ICSID Case No. ARB/19/1

Administered by the

INTERNATIONAL CENTRE FOR SETTLEMENT OF INVESTMENT DISPUTES

LEGACY VULCAN, LLC

Claimant

v.

UNITED MEXICAN STATES

Respondent

CLAIMANT'S POST-HEARING BRIEF (ANCILLARY CLAIM AND JURISDICTION/ADMISSIBILITY OF THE COUNTERCLAIM)

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I. INTRODUCTION AND SUMMARY

1. Since Legacy Vulcan sought leave to file its ancillary claim in May 2022, just days after Mexico shut down what remained of CALICA's operations, it set out to prove a straightforward case: Mexico arbitrarily carried out that shutdown on the President's politically-motivated instruction, in violation of NAFTA Article 1105. The record overwhelmingly establishes this case after the Hearing.[1]

2. As the Hearing illustrated, President López Obrador launched a public harassment campaign against Legacy Vulcan and CALICA in early 2022. The President used the CALICA Project as a scapegoat to deflect environmental criticism of his Mayan Train project, repeatedly accusing CALICA of environmental wrongdoing without evidence. He did this while conceding that CALICA's activities had been authorized by previous governments. He pressured Legacy Vulcan to drop this arbitration and change its business in favor of tourism interests. His government had simply decided that CALICA should stop quarrying. And, in May 2022, Mexico forcibly put a stop to quarrying at the President's personal instruction, announced on television.

3. As it did in its pleadings, Mexico again ignored or sidestepped these undisputable facts at the Hearing. Instead, Mexico first tried to portray the shutdown as a legitimate environmental measure, but the Hearing confirmed that it was not. PROFEPA's witnesses had to acknowledge on cross-examination that the 2022 shutdown of La Rosita contradicted decades of conduct and statements by Mexican authorities. That conduct and those statements are far more credible than Mexico's self-serving allegations now. Mexico's environmental law experts all but ignored that history, which is entirely consistent with the opinions of former PROFEPA high-ranking official and environmental law expert [redacted]. As [redacted] and Mexico's pre-dispute conduct show, CALICA had an environmental impact authorization to quarry La Rosita and did not need a CUSTF to do so. PROFEPA dramatically changed its position as a pretext to enforce President López Obrador's shutdown order.

4. Mexico also doubled down on its parade of red herrings at the Hearing, accusing CALICA of breaching the 1986 Investment Agreement and causing a myriad of environmental harms. But [redacted] debunked the first accusation, which no government entity endorsed until Mexico (and its environmental law experts) came up with it for this arbitration. Dr. Gino Bianchi thoroughly debunked the second accusation — premised on SEMARNAT's so-

[1] Capitalized terms not defined in this Post-Hearing Brief have the same meaning as in Legacy Vulcan's prior submissions.

called "*Dictamen*." The witnesses who co-authored that *Dictamen* conceded that they did not even try to counter Dr. Bianchi's opinions, and their cross-examination further exposed the *Dictamen*'s flawed methodology and anti-CALICA bias.

5. As outlined at the Hearing and discussed in Part II.A-B, the Tribunal correctly asserted jurisdiction over the ancillary claim, and Mexico's conduct — viewed as a whole — falls far short of the minimum standard of treatment under NAFTA Article 1105. Mexico sought to drive Legacy Vulcan out of the country by arbitrarily shutting down its remaining operations for political reasons and pressuring Legacy Vulcan into dropping this arbitration and its Project in favor of local tourism interests. Mexico did this while falsely accusing Legacy Vulcan and CALICA of wrongdoing, including through a sham *Dictamen* CALICA had no notice of or effective opportunity to rebut. These actions were manifestly arbitrary, prejudicial, and contrary to good faith and due process in breach of Article 1105.

6. As discussed in Part II.C, the Hearing also reinforced Legacy Vulcan's showing that it is entitled to the compensation claimed in its ancillary-claim briefs. Legacy Vulcan's witnesses spoke directly to the substantial value of CALICA and its reserves. Brattle showed how their valuation correctly captures the damage to Legacy Vulcan resulting from Mexico's breach and excludes the value of the shipping and distribution components of the CALICA Network. Witness and expert testimony also confirmed that the loss of these highly profitable reserves has caused Legacy Vulcan substantial harm. Brattle's presentation and Hart-Vélez's cross-examination also illustrated that Mexico's valuations rely on a series of flawed premises, yielding fundamentally implausible valuations that are squarely contradicted by Legacy Vulcan's actual historical performance.

II. THE EVIDENCE AT THE HEARING CONFIRMS LEGACY VULCAN'S ENTITLEMENT TO RELIEF ON ITS ANCILLARY CLAIM.

A. THE HEARING CONFIRMED THE TRIBUNAL'S CORRECT FINDING OF JURISDICTION IN PO NO. 7 TO ADJUDICATE THE ANCILLARY CLAIM AND THE LEGAL STANDARDS APPLICABLE TO MEXICO'S UNLAWFUL CONDUCT.

1. The Tribunal Has Jurisdiction to Decide the Ancillary Claim.

7. As the Hearing confirmed and Legacy Vulcan explained in detail in its Comments on the Second Article 1128 Submission of the United States, this Tribunal has jurisdiction under NAFTA to adjudicate the ancillary claim for at least three reasons:[2]

[2] Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, Part II.A-C (25 September 2023).

- *First*, Legacy Vulcan and Mexico consented to arbitrate the ancillary claim under NAFTA and agreed that NAFTA is the law governing jurisdiction and the merits of this dispute, including the ancillary claim.[3] The Tribunal is thus bound under NAFTA and international law to respect that agreement.[4]

- *Second*, Annex 14-C of the USMCA confirms that this arbitration — initiated under Chapter 11 while NAFTA was in force — is unaffected by the entry into force of the USMCA.[5] As the Tribunal recognized in Procedural Order No. 7 ("PO No. 7"), Legacy Vulcan's ancillary claim is so inextricably intertwined with the original claim that this Tribunal "cannot decide on the first without resolving the second."[6] Both claims are thus within the Tribunal's jurisdiction under NAFTA.[7]

- *Third*, Annex 14-C makes clear that Chapter 11 protections remained in force for three years (*i.e.*, until 30 June 2023) for "legacy investments" such as Legacy Vulcan's Project in Mexico.[8] Public statements by the United States, Canada, and Mexico confirm that the NAFTA Parties intended for Annex 14-C to extend the substantive protections of Chapter 11 into a three-year transition period.[9]

8. The first two points stand unrebutted after the Hearing, and Mexico's response to the third point was largely a regurgitation of the Second Article 1128 Submission of the United States, which centers on the United States' efforts to avoid liability in *TC Energy v. USA*.[10] But the U.S. submission ignores key aspects of this arbitration that distinguish it from *TC Energy*, including that the Parties here have explicitly and repeatedly consented to arbitrate the ancillary

[3] *See id.*, Part II.A; Tr. (English), Day 1, 51:9-15 (Claimant's Opening); Claimant's Opening (CD-0007.78-79). All references to the Hearing Transcript and Demonstratives refer to the Ancillary Claim Hearing unless otherwise stated. *See also* Response to Tribunal Question No. 1.

[4] *See* Tr. (English), Day 1, 51:16-21 (Claimant's Opening); Claimant's Opening (CD-0007.80); Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, Part II.A.2.d (25 September 2023).

[5] *See* Tr. (English), Day 1, 54:21-55:2 (Claimant's Opening); Claimant's Opening (CD-0007.84); Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, Part II.B.1 (25 September 2023).

[6] Procedural Order No. 7, ¶ 127 (11 July 2022).

[7] *See* Tr. (English), Day 1, 52:16-53:4 (Claimant's Opening); Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, Part II.B.2 (25 September 2023). *See also Metalclad v. United Mexican States*, ICSID Case No. ARB(AF)/97/1, Award, ¶¶ 59, 68 (30 August 2000) (Lauterpacht (P), Civiletti, Siqueiros) (CL-0019-ENG); *CMS v. Argentina*, ICSID Case No. ARB/01/8, Decision of the Tribunal on Objections to Jurisdiction, ¶¶ 118-120 (17 July 2003) (CL-0162-ENG).

[8] *See* Tr. (English), Day 1, 54:5-56:5 (Claimant's Opening); Claimant's Opening (CD-0007.84-85); Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, Part II.C.1-2 (25 September 2023).

[9] *See* Tr. (English), Day 1, 56:14-57:16 (Claimant's Opening); Claimant's Opening (CD-0007.87); Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, Part II.C.4 (25 September 2023).

[10] Tr. (Spanish), Day 1, 158:13-163:6 (Respondent's Opening).

claim under NAFTA, and that the ancillary claim is part of an arbitration initiated pursuant to NAFTA Chapter 11 while NAFTA was in force.[11]

9. Mexico offered at the Hearing a flawed reading of USMCA Annex 14-C. A proper reading of that Annex confirms the Tribunal's jurisdiction over the ancillary claim, which arises out of violations of NAFTA Chapter 11 obligations that continued to bind Mexico for "legacy investments" after the USMCA came into force.[12] Mexico argued for the first time at the Hearing that Legacy Vulcan's investment in La Rosita does not qualify as a "legacy investment."[13] This is also wrong. As explained more fully in the answer to the Tribunal's Question No. 2, a "legacy investment" is one acquired or established while NAFTA was in force and that existed when the USMCA came into force. Legacy Vulcan's investments in the Project and La Rosita plainly meet this definition because Legacy Vulcan acquired those investments through a merger in 2015, while NAFTA was in effect, and they were in existence when the USMCA came into force.[14]

2. The Hearing Confirmed the Standard Applicable to Mexico's Conduct under NAFTA Article 1105.

10. The Hearing highlighted that the standard set forth in *Waste Management v. Mexico* is the appropriate test for determining a breach of Article 1105.[15] Under that test, a State breaches Article 1105 when it engages in conduct that is arbitrary, grossly unfair, unjust, founded on prejudice or preference rather than on reason or fact, or is contrary to due process and good faith.[16] The *Waste Management* standard also considers whether the host State breached representations it made that were reasonably relied on by the investor.[17] Mexico has repeatedly endorsed the *Waste Management* standard, including in this arbitration,[18] and numerous

[11] Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, Parts I-II.C (25 September 2023).

[12] Reply (Ancillary Claim), ¶¶ 115-125; Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, ¶¶ 45-74; Tr. (English), Day 1, 54:5-20 (Claimant's Opening).

[13] Tr. (Spanish), Day 1, 159:10-22 (Respondent's Opening); Tr. (English), Day 1, 130:18-131:3 (Respondent's Opening); *id.*, at 187:12-188:3 (Respondent addressing Tribunal questions).

[14] *See infra* Response to Tribunal Question No. 2.

[15] Tr. (English), Day 1, 35:14-36:22 (Claimant's Opening).

[16] Tr. (English), Day 1, 37:1-14 (Claimant's Opening). *See also* Memorial, ¶¶ 188, 200; Reply, ¶¶ 127, 154; Memorial (Ancillary Claim), ¶ 92; Reply (Ancillary Claim), ¶¶ 142, 144; *Waste Management v. United Mexican States (II)*, ICSID Case No. ARB(AF)/00/3, Award, ¶ 98 (30 April 2004) (Crawford (P), Civiletti, Magallón Gómez) (CL-0007-ENG) (hereinafter "*Waste Management v. Mexico* (Award)").

[17] *Waste Management v. Mexico (*Award), ¶ 98 (30 April 2004).

[18] *See* Counter-Memorial, ¶ 297; Rejoinder, ¶ 321; Counter-Memorial (Ancillary Claim), ¶ 435; Rejoinder (Ancillary Claim), ¶¶ 349, 357. *See also* Tr. (Spanish), July 2021 Hearing, Day 1, 275:7-17 (Respondent's Opening, reciting the *Waste Management* standard) [English, 228:9-18].

NAFTA tribunals have done so as well.[19] Measured against this standard, the facts of this case show that Mexico's conduct as a whole, as outlined at the Hearing and further discussed below, was manifestly arbitrary, and contrary to good faith and due process in breach of Article 1105.[20]

B. THE HEARING CONFIRMED THAT MEXICO FAILED TO ACCORD LEGACY VULCAN'S INVESTMENTS THE MINIMUM STANDARD OF TREATMENT IN BREACH OF NAFTA ARTICLE 1105.

1. Mexico Shut Down La Rosita Because Mexico's President Gave Instructions to Do So for Arbitrary and Politically-Motivated Reasons.

11. The Hearing confirmed that Mexico's shutdown of La Rosita was manifestly arbitrary. That shutdown was the result of a raw order from Mexico's President; a fact he conceded publicly.[21] President López Obrador also conceded that he issued this order in the spur of the moment, purportedly because the company had "deceived" him as part of settlement negotiations.[22] He did this after months of public attacks against Legacy Vulcan and CALICA designed to bully them into dropping the Project and this arbitration, and to deflect environmental criticism of the government's signature Mayan Train project.[23] This is all documented on video, clips of which Legacy Vulcan featured at the Hearing.[24] This overwhelming evidence stands unrebutted.[25]

12. At the Hearing, Legacy Vulcan highlighted President López Obrador's public anti-CALICA campaign, showing how he openly attacked Legacy Vulcan and CALICA dozens of

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[19] Tr. (English), Day 1, 36:5-9 (Claimant's Opening); Claimant's Opening (CD-0007.58).

[20] Tr. (English), Day 1, 9:16-33:17, 36:14-22 (Claimant's Opening). The Tribunal must consider Mexico's conduct as a whole to determine whether Mexico's combined acts, viewed together, violate NAFTA Article 1105. As the tribunal in *GAMI Investments v. Mexico* explained, "[t]he record as a whole — not isolated events – determines whether there has been a breach of international law." *GAMI Investments, Inc. v. Government of the United Mexican States*, UNCITRAL, Final Award, ¶ 96 (15 November 2004) (Paulsson (P), Reisman, Muró) (CL-0012-ENG). *See also Glamis Gold, Ltd. v. United States of America*, UNCITRAL, Award, ¶ 757 (8 June 2009) (Young (P), Caron, Hubbard) (CL-0016-ENG).

[21] Tr. (English), Day 1, 9:16-10:19 (Claimant's Opening); Claimant's Opening (CD-0007.3-4); *see also* Transcript of President's Morning Press Conference (2 May 2022) (C-0168-SPA.14).

[22] *E.g.*, Transcript of President's Morning Press Conference (2 May 2022) (C-0168-SPA.14) ("Acabo de estar [sobre CALICA] el fin de semana. Y me habían engañado en que ya no estaban extrayendo material [...]. Entonces, he dado instrucciones a la secretaria para proceder de inmediato."). *But see* Witness Statement-[redacted]Claimant's Ancillary Claim Memorial-Third Statement-ENG, ¶ 23 (explaining that there was no deception); Letter from [redacted] to Ambassador Esteban Moctezuma (11 February 2022) (C-0179-ENG-2) (same).

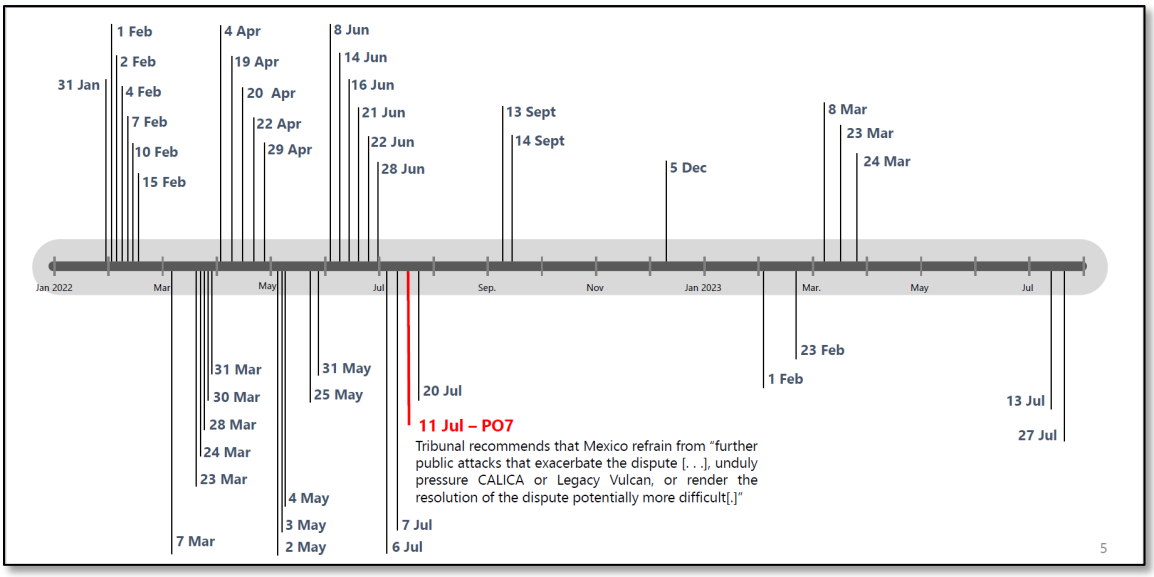
[23] *E.g.*, Tr. (English), Day 1, 10:17-15:13 (Claimant's Opening); Claimant's Opening (CD-0007.5-19).

[24] *E.g.*, Claimant's Opening (CD-0007.3, 7, 11, 16, 18).

[25] *See generally* Respondent's Opening (RD-0005); Counter-Memorial (Ancillary Claim).

times since January 2022 (timeline pictured below).[26] Those attacks have continued since then, including as recently as this month (October 2023), in flagrant defiance of PO No. 7.[27]

Figure 1 - President López Obrador's Televised Attacks Against Legacy Vulcan and CALICA[28]



13. During these televised tirades, Mexico's President has followed the same script:

- falsely declaring from the podium that CALICA was "violating" or "not complying" with Mexican environmental law, while acknowledging that CALICA's activities had been authorized by previous "neoliberal" governments;[29]

- falsely accusing CALICA of "destroying the environment";[30]

[26] Tr. (English), Day 1, 9:16-14:22 (Claimant's Opening); *see also* Memorial (Ancillary Claim), Part II.B.2; Reply (Ancillary Claim), Part II.B.

[27] Transcript of President's Morning Press Conference (14 August 2023) (C-0364-SPA); Transcript of President's Morning Press Conference (6 October 2023) (C-0369-SPA).

[28] Claimant's Opening (CD-0007.5) (each of the dates represents a *Mañanera* attacking CALICA or Legacy Vulcan up to the date of the Hearing); *see also* Reply (Ancillary Claim), Appendix A (including key quotes and citations to these *Mañaneras*).

[29] *E.g.*, Reply (Ancillary Claim), Appendix A, at 2 ("Como no se les amplió la concesión porque estaban incumpliendo, bueno, violando, destruyendo el territorio, se fueron a una denuncia internacional[.]"); Transcript of President's Morning Press Conference (7 February 2022) (C-0215-SPA.17) ("están violando la ley, destruyendo el territorio[.]"); Transcript of President's Morning Press Conference (3 February 2022) (C-0178-SPA.22) ("Estos permisos los entregaron [...] antes del 2000."); Transcript of President's Morning Press Conference (24 March 2022) (C-0221-SPA.44) ("Les dieron permiso para extraer material, grava, que en barcos se llevaban a Estados Unidos [...]"); Transcript of President's Morning Press Conference (2 May 2022) (C-0168-SPA.14) ("Calica, [...] recibió permisos de los gobiernos neoliberales[.]").

[30] *E.g.*, Reply (Ancillary Claim), Appendix A, at 5 ("Claro que hay violaciones, pues esos están destruyendo el medio ambiente."); Claimant's Opening (CD-0007.8, 64).

- falsely accusing CALICA of destroying archaeological sites;[31]

- pressuring Legacy Vulcan and CALICA into dropping this arbitration and selling their lots — including the port terminal — and converting them into a tourist attraction, or face a shutdown;[32]

- declaring that, despite their having been permitted, CALICA's activities — including "extracting material and taking [it] to the United States by ship"— "cannot be allowed" and "will no longer be allowed";[33] and

- using CALICA as a scapegoat to divert environmental and political criticism of his own signature project, the Mayan Train.[34]

14. As the Hearing underscored, the timing of the President's anti-CALICA remarks relative to Mexico's anti-CALICA actions is telling. The President launched his campaign against CALICA *months before* PROFEPA inspected La Rosita and SEMARNAT issued its so-called "*Dictamen*" purporting to assess the environmental impacts of CALICA's activities.[35] Mexico had thus predetermined that CALICA had harmed the environment, broken environmental norms, and that its activities had to be halted — despite being permitted — *before* any governmental agency undertook to assess whether this was or was not the case.

15. The timing of the shutdown itself is also telling. As the President publicly conceded on 2 May 2022 and thereafter, he instructed SEMARNAT on 29 April 2022 to halt quarrying activities in La Rosita, after he saw during a helicopter ride that CALICA was carrying out those activities.[36] PROFEPA — SEMARNAT's environmental enforcement arm — issued two parallel

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[31] *E.g.*, Claimant's Opening (CD-0007.11-12) ("[E]n Calica, destruyeron zonas arqueológicas y ahí no intervino el INAH.").

[32] *E.g.*, *id.*, at 17 ("que retiren su demanda"); *id.*, at 19 ("son tres opciones").

[33] *E.g.*, Reply (Ancillary Claim), Appendix A, at 1-2 ("Pues resulta que le dieron a esa empresa dos concesiones [...] para extraer material y llevarse el material a Estados Unidos por barco. [...] Pero podrá ser muy importante, pero esto no lo podemos permitir[.]").

[34] *E.g.*, *id.*, Appendix A, at 40 ("Resulta que los ambientalistas que no quieren el Tren Maya en esa zona no vieron lo de la destrucción de Vulcan, de la empresa estadounidense, que ya estamos terminando de hacer todo el estudio para mostrarles la destrucción tremenda que causaron[.]"); *id.*, at 10-11, 15-17, 26.

[35] *See* PROFEPA Inspection Report on Environmental Impact (2-5 May 2022) (C-0171-SPA) (issued on 5 May 2022); PROFEPA Inspection Report on Forestry (2-5 May 2022) (C-0172-SPA) (same); SEMARNAT, *Dictamen de impactos ambientales derivados del proyecto de extracción industrial de roca caliza a cargo de la empresa Calica (hoy SAC-TUN) en los municipios de Solidaridad y Cozumel, Quintana Roo* (18 August 2022) (C-0237-SPA) (issued on 18 August 2022).

[36] Andrés Manuel López Obrador, Tren Maya prioriza cuidado de zonas arqueológicas y del ambiente YouTube (uploaded 2 May 2022) (C-188-SPA); Transcript of President's Morning Press Conference (2 May 2022) (C-0168-SPA.14); Transcript of President's Morning Press Conference (31 May 2022) (C-0198-SPA.35) ("hace un mes voy [a CALICA] y entonces me informan: 'No, pues están trabajando, no han dejado de trabajar'. ¿Cómo? Entonces me engañó, y como era un viernes [29 de abril de 2022], sobrevolamos y claro que estaban trabajando, o sea, extrayendo material."); *see also* Tr. (English), Day 1, 9:16-10:16 (Claimant's Opening); Claimant's Opening (CD-0007.3-4).

inspection orders for La Rosita that very day.[37] It then dispatched inspectors who executed the President's instruction shortly thereafter, from 2 to 5 May 2022.[38] This was no coincidence.

16. As explained during the Hearing, Mexico also pressured Legacy Vulcan to drop this arbitration by delaying the customs permit CALICA needed to export its products.[39] Although this customs permit had been renewed regularly as a matter of course for decades, Mexico's course of conduct suddenly changed in early 2022 for no good reason.[40] As [redacted] testimony confirmed, Mexico improperly withheld the customs permit to extract concessions from Legacy Vulcan, while the President relentlessly went after CALICA in his *Mañaneras*.[41]

17. At the Hearing, Mexico failed to counter what the timeline clearly shows: that the shutdown of La Rosita was the execution of the President's raw order, not a legitimate exercise of PROFEPA's inspection powers.[42] One of Mexico's fact witnesses, PROFEPA's Patricio Vilchis, disclaimed having received a presidential instruction and claimed to have ordered the forestry inspection of CALICA because he "found out through the media about the devastation that CALICA was doing."[43] But this allegation — made for the first time at the Hearing — is at odds not only with the timeline but also with President López Obrador's admission that he ordered the shutdown.[44] It would be a remarkable coincidence indeed for PROFEPA to issue not one (Mr. Vilchis's) but two inspection orders (including Ms. Balcázar's) on the same day that the President instructed the head of SEMARNAT to halt CALICA's operations. The timeline is telling.

18. The record evidence also shows that Mexico for decades knew of and approved CALICA's activities in La Rosita since the execution of the 1986 Investment Agreement onward,

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[37] Orden de inspección en materia de impacto ambiental No. PFPA/4.1/2C.27.5/024/2022 del 29 de abril de 2022, emitida por la Directora General de Impacto Ambiental y Zona Federal Marítimo Terrestre de la PROFEPA (R-0128-ESP); Orden de inspección forestal No. OC00158RN2022 del 29 de abril de 2022, emitida por la Dirección General de Inspección y Vigilancia Forestal de la PROFEPA (R-0127-ESP).

[38] PROFEPA Inspection Report on Environmental Impact (2-5 May 2022) (C-0171-SPA); PROFEPA Inspection Report on Forestry (2-5 May 2022) (C-0172-SPA).

[39] *E.g.*, Tr. (English), Day 1, 14:18-16:1 (Claimant's Opening); Claimant's Opening (CD-0007.20-22); Tr. (English), Day 1, 210:10-212:5 ([redacted] direct).

[40] *See, e.g.*, Tr. (English), Day 1, 14:22-15:16 (Claimant's Opening).

[41] Tr. (English), Day 1, 215:10-218:8 ([redacted] cross-examination); *see also* Claimant's Opening (CD-0007.21); Witness Statement-[redacted]-Claimant Ancillary Claim Memorial-Third Statement-ENG, ¶ 15; Transcript of President's Morning Press Conference (3 February 2022) (C-0178-SPA.23).

[42] Tr. (English), Day 1, 9:16-17:1 (Claimant's Opening); Claimant's Opening (CD-0007.3-22).

[43] Tr. (Spanish), Day 2, 470:22-475:21 (Vilchis addressing Tribunal questions); *see also id.* 474:12-17 ("[Prof. Tawil]: ¿Y la instrucción de que procedan a la inspección partió de usted directamente? Nadie le instruyó que hicieran esa inspección.// [Vilchis]: Es correcto.").

[44] Transcript of President's Morning Press Conference (2 May 2022) (C-0168-SPA.14) ("[H]e dado instrucciones a la secretaria [de la SEMARNAT] para proceder de inmediato [...] porque hay violación a las leyes y es una tremenda destrucción del medio ambiente.").

through multiple authorizations, inspections, and environmental audits.[45] This changed suddenly in early 2022, when President López Obrador began claiming publicly that CALICA's quarrying operations were illegal and destructive, despite having been admittedly authorized by prior governments. He called upon Legacy Vulcan and CALICA to drop this arbitration and those operations in favor of local tourism interests, including a close advisor who could benefit from using Punta Venado as a cruise ship terminal.[46] The President chided the critics of the Mayan Train project for not criticizing CALICA.[47] He then instructed his government to shut down CALICA's remaining operations, and his government did so immediately thereafter. No regulatory change or variation in CALICA's activities underpinned this shutdown. The shutdown has been maintained indefinitely since then as a result of Mexico's failure for more than 17 months to issue the *Acuerdo de Emplazamiento*, thereby depriving CALICA of the opportunity to present its defense.[48]

19. This record evidence — laid out and summarized at the Hearing — establishes that Mexico shut down La Rosita on the President's whim, not for the purported environmental concerns or other reasons Mexico has touted.[49] Measures such as Mexico's shutdown of La Rosita, which are not based on the facts or the law but instead advance an ulterior motive grounded in discretion, prejudice, and preference, constitute a breach of the minimum standard of treatment and a failure to act in good faith in violation of NAFTA Article 1105.[50]

20. Mexico's actions here are analogous to those that other tribunals have found to breach the minimum standard of treatment. In *Abengoa v. Mexico*, for example, the tribunal found that Mexico's actions were arbitrary in violation of the minimum standard of treatment when it withdrew investor permits to operate a waste-processing facility based on domestic

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[45] *See, e.g.*, Tr. (English), Day 1, 20:9-22:4, 25:15-26:15 (Claimant's Opening); Claimant's Opening (CD-0007.28-30, 41).

[46] *See, e.g.*, Tr. (English), Day 1, 14:1-11 (Claimant's Opening); Claimant's Opening (CD-0007.15-17).

[47] *See* Tr. (English), Day 1, 11:6-13:1 (Claimant's Opening); Claimant's Opening (CD-0007.6).

[48] *See* Part II.B.2.c) below.

[49] Tr. (English), Day 1, 16:10-30:8 (Claimant's Opening); Claimant's Opening (CD-0007.6-43).

[50] *See Frontier Petroleum Services Ltd. v. Czech Republic*, UNCITRAL, Award, ¶ 300 (12 November 2010) (Williams (P), Álvarez, Schreuer) (CL-0056-ENG) ("Bad faith action by the host state includes the use of legal instruments for purposes other than those for which they were created. It also includes a conspiracy by state organs to inflict damage upon or to defeat the investment, the termination of the investment for reasons other than the one put forth by the government, and expulsion of an investment based on local favouritism.") (quotations omitted); *Abengoa, S.A. y COFIDES, S.A. v. United Mexican States*, ICSID Case No. ARB(AF)/09/2, Award, ¶ 643 (Mourre (P), Siqueiros, Fernández-Armesto) (CL-0047-SPA) ("También es contrario al nivel mínimo de trato el hecho por el Estado de utilizar los poderes que le otorga la ley para propósitos ajenos a los fines de la misma"). *See also Joshua Dean Nelson v. United Mexican States*, ICSID Case No. UNCT/17/1, Award, ¶ 325 (5 June 2020) (Zuleta (P), Veeder, Gomezperalta) (RL-0195).

politics, rather than for stated environmental reasons.[51] Likewise, in *Bilcon v. Canada*, the tribunal held that denying an environmental permit for political reasons unrelated to the merits of the investor's project constituted a breach of the minimum standard of treatment under NAFTA Article 1105 and contravened the investor's legitimate expectations.[52] Similarly, here, the official reasons Mexico gave to justify its latest measures against Legacy Vulcan and CALICA differed from the real reasons behind those measures, as disclosed by the President himself. Mexico's actions were thus manifestly arbitrary in violation of NAFTA Article 1105.

2. PROFEPA's Inspection Executed the President's Order on Pretextual Grounds.

21. The Hearing also confirmed that the grounds PROFEPA asserted for the shutdown of La Rosita were pretextual. After conducting an inspection of La Rosita, PROFEPA inspectors claimed to base their shutdown on the lack of (a) an environmental impact authorization (which CALICA had) and (b) a CUSTF (which CALICA did not need).[53]

a) The Hearing Confirmed That CALICA Had an Environmental Impact Authorization for La Rosita.

22. The Hearing confirmed that PROFEPA's first pretext for shutting down La Rosita — that CALICA lacked an environmental impact authorization — was false on the facts and contradicted by Mexico's prior statements and actions. As the Hearing highlighted, CALICA's operations in La Rosita were authorized long ago from an environmental impact standpoint through the 1986 Investment Agreement.[54] Mexican federal and state authorities evaluated the environmental impacts of the Project and expressly authorized it. Based on that evaluation, SEMARNAT's predecessor — SEDUE — concluded in 1986 that the Project was environmentally feasible.[55] Mexico's witnesses and experts also confirmed that the 1986 Investment Agreement

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[51] *Abengoa, S.A. y COFIDES, S.A. v. United Mexican States*, ICSID Case No. ARB(AF)/09/2, Award, ¶ 645-652 (Mourre (P), Siqueiros, Fernández-Armesto) (CL-0047-SPA).

[52] *Bilcon of Delaware et al v. Government of Canada*, PCA Case No. 2009-04, Award on Jurisdiction and Liability, ¶ 590 (17 March 2015) (Simma (P), McRae, Schwartz) (CL-0009-ENG) ("The *Waste Management* standard calls for a consideration of procedural as well as substantive fairness. Bilcon was denied a fair opportunity to know the case it had to meet. It had no reason to expect, under the law or any notice provided by the JRP, that 'community core values' would be an overriding factor; that this factor would pre-empt a thorough 'likely significant adverse effects after mitigation' analysis of the whole range of project effects; and that this factor would contain elements that would effectively preclude any real possibility that an application could succeed.").

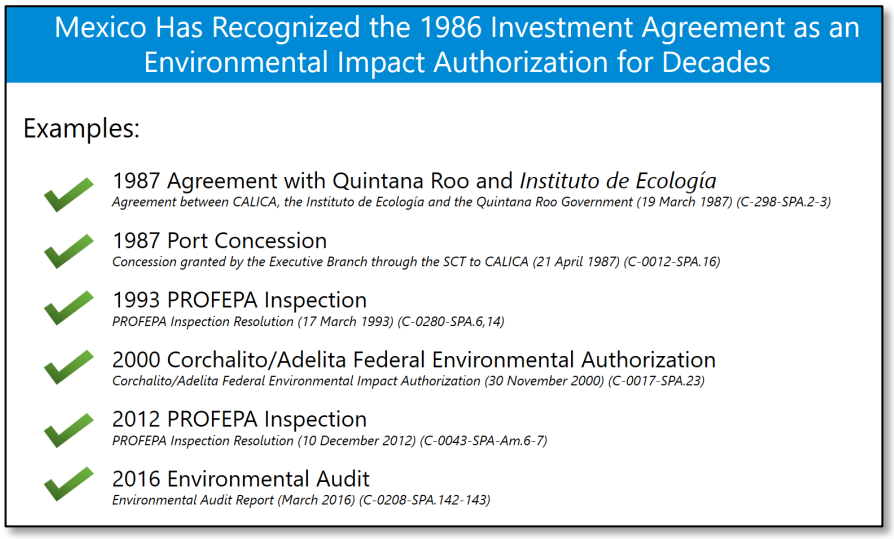
[53] Tr. (English), Day 1, 18:7-19:4 (Claimant's Opening).

[54] Investment Agreement (6 August 1986) (C-0010-SPA.6, 14). *See also* Claimant's Opening (CD-0007.27-31); Expert Report-[redacted]-Environmental Law-Claimant's Ancillary Claim Memorial-Third Report-SPA, ¶¶ 8-15.

[55] Investment Agreement (6 August 1986) (C-0010-SPA.6, 14) ("La SEDUE [...] considera factible desde el punto de vista ambiental, la realización del Proyecto propuesto por [CALICA][.]").

was an environmental impact authorization.[56] SOLCARGO, for example, conceded that "podemos coincidir con [redacted] en el sentido de que esa autorización [de 1986] [...] es una Autorización de Impacto Ambiental."[57] For decades, Mexican authorities agreed with this view as Figure 2 illustrates:

Figure 2 - Instances in which Mexico Recognized the 1986 Investment Agreement as an Environmental Impact Authorization for Operations in La Rosita[58]



23. The 2012 PROFEPA inspection stands out, as highlighted at the Hearing.[59] That inspection was expressly aimed at verifying "physically and through documents that [CALICA] [...] complied with its obligations regarding environmental impact [...]; and if they have an environmental impact authorization in effect."[60] PROFEPA visited CALICA's quarrying lots, including La Rosita, to carry out the inspection.[61] CALICA provided the

[56] Third Balcázar Witness Statement, ¶ 42 (RW-0012); Third SOLCARGO Report, ¶ 98 (RE-008); Expert Report-[redacted]-Environmental Law-Claimant Ancillary Claim Memorial-Third Report-SPA, ¶¶ 67-74; Expert Report-[redacted]-Environmental Law-Claimant's Ancillary Claim Reply-Fourth Report-SPA, ¶¶ 15-18.

[57] Tr. (Spanish), Day 4, 976:21-977:3 (SOLCARGO direct); *but see* Third SOLCARGO Report, § V.A.2 (RE-008) (arguing the "inexistence" of a valid environmental impact authorization).

[58] Claimant's Opening (CD-0007.29).

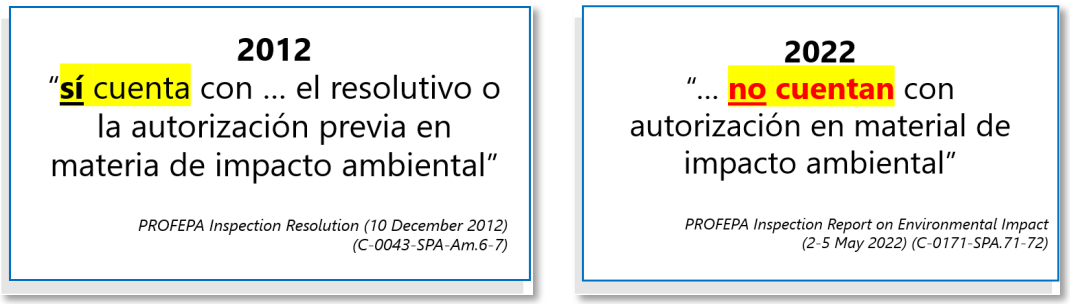
[59] Tr. (English), Day 1, 21:7-22:3 (Claimant's Opening).

[60] PROFEPA Inspection Resolution (10 December 2012) (C-0043-SPA.2) (free translation, the original reads: "con el objeto de verificar física y documentalmente que él o los responsables de la empresa citada [CALICA] [...] hayan dado cumplimiento con sus obligaciones ambientales en materia de impacto ambiental, en lo referente a sus autorizaciones, permisos o licencias, otorgadas por la [SEMARNAT]; y si cuenta con autorización en materia de impacto ambiental vigente.").

[61] *Id.* at 4 ("se realizó un recorrido por el predio de las instalaciones de la citada empresa donde se observó que desarrollan obras y actividades [...] en una superficie que incluye a los predios denominados La Rosita con 931.13 hectáreas [...]").

1986 Investment Agreement as the environmental impact authorization for that lot.[62] PROFEPA analyzed this document and found that "CALICA *does have* [...] an environmental impact authorization."[63] PROFEPA also concluded that "there are no irregularities for which [CALICA] should be charged [...] for noncompliance with its environmental impact obligations."[64] As Figure 3 below shows, PROFEPA inexplicably found exactly the opposite in 2022.

Figure 3 - PROFEPA's Findings in 2022 Inspection (right) Contradicts Its Findings in 2012 Inspection (left)[65]



24. At the Hearing, Mexico's counsel, witnesses, and experts confirmed that, during the May 2022 inspection, CALICA again provided a copy of the 1986 Investment Agreement to PROFEPA's inspectors.[66] The inspectors flatly ignored the document, however, and shut down La Rosita. Ms. Balcázar confirmed at the Hearing that the May 2022 inspection simply concluded that CALICA "no contaba con esa autorización."[67]

25. Mexico tried to justify its disregard of the 1986 Investment Agreement during the May 2022 inspection by arguing at the Hearing that CALICA presented that document too late — on the last day of the inspection and once the shutdown had been imposed.[68] But [redacted] explained that this is no justification: "es irrelevante si la autorización [el Acuerdo de 1986] se

[62] *Id.* at 6-7.

[63] *Id.* (free translation) (emphasis added); Tr. (English), Day 1, 21:7-19 (Claimant's Opening).

[64] PROFEPA Inspection Resolution (10 December 2012) (C-0043-SPA.56-57) (free translation).

[65] Claimant's Opening (CD-0007.30-31); PROFEPA Inspection Resolution (10 December 2012) (C-0043-SPA.6-7); PROFEPA Inspection Report on Environmental Impact (2-5 May 2022) (C-0171-SPA.71-72).

[66] Tr. (Spanish), Day 1, 149:11-14 (Respondent's Opening: "la demandante presentó una copia del acuerdo del 86 hasta el último día de la visita [...]."); Tr. (Spanish), Day 2, 575:1-10 (Balcázar cross-examination); Tr. (Spanish), Day 4, 1053:4-22 (SOLCARGO cross-examination).

[67] Tr. (Spanish), Day 2, 556:21-557:11 (Balcázar cross-examination).

[68] Tr. (Spanish), Day 1, 149:11-14 (Respondent's Opening: "la demandante presentó una copia del acuerdo del 86 hasta el último día de la visita y una vez que la clausura ya se había dictado."); Tr. (Spanish), Day 2, 574:17-:575:15 (Balcázar cross-examination); Tr. (Spanish), Day 4, 1053:4-1054:12 (SOLCARGO cross-examination).

entregó al concluir la visita o se entregó tres o cuatro días después [ya que] la ley le otorgaba el derecho a CALICA de poder presentar esos documentos a los cinco días de concluida la visita."[69]

26. The Hearing testimony therefore made clear that the 1986 Investment Agreement was an environmental impact authorization, that Mexico had considered it as such for decades, and that PROFEPA only found otherwise in 2022 because PROFEPA needed an excuse to justify the President's predetermined shutdown of CALICA's quarrying. This treatment, based not on valid reason or fact but prejudice and discretion, is textbook arbitrariness in breach of the minimum standard of treatment of NAFTA Article 1105.[70]

27. Through its May 2022 inspection, Mexico also denied Legacy Vulcan and CALICA due process in violation of NAFTA Article 1105. Unlike in *Thunderbird v. Mexico*, where the investor was "given a full opportunity to be heard and to present evidence at the Administrative Hearing"[71] and could appeal the administrative ruling, CALICA had no such opportunity here. Because PROFEPA ignored the 1986 Investment Agreement as proof of an environmental impact authorization, Mexico's shutdown of La Rosita suffers from the same type of procedural and due process deficiencies that were present in *Abengoa v. Mexico*, where the investor's operating license was canceled "in complete disregard of due administrative process [...] preventing [the investor] from exercising its right of defense."[72] Mexico failed to provide CALICA the due process to which CALICA was entitled under NAFTA Article 1105.

b) The Hearing Confirmed that CALICA Did Not Need a CUSTF for La Rosita.

28. PROFEPA's second pretext for shutting down La Rosita — that CALICA lacked a CUSTF — was equally baseless and also contradicted decades of prior conduct by Mexican

[69] Tr. (Spanish), Day 3, 756:22-758:7 ([redacted] direct); *see also* Expert Report-[redacted]-Environmental Law-Claimant Ancillary Claim Memorial-Third Report-SPA, ¶ 75.

[70] *Abengoa, S.A. y COFIDES, S.A. v. United Mexican States*, ICSID Case No. ARB(AF)/09/2, Award, ¶ 642 (Mourre (P), Siqueiros, Fernández-Armesto) (CL-0047-SPA); *Eco Oro Minerals Corp. v. Republic of Colombia*, ICSID Case No. ARB/16/41, Decision on Jurisdiction, Liability and Directions on Quantum, ¶ 760 (9 September 2021) (Blanch (P), Grigera Naón, Sands) (CL-0192-ENG); *Joshua Dean Nelson v. United Mexican States*, ICSID Case No. UNCT/17/1, Award, ¶ 325 (5 June 2020) (Zuleta (P), Veeder, Gomezperalta) (RL-0195).

[71] *International Thunderbird Gaming Corporation v. United Mexican States*, UNCITRAL, Award, ¶ 198 (26 January 2006) (van den Berg (P), Wälde, Ariosa) (CL-0004-ENG).

[72] *Abengoa, S.A. y COFIDES, S.A. v. United Mexican States*, ICSID Case No. ARB(AF)/09/2, Award, ¶ 649 (Mourre (P), Siqueiros, Fernández-Armesto) (CL-0047-SPA) (free translation). *See also Glencore International A.G. & C.I. Prodeco S.A. v. Republic of Colombia*, ICSID Case No. ARB/16/6, Award, ¶ 1318 (27 August 2019) (Fernández-Armesto (P), Garibaldi, Thomas) (CL-0057-ENG) (finding that the obligation to provide due process requires that host States "give each party a fair opportunity to present its case and to marshal appropriate evidence," as well as "assess the submissions and the evidence in a reasoned, even-handed, and unbiased decision").

authorities. The Hearing confirmed that (i) a CUSTF has never been necessary for La Rosita as a matter of law; (ii) Mexican law requires environmental-enforcement officials to act if they become aware of any indicia of possible environmental violations; (iii) multiple Mexican environmental authorities had known CALICA was removing vegetation in La Rosita for decades; and (iv) no authority ever acted upon this knowledge to require a CUSTF — until President López Obrador needed an excuse to shut down La Rosita.

29. *First*, the Hearing confirmed that Mexican law did not require CALICA to obtain a CUSTF to quarry La Rosita. As [redacted] explained, a CUSTF is only necessary if the lot at issue is a "forested terrain," a legal status that depends not only on the mere presence of trees but on the lot's official land use designation.[73] It is undisputed that, since 1986, the land use designation of La Rosita has been for quarrying and incompatible with forestry.[74]

30. *Second*, it is undisputed that PROFEPA has the legal obligation to enforce the law by, for example, conducting an inspection whenever it obtains any indicia of a potential violation. In its written pleadings, Mexico asserted that "[l]a *PROFEPA se encuentra obligada de actuar* [...] cuando existen indicios de alguna posible violación a las disposiciones ambientales."[75] Mexico's witnesses confirmed this fact. PROFEPA witness Margarita Balcázar acknowledged that "PROFEPA y sus funcionarios tienen la obligación de actuar cuando tienen conocimiento de una posible violación de las normas ambientales."[76] PROFEPA witness Patricio Vilchis agreed.[77] PROFEPA's decades-long inaction — while being aware of an indicia that vegetation was being removed in La Rosita without a CUSTF — reasonably leads to the inference that no such authorization was required.

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[73] Tr. (Spanish), Day 3, 794:4-20 ([redacted] cross-examination: "mientras el programa de ordenamiento establezca que el predio no es forestal, no le es aplicable aquellas obligaciones que son propias únicamente a un terreno forestal [...] la vocación de terrenos forestales es necesario [...] para identificar si un terreno debe ser o no considerado forestal. Y si es forestal, estará sujeto al cambio de uso de suelo; y si no es forestal, no lo estará."); *see also* Expert Report-[redacted]-Environmental Law-Claimant Ancillary Claim Memorial-Third Report-SPA, § IV.B.1.

[74] Tr. (Spanish), Day 3, 760:8-761:18 ([redacted] direct, explaining, *i.a.:* "los programas de ordenamiento de manera textual han identificado que el uso forestal es incompatible en La Rosita. Es decir, La Rosita es un predio que no tiene actividades forestales, que no es compatible con las actividades forestales. De tal suerte que, si La Rosita es un predio que no es compatible con las actividades forestales, ¿por qué habría que requerir una autorización que es precisamente para inducirlo a actividades no forestales?"); [redacted] Direct Presentation (CD-0010.17); *see also* Expert Report-[redacted]-Environmental Law-Claimant Ancillary Claim Memorial-Third Report-SPA, ¶¶ 112-122.

[75] Counter-Memorial (Ancillary Claim), ¶ 209; *see also id.*, n.206.

[76] Tr. (Spanish), Day 2, 567:12-20 (Balcázar cross-examination).

[77] Tr. (Spanish), Day 2, 458:1-8 (Vilchis cross-examination).

31. *Third*, the Hearing confirmed that PROFEPA had more than an indicia here — it concededly knew for over 30 years that CALICA was removing vegetation in La Rosita without a CUSTF.[78] As highlighted during the Hearing, in March 1993, PROFEPA inspected La Rosita to "verify and confirm [CALICA's] compliance with [...] applicable legal provisions for the granting of permits, authorizations and concessions."[79] PROFEPA expressly noted that CALICA was clearing vegetation [*desmonte*].[80] As Mr. Vilchis testified at the Hearing:

> [Claimant's Counsel]: [E]n el año 1993 PROFEPA observó que CALICA llevaba a cabo desmontes. ¿Cierto?
>
> [Vilchis]: Es cierto.
>
> [Claimant's Counsel]: Y sabía desde entonces que había desmonte de vegetación en La Rosita.
>
> [Vilchis]: Es correcto.[81]

32. As underscored during the Hearing, PROFEPA and the agency where it resides as its enforcement arm — SEMARNAT — thereafter observed again and again that CALICA had removed or was removing vegetation in La Rosita. In 1999, as Mr. Vilchis acknowledged, CALICA requested that its authorization to quarry below the water table at La Rosita be extended to La Adelita and El Corchalito.[82] As part of its request, CALICA openly reported it was removing vegetation ("*desmonte*") in La Rosita, even attaching photographs.[83] SEMARNAT reviewed the documentation, raised no objections, and approved CALICA's request.[84] Over ten years later, in 2012, PROFEPA inspected La Rosita and observed that vegetation had been removed there for

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[78] *See, e.g.*, Claimant's Opening (CD-0007.40-42); *see also* Reply (Ancillary Claim), ¶ 61.

[79] PROFEPA Inspection Report (17 March 1993) (C-0280-SPA.3-4, 11-12) (free translation, the original reads: "[E]s con el fin de verificar y comprobar el cumplimiento de las disposiciones contenidas en la Ley General del Equilibrio Ecológico y la Protección al Ambiente, de las normas técnicas ecológicas y demás disposiciones jurídicas aplicables, al otorgamiento de permisos, autorizaciones y concesiones[.]").

[80] *Id.* at 5, 13 ("En esta área [La Rosita] se observó que el proceso de extracción inicia desde el ***desmonte*** que se realiza de manera controlada, es decir conforme se avanza en la extracción se ***desmonta*** la parcela guardando una distancia entre la vegetación y el banco de material pétreo[.]") (emphasis added).

[81] Tr. (Spanish), Day 2, 448:5-11 (Vilchis cross-examination).

[82] *See* Tr. (Spanish), Day 2, 453:4-455:7 (Vilchis cross-examination); *see also* CALICA's Environmental Impact Statement, Chapter II (23 October 2000) (C-0077-SPA.41) ("[C]on fecha 21 de octubre de 1999, [CALICA] solicitó a la Dirección General de Ordenamiento Ecológico e Impacto Ambiental del Instituto Nacional de Ecología, hacer extensiva la autorización otorgada por la entonces SEDUE para el aprovechamiento de agregados pétreos, puesto que esa entidad autorizó en 1986 el aprovechamiento en los predios 'Punta Inha' y 'La Rosita' y posteriormente, la empresa adquirió los predios 'La Adelita' y 'El Corchalito'."); Reply (Ancillary Claim), ¶ 61.

[83] CALICA's Environmental Impact Statement, Chapter II (23 October 2000) (C-0077-SPA.240).

[84] *See* Corchalito/Adelita Federal Environmental Impact Authorization (30 November 2000) (C-0017-SPA.3, 23).

quarrying.[85] PROFEPA-certified auditors also reported to PROFEPA from 2002 to 2016 that La Rosita was being quarried, which necessarily implies the removal of vegetation.[86] Even the head of PROFEPA heard directly from CALICA — through [redacted] — in July 2021 that quarrying was taking place in La Rosita without a CUSTF.[87]

33. *Fourth*, despite having this knowledge, Mexico's environmental authorities failed to act to enforce any purportedly applicable CUSTF permit — only President López Obrador's 2022 shutdown order changed this decades-long conduct. But Mexico went beyond a mere failure to act before that order; it affirmatively concluded that CALICA was in compliance with its obligations despite lacking a CUSTF. It did so after the 1993 PROFEPA inspection of La Rosita, without any mention of a CUSTF or a subsequent forestry inspection.[88] What PROFEPA said and how it acted then is more credible than what Mexico, including PROFEPA, conveniently says now. As Mr. Vilchis acknowledged at the Hearing:

> [Claimant's Counsel]: [PROFEPA] concluyó [después de la inspección de 1993] que se realizaba el aprovechamiento conforme a la norma aplicable. ¿Cierto?
>
> [Vilchis]: Es cierto.
>
> [Claimant's Counsel]: No se mencionó ningún tipo de cambio de uso de suelo en terrenos forestales; no lo ha visto acá. ¿Correcto?
>
> [Vilchis]: Es correcto.[89]

34. Mr. Vilchis tried to explain away this evidence by alleging that, in 1993, PROFEPA was not competent to enforce forestry requirements and that only the *Secretaría de Agricultura*

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[85] *See* Tr. (Spanish), Day 2, 455:8-458:14 (Vilchis cross-examination); PROFEPA Inspection Resolution (10 December 2012) (C-0043-SPA.4) ("se realizó un recorrido por el predio de las instalaciones de la citada empresa donde se observó que desarrollan obras y actividades [...] en una superficie que incluye a los predios denominados La Rosita con 931.13 hectáreas [...]").

[86] Tr. (Spanish), Day 2, 508:12-509:12; 510:14-511:7; 513:12-514:17 (Castañeda cross-examination).

[87] Tr. (English), Original Claim Hearing, Day 2, 303:4-7 ([redacted] cross-examination: "We carried out quarrying operations in La Rosita and El Corchalito without this requirement for decades in the full knowledge of both SEMARNAT and PROFEPA without any objection having ever been raised."); *id.* at 271 (listing Ms. Blanca Alicia Mendoza Vera, head of PROFEPA, and other officials from this agency and SEMARNAT among the attendees to the July 2021 Hearing); *see also* Tr. (Spanish), Day 2, 458:22-462:19 (Vilchis cross-examination, acknowledging that the head of PROFEPA in 2021 heard [redacted] testimony that CALICA had never had, nor been asked for a CUSTF for La Rosita).

[88] PROFEPA Inspection Resolution (29 March 1993) (C-0281-SPA.2) ("En atención a lo expuesto y del análisis de la documentación legal y aprovechamiento físico de la empresa, manifestamos de manera preliminar que [CALICA] realiza el aprovechamiento conforme a las normas aplicables."); *see also* Tr. (English), Day 1, 26:2-22 (Claimant's Opening); Claimant's Opening (CD-0007.41).

[89] Tr. (Spanish), Day 2, 448:12-19 (Vilchis cross-examination).

y Recursos Hidráulicos could do so.[90] But this explanation was proved to be wrong. In 1993 PROFEPA was the enforcement arm of the *Secretaría de Desarrollo Social* (SEDESOL).[91] As [redacted] explained at the Hearing, under Article 49 of the 1992 Forestry Law, SEDESOL was legally required to assist [*coadyuvar*] in the detection and reporting of violations of forestry laws, including any missing CUSTF permits.[92] SOLCARGO did not refute [redacted] testimony, and Mr. Vilchis was unable to quarrel with the plain text of Article 49 of the 1992 Forestry Law on cross-examination:

> [Claimant's Counsel]: [E]sta disposición [artículo 49 de la Ley Forestal de 1992] obliga al SEDESOL a coadyuvar a la Secretaría de Agricultura y Recursos [...] Hidráulicos en la detección y denuncia de infracciones. ¿Ve eso?
>
> [Vilchis]: Sí, es correcto [...]
>
> [Claimant's Counsel]: Las infracciones señaladas en este capítulo incluyen el Cambio de Uso del Suelo en Terrenos Forestales sin autorización. ¿Recuerda eso?
>
> [Vilchis]: Sí, lo recuerdo.[93]

35. As [redacted] explained at the Hearing, during the 1993 PROFEPA inspection, "los inspectores [...] verificaron que no existía ninguna falta de autorización o motivo para denunciar, aun cuando tenían la capacidad legal para detectar ese tipo de infracciones; y manifiestan que existe remoción de vegetación, pero determinan que esta no es una falta a la ley."[94] SOLCARGO, again, did not refute this point at the Hearing.

36. Mexico's failure to act despite knowing that CALICA had removed vegetation in La Rosita is exemplified by more than just the 1993 PROFEPA inspection. Mr. Vilchis admitted during cross-examination, for example, that he had no explanation for PROFEPA's failure to inspect CALICA following the disclosure of vegetation removal in La Rosita in 1999.[95] The reason is simple, no CUSTF was ever required.

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[90] Tr. (Spanish), Day 2, 449:6-14 (Vilchis cross-examination: "PROFEPA en el 93 no tenía las facultades de inspección y vigilancia forestal" and stating that only the Secretaría de Agricultura y Recursos Hidráulicos could inspect forestry issues in 1993).

[91] Tr. (Spanish), Day 2, 450:20-22 ("[Claimant's Counsel]: [L]a PROFEPA en esta época [1993] pertenecía a SEDESOL. ¿Correcto?// [Vilchis]: Es correcto [...].").

[92] Tr. (Spanish), Day 3, 765:17-766:18 [redacted] presentation); *see also* [redacted] Direct Presentation (CD-0010.21); Mexican Forestry Law of 1992 (C-0140-SPA.29) (Arts. 46.VIII, 49).

[93] Tr. (Spanish), Day 2, 452:13-453:3 (Vilchis cross-examination).

[94] Tr. (Spanish), Day 3, 766:19-767:3 [redacted] direct); *see also* [redacted] Direct Presentation (CD-0010.21).

[95] Tr. (Spanish), Day 2, 454:11-455:17 ("[Claimant's Counsel]: [E]n esta Manifestación de Impacto Ambiental [del 2000], [...] se describe [...] 'Desmonte de vegetación en el predio La Rosita' [...]// [Vilchis]: Sí, lo veo.// [Claimant's Counsel]: Y hay una foto que demuestra el desmonte de vegetación.//[Vilchis]: Sí, (continued…)

37. The same is true of PROFEPA's 2012 inspection of CALICA. As Legacy Vulcan explained in its pleadings, during this inspection, PROFEPA inspectors visited La Rosita, observed quarrying activities there, and concluded that CALICA was in compliance with its environmental obligations.[96] Mr. Vilchis acknowledged that no forestry-focused inspection occurred as a result of what PROFEPA observed in 2012, despite being obligated to act upon knowing that vegetation was being removed there without a CUSTF.[97]

38. Similarly, PROFEPA did nothing with respect to a purported CUSTF requirement after the 2017 PROFEPA inspection of El Corchalito.[98] As Ms. Balcázar acknowledged during cross-examination, she took part in that inspection and passed through La Rosita (where PROFEPA even took photographs).[99] PROFEPA observed that La Rosita contained a quarry, which evidently presupposes the removal of vegetation there; yet failed to conduct a forestry inspection thereafter. Ms. Balcázar could not explain PROFEPA's failure to act.[100]

39. What is more, PROFEPA granted six Clean Industry Certificates to CALICA covering the 2003-2018 period, without ever hinting that a CUSTF was required. As Enrique Castañeda, PROFEPA's head of environmental auditing, explained at the Hearing, PROFEPA grants these certificates to "companies to accredit compliance with their environmental

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es correcto.//[Claimant's Counsel]: Y esto se presentó a SEMARNAT en el año 2000 [...] Mi pregunta es: ¿este hecho no provocó que PROFEPA fuera a inspeccionar a CALICA sobre el Cambio de Uso del Suelo en Terrenos Forestales? ¿Verdad que no?//[Vilchis]: Desconozco por qué no se hizo la visita de inspección, toda vez que yo no era el director general en ese tiempo.").

[96] *See* Reply (Ancillary Claim), ¶ 44; PROFEPA Inspection Resolution (10 December 2012) (C-0043-SPA.4) ("[S]e realizó un recorrido por el predio de las instalaciones de la citada empresa, donde se observó que desarrollan obras y actividades de explotación, extracción, aprovechamiento, molienda, selección, almacenamiento y comercialización de piedra caliza, en una superficie que incluye a los predios denominados La Rosita [...] El Corchalito [...] La Adelita[.]"); *id.* at 56-57 ("no existen irregularidades por las cuales se proceda a emplazar a procedimiento y en su caso, sancionar al establecimiento").

[97] Tr. (Spanish), Day 2, 457:15-458:21 ("[Claimant's Counsel]: [...] [H]abíamos establecido al principio, señor Vilchis, que, al ejercer sus facultades de inspección, los funcionarios de PROFEPA tienen la obligación [...] de actuar si ven algún hecho que pueda constituir alguna posible violación. ¿Está de acuerdo con eso? //[Vilchis]: Es correcto. // [Claimant's Counsel]: O sea que esos inspectores pudieron haber acudido [...] hacia PROFEPA y haberles dicho a otros funcionarios en temas forestales: "Mire, vaya ahí e inspeccione, hay un indicio". // [Vilchis]: Es correcto. Es correcto. Sí. // [Claimant's Counsel]: Y en su conocimiento, luego de esta inspección de 2012, no se -- este indicio, estos hechos observados no dieron lugar a una inspección forestal por parte de PROFEPA. ¿Verdad que no? // [Vilchis]: No, no se hizo inspección hasta el año pasado [(2022)] en materia forestal.").

[98] Tr. (Spanish), Day 2, 567:4-572:6 (Balcázar cross-examination).

[99] Tr. (Spanish), Day 2, 569:9-19, 571:9-17 (Balcázar cross-examination acknowledging having visited La Rosita during the first 2017 PROFEPA inspection); *see also* First PROFEPA Inspection Report (19 May 2017) (C-0115-SPA.36, 54, 63-64) (noting that PROFEPA visited La Rosita).

[100] Tr. (Spanish), Day 2, 572:16-18 (Balcázar cross-examination: "Pues yo no era autoridad ordenadora y no -- desconozco por qué en ese momento mi superior no lo hizo.").

obligations."[101] He also conceded on cross-examination that PROFEPA rigorously monitors the audits that undergird these certificates, which are meant to encourage companies to *exceed* what is required by law.[102] Mr. Castañeda confirmed that environmental audits involve field work (not just document review) and cover forestry issues.[103] Mr. Castañeda also confirmed that PROFEPA reviewed the environmental audits carried out by PROFEPA-certified auditors and determined that CALICA was in full compliance with its environmental obligations at the time, including confirming CALICA's long-standing position that no CUSTF was required for its operations in La Rosita.[104] For example, Mr. Castañeda acknowledged that PROFEPA-certified auditors observed that CALICA "does not require nor required [...] a [CUSTF]" and that, based on this information, PROFEPA issued a Clean Industry Certificate in 2016.[105]

40. In short, the fact that no environmental authority sought to enforce a CUSTF requirement for La Rosita for decades despite being fully aware of vegetation removal there confirms that there was no such requirement for La Rosita, as [redacted] has explained.[106]

c) PROFEPA Has Maintained the Shutdown of La Rosita Arbitrarily.

41. PROFEPA has maintained the shutdown of La Rosita for an inexplicably long period — almost 18 months, and counting — without formally charging CALICA through an *Acuerdo de Emplazamiento*. The Hearing highlighted that this delay was unjustifiable, further confirming the pretextual and arbitrary nature of Mexico's shutdown.

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[101] Tr. (Spanish), Day 2, 484:8-11 (Castañeda cross-examination) (free translation, the original reads: "empresas para acreditar el cumplimiento de sus obligaciones ambientales"); *id.* at 504:19-505:17 (Castañeda cross-examination); LGEEPA Regulation on Environmental Audits, Article 23 (29 April 2010) (C-0210-SPA.10); *see also* National Environmental Audit Program Explanatory Circular (C-0209-SPA.6).

[102] Tr. (Spanish), Day 2, 488:16-489:7 ("[Claimant's Counsel]: [A] través del Programa Nacional de Auditoría Ambiental una empresa no solo cumple con la normativa aplicable una vez que recibe el certificado, sino que se compromete a ir más allá de lo que establece la ley, ¿correcto? // [Castañeda]: Sí.").

[103] Tr. (Spanish), Day 2, 500:12-502:5 ("[Castañeda]: Entre otras, sí -- sí contempla los trabajos de campo."); *id.*, at 492:6-18 ("[Claimant's Counsel]: Los términos de referencia indican las materias que deben ser verificadas durante una auditoría ambiental. ¿Correcto? // [Castañeda]: Efectivamente. // [Claimant's Counsel]: Como ser el agua, el suelo y subsuelo, recursos naturales y recursos forestales, entre otros. ¿Correcto? // [Castañeda]: Sí, así es.").

[104] Tr. (Spanish), Day 2, 504:10-506:3 (Castañeda cross-examination); *id.*, at 524:2-20.

[105] Tr. (Spanish), Day 2, 524:2-20 ("[Claimant's Counsel]: Y en las observaciones al respecto [los auditores] dijeron: *la organización no requiere ni requirió para el caso de las instalaciones auditadas de Autorización de Cambio de Uso de Suelo Forestal*. ¿Correcto? En la columna de observaciones. // [Castañeda]: Sí, lo estoy viendo. // [Claimant's Counsel]: Okay. Y eso fue lo que los auditores le representaron a la PROFEPA. ¿Correcto? // R: En el informe correspondiente. // [Claimant's Counsel]: Y *en base a esta información se emitió el Certificado de Industria Limpia en 2016*. ¿Correcto? // [Castañeda]: *Sí*.") (emphasis added).

[106] *See, e.g.*, Reply (Ancillary Claim), ¶ 61 (listing instances of Mexico's environmental authorities having full knowledge that CALICA was clearing vegetation in La Rosita and not raising objections).

42. It is undisputed after the Hearing that the *Acuerdo de Emplazamiento* is a formal charging instrument that triggers an administrative proceeding, which — once concluded — allows the affected person to seek ordinary judicial remedies.[107] As [redacted] explained:

> El recurso de revisión y el juicio de nulidad, como explico en mi [cuarto] informe, son ambos procedimientos que únicamente son procedentes en contra de una resolución. Al no haber emplazamiento y no haber resolución es claro que hay una imposibilidad total por parte de CALICA de poder acceder a estos mecanismos de defensa que el sistema mexicano le otorga.[108]

43. SOLCARGO agreed.[109] They also acknowledged that — contrary to what Mexico has argued in this arbitration[110] — the delay in PROFEPA's issuance of an *Acuerdo de Emplazamiento* after shutting down La Rosita impacted CALICA's rights.[111] The impact is significant: quarrying was halted for close to 18 months, without CALICA having even been notified of the specific violations it allegedly committed.

44. Mexico was unable to offer a good explanation for this delay. Mr. Vilchis claimed that the delay was "due to the size" of La Rosita.[112] But the *Acuerdo de Emplazamiento* PROFEPA issued to shut down El Corchalito in 2018 came less than two months after the inspection of that sizeable lot.[113] Ms. Balcázar similarly tried to justify the delay by claiming complexity; "all the Clauses of the [1986] Agreement and all the Annexes referred in this Agreement."[114] But this excuse does not square with the inclusion of a laundry list of purported violations to that

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[107] *See, e.g.*, Tr. (Spanish), Day 2, 464:5-13 ("[Claimant's Counsel]: [U]n acuerdo de emplazamiento [...] indica las potenciales violaciones de la ley del visitado o una resolución que indica, como hemos visto en inspecciones pasadas de CALICA, que no había violación. ¿Correcto?// [Vilchis]: Es correcto.").

[108] Tr. (Spanish), Day 3, 750:10-20 ([redacted] Direct Presentation, referencing his Fourth Report, §4.D).

[109] Tr. (Spanish), Day 4, 964:21-965:8 (SOLCARGO direct: "los [...] medios de impugnación posibles [...] son el recurso [de revisión] en sede administrativa y el juicio de nulidad o el juicio administrativo ordinario. Y [redacted] estima que son improcedentes, y yo coincido con él.").

[110] Rejoinder (Ancillary Claim), ¶ 211 (arguing that the delay in charging CALICA "no causa[] perjuicio u obstrucciones para acceder a su derecho a un mecanismo jurisdiccional efectivo" and that "La falta de un Acuerdo de Emplazamiento no tiene efectos negativos en la situación jurídica de CALICA[.]").

[111] Tr. (Spanish), Day 4, 1028:5-10 (SOLCARGO cross-examination: "El problema [...] es si CALICA está afectada. Claro que está afectada, no me queda duda, como los que planteaban este amparo, por la demora, la tardanza y en sí mismo la incertidumbre digamos, ¿no? [...]").

[112] Tr. (Spanish), Day 2, 463:6-21 ("[Claimant's Counsel]: [H]an pasado más de 15 meses sin que se haya emitido ningún documento, ninguna resolución, ningún acuerdo de emplazamiento. [...]// [Vilchis]: No se ha emitido, es correcto, porque se encuentran en valoración todas las pruebas que ha presentado la empresa CALICA. // [Claimant's Counsel]: ¿Por 15 meses? [...] // [Vilchis]: Debido a la extensión, en este caso más de 900 hectáreas; debido al cambio de uso de suelo, a las especies que se ha afectado y sobre todo al tipo de ecosistema y a la cantidad de arbolado que se removió[...]. ").

[113] Shutdown Order (22 January 2018) (C-0117-SPA.37) (*Acuerdo de Emplazamiento* issued 53 days after the inspection ended).

[114] Tr. (Spanish), Day 2, 585:18-586:6 (Balcázar direct) (free translation).

Agreement in Ms. Balcázar's own declaration in this arbitration — prepared and submitted within seven months after the shutdown.[115] Notably, Ms. Balcázar is the authority within PROFEPA charged with issuing the *Acuerdo de Emplazamiento* relating to the May 2022 environmental impact inspection.[116] She can assess purported violations in just a few months when it suits Mexico in this arbitration, but cannot do so for a year and a half when it suits Mexico in the domestic administrative context. Mexico cannot have it both ways.

45. According to Mexico, CALICA could remain shut down for ***five years*** before any *Acuerdo de Emplazamiento*, alluding to Mexican jurisprudence that was established to be wholly inapposite at the Hearing. Answering the Tribunal's questions, Ms. Balcázar asserted that "los tribunales federales han establecido que mientras no se rebase el tiempo que se estipula, que son de ***cinco años*** para [...] que la autoridad determine las sanciones que en su caso hubiese, pues estamos en tiempo para poder resolver el procedimiento."[117] SOLCARGO tried to support Ms. Balcázar's assertion by invoking a ruling of Mexico's Supreme Court, but they had no choice but to concede on cross-examination that this case was inapposite.[118] That case did not involve a shutdown imposed as part of a PROFEPA inspection, but rather a run-of-the-mill inspection followed by a lengthy period of continued operation without an *Acuerdo de Emplazamiento*:

> [Claimant's Counsel]: En esta decisión en ningún momento se indica que [...] luego de [...] la visita de inspección se impuso una medida de clausura. ¿Correcto?
>
> [SOLCARGO]: Es correcto, señor Arvelo.
>
> [Claimant's Counsel]: O sea, aquí [en el caso citado] no se habla de eso. Se habla de una situación en la cual el visitado tuvo una inspección, se levantó el acta y, luego, había un transcurso de tiempo antes del acuerdo de emplazamiento. ¿Correcto?
>
> [SOLCARGO]: Es correcto.
>
> [Claimant's Counsel]: La situación de CALICA es una en la cual después de la visita de inspección se implementó una clausura, y allí estamos por más de 15 meses. ¿Correcto?
>
> [SOLCARGO]: Correcto.[119]

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[115] Third Balcázar Witness Statement (RW-0014) (signed 14 December 2022).

[116] Tr. (Spanish), Day 2, 576:20-577:2 (Balcázar cross-examination).

[117] Tr. (Spanish), Day 2, 586:16-587:4 (Balcázar addressing Tribunal questions) (emphasis added); *see also id.*, at 587:5-9 ("[Prof. Tawil]: O sea que podrían durar cinco años hasta resolver. // [Balcázar]: A partir que se tiene conocimiento de la causa que genera la apertura del expediente."); *id.* at 585:15-586:6 (Balcázar stating she would count the 5 years as of the inspection).

[118] SOLCARGO Direct Presentation (RD-0006.6); Tr. (Spanish), Day 4, 1030:3-19 (SOLCARGO cross-examination).

[119] *Id.*

46. Consistent with this SOLCARGO testimony, [redacted] confirmed that the sole case SOLCARGO cited to defend the lengthy absence of an *Acuerdo de Emplazamiento* here was distinguishable, concluding that "it is arbitrary and it is not legally logical to think that PROFEPA can shut down activities [...] and wait five years for a charging document[.]"[120]

47. Mexico's failure for more than 17 months to issue the *Acuerdo de Emplazamiento* deprived CALICA of the opportunity to challenge PROFEPA's inspection and shutdown in Mexican courts during that time, effectively leaving CALICA defenseless while perpetuating the shutdown indefinitely.[121] This treatment is directly at odds with Mexico's obligation under Article 1105 to give investors "a full opportunity to be heard and to present evidence," including in administrative proceedings.[122] Like the state conduct in *TECO v. Guatemala*, Mexico has shown "a willful disregard of the fundamental principles upon which the regulatory framework is based" and "a complete lack of candor or good faith on the part of the regulator in its dealings with the investor."[123]

48. In an implicit recognition that the delay was indefensible, Mexico just yesterday evening — on the eve of the Post-Hearing Brief deadline — notified CALICA that it finally issued *Acuerdos de Emplazamiento* for PROFEPA's inspections of La Rosita in May 2022. Legacy Vulcan has had no time to review these documents but understands that they unsurprisingly preserve the shutdown along the lines of what Mexico has argued in this arbitration for many months now.[124] Mexico's eleventh-hour, delayed issuance and coordination with this arbitration only confirm the pretextual and arbitrary nature of this exercise. This

[120] Tr. (Spanish), Day 3, 752:3-19 ([redacted] direct: "Esto me parece una interpretación equívoca de una jurisprudencia, pues esa jurisprudencia claramente señala que el período que está analizando es el de una visita y posteriormente la imposición de una medida. Es decir, claramente la autoridad aún no ha ejercido facultades que afectan la esfera del derecho del particular. [...] *[E]s arbitrario y fuera de toda lógica jurídica pensar que la autoridad puede clausurar una instalación [...] y dejar transcurrir cinco años para emitir un acuerdo de emplazamiento y posteriormente una resolución*.") (emphasis added).

[121] *See also* Response to Tribunal Question No. 8 (on the futility of CALICA's available legal recourses).

[122] *International Thunderbird Gaming Corporation v. United Mexican States*, UNCITRAL, Award, ¶ 198 (26 January 2006) (van den Berg (P), Wälde, Ariosa) (CL-0004-ENG). *See also Waste Management v. United Mexican States (II)*, ICSID Case No. ARB(AF)/00/3, Award, ¶ 98 (30 April 2004) (Crawford (P), Civiletti, Magallón Gómez) (CL-0007-ENG) (concluding that the minimum standard of treatment is also infringed by conduct that involves "a complete lack of transparency and candour in an administrative process")*; Glencore International A.G. & C.I. Prodeco S.A. v. Republic of Colombia*, ICSID Case No. ARB/16/6, Award, ¶ 1318 (27 August 2019) (Fernández-Armesto (P), Garibaldi, Thomas) (CL-0057-ENG) (finding that the obligation to provide due process requires that host States "give each party a fair opportunity to present its case and to marshal appropriate evidence," as well as "assess the submissions and the evidence in a reasoned, even-handed, and unbiased decision").

[123] *TECO Guatemala Holdings, LLC v. Republic of Guatemala*, ICSID Case No. ARB/10/23, Award, ¶ 458 (19 December 2013) (Mourre (P), von Wobeser, Park) (CL-0058-ENG).

[124] Legacy Vulcan reserves the right to address this new fact in its Post-Hearing Reply or otherwise.

conduct is a further violation of CALICA's due process rights, in breach of the minimum standard of treatment under NAFTA Article 1105.

3. Mexico's Red Herrings Fail to Disprove That the Shutdown of La Rosita Was Arbitrary and Breached NAFTA.

49. Unable to justify the arbitrary shutdown of La Rosita, Mexico spent a large portion of the Hearing alleging that CALICA breached the 1986 Investment Agreement and caused environmental harm. These are red herrings that should not distract from the core facts underlying this ancillary claim proceeding, and they are false in any event.[125]

50. As Legacy Vulcan explained at the Hearing and Mexico's witness and expert testimony confirmed, Mexico's allegations are irrelevant to the shutdown of La Rosita. Ms. Balcázar acknowledged that "nada de esto" — referring to supposed breaches of the 1986 Investment Agreement or its alleged 25-year term — "está reflejado en el acta de inspección de PROFEPA de mayo de 2022[.]"[126] Mr. Vilchis similarly confirmed that the sole basis for shutting down La Rosita was the lack of a CUSTF.[127] As [redacted] testified, "[t]odas estas alegaciones nuevas son alegaciones que no formaron parte del expediente de PROFEPA y que no han sido determinadas o establecidas por PROFEPA."[128] SOLCARGO did not contradict this.

51. Mexico's red-herring allegations are false in any event: CALICA did not (a) breach the 1986 Investment Agreement; or (b) cause environmental damage.

a) CALICA Did Not Breach the 1986 Investment Agreement.

52. The Hearing confirmed that Mexico's allegations of Investment Agreement breaches are not only baseless but also contradicted by record facts. SOLCARGO, for instance, opined that the 1986 Investment Agreement "never came into effect" because CALICA failed to obtain a CUSTF.[129] But SOLGARGO had to concede on cross-examination that they knew of no Mexican authority having so much as suggested that this was the case in more than three decades (none actually did before this ancillary claim proceeding):

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[125] Tr. (English) Day 1, 19:5-20:4 (Claimant's Opening).

[126] Tr. (Spanish), Day 2, 577:9-580:13 (Balcázar cross-examination) [500:14-503:11].

[127] Tr. (Spanish), Day 2, 438:5-16 ("[Claimant's Counsel]: Y como parte de esa inspección forestal [...] PROFEPA clausuró las actividades de La Rosita indicando que no tenía CALICA una [CUSTF], ¿correcto? // [Vilchis]: Sí, es correcto. // [Claimant's Counsel]: Y esa fue la razón por la cual se clausuró y eso fue uno de los hallazgos de los inspectores durante la visita. ¿Es correcto? // [Vilchis]: Sí[.]").

[128] Tr. (Spanish), Day 3, 768:20-769:2 ([redacted] direct).

[129] Tr. (Spanish), Day 4, 986:18-22 ("[Claimant's Counsel]: [N]o se cumplió con esa disposición en el Acuerdo y, por lo tanto, nunca entró en vigencia. ¿Correcto? // [SOLCARGO]: Así es."); *see also id.* at 975:21-976:2 (SOLCARGO presentation: "este acuerdo [de 1986] no se perfeccionó").

> [Claimant's Counsel]: [N]inguna autoridad [...] ha dicho que el acuerdo de 1986 nunca entró en vigencia, como ustedes han argumentado en este caso. ¿Correcto?
>
> [SOLCARGO]: Bueno, no conozco un procedimiento de esa naturaleza, en el que alguna autoridad se haya pronunciado al respecto.
>
> [Claimant's Counsel]: Donde únicamente se ha argumentado eso es en este arbitraje, a partir de su informe pericial. ¿Correcto?
>
> [SOLCARGO]: Por lo que respecta a lo que conozco del arbitraje, pues sí, supondría que sí.[130]

53. The Hearing also confirmed that SOLCARGO's alternative theory that the 1986 Investment Agreement expired after 25 years was similarly not endorsed by any authority before it was conjured up for the first time in this arbitration. Ms. Balcázar acknowledged that PROFEPA did not rely on this theory to impose the May 2022 shutdown.[131] This is consistent with SEMARNAT's and PROFEPA's decades-long conduct and statements. None of that conduct or those statements even suggested that the Investment Agreement had a 25-year term. SOLCARGO was forced to accept on cross-examination that no Mexican authority had ever endorsed its 25-year-term theory:

> [Claimant's Counsel]: ¿usted conoce alguna autoridad que haya acogido su opinión de que el acuerdo de 1986 tiene un plazo de vigencia de exclusivamente 25 años? [...]
>
> [SOLCARGO]: [L]e concedo que en este momento no se me viene a la mente algún documento en particular.[132]

54. As pictured below, SEMARNAT and PROFEPA acknowledged that the 1986 Investment Agreement lacked an expiration date, a fact SOLCARGO could not credibly spin.[133]

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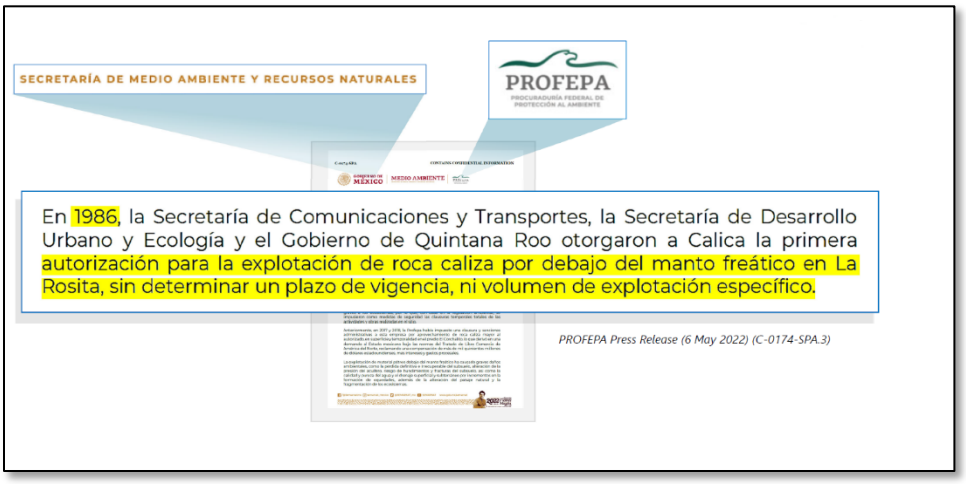
[130] Tr. (Spanish), Day 4, 994:17-995:9 (SOLCARGO cross-examination); *see also id.*, at 987:15-20 ("[Claimant's Counsel]: ¿Conoce usted alguna autoridad mexicana competente que haya determinado que el acuerdo nunca entró en vigencia? // [SOLCARGO]: No estoy al tanto de algún procedimiento de esa naturaleza específicamente.").

[131] Tr. (Spanish), Day 2, 580:3-13 ("[Claimant's Counsel]: [U]sted dice que había 25 años [...] // [Balcázar]: Sí, sí lo veo. // [Claimant's Counsel]: ¿Usted redactó esto y todo lo que dice en su declaración acerca del acuerdo de 1986? // [Balcázar]: Sí, correcto. // [Claimant's Counsel]: Ahora, nada de esto está reflejado en el acta de inspección de PROFEPA de mayo de 2022. ¿Verdad que no? [Balcázar]: No.").

[132] Tr. (Spanish), Day 4, 1011:2-1012:4 (SOLCARGO cross-examination).

[133] Tr. (Spanish), Day 4, 1009:12-1010:3 (SOLCARGO cross-examination, trying to dismiss the import of this public acknowledgment by speculating that it was not vetted by lawyers).

Figure 4 - SEMARNAT / PROFEPA Press Release[134]



55. In short, by insisting at the Hearing that the 1986 Investment Agreement had a 25-year term, SOLCARGO misrepresented the contents of that Agreement and failed credibly to address the record evidence demonstrating that no such term existed.[135]

56. In contrast with SOLCARGO's discredited testimony, [redacted] testimony was consistent with the text of the 1986 Investment Agreement and the record evidence. As he explained, "el Acuerdo del 86 no especifica una vigencia concreta, con una fecha cierta y señalada."[136] This is supported by contemporaneous statements of President López Obrador, those by SEMARNAT and PROFEPA highlighted above, and others.[137]

57. [redacted] also confirmed at the Hearing that references to "useful life" in the 1986 Investment Agreement were estimates centered on the rate of extraction in La Rosita.[138] The environmental impact statement in Annex 2 of that Agreement estimated available reserves of 220 million metric tons that were "sufficient for continuous exploitation" of as low as 25 or as

[134] Claimant's Opening (CD-0007.36); PROFEPA Press Release (6 May 2022) (C-0174-SPA.3).

[135] *See, e.g.*, Claimant's Opening (CD-0007.34-39); SOLCARGO Direct Presentation (RD-0006.8) (showing excerpts of three references to 25 years, one of which was a repeated page); Tr. (Spanish), Day 4, 995:15-997:15 (SOLCARGO cross-examination, conceding that there were not three references to 25 years).

[136] Tr. (Spanish), Day 3, 769:10-14 ([redacted] direct).

[137] Tr. (English), Day 1, 23:8-25:14 (Claimant's Opening); Claimant's Opening (CD-0007.35-36); Transcript of President's Morning Press Conference (3 February 2022) (C-0178-SPA.22) ("estos permisos los entregaron, el de ese predio que están explotando, lo entregaron antes del 2000. Y [...] no le pusieron ni siquiera un límite [...] ni siquiera hay fecha."). *See also* Transcript of President's Morning Press Conference (31 May 2022) (C-0198-SPA.26) (government-prepared video aired during a *Mañanera* stating: "En 1986 [...] otorgaron a Calica la primera autorización para la extracción de roca caliza por debajo del manto freático en La Rosita [...]. Esta autorización no especificaba ni la vigencia ni el volumen de explotación del proyecto[...].").

[138] *See* Tr. (English), Day 1, 230:4-232:18 ([redacted] cross-examination).

high as 40 years, depending on the rate of production.[139] As [redacted] testified, "the 1986 Agreement [...] allowed for the exhaustion of reserves owned by the Company in that lot," and "these references [...] [to 25 years or 40 years] were just general approximate references on the rhythm of extraction."[140] This interpretation is consistent with the Parties' decades-long course of conduct.[141] The Hearing therefore confirmed that the 1986 Investment Agreement lacked a 25-year end date and that CALICA in no way breached that Agreement.[142]

b) CALICA Did Not Cause Environmental Harm.

58. Mexico used a large chunk of its Hearing time to try to convince the Tribunal that CALICA's quarrying activities caused environmental harm, invoking the conclusions of SEMARNAT's so-called "*Dictamen*."[143] But the Hearing confirmed in at least three ways that the *Dictamen* was a hit job designed to lend *post-hoc* support to Mexico's counterclaim and give a technical veneer to President López Obrador's predetermined conclusions.

59. *First*, the timing of the *Dictamen* is telling. The *Dictamen* was commissioned only days after Mexico threatened to file a counterclaim in response to Legacy Vulcan's request for leave to file its ancillary claim.[144] One of the *Dictamen*'s authors, Adrían Pedrozo, and Mexico's expert, Carlos Rábago, acknowledged at the Hearing that the *Dictamen* was completed in record time; in less than a month.[145] Mr. Pedrozo also acknowledged that the *Dictamen* was personally commissioned by María Luisa Albores, head of SEMARNAT, whom President López Obrador

[139] Investment Agreement (6 August 1986) (C-0010-SPA.49, 57).

[140] Tr. (English), Day 1, 232:10-18 ([redacted] cross-examination). *See also* Response to Tribunal Question No. 7 (on [redacted] testimony regarding extraction rates and useful life).

[141] *See also* Response to Tribunal Question No. 6 below (assuming that the Investment Agreement had a 25-year term).

[142] Mexico also alleges that CALICA breached other provisions of the 1986 Investment Agreement, but this allegation has been debunked in Legacy Vulcan's pleadings. *See* Reply (Ancillary Claim), Part II.C.2.

[143] *E.g.*, Tr. (Spanish) Day 1, 141:6-142:22 (Respondent's Opening).

[144] *See* Claimant's Opening (CD-0007.47) (showing the Dictamen was commissioned three days after Mexico announced its intent to file a counterclaim); Tr. (English), Day 1, 31:5-11 (Claimant's Opening); *see also* Mexico's Response to the Claimant's Request for Provisional Measures and Leave to File an Ancillary Claim, ¶¶ 130, 169; SEMARNAT, *Desastre Ambiental Violatorio del Derecho Humano a un Medio Ambiente Sano* (18 August 2022) (C-0235-SPA.17).

[145] Tr. (Spanish), Day 4, 1091:8-14 ("[Claimant's Counsel]: ¿Usted sabe que México elaboró el dictamen entre el 29 de mayo y el 24 de junio de 2022? // [Rábago]: Sí. // [Claimant's Counsel]: Es decir, tardó 26 días en elaborar ese dictamen. ¿Correcto? // [Rábago]: Sí, eso parece."); Tr. (Spanish), Day 3, 703:1-7 ("[Claimant's Counsel]: El dictamen comenzó a elaborarse el 29 de mayo de 2022. ¿Recuerda eso?// [Pedrozo]: Alrededor de esa fecha, sí. // [Claimant's Counsel]: Y se completó en poco menos de un mes. ¿Correcto? // [Pedrozo]: Sí, tuvimos alrededor de un mes para elaborarlo.").

instructed to halt CALICA's remaining operations.[146] It is no coincidence that the *Dictamen's* laundry list of alleged environmental misdeeds echo the President's own allegations dating back months before the *Dictamen* was completed on 24 June 2022.[147]

60. *Second*, the Hearing exposed that the *Dictamen* was not a serious technical exercise but rather part of a governmental campaign against CALICA outside the bounds of due process. Mr. Rábago confirmed that the *Dictamen* "is not part of any administrative proceeding."[148] [redacted] agreed, explaining why this was irregular:

> [E]ste dictamen desde un punto de vista legal es irregular y fuera de todo procedimiento [...] Yo reconozco que las autoridades pueden investigar, en general, la actividad de un sector industrial o las afectaciones en una región en particular. Pero cuando su investigación se dirige a un particular concreto [...] este particular debe estar involucrado [...][.] [E]ste dictamen no brinda de ninguna manera una garantía de audiencia a CALICA[.][149]

61. SEMARNAT's *Dictamen* publicly branded CALICA a human-rights violator responsible for environmental devastation — accusations Mr. Rábago tried to downplay as mere "lenguaje duro."[150] But, by operating outside administrative procedure, SEMARNAT failed to give CALICA an opportunity to be heard at all in an exercise that led to serious public accusations about the company's environmental record. SEMARNAT did not even notify the company about the *Dictamen*.[151] CALICA learned of its existence through social media.[152]

62. *Third*, the *Dictamen* was shown to be tailored to reach a preordained result and was further debunked at the Hearing. Mr. Pedrozo acknowledged that the *Dictamen*'s water study was designed to ***support*** "the hypothesis [...] that CALICA ***altered*** the regional flows and water

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[146] Tr. (Spanish), Day 3, 703:8-704:9 ("[Claimant's Counsel]: Y ya quedó establecido que SEMARNAT fue la que solicitó esa -- el dictamen y fue la propia secretaria, usted dijo al principio [...] la que intervino para solicitar su ayuda del IMTA. ¿Correcto? // [Pedrozo]: Así es [...] [E]sta solicitud solamente podía provenir por parte de la secretaria. // [Claimant's Counsel]: Y la secretaria de SEMARNAT es María Luisa Albores. ¿Correcto? // [Pedrozo]: Así es. // [Claimant's Counsel]: Quería señalar una foto en pantalla muy brevemente para confirmar quién es. Corresponde a la imagen en pausa del vídeo que se encuentra en el expediente como prueba C 188, minuto 8, segundo 29. La persona que está sentada a la parte -- al lado izquierdo del presidente López Obrador es la secretaria de SEMARNAT. ¿Correcto? // [Pedrozo]: Así es.").

[147] *See* SEMARNAT, *Desastre Ambiental Violatorio del Derecho Humano a un Medio Ambiente Sano* (18 August 2022) (C-0235-SPA.17).

[148] Tr. (Spanish), Day 4, 1080:6-11 (Rábago direct: "El dictamen de SEMARNAT, como lo he señalado, no forma parte de los expedientes de los procedimientos de impacto ambiental que tiene la SEMARNAT con CALICA ni forma parte de los procedimientos que tiene la PROFEPA con CALICA.").

[149] Tr. (Spanish), Day 3, 775:2-776:4 ([redacted] direct).

[150] Tr. (Spanish), Day 4, 1094:13-1095:9 (Rábago cross-examination).

[151] Witness Statement-[redacted]-Claimant's Ancillary Claim Reply-Fourth Statement-ENG, ¶ 12.

[152] *Id.*

quality through their Project."[153] Accordingly, the *Dictamen* purported to pass judgment on what happened within CALICA's lots without SEMARNAT having even set foot in them. As Mr. Pedrozo admitted, "no medimos absolutamente nada dentro de la cantera," while conceding that accessing the lots would have been ideal.[154] Ms. Tavera acknowledged that SEMARNAT never bothered to seek permission to access CALICA's lots to perform the purported study, even though SEMARNAT did go through the process of seeking permission to access adjacent lots.[155]

63. As Mr. Pedrozo's cross-examination also showed, even his understanding of the circumstances outside CALICA was fundamentally flawed. He insisted that the presence of nitrites downstream of CALICA was directly caused by CALICA's explosives.[156] But Mr. Pedrozo was unaware that the downstream sites he pointed to were next to an animal farm — a fact he admitted could have caused elevated nitrites.[157] Remarkably, Mr. Pedrozo suggested that CALICA could have caused elevated nitrates ***upstream*** of its lots, in a desperate effort to explain away *Dictamen* results that contradicted its anti-CALICA hypothesis.[158] Legacy Vulcan's expert, Dr. Gino Bianchi, countered with what should be obvious: water cannot flow upstream.[159]

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[153] Tr. (Spanish), Day 3, 699:16-701:2 ("[Claimant's Counsel]: [U]stedes en el IMTA, ese trabajo y ese desarrollo, esa planificación se fundó en una hipótesis, y la hipótesis es que CALICA alteró los flujos regionales y la calidad del agua a través de su proyecto. ¿Correcto? // [Pedrozo]: Sí, es correcto. La hipótesis es que la presencia de esta mina en una superficie tan grande con el nivel freático expuesto en diferentes estanques desde luego alteró el flujo regional que se da en esta zona [...] // [Claimant's Counsel]: Y [...] el IMTA se basó en la hipótesis de que había habido alteraciones por parte de lo que CALICA estaba haciendo. ¿Correcto?// [Pedrozo]: Así es. // [Claimant's Counsel]: Y luego aquí dice [...]: 'Con el objeto de probar esta hipótesis, se planearon una serie de muestreos en el territorio para identificar patrones de calidad y cantidad de agua que evidencian las modificaciones de flujos regionales' [...] ¿Ve eso? // [Pedrozo]: Sí. Sí, lo veo."); SEMARNAT, *Dictamen de impactos ambientales derivados del proyecto de extracción industrial de roca caliza a cargo de la empresa Calica (hoy SAC-TUN) en los municipios de Solidaridad y Cozumel, Quintana Roo* (18 August 2022) (C-0237-SPA.49).

[154] Tr. (Spanish), Day 3, 711:1-2 (Pedrozo cross-examination); *id.*, at 709:3-10("[Claimant's Counsel]: Como científico, yo supondría que usted, en planificar idealmente un muestreo sobre los impactos en el agua de una actividad, debería muestrear los -- el agua de ese lugar, ¿no? [...] // [Pedrozo]: Sí, no, estoy totalmente de acuerdo con usted.").

[155] Tr. (Spanish), Day 3, 643:11-17 (Tavera cross-examination).

[156] Tr. (Spanish), Day 3, 707:19-22 ("[Pedrozo]: La explicación que nosotros tenemos para encontrar nitritos en los cenotes alrededor de la mina es que justamente el compuesto más importante que se utiliza en el explosivo[.]").

[157] Tr. (Spanish), Day 3, 725:4-11, 730:15-732:10 (Pedrozo cross-examination).

[158] Tr. (Spanish), Day 3, 726:10-729:5 (Pedrozo cross-examination); *but see* Pedrozo Witness Statement, ¶¶ 23, 26, n.15 (asserting water in CALICA's vicinity flows towards the coast).

[159] Tr. (English), Day 3, 729:7-13 (Dr. Bianchi' direct, explaining Mr. Pedrozo's reasoning is flawed because "Water does not flow uphill.").

64. Like Mr. Pedrozo, Ms. Tavera acknowledged never having entered CALICA's lots.[160] At the Hearing, she did not seem particularly concerned with her "scientific" methodology to assess biodiversity in CALICA's lots: climbing up an electric tower across the highway from those lots to purportedly discern the fauna within them.[161] Ms. Tavera also conceded that her team prepared a Technical Report — ordered by SEMARNAT — on the tourism potential for CALICA's lots.[162] This Report presented CALICA's cenotes and lagoons as tourist attractions and calculated the number of visitors per day a "CALICA-park" could attract and its expected income:

> [Claimant's Counsel]: [U]sted realizó una evaluación económica del potencial turístico del predio. ¿Correcto?
>
> [Tavera]: Correcto. […]
>
> [Claimant's Counsel]: Es decir, lo que usted está pensando es que por ahí se puede invitar a turistas a que vengan y hagan uso de esa zona y se recauden los recursos. ¿Correcto?
>
> [Tavera]: Es correcto, pero este análisis lo hicimos con fines del diagnóstico ambiental y el potencial del sitio.
>
> [Claimant's Counsel]: Correcto […] Aquí [GFTA-0001.112] se hace un análisis de la cantidad de personas que podrían ingresar al sitio turístico con este potencial turístico, y se concluye […] que son aproximadamente 2631 personas [por día] […] ¿Correcto?
>
> [Tavera]: Es correcto.[163]

65. Ms. Tavera's "Technical Report" is in keeping with President López Obrador's plan to take CALICA's properties and convert them into a tourism complex.[164] This Report also served as a further example of Mexico's use of CALICA to divert environmental criticism from the President's Mayan Train project. As Ms. Tavera acknowledged on cross-examination, of all the projects in Mexico, SEMARNAT opted to compare CALICA's purported environmental impacts

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[160] Tr. (Spanish), Day 3, 642:7-13 ("[Claimant's Counsel]: Y usted, para llevar a cabo este cometido [el Dictamen], […] no entró a los predios de la empresa CALICA.// [Tavera]: No. // [Claimant's Counsel]: Y usted nunca ha estado dentro de los predios de CALICA. ¿Correcto? // [Tavera]: Correcto.")

[161] Tr. (Spanish), Day 3, 649:4-17 ("[Claimant's Counsel]: ¿Usted se subió a las torres eléctricas que están en la carretera 307 para poder divisar lo que estaba ocurriendo en CALICA?// [Tavera]: Es correcto. // [Claimant's Counsel]: ¿Y utilizó largavistas o binoculares? ¿Cómo…? // [Tavera]: No, un dron […] // [Claimant's Counsel]: ¿Y se subió entonces a la torre y desde la torre usaron un dron?// [Tavera]: Sí. […]")

[162] Technical Report (GFTA-001.64-113).

[163] Tr. (Spanish), Day 3, 655:7-657:16 (Tavera cross-examination).

[164] Tr. (English), Day 1, 13:17-14:11 (Claimant's Opening: "[President López Obrador] also said that Mexico was making a proposal to convert the Project into a touristic zone. The President reiterated this just days ago, on the July 27th Mañanera, that Mexico wants to convert the CALICA Project into a tourism development, they want to convert the port that you saw during the Site Visit as support for cruise ships."); *see also, e.g.* Transcript of President's Morning Press Conference (27 July 2023) (C-0362-SPA.27); Transcript of President's Morning Press Conference (13 July 2023) (C-0358-SPA.40-41).

against one: the Mayan Train.[165] She admitted this exercise was "uncommon" and aimed at "show[ing] that the impact of the Maya Train is smaller than that of CALICA[.]"[166] SEMARNAT thus used the Technical Report to defend the Mayan Train at CALICA's expense and lend *post-hoc* support to the President's scapegoating of CALICA.[167]

66. Dr. Bianchi also confirmed at the Hearing that the *Dictamen* was a hit job. He showed, for instance, that, "if the Dictamen's water model were to be correct[,] [e]verything except the conservation zone and some of these other conservation areas, […] all the stops that we took, […] would be flooded by several meters of water."[168] Dr. Bianchi illustrated that the *Dictamen* asserts that water is being lost in CALICA's lots through evaporation while nonsensically calculating that El Corchalito ***gains*** water (despite its lagoon being exposed to evaporation) and La Adelita ***loses*** water (despite lacking lagoons).[169] He also demonstrated that the *Dictamen* had several contradictory water-flow models, each designed to support the *Dictamen*'s anti-CALICA hypotheses, as illustrated below. The *Dictamen's* water-flow models are "all over the place."[170]

[165] Tr. (Spanish), Day 3, 659:10-660:9 (Tavera cross-examination, referring to GFTA-001.55).

[166] Tr. (Spanish), Day 3, 662:18-22 ("[Claimant's Counsel]: ¿Es común en México utilizar toda la estructura estatal para hacer este tipo de comparaciones entre una obra pública y una obra privada? // [Tavera]: No, no es común."); *id.* at 660:6-9 ("[Claimant's Counsel]: esta tabla [GFTA-001.55] […] intenta demostrar que el impacto del Tren Maya es menor al impacto de CALICA. ¿Correcto? // [Tavera]: Correcto.").

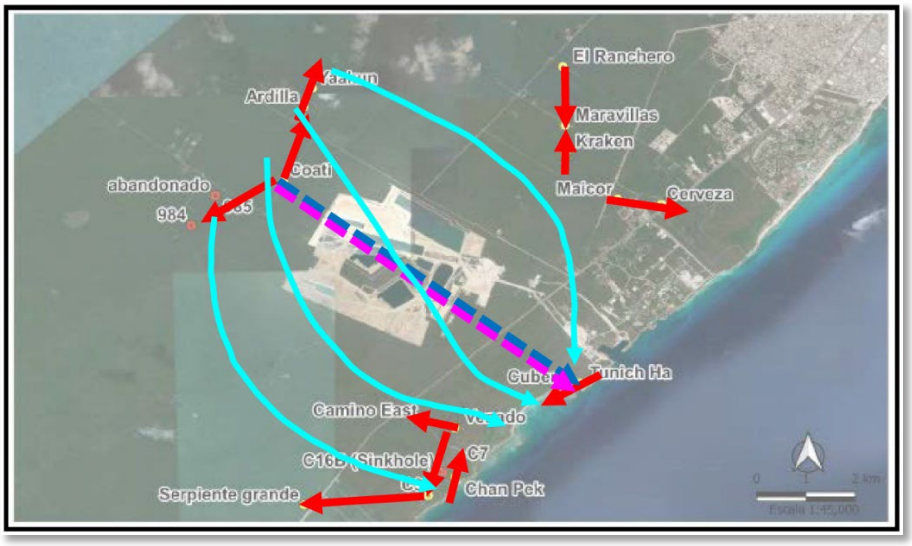
[167] *E.g.*, Claimant's Opening (CD-0007.6-11); Reply (Ancillary Claim), Appendix A, at 40 ("Resulta que los ambientalistas que no quieren el Tren Maya en esa zona no vieron lo de la destrucción de Vulcan, de la empresa estadounidense, que ya estamos terminando de hacer todo el estudio para mostrarles la destrucción tremenda que causaron[.]"); *id.*, at 10-11, 15-17, 26.

[168] Tr. (English), Day 3, 726:1-8 (Bianchi direct).

[169] Tr. (English), Day 3, 730:11-731:9 (Bianchi direct); *see also* Tr. (Spanish), Day 3, 733:6-737:19, 735:18-737:19 (Pedrozo cross-examination, addressing the *Dictamen*'s water-loss modeling, which Mr. Pedrozo acknowledged was "uncertain").

[170] Tr. (English), Day 3, 728:22-729:1 (Bianchi direct).

Figure 5 - Inconsistent Water Flow Models in the Dictamen[171]



67. At the Hearing, Dr. Bianchi also confirmed that biodiversity in CALICA's lots is adequate, even under Ms. Tavera's proposed standard. As she stated during her testimony, "si ustedes vieron jaguares o pumas dentro de este territorio [durante la Visita *in situ*] podríamos decir que tenemos buen estado de conservación."[172] Dr. Bianchi presented uncontroverted evidence of dozens of sightings of both jaguars and pumas,[173] thereby showing — in Ms. Tavera's words — "buen estado de conservación" in CALICA's lots.

68. Importantly, Ms. Tavera acknowledged that the quarrying activities that the *Dictamen* censures were all anticipated by CALICA in the 1986 environmental impact statement, as well as evaluated and authorized by competent authorities.[174] Answering the Tribunal's questions, Ms. Tavera acknowledged that CALICA quarried limestone following the process and

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[171] Bianchi Direct Presentation (CD-0011.49).

[172] Tr. (Spanish), Day 3, 609:18-20 (Tavera direct).

[173] Tr. (English), Day 3, 732:20-733:12 ("[Bianchi]: If the information available from CALICA had been reviewed, one would have seen that there are cameras throughout the four lots that show numerous types of animals detected, including these tope species, 'tope' meaning predator species,[…] and according to Biologist Tavera this morning, that's an indication of a good state of conservation[…]. You have a jaguar that is observed not just in La Adelita but throughout Corchalito, La Rosita, and Punta Venado. […] [S]imilarly with the puma or the cougar. All of these are seen throughout the facility."); Bianchi Direct Presentation (CD-0011.63-64).

[174] Tr. (Spanish), Day 3, 631:1-15 ("[Claimant's Counsel]: Acá [Manifestación de Impact Ambiental de 1986] vemos que la empresa manifiesta que: 'Con la excavación del material se formarán grandes lagunas[…]'. ¿Lo ve? // [Tavera]: Sí. // [Claimant's Counsel]: Es decir, acá la empresa declaró y manifestó la formación de grandes lagunas. ¿Correcto? // [Tavera]: Correcto. // [Claimant's Counsel]: Y estos fueron los impactos que la SEDUE analizó y luego autorizó. ¿Correcto? // [Tavera]: Es correcto."); *id.*, at 630:9-16 ("[Claimant's Counsel]: Aquí [C-0010-SPA.37] vemos entonces que […] se manifiesta a la autoridad la profundidad de […] algunas de las excavaciones. ¿Correcto? // [Tavera]: Correcto. // [Claimant's Counsel]: También vemos que se manifiesta el desmonte que se llevaría a cabo. ¿Correcto? // [Tavera]: Correcto.").

methodology CALICA had proposed to use to environmental authorities in its environmental impact statement, and conceded that the *Dictamen's* criticisms were inherent to open-pit quarrying.[175] In answer to the Tribunal's questions, Mr. Rábago agreed that "en la práctica no hay un estudio de si CALICA ha operado bien o mal la cantera. Es un problema de una cantera frente a selva virgen."[176] The Hearing thus illustrated that Mexico's allegations of environmental harm boil down to the wholesale opposition to quarrying at the very sites that Mexico authorized CALICA to quarry decades ago.[177]

69. In sum, the Hearing further revealed that Mexico's allegations of environmental harm and supposed breaches of the 1986 Investment Agreement are baseless, pretextual and, in any event, immaterial to the shutdown of La Rosita. These allegations should not distract from the core fact animating this ancillary-claim proceeding: Mexico arbitrarily shut down La Rosita for political reasons, invoking pretextual grounds without providing Legacy Vulcan due process.

C. THE HEARING CONFIRMED THAT LEGACY VULCAN IS ENTITLED TO THE COMPENSATION IT IS SEEKING.

70. The evidence presented at the Hearing confirmed that Legacy Vulcan is entitled to full reparation of the losses claimed in its briefs.[178] The Hearing demonstrated that (1) Brattle's valuation correctly measures the loss in fair market value of Legacy Vulcan resulting from the loss of CALICA's remaining reserves in Mexico; (2) Legacy Vulcan has met its burden of proving its substantial damages, as measured by lost future cash flows; and (3) Mexico's alternative valuations rely on flawed premises and yield fundamentally implausible results.

1. The Lost Value of CALICA, Including Its Reserves, Is Measured by the Loss in Legacy Vulcan's Fair Market Value.

a) CALICA Provided Unique Value to Legacy Vulcan.

71. The Hearing further showed the substantial value that CALICA and access to its reserves provided to Legacy Vulcan. [redacted], testified that "the competitive value of the CALICA quarry" was driven by "four items": first, "the unique geology of the CALICA deposit," which has a "specific gravity that is significantly lighter than other

[175] Tr. (Spanish), Day 3, 673:5-674:6 (Tavera addressing Tribunal questions); *see also id.* at 636:15-637:11 ("[Prof. Tawil]: [U]sted dice que para sacar piedra caliza había que hacer explotar esa parte del suelo. ¿Había otra manera de sacar piedra caliza, o el problema es que se autorizó a extraer piedra caliza?//[Tavera]: No soy la autoridad competente para este comentario en particular [...]// [Prof. Tawil]: Okay. El problema podría ser que se está explotando piedra caliza.// [Tavera]: Sí. [...]").

[176] Tr. (Spanish), Day 4, 1119:20-1120:2 (Rábago addressing Tribunal questions).

[177] *See* Claimant's Response on Counterclaim, ¶ 46.

[178] *See* Memorial (Ancillary Claim), ¶ 185; Reply (Ancillary Claim), ¶ 281.

competitive products."[179] "[F]rom a geologic standpoint, it allows [Vulcan] to have a very low-cost deposit but a vast amount of reserves."[180] Second, "the quarry itself is a low-cost operation that is fully automated," making it "quite efficient as a low-cost producer."[181] Third, the vessels are "a very low-cost method" of transportation relative to barge, rail, and truck transportation, [redacted]."[182] Finally, the ability to "unload into [Vulcan's] yard network that is across the Gulf Coast" provides a "strategic advantage of locale to the growth markets that are on the coastal area [of the United States]."[183] [redacted] explained that these items "make[] the CALICA business one of the most profitable businesses that we have, when it was operating."[184]

72. Mexico's own witness, Ms. Tavera, conceded that CALICA has "high-quality" rock with valuable chemical and geological properties.[185] This is consistent with the unrebutted testimony of [redacted], that "CALICA aggregates have superior qualities that distinguish them from other products in the market."[186] Mexico's damages experts elected to ignore [redacted] evidence, purportedly because it was not "marketing or sales material."[187] [redacted] supporting documents clearly show, however, that CALICA's "limestone deposit has specific clay properties with a P.I. that makes it attractive to meet multiple states' Department of Transportation (DOT) requirements"[188] — as [redacted] noted, "[n]ot all quarries are able to meet th[ese] standard[s]."[189] [redacted] also submitted company documents showing why CALICA aggregates have unique chemical properties that make them "especially well suited for projects requiring corrosion-resistant concrete."[190]

[179] Tr. (English), Day 2, 263:20, 264:1-12 ([redacted] direct).
[180] Tr. (English), Day 2, 264:11-12 ([redacted] direct).
[181] Tr. (English), Day 2, 264:13-20 ([redacted] direct).
[182] Tr. (English), Day 2, 265:3-13 ([redacted] direct).
[183] Tr. (English), Day 2, 265:14-17 ([redacted] direct).
[184] Tr. (English), Day 2, 263:8-265:21 ([redacted] direct).
[185] Tr. (Spanish), Day 3, 653:12-22 (Tavera cross-examination) ("[Claimant's counsel]: Cuando usted habla acá de caliza de alta calidad se refiere a las propiedades químicas y geológicas de esa roca. ¿Correcto? // [Tavera]: Correcto.").
[186] Tr. (English), Day 1, 59:20-21 (Claimant's Opening); Claimant's Opening (CD-0007.92).
[187] Tr. (English), Day 5, 1174:3-1175:6 (Hart and Vélez cross-examination).
[188] Witness Statement-[redacted]-Claimant's Ancillary Claim Reply-ENG, ¶ 10.
[189] *Id.*
[190] *Id.*, ¶ 11; *see also id.*, ¶ 10.

b) Legacy Vulcan Invested in an Integrated Network to Access and Sell the CALICA Reserves.

73. The Hearing also underscored that CALICA is part of a vertically-integrated business network that includes Vulica (for shipping products) and the U.S. Yards (for distributing them). [redacted] testified that each component of the CALICA Network [redacted] and that "[t]he uniqueness of the CALICA business and network is that [it] operate[s] under the value proposition of the netback margins [redacted]."[191] This is also reflected in how the businesses "share management."[192] [redacted]"[193]

74. The integrated nature of the CALICA Network cannot therefore be reasonably disputed after the Hearing; it is at the core of CALICA's export-driven business. [redacted] explained that Legacy Vulcan [redacted] For that reason, the CALICA business has been "from the outset an integrated, export-driven business, designed to generate the maximum possible value from the CALICA reserves."[195] [redacted] As Brattle explained, "[t]he CALICA aggregates were very successful in the Gulf Coast markets primarily because of their significant competitive advantage,"[197] confirming that their "highest and best use" is serving the U.S. Gulf Coast market.[198]

[191] Tr. (English), Day 2, 272:13-14, 272:22-273:2 ([redacted] cross-examination).

[192] Tr. (English), Day 2, 271:18 ([redacted] cross-examination).

[193] Tr. (English), Day 2, 271:6-272:10 ([redacted] cross-examination).

[194] Tr. (English), Day 2, 277:22-278:4, 278:22-279:2 ([redacted] cross-examination).

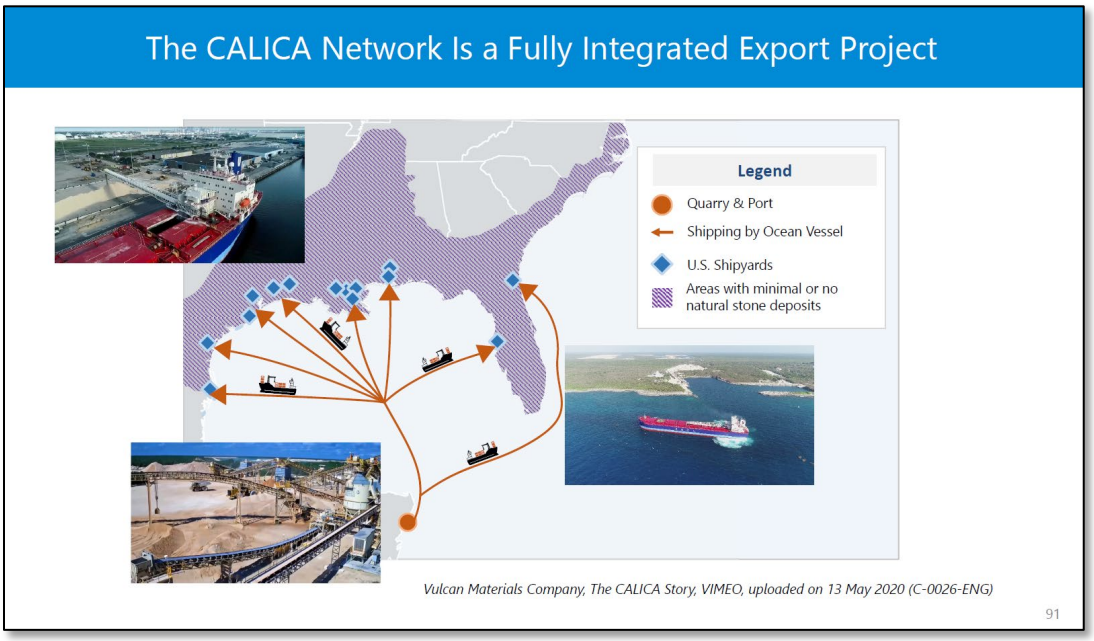
[195] Tr. (English), Day 1, 59:7-10 (Claimant's Opening).

[196] Tr. (English), Day 1, 59:12-15 (Claimant's Opening).

[197] Tr. (English), Day 4, 969:1-3 (Brattle direct).

[198] *See* Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-Fourth Expert Report-ENG, § III.C; *id.*, ¶ 37.

Figure 6[199]



75. The Hearing further confirmed that this has been the case since the Project's inception. A 1987 VMC press release noted that "[u]se of these large, highly efficient, deep-draft vessels, which will have a carrying capacity of approximately 60,000 tons, *is expected to yield significant cost savings over other methods of transporting aggregates into these coastal areas*."[200] [redacted] confirmed this, testifying that the return on the company's investment in the vessels is assessed based on "the overall performance of the business as we reviewed the netback margin."[201] [redacted]

[199] Claimant's Opening (CD-0007.91).

[200] Claimant's Opening (CD-0007.113) (citing Vulcan Materials Co., Press Release (15 July 1987) (C-0330-ENG.2)) (emphasis added).

[201] Tr. (English), Day 2, 283:3-6. ([redacted] cross-examination: "[I]f we're looking at this with regard to investments, it's the overall performance of the business as we reviewed the netback margin.").

[202] Tr. (English), Day 2, 283:6-9 ([redacted] cross-examination).

[203] Tr. (English), Day 2, 315:3-10 ([redacted]

76. Legacy Vulcan's investments to sell CALICA reserves for their highest and best use were also confirmed by [redacted], "the underlying economics [of which] remain relevant," as [redacted] explained.[204] [redacted]

c) Brattle's Valuation Deducts the But-For FMV of Vulica and the U.S. Yards.

77. Mexico continued to misrepresent Legacy Vulcan's damages claim in an effort to restrict damages to losses incurred in Mexico. For example, Ms. Vélez asserted at the Hearing that "Mr. Chodorow's testimony that the value of the CALICA Network is equal to the value of CALICA is incorrect."[209] But this misrepresents Brattle's analysis. As Dr. Núñez explained at the Hearing, Brattle's valuation starts "with the but-for Fair Market Value of the CALICA Network," and then "account[s] for the value of Vulica and the U.S. Yards," assets that "were developed to market CALICA aggregates, but [] have value even without CALICA."[210] After *subtracting* the FMV of Vulica and the U.S. Yards to obtain the but-for FMV of CALICA, Brattle subtracts the actual FMV of CALICA to determine the reduction in FMV of CALICA.[211] "[B]y subtracting the but-for FMV of Vulica and the U.S. Yards from the value of the CALICA Network, [Brattle is] effectively isolating the value of CALICA itself."[212] This is the netback approach, which determines

[204] Tr. (English), Day 2, 308:7-8 ([redacted] cross-examination).
[205] Tr. (English), Day 2, 308:18-309:1 ([redacted] cross-examination).
[206] Tr. (English), Day 4, 966:5-8 (Brattle direct).
[207] Tr. (English), Day 4, 966:18-967:2 (Brattle direct); Brattle Direct Presentation (CD.0012.015).
[208] Tr. (English), Day 4, 966:1-4 (Brattle direct).
[209] Tr. (English), Day 5, 1100:17-19 (Hart and Vélez direct).
[210] Tr. (English), Day 4, 958:3-9, 958:10-13 (Brattle direct).
[211] Tr. (English), Day 4, 959:6-11 (Brattle direct).
[212] Tr. (English), Day 4, 958:20-959:1 (Brattle direct).

the value that CALICA reserves can create for Legacy Vulcan or another hypothetical buyer of that asset.[213]

78. In fact, Mr. Hart conceded that a Buyer would consider "how they can make profit with their apparatus being their transport network, distribution network that sits away from the resource."[215] He testified that the quarry is "an offshore resource, no different than [...] a coal mine [or] an oilfield," and the question is "what's the oil worth there at the port, and that commodity goes offshore."[216] This is consistent with Brattle's use of the netback methodology to determine the value of the "strategically located, high quality reserves" that are the main asset of CALICA and thus Legacy Vulcan.[217] They do that by "looking at the actual Sales Price from the yards, and then [] *deduct[ing]* off the costs for operating the U.S. Yards, shipping the product, and the production at the quarry."[218]

79. Brattle's damages approach takes one final step, by "tak[ing] into account that Legacy Vulcan is able to replace a small portion of the profits lost because of CALICA['s shutdown]

[213] Tr. (English), Day 1, 61:13-15 (Claimant's Opening).
[214] Brattle Direct Presentation (CD-0012.030).
[215] Tr. (English), Day 5, 1168:1-5 (Hart and Vélez cross-examination).
[216] Tr. (English), Day 5, 1168:5-9 (Hart and Vélez cross-examination).
[217] Tr. (English), Day 4, 977:2-8 (Brattle direct).
[218] Tr. (English), Day 4, 977:9-13 (Brattle direct) (emphasis added).

with supplies from inland quarries."[219] Brattle "account[s] for that mitigation as [] show[n] by the yellow box" below to obtain the reduction in FMV of Legacy Vulcan.[220]

2. Legacy Vulcan Has Proven Its Substantial Losses.

80. The Hearing confirmed that CALICA was a highly-profitable business and that the shutdown of its remaining operations caused Legacy Vulcan substantial losses. Historically, the CALICA Network generated [redacted]. [222] Even in its worst-performing year during COVID, the CALICA Network still generated [redacted] [223]

[219] Tr. (English), Day 4, 959:13-16 (Brattle direct).
[220] Tr. (English), Day 4, 959:16-17 (Brattle direct).
[221] Brattle Direct Presentation (CD-0012.003).
[222] Tr. (English), Day 1, 67:13-22 (Claimant's Opening).
[223] *See* Claimant's Opening (CD-0007.105), Figure 9 below.

[redacted]

81. Mexico's shutdown of CALICA's remaining operations eliminated that source of earnings, leading VMC to disclose a potential US$80 to US$100 million adverse impact on its 2022 EBITDA guidance.[225] As [redacted], explained, this was consistent with SEC disclosure rules for earnings guidance.[226] [redacted] testified about how the company estimated the expected 2022 EBITDA impact of US$80-100 million. [redacted]

82. The evidence at the Hearing also confirmed that the Company's expectation was fulfilled. [redacted]

[224] Claimant's Opening (CD-0007.105).

[225] Witness Statement-[redacted]-Claimant's Ancillary Claim Reply-ENG, ¶ 17; *see* Reply (Ancillary Claim), ¶ 227.

[226] Witness Statement-[redacted]-Claimant's Ancillary Claim Reply-ENG, ¶ 17.

[227] Tr. (English), Day 2, 322:3-6 ([redacted] direct).

[228] Tr. (English), Day 2, 322:6-11 ([redacted] direct).

[redacted] also testified to the impact on the company: "Legacy Vulcan loses its competitive advantage in trying to fulfill CALICA customers' orders with alternative domestic sources."[230] In other words, "the ability to maintain the lost tons [caused] by the closure of CALICA, is minimal, and you certainly can't replace the profitability."[231]

83. Brattle validated these conclusions at the Hearing, [redacted]

84. The evidence at the Hearing further demonstrated why Legacy Vulcan has been unable to mitigate the losses caused by Mexico's latest shutdown of CALICA. For instance,

[229] Tr. (English), Day 2, 323:3-6 ([redacted] direct).

[230] Tr. (English), Day 2, 297:21-298:1 ([redacted] cross-examination).

[231] Tr. (English), Day 2, 299:14-16 ([redacted] cross-examination).

[232] Tr. (English), Day 4, 966:18-967:1 (Brattle direct).

[233] Tr. (English), Day 4, 971:10-15 (Brattle direct) (emphasis added); Brattle Direct Presentation (CD.0012.022).

[234] Brattle Direct Presentation (CD-0012.015).

[redacted] testified that without the "competitive advantage" of the CALICA Network, Vulcan was unable to fulfill a large, non-budgeted order [redacted].[235] And while Vulcan "will always try to win work,"[236] it faces stiff competition without the CALICA Network competitive advantage. [redacted]

85. Brattle verified these constraints and explained that, [redacted] For that reason, "[Mexico's] assumption of replacing 100 percent of the volumes from CALICA is unreasonable."[241]

86. Evidence from third-party analysts is consistent with Legacy Vulcan's expectations and Brattle's conclusions. Loop Capital analysis dated 16 May 2022 specifically noted that, even if Vulcan were to "replace some of the lost volume," "the margin on domestic aggregates will be lower due to higher shipping costs as railing or trucking longer distances is traditionally less profitable than Vulcan's well-established long held shipping network including SAC-TUN."[242]

[235] Tr. (English), Day 2, 296:17-297:6 ([redacted] cross-examination).
[236] Tr. (English), Day 2, 298:14-299:5 ([redacted] cross-examination).
[237] Tr. (English), Day 2, 298:14-299:5 ([redacted] cross-examination).
[238] Tr. (English), Day 2, 302:6-10 ([redacted] cross-examination).
[239] Tr. (English), Day 4, 1029:1-7 (Brattle cross-examination).
[240] Tr. (English), Day 4, 1027:10-18 (Brattle cross-examination).
[241] Tr. (English), Day 4, 969:8-10 (Brattle direct).
[242] Tr. (English), Day 5, 1151:11-20 (Hart and Vélez cross-examination, quoting Loop Capital Report (DC-202)).

In addition, financial analysts predicted that "MLM [Martin Marietta] [...] looks to be 'winner' if the SAC-TUN permits are permanently revoked."[243] Mexico challenged none of this evidence.

87. Mexico tried to portray Brattle's approach as unreasonable, with Mr. Hart arguing that "it's not believable that they lose all of their sales due to not being able to get rock from CALICA,"[244] but this is wrong. As Mr. Hart himself acknowledged, Brattle estimated "that [redacted] of lost CALICA sales volumes can be replaced."[245] More importantly, as Mr. Chodorow explained, even where those volumes could be replaced, "the analysis of [redacted] confirms that they were unable to replace the profit margins."[246]

3. Mexico's Alternative Valuation Is Not Credible.

88. The evidence at the Hearing also demonstrated that Mexico's proposed valuation is fundamentally not credible, since the Hart and Vélez model "assumes [one hundred] percent mitigation of lost future sales, including profits."[247] In other words, Hart and Vélez conceded that they assume Legacy Vulcan would have replaced *all* lost CALICA sales and profits with equal sales and profits from other quarries. According to Mr. Hart, this is possible because "[Vulcan] had certainly the capacity in the U.S. to crank up their U.S. facilities."[248] Ms. Vélez similarly conceded that their model assumed "[n]o lost sales, so no lost margin."[249] Hart and Vélez also accepted, "the way the model is set up," they "*effectively value the [CALICA] reserves at zero*."[250]

89. The Hearing illustrated that the Hart and Vélez assumption of 100% mitigation of volumes and profits is fundamentally mistaken and defies basic economic logic. Hart and Vélez conceded that transportation costs can be a significant component of the cost of the product in the aggregates industry and that the per-mile cost of transportation is lower via vessel relative to

[243] Tr. (English), Day 5, 1152:1-4 (Hart and Vélez cross-examination, quoting Loop Capital Report (DC-202)).

[244] Tr. (English), Day 5, 1116:15-17 (Hart and Vélez direct).

[245] Tr. (English), Day 5, 1110:2-4 (Hart and Vélez direct).

[246] Tr. (English), Day 4, 1024:19-22 (Brattle direct).

[247] Tr. (English), Day 1, 72:7-8 (Claimant's Opening).

[248] Tr. (English), Day 5, 1178:22-1179:8 (Hart and Vélez cross-examination: "[T]his is just taking the CALICA volume, which is 5 percent of the volume in the Southern Gulf region, so it's a small percentage. It had certainly the capacity in the U.S. to crank up their U.S. facilities, and we know they, subsequent to the shutdown in September '22, [redacted]. So, yes, their ability to replace what's a reasonably small volume of stone in their network is a perfectly reasonable assumption.").

[249] Tr. (English), Day 5, 1131:17-18 (Hart and Vélez cross-examination).

[250] Tr. (English), Day 5, 1132:11-14 (Hart and Vélez cross-examination); *see also id.*, at 1179:9-12 ("[Claimant's Counsel]: So, again, the value of the lost Reserves, in your view, in your base CALICA Network model, would be zero? [Hart]: Yes.").

truck or rail.[251] Yet they acknowledged that their model does not account for the lower transportation costs associated with ocean vessel shipping, since they assume "that the margin would remain constant in what you sold if you're passing through the transportation costs to your customer."[252] They assume that "*all* transportation costs are passed through to customers in the [s]ales [p]rice."[253] Hart and Vélez also confirmed that they even applied this full-replacement assumption to CALICA volumes sold *in Mexico*[254] — despite having conducted no analysis of how those local sales could be replaced and being aware that Legacy Vulcan has no other quarry in Mexico.[255]

90. Hart and Vélez's 100% mitigation assumption defies economic logic because "[i]f Vulcan were to raise its prices to cover higher transportation costs from alternative quarries, then it would lose sales to competitors."[256] Also, "if Vulcan had some power to raise prices [] without losing to competitors, it would have already [] done so."[257] The 100% mitigation assumption also is plainly inconsistent with Vulcan's disclosures to shareholders, Loop Capital's assessment, and Brattle's findings [redacted], discussed above.[258]

91. Further defying basic economic logic, Hart and Vélez conceded that their model "treats the [redacted] tons in inventory exactly as [it treats] the reserves that have yet-to-be-quarried."[259] In other words, they made *no* adjustments to CALICA's cost of sales to account for the substantial inventories for which production costs had already been incurred — an oversight that has a [redacted] impact on damages.[260] Indeed, Mr. Hart recognized that the lost

[251] Tr. (English), Day 5, 1137:17-19 ("[Claimant's Counsel]: But it can be a significant part of the cost of the product; is that right? [Vélez]: It can be, I would assume."); *id.*, at 1140:11-14 ("[Claimant's Counsel]: Let me ask you this again: Do you understand that transportation by vessel is significantly cheaper than by truck or by rail? Is that right?"); *id.*, at 1141:3 ("[Hart]: In the abstract, yes.").

[252] Tr. (English), Day 5, 1149:11-14 (Hart and Vélez cross-examination).

[253] Tr. (English), Day 5, 1161:11-15 (Hart and Vélez cross-examination) (emphasis added).

[254] Tr. (English), Day 5, 1161:21-1162:5 (Hart and Vélez cross-examination).

[255] Tr. (English), Day 5, 1163:7-10 ("[Claimant's Counsel]: Do you know how those tons are going to be replaced or could be replaced? [Vélez]: No, we have not done that analysis.").

[256] Tr. (English), Day 4, 969:20-22 (Brattle direct); Brattle Direct Presentation (CD-0012.020).

[257] Tr. (English), Day 4, 970:3-5 (Brattle direct); Brattle Direct Presentation (CD-0012.020).

[258] *Supra* Part II.C.2.

[259] Tr. (English), Day 5, 1159:18-22 ("[Claimant's Counsel]: Let me ask that again. Do you treat the 4.1 million tons in inventory exactly as you would treat the reserves that have yet-to-be quarried? [Vélez]: Mathematically, there is no adjustment to be made.").

[260] Tr. (English), Day 5, 1159:4-9 ("[Claimant's Counsel]: So, you make no adjustments to CALICA's cost of sales in your CALICA Network DCF to account for the fact that CALICA was holding those 4.1 million tons of aggregates in its inventories at the time of the shutdown; is that right? [Vélez]: That is correct."); *id.*, at 1161:4-5 (Hart and Vélez cross-examination).

profits associated with a ton of aggregates that has already been produced would be higher than on a ton of aggregates not-yet quarried;[261] yet their analysis fails to account for this.

92. The transfer price is another significant error in the Hart and Vélez analysis, compounding their fundamentally implausible valuation. Mr. Hart admitted that the products that CALICA exports are higher value than the products generally sold into the local Mexican market: "a Buyer would purchase CALICA and [redacted] the majority has been shipped to the United States."[262] Although Ms. Vélez tried to equate the transfer price to a market price, she conceded on cross-examination that they "ha[d] not investigated" whether the transfer price was really a market price.[263] In fact, as discussed in the response to Question No. 9 below, had Hart and Vélez investigated the issue, they would have found that the market price for exports is much higher than the local price.[264]

93. Not only did Hart and Vélez fail to investigate the issue; they failed to check the evidence reflected in their own presentation, which shows that it is implausible to equate transfer prices with market price. As the Tribunal observed during the Hearing, the Hart/Vélez model paradoxically assumed a ***lower*** sales price for CALICA's exports than for the lower-quality products sold locally, as illustrated in Figure 11 below.[265] This makes no sense. Mr. Hart himself acknowledged that [redacted]

[261] Tr. (English), Day 5, 1156:6-1158:8 (Hart and Vélez cross-examination).

[262] Tr. (English), Day 5, 1164:8-13 (Hart and Vélez cross-examination).

[263] Tr. (English), Day 5, 1125:18-19 (Hart and Vélez addressing Tribunal questions).

[264] *See infra* Response to Tribunal Question No. 9.

[265] *See* Tr. (English), Day 5, 1123:19-1125:20 (Hart and Vélez direct); *id.* at 1185:12-1188:13 (Hart and Vélez addressing Tribunal questions).

[266] Tr. (English), Day 5, 1164:8-13 (Hart and Vélez cross-examination) (emphasis added); *see also id.* at 1186:12-21 (Hart and Vélez addressing Tribunal questions, stating that the sales in Mexico are "a lower-value product").

94. All of these flawed inputs yield a fundamentally implausible valuation that is squarely contradicted by actual performance data before the breach. As described above, CALICA was a highly-profitable business that consistently generated substantial earnings for Legacy Vulcan.[268] Mr. Hart conceded that he thinks "a 2022 EBITDA of [redacted] would have been more reasonable than the [redacted] that was budgeted by the Company."[269] But he refused to engage with the clear inconsistency between the company's *actual* EBITDA of [redacted] and his assumed full-year EBITDA of [redacted], claiming that the [redacted] is "not an actual EBITDA. That's a calculated number by Brattle, which we disagree with."[270] But that is demonstrably false. The CALICA Network's EBITDA is a real-world figure derived from Vulcan's internal accounting system, [redacted].[271] It is the same figure shown in [redacted]-0006, which pulls the EBITDA for [redacted].[272] And it is the same figure Vulcan used to calculate its earnings impact

[267] Hart and Vélez Direct Presentation (RD-0009.11).

[268] *Supra* ¶¶ 80-81.

[269] Tr. (English), Day 5, 1180:2-9 ("[Claimant's Counsel]: So, based on your assessment of CALICA's financial performance, prior to the Valuation Date, you think a 2022 EBITDA of 37 million would have been more reasonable than the 110 million that was budgeted by the Company; is that right? // [Hart]: I do, with the declining performance of the CALICA quarry, that that's what our calculations show.").

[270] Tr. (English), Day 5, 1182:13-15 (Hart and Vélez cross-examination).

[271] *See* CALICA Network EBITDA Data from 2014-2022 ([redacted]-0020).

[272] Sac Tun Supply Chain EBITDA from Longview.xlsx ([redacted]-0006).

disclosure to investors.[273] By ignoring the real-world evidence showing that the CALICA Network's profitability is far higher than the EBITDA implied in Hart and Vélez's DCF, Hart and Vélez failed to put forward a plausible alternative valuation that could credibly reflect the CALICA Network's value or the resulting damages to Legacy Vulcan. As shown below in Figure 12, the Hart and Vélez valuations are squarely inconsistent with the CALICA Network's actual historical and expected performance.

D. THE HEARING CONFIRMED THAT THE TRIBUNAL LACKS JURISDICTION OVER MEXICO'S COUNTERCLAIM.

95. Finally, the Hearing confirmed that Mexico's counterclaim is nothing more than a baseless distraction from Mexico's own wrongful conduct, and that Mexico has failed to meet any of the conditions necessary for the Tribunal to have jurisdiction over it.[275] Legacy Vulcan showed that Mexico's counterclaim is also barred because it is untimely, as explained further in the answer to the Tribunal's Question No. 12, and because Mexico failed to comply with the waiver requirements of NAFTA Article 1121.[276] Mexico completely ignored these objections at the

[273] *See* Witness Statement-[redacted]-Claimant's Ancillary Claim Reply-ENG, ¶ 19.

[274] Claimant's Opening (CD-0007.114).

[275] Tr. (English), Day 1, 172:16-182:22 (Claimant's Opening on the Counterclaim).

[276] Tr. (English), Day 1, 179:17-182:22 (Claimant's Opening on the Counterclaim); *see also* Response on Counterclaim, Parts III.A.4, IV.

Hearing, and they stand undisputed and unrebutted. For these reasons, the Tribunal should dismiss Mexico's counterclaim and order Mexico to pay all costs and expenses associated with this wasteful litigation tactic.

III. LEGACY VULCAN'S ANSWERS TO THE TRIBUNAL'S QUESTIONS.

A. QUESTION NO. 1(A)

In ¶ 150 of Procedural Order No. 7, the majority of the Tribunal considered the ancillary claim to be "within the scope of consent of the Parties and within the jurisdiction of ICSID". In ¶ 157 of the same Order, the majority also confirmed that the "consideration of the ancillary claim [would] be carried out respecting due process for both sides, including at a minimum further written submissions and evidence, and not based on the observations made to date". Can any of these findings be revised in light of the arguments regarding the USMCA raised by Respondent and by Claimant subsequent to the issuance of Procedural Order No. 7?

96. The Tribunal's finding in PO No. 7 that the ancillary claim is "within the scope of consent of the Parties and within the jurisdiction of ICSID" is correct and should not be reconsidered because (i) Mexico cannot unilaterally withdraw its consent once it has been perfected, and (ii) the Parties have agreed that NAFTA is the law applicable to the ancillary claim. The principle of *res judicata* also counsels against revising the Tribunal's findings in PO No. 7.

97. The ancillary claim is "within the scope of consent of the Parties" because such consent was perfected when Legacy Vulcan accepted Mexico's standing offer to arbitrate under NAFTA. Legacy Vulcan's consent is recorded in its Notice of Intent to Submit a Claim, stating that "Legacy Vulcan and Calica hereby consent to submit to ICSID arbitration, pursuant to Article 1121 of NAFTA, the disputes described herein and any other disputes that have arisen or may arise in the future between the parties."[277] Legacy Vulcan re-affirmed its consent when it sought leave from the Tribunal to submit the ancillary claim in this proceeding.[278] Because Legacy Vulcan perfected the Parties' consent to arbitrate the ancillary claim with its submission of the dispute to arbitration, "no party may withdraw its consent unilaterally" in accordance with Article 25(1) of the Convention. This perfected consent is therefore not altered by Mexico's introduction of jurisdictional objections based on the USMCA.[279]

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[277] Notice of Intent (3 September 2018) (C-0007-SPA). *See also*, Consent/Waiver Letter (C-0008-ENG); Request for Arbitration, ¶¶ 24, 28 (emphasis added).

[278] Claimant's Request for Provisional Measures and Leave to Submit an Ancillary Claim, ¶¶ 45-46; Claimant's Reply on Request for Provisional Measures and Leave to Submit an Ancillary Claim, ¶¶ 20-36.

[279] Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab , ¶¶ 7-11, 24-25; *see also* Claimant's Request for Provisional Measures and For Leave to Submit an Ancillary Claim, ¶ 45.

98. Mexico also ratified its consent in its submissions that "*the text of the NAFTA establishes the scope of Respondent's consent to arbitration*" of the ancillary claim,[280] and that the Tribunal's jurisdiction over the ancillary claim was determined by Mexico's "consent to arbitration, which is subject to compliance with the requirements and formalities *provided for in NAFTA*."[281] These statements confirm Mexico's agreement that NAFTA governs the Tribunal's jurisdiction over the ancillary claim. The Parties' agreement on this point is further confirmed by Mexico's repeated acknowledgement in this arbitration that NAFTA applies to measures and events that occurred *after* the entry into force of the USMCA.[282]

99. Further, by explicitly agreeing that its consent to arbitrate the ancillary claim is governed by NAFTA, Mexico necessarily agreed that — if the Tribunal found the ancillary claim fell within the scope of that consent, as the Tribunal did in PO No. 7 — NAFTA is the law applicable to the issues in dispute.[283] In particular, NAFTA Article 1131(1) requires this Tribunal to "decide the issues in dispute in accordance with *this Agreement* and applicable rules of international law."[284] Article 42(1) of the ICSID Convention, in turn, requires the Tribunal to "decide a dispute in accordance with such rules of law as may be agreed by the Parties"[285] — here NAFTA. This Tribunal is therefore bound to apply NAFTA as the chosen law of the Parties under both NAFTA and the ICSID Convention. Failure to do so constitutes grounds for annulment.[286]

100. Mexico's delayed reliance on the USMCA to argue that there is no jurisdiction over the ancillary claim thus fails.[287] Tribunals have rejected attempts by respondents to defeat jurisdiction by seeking to withdraw or artificially limit their consent after it has been perfected,

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[280] Mexico's Rejoinder on the Claimant's Request for Provisional Measures and Leave to File an Ancillary Claim, ¶ 69 (free translation, the original reads: "En este sentido, el texto del TLCAN establece el alcance del consentimiento de la Demandada al arbitraje.") (emphasis added).

[281] Mexico's Response to the Claimant's Request for Provisional Measures and Leave to File an Ancillary Claim, ¶ 3 (free translation, the original reads: "el consentimiento del Estado para someterse al arbitraje, el cual se sujeta al cumplimiento de requisitos y formalidades que prevé el TLCAN") (emphasis added).

[282] Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, ¶¶ 20-22; Reply, ¶¶ 166, 170.

[283] *See* Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, ¶¶ 18-19 (explaining that express choice of law provisions are set forth in NAFTA Articles 1116(1), 1117(1), and 1131(1), which require that NAFTA apply to all disputes falling within the Parties' scope of consent).

[284] NAFTA, Art. 1131(1) (Governing Law) (C-0009-SPA) (emphasis added).

[285] ICSID Convention, Art. 42(1) (C-0129-ENG) (emphasis added).

[286]Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, ¶ 28.

[287] Reply (Ancillary Claim), ¶¶ 134-137; Legacy Vulcan's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab, ¶¶ 6-31.

holding that Article 25(1) of the ICSID Convention prohibits a party from doing so unilaterally.[288] None of the findings in PO No. 7 can or should be revised by virtue of Mexico having tried to relitigate this issue after issuance of PO No. 7, relying on the USMCA for the first time.

101. Furthermore, a decision by the Tribunal not to revisit its decision in PO No. 7 is consistent with the principle of *res judicata*, a well-established principle of international law.[289] *Res judicata* applies not only to final awards on the merits but also to pre-award decisions addressing questions of jurisdiction,[290] such as PO No. 7, which is a substantive ruling finally settling the question whether the Parties consented to arbitrate the ancillary claim. PO No. 7's finding on jurisdiction over the ancillary claim is clearly a final ruling, "[i]t was not issued *prima facie*."[291] As the tribunal in *Landesbank v. Spain* explained, "a decision on jurisdiction is *res judicata* as regards the matters which it decides."[292] Absent exceptional circumstances, such as the discovery of a new fact that could decisively affect the outcome, a decision dismissing

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[288] *ESPF Beteiligungs GmbH, ESPF Nr. 2 Austria Beteiligungs GmbH and InfraClass Energie 5 GmbH & Co. KG v. Italian Republic*, ICSID Case No. ARB/16/5, Award, ¶ 268 (14 September 2020) (Alvarez (P), Pryles, Boisson de Chazournes) (CL-0268-ENG) ("Arbitration is a consensual but binding dispute resolution mechanism; once consent has been given and the offer to arbitrate accepted, it cannot be unilaterally withdrawn by either party to a dispute."); *Ampal-American v. Egypt*, ICSID Case No. ARB/12/11, Decision on Jurisdiction, ¶ 168 (1 February 2016) (Fortier (P), McLachlan, Vicuña) (CL-0269-ENG) ("Article 25(1) of the ICSID Convention is very clear. The jurisdiction of the Centre is to be assessed at the time that jurisdiction is invoked […]. When jurisdiction has crystallized, 'no Party may withdraw its consent unilaterally,' says plainly Article 25(1).").

[289] *JSC Tashkent Mechanical Plant et al. v. Kyrgyz Republic*, ICSID Case No. ARB(AF)/16/4, Award, ¶ 436 (17 May 2023) (Cremades Sanz-Pastor (P), Born, Douglas) ("[T]he doctrine of *res judicata* is a well-established principle of public international law.") (CL-0288-ENG) (hereafter "*JSC Tashkent v. Kyrgyz Republic* (Award)"); *see also Occidental Petroleum et al. v. Republic of Ecuador*, ICSID Case No. ARB/06/11, Decision on Annulment of the Award, ¶ 394 (2 November 2015) (Fernández-Armesto (P), Oreamuno, Feliciano) (CL-0289-ENG) ("The principle of *res iudicata* […] is […] an important principle of international law.").

[290] *Waste Management v. United Mexican States (II)*, ICSID Case No. ARB(AF)/00/3, Decision of the Tribunal on Mexico's Preliminary Objection concerning the Previous Proceedings, ¶ 45 (26 June 2002) (Crawford (P), Civiletti, Magallón Gómez) (CL-0290-ENG) ("at whatever stage of the case it is decided, a decision on a particular point constitutes a *res judicata* as between the parties to that decision"); *Landesbank Baden-Württemberg et al. v. Kingdom of Spain*, ICSID Case No. ARB/15/45, Decision on the Respondent's Application for Reconsideration of the Tribunal's Decision of 25 February 2019 Regarding the "Intra-EU" Jurisdictional Objection, ¶¶ 34-37 (11 November 2021) (Greenwood (P), Poncet, Clay) (CL-0291-ENG); *RREEF Infrastructure et al. v. Kingdom of Spain*, ICSID Case No. ARB/13/30, Decision on Responsibility and on the Principles of Quantum, ¶ 209 (30 November 2018) (Pellet (P), Nikken, Volterra) (CL-0061-ENG); *JSC Tashkent v. Kyrgyz Republic* (Award), ¶ 437 (CL-0288-ENG).

[291] *Jan Oostergetel and Theodora Laurentius v. Slovak Republic*, UNCITRAL, Final Award, ¶ 135 (23 April 2012) (Kaufmann-Kohler (P), Wladimiroff, Trapl) (CL-0292-ENG).

[292] *Landesbank Baden-Württemberg et al. v. Kingdom of Spain*, ICSID Case No. ARB/15/45, Decision on the Respondent's Application for Reconsideration of the Tribunal's Decision of 25 February 2019 Regarding the "Intra-EU" Jurisdictional Objection, ¶ 37 (11 November 2021) (Greenwood (P), Poncet, Clay) (CL-0291-ENG). *See also JSC Tashkent v. Kyrgyz Republic* (Award), ¶ 439 (CL-0288-ENG) ("It is undisputed that a ruling upholding a jurisdictional objection has res judicata effect. It would in the Tribunal's view be illogical to deny the same quality to a ruling which dismisses an objection simply because it is contained in a decision rather than an award.").

objections to jurisdiction is *res judicata* and should not be reconsidered.[293] As the tribunal in *JSC Tashkent v. Kyrgyz Republi*c explained, this conclusion results even where a party raises new jurisdictional objections after the question of jurisdiction has already been decided:

> The language of the Decision on Bifurcated Preliminary Objections is clearly that of a final ruling, therefore, the Tribunal concludes that it constitutes *res judicata*. *The Tribunal does not consider that this conclusion is altered by the fact that the jurisdictional objections now asserted by the Respondent were not asserted or addressed in the preliminary phase of this arbitration*. In the Tribunal's view, the doctrine of *res judicata* applies to claims or objections that could have been raised or asserted in an earlier proceeding, but were not. Here, there is no question but that the Respondent's present jurisdictional objections could have been asserted previously. The fact that they were not does not alter application of the doctrine of *res judicata*.[294]

102. In PO No. 7, the majority of the Tribunal correctly and definitively determined that the "ancillary claim [is] within the scope of the consent of the Parties and within the jurisdiction of ICSID,"[295] and that Mexico had consented under NAFTA to arbitrate the ancillary claim.[296] Because Mexico was obviously aware of the USMCA when it presented its jurisdictional objections to the ancillary claim in May and June 2022, there is no "new" fact that would justify reconsideration of the Tribunal's decision. Because the Tribunal's findings in PO No. 7 regarding jurisdiction over the ancillary claim are correct and no exceptional circumstances exist that would justify reconsideration of that decision, PO No. 7 should not be revised.

B. QUESTION NO. 1(B)

What are the implications, if any, of the fact that Respondent brought its jurisdictional objection based on the supersession of NAFTA by the USMCA together with its Counter-Memorial on the Ancillary Claim of 19 December 2022 (see Counter-Memorial on Ancillary Claim, ¶ 407 et seq.)?

103. The fact that Mexico waited until filing its Counter-Memorial on the Ancillary Claim to raise its USMCA-based jurisdictional objection confirms that Mexico previously agreed that NAFTA applies to the ancillary claim as the law chosen by the Parties.

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[293] *JSC Tashkent v. Kyrgyz Republic* (Award), ¶¶ 439-441 (CL-0288-ENG); *Landesbank Baden-Württemberg et al. v. Kingdom of Spain*, ICSID Case No. ARB/15/45, Decision on the Respondent's Application for Reconsideration of the Tribunal's Decision of 25 February 2019 Regarding the "Intra-EU" Jurisdictional Objection, ¶ 35 (11 November 2021) (Greenwood (P), Poncet, Clay) (CL-0291-ENG).

[294] *JSC Tashkent v. Kyrgyz Republic* (Award), ¶¶ 442-443 (CL-0288-ENG).

[295] Procedural Order No. 7, ¶ 150. The dissent raised issues of admissibility under NAFTA, not any potential issues of jurisdiction under USMCA. Dissenting Opinion to Procedural Order No. 7 of Professor Puig, ¶¶ 2-9; Tr. (English), Day 1, 96:11-20 (Claimant addressing Tribunal questions).

[296] Procedural Order No. 7, ¶¶ 118, 150.

104. As noted above, in responding to Legacy Vulcan's filing of the ancillary claim, Mexico confirmed its understanding that "*the text of the NAFTA establishes the scope of Respondent's consent to arbitration*" of the ancillary claim.[297] Had Mexico truly believed that the USMCA precluded consideration of that claim under NAFTA, Mexico would have said so in its submissions of May and June 2022. It did not. This was consistent with Mexico's acknowledgment during the arbitration's first phase that its NAFTA obligations applied to events occurring *after* entry into force of the USMCA. It was *Mexico* who introduced for the Tribunal's consideration during the first phase of this proceeding measures it adopted *after* the USMCA entered into force.[298] Mexico never suggested that these measures fell outside the scope of NAFTA or the Parties' consent to arbitration in light of the USMCA.

105. Mexico's argument that it was entitled to bring its USMCA-based jurisdictional objection when it did entirely misses the point.[299] The point is that Mexico's own conduct — including its confirmation in May and June 2022 that NAFTA governed its consent to arbitrate the ancillary claim — shows that Mexico agreed with Legacy Vulcan that NAFTA applied to the ancillary claim. Mexico cannot now unilaterally withdraw its consent to arbitrate the ancillary claim under NAFTA or derogate from the Parties' choice of law. Once the disputing parties agree on the applicable law, as has occurred here, that agreement stands unless there is a subsequent *mutual* agreement otherwise.[300] No such mutual agreement exists here.

106. Moreover, Mexico was not *entitled* to bring its USMCA-based objection with its Counter-Memorial. ICSID Arbitration Rule 41(1) required Mexico to bring any such objection "*as early as possible*." Just as the tribunal in *JSC Tashkent v. Kyrgyz Republic* described, here "there is no question but that the Respondent's present jurisdictional objections could have been asserted previously."[301] Having failed to do so, Mexico cannot now disregard the Tribunal's ruling

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[297] Mexico's Rejoinder on the Claimant's Request for Provisional Measures and Leave to File an Ancillary Claim, ¶ 69 (free translation, the original reads: "En este sentido, el texto del TLCAN establece el alcance del consentimiento de la Demandada al arbitraje.") (emphasis added). *See also* Mexico's Response to the Claimant's Request for Provisional Measures and Leave to File an Ancillary Claim, ¶ 3 (free translation, the original reads: "el consentimiento del Estado para someterse al arbitraje, el cual se sujeta al cumplimiento de requisitos y formalidades que prevé el TLCAN") (emphasis added).

[298] *See* Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab , ¶ 7; Counter-Memorial, ¶¶ 119, 326.

[299] Rejoinder (Ancillary Claim), ¶ 256.

[300] Claimant's Comments on the Second Article 1128 Submission of the United States of America and the 30 June 2023 Letter of Mr. Queztal Tzab , ¶ 25; *see also AGIP SpA v. People's Republic of the Congo*, ICSID Case No. ARB/77/1, Award, ¶¶ 18, 44 (30 November 1979) (Trolle (P), Dupuy, Rouhani) (CL-0285-FR).

[301] *JSC Tashkent v. Kyrgyz Republic* (Award), ¶ 443 (CL-0288-ENG).

in PO No. 7 that it has jurisdiction over the ancillary claim. Mexico's USMCA-based jurisdictional objection represents a *post-hoc*, meritless effort to skirt responsibility for its wrongful conduct.

107. For all these reasons, Mexico's late reliance on the USMCA to challenge the Tribunal's jurisdiction over the ancillary claim implies that Mexico did not really interpret the USMCA as it now claims. Instead, Mexico understood NAFTA to apply to the ancillary claim, as the Parties agreed. Legacy Vulcan's jurisdictional arguments as well as the Tribunal's jurisdictional findings in PO No. 7 are therefore correct and should not be disturbed.

C. QUESTION NO. 2(A)

Is Claimant's investment in La Rosita a "legacy investment" for the purpose of Annex 14-C of the USMCA?

108. Legacy Vulcan's investment in La Rosita is a "legacy investment" under paragraph 6(a) of USMCA Annex 14-C. That paragraph defines "legacy investment" as (i) "an investment of an investor of another Party in the territory of the Party established or acquired between January 1, 1994, and the date of termination of NAFTA 1994," and (ii) "in existence on the date of entry into force of this Agreement."[302] Both of these requirements are met here.

109. Legacy Vulcan fully acquired its investment in La Rosita after 1 January 1994, while NAFTA was in effect, and that investment existed when the USMCA came into force on 1 July 2020. True, the Project — encompassing La Rosita and Punta Venado at first — was launched in the late 1980s, before NAFTA.[303] But Legacy Vulcan acquired all rights and obligations relating to the Project from Legacy Vulcan Corporation in 2015.[304] Legacy Vulcan thus acquired all of the Project, encompassing La Rosita, while NAFTA was in effect.

110. It is also undisputed that Legacy Vulcan (including its predecessor investors) made investments in La Rosita throughout the years between 1994 and 2020,[305] and that Legacy Vulcan's Mexican investment was in existence when the USMCA entered into force on

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[302] USMCA, Annex 14-C, ¶ 6(a) (C-0314-ENG).

[303] Memorial, ¶¶ 23-28.

[304] *See id.*, ¶ 17, n.2; Witness Statement-[redacted]-Claimant's Memorial-ENG, ¶ 13, n.1; Ancillary Claim Reply, ¶ 119. Legacy Vulcan Corporation had previously acquired Grupo ICA's share in the Project in 2001. Witness Statement-[redacted]-Claimant's Memorial-ENG, ¶ 26; Vulcan Materials Company, Form 10-K for the 2001 fiscal year, p. 5 (27 March 2002) (C-0046-ENG).

[305] *See, e.g.*, Memorial, ¶¶ 105-109 (discussing additional investments between June 2014 and December 2017, including, *inter alia*, the 2015 investment of [redacted] for a supplemental processing plant at La Rosita); Reply, ¶ 146 (same); Authorization for Expenditure (AFE) Project Description, Plant 4511, Sac Tun, Supplemental Plant, pp. 5-6 (24 April 2015) (C-0089-ENG); Witness [redacted]-Claimant's Memorial-ENG, ¶ 54.

1 July 2020. These facts establish that Legacy Vulcan's investments in La Rosita constitute a "legacy investment" under USMCA Annex 14-C.[306]

111. At the Hearing, Respondent for the first time suggested that Legacy Vulcan's investment in La Rosita is not a "legacy investment" purportedly because it was "established in 1986 [...] eight years before the entry into force of NAFTA."[307] This eleventh-hour argument ignores the facts described above. Even if the investment in La Rosita could be deemed to have been "established" in the late 1980s, Legacy Vulcan acquired that investment after and while NAFTA was in effect, thus meeting the definition of "legacy investment" in Annex 14-C.[308]

112. Moreover, as explained below in response to Question 2(b), even if Legacy Vulcan had established and acquired its investment in La Rosita before NAFTA went into effect (*quod non*), Note 39 to NAFTA confirms that investments in existence when NAFTA entered into force are investments for the purpose of NAFTA Chapter 11.[309] It would be illogical and inconsistent with the purpose of the USMCA if the definition of "legacy investment" in Annex 14-C included only one category of NAFTA Chapter 11 protected investments (*i.e.*, those acquired after NAFTA went into effect) but excluded others (*i.e.*, those in existence at the time NAFTA entered into force) that had also been explicitly protected under that Chapter.[310]

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[306] *See generally, e.g.*, Christoph Schreuer & Ursula Kriebaum, *At What Time Must Legitimate Expectations Exist*, *in* A LIBER AMICORUM: THOMAS WÄLDE – LAW BEYOND CONVENTIONAL THOUGHT 1, pp. 4-5 (J. Werner & A. H. Ali eds., 2009) (CL-0074-ENG) ("[A] typical investment is not a simple event. An investment operation is often composed of a number of diverse transactions and activities, which must be treated as an integrated whole. Therefore, an investment is often a complex process involving diverse transactions which have a separate legal existence but a common economic aim.").

[307] *See* Tr. (English), Day 1, 130:18-131:3 (Respondent's Opening); *id.* 187:12-188:3 (Respondent addressing Tribunal questions).

[308] *See generally, e.g.*, Christoph Schreuer & Ursula Kriebaum, *At What Time Must Legitimate Expectations Exist*, *in* A LIBER AMICORUM: THOMAS WÄLDE – LAW BEYOND CONVENTIONAL THOUGHT 1, pp. 4-5 (J. Werner & A. H. Ali eds., 2009) (CL-0074-ENG) (explaining that "an investment is often a process rather than an instantaneous act" and that "investments can take place incrementally over a certain period of time").

[309] *See* NAFTA, Note 39 ("Article 1101 (Investment - Scope and Coverage)") (CL-0297-ENG) ("[T]his Chapter covers investments *existing on the date of entry into force of this Agreement* as well as investments made or acquired thereafter.") (emphasis added).

[310] NAFTA, Note 39 (CL-0297-ENG) (clarifying that NAFTA "covers investments *existing on the date of entry into force of this Agreement* [NAFTA].") (emphasis added). Under the USMCA, the State Parties, "recogniz[ed] the importance of a smooth transition from NAFTA 1994 to [the USMCA]," *see* USMCA, Art. 34.1(1) (C-0319-ENG), and resolved to "ESTABLISH a clear, transparent, and predictable legal and commercial framework for business planning, that supports further expansion of trade and investment." USMCA, Preamble (C-0318-ENG); *see also* RUDOLPH DOZER & CHRISTOPH SCHREUER, PRINCIPLES OF INTERNATIONAL INVESTMENT LAW, p. 41 (Oxford University Press, 2012) (CL-0296-ENG) ("Many BITs provide that they shall be applicable to all investments whether made before or after their entry into force. In other words, they also protect existing investments. This should not lead to the conclusion that treaties not containing a clause of this type will only apply to 'new' investments.").

113. Because Legacy Vulcan acquired its investment in La Rosita while NAFTA was in effect and that investment was in existence on the date the USMCA entered into force, that investment is a "legacy investment" under paragraph 6(a) of USMCA Annex 14-C.

D. QUESTION NO. 2(B)

Is an investment made prior to 1994 an investment for the purpose of Chapter 11 of the NAFTA?

114. Yes, an investment made prior to 1994 that existed when NAFTA entered into force qualifies as an investment under NAFTA Chapter 11. NAFTA Note 39 ("Article 1101 (Investment - Scope and Coverage)") provides that Chapter 11 "covers investments *existing on the date of entry into force of this Agreement* as well as investments made or acquired thereafter."[311] Under the plain text of NAFTA, therefore, an investment made before 1994 and existing when NAFTA entered into force is a covered investment under Chapter 11.

E. QUESTION NO. 3

When did the alleged requirement to obtain a CUSTF (Authorisation for Soil-Use Change in Forested Terrains / Autorización de Cambio de Uso del Suelo en Terrenos Forestales) come into effect for La Rosita?

115. The requirement to obtain a CUSTF has never applied to La Rosita. While there have been laws in effect requiring permits to change the land use of a forested terrain for non-forestry use since May 1986,[312] the CUSTF was only regulated in detail in the 2003 Law on

[311] NAFTA, Note 39 (CL-0297-ENG) (emphasis added); *Mondev International Ltd. v. United States of America*, ICSID Case No. ARB (AF)/99/2, Award, ¶ 68 (11 October 2022) (Stephen (P), Crawford, Schwebel) (CL-0011-ENG) (emphasis added); *see also, e.g.*, *Yaung Chi OO Trading Pte Ltd. v. Government of the Union of Myanmar*, ASEAN I.D. Case No. ARB/01/1, Award, ¶ 73-75 (31 March 2003) (Sucharitkul (P), Crawford, Delon) (CL-0293-ENG) ("the Framework Agreement must be considered as applying to ASEAN investments lawfully in existence in a host State at the time the Framework Agreement entered into force for that State."); ZACHARY DOUGLAS, THE INTERNATIONAL LAW OF INVESTMENT CLAIMS, p. 341 (2009) (CL-0294-ENG) ("The question that arises is whether an investment treaty applies to investments made before the treaty enters into force in the absence of such an express stipulation. A negative answer would severely limit the scope of the investment treaty and lead to highly artificial distinctions."); CAMPBELL MCLACHLAN ET AL., INTERNATIONAL INVESTMENTS ARBITRATION, §6.37 (2007) (CL-0295-ENG) ("Many investment treaties contain a 'scope of application' provision which expressly states that the treaties apply to investments made both prior and subsequent to the coming into force of the treaty.").

[312] Tr. (Spanish), Day 3, 782:8-12 ([redacted] cross-examination: "el permiso del que hemos hablado a lo largo de este arbitraje es el cambio de uso de suelo en terrenos forestales. Este [refiriendo al artículo 25 de la Ley Forestal de 1986] es el antecedente normativo del mismo."); Ley Forestal (30 de mayo de 1986) (R-0170-SPA.6) (Article 25, referring to the "permisos que expida la Secretaría de Agricultura y Recursos Hidráulicos para cambio de uso de las tierras forestales con fines agrícolas, ganaderos, urbanos, recreativos y otros usos").

Sustainable Forestry Development.[313] Prior laws generally referenced a permit "*para cambio de uso de las tierras forestales*" without further detail.[314]

116. As [redacted] explained during the Hearing, a land-use change permit under these laws has only been required for "forested terrains," and La Rosita has never qualified as such.[315] Whether a place can be considered a "forested terrain" depends in part on its land use designation, as defined by state and municipal authorities.[316] As [redacted] has shown, and Mexico has not disputed, the land use designation of La Rosita has not been compatible with forestry activities since 1986.[317]

117. The fact that La Rosita did not need a CUSTF is further evidenced by the longstanding conduct of environmental authorities. As [redacted] explained, for over 35 years before this dispute, no such authority ever indicated that a CUSTF was required for La Rosita; to the contrary, they indisputably knew that vegetation was being cleared in that lot and found that this was not contrary to Mexican law.[318] As [redacted], explained:

> En 37 años, las autoridades nunca han exigido un [CUSTF] en La Rosita. [...] He visto que [...] decenas de inspectores han pasado por esos predios, sobre todo decenas de informes a autoridades ambientales, federales, estatales y municipales se dieron por parte de la empresa en diversos períodos y en diversas oportunidades a todos funcionarios especialistas en el tema ambiental. [...]

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[313] Ley General de Desarrollo Forestal Sustentable (published in 2003) ([redacted]-011.47); *see also* Expert Report-[redacted]-Environmental Law-Claimant's Memorial-SPA, ¶ 106 (referencing the 2003 *Ley General de Desarrollo Forestal Sustentable*).

[314] *Compare* Ley General de Desarrollo Forestal Sustentable (published in 2003) ([redacted]-011.47) (containing a chapter regulating the CUSTF in detail); *with* Ley Forestal (30 de mayo de 1986) (R-0170-SPA.6) (containing no such chapter but only a vague reference to a permit without further detail); Ley Forestal (22 diciembre 1992) (GCI-008.5) (same).

[315] Tr. (Spanish), Day 3, 788:8-791:18 ([redacted] cross-examination explaining that the permits referenced in the 1986 and 1992 forestry laws apply only to forested terrains).

[316] Tr. (Spanish), Day 3, 794:4-20 ([redacted] cross-examination: "mientras el programa de ordenamiento establezca que el predio no es forestal, no le es aplicable aquellas obligaciones que son propias únicamente a un terreno forestal [...] la vocación de terrenos forestales es necesario [...] para identificar si un terreno debe ser o no considerado forestal."); *see also* Expert Report-[redacted]-Environmental Law-Claimant Ancillary Claim Memorial-Third Report-SPA, § IV.B.1.

[317] Tr. (Spanish), Day 3, 761:2-18 ([redacted] direct, explaining, *i.a.:* "los programas de ordenamiento de manera textual han identificado que el uso forestal es incompatible en La Rosita. Es decir, La Rosita es un predio que no tiene actividades forestales, que no es compatible con las actividades forestales. De tal suerte que, si La Rosita es un predio que no es compatible con las actividades forestales, ¿por qué habría que requerir una autorización que es precisamente para inducirlo a actividades no forestales?"); [redacted] Direct Presentation (CD-0010.17); *see also* Expert Report-[redacted]-Environmental Law-Claimant Ancillary Claim Memorial-Third Report-SPA, ¶¶ 112-122.

[318] *See* Part II.B.2.b) above; Tr. (Spanish), Day 3, 761:19-763:2 ([redacted] direct).

> [N]inguno determinó que el [CUSTF] era necesario. Me parece que esta determinación es porque todos estos funcionarios especialistas en temas ambientales llegaron a la misma conclusión que yo [...].[319]

118. PROFEPA's failure to demand a CUSTF for decades, despite knowing that CALICA was clearing vegetation in La Rosita, is telling. At the Hearing, Mexico's witnesses conceded that PROFEPA was duty-bound to act upon having any indicia of illegal activity.[320] PROFEPA knew that CALICA had removed vegetation in La Rosita for decades and never took action (until after President López Obrador's instruction in 2022).[321] These facts confirm that no CUSTF was required for La Rosita and that CALICA in no way violated forestry laws by quarrying that lot.

119. Even if a CUSTF had been required for La Rosita (it was not), the enforceability of this requirement lapsed almost two decades ago. In 1993, PROFEPA — then authorized to review compliance with forestry requirements[322] — inspected La Rosita, noted and documented that CALICA was removing vegetation, and concluded that this raised no issues.[323] Since the applicable statute of limitations is five years, the limitations period lapsed, at the latest, in 1998.[324]

F. QUESTION NO. 4(A)

Clause 11 of the Investment Agreement (Exh. C-010) provides:

"The COMPANY undertakes, before commencing the Project, to obtain, in accordance with the applicable legal provisions, the permits, licenses and authorizations that may be necessary for the execution of said Project."

With reference to the above and any other relevant provision:

What is the legal situation under Clause 11 of the Investment Agreement in relation to permits, licenses and authorisations that become applicable subsequent to the commencement of the

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[319] Tr. (Spanish), Day 3, 762:2-763:1 ([redacted] direct); *see also id.*, 761:14-18 ([redacted] presentation: "La Rosita es un predio que no es compatible con las actividades forestales, ¿por qué habría que requerir una autorización que es precisamente para inducirlo a actividades no forestales?").

[320] Part II.B.2.b) above; Tr. (Spanish) Day 2, 567:14-20 ("[Claimant's Counsel]: PROFEPA y sus funcionarios tienen la obligación de actuar cuando tienen conocimiento de una posible violación de las normas ambientales. ¿Sí o no?//[Balcázar]: Sí."); Tr. (Spanish) Day 2, 458:1-8 ("[Claimant's Counsel]: [...] al ejercer sus facultades de inspección, los funcionarios de PROFEPA tienen la obligación [...] de actuar si ven algún hecho que pueda constituir alguna posible violación. ¿Está de acuerdo con eso?//[Vilchis]: Es correcto.").

[321] *See* Part II.B.2.b) above; Reply (Ancillary Claim), ¶ 61.

[322] Tr. (Spanish), Day 3, 764:19-766:10 ([redacted] explaining that PROFEPA was the competent authority under the applicable 1992 Forestry Law); [redacted] Direct Presentation (CD-0010.21); *see also* Tr. (Spanish), Day 2, 449:21-453:3 (Vilchis cross-examination, acknowledging the same); Mexican Forestry Law of 1992 (C-0140-SPA.28-29) (Arts. 44, 46.VIII, 49).

[323] PROFEPA Inspection Report (17 March 1993) (C-0280-SPA.5, 13); *see also* Tr. (Spanish), Day 4, 1022:18-1023:9 ("[Claimant's Counsel]: [S]i el desmonte ocurrió hace 20 años con conocimiento de la autoridad, entonces comenzó a correr el período de prescripción a partir de que se llevó a cabo ese hecho. ¿Correcto? // [SOLCARGO]: Correcto.").

[324] Tr. (Spanish), Day 3, 763:3-767:3 ([redacted] direct); *see also* Expert Report-[redacted]-Environmental Law-Claimant's Ancillary Claim Reply-Fourth Report-SPA, ¶ 55.

Project?

120. In Clause 11 of the Investment Agreement, CALICA undertook to obtain all the necessary permits, licenses, and authorizations for the execution of the Project *before* the Project commenced.[325] This Clause imposed no obligation after the Project commenced. Accordingly, any permits, licenses, and authorizations that became necessary *after* the Project commenced (*i.e.*, after 1986) would not have implicated Clause 11.

G. QUESTION NO. 4(B)

What is the legal situation under Clause 11 of the Investment Agreement specifically in relation to Claimant's La Rosita lot and the alleged requirement to obtain a CUSTF (Authorisation for Soil-Use Change in Forested Terrains / Autorización de Cambio de Uso del Suelo en Terrenos Forestales)?

121. Clause 11 required CALICA to obtain permits, licenses and authorizations that were "necessary for the execution of the [...] Project."[326] As [redacted] has explained and the record and Mexico's long-standing conduct confirm, a CUSTF was not necessary for the Project's execution relating to La Rosita, as further explained in the answer to Question 3 above.[327]

H. QUESTION NO. 5

Clause 12 of the Investment Agreement (Exh. C-010) provides:
"The failure to comply with any of the obligations undertaken by that the (sic.) COMPANY under this Agreement, as well as with those deriving from the documents attached hereto, shall give rise to the termination of the Agreement."
(a) Has the Investment Agreement been terminated by Respondent on the basis of Clause 12 or on any other basis? (b) If so, when and how, with reference to the record in this proceeding?

122. Mexico has never terminated the 1986 Investment Agreement under Clause 12 or any other basis. While President López Obrador has complained in his morning press conferences about the undefined term of the Investment Agreement, Mexico has never terminated it nor indicated an intent to do so.[328]

I. QUESTION NO. 6

Assuming without deciding that the Investment Agreement had a term of 25 years as argued by Respondent (see Respondent's Opening Presentation, slide 13), why and on what legal basis has

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[325] Investment Agreement (6 August 1986) (C-0010-SPA.7, 16) ("Décima Primera: La empresa se obliga, antes de iniciar el proyecto, a obtener con apego a las disposiciones legales aplicables, la expedición de los permisos, licencias y autorizaciones que fueren necesarias para la ejecución del referido Proyecto.").

[326] *Id.* (free translation, the original reads: "permisos, licencias y autorizaciones que fueren necesarias para la ejecución del referido Proyecto.").

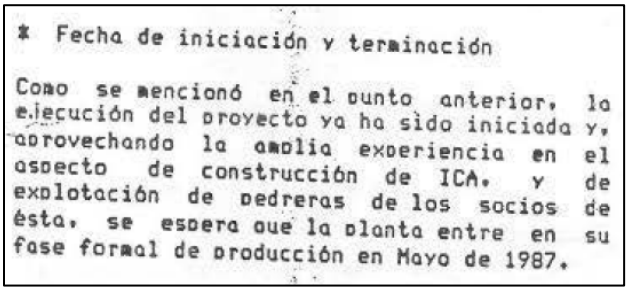
[327] *See, e.g.*, Tr. (Spanish), Day 3, 758:8-768:10 ([redacted] direct).

[328] *See, e.g.,* Transcript of President's Morning Press Conference (3 February 2022) (C-0178-SPA.22) ("Estos permisos los entregaron, el de ese predio que están explotando, lo entregaron antes del 2000. Y fíjense cómo era antes este asunto, cómo eran las cosas antes, no le pusieron ni siquiera un límite a la concesión[.]").

Respondent allowed CALICA to continue its operations under the Investment Agreement after the expiry of that period?

123. The Investment Agreement does not have a term of 25 years.[329] If it had such a term, PROFEPA would have been duty-bound to act after its purported expiration given its knowledge that there were ongoing activities in La Rosita. In 2012, for example, PROFEPA conducted an inspection of CALICA's operations and saw that vegetation had been cleared in La Rosita. This happened over 25 years after the 1986 Investment Agreement was executed.[330] Mexico has suggested that the purported 25-year term expired in 2014 because —Mexico claims — the Project only began in 1989. But this is incorrect, as the Investment Agreement notes that, by 1986, the execution of the Project had already begun (pictured below).

Figure 13 - Excerpt from Annex 2 to the 1986 Investment Agreement[331]



* Fecha de iniciación y terminación

Como se mencionó en el punto anterior, la ejecución del proyecto ya ha sido iniciada y, aprovechando la amplia experiencia en el aspecto de construcción de ICA, y de explotación de pedreras de los socios de ésta, se espera que la planta entre en su fase formal de producción en Mayo de 1987.

124. As [redacted] explained at the Hearing, "existe ya la acreditación de que desde el momento mismo en que existe el documento, el documento toma vigencia y surte sus efectos jurídicos."[332] For this reason, had the 1986 Investment Agreement had a 25-year term (it did not), that term would have expired in 2011. Regardless, even if that Agreement had a 25-year term and even if the clock started ticking in 1989, PROFEPA was aware of continued quarrying and processing activities in La Rosita after 2014 through, for example, environmental audits submitted to PROFEPA from 2002 to 2016, and PROFEPA's 2017 inspection of El Corchalito.[333]

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[329] *See, e.g.*, Part II.B.3.a) above; Tr. (Spanish), Day 3, 769:10-774:11 ([redacted] direct); [redacted] Direct Presentation (CD-0010.25-30); Tr. (Spanish), Day 4, 987:15-988:3, 994:17-995:9, 1011:2:1012:4 (SOLCARGO cross-examination, acknowledging that no authority has ever alleged the existence of a supposed 25-year term for the Investment Agreement); *see also* Expert Report-[redacted]-Environmental Law-Claimant's Ancillary Claim Reply-Fourth Report-SPA, ¶¶ 63-78; PROFEPA Press Release (6 May 2022) (C-0174-SPA.3); Transcript of President's Morning Press Conference (2 February 2022) (C-0178-SPA.22).

[330] *See* Tr. (Spanish) Day 2, 567:14-20 (Balcázar cross-examination, acknowledging PROFEPA's duty to investigate any indicia of possible infringement); *id.*, 458:1-8 (Vilchis doing the same); Counter-Memorial (Ancillary Claim), ¶ 209; PROFEPA Inspection Resolution (10 December 2012) (C-0043-SPA.4) (reflecting that PROFEPA observed activities in La Rosita).

[331] Investment Agreement (6 August 1986) (C-0010-SPA.60).

[332] Tr. (Spanish) Day 3, 821:16-822:1 ([redacted] cross-examination).

[333] *See* Part II.B.3.a) above.

125. The fact that Mexico allowed CALICA to operate La Rosita for this long under these circumstances would make no sense if the 1986 Investment Agreement had a 25-year term. Mexico's environmental authorities were well aware of that Agreement.[334] The only reasonable explanation for PROFEPA's inaction is that there was no 25-year term to CALICA's quarrying activities under the 1986 Investment Agreement, and that this was recognized by everyone concerned until it became convenient for Mexico to argue otherwise in this arbitration.

J. QUESTION NO. 7(A)

In his testimony, [redacted] *referred to: estimated extraction rates as referred to at pp. 47-49 of the Investment Agreement (Exh. C-10), with "an increasing curve that goes beyond* [redacted] *Please explain the basis for these statements by reference to the evidence in the record.*

126. [redacted] was referring to the estimated initial production forecast contained in the environmental impact statement attached as Annex 2 to the 1986 Investment Agreement.[335] As shown by the numbers on the bars toward the right-hand side of the graph that appears on the left in Figure 14 below, the 1986 Investment Agreement anticipated that extraction volumes could surpass six million tons per year.

[334] *See, e.g.*, Tr. (Spanish), Day 4, 1010:5-17 ("[Claimant's Counsel]: Para esta fecha [2000], [...] SEMARNAT tenía conocimiento del acuerdo de 1986 por décadas. ¿Correcto? [...]// [SOLCARGO]: A ver, yo creo que la respuesta es sí, porque la SEDUE se transformó en SEMARNA[P] y la SEMARNA[P] se transformó en SEMARNAT y pudiera uno asumir que hay un continuo y hay una entrega de archivos entre los ministerios que fueron, digamos, ocupándose del tema ambiental."); Claimant's Opening (CD-0007.29) (Tr. (English), Day 1, 20:15-21:6 (Claimant's Opening).

[335] Tr. (English), Day 1, 236:19-237:4 ([redacted] addressing Tribunal questions).

127. As [redacted] explained at the Hearing, "in extractive industries, there is not a set rate that keeps consistent throughout the years. The rate of extraction can get lower or up depending on market conditions, amongst other things."[337] Limestone extraction at CALICA would therefore fluctuate, [redacted], and this is what the 1986 Investment Agreement reflected.[338] As [redacted] explained at the Hearing, this fluctuation is consistent with the fact that, in Mexico, an open pit quarry, including its reserves — unlike a mine — is not subject to concession by the State; rather, it is the property of the owner of the lot where the quarry is located.[339] In other words, the environmental impact authorization did not regulate the amount of reserves that could be extracted but rather the environmental impacts the quarrying of those reserves would have.[340]

K. QUESTION NO. 7(B)

In his testimony, [redacted] referred to: "the Agreement that was executed with President De la Madrid", referring to an [redacted] (see Transcript Day 1 (Eng), 237:2-12). Please explain the basis for these statements by reference to

[336] Investment Agreement (6 August 1986) (C-0010-SPA.48) (left and top right); *id.* at 49 (reflecting this same data in a table) (bottom right).

[337] Tr. (English), Day 1, 239:5-9 ([redacted] addressing Tribunal question).

[338] *See* Investment Agreement (6 August 1986) (C-0010-SPA.48-49).

[339] Tr. (Spanish), Day 3, 773:1-20 ([redacted] direct, explaining, *i.a.*, that "los materiales pétreos son patrimonio del dueño del terreno, siempre que su extracción sea [...] a cielo abierto [...] [U]na Autorización de Impacto Ambiental no regula per se la cantidad a extraer del material precisamente porque no es una concesión minera y no se rige bajo los parámetros legales de una concesión minera.").

[340] *Id.*

the evidence in the record.

128. In 1987, Mexico's President, Miguel De la Madrid, personally endorsed the Project as Legacy Vulcan and Grupo ICA committed to invest [redacted] to develop it.[341] [redacted] was referring to this endorsement during his testimony. As [redacted] said, "in the Agreement that was executed with President de la Madrid, it was referred that the approximate rate [of production] would be [redacted]."[342] This endorsement, excerpted below, further shows that production at CALICA was anticipated to surpass [redacted] per year.

L. QUESTION NO. 8(I)

On the basis of the evidence in the record, please summarize the legal options available for CALICA before domestic administrative and/or judicial proceedings against: (i) the alleged order of the President of Mexico to shut down La Rosita.

129. The only legal recourse against either the President's order to shut down La Rosita or the illegal shutdown itself was an *amparo*. CALICA filed several such *amparos*, but none were successful in preventing or lifting the shutdown because, as [redacted] has explained, this sort of *amparo* challenge to precautionary measures imposed by PROFEPA purportedly on environmental grounds are generally doomed to fail.[344]

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[341] Agreement entered into between Grupo ICA and Vulcan Materials Company, witnessed by Miguel De la Madrid Hurtado (6 July 1987) (C-0011-SPA). *See also* Memorial, ¶ 28; Tr. (English), Day 1, 87:5-10 (Claimant's Counsel addressing Tribunal questions: "President de la Madrid, as you know, was involved not only in the project, but there was also an agreement signed with President de la Madrid, where he bore witness to the fact that this was a project that was favorable for Mexico and the development of the region.").

[342] Tr. (English), Day 1, 237:5-7 ([redacted] addressing Tribunal questions).

[343] Agreement entered into between Grupo ICA and Vulcan Materials Company, witnessed by Miguel de la Madrid Hurtado (6 July 1987) (C-0011-SPA.9) (red rectangles added).

[344] Expert Report-[redacted]-Environmental Law-Claimant's Ancillary Claim Reply-Fourth Report-SPA, ¶¶ 114-117.

130. Ordinary recourses to challenge acts of governmental authority in Mexico — the *recurso de revisión* or the *juicio de nulidad* — are available only against administrative resolutions, not against acts of authority carried out outside the confines of an administrative proceeding.[345] Because President López Obrador's order to stop CALICA's operations in La Rosita was not an administrative "resolution"[346] and was not carried out within an administrative proceeding, CALICA's only legal option to challenge this order was an *amparo*.

131. CALICA promptly [redacted] challenging the President's verbal order the very day he publicly announced it (2 May 2022).[347] Given the gravity and urgency of the matter, CALICA filed this action just hours after the President's announcement, and — at the time — its counsel lacked a certified copy of the 1986 Investment Agreement.[348] CALICA submitted a certified copy of the Corchalito/Adelita Federal Environmental Impact Authorization as supporting evidence instead, given that this document expressly recognizes CALICA's rights to quarry La Rosita (and the Project more broadly), referring to La Rosita and the 1986 Investment Agreement.[349] *Amparos* in Mexico normally seek to stop constitutional violations by reinstating the *status quo ante*.[350] The judge hearing CALICA's *amparo* recognized that President López Obrador had issued a verbal order to shut down the Project but found that "the request for an injunction must be denied" because the challenged acts, *i.e.* the Presidential verbal order "ha[d] already been issued, and therefore, they are considered a *fait accompli [hecho consumado].*"[351]

M. QUESTION NO. 8(II)

On the basis of the evidence in the record, please summarize the legal options available for CALICA before domestic administrative and/or judicial proceedings against: … (ii) the execution of such order by officials of SEMARNAT and PROFEPA through a temporary

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[345] *Id.* at ¶ 111.

[346] *See* Mijangos Report, ¶¶ 20-22 (defining administrative acts under Mexican law).

[347] Juzgado Séptimo de Distrito en el Estado de Quintana Roo, Acuse de recibo de demanda de amparo, Amparo Indirecto 431/2022, 2 de mayo de 2022 (R-0215-ESP).

[348] *See* Claimant's Reply to Respondent's Response to Its Request for Provisional Measures and For Leave to Submit an Ancillary Claim, ¶ 14, n.27; Reply (Ancillary Claim), ¶ 108.

[349] Corchalito/Adelita Federal Environmental Impact Authorization (30 November 2000) (C-0017-SPA.23).

[350] Tr. (Spanish), Day 3, 844:7-9 ([redacted] addressing Tribunal questions: "lo primero que tiene por principio el concepto de amparo es que las cosas se queden en el estado en el que están [before the challenged measure].").

[351] Juzgado Séptimo de Distrito en el Estado de Quintana Roo, Amparo indirecto 431/2022, Suspensión Provisional, 3 de mayo de 2022 (R-0130-ESP.3) (free translation, the original reads: "en relación con los actos reclamados lo procedente es negar la medida cautelar, toda vez que ya fueron emitidos, por lo que les reviste el carácter de consumados y contra éstos es improcedente la suspensión[.]").

shutdown resulting from an allegedly irregular process.

132. Like the President's verbal order, PROFEPA's execution of that order through the shutdown of La Rosita did not constitute an administrative resolution that could be challenged by a *juicio de nulidad* or a *recurso de revisión*. As [redacted] and SOLCARGO agreed at the Hearing, the only way to challenge this measure in domestic court was through an *amparo*.[352]

133. As [redacted] explained, while an *amparo* was procedurally available, it was futile in practice ("*prácticamente inviable*") because there was no realistic chance a judge would lift the shutdown.[353] Mexican courts rarely, if ever, suspend a precautionary measure imposed by an authority — such as a shutdown — purportedly to protect the environment from imminent harm because such measures are considered to be public policy provisions and are therefore given deference ("*el beneficio de la duda*") by courts.[354] Mexico's judiciary has confirmed that a court hearing a constitutional matter will not grant a suspension in respect of a precautionary measure imposed by an environmental authority until it is determined on the merits whether that authority's actions have been in accordance with the law.[355] In practice, this means CALICA may file an *amparo*, but that type of action had no realistic chance of success.[356] CALICA has nonetheless filed *amparos* to preserve its rights under Mexican law.[357] None has been successful in lifting the closure.

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[352] Tr. (Spanish), Day 3, 750:10-20 ([redacted] direct: "CALICA no tiene a su alcance las vías de defensa en contra de la legalidad del procedimiento. El recurso de revisión y el juicio de nulidad, como explico en mi informe, son ambos procedimientos que únicamente son procedentes en contra de una resolución. Al no haber emplazamiento y no haber resolución es claro que hay una imposibilidad total por parte de CALICA de poder acceder a estos mecanismos de defensa que el sistema mexicano le otorga."); Tr. (Spanish), Day 4, 965:1-11 (SOLCARGO direct: "el recurso en sede administrativa y el juicio de nulidad o el juicio administrativo ordinario. Y [redacted] estima que son improcedentes, y yo coincido con él. Es cierto, esos dos medios de impugnación no están a la mano en el caso de la imposición de una medida de seguridad. [...] [E]l medio, el gran medio, el gran mecanismo de control jurisdiccional de este acto está en el juicio de amparo.").

[353] Tr. (Spanish), Day 3, 834:21-835:4 ([redacted] cross-examination: "Cuando yo hago un análisis de la valoración de los efectos de un amparo en La Rosita lo que yo concluyo es que no se podrá levantar la clausura por la vía del amparo. En el caso de La Rosita es prácticamente inviable en materia ambiental."); *see also* Expert Report-[redacted]-Environmental Law-Claimant's Ancillary Claim Reply-Fourth Report-SPA, ¶¶ 107-118.

[354] Expert Report-[redacted]-Environmental Law-Claimant's Ancillary Claim Reply-Fourth Report-SPA, ¶¶ 115-117.

[355] *Id.*; Multi-Judge Circuit Courts, Tenth Series, Record No. 2016061 ([redacted]-0072) ("Medio ambiente. Son disposiciones de orden público las normas que lo protegen y, por tanto, es improcedente conceder la suspensión definitiva contra [the challenged measure] que tiende a disminuir la contaminación.").

[356] Expert Report-[redacted]-Environmental Law-Claimant's Ancillary Claim Reply-Fourth Report-SPA, ¶ 118 ("as long as PROFEPA keeps its administrative procedure stalled [...], it will be practically impossible for CALICA to find a legal avenue affording the company a legitimate opportunity to defend its interests.").

[357] SOLCARGO Fourth Report, ¶ 140 (listing some of the many amparos filed by CALICA).

134. While SOLCARGO suggested that an *amparo* judge could lift the shutdown, it cited no precedent where an *amparo* successfully did so.[358] The lone case SOLCARGO cited is inapposite.[359] In that case, which involved CALICA, the judge *did not* order PROFEPA to lift the shutdown, but only ordered PROFEPA to temporarily suspend its ban on CALICA personnel entering La Rosita to, among other activities, conduct routine maintenance.[360] In fact, the judge acknowledged that PROFEPA's shutdown of La Rosita would continue.[361] SOLCARGO has therefore failed to refute [redacted] well-reasoned opinion — supported by record facts — that CALICA lacked an effective domestic recourse to thwart President López Obrador's unlawful shutdown order and its swift execution.

N. QUESTION NO. 9

On the basis of the evidence in the record, under the income approach to damages as proposed by Claimant, what would Claimant's damages be if the flow of income was to be determined on the basis of the market price ex-works off CALICA?

135. None of the Parties' models has determined the market price ex-works off CALICA sales to Legacy Vulcan ("CALICA Ex-Works Price"). In the absence of a directly observed CALICA Ex-Works Price, there are two alternative approaches to estimate it based on the record evidence: the top-down price approach and bottom-up price approach (explained below). These approaches indicate prices that are roughly consistent with actual market prices ex-works off CALICA for the limited volumes CALICA sold directly to unrelated third parties for export. If the flow of income were to be determined on the CALICA Ex-Works Price basis, Legacy Vulcan's damages estimate for the ancillary claim would be [redacted]. This calculation is obtained using the Hart/Vélez CALICA-only DCF model, replacing their flawed transfer price with the estimated CALICA Ex-Works Price, and correcting a few other errors in that model (as explained in paragraph 145 below). This calculation is consistent with Brattle's [redacted] because both approaches exclude any value accruing to Legacy Vulcan arising from its ownership of Vulica and the U.S. Yards (*see* Figure 7 above).[362]

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[358] Tr. (Spanish), Day 4, 965:9-20, 967:1-14 (SOLCARGO direct, arguing that an *amparo* could lift the shutdown and referencing only to JPMA-30).

[359] SOLCARGO Fourth Report, n.51 (citing JPMA-30).

[360] JPMA-30.10 (ordering that "Continúe surtiendo sus efectos la clausura temporal total[.] [...] Y por lo que hace al restante efecto de la medida cautelar solicitado, consistente en que se inaplique (sic.) la interpretación consistente en que no se puede ingresar a los predios mediante las entradas de acceso, se concede la suspensión provisional[.]").

[361] *Id.*, ("Continúe surtiendo sus efectos la clausura temporal total decretada[.]").

[362] *See supra* Part II.C.1.c; Brattle Direct Presentation (CD-0012.030).

136. Because Legacy Vulcan is the owner of the CALICA reserves, the sales price to Legacy Vulcan is a transfer price. However, the transfer price imputed in the [redacted] for CALICA sales to Legacy Vulcan in Mexico is not a market price, and it does not reflect the CALICA Ex-Works Price, a fact noted by the Tribunal.[363] An ex-works price off CALICA can be observed for the limited volumes of sales to [redacted], but this price does not exactly correspond to the CALICA Ex-Works Price due to product mix. Specifically, the Netback Reports show that [redacted].[364] However, there were no [redacted], meaning that these observed ex-works prices cannot be applied directly to Legacy Vulcan. Nonetheless, [redacted] demonstrate that Hart/Vélez's assumed export price of [redacted] is clearly and substantially understated.[365]

137. There are two alternative approaches to estimate the CALICA Ex-Works Price based on the record evidence: top down and bottom up, which we explain below.

1. Top-Down Approach to Estimate CALICA Ex-Works Price.

138. The top-down approach starts with a simple concept: the CALICA Ex-Works Price is the price that CALICA could achieve in a hypothetical negotiation [redacted]

[363] *See* Tr. (English), Day 5, 1123:19-1125:20 (Hart and Vélez addressing Tribunal questions, noting the anomaly that the local Sales Price in the Hart/Vélez CALICA model is higher than the export Sales Price, and confirming that Mr. Hart and Ms. Vélez did not investigate the issue); *id.*, 1185:12-1188:13 (same); *see also id.*, 1187:9-12 ("[Prof. van den BERG]: So, why is then that export Sales Price in 2020 is for exports [redacted], and for local [redacted], assuming the terms of the delivery are the same, as actual export prices."). Neither Mr. Hart nor Mrs. Vélez was able to explain this anomaly.

[364] *See* Vulcan Materials Company, CALICA Netback Data Summary for First Quarter 2022, tab "Netback Data_All Years," rows 1344, 1346, 1445, 1447, 1546, 1592, 1647, 1747, 1864, and 2005 (DC-0227). These sales were picked up by the purchaser at the Punta Venado port, as reflected by the fact that there are no shipping costs associated with these sales in the Netback Reports.

[365] Fourth Credibility Report, tab 1.2, cell C26 (Exhibit 1) (averaging prices of [redacted] for 2019 to 2021).

139. The *actual* profit that Legacy Vulcan was able to command from selling aggregates purchased from a third-party seller to supply the U.S. Gulf Coast [redacted]

140. [redacted]

141. [redacted]

[366] *See* Vulcan Materials Company, 2021 Blue Water Network Profitability by Source (DC-0183) (tab 'Cash Profit by Source (LV)'); Vulcan Materials Company, 2022-Q3 Blue Water Network Profitability by Source (DC-0229) (tab 'Cash Profit by Source (LV)'). [redacted]

[367] *See* Witness Statement-[redacted]-Claimant's Ancillary Claim Memorial-Second Statement-ENG, ¶¶ 14–15; Witness Statement-[redacted]-Claimant's Ancillary Claim Reply-Third Statement-ENG, ¶ 14.

[368] Vulcan Materials Company, 2021 Blue Water Network Profitability by Source (DC-0183); Vulcan Materials Company, 2022-Q3 Blue Water Network Profitability by Source (DC-0229).

[redacted]

2. Bottom-Up Approach to Estimate CALICA Ex-Works Price.

142. The bottom-up CALICA Ex-Works Price is calculated based on actual market prices that Legacy Vulcan agreed to pay [redacted]

143. [redacted]

[369] Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-Third Expert Report-ENG, ¶ 41; Brattle Direct Presentation (CD.0012.010, 12-14); Tr. (English), Day 4, 965:10-967:2 (Brattle direct).

[370] [redacted]

[371] Brattle analysis based on Vulcan Materials Company, 2021 Blue Water Network Profitability by Source (DC-0183) and Vulcan Materials Company, 2022-Q3 Blue Water Network Profitability by Source (DC-0229). [redacted]

(continued…)

[redacted]

3. Application of CALICA Ex-Works Price to "CALICA-Only" Model.

144. [redacted].[372]

145. Substituting the CALICA Ex-Works Price of [redacted], described above, CALICA-only damages in the Hart/Vélez DCF model increase to between [redacted] before pre-award interest.[373] This range, however, underestimates damages because the Hart/Vélez CALICA-only DCF contains a number of errors that require making the following adjustments:

[redacted]

[373] Mr. Hart acknowledged at the Hearing that, if the transfer price is not a market price, then it should be adjusted to reflect a market price to properly value CALICA: "if they have a beef or a problem with the Transfer Price saying it's not a Market Price, that would be an adjustment they'd make to say what the value of CALICA [is]." Tr. (English), Day 5, 1112:7-12 (Hart and Vélez direct). Brattle modifies Exhibit 1 to the Fourth Credibility Report. This calculation replaces the "Real Export Price (Per Ton)" in Tab 1.2, cell C26 of [redacted]

- Adjust the Hart/Vélez CALICA-only DCF to account for [redacted] — a consideration that Mr. Hart agreed would be appropriate but Ms. Vélez acknowledged their DCF analysis did not do.[374] [redacted]
- Replace Hart/Vélez's discount rate with Brattle's discount rate. Hart/Vélez use a discount rate that is too high and not representative of the risks to which CALICA's cash flows are exposed. [redacted]
- [redacted]
- [redacted]

[374] *Supra* ¶ 91.

[375] *See* Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-Fourth Expert Report-ENG , ¶¶ 205, 236; Tr. (English), Day 5, 1156:2-1159:22 (Hart and Vélez cross-examination). This adjustment can be made in Exhibit 1 to the Fourth Credibility Report, tab 1.1, cell G27. The corrected cost of sales after removing the cost applied to inventories is [redacted]. Brattle calculates this figure as Hart/Vélez's 2025 cost of sales [redacted] less Hart/Vélez's per unit production costs [redacted] applied to [redacted]. Hart/Vélez's per unit production cost is their three-year average cost of sales excluding depreciation divided by the three-year average total tons sold from Fourth Credibility Report, Updated DCF Results – CALICA, tab 1.2 (Exhibit 1). Brattle has prepared a revised version of the Hart/Vélez CALICA-only DCF model with switches that can be used by the Tribunal to make each of the changes discussed above individually or together, if helpful. Note that, due to rounding, changes made using the description in this and following footnotes may yield slightly different results than Brattle's revised version of the Hart/Vélez CALICA-only DCF. In this adjusted Hart/Vélez CALICA-only DCF model, tab 1.1, cell G27: 2025 costs of sales is corrected to remove production costs applied to [redacted]. Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-Third Expert Report-ENG, ¶ 86.

[376] *See* Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-Fourth Expert Report-ENG, § V.C.3, ¶ 236. This adjustment can be made at Fourth Credibility Report, Updated DCF Results – CALICA, tab 1.1, cell C46 (Exhibit 1) by replacing Hart/Vélez's WACC with a real WACC of [redacted] is Brattle's WACC adjusted for political risk and converted from nominal to real terms as follows: Brattle's political risk-adjusted WACC of [redacted] in nominal terms (*see* Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-Third Expert Report-ENG, Workpaper U, tab U1 (DC-0252)) less Hart/Vélez's implied inflation rate of 3.230% (Fourth Credibility Report, Updated DCF Results – CALICA, tab 1.3 (Exhibit 1)). In Brattle's revised version of the Hart/Vélez CALICA-only DCF, tab 1.1, cell C46: Hart/Vélez's WACC is replaced with Brattle's real WACC of [redacted] described above.

[377] *See* Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-Fourth Expert Report-ENG, ¶¶ 213, 236. This adjustment can be made in Fourth Credibility Report, Updated DCF (continued…)

[redacted]

146. Correcting these errors, the damages estimated under the Hart/Vélez CALICA-only DCF are [redacted]. This is consistent with the damages of [redacted] estimated in the Brattle model.[380] Legacy Vulcan is prepared to submit a version of the Hart/Vélez CALICA-only DCF model with switches that can be used by the Tribunal to make any or all of the changes discussed above, if helpful to the Tribunal.[381]

O. QUESTION NO. 10

On the basis of the expert evidence of both sides, is there a possibility of overlap between the

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Results – CALICA, tab 1.2, cell F77 (Exhibit 1). [redacted]

[378] Fourth Credibility Report, Updated DCF Results – CALICA , tab 1.2, cell C70 (Exhibit 1).

[379] *See* Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-Fourth Expert Report-ENG, § V.C.2.d, ¶ 236. This adjustment can be made in Fourth Credibility Report, Updated DCF Results – CALICA, tab 1.1, cells D16 and H38 (Exhibit 1). [redacted]

[380] Brattle Direct Presentation (CD-0012.004). [redacted].

[381] Applying a similar methodology to the Hart/Vélez CALICA-only DCFs in CRED-080 would yield damages of [redacted] for Breach #1 and [redacted] for Breach #2. This calculation requires the following corrections to the Hart/Vélez analyses: 1) apply the same CALICA Ex-Works Prices described above but adjust for actual real growth during 2015-2020 and expected real growth from 2022 forward (Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-Third Expert Report-ENG, Workpaper P5; Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-First Expert Report-ENG, ¶ 100); 2) correct sales to reflect the demand forecast prepared by Legacy Vulcan (DC-0095); 3) calculate working capital as [redacted] (Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-First Expert Report-ENG, Workpaper J, tab J5, cell H17; Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-First Expert Report-ENG, Workpaper J, tab J23, cell H18; and 4) replace the Hart/Vélez discount rate with Brattle's discount rate adjusted for political risk and converted from nominal to real terms. The resulting damages from the adjusted Hart/Vélez model are in the same order of magnitude as Brattle's estimates of [redacted] for Breach #1 and [redacted] for Breach #2. However, differences still remain because of other unreasonable assumptions or errors reflected in the Hart/Vélez DCF model in CRED-080, as discussed in the Second Brattle Report (*e.g.*, the failure to distinguish between fixed and variable costs).

original damages claims in relation to El Corchalito, La Adelita and the port fees at Punta Venado, and the ancillary claim in relation to La Rosita?

147. No, there is no possibility of overlap because the damages for each breach (Breach #1, Breach #2, Breach #3, and ancillary claim) were calculated separately and each calculation is based on the lost value of the quantity of reserves that could have been produced and sold from each of the three lots but for Mexico's wrongful measures.

- Damages estimated for Breach #1 measure only the harm caused by Mexico from preventing CALICA to quarry La Adelita as of 6 December 2015.[382] This calculation reflects damages resulting from the ability to quarry only El Corchalito and La Rosita (the actual scenario) versus all three lots, including La Adelita (the "but-for" scenario).
- Damages estimated for Breach #2 start with the assumption that La Adelita will never be quarried. The damages reflect the harm from the inability to quarry El Corchalito, calculated as the difference in value from being able to quarry both La Rosita and El Corchalito (the but-for scenario) and being able to quarry only La Rosita (the actual scenario).[383]
- Damages estimated by Brattle for the ancillary claim assume that La Adelita will never be quarried and El Corchalito will have no further quarrying activity. Without these lots, the CALICA business derives value from being able to quarry only La Rosita. The damages reflect the loss from having to shut down the quarry immediately as of 5 May 2022 (the actual world) rather than quarrying La Rosita until reserves are exhausted (the but-for world).[384]
- Damages for the port fees at Punta Venado (Breach #3) applied for 2007 to 2017 and are accounted for separately by Brattle.[385] These damages do not overlap with any of the other damages because they are unrelated to CALICA's ability to quarry any of the lots and export its production, and Brattle made an explicit adjustment to avoid double-counting.[386]

148. Mexico does not argue that Brattle's methodology leads to any overlap in claims, and indeed Hart/Vélez use the same but-for and actual scenarios for each of the scenarios (except for Breach #3, which Hart/Vélez do not analyze).

P. QUESTION NO. 11

According to Claimant's witness [redacted]*, ". . . there were enough reserves in 2014 . . . that*

[382] Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-First Expert Report-ENG, ¶ 77.

[383] *Id.*, ¶ 79 and Figure 8.

[384] Hart/Vélez similarly calculated damages on the same volume of lost sales of La Rosita reserves as Brattle, without any adjustment to damages from the first phase, implicitly recognizing the lack of any overlap. As Brattle explained in their third expert report, "[t]he damages here are incremental to those estimated in the prior Brattle reports, which assumed an actual scenario in which CALICA could continue to produce and export aggregates until the end of La Rosita's quarrying life. Damages estimated in this report are therefore additive with those from the prior Brattle reports." Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-Third Expert Report-ENG, ¶ 4.

[385] Expert Report-Darrell Chodorow and Fabricio Núñez-Claimant's Ancillary Claim Reply-First Expert Report-ENG, ¶ 196 and Table 15.

[386] *Id.*, ¶ 119.

the need for the Company remaining extraction activities until at least 2037, and that's why the Port Concession got extended to that date." (Transcript Day 1 (Eng), 239:2-7). Please explain the basis for this statement by reference to evidence in the record.

149. In May 2015, Mexico extended the CALICA Port Concession through April 2037 (extendable for an additional 50 years) in compliance with one of Mexico's obligations under the 2014 Agreements.[387] [redacted] statement at the Hearing was referring to this extension and Mexico's recognition in doing so that CALICA had available reserves to quarry through at least 2037. Because (i) CALICA had more than enough reserves in La Adelita to quarry materials through at least 2037 and beyond;[388] and (ii) Mexico recognized that CALICA would quarry and export those reserves in decades to come, Mexico extended the term of the CALICA Port Concession through April 2037 (that is, 50 years since the granting of the original concession), with the possibility of a further extension.[389]

Q. QUESTION NO. 12

Is Respondent's counterclaim directed against Claimant's original claim and/or against Claimant's ancillary claim? Was it brought timely with respect to each, as applicable?

150. Mexico's counterclaim is directed against Legacy Vulcan's original and ancillary claims. That counterclaim was not timely brought with respect to either one.

151. As the Tribunal correctly put it in PO No. 7, "Claimant's prior claims and requests for relief in this proceeding are directed at CALICA's La Adelita and El Corchalito lots, as well as port fees associated with the port at Punta Venado."[390] Legacy Vulcan's ancillary claim, by contrast, relates to Mexico's wrongful shutdown of CALICA's remaining quarrying and export operations in La Rosita and Punta Venado.[391] Mexico's counterclaim extends beyond the scope of

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[387] Total Regularization Scheme entered into between the SCT and CALICA (12 June 2014) (C-0020-SPA.14) ("La SCT tramitará la ampliación del plazo de la CONCESIÓN hasta el año 2037, conforme a la legislación vigente, por considerarla procedente[.]");Witness Statement-[redacted]-Claimant's Memorial-ENG, ¶ 28; Amendment to the Concession granted by the Federal Government through the SCT to Calica (13 May 2015) (C-0016-SPA.37); *see also* Mexico Federal Official Gazette, Ports Act, Article 23 (19 July 1993) (C-0047-SPA.40).

[388] *See* Memorandum for Meeting of the Board of Directors (11 July 2014) (C-0088-ENG.10) ([redacted]); *see also* MOU (12 June 2014) (C-0021.13) ("Adicionalmente, el Municipio de Solidaridad y la Secretaría de Ecología gestionarán ante dichos órganos técnico y ejecutivo que el POEL permita que en cada uno de las referidos predios [(*i.e.*, La Rosita, El Corchalito y La Adelita)] se lleve a cabo la extracción y explotación de piedra caliza, materiales pétreos, agregados y derivados, incluyendo cemento, en una superficie de [redacted], y que dicha extracción y explotación pueda realizarse por un plazo de [redacted], con derecho a prórroga en términos de la legislación aplicable.").

[389] Amendment to the Concession granted by the Federal Government through the SCT to Calica (13 May 2015) (C-0016-SPA.15) ("NINETEENTH.- Term. "The Ministry" hereby authorizes the extension of the original term of the Concession Title, as provided in Recital X above, for a term of 50 (fifty) years, counted as of April 21, 1987, ending on April 20, 2037.").

[390] Procedural Order No. 7, ¶ 71.

[391] Reply (Ancillary Claim), ¶ 276.

the ancillary claim to include CALICA's alleged environmental breaches and harms related to El Corchalito and La Adelita.[392] That counterclaim is thus broader than "the subject of [Legacy Vulcan's] *new* claim" — despite what Mexico initially represented would be the more limited scope of its counterclaim.[393]

152. To the extent Mexico's counterclaim is directed to Legacy Vulcan's original claim (arising from El Corchalito and La Adelita), it is grossly untimely. Rule 40(2) of the 2006 ICSID Arbitration Rules required Mexico to present any counterclaim relating to Legacy Vulcan's original claim no later than in its first counter-memorial, filed on 23 November 2020.[394] Mexico failed to do so, waiting instead until well over a year after the Hearing in the first phase of this arbitration to lodge a counterclaim directed at Legacy Vulcan's long-ago-submitted original claim. Thus, even assuming for the sake of argument that Mexico could bring a counterclaim under NAFTA, Mexico waived it in respect of purported violations of environmental law in El Corchalito and La Adelita.[395]

153. To the extent Mexico's counterclaim is directed at La Rosita and Punta Venado (the shutdown of which gave rise to the ancillary claim), it is also untimely. Because Mexico was well aware of CALICA's activities in those lots before it filed its first counter-memorial in November 2020, it should have brought any counterclaim with respect to those activities at that time, consistent with ICSID Arbitration Rule 40(2).[396] Mexico failed to do so, thus waiving its right to bring a counterclaim directed at La Rosita and Punta Venado.[397]

154. Mexico's counterclaim is also time-barred under the three-year statute of limitations in NAFTA Articles 1116(2) and 1117(2).[398] These provisions bar any claim for which Mexico had or should have had knowledge of breach and damage before 19 December 2019.[399]

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[392] *Id.*; *see also* Memorial on Jurisdiction and Admissibility (Counterclaim), Part II.A.(2) (setting forth Mexico's allegations of breaches "applicable to El Corchalito and La Adelita").

[393] Mexico's Response to the Claimant's Request for Provisional Measures and Leave to File an Ancillary Claim, ¶ 130 ("México desea enfatizar que en caso de que el Tribunal autorice la presentación de la nueva reclamación que la Demandante pretende hacer pasar por subordinada, *se reserva el derecho de presentar una solicitud de autorización para presentar una reconvención relacionada con el objeto de la nueva reclamación*") (emphasis added).

[394] ICSID Arbitration Rules, Rule 40(2) ("An incidental or additional claim shall be presented not later than in the reply and a counter-claim no later than in the countermemorial, unless the Tribunal, upon justification by the party presenting the ancillary claim and upon considering any objection of the other party, authorizes the presentation of the claim at a later stage in the proceeding").

[395] Claimant's Response on Counterclaim, ¶¶ 174-175.

[396] *Id.*, ¶ 176.

[397] *Id.*, ¶ 176.

[398] *See* Tr. (English), Day 1, 179:22-180:13 (Claimant's Opening).

[399] Claimant's Response on Counterclaim, ¶ 122.

As shown at the Hearing, Mexico conducted multiple inspections and audits of La Rosita between 1993 and 2016 and has thus been aware for decades of CALICA's activities in that lot and what it now claims is "damage" resulting from operations there.[400] Mexico also knew of the purported environmental damage it alleges for El Corchalito by no later than its shutdown of that lot in January 2018.[401] Mexico's counterclaim would have therefore arisen more than three years before Mexico pursued it, in contravention of NAFTA's three-year limitations period.[402] Mexico provided no answer to this at the Hearing.

R. QUESTION NO. 13

Is the Tribunal's jurisdiction over Respondent's counterclaim contingent on the Tribunal having jurisdiction over Claimant's ancillary claim? Assuming, without deciding, that the Tribunal has no jurisdiction over Claimant's ancillary claim, does this have as a consequence that the Tribunal does not have jurisdiction over Respondent's counterclaim?

155. In addition to the multiple reasons Legacy Vulcan has detailed for the Tribunal's lack of jurisdiction over Mexico's counterclaim,[403] the Tribunal would also lack jurisdiction over that counterclaim if it lacked jurisdiction over the ancillary claim (though, as explained above and elsewhere, it *does have* jurisdiction over the ancillary claim[404]). This is because — aside from having to meet other jurisdictional requirements (*e.g.*, being within the consent of the parties to arbitrate, etc.) that Mexico's counterclaim has failed to meet here[405] — a counterclaim must be closely related to the primary claim.[406] Specifically, as Legacy Vulcan highlighted at the Hearing, the counterclaim must be based on the same investment treaty that gives rise to the primary claim.[407] If the Tribunal were to find that it does not derive jurisdiction over the primary claim

[400] Tr. (English), Day 1, 20:15-21:19; 26:2-15; 179:22-180:8 (Claimant's Opening); Claimant's Response on Counterclaim, ¶¶ 128-132.

[401] Tr. (English), Day 1, 180:9-11 (Claimant's Opening); Claimant's Response on Counterclaim, ¶ 133.

[402] *See* Tr. (English), Day 1, 179:22-180:13 (Claimant's Opening).

[403] Claimant's Response on Counterclaim, ¶¶ 77-184. *See also* Reply (Ancillary Claim), ¶¶ 248-280.

[404] *See* Part II.A.1 above; Legacy Vulcan's Comments on the Second Article 1128 Submission of the United States and the 30 June 2023 Letter of Mr. Queztal Tzab, ¶¶ 6-74; Reply (Ancillary Claim), ¶¶ 112-141.

[405] *See, e.g.*, Claimant's Response on Counterclaim, ¶¶ 77-158, 173-184.

[406] *Id.*, ¶¶ 159-168 .

[407] Tr. (English), Day 1, 178:12-179:11 (Claimant's Opening); Claimant's Response on Counterclaim, ¶¶ 164-168; *see also Saluka Investments B.V. v. Czech Republic*, PCA Case No. 2001-04, Decision on Jurisdiction Over the Czech Republic's Counterclaim, ¶ 61 (7 May 2004) (Watts (P), Behrens, Yves Fortier) (RL-0176); *Sergei Paushok et al v. The Government of Mongolia*, UNCITRAL, Award on Jurisdiction and Liability, ¶ 694 (28 April 2011) (Lalonde (P), Stern, Grigera Naón) (RL-0177).

(here, the ancillary claim) from NAFTA, there could not possibly be the requisite "close connection" with the counterclaim, thus defeating jurisdiction over the latter.[408]

156. Legacy Vulcan's ancillary claim arises under NAFTA, and, as the Tribunal held in PO No. 7, the Parties consented to arbitrate that claim under NAFTA.[409] As explained in response to Question No. 1, this jurisdictional finding was correct, the Tribunal has jurisdiction over the ancillary claim under NAFTA and the ICSID Convention, and Mexico's eleventh-hour jurisdictional objection based on the USMCA fails.[410] Mexico has also purported to base its counterclaim on NAFTA (not the USMCA),[411] though — as Legacy Vulcan has explained at the Hearing — Mexico's counterclaim really arises under Mexican domestic law.[412]

157. If, however, the Tribunal were to conclude that it lacks jurisdiction over the ancillary claim because — as Mexico now mistakenly claims — the obligations of NAFTA terminated in July 2020,[413] Mexico's counterclaim — argued by Mexico to be based on NAFTA — could not possess the necessary "close connection" to Legacy Vulcan's ancillary claim, because the counterclaim would not arise under the same legal instrument. Absent consent under a particular treaty to arbitrate a primary claim, jurisdiction over the counterclaim must necessary fail.[414]

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[408] *Sergei Paushok et al v. The Government of Mongolia*, UNCITRAL, Award on Jurisdiction and Liability, ¶ 693 (28 April 2011) (Lalonde (P), Stern, Grigera Naón) (RL-0177) ("In considering whether the Tribunal has jurisdiction to consider the counterclaims, it must therefore decide whether there is a close connection between them and the primary claim from which they arose or whether the counterclaims are matters that are otherwise covered by the general law of Respondent.").

[409] Procedural Order No. 7, ¶ 150 (11 July 2022).

[410] *See supra* Response to Tribunal Question No. 1.

[411] Counterclaim Memorial, ¶ 13 ("[T]he Tribunal has jurisdiction to hear the counterclaim based on Chapter XI of NAFTA") (free translation); *id.*, ¶ 213 (asserting Mexico's counterclaim is based on alleged "breaches by [Legacy Vulcan] of environmental obligations, which have generated a violation of the obligations contained in Article 1114 of NAFTA") (free translation).

[412] Tr. (English), Day 1, 178:12-179:11 (Claimant's Opening); Claimant's Response on Counterclaim, ¶¶ 139-147.

[413] Rejoinder (Ancillary Claim), ¶¶ 264-266, 269.

[414] *Metal-Tech Ltd. v. The Republic of Uzbekistan*, ICSID Case No. ARB/10/3, Award, ¶ 413 (4 October 2013) (Kaufmann-Kohler (P), Townsend, Wobeser) (RL-0171-ENG) ("It follows from the foregoing discussion that the first requirement set in Article 46 of the ICSID Convention which relates to jurisdiction, including consent, is not met. As a consequence of its having no jurisdiction over the claims, this Tribunal has no jurisdiction over the counterclaims.").

Respectfully submitted,

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