FINAL
JI DETERMINATION REPORT

-PUBLIC VERSION-

FERTIBERIA S.A.

FERTIBERIA AVILÉS N_2O ABATEMENT PROJECT IN SPAIN

Report No: 8000376290 - 09/429

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Client: FERTIBERIA S.A.	Client ref.: Francisca Galindo Paniagua
Summary:	☒ positive determination opinion ☐ negative determination opinion

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

"FERTIBERIA AVILÉS N_2O ABATEMENT PROJECT IN SPAIN"

with regard to the relevant requirements of the host country Spain 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 UNFCCC Methodology: „"Catalytic reduction of N_2O inside the ammonia burner of nitric acid plants", Version 03.4. 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 (Spain) 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 176,136 tCO_2e (between 2010 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 LoAs will be issued after registration of the project at the DFP, CAR A1 can not be closed during time of determination.

Report No.: 8000376290 - 09/429	Subject Group: Climate Protection	
Report title: Fertiberia Avilés N_2O abatement project in Spain		
Work carried out by: Mr. Rainer Winter Mr. Ulrich Walter Mr. Emilio Martin		
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Indexing terms

JI – Track 1

Determination PDD

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Abbreviations

AMS	Automated Monitoring System
BAT	Best available technology
BAU	Business as usual
CA	Corrective Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CH_4	Methane
CL	Clarification Request
CO_2	Carbon dioxide
CO_{2e}	Carbon dioxide equivalent
CP	Certification Program
DFP	Designated Focal Point
DVM	Determination and Verification Manual /Draft)
EB	CDM Executive Board
EIA	Environmental Impact Assessment
ERU	Emission Reduction Unit
ETS	European Union Emissions Trading Scheme
FAR	Forward Action Request
FMD	Flow measuring device
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
MCA	Multi Component Analyser
N_2O	Nitrous Oxide
NCV	Net Calorific Value of Fuel
PDD	Project Design Document
QC/QA	Quality control/Quality assurance
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 OBJECTIVE / SCOPE

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

"Fertiberia Avilés N_2O abatement project in Spain"

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 determinated 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	"Fertiberia Avilés N_2O abatement project in Spain"		
Project size	☐ Large Scale	☒ Small Scale	
Project Scope *(according to UNFCCC sectoral scope numbers for JI)*	☐	1	Energy Industries (renewable- /non-renewable sources)
	☐	2	Energy distribution
	☐	3	Energy demand
	☐	4	Manufacturing industries
	☒	5	Chemical industry
	☐	6	Construction
	☐	7	Transport
	☐	8	Mining/Mineral production
	☐	9	Metal production
	☐	10	Fugitive emissions from fuels (solid, oil and gas)
	☐	11	Fugitive emissions from production and consumption of halocarbons and hexafluoride

Item	Data		
	☐	12	Solvents use
	☐	13	Waste handling and disposal
	☐	14	Land-use, land-use change and forestry
	☐	15	Agriculture
Applied Methodology	*AM0034*		
Track	*1*		
Crediting period	☐ Renewable Crediting Period (7 y) ☒ Fixed Crediting Period (10 y) Estimated for 2010-05-16 – 2012-12-31 (If N_2O is not included in the ETS after 2012, the period will extend to regular 10 Years until 2019)		
Start of crediting period[1]	2010-05-16 (estimated)		

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	Spain	Fertiberia S.A.
Other involved party/ies	Germany	N.serve Environmental Services GmbH
	United Kingdom	Johnson Matthey Plc

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	Spain
Region	Principado de Asturias
Project location address	Fertiberia S.A., Fábrica de Avilés, Complejo Industrial, Carretera Avilés-Gijón Km.8 33400 – Trasona, Corvera de Asturias (Asturias)
Plant Coordinates	43°33'00.19'' N

[1] As per the published PDD

No.	Project Location
	5°51'49.52" W

2.4 Technical Project Description

The project involves the installation of a secondary N_2O reduction catalyst of the nitric acid production plant Avilés. 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 standard precious metal gauze pack in the ammonia burner. The nitrous oxide would otherwise be emitted within the tail gas of the nitric acid plant to 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
Ammonia Oxidation Reactor		
Manufacturer	-	Uhde
Diameter	mm	2280
Start of commercial production	-	1970
Operating conditions as per specifications (trip point values)		
- Temperature:	℃	880 (750 low – 980 high)
- Pressure (min/max):	kg/cm² (process)	4,59
- Ammonia to Air ratio (max)	Vol.-%	10,5 (9 low – 13 high)
Ammonia Oxidation Catalyst		
Composition:	-	Platinum-Rhodium-Palladium
Absorber		
Design capacity per day	t/d (100 %)	570
Maximum capacity per day	t/d (100 %)	570
Annual operation (design)	days	340
Secondary Catalyst		
Manufacturer	-	Johnson Matthey
Type	-	Pellets 9x9 mm
Composition		Cerium based with Co as active compound
Design efficiency N_2O reduction	%	80
Design efficiency NO_x reduction	%	0
$DeNO_X$-Catalyst		
Line 1:	-	
Manufacturer	-	ESPINDESA
Type	-	SCR, V_2O_5 –based
Line 2:	-	
Manufacturer	-	CRI Catalyst company
Type	-	SCR, Lateral Flow, V_2O_5 -based
N_2O Analyzer (stack)		

Parameter	Unit	Value
Manufacturer	-	(The N_2O Analyser is ordered. Installation will be done before start of the project)
Type	-	
Measurement Principle	-	
Stack volume flow rate measurement		
Manufacturer	-	(The volumeter is ordered. Installation will be done before start of the project)
Type	-	
Measurement Principle	-	

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[/PDD/] 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	2009-10-16
Submission of PDD for global stakeholder commenting process	2010-02-22
On-site visit	2010-02-04 to -05
Draft reporting finalised	2010-03-29
Final reporting finalised	2010-03-31
Technical review on final reporting finalised	2010-04-01

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 [1]	Qualification Status [2]	Scheme competence	Technical competence [4]	Host country Competence	Team Leading competence
☒ Mr. ☐ Ms.	R. Winter	TÜV NORD CERT, Germany	TL	SA	☒	Q	☐	☒
☒ Mr. ☐ Ms.	U. Walter	TÜV NORD CERT, Germany	TM	TE	☐	Q	☐	☐
☒ Mr. ☐ Ms.	E. Martin	TÜV NORD CERT, Germany	TM	TE	☐		☒	☐
☒ Mr. ☐ Ms.	E. Krupp	TÜV NORD CERT, Germany	TR[3], FA	SA	☒		☐	☒
☒ Mr. ☐ Ms.	S. Winter	TÜV NORD CERT, Germany	TR[3]	E	☒		☐	☐

[1] TL: Team Leader; TM: Team Member, TR: Technical review; FA: Final approval

[2] GHG Auditor Status: A: Assessor; E: Expert; SA: Senior Assessor; T: Trainee; TE: Technical Expert

[3] No team member

[4] 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, was made publicly available on TÜV NORD Website www.global-warming.de during a 30 days period from 2010-02-23 to 2010-03-26.

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 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 determinated and the result of the determination.

The determination protocol as described in Figure 1.

Determination Protocol Table A-1: Requirement checklist				
Checklist Item	***Determination PDD Team Comment***	***Reference***	***Draft Conclusion***	***Final Conclusion***
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 sub-divided as per the requirements of the topic and the individual project activity.	*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.*	*Gives reference to the information source on which the assessment is based on*	*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.*	*In case a corrective action or a clarification the final assessment at the final determination stage is given.*

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 1.0) 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.

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

Interviewed Persons / Entities	**Interview topics**
Project proponent representatives (Fertiberia) Project consultant (N.Serve)	- Chronological description of the project activity with documents of key steps of the implementation. - Implementation status

Interviewed Persons / Entities	Interview topics
	- 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 - Plant characteristics

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 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

Determination topic [1)]	No. of CAR	No. of CL	No. of FAR
General description of project activity (A) - Project boundaries - Participation requirements - Technology to be employed - Contribution to sustainable development	1	1	1
Project baseline (B) - Baseline Methodology - Baseline scenario determination - Additionality determination - Calculation of GHG emission reductions Project emissions Baseline emissions - Leakage	1	1	-
Duration of the Project / Crediting Period (C)	-	-	-
Monitoring Methodology (D) - Monitoring of Project emissions Baseline emissions Leakage Sustainable development indicators / environmental impacts Project management planning	1	1	1
Estimation of greenhouse gas emission reductions (E)	-	1	-
Environmental impacts (F)	-	-	-
Stakeholder Comments (G)	-	-	-
SUM	**3**	**4**	**2**

- The letters in brackets refer to the determination protocol

The following tables include all raised CARs, CLs and FARs. For an in depth evaluation of all determination items it should be referred to the determination protocols (see Annex 1).

Finding:	**A1**		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	No letters of approval have been provided so far.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	*The Spanish DFP asked for the final determination report before issuing the LoA for the project. The LoA will be presented to the AIE during the first verification.*		
DOE Assessment #1 *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.*	The pending letters of approval will be provided only on the basis of the successful conclusion of this determination. Thus this CAR will automatically be closed if the host country issues the LoA. A corresponding update of this report is considered to be not required.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements		

Finding:	**A2**		
Classification	☐ CAR	☐ CL	☒ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	Since the secondary catalyst was not installed at the time of the on-site visit, the verifier should check the documents and evidences related to the proper installation of the catalyst technology in the ammonia burner.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	*All necessary documents and demonstrations of the correct installation of the catalyst will be provided during the first verification.*		
DOE Assessment #1 *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.		
Conclusion *Tick the appropriate checkbox*	☒ To be checked during the first periodic verification ☐ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements		

Finding:	A3		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	It should be clarified, that the flow and concentration measurements will not only be cross-checked with tank level measurements but also with laboratory tests during regular inspections.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	*The plant will additionally conduct cross-checks with laboratory measurements. The information has been added to the PDD under A.4.3.1..*		
DOE Assessment #1 *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 PP provided quality documents which proved that additional cross-check are implemented in regular plant monitoring.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements		

Finding:	B1		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The PP describes in section B.1. a forth layer of jurisdiction (Principato de Asturias: Expte. AAI-050/06), which limits the emission of N_2O and NO_x of the Aviles plant, whereas section A.4.3. explains, that there is no legal requirement for Fertiberia Avilés to reduce the emission of the plant. Clarification is requested.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	*A.4.3 contained a mistake, since a limit is applied. However, under business as usual conditions this limit of 1500 ppm is not achieved by the plant. A respective change has been made to the PDD.*		
DOE Assessment #1 *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 PDD was revised accordingly.*		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements		

Finding:	B2		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	As the inlet airflow was used to calculate the stack-massflow of N_2O, the calculation "N_2O data used for the PDD" should include a modification of the gas composition of the inlet air during the process, i.e. the conversion of O_2 in the ammonia burner.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	*A correction factor or 19% has been used for calculating the tail gas flow from the airflow. A detailed explanation for this factor has been provided to the AIE. The pre-project emissions factor as well as all respective data were recalculated in the PDD.*		
DOE Assessment #1 *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 calculation considers the conversion of O_2 during HNO_3 synthesis and the volume flow after the ammonia burner was reduced by 19 % (vol-share of O_2 in air). Since the calculation will only be used to proof that the pre-project emission factor exceeds the Benchmark value to many times, this estimation is assessed as to be appropriate.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements		

Finding:	D1		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The monitoring methodology should differentiate between the different plant conditions: • Line 1 in operation, Line 2 shut down • Line 1 shut down, Line 2 in operation • Line 1 and Line 2 in operation. The monitoring plan should take into account different $NCSG_n$ (Mean concentration of N_2O in the tail gas stream during the Verification Period) and VSG_n (Mean tail gas volume flow rate during the Verification Period), if one of both Lines is not in operation.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	*The monitoring procedures of the plant will differentiate between the three scenarios that are possible when the plant is in operation. The scenarios and the respective monitoring procedures are now described in detail in section D.1.2.2.*		

Finding:	D1
DOE Assessment #1 *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 plant status now differs between three scenarios: • Scenario I: Both lines are in operation • Scenario II: Only line one is in operation • Scenario III: Only line two is in operation For all three scenarios, the project emissions (Pe_n) will be calculated and all three emissions will be summed up to a total PE for the specific verification period.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements

Finding:	D2		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	According to the methodology AM0034, a statistical evaluation should be applied to the monitoring parameters NCSG and VSG in section D.1.2.2..		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	*The statistical evaluation will be applied and respectively added in the PDD.*		
DOE Assessment #1 *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 PDD was revised accordingly.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements		

Finding:	D3		
Classification	☐ CAR	☐ CL	☒ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The AMS and coriolis flow meter need to be checked in detail during the first verification.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	*All necessary documents and demonstration of correct installation of the AMS and the coriolis flow meter will be provided during the first verification.*		

DOE Assessment #1 *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
Conclusion *Tick the appropriate checkbox*	☒ To be checked during the first periodic verification ☐ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

Finding:	**E1**		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	Emissions reductions of year 2020 are not included in Table 12 in Section E.6.. The results of total and average reductions (2010-2020) deviate from Table 4..		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	*Table 4. has been corrected.*		
DOE Assessment #1 *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 12 was corrected, data from 2012 were included.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ 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 determination findings in chapter 4 and the determination protocol (Annex 1).

5.1 General Description of the Project Activity

5.1.1 Participation

LOA

The pending letters of approval will be provided only on the basis of the successful conclusion of this determination. Thus this CAR will automatically be closed if the host country issues the LoA. A corresponding update of this report is considered to be not required.

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 listed or 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 Contribution to Sustainable Development

The contribution of the project activity to sustainable development of the host country has not been confirmed, because the LoA is still pending. The LoA which will be provided by the host country after submission of the Final Determination Report will include a clear statement regarding the sustainability of the project.

For an in depth evaluation of these topics, please refer to section A.2 and B.2 of the PDD.

5.1.3 PDD Editorial Aspects

The PDD is in line with the guidelines for users of the JI PDD form (version 04), issued on the UNFCCC JI website. The latest JI PDD form (version 01) was used.

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

5.1.4 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.3 of the table A-1 of the annex 1 and chapter 2 of this determination report.

5.1.5 Type of Project

The project qualifies as a Small Scale JI Track 1 Project, scope 5: "Chemical Industry". The host country Spain fulfils the requirements for Track 1 participation. National guidelines and procedures for approving JI projects are implemented /dfp/, /B-5/, /B-9/.

5.2 Project Baseline, Additionality and Monitoring Plan

5.2.1 Application of the Methodology

The project applies in principle to the approved baseline and monitoring methodology AM0034 methodology: "Catalytic reduction of N_2O inside the ammonia burner of nitric acid plants", version 03.4. /B-2/. Since the methodology is applied in the context of a JI Track 1 projects, some eligible deviations were made and properly described in the PDD. The Baseline Emission factor will not be determinated by assessment of a historical baseline campaign because the DFP involves a benchmark factor, which will be applied for the calculation of the emission reduction. This leads to an adjustment of the abovementioned methodology due to these specific project conditions.

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.

In summary 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 (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 Avíles Nitric Acid Plant from the ammonia burner to the stack) 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 determination.

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

According to AM0034 leakage calculation is not required.

Emission reduction is calculated and estimated by the difference between baseline emissions and project emissions.

Baseline Emissions:

The baseline methodology takes into account an anticipated benchmark of 2.5 kg N_2O/t HNO_3 (100%) throughout the project activity, which was introduced by the Spanish DFP/RDFP/.

Any national regulation and limits will be taken into account when calculating emissions reductions and will be monitored throughout the project /PDD/.

The Principado de Asturias has passed the Resolución de 28 de abril de 2008 /B-10/ under which an emission-limit of 1,500 ppm for N_2O (which is about 9.4 kg N_2O/t HNO_3) is imposed on the Avilés plant. The PP could prove with historical data of plant emissions that N_2O-emissions don not exceed about 1,100 ppmv. Because of this, regulatory limits shall not be taken into account for determination of the benchmark.

The baseline emission factor considers the limiting benchmark value of the DFP and is determinated as follows:

Year:	2010	2011	2012	
Value:	2.5	2.5	2.5	kg N_2O/t HNO_3 (100%).

Project Emissions:

Taking into account an 80 % efficiency of the secondary N_2O abatement catalyst and an Emission Factor of 6.65 kg N_2O/tHNO_3 (according to historical data of the plant/HIST/) average project emissions factor results to 1.33 kg N_2O/tHNO_3.

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 the JI project activity

The start of the project is estimated for May 2010-05-16. At this date, the plant will be restarted with a fully operational secondary catalyst which was installed during the yearly regular shutdown. This date will be fixed as the starting date of the project. The project developer N.serve as project developer is deeply involved in the preparation of the project and in the communication with the DFP regarding the registration of the project, so a prior consideration of the Joint Implementation mechanism is obvious.

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 Methodological CDM Tool "Combined Tool to identify the baseline scenario and demonstrate additionality" (Version 02.2)". According to the EB[/B-11/], this tool is applicable for project activities using approved methodologies where all identified alternative baseline scenarios are under the control of project participants (no leakage occurs). Since this is the case in the Fertiberia project, it is appropriate to apply the Combined Tool to the project.

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[/cost/].

The main types of costs are:

- Catalyst costs:
    - Catalyst costs (leasing)
    - Modification of baskets
- Automated monitoring system:
    - AMS system
    - AMS Engineering & Installation
- JI project operating costs:
    - QAL2 audit
    - QAL 3 (maintenance, calibrations etc) (ongoing)
    - Annual Surveillance Test
    - Determination (once)
    - First Verification

- Subsequent Verifications (2 per year)

The determination 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 (Inspection of available documents, which are stated as confidential during on site visit) 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_2O destruction technology options are expected to generate any significant financial or economic benefits other than JI related income. Therefore, the "Business As Usual" scenario, which corresponds to the current plant operation, 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 determination 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 (annex 1) and annex 4 of this report.

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

Considering all statements above, the determination 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 Fertiberia and N.serve, who will process the monitoring data and it can be confirmed, that the monitoring plan is in major in compliance with the methodology AM0034, considering the changes as given in section B1 of the PDD

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 PP made amendments to the monitoring methodology of the applied methodology AM0034. The amendments are related to the fact, that no baseline campaigns were applied and there is no necessity to compare baseline operational parameters with operational parameters of the project period. The provided monitoring plan can be implemented and the determination 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 (annex 1).

5.2.9 Crediting Period

The estimated project starting date is 2010-05-16 and the duration of the crediting period extends from 2010-05-16 to 2012-12-31, which is deemed realistic and appropriate. The full extension of the crediting period can only be applied to the project activity, if the JI regulations are applicable and no further regulation (esp. EU-ETS involvement) is in place after end of 2012. If N_2O is not included in the ETS after 2012, the period will extend to regular 10 Years until 2020.

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

5.2.10 Environmental Impacts

The project reduces the N_2O-Emissions of the Fertiberia plant using a specific catalytic oxidisation process. No additional emissions will occur, no additional usage of resources is necessary.

On the basis of document review and the on-site visit the determination 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 (annex 1).

5.2.11 Comments by Stakeholders

The global stakeholder consultation for the project was carried out on the TÜV NORD website www.global-warming.de for 30 days, in line with the applicable requirements.

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

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

5.2.12 Issues for verification

- The AMS and coriolis flow meter need to be checked in detail during the first verification regarding suitability to fulfil the requirements of the ISO 14181. The fulfilment of QAL 1 needs to be proved by an independent laboratory with EN ISO/IEC 17025. This includes the determination of the uncertainty on the basis of applicable international standards.
- Since the secondary catalyst was not installed at the time of the on-site visit, the verifier should check the documents and evidences related to the proper installation of the catalyst technology in the ammonia burner.

6 DETERMINATION OPINION

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

"FERTIBERIA AVILÈS N_2O ABATEMENT PROJECT IN SPAIN"

with regard to the relevant requirements of the host country Spain 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 UNFCCC Methodology: „"Catalytic reduction of N_2O inside the ammonia burner of nitric acid plants", Version 03.4.

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 (Spain) 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 176,136 tCO_2e (between 2010 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 LoAs 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 LoAs of the parties involved will be provided.

Essen, 2010-04-06

Mr Rainer Winter,

TÜV NORD JI/CDM CP

Determination Team Leader

Essen, 2010-04-06

Mr Eric Krupp

TÜV NORD JI/CDM CP

Final Approval

7 REFERENCES

Table 7-1: Documents provided by the project participant

	Document
/**14001**/	ISO 14001 Certificate, valid until 2012-02-28, issued by AENOR at 2006-02-28.
/**18001**/	OHSAS 18001 Certificate, valid until 2011-12-18, issued by AENOR at 2008-12-18.
/**9001**/	ISO 9001:2000 Certificate, valid until 2010-06-04, issued by AENOR at 2007-06-04.
/**9001-1**/	Quality document regarding the maintenance of the AMS
/**9001-2**/	Quality document regarding the controlling of atmospheric emissions
/**9001-3**/	Quality document regarding the application of the environmental permissions
/**AAI**/	Legal permission from the local authority regarding max. emission levels
/**ANALYS**/	Safety recommendations of the Dr. Födisch multicomponent analyser
/**BASKET**/	Pro forma invoice regarding four new baskets for ammonia burner
/**BFLOW**/	Block flow diagram of the Nitric Acid plant
/**BURNER**/	Engineering drawing of ammonia burners
/**CATLINE1**/	Security data sheet for catalyst line 1
/**CATLINE2**/	Operation manual Shell $DeNO_x$-System for Fertiberia, Line 2
/**CON1**/	Confidential contract between Johnson Matthey and Fertiberia regarding the conditions of leasing the catalyst during project time, provided during on-site visit
/**COST**/	Excel-sheet: cost analysis_Aviles
/**DATABAS**/	Technical description of the HONEYWELL database
/**FLOW**	Product information flow measuring device FMD 99
/**FOED**/	Quotation from Dr. Födisch Umweltmesstechnik AG regarding MCA and

	Document
	FMD
/**FSPLANT**/	Flow sheet of the Nitric Acid plant
/**GASES**/	Quotation from AIR LIQUIDE regarding test gases for AMS
/**HIST**/	Historical production data from 1970 – 2009
/**INFO**/	Fertiberia company presentation booklet.
/**INOUT**/	Input and Output values of Fertiberia plant from 2007-01 – 2009-12
/**LOCATE**/	Location of the instruments for registration of data
/**MMADOC**/	Confirmation of the DFP of the implementation of a project benchmark as baseline reference dated 2009-11-11
/**MMF300**/	Technical description of the Micro Motion flow meter F300
/**MONI**/	Monitoring report template send to N.serve
/**N2OVAL**/	Historical N_2O-Emission data from July to December 2009
/**NACONC**/	Data of Nitric Acid density and Concentration "Degasificator de Ácido"
/**NAFLOW**/	Quotation from EMERSON regarding a Micro Motion Coriolis flow meter
/**P&I**/	P&I-sheet of the complete Nitric acid plant
/**PP**/	Plant permission regarding et al. max. capacity
/**PRESENT**/	Presentation of the Fertiberia N_2O abatement JI project from 2010-02-04 at Avilés plant, 90 pages
/**RAWDATA**/	Raw data to be measured & stored at Avilés Fertiberia plant
/**RDFP**/	Resolution of the Designated Focal Point with approving guidelines and applicability of the 2.5 kg N_2O/t HNO_3-benchmark.
/**SCHEDULE**/	Schedule of project implementation activities from 2010-01-15 – 2010-06-18
/**SHEET**/	Flowsheet of Fertiberia plant
/**SHUT**/	Schedule of plant shutdowns and startups between 2007-07-01 and 2009-

	Document
	12-09
/**TRIP-FLOW**/	Flow diagram of logical links of trip-point-transmitter and plant
/**UHDE**/	Plant design data

Table 7-2: Background investigation and assessment documents

Reference	Document
/**B-1**/	Methodological Tool : "Tool for the demonstration and assessment of additionality" (Version 05.2), EB 39, Annex 10
/**B-2**/	Approved baseline and monitoring methodology AM0034: "Catalytic reduction of N_2O inside the ammonia burner of nitric acid plants", version 3.4
/**B-3**/	European Standard DIN EN 14181: "Stationary source emissions – Quality assurance of automated measuring systems
/**B-4**/	"Joint Implementation Project Design Document Form, Version 01 – in effect as of: 15 June 2006"
/**B-5**/	Spanish "Royal Decree 1031/2007, which develops the participation framework in the flexible mechanisms of the Kyoto Protocol »
/**B-6**/	Reference Document on Best Available Techniques for the Manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers
/**B-7**/	Guidelines for Users of the Joint Implementation Project Design Document Form, Version 04
/**B-8**/	Approved baseline methodology AM0028: "Catalytic N2O destruction in the tail gas of Nitric Acid or Caprolactam Production Plants", Version 04.2
/**B-9**/	Aprobación de proyectos de AC en España (JI Approval and Authorisation Guidance in Spain)
/**B-10**/	Bouletin No 139 del lunes 16 junio de 2008 of the Gobierno del Principado de Asturias: "Resolución de 28 de abril de 2008, de la Consejería de Medio Ambiente y Desarrollo Rural, por la que se otorga autorización ambiental integrada a instalación industrial. Expte. AAI-067/06", (local decree setting the emission limits of the Fertiberia plant, i.e. 1,500 ppm N_2O). Document

Reference	Document
	available on: http://www.asturias.es/portal/site/Asturias/menuitem.1003733838db7342ebc4e191100000f7/?vgnextoid=d7d79d16b61ee010VgnVCM1000000100007fRCRD&fecha=16/06/2008&refArticulo=2008-10592
/**B-11**/	Report of Executive Board of the Clean Development Mechanism, Twenty-Seventh Meeting, Date: 1 November 2006, Ref: CDM-EB-27
/**B-12**/	Joint Implementation Supervisory Committee, Eighteenth meeting Report . Annex 3:PROVISIONS FOR JOINT IMPLEMENTATION SMALL-SCALE PROJECTS (Version 03)
/**B-13**/	/B-11/ Real Decreto Legislativo 1/2008, de 11 de enero, por el que se aprueba el texto refundido de la Ley de Evaluación de Impacto Ambiental de proyectos.

Table 7-3: Websites used

Reference	Link	Organisation
/**ast**/	http://asturias.es	Website of the Gobierno del Principado de Asturias (local government of asturias)
/**bref**/	http://eippcb.jrc.ec.europa.eu/reference/	Website of the European Commission, Joint Research Centre, Institute for Prospective Technological Studies (Provision of BAT-Reference documents)
/**dfp**/	http://www.mma.es	Ministerio de Medio Ambiente, Medio Rural y Marino Oficina Española de Cambio Climático (OECC)
/**dehst**/	http://www.dehst.de	German Emissions Trading Authority (DEHSt) at the Federal Environment Agency
/**ipcc**/	http://eippcb.jrc.ec.europa.eu/pages/FActivities.htm	IPCC publications
/**cdm**/	http://cdm.unfccc.int/Reference/tools/index.html	Web page of the UNFCCC
/**eu**/	http://ec.europa.eu/environment/climat/emission/implementation_en.htm	EC legal database

Reference	Link	Organisation
/**efma**/	www.efma.org	Web page of the European Fertilizer Manufacturers Association
/**ji**/	http://ji.unfccc.int	UNFCCC JI-website with relevant JI related documents/guidances
/**jir**/	http://www.jirulebook.org/track1	JI-Rulebook, Practice and Procedures

Table 7-4: List of interviewed persons

Reference	MoI[1]		Name	Organisation / Function
/**IM01**/	V	☒ Mr. ☐ Ms	David Herrero Fuentes	Fertiberia, Plant Director
/**IM01**/	V	☐ Mr. ☒ Ms	Irene Garziles Ribot	Fertiberia, Quality Manager
/**IM01**/	V	☒ Mr. ☐ Ms	Juan A. Alonso Garcia	Fertiberia, Head of Service
/**IM01**/	V	☒ Mr. ☐ Ms	Esteld Zapico Rouez	Fertiberia, Environmental Technician
/**IM01**/	V	☒ Mr. ☐ Ms	Jesus Alberto Gonzalez	Fertiberia, Head of Operations
/**IM01**/	V	☒ Mr. ☐ Ms	Victor M. Fernandez Zaluarez	Fertiberia, Head of Electric Department
/**IM01**/	V	☒ Mr. ☐ Ms	Juan Álvarez de Linera	Fertiberia, Maintenance Manager
/**IM01**/	V	☒ Mr. ☐ Ms	Javier Nicolás	Fertiberia, Plant Manager
/**IM01**/	V	☐ Mr. ☒ Ms	Sarah Debor	N.Serve, Project Leader
/**IM01**/	V	☒ Mr. ☐ Ms	Christopher Brandt	N.Serve, Head CDM/JI Projects

[1)] Means of Interview: (**T**elephone, **E**-Mail, **V**isit)

ANNEX

A1:	Determination Protocol
A2:	Assessment of Baseline Information
A3:	Assessment of Financial Parameters
A4:	Assessment of Barrier Analysis
A5:	Outcome of the GSCP
A6:	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.**
A. General Description of Project Activity				
A.1. Approval *The written approval of the parties involved is a mandatory requirement*				
A.1.1. Which Parties and project Participants are involved in the project?	Parties involved are Spain (as a Host Party), UK and Germany. The Project Participant of the Host Country Spain is Fertiberia S.A.. The Project Participant of Germany is N.serve Environmental Services GmbH. The Project Participant of the United Kingdom is Johnson Matthey Plc.	/PDD/	CAR A1	
A.1.2. Are the parties involved eligible for JI Track 1?	By means of checking the UNFCCC website and the website of the DFP, it was confirmed that all parties are eligible under JI track 1.	/ji/ /dfp/		OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
		/B-5/ /B-9/ /dehst/ /unfccc/		
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 the CAR A1 will automatically be closed if the host country issues the LoA. A corresponding update of this report is considered to be not required.	/PDD/	CAR A1	OK
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	OK
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	OK
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	OK
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?	Yes, the information regarding the name of the organisation given in Annex 1 is in line with A.3	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
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	OK
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	OK
A.2. PDD editorial aspects *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.*				
A.2.1. Has the latest version of the applicable PDD form been applied?	The latest version of the PDD form, Version 1, has been used for preparation the PDD.	/PDD/ /B-4/ /ji/		OK
A.2.2. Has the PDD been duly filled in accordance with the latest guidance(s)?	The PDD is in line with the Guidelines for Users of the Joint Implementation Project Design Document Form, Version 04, issued on the UNFCCC website.	/PDD/ /B-7/ /ji/		OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
A.3. Technology to be employed *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.*				
A.3.1. Does the PDD contain a clear, accurate and complete project description?	Within the project, N_2O emissions from the production of nitric acid at Fertiberia Avíles nitric acid plant will be reduced by installation of a secondary abatement catalyst. The project description was provided in various parts of the PDD, esp. in the chapters A.2. and A.4.. The project activity description is assessed as clear, accurate, complete and sufficient; the PDD is in line with provided evidences and physical implementation of the project activity. The details including the technical specification of the state of the art catalyst technology for the abatement of N_2O 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_3-production site and it could be verified that the physical implementation of the project activity is in line with the information provided in the PDD. The applicability of the type of abatement catalyst under appropriate plant conditions is suitable to decompose N_2O.	/PDD/ /CON1/ /FOED/	FAR A2 FAR D3	OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	This could be proved with a supply agreement between Fertiberia and Johnson Matthey. Since the catalyst was not delivered and installed, a FAR A2 was raised to check the proper installation of the catalyst before start of the project. The AMS and the coriolis flow meter were not installed at the date of the on-site visit and the suitability of the measurement instrument (the AMS needs to fulfil the requirements of the ISO 14181) should to be proved by an independent laboratory with EN ISO/IEC 17025 (regarding AMS) and checked during the first verification. A corresponding FAR D3 was raised.			
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 found to be in line with the PDD and other project documentation documents.	/PDD/		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_2O emissions from the production of nitric acid at Fertiberia Avilés nitric acid plant will be reduced by installation of a secondary N_2O abatement catalyst. The N_2O abatement catalyst will be installed in 2010-05-16 insight the ammonia burner. Previous to this, no N_2O abatement-technology was used so that the pre-project situation does not include any N_2O abatement measures.	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
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 of the nitric acid production process 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 and • catalytic N_2O decomposition in the oxidation reactor is referenced in the BAT Reference Documents of the European Commission for Manufacture of Large Volume Inorganic Chemicals, this project reflects current good engineering practice.	/PDD/ /B-6/ /BREF/ /bref/		OK
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 the best available technology acc. to the BREF-Documents of the EU.	/PDD/ /B-6/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
A.4. Small scale project activity *It is assessed whether the project qualifies as small-scale JI project activity*				
A.4.1. Does the project qualify as a small scale project activity as defined by the JISC	The project activity is a small scale project since the estimated emission reductions between 2010 and 2012 of 176,136 tCO_2e result to a mean value of 58,712 tCO_2e/year between 2010 and 2012 which exceeds the limit of 60,000 tCO_2e annually (The emission reduction of 651,839 tCO_2e (mean value of 65,184 tCO_2e/year over the full crediting period of 10 years between 2010 and 2020 was not taken into account since the project will most likely be finished at 2012 after including N_2O into the ETS).	/PDD/ /B-12/		OK
A.4.2. Does the project apply one of the approved small scale categories and any methodology and tool referred therein?	No. The project applies to the methodology AM0034 which does not differentiates between small and large scale projects and is applicable to the project activity.	/B-2/		OK
A.4.3. Is the small scale project activity not a debundled component of a larger project activity?	See. A.4.2.			-
B. Project Baseline, Additionality and Monitoring Plan				

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
B.1. Application of the Methodology				
B.1.1. What kind of methodology has been used?	Name: Approved baseline and monitoring methodology AM0034: "Catalytic reduction of N_2O inside the ammonia burner of nitric acid plants", Version: 3.4 with project specific amendments –which is eligible in JI Track 1 projects. Type: ☐ CDM Approved Methodology – latest version with project specific amendments ☐ National Methodology ☒ CDM Approved Methodology – older version ☐ Combination of Approved Methodologies ☐ Project specific Methodology The valid version is 4.0 and 3.4 was used for preparing the project PDD. Since the version 3.4 is still valid (grace period will end 2010-10-25 23:59) and the submission for registration will most likely be done more than two months before end of validity, there is no necessity to refer to the latest version 4.0.	/PDD/ /B-1/ /B-2/		OK
B.1.2. Is the applied CDM methodology identical	The proposed project activity uses the Methodology	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
with the version available on UNFCCC website or -in case of a country or project-specific methodology- is the methodology approved by the Host Country?	AM0034, Version 3.4, but some aspects will not be applied or applied in a modified manner. <u>Note:</u> According to the JI rulebook : "Under the Track 1 process, the determination of the eligibility of the project and the monitoring and verification of emission reductions is subject to national rules and procedures only". a 100% compliance of the project methodology to an approved UNFCCC-methodology is -the consent of the national DFP presumed- not mandatory. **Aspect:** Baseline campaign, Baseline emissions <u>Requirement of the methodology:</u> BE established based on distinct baseline campaign. <u>Adjustment in JI project specific context:</u> Benchmark factors are used for determining reference case emissions. <u>Assessment of the determination team:</u> The Spanish DFP is being proposed and is to be agreed a benchmark of kg 2.5 N_2O/t HNO_3 which will replace an Emission Factor generated in a Baseline Campaign. The	/B-2/ /MMA DOC/ /jir/		

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	determination team follows the reasoning of the PP. **Aspect:** Crediting period starting date <u>Requirement of the methodology:</u> Crediting Period starts at a date specified in the PDD which is later than registration. <u>Adjustment in JI project specific context:</u> Crediting Period starts with catalyst installation, which may have already taken place before the Final Determination of the project. <u>Assessment of the determination team:</u> The installation of the catalyst will be done during a routine shut-down of the plant in May 2010. This date is likely to be before finalisation of the administrative procedures of the project registration. This was communicated to the Spanish DFP, which will make a final decision after submission of the project application. The determination team will follow the decision of the DFP. The determination team follows the reasoning of the PP. **Aspect:** Permitted range of operational parameters <u>Requirement of the methodology:</u>			

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	Establishing a permitted range of operational parameters to avoid manipulation of baseline emissions. Adjustment in JI project specific context: No permitted range of operational parameters is established Assessment of the determination team: Since a benchmark for baseline emissions will be implemented, there is no chance for increasing the emission reductions by manipulating the operation conditions. The determination team follows the reasoning of the PP. **Aspect:** Statistical analysis of baseline emissions data Requirement of the methodology: Statistical analysis of data collected in the baseline campaign Adjustment in JI project specific context: No step is undertaken Assessment of the determination team: Since a benchmark for baseline emissions will be implemented, no baseline data for statistical analysis are available. The determination team follows the reasoning of the PP. **Aspect:**			

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	Cap of baseline campaign length Requirement of the methodology: Maximum allowable nitric acid production in baseline campaign. Adjustment in JI project specific context: No baseline campaign was carried out. Assessment of the determination team: Since a benchmark for baseline emissions will be implemented, a baseline campaign was not conducted. The determination team follows the reasoning of the PP. **Aspect:** Cap on ERUs entitled emission reductions Requirement of the methodology: Limiting the ERUs to the maximum annual design capacity. Adjustment in JI project specific context: The cap on ERUs entitled emissions reductions is not needed. Assessment of the determination team: Since all emissions of Spain as a Annex 1 member state are included in the national inventory, the increase of emissions caused by plant enlargements needs to be compensated and will not lead to more emissions in Spain. The			

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	determination team follows the reasoning of the PP. **Aspect:** Deduction of AMS uncertainty from baseline emission factor. <u>Requirement of the methodology:</u> Combined uncertainty for all parts of the AMS is deducted from EF_{BL}. <u>Adjustment in JI project specific context:</u> Uncertainty is not taken into account. <u>Assessment of the determination team:</u> Uncertainty will not taken into account, because • No baseline campaign was conducted. • The implementation of a benchmark significant lower then historical emissions will lead to conservative calculations of emission reductions. The determination team follows the reasoning of the PP. **Aspect:** Recalculation of EF_{BL}-value in case of shorter project campaign. <u>Requirement of the methodology:</u> In case a project campaign is shorter than the baseline campaign, EF_{BL} is re-calculated for that campaign.			

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	Adjustment in JI project specific context: EF_{BL} is not being applied. Assessment of the determination team: Uncertainty will not taken into account, because No baseline campaign was conducted and no EF_{BL} was calculated. The determination team follows the reasoning of the PP. **Aspect:** Monitoring Periods based on campaigns. Requirement of the methodology: Verifications can only be undertaken for full campaigns, not merely for parts of campaigns. Adjustment in JI project specific context: This restriction does not apply. Assessment of the determination team: Project campaigns are not be related to baseline campaigns. Because of that, emission reductions can also be determined for parts of campaigns. The determination team follows the reasoning of the PP. **Aspect:** Moving Average Emissions Factor ($EF_{ma,n}$). Requirement of the methodology:			

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	Project emissions are compared to the average emission factor of all previous project campaigns (of the first 10 campaigns only). <u>Adjustment in JI project specific context:</u> This step is not being applied. <u>Assessment of the determination team:</u> Since a benchmark for baseline emissions will be implemented, no moving average for monitoring of catalyst efficiency is necessary. The determination team follows the reasoning of the PP. **Aspect:** Minimum project emissions factor after 10^{th} campaign (EFmin) <u>Requirement of the methodology:</u> No project emissions factor after the 10^{th} project campaign may be higher than the lowest recorded during these campaigns. <u>Adjustment in JI project specific context:</u> This restriction does not apply. <u>Assessment of the determination team:</u> Since a benchmark for baseline emissions will be implemented, the project emission factor should not be capped taking into account a loss of efficiency of the N_2O			

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	abatement catalyst. The determination team follows the reasoning of the PP. **Aspect:** AMS downtime during baseline campaign. Requirement of the methodology: AM0034 requires either using 4.5 $kgN_20/tHNO_3$ as a default factor or the last measured value whichever is lower. Adjustment in JI project specific context: This restriction does not apply. Assessment of the determination team: Since no baseline campaign was carried out, no AMS was operated before start of project activity. The determination team follows the reasoning of the PP. **Aspect:** AMS downtime and implausible values during project activity. Requirement of the methodology: In case of downtime, malfunction of the AMS or implausible values, the average hourly value will be calculated from the remaining data available for that hour. Only in the case where the remaining data constitutes less than 50% of the hourly data, will all the data from that hour be eliminated.			

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	Adjustment in JI project specific context: This restriction does not apply. Assessment of the determination team: The implementation of a benchmark which is significant lower then historical emissions will lead to sufficiently conservative calculations of ERUs. The determination team follows the reasoning of the PP. **Aspect:** Recording and storage interval for the parameters NCSG, VSG, TSG and PSG. Requirement of the methodology: AM0034 requires a recording frequency of 2 seconds for these parameters. Adjustment in JI project specific context: A recording frequency of 5 seconds will be applied. Assessment of the determination team: Due to the stable operating conditions in the plant and very low variations of N_2O emission values, an interval of 5 seconds is sufficient in order to establish high-quality hourly mean values. A higher frequency of recorded values is not necessary. The determination team follows the reasoning of the PP. **Aspect:**			

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	Parameters gauze supplier and composition. Requirement of the methodology: AM0034 requires the monitoring of the parameters "gauze supplier" and "gauze composition". Adjustment in JI project specific context: Parameters "gauze supplier" and "gauze composition" do not need to be monitored Assessment of the determination team: Since a baseline benchmark will be implemented, a manipulation using different gauze suppliers and gauze compositions is not possible. The determination team follows the reasoning of the PP. **Aspect:** TRIP point values Requirement of the methodology: Trip point values shall be monitored Adjustment in JI project specific context: Parameters OT_h; OP_h; *AFR; AIFR will not be monitored.* The status of the ammonia inlet valve is monitored in order to show whether the plant is in operation or not Assessment of the determination team: The determination team checked on site, that a non			

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	tolerable drift of different trip points will automatically lead to the closing of the ammonia inlet valve and a shut down of the plant. An additional monitoring of trip-points is not necessary.			
B.1.3. Are all applicability criteria in the methodology, the applied tools or any other methodology component referred to therein fulfilled?	Following applicability criteria of the methodology will not be applied in the project activity: (a) limitation to existing production capacity The determination team follows the argumentation of the PP, that there is no risk of shifting capacities from Annex I countries to non-Annex I countries. Therefore, these criteria should not be applicated to the project activity. Following applicability criteria of the methodology will be applied in the project activity: (b) exclusion of projects resulting in shut-down of N_2O abatement (c) no effect on HNO_3 production (d) no increased NO_X emissions (e) no other GHG emissions (f) continuous N_2O measurement possible	/PDD/ /B-2/ /B-5/		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.	/PDD/ /B-2/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
B.2. Project Boundaries *Project Boundaries are the limits and borders defining the GHG emission reduction project*				
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_X and N_2O abatement-devices and the AMS in the stack are included. According to the methodology, only the emissions of N_2O as tail gas emission have to be considered in the project boundary. This is -according to the methodology- clearly described in words and a visualisation of the physical project.	/PDD/		OK
B.2.2. Are all sources and GHGs included in the project boundary as required in the applied methodology?	The methodology only considers N_2O as the main emission source in tail gas after the destruction facility. All other gases/sources are –in correspondence with the methodology- not included in the project boundary.	/PDD/ /B-2/		OK
B.2.3. In case the methodology allows choosing whether a source and/or gas is to be included, is the choice sufficiently explained and justified?	See B.2.2	/PDD/ /B-2/		OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
B.3. Baseline Identification *The choice of the baseline scenario will be determinated 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.*				
B.3.1. What has been identified as the baseline scenario?	All scenarios, with the exception of the "continuation of the status quo", face significant investment barriers, as well as some technological barriers, and therefore have to be excluded from further analysis. Hence, the continuation of the current situation is defined as baseline scenario.	/PDD/ /AAI/		OK

B.3.2. What possible baseline scenarios have been considered?	Following alternatives to the project activity have been identified:
	• Status quo: The continuation of the current situation, without installing any N_2O abatement technology in the plant until 31st December 2012.
	• Switch to alternative production method not involving ammonia oxidation process;
	• Alternative use of N_2O such as:
	  ○ Recycling of N_2O as a feedstock for the plant;
	  ○ The use of N_2O for external purposes
	• Installation of Non-Selective Catalytic Reduction (NSCR)
		/PDD/		OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	DeNOx system • Installation of an N_2O destruction or abatement technology instead of the project activity (i.e. taking N_2O abatement measures without participating in the JI): ○ Tertiary measure for N_2O destruction ○ Primary or secondary measures for maximum N_2O destruction or abatement For a deep evaluation, see annex A2: Assessment of baseline information.			
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.	/PDD/		OK
B.3.4. Is the list of alternatives complete?	The list of alternatives as described under B.3.2. is complete and assessed in accordance with the project.	/PDD/ /B-8/		OK
B.3.5. Has the baseline scenario been determined according to the methodology?	According to the Methodology AM0034, the baseline scenario was identified using a procedure for identification of the baseline scenario described in the approved methodology AM0028 "Catalytic N_2O destruction in the tail gas of nitric acid Plants".	/PDD/ /B-2/ /B-8/		
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 baseline value.	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
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, the legal requirements have been assessed and depicted in the PDD. Decrees of the local government where provided during on-site visit. The Principado de Asturias has passed the Resolución de 28 de abril de 2008 under which an emission limits of 1,500 ppm N_2O was imposed on the Avilés plant. According to the BREF-pares, this emission cap is equal to an emission factor of about 9.34 kg N_2O/t HNO_3 which is much higher than the historical plant emissions and emissions after implementation of the project activity.	/PDD/ /AAI2/ /PP/ /AAI/ /PRESENT/		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 governmental decisions.	/PDD/		OK
B.4. Additionality Determination *The assessment of additionality will be determinated with focus on whether the project itself is not a likely baseline scenario.*				
B.4.1. Methodology				
B.4.1.1. Did the additionality justification follow the	The additionality has been proved according to the	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
requirements of the applied methodology and/or methodological tools?	methodology, which includes a scheme for the assessment of the reference scenario and additionality of the project activity. The PP used the "Combined tool to identify the baseline scenario and demonstrate additionality", which is consistent to the "Additionality Tool" referenced in the methodology AM0034.	/B-1/ /B-2/ /B-8/ /EB27/		
B.4.2. Consideration of JI before project start				
B.4.2.1. Is the project starting date reported in accordance with the glossary of JI terms??	Since this a Track 1-project, a full compliance with the JI-rules is not required and a project starting date is not indicated. The start of the crediting period is envisaged in 2010-05-16. At this date, the plant will restart with a fully operational secondary catalyst in the ammonia burner and an AMS which is in compliance with requirements of the methodology. This date is reported as starting date of the project.	/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 determination of the project activity will most likely be finalized until start of the project. In case of receiving the official approval later than the starting date, the PP have asked to be allowed to claim ERUs for emissions reductions achieved from the installation of the catalyst and AMS onwards, even if the final approval of the JI project is received at a later date.	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
B.4.2.3. How and when was the decision to proceed with the project?	The Spanish DFP stated on 2009-11-09, that they do not have any fundamental objections to retroactive crediting from the start of the project activity. This was the incentive for the PP to proceed with the project.	/PDD/ /MMA DOC/		OK
B.4.2.4. Is the project start date consistent with the available evidences?	Since the starting date of the project is envisaged 3 month after on site visit and preparation of the determination report, no definite statement can be made if the date will be met or not. The PP presented a detailed MS-project schedule depicting the different actions in the course of the project before starting up in 2010-05-16. The contract with Johnson Matthey (catalyst) and Alloy Engineering (basket) mentions clearly a delivery date before May 2010.	/PDD/ /SCHEDULE/ /BASKET/		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?	Yes, the decision to proceed with the project has been taken by the decision board of Fertiberia	/PDD/		OK
B.4.2.6. How was the JI involved in the decision making process?	JI was considered in the early stage of the project. For this reason, Fertiberia contracted N.serve to develop the JI-project activity.	/PDD/		OK
B.4.2.7. Can the JI involvement in the decision assessed as serious?	Yes (see above)	/PDD/		OK
B.4.3. Identification of alternatives Step 1 (in case of SSC projects pl. skip steps 1 and 2)				

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
B.4.3.1. Have all realistic alternatives been identified to the project?	Yes, according to the methodology, all realistic alternatives have bee identified to the project. The scenarios • Switch to alternative production method not involving ammonia oxidation process • Alternative use of N_2O such as: ○ Recycling of N_2O as a feedstock for the plant; ○ The use of N_2O for external purposes were not taken into account in the following assessment, since they are technically and economically not applicable/feasible in the context of the project activity.	/PDD/ /BREF/		OK
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 mentioned alternatives, i.e. status-quo and the project activity not undertaken as a JI project are included in the list of alternatives.	/PDD/		OK
B.4.3.3. Do all identified alternatives comply with applicable regulation?	Yes, the alternatives are complying with the legal obligations, since the high regulatory limit of the N_2O-emissions of the plant does not substantiate the application of any abatement technologies.	/PDD/ /AAI/		OK
B.4.4. Investment analysis Step 2 *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*				

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
to provide additional details of the calculation parameters..				
B.4.4.1. Is an appropriate analysis method chosen for the project (simple cost analysis, investment comparison analysis or benchmark analysis)?	The PDD takes into account the Methodological Tool: Combined Tool to identify the baseline scenario and demonstrate additionality" (Version 02.2), which allows the simple costs analysis as an appropriate method for investment analysis /See 4.1.1.) The relevant (confidential) documents regarding project costs are inspected during on-site visit..	/PDD/ /CON1/ /COST/		OK
B.4.4.2. Is a clear, viewable and unprotected Excel spreadsheet available for the investment calculation?	Yes the PP provided an unprotected Excel sheet with a simple cost analysis.	/COST/		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?	Yes the period chosen is similar to the period given in the reports.	/PDD/ /COST/		OK
B.4.4.4. Is the fair value calculated in accordance with local accounting regulations (where available) or international best practice?	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis.	-	-	-
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?	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis	-	-	-

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
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?	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis	-	-	-
B.4.4.7. Is taxation excluded in the investment analysis or is the benchmark intended for post tax comparisons?	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis	-	-	-
B.4.4.8. Were the input values used in the investment analysis valid and applicable at the time of the investment decision?	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis	-	-	-
Investment comparison				
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	-	-	-
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?	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis	-	-	-
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	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis	-	-	-

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
equity IRR)?				
B.4.4.12. Is the benchmark value suitable for the project activity?	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis	-	-	-
B.4.4.13. Is it ensured that the project cannot be developed by other developers than the PP?	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis	-	-	-
B.4.4.14. Was the benchmark consistently used in the past for similar projects with similar risks?	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis	-	-	-
B.4.4.15. Was sensitivity analysis appropriately done by the project participants?	Since the methodology requires only a simple cost analysis, this value is not assessed in the analysis	-	-	-
B.4.5. **Barrier analysis Step 3 or SSC additionality assessment**				
B.4.5.1. Are there any barriers given whose issues have a clear and definable impact on the profitability of the project?	Revenues from the sale of ERUs are the only income that would be generated by the project activity. This implies that without the registration of the project as a JI activity, the project will not take place.	/PDD/	-	OK
B.4.5.2. How is it justified and evidenced that the barriers given in the PDD are real?	The PP explained that the plant is in compliance with all governmental obligations and the plant would run under status quo conditions without implementation of the project activity. The costs, which are related with the implementation of the project activity (installation of the N_2O-catalyst) can only be compensated by registration as a JI project.	/PDD/	-	OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
B.4.5.3. How is it justified that one or a set of real barriers prevent(s) the implementation of the project activity?	Since there is no revenue gained through the reduction of N_2O-emissions, the costs associated with the realisation of the project are a real barrier for the implementation of the project.	/PDD/	-	OK
B.4.6. Common practice analysis Step 4 (in case of SSC projects skip this step)				
B.4.6.1. Is the defined region for the common practice analysis appropriate for the technology/industry type?	The company Fertiberia starts two similar JI projects in Spain, reducing the N_2O-emission with secondary abatement catalysts in 2009/2010. The chosen technology has been implemented in several other JI project activities (France, Germany and Sweden) which are comparable/similar to the Fertiberia Avilés project. This project type is already diffused in the region resp. industrial sector.	/PDD/	-	OK
B.4.6.2. To what extent similar projects have been undertaken in the relevant region?	Other similar projects which are included in a JI or CDM activity are already successfully validated/determinated or verified.	/PDD/	-	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?	There are only small operational deviations in the commercially production of HNO_3. The respective abatement technology is quite the same and completely described in the BREF documents of the EU regarding the best available technologies for HNO_3-production and N_2O emission reduction	/PDD/ /BREF/	-	OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
B.5. Calculation of GHG Emission Reductions *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.*				
B.5.1. Are the emission reductions real, measurable and give long-term benefits related to the mitigation of climate change?	The emission reductions are real, measurable and give long-term benefits related to the mitigation of climate change.	/PDD/		OK
B.5.2. Are the equations applied correctly according to the applied approved methodology?	Yes, formulas applied are in accordance with the methodology. As mentioned above, the baseline emission factor will be determined by the DFP for the duration of the project activity, so there is no need for application of the equitation according to the methodology. Nevertheless, the PP calculated historical emission factors to prove the compliance with applicable regulations. The formulae to calculate the estimated emission reductions are presented in the section D.1.2.2. of the PDD in a clear and transparent manner. Since the plant consists of two production lines, the	/PDD/ /B-1/ /B-2/ /B-8/ /MMADOC/	~~CL D1~~ ~~CAR D2~~	OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	determination team requested for clarification (CL D1), that for all plant conditions: • Line 1 in operation, Line 2 shut down • Line 1 shut down, Line 2 in operation • Line 1 and Line 2 in operation. For all three scenarios, the project emissions (Pe_n) will be calculated and all three emissions will be summed up to a total PE for the specific verification period. According to the methodology AM0034, a statistical evaluation should be applied to the monitoring parameters NCSG and VSG in section D.1.2.2. (CAR D2). According to the methodology, no leakage should be taken into account.			
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 AM0034 allows calculating the emission reductions against a historical baseline-emission factor or a regulatory limit. The implementation of a benchmark value –the current situation in this project- corresponds basically to a calculation against a regulatory limit so that it can be confirmed, that the equitations applied properly justified and in line with the methodology.	/PDD/ /B-2/		OK
B.5.4. Have conservative assumptions been used when calculating the emission reductions?	Yes. The project activity takes into account a decision of the DFP, setting the benchmark Emission Factors (EF_{BM}) for the calculation of the reduction of N_2O-Emission in future years. These values/years are: Year: 2010 2011 2012	/PDD/ /MMA DOC/ /MMA/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	Value: 2.5 2.5 2.5 kg N_2O/t HNO_3 (100%) The implementation of a benchmark factor reduces the baseline emission factor from 6.65 (historical pre-project emission factor) to 2.5 kg N_2O/t HNO_3. The calculation is deemed to be conservative.	/RDFP/		
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.	/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 • in line with the methodology and • checked to be reasonable. Some amendments to the methodology were made and described sufficiently in the PDD	/PDD/ /B-2/		OK
B.6. Monitoring of Emission Reductions *It is assessed whether the monitoring plan is appropriate for the project activity and in line with the applied methodology.*				
B.6.1. Are all monitoring parameters required by the applied methodology contained in the monitoring plan?	A methodology AM0034 includes a comprehensive list of parameters monitored during the crediting period. Since a benchmark value will be applied, only project emissions will	/PDD/ /B-2/		OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	be monitored: • $NCSG_n$: N_2O concentration in the stack gas • VSG_n: Volume flow rate of the stack gas • OH_n: Operation hours • NAP_n: Nitric acid production • TSG: Temperature of stack gas • PSG: Pressure of stack gas Following parameter are recorded on-site and are available for plausibility check during verification on-site: • AFR: Ammonia flow rate to the AOR • AIFR: Ammonia to air ratio • OT_h: Oxidation temperature • OP_n: Operation pressure During on-site visit it was checked, that the pressures of air- and NH_3-inlet and not the oxidation pressure in the ammonia reactor will be used as safety trip point. A correction in the PDD is necessary. In the following discussion it was	/TRIP-FLOW/		

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	specified, that the operational parameter: Operating Pressure (OPt) Operating Temperature (OTh) Ammonia Flow (AFR) and Ammonia to Air Ratio (AIFR) not be monitored, because the ammonia inlet valve is the only criteria for determination if the plant is in operation or not. In case of a non tolerable drift of one or more trip points, the process control system will automatically command to close the ammonia inlet valve and shut down the plant. An additional monitoring of trip-points is not necessary.			
B.6.2. In case different approaches can be chosen acc. to the methodology, is the selection of parameters justified and correct?	The methodology does not allow choosing between the parameters or approaches.	/B-2/		OK
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?	The methodology requires the use of the European norm EN14181 (2004) *"Stationary source emissions - Quality assurance of automated measuring system"* as a guidance for installing and operating the Automated Monitoring System (AMS) in the nitric acid plants for the monitoring of N_2O emissions. Since this norm demands a regular check of the monitoring instruments by an independent entity, it can be assumed, that the means of monitoring of relevant emission parameters are in accordance with the methodology. The maintenance of all other measurement	/PDD/ /9001-1/ /9001-2/ /9001-3/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	devices i.e.: HNO_3-flowmeter is included in regular ISO 9001 procedures of the plant.			
B.6.4. Are all parameters appropriately labelled?	Yes, the parameters are labelled according to the methodology. See 6.1..	/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?	Yes, the determination team assessed the situation on site and came to the conclusion, that the monitoring arrangements can properly be implemented.	/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 section D. 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 DIN EN 14181, ISO 9001, OHSAS 18001 and 14001.	/PDD/ /14001/ /18001/ /9001/ /9001-1/ /9001-2/ /9001-3/		OK
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 raw data required for verification and issuance will be stored in a central data system of the plant and kept for two years after the project end.	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
B.6.8. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining emissions reductions during the crediting period?	Baseline emissions: It was decided by the DFP, that baseline emissions should be calculated applying a "Benchmark Emission Factor (EF_{BM}), or if lower, regulatory limits of local authorities. Therefore, the acquisition of data of N_2O-emissions in order to determine the baseline emissions and a corresponding emission factor is not necessary. Project emissions: According to the methodology, the monitoring plan ensures the provision of all relevant data necessary for determination of the GHG emissions within the project boundary. Leakage: According to the methodology, leakage does not occur.	/PDD/ /MMADOC/		OK
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 a Spanish DFP decision. The violation of these limits will lead to a reduction of ERUs for the relevant period.	/PDD/		OK
B.6.10. Is the measurement method clearly stated for each indicator to be monitored and also deemed appropriate?	Yes, the monitoring plan provides clear measurement methods for project emissions in section D. of the PDD.	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
B.6.11. Is the measurement equipment described and deemed appropriate?	The measurement of project emissions and process parameters is described appropriate in the PDD and in documents provided during the site visit. Several documents regarding QS/QA of the AMS where provided. Since the AMS was not ordered and installed during the on site visit, a FAR D3 was raised to check the appropriateness of the device. To guarantee a redundant determination of the HNO_3-volumer produced during a verification period (continuous validation of the coriolis mass flow meter), it should be clarified, that the flow and concentration measurements will not only be cross-checked with tank level measurements but also with laboratory tests during regular inspections.	/PDD/ /18001/ /9001/ /14001/ /9001-1/ /9001-2/ /9001-3/ /MANUAL/ /DATABAS/ /FLOW/ /FOED/ /GASES/ /MMF300/	FAR D3 ~~CL A3~~	OK
B.6.12. Is the measurement accuracy addressed and deemed appropriate? Are procedures in place on how to deal with erroneous measurements?	The methodology refers to the DIN EN 14181 guideline for verification and determination of measurements uncertainty of the AMS by a standard reference method. This includes a comparison with international guidelines setting standard values for uncertainties. An implausibility check is implemented in the process of	/PDD/	~~CAR D2~~	OK

Checklist Item (incl. guidance for the determination team)	**Determination Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	data assessment to exclude erroneous measurements/ false data sets. According to the methodology AM0034, a statistical evaluation should be applied to the monitoring parameters NCSG and VSG in section D.1.2.2. (CAR D2).			
B.6.13. Is the measurement interval identified and deemed appropriate?	The AMS is working as an online- and permanent-measurement device. The AM0034 requires a recording frequency of 2 seconds, whereas the monitoring plan provides an interval of 5 seconds. Due to stable process conditions and constant values a 5 secondly interval can considered to be sufficient.	/PDD/		OK
B.6.14. Is the registration, monitoring, measurement and reporting procedure defined?	The procedures are defined in section D.1.2. of the PDD to a sufficient extent. The data used for the calculation of project emission and relevant plant operation parameters will be stored at a central data acquisition system of the plant and evaluated by N.serve according to the regulations of the methodology. During a visit at the office of N.serve, the determination team could check the procedure of data processing and calculation using Microsoft Excel and Access tools. N.serve provided an established methodology to calculate emission reductions according to the methodology AM0034, verified in different JI and CDM N_2O-reduction projects.	/PDD/		OK
B.6.15. Are procedures identified for maintenance of monitoring equipment and installations? Are	The measurement equipment (AMS) for project emissions (N_2O) will be maintained using a QA/QS programme which	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
the calibration intervals being observed?	refers to the EN 14181 and through internal measures for quality assurance related to ISO 9001 and 14001.	/9001-1/ /9001-2/ /9001-3/		
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)	Yes, see B.6.8 and 6.14.	/PDD/		OK
B.7. Project Management Planning *It is checked that project implementation is properly prepared for and that critical arrangements are addressed.*				
B.7.1. Is the authority and responsibility of overall project management clearly described?	Yes, the operational and management structure of the plant is well described and certified against ISO 9001 and 14001 requirements. An external laboratory will bee contracted for maintenance of the AMS. The determination of the data sets relevant for the project activity and calculation of emission reduction will be carried out by N.serve.	/PDD/ /14001/ /9001/ /9001-1/ /9001-2/ /9001-3/		OK
B.7.2. Are procedures identified for training of monitoring personnel?	A specific training course will be carried out by the AMS supplier Dr. Födisch.	/PDD/ /FOED/		OK
B.7.3. Are procedures identified for review of	Yes, all monitoring related data will be sent to N.serve for	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
reported results/data?	revision, plausibility check and calculation of the project emissions.			
B.7.4. Is the authority and responsibility of overall project management clearly described?	Yes, the PP provided a chart with all relevant responsibilities regarding the project activity	/PDD/ /PRESENT/		OK
B.7.5. Are procedures identified for training of monitoring personnel?	Yes, see above.	/PDD/		OK
C. Duration of the Project/ Crediting Period *It is assessed whether the temporary boundaries of the project are clearly defined.*				
C.1. Is the project's starting date and the project duration clearly defined and evidenced?	Since this a Track 1-project, a full compliance with the JI-rules is not required and a project starting date is not indicated in the PDD (see. B.4.2.1.). The starting date of the project is envisaged in 2010-05-16. At this date, the plant will start operation with a secondary catalyst installed in the ammonia burner and an AMS which is in compliance with requirements of the methodology. The crediting period will start with the start of the project activity most likely before provision of the LOA and registration of the project.	/PDD/ /PRESENT/ /SCHEDULE/		OK
C.2. Is the project's operational lifetime clearly defined and evidenced?	The operational lifetime (efficiently of the catalyst) is estimated at 2 years and 7.5 months until end of December 2012. After this date it is expected, that N_2O emission from	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	HNO_3 plants will be covered by the EU ETS and that the project will no longer be viable. If N_2O is not included in the ETS after 2010, the period will extend to regular 10 Years until 2019.			
C.3. Is the start of the crediting period clearly defined and reasonable?	Yes, see C.1.	/PDD/		OK
D. Environmental Impacts *Documentation on the analysis of the environmental impacts will be assessed, and if deemed significant, an EIA should be provided to the DOE.*				
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 F.: Environmental Impacts. Apart from the reduction of emissions of N_2O in a catalytic oxidisation process, there will be no significant further impacts on the environment occur.	/PDD/		OK
D.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	According to the real decreto 1/2008, de 11 de enero, the PP need to conduct an Environmental impact assessment for the project activity, but since the only environmental impact of the project is the reduction of N2O-emission of the plant, an EIA is not required.	/B-5/ /B-13/		OK
D.3. Will the project create any adverse	See D.1.	-	-	-

Checklist Item (incl. guidance for the determination team)		Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	environmental effects?				
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 Spain. With or without implementing the project activity, the plant is in compliance with the Integrated Environmental Authorisation, issued by the local authorities.	/AAI/		OK
E. Stakeholder Comments *The DOE should ensure that stakeholder comments have been invited with appropriate media and that due account has been taken of any comments received.*					
E.1.	Have relevant stakeholders been invited to consultation?	A global stakeholder consultation was carried out on the TÜV NORD website www.global-warming.de for 30 days. No comments were received. The 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.	/PDD/		OK
E.2.	Have appropriate media been used to invite comments by local stakeholders?	See E.1.	/PDD/		OK

Checklist Item (incl. guidance for the determination team)	Determination Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
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
E.4. Is an appropriate summary of the stakeholder comments received provided in the PDD?	See E.1.	/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

☐	Baseline alternatives are not identified
☒	Assessment of alternatives of baseline see below

Baseline Alternatives identified	Inline with the Metho-dology?	Eli-mina-ted	Reasons for elimination / non-elimination from list of alternatives	Evi-dence used	DOE Assessment	
					Appro-priate-ness of elimi-nation	Assessment of determination team (results and means of assessment)
a) Continuation of the Status Quo (Business as Usual Scenario). The continuation of the business as usual scenario, where there is no N_2O destruction technology installed.	☒	☐	**Since the plant emissions of N_2O are below the legal emission limits, there are currently no incentives to install any N_2O abatement technology is in compliance with all gouvernmental regulation.**	**/PDD/**	☐	The determination team follows the opinion for the elimination of scenario a since no limitations or regulations could be identified, which will force the plant operator to limit or decrease the N2O emissions.
B) Alternative uses of N_2O, such as: ***- Recycling of N_2O for feedstock*** ***- External use of N_2O***	☒	☒	**The use of N_2O as a feedstock for the production of nitric acid is technically feasible, but an amendment of the existing plant to generate small amounts of HNO_3 from the emitted N_2O not a viable option.**	**/PDD/ /bref/**	☒	There is no commercially available technology to generate HNO_3 from N_2O out of plant exhaust. Due to low concentrations of N_2O in the exhaust of the plant, the separation and external use of N_2O is not a financially attractive alternative.

Baseline Alternatives identified	Inline with the Metho-dology?	Eli-mina-ted	Reasons for elimination / non-elimination from list of alternatives	Evi-dence used	DOE Assessment	
					Appro-priate-ness of elimi-nation	Assessment of determination team (results and means of assessment)
c) Installation of NCSR (Non Specific Catalytic Reduction)	☒	☒	**The application of a Non Specific Catalytic Reduction Unit causes high investment and operation costs due to permanent demand of a reduction agent. This technology produces emissions of CO, CO_2 and remaining hydrocarbons.**	**/PDD/ /AAI/ /PRESENT/**	☒	Since the plant Fertiberia Avilés is already in compliance with the prevailing NO_X regulation, the installation of a Non-Selective Catalytic Reduction (NSCR) NO_X catalyst unit is uneconomic.
d) Implementation of a primary, secondary or secondary N_2O destruction technology in the absence of the registration of the project activity as a JI project.	☒	☒	**Since there is no financial benefit to reduce the N_2O-emission, the implementation of a catalyst technology in absence of the project activity will not take place**	**/PDD/ /bref/**	☒	The determination team follows the justification of the PP, that there is no incentive to implement an (primary, secondary or tertiary) abatement technology in a comparable extent in absence of the project activity

ANNEX 3: ASSESSMENT OF FINANCIAL PARAMETERS

Table A-3: Assessment of Financial Parameters

☐	No financial parameters are used for additionality justification so far
☒	Assessment of all financial parameters see below

Not included in public version due to confidentiality issues.

ANNEX 4: ASSESSMENT OF BARRIER ANALYSIS

Table A-4: Assessment of Barrier Analysis

☐	No barrier parameters are used for additionality justification
☒	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_2O destruction technology options (including NSCR) are expected to generate any financial or economic benefits other than JI-related income. 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 is appropriate to prove, that there are no financial benefits which can be generated by the reduction of N_2O 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 imple-mentation of an additional N_2O abatement technology in an exis-ting plant is coupled with com-prehensive construc-tion 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

☒	No comments were received during the global stakeholder consultation period
☐	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 *)	Response determination team *)	Conclusion (incl. CARs CLs or FARs)

*) 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

☐	A latest version of a CDM approved methodology (Type I) or a national methodology (Type II) is used – no validation of the applicated methodology is necessary*.
☒	An older version of a CDM approved methodology, a combination of approved methodologies or a project specific methodology is used. The assessment see below*:

The proposed project activity uses the Methodology AM0034, Version 3.4. The valid version is 4.0 from 2010-02-26 onwards.

Since the version 3.4 is still valid (grace period will end 2010-10-25 23:59) and the submission for registration will most likely be done more than two months before end of validity, there is no necessity to refer to the latest version 4.0.

Some aspects of AM0034 will not be applied or applied in a modified manner what is eligible in the course of track 1 JI projects.