

1. Objective

The purpose of this document is to provide a courtesy, non-exhaustive summary in English of some points of the terms of reference for the tender for the supply of Continuous Emission Monitoring Systems (CEMS) for nitrous oxide (N₂O) and NO_x at the Química PIMA nitric acid production plant in Hermosillo, Sonora, Mexico (hereafter, "ToR" or "terms of reference").

This document does not replace the ToR and the interested bidders must ensure that they read the full extent of these ToR and understand them correctly in order to submit a proposal that satisfies Química PIMA's requirements.

In the event of any discrepancy between this document and the terms of reference of the tender, the latter shall prevail.

2. General information

The tender is an "Open International Tender" and shall be carried out in compliance with the principles and provisions of the Mexican Public Procurement Regulation. The sole responsible for the tender, including but not limited to its publication, answering any questions related to or deciding on the winner bid is Química Pima.

This tender takes place in the context of the Nitric Acid Climate Action Group ([NACAG](#)) initiative, a project funded by the German Government and implemented by the German Agency for Development Cooperation (GIZ), which provides technical and financial support for the installation of N₂O mitigation and monitoring technology in nitric acid plants globally. In this regard, Química PIMA has signed a Grant Agreement with GIZ that covers the financing of the technology to be acquired through this process.

3. Events calendar

The Tender events will take place according to the following schedule:

Publication of tender on the website	28 September 2022
Site visit to the plant	19 October 2022 from 10 a.m. to 1 p.m. (Hermosillo, Sonora time)
Deadline for submission of questions by Bidders	26 October 2022
Publication of the Minutes of Clarifications on the Website	4 November 2022
Deadline for submission of re-questions on the clarifications related to the first round of questions.	11 November 2022
Publication of the minutes with answers to questions from the clarification event on the website.	18 November 2022
Last day to publish Modification to ToR on Web Page	25 November 2022
Deadline to submit proposals	8 January 2023
Presentation and Opening of Bids	9-13 January 2023
Deadline for evaluation of Proposals by Química PIMA	14-20 January 2023 (7 calendar days)

Deadline for External Audit	23 January to 3 March 2023 (40 calendar days)
Tender results	6-10 March 2023
Signing of contract	15 calendar days after publication of the tender results.

This schedule of tender events is subject to change by Química PIMA.

4. General summary of the scope of work

The following is a non-exhaustive summary of the scope of goods and services included in the tender; interested bidders should review the ToR to understand the full scope expected by Química PIMA.

Among others, the technology supplier must comply with the following scope of supply:

- Engineering, production or procurement, factory acceptance testing, delivery to site, commissioning, start-up, on-site support, on-site testing to ensure warranty, training of plant personnel and supply of all required documentation for 2 sets of complete N₂O and NO_x emission monitoring systems (one upstream and one downstream of the NO_x abatement unit):
 - A stack gas flow meter certified EN 14181 QAL1 incl. installation flange for the measurement of:
 - Flue gas flow (volume or mass flow)
 - Flue gas temperature
 - Flue gas pressure
 - Installation according to EN 15259
 - An ammonia flow meter to the DeNO_x reactor (mass or volumetric flow)
 - The sampling system for the gas analysers shall be hot extraction (wet basis analysis). Gas sampling probe, heated sampling line, gas sample treatment.
 - Sampling probe and installation flange
 - Heated sampling line suitable for aggressive ambient conditions, high temperatures and UV radiation
 - Sample gas treatment unit with sample filtration pump
 - No recirculation of the sample gas back into the stack necessary
 - N₂O analysers (EN 14181 QAL1 certified), O₂, NO, NO₂, NO_x, NH₃. It is not allowed to measure NO + O₂ and apply a conversion factor to determine the NO₂ ratio.
 - Range 1 N₂O (upstream of the reactor): 0 - 3000 ppm
 - Range 2 N₂O (downstream of the reactor): 0 - 3000 ppm
 - Range 1 NO (upstream of reactor): 0 - 2000 ppm
 - Range 2 NO (downstream of reactor): 0 - 2000 ppm
 - Range 1 NO₂ (upstream of reactor): 0 - 1000 ppm
 - Range 2 NO₂ (downstream of reactor): 0 - 1000 ppm
 - Range 1 NO_x (upstream of reactor): 0 - 3000 ppm
 - Range 2 NO_x (downstream of reactor): 0 - 3000 ppm
 - Range NH₃ (downstream of reactor): 0 - 20 ppm
 - O₂ range: 0 - 4%.

- Incl. hardware or configuration necessary for remote maintenance or diagnostics.
- Must comply with EN 14181 - QAL1 Data capture and evaluation
 - Data Acquisition and Handling System (DAHS)
 - The analyser cabinet must be installed in a climate-controlled room or in a separate container.
 - Valves, pressure reducers, pipes, fittings, etc. for automatic calibration gas application.
 - N₂ and N₂O zero gas and calibration gas with certificate of analysis from an ISO IEC 17025 accredited laboratory for both N₂O measurement ranges.
 - Rack for calibration gas cylinders .
 - Spare parts pool for 3 years of regular maintenance
- The supplier will supervise the installation of the equipment and will be responsible for the commissioning and start-up of the equipment at the plant with the support of local personnel.
- Annual maintenance of the complete analyser system and data logging system for 3 years (remotely).

5. Evaluation Methodology

The Technical Proposal and the Financial Proposal will have the same weights, corresponding to 50% for each one.

EVALUATION OF THE TECHNICAL PROPOSAL

The Requirements that will be evaluated with the criteria of Points and Percentages will be the following:

	Assessment criteria	Maximum points to be obtained
1	Proven experience of the project leader through Curriculum Vitae, specifically in hot extractive type CEMS measurement projects in chemical plants. Points will be allocated as follows: 3 years of experience or less: 0 points More than 3 and less than 5 years of experience: 5 points Between 5 and up to 10 years of experience: 10 points More than 10 years of experience: 16 points	16
2	Guarantee spare parts pool for at least 3 years of regular maintenance (a period longer than 3 years will be considered positively). Points will be allocated as follows: The bidder offering the highest number of years will be awarded the maximum score (16 points) and the others will be awarded points on a pro rata basis, with the understanding that they must offer a spare parts pool for at least 3 years of regular maintenance.	16

3	<p>Ensure efficiency and reasonableness of the project execution time (<u>from contract signature to delivery of goods on site</u>). Points will be allocated as follows:</p> <p>The bidder offering the shortest on-site delivery time from contract signature will be awarded the maximum score (16 points) and the other bidders will be awarded points on a pro-rata basis, provided they propose a delivery time of less than 10 months for on-site delivery of goods.</p>	16
4	<p>CEMS Warranty (time). The bank guarantee of liability for hidden defects shall be for a minimum of 1 (one) year from delivery of the Goods on site. The remaining years shall be guaranteed by the manufacturer's or supplier's standard policy. Points shall be allocated as follows:</p> <p>The bidder offering the highest number of years of warranty will be assigned the maximum score (16 points) and the others will be assigned points proportionally, provided they offer at least 1 (one) year of warranty (only this first year must be supported by a bank guarantee). Additional years beyond the first year will NOT be supported by a bank guarantee.</p>	16
5	<p>CEMS maintenance and after-sales technical assistance offered. Points will be allocated as follows:</p> <p>The bidder offering the highest number of years of after-sales support and assistance will be awarded the maximum score (16 points) and the others will be awarded points on a pro rata basis.</p>	16
6	<p>Have successfully designed, installed and commissioned at least three (3) hot extractive type CEMS projects in chemical plants. Bidders shall submit at least three (3) traceable and verifiable reference letters from customers whose projects have been implemented. <i>Letters of reference shall specify the nature of the work, the completion date and duration of the project, the value of the contract and the client's contact details.</i></p> <p>Points will be allocated as follows: Less than 3 Reference Letters: 0 points 3 Reference Letters: 12 points Between 4 and 6 Reference Letters: 15 points More than 6 Reference Letters: 20 points</p>	20
Total		100

**Note: For a bid to be further considered in the evaluation, a minimum score of 60 in the technical evaluation needs to be achieved*

EVALUATION OF THE FINANCIAL PROPOSAL

The total score of the Financial Proposal will have a maximum value of 100 points. The bid with the lowest Financial Proposal will be scored with the maximum points. The other bids will be scored in proportion to the value of the lowest-cost offer.