CALL FOR INPUT	
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Document reference number and title: (Recommendation from the MEP to SBM020)

A6.4 MEP012-A05: Draft mechanism methodology: N2O abatement from nitric acid production (version 01.0)

Item	Section no. (as indicated in the document)	Paragraph/Table/Figure no. (as indicated in the document)	Comment (including justification for change)	Proposed change (including proposed text)
1	COVER NOTE	3.1.	Typo: of of Further, the numbering is not consecutive from section 3.2 onwards (3.1 ends with 10, 3.2 starts with 1).	Correction of typo and numbering

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2	COVER NOTE	3.2.	"To ensure the continued adequacy of the methodological approach for baseline setting (i.e., the assumption that no legal requirements would influence N2O emission levels in the baseline), the regulatory analysis shall be repeated for each monitoring period." The wording "influence N_2O emission levels in the baseline" introduces ambiguity and is undefined. Various regulatory measures (e.g., general environmental regulations or standards targeting pollutants other than N_2O) could indirectly affect operational conditions without explicitly requiring N_2O abatement. Such indirect / insignificant effects should not invalidate the baseline assumption that no legal requirement mandates N_2O abatement at nitric acid plants. Therefore, the term "influence" should be rephrased. When implementing new legal regulations, there are usually transition periods defined and common practice. Since the implementation of an Article 6.4 project takes long, such a transition period/grace periods should also be granted to Art 6.4 project activities. In addition, it shall be noted that the implementation of secondary or tertiary N_2O abatement systems requires substantial capital expenditures, and the decision to finally invest in the Article 6.4 project is only taken in case of a positive additionality check, which is done during the project registration stage. Consequently, the regulatory analysis shall be repeated at the renewal of each crediting period (and not for each monitoring period).	"To ensure the continued adequacy of the methodological approach for baseline setting (i.e., the assumption that no legal requirement exists that sets a limit equal or below the N2O baseline emission factor), the regulatory analysis shall be conducted at the renewal of each crediting period."

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3	COVER NOTE	3.4.	"… the methodology caps the quantity of nitric acid production used for calculating baseline emissions to the maximum annual production in the last five years or, where such data is not available, an IPCC default factor for the capacity utilization…" Firstly, it should be noted that a nitric acid plant is part of a complex chemical compound that is restrained by several parameters related to the operation, logistics and market demand of the final products. As nitric acid is only an intermediate product, its production volume is inherently limited by market dynamics of the final products. Furthermore, nitric acid plants are designed to regularly operate beyond the nameplate capacity (>100%). Therefore, to avoid any increase in the nitric acid production as a result of the implementation of the Article 6.4 activity, the quantity of nitric acid production used for calculating baseline emissions should be conservatively capped at the nameplate capacity of the plant, which is simple, transparent and conservative.	"… the methodology caps the quantity of nitric acid production used for calculating baseline emissions to the nameplate capacity of the nitric acid plant ..."
4	COVER NOTE	3.8.	"…, including electricity consumption, fossil fuel consumption, steam consumption and use of other inputs, such as urea or ammonia." Alternatively, to maintain simplicity and consistency with established practice (e.g. ACM0019), it is recommended to refer to existing A6.4/CDM methodological tools for the calculation of emissions from electricity, fuel, and steam consumption, rather than introducing new methodological procedures.	Reference to relevant methodological tools.
5	APPLICABILITY	12. (c)	"Introduction of a new form of N2O abatement with lower N2O emissions than the one used in the historical situation." "… lower N2O emissions than the one used in the historical situation" should be defined	Please include a definition.

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6	APPLICABILITY	17.	"Under this mechanism methodology, a project design document (PDD) and registered Article 6.4 activity shall only include a single nitric acid production line." The restriction to a single nitric acid production line per project activity is not considered necessary. Previous CDM experience (e.g. -ref.nr. 0765, 1369, 1481, etc.) demonstrates that projects covering multiple production lines were successfully validated and verified without any technical or procedural complications. Therefore, inclusion of multiple lines within one project activity remains manageable, transparent, and consistent with MRV requirements, and such a restriction may unnecessarily limit project scalability.	Sentence/requirement shall be deleted.
7	APPLICABILITY	18. (b)	"No policies that may affect N2O emissions from nitric acid production are active or scheduled to take effect within the crediting period, unless they refer to or formally integrate the mechanism as an instrument for implementation;" Please refer to our Comment #2 (Cover note, 3.2.) above	“No policies that sets a limit equal or below the N2O baseline emission factor from nitric acid production are active or scheduled to take effect within the crediting period, unless they refer to or formally integrate the mechanism as an instrument for implementation;“

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8	APPLICABILITY	18. (e)	"To ensure that the technology installed under the Article 6.4 activity is environmentally sound, the Article 6.4 activity shall have been designed in a manner that ensures that implementation of the Article 6.4 activity does not lead to an increase in emissions of nitrogen oxides (NOx) and that the Article 6.4 activity is designed to contain emissions of NOx, ammonia, carbon monoxide and hydrocarbons in accordance with any legal requirements." Secondary and tertiary N_2O abatement technologies are designed to selectively decompose N_2O without increasing the NOx emissions or affecting the core nitric acid production process. In practice, such systems would not be implemented, if they impact NOx levels negatively at the AOR or absorber, as this would reduce plant efficiency. It should also be noted that the availability of consistent, high-quality data for direct comparison with historical operating conditions may be limited. Furthermore, a precondition for implementing an Article 6.4 project at a nitric acid plant, is that the plant and the project comply with all legal requirements. So, compliance is ensured through proven technology design, operational monitoring, and adherence to applicable environmental regulations.	"To ensure that the technology installed under the Article 6.4 activity is environmentally sound, the Article 6.4 activity shall have been designed in a manner that ensures that implementation of the Article 6.4 activity is designed to contain emissions of NOx, ammonia, carbon monoxide and hydrocarbons in accordance with any legal requirements."
9	PROJECT BOUNDARY	Table 2.	Categorization of GHGs of “Operation of a tertiary N2O abatement system” It seems there is a typo as the GHG emissions “Included / Not included” are repeated.	Delete repeated sections of GHG emissions.
10	DEMONSTRATION OF ADDITIONALITY	28. (b) (ii) d.	"Legal requirements concerning gases other than N2O, such as requirements for NOx emissions which may require the installation of an NSCR system;" Nitric acid plants need to comply with existing NOx requirements and regulations prior and after the start of an Article 6.4 activity. So, in our opinion there is no need to add this requirement specifically and it could be deleted.	Delete this requirement/bullet point.

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11	DEMONSTRATION OF ADDITIONALITY	30.	"Activity participants shall assess the requirements of paragraphs 29 and 30 for each monitoring period." Please refer to our comment regarding Cover Note, 3.2	"Activity participants shall assess the requirements of paragraphs 29 and 30 for each renewal of each crediting period."
12	BASELINE EMISSIONS	36.	"The cap on the nitric acid production level used for determining baseline emissions (PNA,cap) is introduced to avoid the possibility that A6.4ERs are claimed from any increases in nitric acid production levels as a result of the incentives from A6.4ERs. …" Please refer to our comment regarding Cover Note, 3.4	"The cap on the nitric acid production level used for determining baseline emissions (PNA,cap) is introduced to avoid the possibility that A6.4ERs are claimed from any increases in nitric acid production levels as a result of the incentives from A6.4ERs and therefore the cap shall be set at the nameplate capacity of the nitric acid plant." Delete the rest of this paragraph.
13	BASELINE EMISSIONS	Table 3.	Please also refer to our comment regarding Appendix 74, 78, 79 For a detailed explanation of the analysis, please refer to the confidential document that has been sent via e-mail. An analysis among existing nitric acid plants has been prepared to determine the most accurate baseline N2O emission factors (per plant pressure type) applicable for Type 1 and 2 of the draft methodology (introduction or restart of N2O abatement), which are presented here.	For a detailed explanation of the analysis and resulting emission factors, please refer to the confidential document that has been sent via e-mail.
14	BASELINE EMISSIONS	39.	"…, the parameter INDA shall be determined as follows: (a) …, then INDA = 0.01 shall apply; (b) …, then INDA = 0.05 shall apply; and (c) Otherwise, INDA = 0.03 shall apply." The MEP approach for setting downwards adjustment is supported, whereas the INDA shall be set at a more reasonable level.	"…, the parameter INDA shall be determined as follows: (a) …, then INDA = 0.01 shall apply; (b) …, then INDA = 0.03 shall apply; and (c) Otherwise, INDA = 0.02 shall apply."

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15	PROJECT EMISSIONS	44. (e) and 44(f)	"(e) …the maximum hourly value of the N2O concentration and/or volume or mass flow of the tail gas observed since the start of operation of the Article 6.4 activity... (f) If data for either the N2O concentration or the volume or mass flow of the tail gas are not available for more than 10 days, then no emission reductions shall be claimed in the period thereafter until the measurements have been resumed;" The requirement to apply the maximum historical hourly value and to suspend crediting after 10 days of missing data may not be practical under real operational conditions. Situations such as force majeure events (e.g. COVID-19 pandemic, travel restrictions, delayed spare parts, or limited access to technical experts) can prevent timely restoration of monitoring systems. In such cases, applying a full suspension of emission reductions is overly restrictive and doesn´t reflect established practice. Instead, conservative data substitution and recalculation approaches, as given by CDM methodologies or the CDM validation & verification standard, provide a transparent, conservative, and verifiable alternative to address temporary data gaps without compromising environmental integrity. Therefore, it is recommended to allow the use of conservative fallback procedures during limited data gaps, rather than fully suspending crediting, provided that proper justification and documentation are ensured.	Ad (e): "…the maximum hourly value of the N2O concentration and/or volume or mass flow of the tail gas observed during the monitoring period. If data for neither the N2O concentration nor the volume or mass flow of the tail gas are available for more than 1/3 of any hour while the plant was in operation, the maximum value of mass flow of N2O calculated during the monitoring period shall be applied to any such hour. ..." Ad (f): shall be deleted entirely.

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16	APPENDIX 1	74. (a)	"Operators of nitric acid production plants commonly have incentives to pursue primary N2O abatement as this can enhance the yield and may also reduce NOx emissions;" There is no public evidence available that primary N2O abatement are commonly used in nitric acid plants. From an operational and industrial perspective, modified primary catalyst systems may introduce technical and economic uncertainties / risks for plant operators. These constraints indicate that modified primary catalyst abatement cannot be considered as applicable & economically viable BAT option across nitric acid plants. Potential influences to be considered / discussed: - increased process sensitivity in the ammonia oxidation reactor, - potential safety concerns (e.g., ammonia slip and ammonium nitrate formation), - uncertainty in platinum loss behaviour, and impacts on plant performance such as increased pressure drop, potential de-bottlenecking requirements, and - yield or catalyst lifetime reductions	Please refer to comment regarding table 3 and comment regarding Appendix 78, 79 / Table 6

17	APPENDIX 1	78. 79. Table 6	"78. Data on best performing primary abatement technologies is scarce. One reason is that many plants only perform N2O measurements if secondary or tertiary abatement is applied, in the context or legal requirements or incentives to pursue N2O abatement. There is also only limited data available from the literature. 79. Lowest baseline emission factor reported among CDM and JI nitric acid production plants (kg N2O / t HNO3)" We agree that the data on modified primary catalyst systems rely on very limited, scarce and non-representative data, and in the literature only limited data is available. Further, it is noted that the primary catalyst systems are not widely implemented in the industry, and the only available data is largely vendor-specific or based on isolated cases with incomplete disclosure of key operating parameters (e.g., gas flow, plant configuration, and long-term performance). Officially verified data (based on the relevant ISO norms) are not available / not published. Given the significant variability across plant designs, operating pressures and scales, such very limited, not verified data shall not be considered sufficiently robust to define BAT-level performance. An analysis among existing nitric acid plants that have been registered as CDM projects applying methodologies AM0028 and AM0034, has been prepared to determine the most accurate baseline N2O emission factors applicable for Type 1 and 2 of the draft methodology (introduction or restart of N2O abatement). The analysis has been done acc. to following steps (for a detailed explanation please refer to the confidential document that has been sent along): • Step 1: Data Selection: Use verified data from nitric acid plants registered under CDM methodologies AM0028 and AM0034 (revalidation under ACM0019) and exclude e.g. caprolactam plants or unverified datasets. • Step 2: Categorization of Nitric Acid Plants: Group plant lines based on pressure type. • Step 3: Calculation of Annual Emission Factors o Step 3.1: Calculation of Emission Factors: For each plant line, calculate the annual weighted average N_2O emission factor. o Step 3.2: Conservative Selection: For each plant line, select the lowest annual emission factor to	Please refer to our comment regarding table 3.

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			ensure conservativeness. o Step 3.3: Aggregation and Statistical Evaluation: In accordance with Article 6.4 “Standard: Setting the baseline in mechanism methodologies the 20th percentile of dataset is selected as the representative emission factor for each category. Based on above-described procedure the resulting N_2O emission factors can be summarized as follows: "Pressure type Pressure category BAT baseline emission factors for type 1 or 2 (introduction or restart of N2O abatement) [kg N2O / t HNO3] Number of nitric acid production lines For a detailed explanation of the analysis and resulting emission factors, please refer to the confidential document that has been sent via e-mail.	
18	APPENDIX 1	79.	"Error! Reference source not found. below shows the lowest baseline emission factor reported among CDM and JI plants for the respective plant pressure." Reference/link is not functioning.	Correction of reference/link.
19	APPENDIX 1	86. and Table 7.	"Dual low/medium pressure 6.30 Dual medium/high pressure 5.60" The values have been mixed up, please check.	Correct the EF values.

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20	APPLICABILITY	12. (c)	"(c) Type 3: Enhancement of N2O abatement…… This may, for example, include: (i) Introduction of secondary N2O abatement system to complement an existing NSCR abatement system; (ii) Replacing an existing secondary N2O abatement system by a new tertiary catalytic N2O abatement system." The current applicability definition limits enhancement activities to specific technology transitions (e.g. secondary to tertiary systems). However, this approach is overly restrictive and does not fully reflect practical implementation scenarios in nitric acid plants. In practice, performance of N_2O abatement systems varies significantly depending on technology design, catalyst condition, operational parameters, and plant-specific constraints. Therefore, emission reductions are driven by actual performance improvement, rather than by the specific technology type alone. As such, restricting applicability to predefined technology substitutions (e.g. secondary → tertiary) may exclude valid project activities where significant emission reductions are achieved through upgrading or optimizing existing systems, even within the same technology category. Accordingly, the applicability should be based on the principle of transition from lower-performing to higher-performing N_2O abatement systems, rather than being limited to specific technology configurations.	"(c) Type 3: Enhancement of N_2O abatement…… This may, for example, include: (i) Introduction of an additional N_2O abatement system to complement an existing abatement configuration; (ii) Replacement or upgrade of an existing N_2O abatement system with a higher-performing system resulting in a demonstrable reduction in the monitored N_2O emission factor (kg N_2O / t HNO_3);"
21	APPLICABILITY	Table 1.	"Type 3: Enhancement of N2O abatement One of the following two forms of N2O abatement (but not a combination thereof) has been in operation at any point in time since 1 January 2021: secondary N2O abatement or NSCR abatement" Please refer to comment on 12. (c)	"Type 3: Enhancement of N2O abatement One of the following three forms of N2O abatement (but not a combination thereof) has been in operation at any point in time since 1 January 2021: secondary N2O abatement, tertiary N2O abatement or NSCR abatement"

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22	INTRODUCTION	The latest form: A6.4-FORM-METH-002 (PROPOSED NEW BASELINE AND MONITORING METHODOLOGY OR METHODOLOGICAL TOOL FORM FOR EMISSION REDUCTIONS ACTIVITIES (Version 02.0)) has not been used.	-	-