>3</sub> (100%).	/PDD/ /AP/	<input checked="" type="checkbox"/>	The determination team follows the statements for the elimination of scenario a)i), since the 'Arrêté Préfectoral', which is an official decision of the local government obliges the plant operator to reduce the emission level to the limit of 3.99kg N <sub>2</sub> O/tHNO <sub>3</sub> .
<i>a) Continuation of the Status Quo (Business as Usual Scenario). The continuation of the business as usual scenario, where: ii) only sufficient secondary catalyst is</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The scenario which includes the option to install only just enough catalyst material in the de-N <sub>2</sub> O bed to achieve compliance with the local 'Arrêté Préfectoral' on N <sub>2</sub> O emissions will not lead to an emission reduction beyond the 4.00kg N <sub>2</sub> O/tHNO <sub>3</sub> and the	/PDD/ /AP/	<input type="checkbox"/>	The determination team follows the statement for the eligibility of scenario a)ii), since only the reduction of emissions below the limits of the governmental decree will lead to claim for Emission Reduction Units in compliance with the country specific methodology.

Baseline Alternatives identified	Inline with the Methodology?	Eliminated	Reasons for elimination / non-elimination from list of alternatives	Evidence used	DOE Assessment	
					Appropriateness of elimination	Assessment of determination team (results and means of assessment)
<i>installed to ensure compliance with any applicable legal N<sub>2</sub>O regulations.</i>			project activity will not take place.			
<b>b) Alternative uses of N<sub>2</sub>O, such as:</b> - Recycling of N <sub>2</sub> O for feedstock - External use of N <sub>2</sub> O	☒	☒	The use of N <sub>2</sub> O as a feedstock for the production of nitric acid is technically not feasible, because it is not possible to produce nitric acid from N <sub>2</sub> O at the quantities found in the tail gas of nitric acid plants.	/PDD/ /BREF/	☒	Due to low concentrations of N <sub>2</sub> O in the exhaust of the plant, the recycling is not a technically suitable and economically attractive alternative.
<b>c) Installation of NCSR (Non Specific Catalytic Reduction)</b>	☒	☒	The application of a Non Specific Catalytic Reduction Unit causes high investment and operation costs due to permanent demand of an reduction agent. This technology produces emissions of CO, CO <sub>2</sub> and remaining hydrocarbons.	/PDD/ /BREF/	☒	Since there is an efficient N <sub>2</sub> O-abatement system available, there is no need to choose a not-state-of-the-art-technology.
<b>d) Implementation of a primary, secondary or tertiary N<sub>2</sub>O destruction technology in the absence of the registration of the project activity as a <i>Projet Domestique</i>.</b>	☒	☒	Since there is no financial benefit to reduce the N <sub>2</sub> O-emission below the regulatory limit of 4 kg N <sub>2</sub> O/t HNO <sub>3</sub> , the implementation of a catalyst technology in absence of the project activity will not take place.  <u>Implementation in the absence of</u>	/PDD/	☒	The determination team follows the justification of the PP, that there is no incentive to implement an abatement technology in a comparable extent in absence of the project activity





Baseline Alternatives identified	Inline with the Methodology?	Eliminated	Reasons for elimination / non-elimination from list of alternatives	Evidence used	DOE Assessment	
					Appropriateness of elimination	Assessment of determination team (results and means of assessment)
			<i><u>the registration of the project activity as a Projet Domestique: See alternative a)ii)</u></i>			

**ANNEX 3: ASSESSMENT OF FINANCIAL PARAMETERS**

**Table A-3: Assessment of Financial Parameters**

<input type="checkbox"/>	No financial parameters are used for additionality justification so far
<input checked="" type="checkbox"/>	Assessment of all financial parameters see below

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT		
					Correctness of value applied	Appropriateness of information source	Comment
Project revenues	2,397,980 (2009 – 2012 period)	EUR	GPN GPTS 100120 (Excel sheet)	- Project documentation	The values are correct	The information sources are checked to be appropriate	<p>The parameter "Project revenues" of the cost analysis is related to following figures:</p> <ul style="list-style-type: none"> <li>• Expected HNO<sub>3</sub> production (t)</li> <li>• Benchmark emissions (tCO<sub>2</sub>e)</li> <li>• Project Emissions (tCO<sub>2</sub>e)</li> <li>• 10% deduction</li> </ul> <p>is correct calculated and assessed. There are no emission taxes regarding N<sub>2</sub>O-emission included as an additional income.</p>
Tax savings	182,954 (2009 – 2012 period)	EUR	GPN GPTS 100120 (Excel sheet)	- Project documentation	The values are correct	The information sources are checked to be appropriate	<p>A special environmental tax is payable in accordance with article 45 of the 'Loi de Finances 1999' and article 266 nonies of the 'Code des Douanes'. The law stipulates a tax of 64.84 EU per tonne N<sub>2</sub>O emitted. The tax</p>

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT		
					Correctness of value applied	Appropriateness of information source	Comment
							savings were not added to the project revenues but used as an argument, that the project activity can not be financed with these tax savings and without support of the ERU issuing.
Secondary Catalyst costs	1,541,386 (2009 – 2012 period)	EUR	GPN GPTS 100120 (Excel sheet)	- Project documentation	The values are correct	The information sources are checked during on site visit to be appropriate	<p>The parameter "Secondary Catalyst Costs" of the cost analysis includes the costs for</p> <ul style="list-style-type: none"> <li>• leasing (€1.093/tHNO<sub>3</sub>)</li> <li>• metal losses</li> <li>• fixing metal assets</li> </ul> <p>and is correct calculated and assessed. Evidences are provided in the financial proposal of Heraeus as catalyst supplier<sup>/HERAEUS1/</sup>.</p>
Finetech AMS costs	305,000 (2009 – 2012 period)	EUR	GPN GPTS 100120 (Excel sheet)	- Project documentation	The values are correct	The information sources are checked during on site visit to be appropriate	<p>The parameter "Finetech AMS costs" of the cost analysis includes the costs for</p> <ul style="list-style-type: none"> <li>• AMS <ul style="list-style-type: none"> <li>○ N<sub>2</sub>O analyser Orbital AIT Anafin</li> <li>○ Stack volume flow meter</li> <li>○ Cabinet</li> </ul> </li> <li>• Installation and connection</li> <li>• Sampling points, cal gases, pressure regulators, access platform</li> </ul>



Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT		
					Correctness of value applied	Appropriateness of information source	Comment
							<ul style="list-style-type: none"> <li>Engineering Study and is correct calculated and assessed. Evidences are provided in the financial proposal of Finetech as AMS supplier<sup>/FINETECH/</sup>.</li> </ul>
JI Project operating costs	216,500 (2009 – 2012 period)	EUR	GPN GPTS 100120 (Excel sheet)	- Project documentation	The values are correct	The information sources are checked during on site visit to be appropriate	<p>The parameter "JI Project operating costs" of the cost analysis includes the costs for</p> <ul style="list-style-type: none"> <li>QAL2 audit (2010)</li> <li>QAL 3 (maintenance, calibrations etc) (ongoing)</li> <li>Annual Surveillance Test ( 2011, 2012)</li> <li>Determination (once)</li> <li>First Verification</li> <li>Subsequent Verifications (x 5)</li> </ul> <p>and is correct calculated and assessed. The determination team valuating these costs as customary and correct.</p>

**ANNEX 4: ASSESSMENT OF BARRIER ANALYSIS**

**Table A-4:** Assessment of Barrier Analysis

<input type="checkbox"/>	No barrier parameters are used for additionality justification
<input checked="" type="checkbox"/>	Assessment of barriers see below

Kind of Barrier (invest, tech, other)	Description of Barrier	Evidence used	Assessment of determination team	
			Appropriateness of information source	Explanation of final result
Investment	None of the N <sub>2</sub> O destruction technology options (including NSCR) are expected to generate any financial or economic benefits other than JI-related income (minor tax savings caused by lower N <sub>2</sub> O-emissions exepcted). Their operation does not create any marketable products or by-products. However, any operator willing to install and thereafter operate such technology faces significant investment and additional operating costs	/PDD/ Check of legal frame conditions of the country	The source are appropriate to prove, that there are no financial benefits which can be generated by the reduction of N <sub>2</sub> O or other GHG emissions.	The PP could prove, that the project activity faces an investment barrier



Techno-logical	It is unlikely that any plant operator would install such technologies on a voluntary basis without the incentive of any regulatory requirements (emissions caps) or financial benefits (such as revenues from the sale of ERUs).	/PDD/ /BREF/	The BREF documents show clearly, that the implementation of an additional N <sub>2</sub> O abatement technology in an existing plant is coupled with comprehensive construction works.	The PP could prove, that the project activity faces a technological barrier
----------------	---	-----------------	--	---



**ANNEX 5: OUTCOME OF THE GSCP**

**Table A-5:** Outcome of the Global Stakeholder Consultation Process

<input checked="" type="checkbox"/>	No comments were received during the global stakeholder consultation period
<input type="checkbox"/>	Comments were received during the global stakeholder consultation period. The comments (in unedited form) and the consideration/response of the determination team are presented below:

Comment No.:	Comment by:	Inserted on:	Subject	Comment <sup>*)</sup>	Response determination team <sup>*)</sup>	Conclusion (incl. CARs CLs or FARs)

<sup>\*)</sup> In case clarifications have been requested by the determination team corresponding rows shall be added



**ANNEX 6: APPLICATION OF NON APPROVED METHODOLOGIES REQUIREMENTS CHECKLIST**

**Table A-6:** Non approved Methodologies Requirement Checklist

<input checked="" type="checkbox"/>	An approved CDM or country specific methodology was applied.
<input type="checkbox"/>	An non approved methodology was applied.

Checklist Item	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.