Brazilian Institute of Environment and Renewable Natural Resources

TECHNICAL NOTE No. 145/2025/COREM/CGQUA/DIQUA

PROCESS NO. 02001.027060/2025-51

INTERESTED PARTY: Unipar Indupa do Brasil SA

1. SUBJECT

1.1. Final analysis of the application for authorization from the company Unipar Indupa do Brasil SA (CNPJ: 61.460.325/0004-94) to sell metallic mercury, based on the new documents attached to this process, following an agreement reached in a meeting between Corem, CGQua and the company representatives on 11/24/2025.

1.2. The detailed information in this Technical Note should be analyzed in conjunction with that already described in Technical Note No. 92 (Sei document No. 24417500) and Technical Note No. 126 (Sei document No. 25139082).

2. REFERENCES

2.1. for **Ibama Normative Instruction No. 26, of December 10, 2024 ,** which establishes the requirements and procedures environmental control of the import, export, trade, transfer, recycling, recovery, use and transport of metallic mercury, as well as the desining of mercury waste in national territory.

3. INTRODUCTION

Following the superior evaluation of Technical Note No. 126 and the Draft Notice (Sei 3.1 document No. 25330738), a meeting was held on November 24, 2025, with representatives from the heads of Corem and CGQua, as well as those responsible for Unipar Indupa, in which the following points highlighted in the aforementioned draft were discussed:

> Ibama informs that, after analyzing the submitted documents, it will be necessary to supplement the qualification process with the information listed below, as per Ibama Normative Instruction No. 26, of December 10, 2024:
>
> a) Submit the supporting documents for the disposal of mercury waste, particularly those relating to the years 2024 and 2025, mentioned in the Official Response, but not submitted to the process, in accordance with Article 16, item IV; b) Justify the origin of
>
> the 6,887 kg of mercury sold in addition to the 30,000 kg obtained through recovery in the decommissioning and decommissioning process of the plant (Total sales recorded: 36,887 kg); c) Detail the process that
>
> originated the declared mercury stock (2,282.49 kg), since this value, together with the total sales made, exceeds the amount recovered and declared in the Ibama system, in accordance with Article 5, item III.

3.2. The CGQua Dispatch (Sei document no. 25354533), reproduced below, This presents a summary of the decisions resulting from this meeting:

> In response to the meeting, the company included in the project plans the documents related to waste management for the years 2024 and 2025.
>
> Therefore, I return the case file for analysis regarding the viability of the company's qualification, considering that:
>
> a) the documents proving the denaturation of mercury residues have been included.

recently in the process;

b) the existence of import records for approximately 11,000 kilograms of mercury, in addition to 30,000 kilograms recovered from the decommissioning process, which would generate a surplus of mercury. originating from the total sales recorded;

c) the company's statement that the declared stock of mercury (2,282.49 kg) originates from from the deactivation of the old unit (SEI 25098810).

In these terms, I leave the present document for technical comment and preparation of supporting documents to... management regarding the company's eligibility.

4. TECHNICAL ANALYSIS

4.1. Regarding the indications present in the Draft Notice No. 25330738 and which were discussed in From the meeting on November 24th, the following points stand out:

4.1.1. With regard to the supporting documents for the disposal of waste containing

Regarding mercury levels for the years 2024 and 2025, Unipar Indupa initially attached the following to the process. Waste Transportation Manifests (MTR) listed below:

I - MTR No. 240004984960 issued on 09/02/2024 (Sei document No. 25441157);

II - MTR No. 240003620408 issued on 04/12/2024 (Sei document No. 25441156);

III - MTR No. 250005833797 issued on 05/05/2025 (Sei document No. 25441155);

IV - MTR No. 250006340501 issued on 04/06/2025 (Sei document No. 25441154);

V - MTR No. 250008059055 issued on 09/22/2025 (Sei document No. 25441153);

VI - MTR No. 250005315621 issued on 01/04/2025 (Sei document No. 25441151);

VII - MTR No. 250006472325 issued on 06/12/2025 (Sei document No. 25441149);

VIII - MTR No. 250008058383 issued on 09/22/2025 (Sei document No. 25441147).

4.1.1.1. According to the specification registered on the official gov.br page (https://www.gov.br/pt-br/servicos/obter-o-documento-manifesto-de-transporte-de-residuos-mtr), the Transportation Manifests Waste Declarations are self-declaration documents issued by the waste generator in the National System of Information on Solid Waste Management (SINIR) with the objective of monitoring, tracking and To control the movement of solid waste in Brazil, from its generation to its final disposal. environmentally sound.

4.1.1.2. On the other hand, the Certificate of Movement of Environmentally Relevant Waste (Cadri) is a document issued by the environmental agency that authorizes the movement of hazardous waste.

4.1.1.3. Given this, communication was established with the company via email (I know the document). (Sec nº 25563263) requesting the documents issued by the environmental agency that authorized the Destination of mercury waste in the years 2024 and 2025.

4.1.1.4. In response to this request, Unipar attached the Cadris and the Certificates of Desnation. Final Waste Disposal (CDF):

I - Cadri No. 16009450 issued on 02/27/2022 and valid until 07/25/2024 (Sei document no. 25564818);

II - Cadri No. 16009857 issued on 04/13/2023 and valid until 04/13/2025 (Sei document no. 25564820);

III - Cadr No. 16010402 issued on 06/21/2024 and valid until 06/21/2026 (document Sei nº 25564819);

IV - Cadr No. 16010827 issued on 05/14/2025 and valid until 05/14/2029 (Sei document no. 25564821);

V - CDF No. 2468629/2024 referring to the period 01/02/2024 and 29/02/2024 (Sei document no. 25564822);

VI - CDF No. 3390817/2025 referring to the period 01/12/2024 and 31/12/2024 (Sei document no. 25564824);

VII - CDF No. 3644497/2025 referring to the period 01/02/2025 and 28/02/2025 (document Sei nº 25564825);

VIII - CDF No. 3736042/2025 referring to the period 01/04/2025 and 03/04/2025 (document Sei nº 25564827);

IX - CDF No. 3964444/2025 referring to the period 01/05/2025 and 31/05/2025 (Sei document no. 25564828);

X - CDF No. 3976004/2025 referring to the period 01/06/2025 and 16/06/2025 (Sei document no. 25564826);

XI - CDF No. 4058198/2025 referring to the period 01/06/2025 and 30/06/2025 (Sei document no. 25564829);

XII - CDF No. 4324402/2025 referring to the period 01/09/2025 and 24/09/2025 (document Sei nº 25564831);

XIII - CDF No. 4402887/2025 referring to the period 01/09/2025 and 30/09/2025 (document Sei nº 25564832).

4.1.1.5. The supplementary information provided fulfills the requirement set forth in article 16, paragraph IV of Ibama Normative Instruction No. 26, of December 10, 2024.

4.1.2. Regarding items "a" and "b" of the Draft Notice, which concern the indication of justification of the origin of the 6,887 kg of mercury traded in addition to the value of 30,000 kg obtained via recovery in the decommissioning and decommissioning process of the plant, as well as of the inventory of Regarding the declared mercury (2,282.49 kg), the CGQua Dispatch highlights an alignment developed at the meeting. from 11/24 that the first amount would represent a mercury balance generated from the sum of the 11,005.5 kg imported, plus the 30,000 kg recovered during decommissioning, and that the quantity The amount declared in stock comes from the decommissioning of the old unit that used mercury.

4.1.2.1. Strictly speaking, the calculation agreed upon above for estimating the mercury balance for sale may having incurred a virtual increase in the amount held by the company, given that the amount The imported material was used in the electrolysis operation and may already be included, in part or in full, in the process. Quantitative amount recovered during the plant decommissioning process.

4.1.2.2. With regard to the declared mercury stockpile, which also exceeds the total of 30,000 kg of mercury recorded as recovered after decommissioning and subsequently marketed, it is understood from the information present in the CGQua Dispatch that there was a confirmation by the company that the origin of the amount was still related to the lawsuits. from the mercury electrolysis plant.

4.1.2.3. In view of this, despite the technical controversy, the decision adopted in this Technical Note will be as follows: Alignment between the heads of Corem and CGQua and the representatives of Unipar Indupa.

5. CONCLUSION

5.1. In light of the foregoing, Corem declares that the qualification of Unipar Indupa do Brasil SA for the The sale of metallic mercury **is approved,** in accordance with Ibama Normative Instruction No. 26, of 10 of December 2024.

5.2. The statements submitted by the company are summarized in the table below:

Qualification - requirements from IN 26/2024	Statements from Unipar Carbocloro	Status
Article 5, item III (declaration of quantity and origin of mercury in possession)	2,282.49 kg Origin: plant decommissioning process mercury	Served

Article 13, sections I and II (basic data and environmental license)	Basic data described in the document. (24317592); - Environmental license (expiration date 04/28/2025) automatically extended after renewal request. Awaiting opinion from the state environmental agency. (24317594).	Served
Article 16, paragraph I (environmental license)	Environmental license (expiration date 04/28/2025) automatically extended after renewal request. Awaiting opinion from the state environmental agency. (24317594).	Served
Article 16, item II (maximum capacity for mercury use, mercury inventory and annual mercury replenishment)	The information requested in this article does not apply to the company, as it decommissioned its mercury-based production plant in 2008.	Served
Article 16, item III (annual forecast of mercury use)	The information requested in this article does not apply to the company, as it decommissioned its mercury-based production plant in 2008.	Served
Article 16, item IV (disposal of generated mercury waste)	The following documents were attached to the process: - Certificates of Movement of Environmentally Relevant Waste (CADRI); - Waste Transportation Manifests (MTR); and - Certificates of Final Waste Destination.	Served
Article 16, item V (mercury losses observed in the process)	The information requested in this article does not apply to the company, as it decommissioned its mercury-based production plant in 2008.	Served

5.3. For your consideration.

(electronically signed)
CÂNDIDA MARIA DE OLIVEIRA VIRGENS PAIM
Environmental Analyst
Corem/CGQua/Diqua

This document was electronically signed by **CANDIDA MARIA DE OLIVEIRA VIRGENS PAIM, Environmental Analyst,** on December 4, 2025, at 4:55 PM, Brasília time, pursuant to Article 6, § 1, of Decree No. 8,539, of October 8, 2015.

The authenticity of this document can be verified at https://sei.ibama.gov.br/autenticidade. providing the verification code **25528692** and the CRC code **D5BD6483.**

Unipar

14th November 2025

Mr. Ersin Esen
Interim Global GEF Coordinator
United Nations Environment Programme
Gigiri, Nairobi, Kenya

Subject: **Project "Environmentally sound management and disposal of excess mercury and mercury waste from removing mercury electrolytic cells in Brazil's chlor-alkali sector (Chlor-alkali Brazil)" – GEF 11697 – Co-Financing Commitment Letter**

Dear Mr. Esen,

Unipar Carbocloro S.A. (UNIPAR) is pleased to confirm its commitment to support to the above-mentioned project to be funded by the Global Environment Facility (GEF), emphasizing that the motivations and objectives of this important initiative are in line with its core institutional values.

With this scope, this organization confirms that it intends to play the role described in the project document and contribute to its implementation throughout its duration (60 months), as detailed in the following table:

Nature of contribution	**Type of contribution**	**Estimated Amount (USD)**
Investment for conversion to Membrane Technology	In Kind	100,000,000
70,000 kg of mercury to be delivered to the project. Value based on proposals received for sale (25 USD/kg Hg).	In Kind	1,750,000
Decommissioning: Workforce available for project-related activities (5 years) Full-Time Total - 10 Employees: • 4 Operators, 1 x Shift • 1 Safety Technician • 1 Operations Supervisor • 4 Operations Assistants Part-Time: 3 Employees: • 1 Environmental Technician. • 1 Laboratory Analyst • Production Coordinator1		2,000,000
Decommissioning: Professional services provided to assist with project activities - (Contracting a	In Kind	250,000

UNIPAR CARBOCLORO S.A. - JURÍDICO

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laboratory for Hg analysis in urine, gaseous emissions analysis)		
Decommissioning: Treatment of liquid, gaseous, and solid effluents Equipment/technical resources, raw materials provided for activities associated with the project	In Kind	600,000
Preparar instalações disponibilizados para atividades do projeto de descomissionamento, necessárias para descontaminação de tubulações e equipamento)	In Kind	200,000
Preparing facilities for decommissioning project activities, permitting decontamination of pipelines and equipment financial investment in activities complementary to the project work plan - (Inventory of all equipment/PPE required for the activities)	In Kind	200,000
Sending solid waste after thermal treatment to landfills in accordance with CADRI Approved	In Kind	550,000
Total contribution		**105,550,000**

The companies operating these plants have initiated the conversion and decommissioning of mercury technologies which will be completed by December 31, 2025.

Several challenges persist in adopting global Best Available Technologies/Best Environmental Practices (BAT/BEP) and minimizing potential health and environmental impacts due to regulatory, capacity and information and knowledge gaps.

We understand the GEF Project ID 11697 will offer technical and financial support for the sound disposal of excess mercury/mercury waste resulting from the phase-out of mercury cells in these plants through four main components:

1) national capacity building to manage hazardous chemicals and mercury contamination;

2) introduction and implementation of BAT/BEP during decommissioning of mercury cells and following plant conversion;

3) stabilization, treatment and disposal of mercury and contaminated materials;

4) knowledge management communications.

The project will ensure the swift removal of metallic mercury and will be responsible for providing appropriate containers for its safe storage, as well as providing a suitable and secure location for its safekeeping.

It will also introduce appropriate technologies and approaches to monitor the decontamination of equipment and facilities, oversee temporary mercury storage and remediate affected areas around each facility.

Unipar

In particular, the Project understands that the GEF will be responsible for the costs of:

• Contracting a company to collect, transport internally and externally the metallic mercury to be stabilized, and send the stabilized metallic mercury mentioned above in item 3 for final and safe disposal.

• Contracting a company responsible for collecting, transporting the metallic mercury to be stabilized internally and externally to the plant and sending the stabilized metallic mercury mentioned above in item 3 to its final and safe destination. to stabilize all the metallic mercury generated during the phase-out and decommissioning of Brazilian mercury plants.

• Contracting a company to dismantle the piping and equipment of the mercury plants, as well as separate the metallic mercury and decontaminate these piping and equipment.

Therefore, the amounts presented in the co-participation table above do not include these expenses.

We recommend that the environmentally appropriate disposal alternative for excess mercury and waste from the disposal of mercury electrolytic cells in Brazil be the international route, through export.

If the national solution is chosen, the project must guarantee that there is no obligation to return the material to the chlor-alkali plants, and the imposition of in situ stabilization or stabilization under operational management by these plants is prohibited. Under no circumstances will stabilization be permitted on the premises of the industrial unit.

Environmentally sound management and disposal of excess mercury and mercury waste from removing mercury electrolytic cells in Brazil's chlor-alkali sector (Chlor-alkali Brazil) *(GEF ID 11697).*

The Chlor-alkali project in Brazil aims to reduce negative environmental and social impacts from mercury and mercury wastes originating from the phase out of mercury electrolytic cells from three chlor-alkali facilities located in Cubatão/São Paulo, Honório Gurgel/Rio de Janeiro and Igarassu/Pernambuco, Brazil.

Sincerely,

DocuSigned by:
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Assinado por:
Ricardo R. Congro
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UNIPAR CARBOCLORO S/A - JURÍDICO

Katrium
INDÚSTRIAS QUÍMICAS S.A.

Rio de Janeiro, November 17, 2025.

Mr. Ersin Esen

Interim Global GEF Coordinator

Global Environment Facility - ("**GEF")**

United Nations Environment Programme ("**UNEP**")

Gigiri, Nairobi, Kenya

Subject: **Environmentally sound management and disposal of excess mercury and mercury waste from removing mercury electrolytic cells in Brazil´s chlor-alkali sector (Chlor-alkali Brazil" – GEF 11697 – Cofinancing Commitment Letter**

Dear Mr. Esen,

Katrium Indústrias Químicas S.A. ("**Katrium**"), a private legal entity, registered under the Ministry of Finance corporate taxpayer's CNPJ/MF No. 28.789.998/0002-55, located at Estrada João Paulo, 530, ZIP Code 21.512-001, Honório Gurgel neighborhood, in the city of Rio de Janeiro, state of Rio de Janeiro, is pleased to confirm its commitment to support the project concerning the *"Environmentally sound management and disposal of excess mercury and mercury waste from removing mercury electrolytic cells in Brazil´s chlor-alkali sector"* ("Project ID 11697"), to be financed by the Global Environment Facility - GEF, emphasizing that the motivations and objectives of this important initiative are aligned with its core institutional values.

The Project's purpose is to reduce the environmental and social impacts associated with mercury and the waste generated by the gradual phase-out of mercury electrolytic cells in the chlor-alkali sector. The Project implementation will occur through environmentally sound management and disposal of excess mercury, covering three (3) diverse and independent units, located in the cities of Cubatão/SP, Honório Gurgel/RJ, and Igarassu/PE.

The actions included in the Project involve technological conversion to mercury-free processes, safe decommissioning, stabilization and final disposal of mercury, as well as training and communication programs to ensure compliance with global best practices.

Within this scope, Katrium, the company in charge of Honório Gurgel/RJ industrial facility, confirms its intention to perform the role described in the project document and to contribute to its implementation throughout its duration (planned for a 60-month period), as detailed in the table below:

Katrium
INDÚSTRIAS QUÍMICAS S.A.

Nature of Contribution	Type of Contribution	Estimated Amount (USD)
Investment for conversion to Membrane Technology	cash	70,000,000
34,335 kg of mercury from cells and stock	Metallic mercury (75 USD x kg)	2,575,125
Estimated 15,600 kg of mercury from equipment to be decommissioned	Metallic mercury (75 USD x kg)	1,170,000
Decommissioning: Workforce allocated for project-related activities (estimated 5 years) Full Team – 20 Employees: Katrium Operational Team Katrium Supervision Team Security Team (Hired) Mechanical Dismantling Team (Hired) Electrical/Instrumentation Dismantling Team (Hired) Civil Dismantling Team (Hired) Partial Team – 20 Employees: Members of the Multidisciplinary Phase-Out Committee Multidisciplinary Technical Team (management of project disciplines/phases)	cash	4,080,000
Decommissioning: Professional services for project activities (Risk Studies, Environmental Monitoring, Occupational Health, and Safety, Health, and Environmental Management Programs)	cash	1,300
Decommissioning: Civil and mechanical dismantling work	cash	5,500
Decommissioning: Treatment of liquid, gaseous, and solid effluents at own, temporary, and/or external facilities as required	cash	965,400
Preparation of facilities for decommissioning activities, including resources and supplies for decontamination of pipelines and equipment	cash	400,000

FÁBRICA HONÓRIO GURGEL: Est. João Paulo, 530, Parte - Honório Gurgel - 21.512-002 - Rio de Janeiro – RJ - Tel.(21)2472-9060 - Fax. (21)3372-6496 - Email:katium@katrium.com.br
FÁBRICA SANTA CRUZ: Rua Nelson da Silva, 288 – Distrito Industrial de Santa Cruz – 21.585-160 – Rio de Janeiro – RJ – Tel. (21) 3305-7700 – Fax. (21) 2418-1032

Financial investment in complementary activities to the project work plan (PPE required for activities)	cash	280,000
Transport and disposal of solid waste to licensed landfills	cash	930,000
Costs (excluding technology conversion)		10,407,325
Total Contribution: Total costs (including technology conversion)		80,407,325

Several challenges persist in adopting global Best Available Technologies /Best Environmental Practices ("**BAT/BEP**") and minimising potential impacts on health and the environment, due to regulatory, technical and professional capacity gaps, as well as gaps in information and knowledge.

Katrium considers that the Project ID 11697 will provide technical support for the proper disposal of excess mercury/mercury waste, resulting from the gradual phase-out of mercury cells in those industrial plants through four (4) main components:

1) Strengthening national capacity for managing hazardous chemical facilities and mercury contaminated sites;

2) Introducing BAT/BEP during decommissioning of mercury cells and following technology conversion of the three (3) plants;

3) Stabilization, treatment and final disposal of excess mercury and contaminated materials from the three (3) decommissioned and converted plants;

4) Knowledge management and communication.

Katrium also considers that, by means of Project ID 11697, appropriate technologies and approaches will also be introduced to monitor the decontamination of equipment and facilities, to oversee temporary mercury storage, and to remediate affected areas around each installation.

In particular, Project ID 11697 will encompass the hiring of a company to collect and transport, both domestically and internationally, the metallic mercury to be stabilized and to be sent, as mentioned in item 3 and as established in the document "GEF-8 Request for FSP and MSP (2-step) CEO Endorsement/Approval."

UNEP, as the implementing agency for Project ID 11697, will ensure the prompt removal of metallic mercury and will be responsible for providing and/or reimbursing the appropriate containers for its safe storage, as well as for making a suitable and secure location for its storage available.

Katrium
INDÚSTRIAS QUÍMICAS S.A.

Katrium recommends that the preferred alternative for the environmentally sound disposal of excess mercury and the waste resulting from the elimination of mercury electrolytic cells in Brazil be exportation to companies that use or dispose of such product.

In the event that the national solution of converting metallic mercury into HgS is chosen, UNEP must guarantee that there is no obligation to return the material to the chlor-alkali plants and that *in situ* stabilization or stabilization under operational management by such plants is prohibited. Under no circumstances shall stabilization be carried out within Katrium's industrial facilities, as such activity is unfeasible to be carried out on the site.

Project ID 11697 aims to reduce the negative environmental and social impacts from mercury and its residues, coming from the phase-out of mercury electrolytic cells.

Sincerely,

Assinado por:
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Anderson Azevedo L. Assumpção
Director – President
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November 12, 2025

Mr. Ersin Esen
Interim Global GEF Coordinator
United Nations Environment Programme
Gigiri, Nairobi, Kenya

Subject: **Project "Environmentally Sound Management and Disposal of Mercury Surplus and Mercury Waste from the Phasing-out of Mercury-Cell Electrolytic Facilities in the Chlor-Alkali Sector of Brazil (Cloro-Álcalis Brasil)" - GEF 11697 - Letter of Cofinancing Commitment**

Dear Mr. Esen,

The Cape Igarassu Indústria e Comércio de Produtos Químicos Ltda. (Chlorum Solutions) is pleased to confirm its commitment to supporting the above-mentioned project, to be financed by the Global Environment Facility (GEF), emphasizing that the motivations and objectives of this important initiative are aligned with its core institutional values.

Within this scope, our organization confirms its intention to play the role described in the project document and to contribute to its implementation throughout its duration (60 months), as detailed in the table below:

Nature of contribution	**Type of contribution**	**Estimated Amount (USD)**
Investment for conversion to Membrane Technology	In-kind	USD 70,000,000 BRL 350,000,000
45,000 kg of mercury to be delivered to the project, valued according to proposals received for sale (USD 25/kg Hg)	In-kind	USD 1,125,000 BRL 5,625,000
Decommissioning: Workforce made available for project-related activities. Total Full-time – 11 Staff Members: • 2 Supervisors, • 4 Operators, • 4 Operation Assistants, • 1 Safety Technician. Partial-time – 5 Staff Members: • 1 Environmental Manager, • 1 Environmental Coordinator, • 1 Environmental Analyst, • 1 Production Coordinator, • 1 Laboratory Analyst	In-kind	USD 2,800,000 BRL 14,000,000

Decommissioning: Professional services provided to support project activities (Contracting laboratory for urine Hg analysis, gas emission analysis)	In-kind	USD 550,000 BRL 2,750,000
Decommissioning: Treatment of liquid, gaseous and solid effluents – Equipment/technical resources made available for project-related activities	In-kind	USD 900,000 BRL 4,500,000
Preparation of facilities made available for project decommissioning activities, required for the decontamination of pipelines and equipment	In-kind	USD 45,000 BRL 225,000
Financial investment in complementary activities to the project work plan (Survey of all equipment / PPE required for activities)	In-kind	USD 700,000 BRL 3,500,000
Investment for solid waste management activities and disposal to landfill	In-kind	USD 1,600,000 BRL 8,000,000
Total contribution		**Sum USD 77,720,000 BRL 388,600,000**

Note: Exchange rate USD 1.00 = BRL 5.00.

We understand that GEF Project ID 11697 will provide technical and financial support for the proper disposal of excess mercury and waste resulting from the phase-out of mercury cells, through four main components:

1. National capacity building for managing hazardous chemicals and mercury contamination;
2. Introduction and implementation of BAT/BEP during decommissioning of mercury cells and after the technology conversion;
3. Stabilization, treatment, and disposal of mercury and contaminated materials;
4. Communications for knowledge management.

The project will also introduce appropriate technologies and approaches to monitor equipment and facility decontamination, oversee temporary storage of mercury, and remediate areas affected around each plant.

Regarding the Project, we understand that the GEF will be responsible for the costs of:

- Hiring a company to collect, internally transport, and export the metallic mercury to be stabilized, and safely dispose of the stabilized metallic mercury mentioned in item 3, according to the proposal of the international provider.
- Hiring a company for the stabilization of all metallic mercury generated during the phase-out and decommissioning of Brazilian industries that use mercury technology.

- Hiring a company for dismantling pipelines and equipment, as well as separating metallic mercury and decontaminating such pipelines and equipment.

Therefore, the co-financing amounts presented in the table above do not include these costs.

Considering the meeting held on November 11, 2025, which was attended by representatives from the Ministry of the Environment, IBAMA, CETESB, CPRH, FECD, as well as the companies Katrium, Unipar, and Chlorum, and the association Abiclor, during which several relevant issues related to GEF Project ID 11697 were discussed, we are proceeding based on the following assumptions:

- UNEP will ensure swift removal of metallic mercury and will be responsible for providing appropriate containers for its safe storage, as well as for making available a suitable and secure location for its safeguarding.
- The most recommended environmentally sound disposal option for excess mercury and waste from the elimination of mercury electrolytic cells in Brazil is export.
- Should a national solution for converting metallic mercury into HgS be adopted, UNEP must guarantee that the material will not be required to return to the chlor-alkali plants.
- Similarly, the in situ stabilization of metallic mercury, particularly within industrial facilities, will not be considered.

Sincerely,

DocuSigned by:
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Alfredo Luiz Kerzner
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