




## Validation report form for post-registration changes for CDM project activities

(Version 01.0)

Complete this form in accordance with the "Attachment: Instructions for filling out the validation report form for post-registration changes for CDM project activities" at the end of this form.

### VALIDATION REPORT ON POST-REGISTRATION CHANGES (PRCs)

|  |  |                          |   |
|--|--|--------------------------|---|
| <b>Title and reference number of the project activity</b>      | Omnia N <sub>2</sub> O Abatement Project II<br>UNFCCC ID: 6083   |                          |   |
| <b>Process track</b>   | <input type="checkbox"/> Prior approval<br><input checked="" type="checkbox"/> Issuance<br><input type="checkbox"/> Renewal of crediting period  |                          |   |
| <b>Version number of the validation report on PRCs</b>         | 1.0<br>TN P-No. : 8000461646 – 16/093  |                          |   |
| <b>Completion date of the validation report on PRCs</b>        | 12/12/2016   |                          |   |
| <b>Type(s) of PRCs</b>   | <input type="checkbox"/> Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline<br><input checked="" type="checkbox"/> Corrections<br><input type="checkbox"/> Changes to the start date of the crediting period<br><input type="checkbox"/> Inclusion of a monitoring plan to a registered project activity<br><input checked="" type="checkbox"/> Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline<br><input type="checkbox"/> Changes to the project design of a registered project activity<br><input type="checkbox"/> Types of changes specific to afforestation and reforestation project activities |                          |   |
| <b>Version number of PDD to which this report applies</b>      | Version 3.0  |                          |   |
| <b>Project participant(s)</b>                                  | Omnia Fertilizer, Division of Omnia Group (Pty) Ltd.<br>Belektron d.o.o.<br>Nordic Environment Finance Corporation   |                          |   |
| <b>Host Party</b>  | South Africa   |                          |   |
| <b>Sectoral scope(s), selected methodology(ies), and where</b> | Project Scope<br>(according to   | <input type="checkbox"/> | 1<br>Energy Industries<br>(renew able- /non-renew able sources) |

|   |  |  |    |  |
|---|--|--|----|--|
| applicable, selected standardized baseline(s)                                 | UNFCCC sectoral scope numbers for CDM)   |  |    |  |
|   |  | <input type="checkbox"/>   | 2  | Energy distribution  |
|   |  | <input type="checkbox"/>   | 3  | Energy demand  |
|   |  | <input type="checkbox"/>   | 4  | Manufacturing industries   |
|   |  | <input checked="" type="checkbox"/>  | 5  | Chemical industry  |
|   |  | <input type="checkbox"/>   | 6  | Construction   |
|   |  | <input type="checkbox"/>   | 7  | Transport  |
|   |  | <input type="checkbox"/>   | 8  | Mining/Mineral production  |
|   |  | <input type="checkbox"/>   | 9  | Metal production   |
|   |  | <input type="checkbox"/>   | 10 | Fugitive emissions from fuels (solid, oil and gas)                                 |
|   |  | <input type="checkbox"/>   | 11 | Fugitive emissions from production and consumption of halocarbons and hexafluoride |
|   |  | <input type="checkbox"/>   | 12 | Solvents use   |
|   |  | <input type="checkbox"/>   | 13 | Waste handling and disposal  |
|   |  | <input type="checkbox"/>   | 14 | Afforestation and Reforestation  |
|   |  | <input type="checkbox"/>   | 15 | Agriculture  |
|   |  | <input type="checkbox"/>   | 16 | Carbon capture and storage   |
|   | Applied Methodology(ies) and/or standardized baseline  | ACM0019 Version 01.0.0: "N <sub>2</sub> O abatement from nitric acid production".<br><br>standardized baseline(s): N/A |    |  |
| Name of DOE   | TÜV NORD CERT GmbH   |  |    |  |
| Name, position and signature of the approver of the validation report on PRCs | <br>Stefan Winter,<br>Final Approver |  |    |  |

**SECTION A. Executive summary**

As this assessment was carried out as part of the 4<sup>th</sup> verification of the project activity please refer to chapter 2 of the verification report.

**Table 1:** Project Characteristics

| Item              | Data   |                                      |
|-------------------|--|--------------------------------------|
| Project title     | Omnia N <sub>2</sub> O Abatement Project II  |                                      |
| Project type      | <input checked="" type="checkbox"/> Standard   | <input type="checkbox"/> PoA         |
| Project size      | <input checked="" type="checkbox"/> Large Scale  | <input type="checkbox"/> Small Scale |
| Technical Area(s) | 5.2 Caprolactam, nitric and adipic acid  |                                      |
| Location          | Sasolburg, South Africa  |                                      |
| Crediting period  | <input type="checkbox"/> Renewable Crediting Period (7 y)<br><input checked="" type="checkbox"/> Fixed Crediting Period (10 y) |                                      |

For a detailed project description please refer to the verification report (to which this report is attached).

**SECTION B. Validation team, technical reviewer and approver**

On the basis of a competence analysis and individual availabilities an assessment team, consistent of one team leader and 1 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 following table below.

**B.1. Validation team member**

| No. | Role        | Type of resource | Last name    | First name | Affiliation<br>(e.g. name of central or other office of DOE or outsourced entity) | Involvement in |                    |              |                     |
|-----|-------------|------------------|--------------|------------|---|----------------|--------------------|--------------|---------------------|
|     |             |                  |              |            |   | Desk review    | On-site inspection | Interview(s) | Validation findings |
| 1.  | Team Leader | IR               | Winter       | Rainer     | TÜV NORD CERT   | x              | x                  | x            | x                   |
| 2.  | Team member | EI               | Kochaniewicz | Grzegorz   | -   | x              | x                  | x            | x                   |

**B.2. Technical reviewer and approver of the validation report on PRCs**

| No. | Role               | Type of resource | Last name | First name | Affiliation<br>(e.g. name of central or other office of DOE or outsourced entity) |
|-----|--------------------|------------------|-----------|------------|---|
| 1.  | Technical reviewer | IR               | Stöhr     | Christina  | TÜV NORD CERT   |
| 2.  | Technical reviewer | IR               | Winter    | Stefan     | TÜV NORD CERT   |

|  |            |  |  |  |  |
|--|------------|--|--|--|--|
|  | / Approver |  |  |  |  |
|--|------------|--|--|--|--|

## SECTION C. Means of validation

### C.1. Desk review

The *assessment of post registration changes* consisted of the following steps:

- Appointment of team members and technical reviewers
- A desk review of the registered and revised PDD<sup>/PDD/</sup> submitted by the client and additional supporting documents
- On-Site assessment (if required)
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Resolution of corrective actions (CARs / CLs) (if any)
- Final reporting
- Technical review
- Final approval.

In this case all activities were carried out as part of the 4<sup>th</sup> verification of this project activity.

The registered as well as the revised PDD and supporting background documents related to the project design and the post registration changes were reviewed.

As far as required the assessment 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.

A list all documents reviewed or referenced during this validation is presented in **Fehler! Verweisquelle konnte nicht gefunden werden..**

### C.2. On-site inspection

| Duration of on-site inspection: 21/07/2016 to 22/07/2016 |                                   |               |                                |  |
|--|-----------------------------------|---------------|--------------------------------|--|
| No.  | Activity performed on-site        | Site location | Date                           | Team member                            |
| 1.   | Inspection of the project site    | Sasolburg     | 21/07/2016<br>to<br>22/07-2016 | R. Winter (RW)<br>G. Kochaniewicz (GK) |
| 2.   | Interview with operating personal | Sasolburg     | 21/07/2016<br>to<br>22/07-2016 | R. Winter<br>G. Kochaniewicz           |
| 3.   | Inspection of installed equipment | Sasolburg     | 21/07/2016<br>to<br>22/07-2016 | R. Winter<br>G. Kochaniewicz           |
| 4.   | Review of national law            | Sasolburg     | 21/07/2016<br>to<br>22/07-2016 | R. Winter<br>G. Kochaniewicz           |

### C.3. Interviews

| No. | Interviewee   |            |                  | Date             | Subject         | Team member |
|-----|---------------|------------|------------------|------------------|-----------------|-------------|
|     | Last name     | First name | Affiliation      |                  |                 |             |
| 1.  | Van der Merwe | Pieter     | Omnia Fertilizer | 21/07/2016<br>to | General aspects | RW, GK      |

|    |               |             |                       |                          |  |        |
|----|---------------|-------------|-----------------------|--------------------------|--|--------|
|    |               |             |                       | 22/07-2016               |  |        |
|    | Suthan        | Shivashakar | Omnia Fertilizer      | 21/07/2016 to 22/07-2016 | Process Engineering                                | RW, GK |
| 2. | Sejake        | Moeletsi    | Omnia Fertilizer      | 21/07/2016 to 22/07-2016 | All  | RW, GK |
| 5. | Van der Merwe | Schalk      | Omnia Fertilizer      | 21/07/2016 to 22/07-2016 | Monitoring equipment                               | RW, GK |
| 7. | Visagie       | Karol       | Omnia Fertilizer      | 21/07/2016 to 22/07-2016 | Instrumentation, reading and calibration procedure | RW, GK |
| 8  | Garbers       | Andrew      | Omina Fertilizer      | 22/07/2016               | General aspects                                    | RW, GK |
| 9. | Stilkenbäumer | Martin      | Klimadock/Consultant. | 21/07/2016 to 22/07-2016 | General aspects, Monitoring report, ER calculation | RW, GK |

#### C.4. Clarification requests, corrective action requests and forward action requests raised

| Areas of validation findings  | No. of CL | No. of CAR | No. of FAR |
|---|-----------|------------|------------|
| Compliance with PDD form  | 0         | 0          | 0          |
| Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline | 0         | 0          | 0          |
| Corrections   | 1         | 0          | 0          |
| Changes to the start date of the crediting period   | 0         | 0          | 0          |
| Inclusion of a monitoring plan to a registered project activity   | 0         | 0          | 0          |
| Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline        | 0         | 0          | 0          |
| Changes to the project design of a registered project activity  | 0         | 0          | 0          |
| Types of changes specific to afforestation and reforestation project activities                           | 0         | 0          | 0          |
| Others (please specify)   | 0         | 0          | 0          |
| <b>Total</b>  | <b>0</b>  | <b>0</b>   | <b>0</b>   |

### SECTION D. Validation findings

#### D.1. Compliance with PDD form

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | The project participants used a later version of the PDD form for the revised PDD than the version of the PDD form of the registered PDD. By means of checking updated PDD with the latest applicable and available PDD template form the DOE confirms that the information transferred to the later version of the PDD form is materially the same as that in the registered PDD besides those changes highlighted and assessed under this report. |
| <b>Findings</b>            | -   |
| <b>Conclusion</b>          | The updated PDD is in line with the latest applicable PDD form.   |

#### D.2. Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | Type of <input type="checkbox"/> Temporary Deviation from Monitoring Plan |
|----------------------------|---|

|  |  |  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|--|--|--|--|------------|--------------------|--|--|--|--------------------------|---|--------------------------|---|--------------------------|--|-----------------------|--|--|--|--------------------------|--|--------------------------|--|
|  | change(s):   | <input type="checkbox"/>   | Temporary Deviation from Monitoring Methodology                              |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|  | <b>Description of post registration change</b>   |  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|  | <b>Start Date:</b><br>Please provide the start date of the change  | DD/MM/YYYY   | <b>End Date:</b><br>Please provide the end date of the change, if applicable | DD/MM/YYYY |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|  | <b>Description:</b><br>Please give a detailed description of the change(s)   | N/A  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|  | <b>Assessment of post registration change – Temporary deviations from MP or MM</b>   |  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|  | <b>Accuracy:</b><br>Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation.  |  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|  | <b>Conservative-ness:</b><br>Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated.   |  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|  | <b>Appendix 1 PS:</b><br>Check if the changes fall under one of the scenarios of appendix 1 of the PS.   |  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
| <b>Findings</b>  |  |  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
| <b>Conclusion</b>  | <p>Based on the above the temporary deviation(s) from the registered monitoring plan, applied monitoring methodology and/or applied standardized baseline are in accordance with applicable validation requirements related to the temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline in the VVS.</p> <table border="1"> <tr> <td colspan="3"><b>Revised PDD</b></td> </tr> <tr> <td rowspan="3"><b>Rev. of PDD:</b><br/>Check whether the changes have been fully addressed in a revised PDD.</td> <td><input type="checkbox"/></td> <td>The changes have correctly been reflected in the revised PDD.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>A revision of the PDD is not required (in case of temp. changes).</td> </tr> <tr> <td><input type="checkbox"/></td> <td>The revised PDD has been forwarded in (i) track-change and (ii) clean version.</td> </tr> <tr> <td colspan="3"><b>Prior Approval</b></td> </tr> <tr> <td rowspan="2"><b>Prior approval:</b><br/>Assess whether the change requires prior approval of the board</td> <td><input type="checkbox"/></td> <td>The post registration change requires prior approval</td> </tr> <tr> <td><input type="checkbox"/></td> <td>The post registration change does not require prior approval</td> </tr> </table> |  |  |            | <b>Revised PDD</b> |  |  | <b>Rev. of PDD:</b><br>Check whether the changes have been fully addressed in a revised PDD. | <input type="checkbox"/> | The changes have correctly been reflected in the revised PDD. | <input type="checkbox"/> | A revision of the PDD is not required (in case of temp. changes). | <input type="checkbox"/> | The revised PDD has been forwarded in (i) track-change and (ii) clean version. | <b>Prior Approval</b> |  |  | <b>Prior approval:</b><br>Assess whether the change requires prior approval of the board | <input type="checkbox"/> | The post registration change requires prior approval | <input type="checkbox"/> | The post registration change does not require prior approval |
| <b>Revised PDD</b>   |  |  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
| <b>Rev. of PDD:</b><br>Check whether the changes have been fully addressed in a revised PDD. | <input type="checkbox"/>   | The changes have correctly been reflected in the revised PDD.                  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|  | <input type="checkbox"/>   | A revision of the PDD is not required (in case of temp. changes).              |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|  | <input type="checkbox"/>   | The revised PDD has been forwarded in (i) track-change and (ii) clean version. |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
| <b>Prior Approval</b>  |  |  |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
| <b>Prior approval:</b><br>Assess whether the change requires prior approval of the board     | <input type="checkbox"/>   | The post registration change requires prior approval                           |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |
|  | <input type="checkbox"/>   | The post registration change does not require prior approval                   |  |            |                    |  |  |  |                          |   |                          |   |                          |  |                       |  |  |  |                          |  |                          |  |

## D.3. Corrections

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | <b>Description of post registration change</b> |
|----------------------------|--|

|  |  |   |  |   |
|--|--|---|--|---|
|  | <b>Start Date:</b><br>Please provide the start date of the change  | 10/12/2015  | <b>End Date:</b><br>Please provide the end date of the change, if applicable | - |
|  | <b>Description:</b><br>Please give a detailed description of the change(s)   | Corrections in the PDD:<br><br>1. Parties and project participants:<br>1.1. Update of the list of project participants on the cover page and in Appendix 1 from:<br><ul style="list-style-type: none"> <li>Omnia Fertilizer, Division of Omnia Group (Pty) Ltd,</li> </ul> to:<br><ul style="list-style-type: none"> <li>Omnia Fertilizer, Division of Omnia Group (Pty) Ltd,</li> <li>Nordic Environment Finance Corporation,</li> <li>Belektron d.o.o</li> </ul> 1.2. Update of parties and project participants in Chapter A.4 from:<br><ul style="list-style-type: none"> <li>South Africa, Omnia Fertilizer, Division of Omnia Group (Pty) Ltd</li> </ul> To:<br><ul style="list-style-type: none"> <li>South Africa, Omnia Fertilizer, Division of Omnia Group (Pty) Ltd,</li> <li>Norway, Nordic Environment Finance Corporation,</li> <li>United Kingdom of Great Britain and Northern Ireland Belektron d.o.o</li> </ul> 2. Section B.6.2 and Section B.7.1<br>Information for "Purpose of data" added as this is a new requirement of the new PDD template.<br><br>3. Parameter "wc,i,y" is removed from the section B.6.2 as this Parameter is to be monitored and not fixed ex-ante<br><br>4. Section B.7.1<br>Information for "Monitoring frequency " has been added as this is a new requirement of the new PDD template. |  |   |
|  | <b>Assessment of post registration change – Corrections</b>  |   |  |   |
|  | <b>Accuracy:</b><br>Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation.                                | The corrections do not affect the accuracy of the ER calculation, as they mainly refer to the PP and some minor editorial corrections in section B.6.2 and B.7.1 due to the change of PDD template.<br>Parameter "wc,i,y" was already a mentioned in section B.7.1, therefore there will be no effect on the accuracy of the ER calculation.  |  |   |
|  | <b>Conservative-ness:</b><br>Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated. | The corrections do not affect the conservatives of the ER calculation as they mainly refer to the PP and some minor editorial corrections in section B.6.2 and B.7.1 due to the change of PDD template..<br><br>Parameter "wc,i,y" was already a mentioned in section B.7.1, therefore there will be no effect to the conservatives of the ER calculation.  |  |   |

|  |  |   |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |
|--|--|---|--|--------------------|--|--|--|--|-------------------------------------|---|--|--------------------------|---|--|-------------------------------------|--|--|-----------------------|--|--|--|--|--------------------------|--|--|-------------------------------------|--|--|
|  | <b>Appendix 1 PS:</b><br>Check if the changes fall under one of the scenarios of appendix 1 of the PS.   | The corrections of the project information do not affect the design of the project activity and do not require prior approval in line with Appendix 1 PS §1, Point 1. |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |
| <b>Findings</b>  |  |   |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |
| <b>Conclusion</b>  | Based on the above stated the corrections to the registered PDD are in accordance with applicable validation requirements related to the corrections in the VVS.   |   |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |
|  | <table border="1"> <tr> <td colspan="4"><b>Revised PDD</b></td> </tr> <tr> <td rowspan="3"> <b>Rev. of PDD:</b><br/>           Check whether the changes have been fully addressed in a revised PDD.         </td> <td><input checked="" type="checkbox"/></td> <td colspan="2">The changes have correctly been reflected in the revised PDD.</td> </tr> <tr> <td><input type="checkbox"/></td> <td colspan="2">A revision of the PDD is not required (in case of temp. changes).</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td colspan="2">The revised PDD has been forwarded in (i) track-change and (ii) clean version.</td> </tr> <tr> <td colspan="4"><b>Prior Approval</b></td> </tr> <tr> <td rowspan="2"> <b>Prior approval:</b><br/>           Assess whether the change requires prior approval of the board         </td> <td><input type="checkbox"/></td> <td colspan="2">The post registration change requires prior approval</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td colspan="2">The post registration change does not require prior approval</td> </tr> </table> |   |  | <b>Revised PDD</b> |  |  |  | <b>Rev. of PDD:</b><br>Check whether the changes have been fully addressed in a revised PDD. | <input checked="" type="checkbox"/> | The changes have correctly been reflected in the revised PDD. |  | <input type="checkbox"/> | A revision of the PDD is not required (in case of temp. changes). |  | <input checked="" type="checkbox"/> | The revised PDD has been forwarded in (i) track-change and (ii) clean version. |  | <b>Prior Approval</b> |  |  |  | <b>Prior approval:</b><br>Assess whether the change requires prior approval of the board | <input type="checkbox"/> | The post registration change requires prior approval |  | <input checked="" type="checkbox"/> | The post registration change does not require prior approval |  |
| <b>Revised PDD</b>   |  |   |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |
| <b>Rev. of PDD:</b><br>Check whether the changes have been fully addressed in a revised PDD. | <input checked="" type="checkbox"/>  | The changes have correctly been reflected in the revised PDD.   |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |
|  | <input type="checkbox"/>   | A revision of the PDD is not required (in case of temp. changes).   |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |
|  | <input checked="" type="checkbox"/>  | The revised PDD has been forwarded in (i) track-change and (ii) clean version.  |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |
| <b>Prior Approval</b>  |  |   |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |
| <b>Prior approval:</b><br>Assess whether the change requires prior approval of the board     | <input type="checkbox"/>   | The post registration change requires prior approval  |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |
|  | <input checked="" type="checkbox"/>  | The post registration change does not require prior approval  |  |                    |  |  |  |  |                                     |   |  |                          |   |  |                                     |  |  |                       |  |  |  |  |                          |  |  |                                     |  |  |

#### D.4. Changes to the start date of the crediting period

|                            |  |                          |   |            |
|----------------------------|--|--------------------------|---|------------|
| <b>Means of validation</b> | <b>Description of post registration change</b>   |                          |   |            |
|                            | <b>Start Date:</b><br>Please provide the registered start date of the CP.  | DD/MM/YYYY               | <b>Revised Start Date:</b><br>Please provide the proposed revised start date of the CP  | DD/MM/YYYY |
|                            | <b>Description:</b><br>Please give a detailed description /reasoning of the requested revision of CP starting date:  | N/A                      |   |            |
|                            | <b>LDC:</b><br>Please check if the host country is an LDC. In case of LDCs the timeframes of the below defined categories are to be doubled.               | <input type="checkbox"/> | The host country is a LDC   |            |
|                            |  | <input type="checkbox"/> | The host country is <b>not</b> a LDC  |            |
|                            | <b>Categories:</b><br>Please check under which category - as defined below – the requested changes fall. In case of LDCs the timeframes are to be doubled. | <input type="checkbox"/> | Category A: > ± 2 a   |            |
|                            |  | <input type="checkbox"/> | Category B: < ± 1 a; not before registration date   |            |
|                            |  | <input type="checkbox"/> | Category C: $(SD_{old} \pm 1 a) \leq SD_{new} \leq (SD_{old} \pm 2 a)$  |            |
|                            | <b>Assessment of post registration change</b>  |                          |   |            |
|                            | <b>Cat. A: &gt; ± 2 a</b><br>Changes of start date of more than 2 years (4 years for LDCs) are not allowed as per  | <input type="checkbox"/> | The change is a cat. A case. The change of the CP start date as requested by the PP is not allowed as per the PS. Thus a corresponding CAR has been raised. |            |



|                   |  |  |  |
|-------------------|--|--|--|
|                   | the PS.  |  |  |
|                   | <b>Cat. B: <math>&lt; \pm 1</math> a</b><br>Prior notification is not required if changes of less than 1 year are requested. The CP start date shall not be earlier than the date of the project registration.   | <input type="checkbox"/>   | The change is a cat. B case. The proposed new CP start date differs less than $\pm 1$ year (2 years in case of LDCs) from the registered CP start date. Furthermore it is confirmed that the proposed new CP start date is not before the registration date of the PA. Thus a prior approval is not required.                          |
|                   | <b>Cat. B: <math>\pm 1a &lt; SD &lt; \pm 2a</math></b><br>Check whether the project falls under this category. If yes prior approval is required. The assessment team shall assess on the basis of a demonstration by the PPs whether the conservativeness of the baseline is not affected by changes that have occurred in-between. Further it has to be assessed, whether substantive progress has been made by the PPs to start the project activity. | <input type="checkbox"/>   | The change is a cat. C case.   |
|                   |  | <input type="checkbox"/>   | The PPs have provided the assessment team with a sufficient demonstration regarding (i) potential effects on the baseline and (ii) progress made to start the project.   |
|                   |  | <input type="checkbox"/>   | On the basis of a detailed analysis of the PP's demonstration as well as background investigation (incl. on-site inspection) the assessment team confirms that no changes have occurred to the PA which would result in a less conservative baseline. This assessment is based on the following considerations:<br>< further details > |
|                   | <input type="checkbox"/>   | On the basis of a detailed analysis of the PP's demonstration as well as background investigation (incl. on-site inspection) the assessment team confirms that substantive progress has been made by the PPs to start the PA. This assessment is based on the following considerations:<br>< further details > |  |
| <b>Findings</b>   |  |  |  |
| <b>Conclusion</b> | Based on the assessment above the changes to the start date of the crediting period are in accordance with applicable validation requirements related to the changes to the start date of the crediting period in the VVS.   |  |  |
|                   | <b>Revised PDD</b>   |  |  |
|                   | <b>Rev. of PDD:</b><br>Check whether the changes have been fully addressed in a revised PDD.   | <input type="checkbox"/>   | The changes have correctly been reflected in the revised PDD.  |
|                   |  | <input type="checkbox"/>   | A revision of the PDD is not required (in case of temp. changes).  |
|                   |  | <input type="checkbox"/>   | The revised PDD has been forwarded in (i) track-change and (ii) clean version.   |
|                   | <b>Prior Approval</b>  |  |  |
|                   | <b>Prior approval:</b><br>Assess whether the change requires prior approval of the board   | <input type="checkbox"/>   | The post registration change requires prior approval   |
|                   |  | <input type="checkbox"/>   | The post registration change does not require prior approval   |

#### D.5. Inclusion of a monitoring plan to a registered project activity

|                            |  |            |  |            |
|----------------------------|--|------------|--|------------|
| <b>Means of validation</b> | <b>Description of post registration change</b>             |            |  |            |
|                            | <b>Start Date:</b><br>Please provide the start date of the | DD/MM/YYYY | <b>End Date:</b><br>Please provide the end date of the | DD/MM/YYYY |

|   |  |                          |   |  |
|---|--|--------------------------|---|--|
|   | change   |                          | change, if applicable   |  |
|   | <b>Description:</b><br>Please give a detailed description of the change(s)   | -                        |   |  |
|   | <b>Assessment of post registration change – Inclusion of a MP</b>  |                          |   |  |
|   | <b>MM compliance:</b><br>Please check in case of changes to the registered MP, whether they are in compliance with the MM.   |                          |   |  |
|   | <b>Later version of MM:</b><br>Please check in cases where compliance with a later version of the MM is demonstrated that the conservativeness of the monitoring and verification is not affected. |                          |   |  |
|   | <b>Accuracy:</b><br>Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation.  |                          |   |  |
|   | <b>Conservative-ness:</b><br>Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated.                 |                          |   |  |
|   | <b>Appendix 1 PS:</b><br>Check if the changes fall under one of the scenarios of appendix 1 of the PS.   |                          |   |  |
| <b>Findings</b>   |  |                          |   |  |
| <b>Conclusion</b>   |  |                          |   |  |
| Based on the above stated the inclusion of a monitoring plan to the registered project activity is in accordance with applicable validation requirements related to the inclusion of a monitoring plan to a registered project activity in the VVS. |  |                          |   |  |
| <b>Revised PDD</b>  |  |                          |   |  |
| <b>Rev. of PDD:</b><br>Check whether the changes have been fully addressed in a revised PDD.  |  | <input type="checkbox"/> | The changes have correctly been reflected in the revised PDD.     |  |
|   |  | <input type="checkbox"/> | A revision of the PDD is not required (in case of temp. changes). |  |
|   |  | <input type="checkbox"/> | The revised PDD has been forwarded in (i) track-                  |  |

|  |  |  |
|--|--|--|
|  |  | change and (ii) clean version.   |
|  | <b>Prior Approval</b>  |  |
|  | <b>Prior approval:</b><br>Assess whether the change requires prior approval of the board | <input type="checkbox"/> The post registration change requires prior approval<br><input type="checkbox"/> The post registration change does not require prior approval |
|  |  |  |

#### D.6. Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline

|  |   |   |  |   |
|--|---|---|--|---|
| <b>Means of validation</b>   | Type of change(s):  | <input checked="" type="checkbox"/>   | <i>Permanent Change from Monitoring Plan</i>                                 |   |
|  |   | <input type="checkbox"/>  | <i>Permanent Change from Monitoring Methodology</i>                          |   |
|  | <b>Description of post registration change</b>  |   |  |   |
|  | <b>Start Date:</b><br>Please provide the start date of the change   | 30/04/2012  | <b>End Date:</b><br>Please provide the end date of the change, if applicable | - |
|  | <b>Description:</b><br>Please give a detailed description of the change(s)  | <p>Permanent change of the QA/QC calibration procedure of monitoring parameter <math>P_t</math> (part of the stack gas flow meter) described in the PDD as "Periodic calibration against a primary device must be performed periodically and records of calibration procedures must be kept available as well as the primary device and its calibration certificate. Pressure transducers (either capacitive or resistive) must be calibrated monthly", to "Periodic calibration against a primary device provided by an independent accredited laboratory is mandatory. According to EN 14181, the flow meter (including the parameter <math>P_t</math>) is tested and calibrated by an external laboratory with EN ISO IEC 17025 Accreditation. The QAL2 test is conducted once every 5 years; the AST test is conducted once per year. Every 5 years the AST test is part of the QAL2 test."</p> <p>A monthly calibration of the <math>P_t</math> instrument would jeopardize the validity of the QAL2 correction factor for the parameter Stack gas flow (<math>V_{t,db}</math>) and is therefore not possible.</p> |  |   |
|  | <b>Assessment of post registration change – Permanent changes from MP or MM</b>   |   |  |   |
| <b>MM compliance:</b><br>Please check in case of changes to the registered MP, whether they are in compliance with the MM. | <p>The Monthly calibration stipulated in the registered MP is in contradiction to the requirement in the applied methodology ACM 0019 version 01: <i>"The monitoring system is to be installed and maintained throughout the crediting period based on the European Norm 14181 (2004), or any more recent update of that standard"</i>.</p> <p>According to EN 14181 periodic calibration against a primary device provided by an independent accredited laboratory is mandatory for the stack gas flow meter and the N2O analyzer. According to EN 14181, the flow meter (including the parameter <math>P_t</math>) is tested and calibrated by an external laboratory with EN ISO IEC 17025</p> |   |  |   |

|  |  |  |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
|--|--|--|--|--------------------|--|--|--|-------------------------------------|---|--------------------------|---|-------------------------------------|--|-----------------------|--|--|--|--------------------------|--|-------------------------------------|--|
|  |  | Accreditation. The QAL2 test is conducted once every 5 years; the AST test is conducted once per year. Every 5 years the AST test is part of the QAL2 test. Therefore the applied changes are in compliance with the applied methodology.  |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
|  | <b>Later version of MM:</b><br>Please check in cases where compliance with a later version of the MM is demonstrated that the conservativeness of the monitoring and verification is not affected. | As per ACM 0019 version 02: <i>"The monitoring system is to be installed and maintained throughout the crediting period based on the European Norm 14181 (2004), or any more recent update of that standard"</i> .<br>The provisions regarding monitoring of the N <sub>2</sub> O concentration and volume or mass flow of the tail gas are the same in the latest versions of the methodology.  |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
|  | <b>Accuracy:</b><br>Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation.  | The permanent changes from registered monitoring plan is in line with the applied methodology and the latest version thereof. The accuracy of the measurement will remain unaffected.  |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
|  | <b>Conservativeness:</b><br>Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated.                  | The permanent changes from registered monitoring plan is in line with the applied methodology and the latest version thereof and do not affect conservativeness of the measurement and ER calculation.   |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
|  | <b>Appendix 1 PS:</b><br>Check if the changes fall under one of the scenarios of appendix 1 of the PS.   | The changes are in line with Annex 1 of PS version 9, paragraph 3. point 5.(f). The permanent changes do not require prior approval of the board.  |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
| <b>Findings</b>  |  |  |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
| <b>Conclusion</b>  |  | Based on the above stated the permanent changes from the registered monitoring plan, applied monitoring methodology and/or applied standardized baseline are in accordance with applicable validation requirements related to the permanent changes from the registered monitoring plan, monitoring methodology and/or standardized baseline in the VVS.   |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
|  |  | <table border="1"> <tr> <td colspan="3"><b>Revised PDD</b></td> </tr> <tr> <td rowspan="3"> <b>Rev. of PDD:</b><br/>           Check whether the changes have been fully addressed in a revised PDD.         </td> <td><input checked="" type="checkbox"/></td> <td>The changes have correctly been reflected in the revised PDD.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>A revision of the PDD is not required (in case of temp. changes).</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>The revised PDD has been forwarded in (i) track-change and (ii) clean version.</td> </tr> <tr> <td colspan="3"><b>Prior Approval</b></td> </tr> <tr> <td rowspan="2"> <b>Prior approval:</b><br/>           Assess whether the change requires prior         </td> <td><input type="checkbox"/></td> <td>The post registration change requires prior approval</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>The post registration change does not require prior approval</td> </tr> </table> |  | <b>Revised PDD</b> |  |  | <b>Rev. of PDD:</b><br>Check whether the changes have been fully addressed in a revised PDD. | <input checked="" type="checkbox"/> | The changes have correctly been reflected in the revised PDD. | <input type="checkbox"/> | A revision of the PDD is not required (in case of temp. changes). | <input checked="" type="checkbox"/> | The revised PDD has been forwarded in (i) track-change and (ii) clean version. | <b>Prior Approval</b> |  |  | <b>Prior approval:</b><br>Assess whether the change requires prior | <input type="checkbox"/> | The post registration change requires prior approval | <input checked="" type="checkbox"/> | The post registration change does not require prior approval |
| <b>Revised PDD</b>   |  |  |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
| <b>Rev. of PDD:</b><br>Check whether the changes have been fully addressed in a revised PDD. | <input checked="" type="checkbox"/>  | The changes have correctly been reflected in the revised PDD.  |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
|  | <input type="checkbox"/>   | A revision of the PDD is not required (in case of temp. changes).  |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
|  | <input checked="" type="checkbox"/>  | The revised PDD has been forwarded in (i) track-change and (ii) clean version.   |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
| <b>Prior Approval</b>  |  |  |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
| <b>Prior approval:</b><br>Assess whether the change requires prior                           | <input type="checkbox"/>   | The post registration change requires prior approval   |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |
|  | <input checked="" type="checkbox"/>  | The post registration change does not require prior approval   |  |                    |  |  |  |                                     |   |                          |   |                                     |  |                       |  |  |  |                          |  |                                     |  |

|  |                       |  |  |
|--|-----------------------|--|--|
|  | approval of the board |  |  |
|--|-----------------------|--|--|

**D.7. Changes to the project design of a registered project activity**

|   |   |                          |  |            |
|---|---|--------------------------|--|------------|
| <b>Means of validation</b>  | Type of change(s):  | <input type="checkbox"/> | <i>Changes to the project design</i>   |            |
|   |   | <input type="checkbox"/> | <i>Changes to the PoA design</i>   |            |
|   | <b>Description of post registration change</b>  |                          |  |            |
|   | <b>Start Date:</b><br>Please provide the start date of the change   | DD/MM/YYYY               | <b>End Date:</b><br>Please provide the end date of the change, if applicable | DD/MM/YYYY |
|   | <b>Description:</b><br>Please give a detailed description of the change(s)  | N/A                      |  |            |
|   | <b>Applicability and application of the Approved Baseline Methodology</b>   |                          |  |            |
|   | <b>Description:</b><br>Please give a detailed description on how the changes affect the applicability and application of the approved Baseline Methodology. Check if the actual changes would adversely affect the conclusions during validation.       |                          |  |            |
|   | <b>Additionality assessment</b>   |                          |  |            |
|   | <b>Description:</b><br>Please give a detailed description re-assessment of additionality. Check whether the actual changes would adversely affect the conclusions during validation. If required please make use of the assessment tables in the annex. |                          |  |            |
|   | <b>Scale of the Project activity</b>  |                          |  |            |
| <b>Description:</b><br>Please give a detailed regarding the effect of the changes on the scale of the PA (i.e. LSC or SSC). |   |                          |  |            |
| <b>Revised PDD</b>  |   |                          |  |            |

|                   |   |                                     |   |
|-------------------|---|-------------------------------------|---|
|                   | <b>Rev. of PDD:</b><br>Check whether the changes have been fully addressed in a revised PDD. In this context pl. refer to <ul style="list-style-type: none"> <li>- Changes in the effective output capacity.</li> <li>- Addition of components or extension of technology</li> <li>- In case of multiple site projects: Removal or addition of sites</li> <li>- Operational parameters under the control of PPs differing from expected parameters</li> <li>- Changes to the baseline Meth (e.g. addition of a new Meth or change of the BL scenario.</li> <li>- Effects with regards to B, C and D above incl. compliance with the MP and level of accuracy and completeness of monitoring.</li> </ul> | <input type="checkbox"/>            | The post registration change has correctly been reflected in the revised PDD. This assessment is based on the following considerations:   |
|                   |   |                                     |   |
|                   |   |                                     |   |
|                   |   |                                     |   |
| <b>Findings</b>   |   |                                     |   |
| <b>Conclusion</b> | Based on the above the changes to the project design of a registered project activity are in accordance with applicable validation requirements related to the changes to the project design of a registered project activity in the VVS.   |                                     |   |
|                   | <b>Traceability:</b><br>Check if the PPs have provided a revised PDD in both clean and track-change version.  | <input type="checkbox"/>            | The revised PDD has been forwarded in (i) track-change and (ii) clean version.  |
|                   | <b>Prior approval:</b><br>Assess whether the change requires prior approval of the board  | <input checked="" type="checkbox"/> | The changes do not raise concerns with respect to aspects outlined in the PS: <ul style="list-style-type: none"> <li>a. applicability and application of the Approved Baseline Methodology under which the project activity has been registered.</li> <li>b. additionality of the project</li> <li>c. scale of the CDM project activity and</li> </ul> Prior Approval by the Board is not required. |

|  |  |                          |   |
|--|--|--------------------------|---|
|  |  | <input type="checkbox"/> | The post registration change requires prior approval. |
|--|--|--------------------------|---|

**D.8. Types of changes specific to afforestation and reforestation project activities**

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | N/A  |
| <b>Findings</b>            |  |
| <b>Conclusion</b>          | Based on the above the changes specific to afforestation and reforestation project activities are in accordance with applicable validation requirements related to the types of changes specific to afforestation and reforestation project activities in the VVS. |

**SECTION E. Internal quality control**

Before submission of the final assessment report a technical review 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 assessment opinion as prepared by the validation team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

**SECTION F. Validation opinion**

The below listed changes have occurred after the registration of the project / PoA.

| <i>Type of Change occurred</i>   | <i>Total No. of changes</i> | <i>No. of changes which require prior approval</i> |
|--|-----------------------------|--|
| <input type="checkbox"/> Temporary deviations from the MP                      | 0                           | -  |
| <input type="checkbox"/> Temporary deviations from the MM                      | 0                           | -  |
| <input checked="" type="checkbox"/> Corrections that do not affect the project | 4                           | -  |
| <input type="checkbox"/> Change to the start date of the crediting p.          | 0                           | -  |
| <input checked="" type="checkbox"/> Permanent changes from the MP              | 1                           | -  |
| <input type="checkbox"/> Permanent changes from the MM                         | 0                           | -  |
| <input type="checkbox"/> Design changes to the project activity / PoA          | 0                           | -  |
| <input type="checkbox"/> Changes specific to AR projects                       | 0                           | -  |

Non of the changes requires prior approval of the Board.

Essen, 12/12/2016




Winter Rainer  
TÜV NORD JI/CDM CP  
Assessment Team Leader



## Appendix 1. Abbreviations

| Abbreviations          | Full texts  |
|------------------------|---|
| <b>CA</b>              | Corrective Action / Clarification Action              |
| <b>CAR</b>             | Corrective Action Request                             |
| <b>CDM</b>             | Clean Development Mechanism                           |
| <b>CER</b>             | Certified Emission Reduction                          |
| <b>CL</b>              | Clarification Request                                 |
| <b>CO<sub>2</sub></b>  | Carbon dioxide  |
| <b>CO<sub>2e</sub></b> | Carbon dioxide equivalent                             |
| <b>CP</b>              | Certification Program                                 |
| <b>DNA</b>             | Designated National Authority                         |
| <b>EB</b>              | CDM Executive Board                                   |
| <b>GHG</b>             | Greenhouse gas(es)                                    |
| <b>PA</b>              | Project activity                                      |
| <b>PDD</b>             | Project Design Document                               |
| <b>PoA</b>             | Programme of Activities                               |
| <b>PRC</b>             | Post Registration Changes                             |
| <b>QC/QA</b>           | Quality control/Quality assurance                     |
| <b>UNFCCC</b>          | United Nations Framework Convention on Climate Change |
| <b>VVS</b>             | Validation and Verification Standard                  |

## Appendix 2. Competence of team members and technical reviewers



**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TÜV NORD JCQM Certification Program

**Mr. Grzegorz Kochaniewicz**


| SCHEME            | STATUS   | VALID UNTIL |
|-------------------|--|-------------|
| CDM               | Senior Assessor (Validation, Verification)<br>Technical Reviewer | 2019-02-08  |
| VCS / ISO 14064-2 | Senior Assessor  | 2019-02-08  |

Authorization status for technical areas within sectoral scope:

| CODE | TECHNICAL AREA             |
|------|----------------------------|
| 1.2  | Renewables                 |
| 2.1  | Energy Demand              |
| 13.1 | Waste and Waste Management |

173 - Rev. 7, Date: 2016-02-09

VC1201-VA050-F04-2014-13-13\_Rev. 4.docx      001-VA050-F04-2014-13-13\_Rev. 4.docx



**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TÜV NORD JCQM Certification Program

**Mr. Rainer Winter**


| SCHEME            | STATUS   | VALID UNTIL |
|-------------------|--|-------------|
| CDM               | Senior Assessor (Validation, Verification)<br>Technical Reviewer | 2019-07-01  |
| A                 | Senior Assessor<br>Technical Reviewer                            | 2019-07-01  |
| VCS / ISO 14064-2 | Senior Assessor<br>Technical Reviewer                            | 2019-07-01  |

Authorization status for technical areas within sectoral scope:

| CODE | TECHNICAL AREA                         |
|------|--|
| 1.1  | Thermal Energy Generation              |
| 1.2  | Renewables                             |
| 4.1  | Cement and lime production             |
| 4.2  | Paper                                  |
| 5.1  | Chemical Industry                      |
| 5.2  | Caprolactam, nitric and adipic acid    |
| 6.1  | Microplastic production                |
| 6.1  | Aluminium and magnesium production     |
| 6.1  | Iron, steel and Ferro alloy production |
| 9.2  | Production of fluorinated gases        |
| 11.1 | Production of fluorinated gases        |
| 11.2 | Production of fluorinated gases        |
| 12.1 | Chemical Industry                      |
| 13.1 | Solid waste and wastewater             |

003 - Rev. 10, Date: 2016-07-01

003-VA050-F04-2014-13-13\_Rev. 4.docx      003-VA050-F04-2014-13-13\_Rev. 4.docx



**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TÜV NORD JCQM Certification Program

**Mr. Stefan Winter**


| SCHEME | STATUS   | VALID UNTIL |
|--------|--|-------------|
| CDM    | Senior Assessor (Validation, Verification)<br>Technical Reviewer | 2017-07-27  |
| VCS    | Senior Assessor (Validation, Verification)<br>Technical Reviewer | 2017-07-27  |

Authorization status for technical areas within sectoral scope:

| CODE | TECHNICAL AREA                         |
|------|--|
| 1.1  | Thermal energy generation              |
| 1.2  | Renewables                             |
| 2.1  | Energy distribution                    |
| 3.1  | Energy demand                          |
| 4.1  | Cement and lime production             |
| 4.2  | Paper                                  |
| 5.2  | Caprolactam, nitric and adipic acid    |
| 6.1  | Aluminium and magnesium production     |
| 6.2  | Iron, steel and Ferro alloy production |
| 13.1 | Solid waste and wastewater             |
| 13.2 | Manure                                 |

183 - Rev. 4, Date: 2015-01-05

183-VA050-F04-2014-13-13\_Rev. 4.docx      001-VA050-F04-2014-13-13\_Rev. 4.docx



**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TÜV NORD JCQM Certification Program

**Ms. Christina Stöhr**

| SCHEME            | STATUS  | VALID UNTIL |
|-------------------|---|-------------|
| CDM               | Assessor (Validation, Verification)<br>Technical Reviewer | 2017-12-12  |
| VCS / ISO 14064-2 | Assessor/ Technical Reviewer                              |             |

Authorization status for technical areas within sectoral scope:

| CODE | TECHNICAL AREA             |
|------|----------------------------|
| 1.1  | Thermal energy generation  |
| 1.2  | Renewables                 |
| 13.1 | Solid waste and wastewater |

200 - Rev. 4 Date: 2015-06-09

200-VA050-F04-2014-13-13\_Rev. 4.docx      001-VA050-F04-2014-13-13\_Rev. 4.docx

### Appendix 3. Documents reviewed or referenced

| No. | Reference      | Author | Title  | References to the document   | Provider |
|-----|----------------|--------|--|--|----------|
| 1   | <b>/ACM19/</b> | UNFCCC | <ul style="list-style-type: none"> <li>ACM0019, version 01 : N<sub>2</sub>O abatement from nitric acid production</li> <li>ACM0019, version 02 : N<sub>2</sub>O abatement from nitric acid production</li> </ul> | <a href="http://cdm.unfccc.int/methodologies/index.html">http://cdm.unfccc.int/methodologies/index.html</a>  | Others   |
| 2   | <b>/TA/</b>    | UNFCCC | Tool to determine the mass flow of a greenhouse gas in a gaseous stream (version 02.0.0)   | <a href="https://cdm.unfccc.int/Reference/tools/index.html">https://cdm.unfccc.int/Reference/tools/index.html</a>  | Others   |
| 3   | <b>/PDD-T/</b> | UNFCCC | Project Design Document Form (F-CDM_PDD) (Version 8.0)   | <a href="https://cdm.unfccc.int/Reference/PDDs_Forms/index.html">https://cdm.unfccc.int/Reference/PDDs_Forms/index.html</a>  | Others   |
| 4   | <b>/VVS/</b>   | UNFCCC | CDM Validation and Verification Standard (Version 9)   | <a href="http://cdm.unfccc.int/Reference/Standards/index.html">http://cdm.unfccc.int/Reference/Standards/index.html</a>  | Others   |
| 5   | <b>/PS/</b>    | UNFCCC | CDM project standard (Version 9)   | <a href="http://cdm.unfccc.int/Reference/Standards/index.html">http://cdm.unfccc.int/Reference/Standards/index.html</a>  | Others   |
| 6   | <b>/CPM/</b>   | DOE    | TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)  |  | Others   |
| 7   | <b>/IPCC/</b>  | IPCC   | <ol style="list-style-type: none"> <li>1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book</li> <li>2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book</li> </ol>       | <a href="http://www.ipcc-nggip.iges.or.jp/public/gl/invs1.html">http://www.ipcc-nggip.iges.or.jp/public/gl/invs1.html</a><br><a href="http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html">http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html</a> | Others   |
| 8   | <b>/KP/</b>    |        | Kyoto Protocol (1997)  |  | Others   |
| 9   | <b>/MA/</b>    |        | Decision 3/CMP. 1 (Marrakesh – Accords)  |  | Others   |
| 10  | <b>/PDD1/</b>  | PP     | Project Design Document named “Omnia N <sub>2</sub> O Abatement Project II” version 02, dated 2012-04-12, registered 30/04/2012  |  | PP       |
| 11  | <b>/PDD2/</b>  | PP     | Revised PDD “Omnia N <sub>2</sub> O Abatement Project II” version 03, dated 2016-11-23, reflecting the intended / implemented changes  |  | PP       |
| 12  | <b>/XLS/</b>   | PP     | Emission reduction calculation spreadsheet   |  | PP       |
| 13  | <b>/VAL/</b>   | DOE    | Validation Report for CDM project “Omnia N <sub>2</sub> O Abatement Project II” version 02, dated 2011-11-01   |  | Others   |
| 14  | <b>/VER/</b>   | PP     | Documents of previous verifications (Monitoring report, verification report, ER calculation sheet)   |  | PP       |

## Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CL from this validation

|   |    |             |  |                  |
|---|----|-------------|--|------------------|
| CL ID   | xx | Section no. |  | Date: DD/MM/YYYY |
| Description of CL                             |    |             |  |                  |
| -   |    |             |  |                  |
| Project participant response                  |    |             |  | Date: DD/MM/YYYY |
|   |    |             |  |                  |
| Documentation provided by project participant |    |             |  |                  |
|   |    |             |  |                  |
| DOE assessment                                |    |             |  | Date: DD/MM/YYYY |
|   |    |             |  |                  |

Table 2. CAR from this validation

|   |    |             |  |                  |
|---|----|-------------|--|------------------|
| CAR ID  | xx | Section no. |  | Date: DD/MM/YYYY |
| Description of CAR                            |    |             |  |                  |
| -   |    |             |  |                  |
| Project participant response                  |    |             |  | Date: DD/MM/YYYY |
|   |    |             |  |                  |
| Documentation provided by project participant |    |             |  |                  |
|   |    |             |  |                  |
| DOE assessment                                |    |             |  | Date: DD/MM/YYYY |
|   |    |             |  |                  |

Table 3. FAR from this validation

|   |    |             |  |                  |
|---|----|-------------|--|------------------|
| FAR ID  | xx | Section no. |  | Date: DD/MM/YYYY |
| Description of FAR                            |    |             |  |                  |
| -   |    |             |  |                  |
| Project participant response                  |    |             |  | Date: DD/MM/YYYY |
|   |    |             |  |                  |
| Documentation provided by project participant |    |             |  |                  |
|   |    |             |  |                  |
| DOE assessment                                |    |             |  | Date: DD/MM/YYYY |
|   |    |             |  |                  |

## Appendix 5. Assessment of Financial Parameters

Assessment of Financial Parameters (VVS, §§ 129, 130 / in case financial parameters from FSR §131 and §132)

| <input checked="" type="checkbox"/> | No financial parameters are used for additionality justification |      |  |           |                              |         |
|-------------------------------------|--|------|--|-----------|------------------------------|---------|
| <input type="checkbox"/>            | Assessment of all financial parameters see below                 |      |  |           |                              |         |
| Parameter                           | Value applied  | Unit | Source of Information<br>(please indicate document and page) | Reference | DOE ASSESSMENT               |         |
|                                     |  |      |  |           | Correctness of value applied | Comment |
|                                     |  |      |  | //        | <input type="checkbox"/>     |         |

## Appendix 6. Assessment of Barrier Analysis

### Assessment of Barrier Analysis (VVS, §§ 133-136)

| <input checked="" type="checkbox"/>      | No barrier parameters are used for additionality justification |               |                                       |                             |
|--|--|---------------|---------------------------------------|-----------------------------|
| <input type="checkbox"/>                 | Assessment of barriers see below                               |               |                                       |                             |
| Kind of Barrier<br>(invest, tech, other) | Description of Barrier   | Evidence used | Assessment of validation team         |                             |
|  |  |               | Appropriateness of information source | Explanation of final result |
|  |  |               | <input checked="" type="checkbox"/>   |                             |