BEFORE THE HONORABLE TRIBUNAL ESTABLISHED PURSUANT TO CHAPTER XI OF THE NORTH AMERICAN FREE TRADE AGREEMENT (NAFTA)

ODYSSEY MARINE EXPLORATION, INC.
(CLAIMANT)

V.

UNITED MEXICAN STATES,
(RESPONDENT)

(Caso CIADI No. UNCT/21/1)

REJOINDER

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[Courtesy Translation]

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GLOSSARY

Short	Complete name
Claims Agreement	International Claims Enforcement Agreement
Agro Nitrogenados	Agro Nitrogenados, S.A. de C.V.
AHMSA o Altos Hornos	Altos Hornos de México S.A. de C.V.
AIA	Environmental Impact Authorization ("*Autorización de Impacto Ambiental*")
AIDA	Asociación Interamericana para la Defensa del Ambiente
AIG	Australian Institute of Geoscientists
AP	Project Area ("*Área del Proyecto*")
APF	Federal Public Administratio ("*Administración Pública Federal*")
APFC	Federal Public Centralized Administration ("*Administración Pública Federal Centralizada*")
API	Administración Portuaria Integral
ASF	Federal Audit Authority ("*Auditoría Superior de la Federación*")
AusIMM	The Australasian Institute of Mining and Metallurgy
Ballena gris	A species of cetacean scientifically known as *Eschrichtius robustus*
Boskalis	Royal Boskalis Westminster R.V.
CEMDA	Centro Mexicano de Derecho Ambiental, A.C.
CFE	Federal Electricity Commission ("*Comisión Federal de Electricidad*")
CIADI	Centro Internacional de Arreglo de Diferencias Relativas a Inversiones
CIBNOR	Centro de Investigaciones Biológicas del Noreste, S.C.
CICIMAR	Centro Interdisciplinario de Ciencias Marinas
CIDH	Inter-American Court of Human Rights ("*Corte Interamericana de Derechos Humanos*")
CIJ	International Court of Justice ("*Corte Internacional de Justicia*")
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIMVAL	International Mineral Valuation Committee
Código VALMIN	The Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets
CONABIO	National Commission for the Knowledge and Use of Biodiversity ("*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*")
CONAGUA	National Watter Comission ("*Comisión Nacional del Agua*")
CONANP	National Comission of Natural Protected Areas ("*Comisión Nacional de Áreas Naturales Protegidas*")
CONAPESCA	National Comission of Aquaculture and Fisheries ("*Comisión Nacional de Acuacultura y Pesca*")
CONMECCOP	Mexican Confederation of Fisheries and Aquaculture Cooperatives ("*Confederación Mexicana de Cooperativas Pesqueras y Acuícolas*")
Consejo Consultivo	Consulting Council on Sustainable Development of SEMARNAT ("*Consejo Consultivo para el Desarrollo Sustentable de SEMARNAT*")
Constitución de México o CPEUM	Constitution of the United Mexican States
CPF	Federal Criminal Code ("*Código Penal Federal*")
Demandada o México	United Mexican States
DGCJCI	Office of the General Counsel of International Trade of the Ministry of Economy ("Dirección General de Consulltoría Jurídica de Comercio Internacional")

Short	Complete name
DGIRA	General Directorate of Impact and Environmental Risk ("*Dirección General de Impacto y Riesgo Ambiental*")
DOF	Federal Official Gazette ("Diario Oficial de la Federación")
Don Diego, Proyecto o Proyecto Don Diego	Dredging project of black phosphate sands in the Don Diego deposit
Drumcliffe	Drumcliffe Partners IV LLC
EIA	Environmental impact assessment ("Evaluación de Impacto Ambiental")
EPC	Engineering, Procurement and Construction
Epsilon	Epsilon Acquisitions, LLC
ESSA	Exportadora de Sal, S.A. de C.V.
ExO	Exploraciones Oceánicas, S. de R.L. de C.V.
FEDECOOP	Regional Federation of Fishing Cooperative Societies ("Federación Regional de Sociedades Cooperativas Pesqueras")
Fertinal	Grupo Fertinal, S.A. de C.V.
FGR	General Attorney Office ("Fiscalía General de la República")
Fosforitas del Pacífico	Fosforitas del Pacífico, S.A. de C.V.
Grupo de Expertos en Tortugas Marinas	Group of experts comprised of Dres. Agnese Mancini, Alberto Abreu, Bryan Wallave, Alan Zavala and the M.in S. Raquel Briseño, active members of the "Marine Turtle Specialist Group", belonging to the "International Union for Conservation of Nature".
IIO	Oceanological Research Institute of the Autonomous University of Baja California ("Instituto de Investigaciones Oceanológicas de la Universidad Autonóma de Baja California")
INAPESCA	National Fisheries Institute ("Instituto Nacional de Pesca")
IUCN	International Union for Conservation of Nature ("*Unión Internacional para la Conservación de la Naturaleza*")
IPN	Instituto Politécnico Nacional
LFRASP o LFRA	Federal Law of Administrative Liabilities of Public Servants
LGEEPA	General Law of Ecological Balance and Environmental Protection
LGRA	General Law of Administrative Liabilities
LOAPF	Federal Public Administration Law
Mako Resources	Mako Resources, LLC
MCA	Minerals Council of Australia
MIA	Environmental impact statement ("*Manifestación de Impacto Ambiental*")
MIA-R	Environmental impact statement regional modality ("*Manifestación de Impacto Ambiental modalidad Regional*")
MINOSA	Minera del Norte, S.A. de C.V.
Monaco	Monaco Financial, LLC
MTSG	Marine Turtle Specialist Group ("Grupo de Especialistas de Tortugas Marinas") of the Species Survival Commission, belonging to the IUCN.
Nasdaq	National Association of Securities Dealers Automated Quotation
NOAA	National Oceanic and Atmospheric Administration
NOM	Mexican official standard ("Norma Oficial Mexicana")
NOM-059-SEMARNAT	Mexican official standard NOM-059-SEMARNAT-2010, Environmental Protection-Mexico's Native Species of Wild Flora and Fauna-Risk Categories and Specifications for Inclusion, Exclusion or Change-List of Species at Risk.

Short	Complete name
NOM-131-SEMARNAT	Mexican official standard NOM-131-SEMARNAT-2010, That establishes guidelines and specifications for the development of whale watching activities, related to their protection and the conservation of their habitat
NYSE	The New York Stock Exchange
Oceánica Resources	Oceánica Resources, S. de R.L.
Odyssey o Demandante	Odyssey Marine Exploration, Inc.
OIC	Internal Control Body ("*Órgano Interno de Control*")
ONG/NGO	Non-governmental Organization
PEIA o Procedimiento EIA	Environmental impact assessment proceeding
Pemex	Petróleos Mexicanos
Phosmex	Corporación Fosforica Mexicana, S.A. de C.V
Poplar	Poplar Falls, LLC
PRIMMA	Marine Mammal Research Program ("*Programa de Investigación de Mamíferos Marinos*")
PROFEPA	Federal Attorney for Environmental Protectio ("*Procuraduría Federal de Protección al Ambiente*")
Proyecto El Chaparrito	ESSA's project at the El Chaparrito port
Proyecto Laguna Verde	CFE's project located at Laguna Verde
Proyecto Puerto Matamoros	Project located in Matamoros, Tamaulipas
Proyecto Puerto Veracruz	Project located in Veracruz port
Proyecto Santa Rosalía	Maintenance Dredging Project in the Dock in the Port of Santa Rosalía, BC.S
Proyecto Sayulita	Executive Project of the Integral Sanitation System in Sayulita, Nayarit
PSP	Full Protection and Security ("Protección y Seguridad Plenas")
Quadrant	Quadrant Economics, LLC
REIA o RLGEEPAMEIA	Regulations of the Mexican General Law of Ecological Balance and Environmental Protection in Environmental Impact Assessment
RISEMARNAT o Reglamento Interior	Internal Regulations of the SEMARNAT
Resolution 2016	DGIRA Resolution, Communication No. SGPA/DGIRA/DG/2270 April 7, 2016.
Resolution 2018	DGIRA Resolution Communication No. SGPA/DGIRA/DG/07852 October 12, 2018.
Resolutions	Resolution 2016 and Resolution 2018
Rofomex	Rofomex II, S.A. de C.V.
S.C.P.P. or Cooperativa Puerto Chale	Sociedad Cooperativa de Pescadores Puerto Chale
SADER	Ministry of Agriculture ("Secretaría de Agricultura y Desarrollo Rural")
SAGARPA	Ministry of Agriculture ("Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación")
SAR	Regional Environmental System ("Sistema Ambiental Regional")
SAT	Tax Authority ("Servicio de Administración Tributaria")
SCT	Ministry of Communications and Transportation ("Secretaría de Comunicaciones y Transportes")
SEC	U.S. Securities and Exchange Commission
SEMARNAT	Ministry of the Environment and Natural Resources ("Secretaría de Medio Ambiente y Recursos Naturales")

Short	Complete name
SFP	Public Administration Ministry ("Secretaría de la Función Pública")
Solcargo	Solórzano, Carvajal, González y Pérez Correa, S.C.
Subsea Minerals	Subsea Minerals Ltd.
TFJA	Federal Administrative Tribunal ("Tribunal Federal de Justicia Administrativa")
FET	Fair and Equitable Treatment
NAFTA	North American Free Trade Agreement
Caretta Caretta Turtle	Sea turtle also known as caguama, or loggerhead
UABCS	Universidad Autónoma de Baja California Sur
UCAJ	Unidad Coordinadora de Asuntos Jurídicos
UNAM	Universidad Nacional Autónoma de México
UNESCO	United Nations Educational Scientific and Cultural Organization
WGM	Watts, Griffis and McOuat Limited
EEZ	Exclusive Economic Zone

I. INTRODUCTION

1. This Rejoinder contains responses to the factual, legal and *quantum* aspects of the Claimant's claims filed against the Mexican State regarding the Don Diego Project. Contrary to the Claimant's arguments, Mexico has provided the necessary evidence to demonstrate that the case presented by Odyssey, its partial description of the facts, and unsubstantiated accusations lack merit and represent an abuse of the use of the investment arbitration mechanism provided for in Chapter XI of the NAFTA.

2. Based on the evidence presented by the Respondent, the Tribunal may corroborate that there was no politically motivated campaign by Mr. Pacchiano against the Don Diego Project and, likewise, it can verify that the Don Diego Project did not receive a less favorable treatment than that received by other projects. On the contrary, the Respondent has shown that the decisions issued by the DGIRA were reasonable taking into account the importance of the Gulf of Ulloa and the marine species inhabiting that area.

3. In order to be able to start the Don Diego Project, the Claimant had to obtain an environmental impact authorization from the DGIRA, which is the only technical and regulatory entity in the entire Mexican government empowered to issue such an authorization. The Claimant submitted an "environmental impact statement" (MIA) that started the environmental impact assessment procedure (EIA Procedure), which culminated in the issuance of the 2016 Resolution, which was the basis for the DGIRA to deny Don Diego Project's environmental authorization.

4. Subsequently, the Claimant challenged the 2016 Resolution before the Mexican courts (TFJA). In this regard, the national courts ordered the DGIRA to reissue a new resolution exercising its full freedom of decision based on its regulatory powers. Therefrom derived, and based on the relevant technical and scientific aspects and complying with what was ordered by the TFJA, the DGIRA issued the 2018 Resolution which was the basis for it again to reject Don Diego Project's application for environmental impact authorization. Dissatisfied with this decision, ExO once again challenged the 2018 Resolution. Consequently, there are currently legal matters pending resolution by Mexican courts.

5. The administrative EIA Procedure, as well as the litigation before national courts, were transparent and carried out in accordance with due process. Proof of this is that ExO and a plurality

of parties (authorities, international organizations, non-governmental organizations, inhabitants of communities, among others) actively participated in the EIA Procedure in full adherence to the legal framework. The situation to be considered is that, based on contemporary and irrefutable evidence, the EIA Procedure concluded that the Don Diego Project was not a sustainable or viable project, which is why it did not obtain the "environmental impact authorization" from the DGIRA.

6. Now, practically three years after the 2018 Resolution, the Claimant and its witnesses continue to argue that there were political reasons that led to the denial of the Don Diego Project's environmental impact authorization. This is false and there is no evidence to support this claim. In fact, the Claimant's' allegations depend largely on two [redacted] It is clear that these allegations have little credibilty.

7. Part of the Claimant's strategy in this arbitration has been to ignore or minimize the relevance of the Gulf of Ulloa. Despite these efforts, Odyssey is unable to disprove the fact that this is a unique place in the world. On the one hand, the Gulf of Ulloa is part of the migratory routes of different species of whales from Russian and North American coasts, which shelter in neighboring areas considered whaling sanctuaries, which are protected natural areas and are part of the natural heritage of humanity. On the other hand, the Gulf of Ulloa is a natural center of biological activity that concentrates a large population of sea turtles, and a primordial feeding habitat for the *Caretta caretta* turtle, which represents a unique natural phenomenon. This species —in danger of extinction—is born off the coast of Japan and migrates to Mexico to grow and feed precisely in the Gulf of Ulloa. Dozens of years later, it returns to the Japanese coast to continue its reproductive cycle. Similarly, the Gulf of Ulloa is a feeding area for several threatened species, including the Guadalupe fur seal. These are just a few aspects that show that the Gulf of Ulloa is a natural treasure for Mexico and for humanity.

8. The Claimant has made it clear that its claim in this arbitration is comparable to its other line of business: the "treasure hunt":

> That potential $2 billion judgment (of which Odyssey would be entitled to 65%, or some $1.3 billion, due to partnerships) for a publicly traded company with a market cap of about $90 million has been enticing to investors. Since the litigation started, Gordon says he's seen a new group of investors emerge who are wagering on the outcome of the litigation. To date, Odyssey Marine has raised more than $30 million for the court battle with Mexico, with $20 million coming in the form of non-recourse debt that will not have to be repaid if they lose. The company posted $2.03 million in revenue in 2020, down from $3.07 million in 2019.[1]

9. This kind of statement undermines the credibility of Odyssey's business projections and claims raised in this arbitration. In fact, it is seriously questionable that the Claimant seeks for the Tribunal to resolve technical and legal issues that are subject to review before Mexican courts. Given this situation, the Respondent has found it necessary to reiterate in this Rejoinder that the Tribunal is not the competent authority to: *i)* conduct a *de novo* review of the 2015 MIA of the Don Diego Project; nor *ii)* act as a court of appeal. Investment arbitration simply does not have that function.

10. The Claimant has not been able to refute the fact that the extraction of minerals from the seabed is a highly regulated and controversial activity at the international level due to the high degree of uncertainty about the impacts on both the environment and the species inhabiting the place where such activities are carried out. Despite this, the Claimant's position before the Mexican courts and before this Tribunal is that the dredging in the Project —to be carried out 24 hours a day, seven days a week and over 50 years— would not have caused environmental impacts. This position is simply absurd. Based on the facts, as well as the testimony and expert reports provided by the Respondent, the Tribunal will be able to corroborate the high degree of speculation around the Don Diego Project, which is a project that only reached a merely initial stage.

11. The high degree of speculation about the possible environmental impacts that the Don Diego Project could generate and the lack of specific information that would effectively address the authority's questions, led the DGIRA to reject the Project's environmental authorization. The foregoing was based on a detailed technical and scientific analysis of the available evidence that involved, *inter alia*, the determination of the clear deficiencies in the MIA prepared by ExO and

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[1] Business Observer, "Marine and mineral extraction company dive into legal squabble with Mexico" (May 5, 2021). **R-0172**.

Odyssey, as well as the application of the precautionary principle, applicable under Mexican law and public international law.

12. Notwithstanding the fact that the 2018 Resolution is reasonable from a technical, scientific and legal point of view, the Respondent has shown that [redacted] the DGIRA's decision to deny the environmental authorization was not based on any order or instruction for political reasons.

13. In this sense, the Respondent has been able to corroborate that all of Odyssey's allegations and its witnesses regarding alleged: *i)* meetings with Mr. Pacchiano; *ii)* commercial relations with Pemex; *iii)* working meetings with environmental authorities; and *iv)* meetings with leading scientists —such as Dr. Seminoff— are false.

14. For the benefit of the Tribunal, the Respondent summarizes the most important legal aspects of this Rejoinder Memorial:

- The Claimant is unable to demonstrate that Mexico failed to provide Fair and Equitable Treatment to Odyssey's investment pursuant to NAFTA Article 1105. The evidence provided by the Claimant is ineffective to demonstrate, *inter alia*, that Mr. Rafael Pacchiano ordered the Don Diego Project's environmental authorization denial for political reasons.

- The fact that the Claimant does not agree with the content of the Resolutions that denied environmental authorization to the Don Diego Project does not mean that such Resolutions are illegal or arbitrary.

- The Claimant had access to due process at all times before the DGIRA and before the national courts. In particular, the Claimant actively participated in the Don Diego Project's environmental assessments, but it was unable to demonstrate that Don Diego was a viable project. It is worthwhile to highlight the fact that the Claimant does not allege any claims against the actions of the Mexican courts and also that it continues to litigate the same DGIRA's actions that are subject of this arbitration, before national courts.

- The alleged "legitimate expectations" of Odyssey were not violated by Mexico. The environmental regulation and, in particular, the decisions around it, may not be perfect, but that does not mean that the decision to deny Don Diego Project's authorization was not reasonable from the technical, scientific and legal fields.
- The Claimant is unable to legally and factually demonstrate that Mexico violated the obligation to provide Full Protection and Security (PSP) to Odyssey's investment. It even appears that the Claimant declined to present this claim in arbitration considering that the Reply does not even refer to the principle of PSP under the NAFTA.
- The Respondent acted with full and due exercise of its environmental regulatory powers when evaluating and resolving the request for an environmental impact statement. DGIRA's decision is not comparable to a direct or indirect expropriation measure and, therefore, does not violate NAFTA Article 1110.
- Claimant's claim related to National Treatment under NAFTA Article 1102 is a desperate attempt by Odyssey to try to substantiate its case. However, it is without merit. First, none of the Six Projects is in "similar circumstances" to the Don Diego one and, second, it is false that Mexico has accorded less favorable treatment to the Don Diego Project compared to the treatment accorded to other projects.
- The competent regulatory authority determined that the project was not environmentally viable and that there was no certainty that the environment, as well as threatened and endangered species, would not be affected. Therefore, it is appropriate for the Tribunal to offer deference to the decision issued by the regulatory authority, *i.e.*, the DGIRA.
- The Tribunal cannot conduct a de novo review of the 2015 MIA, much less serve as an appellate court to analyze the 2018 Resolution technical-scientific aspects. Again, the Tribunal's function is to determine whether the DGIRA's decision is reasonable and if it was issued in accordance with the principles established in Chapter XI of NAFTA, taking into account the facts duly demonstrated in this arbitration.

15. Regarding the *quantum* analysis, the Respondent's position can be summarized as follows:

- The Claimant's claim for damages is grossly overstated. Contemporary evidence shows that the Project was still in its early stages and the necessary elements did not exist to

estimate the various components of future cash flows with a reasonable degree of certainty. As of the Valuation Date, the Claimant had not demonstrated the technical or economic viability of its project through a feasibility study (FS or PFS), nor did it have Proved or Probable Mineral Reserves.

- The fact that the MIA's approval was a necessary condition for the Project to advance to its next stage does not imply that, if obtained, the Project would become the profitable business on which the Claimant bases its estimate of damages. The Project still had to overcome important obstacles such as: developing the basic engineering of the operation; demonstrate the existence of Reserves; perform tests to confirm that it could consistently produce a product conforming to market specifications; establish a customer base or at least demonstrate that there was a potential market for its products; get the funding; build the necessary equipment and infrastructure; and a long etcetera.

- The above-mentioned is indicative that the success that the Claimant anticipated was a simple possibility and not a probable outcome, as the Claimant pretends the Tribunal to believe through the numerous expert reports it has submitted in this proceeding and that were prepared specifically for the purposes of this litigation. The fact that the Claimant values the Project as if it were an ongoing business with a proven track record of profitable operations or as a project whose technical and economic viability has been demonstrated with contemporary specialized studies, explains the enormous divergence between the results obtained by the parties' damage experts.

- The Respondent has demonstrated and confirmed in this writing that, in accordance with the generally accepted guidelines and standards for the valuation of mining projects, the best practices of the industry and the practice of international tribunals that have resolved controversies related to projects in the pre-operational stage, a project like Don Diego's cannot be valued through the revenue approach (DCF or ROV), as the Claimant's experts do. Projects that are in an early development stage, equivalent to that of the Project, are valued through cost or market methodologies such as those used by Quadrant, the Respondent's expert.

16. In conclusion, the Respondent does not consider it appropriate —nor pertinent— that in an investor-State arbitration, technical-scientific aspects that have already been submitted to the

national regulator and expert authority in environmental matters are re-evaluated. Similarly, the evidence provided by the Respondent has shown that: *i)* the Claimant's claims lack merit; *ii)* Odyssey's witness statements should not be admitted or, where appropriate, have no credibility; and *iii)* the Claimant's claim for damages is unsupported.

17. The Respondent requests the Tribunal to consider as a starting point for its analysis the following observation of the UNESCO World Heritage Center on the Don Diego Project: "the Project, located in the Gulf of Ulloa, would seriously threaten the marine species and ecosystems of the area […] an important attribute of the Outstanding Universal Value of the property […]".

II. FACTS

A. The Claimant seeks for the Tribunal to resolve, in accordance with Mexican law, scientific and legal issues that are subject to review by national courts

18. In its Reply, the Claimant argues that "Odyssey is not seeking to appeal an adverse environmental decision, nor is it asking the Tribunal to determine the MIA afresh",[2] however, it also acknowledges that "[t]he dispute is whether the scientific and other factual evidence demonstrates that the Project was illegitimately denied".[3] These statements are contradictory since they show that the Claimant seeks, in fact, for the Tribunal to analyze and rule on technical-scientific aspects, masking its claim with the alleged existence of "secret marching orders"[4] under which they implied that the 2014 MIA was withdrawn and the 2015 MIA was denied.

19. But not only that, the Claimant also seeks for the Tribunal to rule on the correct interpretation and application of Mexican environmental law, that is, to act as a national court to determine the scope of the LGEEPA article 35. This is confirmed by the Claimant's following assertion:

> There is a dispute as to whether the DGIRA is entitled to deny a MIA under Article 35(III)(b) only when proposed activities would adversely affect an endangered species

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2 Reply, ¶ 17.

3 Reply, ¶ 19.

4 The Claimant expressly used the concept of "*secret marching orders*" to formulate its claim regarding the two denials of the MIA, however, Mexico noted the similarities between the concept and the claim that was made in the case *Vento Motorcycles v. Mexico*. Consequently, the Claimant now attempts —unsuccessfully— to depart from the analogies existing in that case and within its Reply has dispensed with the use of that term. *See* Claimant's Reply, ¶ 221.

> as a whole (as Odyssey asserts), or when those proposed activities would affect a few individuals of an endangered species (as Mexico asserts).[5]

20. In this sense, the Tribunal must bear in mind that the factual aspects of a technical-scientific nature, as well as the interpretation and application of the LGEEPA, are being reviewed by the TFJA.[6] Therefore, the Tribunal' should focus on determining whether *prima facie* evidence has been submitted proving that the DGIRA acted on a whim and resolved the matter in the way it did so by a political instruction outside the legal framework. In any case, the Tribunal must determine whether the alleged "secret marching orders" constitute *per se* a violation of the minimum standard of treatment or expropriation under NAFTA. Based on the evidence provided by the Claimant, it is evident that the Tribunal will conclude that the claim does not stand and the DGIRA's decision —in its capacity as a specialized and regulatory body in technical-scientific matters— was reasonable and does not generate any violation of Mexico's obligations under NAFTA.

21. In any event, it is evident that the judgment handed down in the trial before the TFJA will invariably affect the Claimant's claim.[7] This situation is well known by Odyssey who omits to address this aspect and, instead, limits itself to stating that "Mexico breached NAFTA's investment protections",[8] notwithstanding that the facts underlying its claim are practically the same as in Mexican courts, as discussed below.

1. The Claimant omits to indicate that the nullity trial before the TFJA affects the factual aspects of its claim in this arbitration

22. As already indicated in the Counter-Memorial, on August 19, 2019, ExO challenged the DGIRA's 2018 Resolution through a contentious administrative lawsuit before the TFJA.[9] ExO requested the TFJA to "analyze the legality of the defendant authority's Refusal to authorize the ExO MIA, […] and sentence the authority to issue a new resolution […]".[10] Particularly, ExO expressly asked the TFJA "resolve the merits of the ExO claim by establishing the terms and guidelines that the authority must observe", that is, "that is resolved on the authorization of the

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5 Reply, ¶ 22.

6 *See* Second Solcargo-Rábago Report, ¶¶ 94-98.

7 *See* Second Solcargo-Rábago Report, ¶¶ 102-106.

8 Reply, ¶ 17.

9 Counter-Memorial, ¶¶ 379-384. *See* Second Solcargo-Rábago Report, ¶¶ 102-106.

10 **C-0186**, pp. 13-14.

MIA".[11] There is no doubt that if the TFJA resolves ExO's challenge in its favor, the Claimant would be in a position to obtain double compensation before this Tribunal.

23. From that point of view, the Claimant's claim is premature. Proof of this is that it resorts to this Tribunal to analyze exactly the same facts that it raises before national courts.[12] The Claimant even goes so far as to request this Tribunal —as well as the TFJA— to rule on the interpretation of Mexican environmental regulations.

24. Indeed, in its Reply, the Claimant develops various arguments regarding the interpretation of LGEEPA article 35, particularly, it indicates that "[r]espondent's interpretation of Article 35(III)(b) is manifestly wrong and directly contradicts SEMARNAT's practice and application".[13] To do this, the Claimant relies on the report of a legal expert who distinguishes between the terms "species" and "individual" to —erroneously— interpret[14] LGEEPA article 35 and even cites the alleged existence of an interpretive standard adopted by the DGIRA in the Puerto de Manzanillo project.[15] Precisely those three aspects of LGEEPA article 35 that the expert addresses and the Claimant cites, namely: (i) erroneous interpretation; (ii) distinction between individual and species; and (iii) alleged administrative precedent of the "Puerto de Manzanillo" project, are actually a mere copy of what ExO argued to the TFJA:

> […] we argue that the defendant authority assumed an improper interpretation of article 35, section III, subparagraph b) of the LGEEPA, whose application -under criteria of reasonableness and proportionality- requires determining (i) if the identified impacts represent damage, for which dimensioning variables along with mitigation and compensation measures should be considered, and (ii) if the eventual damage transcends to a specific species, and not only certain individuals or populations
>
> […]
>
> It is worth highlighting that the environmental authority has expressly assumed that criterion, as can be seen in page 101 of the official letter SGPA / DGIRA.DDT.-1383.05 dated November 22nd, 2005, in which the project "Port of Manzanillo, Master Development Program, 2000-2010" was authorized, […].[16]

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11 **C-0186**, pp. 14-15.

12 *See* Second Solcargo-Rábago Report, ¶¶ 102-106.

13 Reply, ¶¶ 19-30.

14 *See* Second Solcargo-Rábago Report, ¶¶ 12-18.

15 Second Héctor Herrera Report, ¶¶ 49-67.

16 **C-0186**, pp. 51 and 53 (emphasis added).

25. This similarity is not accidental and is repeated throughout the Claimant's Reply. For example, in the "legal grounds" section regarding the claim on alleged discrimination based on NAFTA Article 1102, the Claimant relies on the report of a biology expert to assert that: (i) there are other projects comparable to the Don Diego Project; and (ii) the Don Diego Project was discriminated against by the Respondent for not having been authorized. Again, the arguments and facts referred to by the Claimant are practically a copy of what ExO presented before the TFJA:[17]

> […] Ex O sets forth the arguments that prove the illegality of the Contested Resolution to the extent that, in denying the authorization of the Project, the defendant authority failed to consider assumed criteria previously used to authorize projects of a similar nature.
>
> […] These violations are independent from each other; however, they are exposed in the same concept of challenge, insofar as their joint understanding allows us to arrive at the conclusion that the DGIRA should have applied different criteria when deliberating on ExO's MIA, and since it did not, a factual situation arose that implies an undue appreciation of the Project and its MIA, as well as an unequal treatment in front of project owners who are placed in similar situations of law.[18]

26. For the benefit of the Arbitration Tribunal, Table 1 presents a comparative analysis that shows the similarities of the facts and claims raised by the Claimant before this Tribunal *vis-à-vis* those that are presented before the TFJA and whose decision remains *sub judice*.

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[17] Although within the lawsuit filed by ExO before the TFJA only 3 projects coincide with the 5 that the Claimant presented in its Reply, ExO presented a list with more than 70 dredging projects that it considers comparable to the Don Diego Project. *See* **C-0186**, pp. 149-153.

[18] **C-0186**, p. 149.

Table 1. ExO's claims and arguments before the TFJA *vis-à-vis* Odyssey's claims and arguments before the Arbitral Tribunal

Coinciding aspects in the Arbitration and the TFJA	NAFTA Arbitration	TFJA
(i) Claims related to projects similar to Don Diego		
Unequal or less favorable treatment.	Memorial, ¶¶ 323-324, 329, 333, 340 and 348-350. Reply, ¶¶ 308-310.	Nullity Appeal 2019 ("**C-0186**"), pp. 149, 167, 168 and 170. Review Appeal, ("**C-0141**"), pp. 18-19.
Approval of various dredging projects similar to Don Diego.	Memorial, ¶¶ 182-186, 350 and 352. Reply, ¶¶ 268-269. Pliego ER2, ¶¶ 279-316.	**C-0186,** pp. 149, 154 and 167.
Higher impact and higher density of sea turtles in the areas of projects similar to Don Diego.	Memorial, ¶¶ 330-333 and 340. Pliego, ER1, ¶¶ 331-333. Reply, ¶¶ 302 and 304.	**C-0186**, pp. 154 and 167-169.
Veracruz, Laguna Verde and ESSA Projects.	Memorial, ¶¶ 182, 185, 338, 342, 344 and 348. Pliego ER2, ¶¶ 149-152. Reply, ¶¶ 280 and 298-299.	**C-0186**, pp. 154 to 159 and 164.
Mitigation measures in other projects.	Memorial, ¶¶ 334, 335, 345 and 346. Pliego, ER1 and ¶ 275.	**C-0186,** pp. 84, 167, 169 and 170.
(ii) Claims related to Article 35, section III, subsection b) of the LGEEPA		
Illegal denial of the Project due to an incorrect interpretation and motivation.	Memorial, ¶¶ 152, 153, 161, 208 and 281. Reply, ¶¶ 491 and 543.	**C-0186**, pp. 30, 78 and 79. **C-0141**, p. 15.
Scope and interpretation. It is only substantiated if there is an effect on the entire species.	Memorial, ¶ 291. Reply, ¶ 20-27. Herrera ER2, ¶ 49.	**C-0186**, pp. 51 and 52.
Criteria applied to the Puerto Manzanillo Project.	Reply, ¶ 25-26. Herrera ER1, ¶ 56. Herrera ER2, ¶¶ 62-64.	**C-0186**, pp. 53, 160 and 161.
Low probability that the Project will affect C. *Caretta*.	Memorial, ¶107 (f). Reply, ¶¶ 31, 45 and 50. Clarke WS1, ¶ 74.5. S. Flores ER1, ¶¶ 29 and 113.	**C-0186**, p. 54.
Difference between "species" and "individuals".	Reply, ¶ 24. Herrera ER1, ¶ 56. Herrera ER2, ¶ 58. C-0453. [redacted] ER, pp 23, 28-32.	**C-0186**, pp. 74 and 75. **C-0141**, p. 31.
The authority should have issued a conditional authorization.	Memorial, ¶ 251. Reply, ¶¶ 17, 73[redacted]s WS1, ¶ 11. [redacted]s WS2, ¶ 30. [redacted] WS1, ¶ 7	**C-0186,** pp. 6, 13,197. **C-0140,** pp. 29 and 38.
(iii) Claims related to the density and affectation of the Turtle C. *Caretta*		
Incorrect appreciation of the C. *caretta* density by the authority.	Memorial, ¶¶ 161, 272, 273 and 275. Reply ¶¶ 18, 58-63 and 228. C-0453, [redacted] ER, pp. 28-31 and 40.	**C-0186,** pp. 23-28, 32, 33, 56, 132 and 145.

Coinciding aspects in the Arbitration and the TFJA	NAFTA Arbitration	TFJA
Improper delimitation and definition of the *C. caretta* habitat.	Memorial, ¶¶ 159, 260, 271, subsection c. C-0453, [redacted] ER, p. 17, Flores WS2, ¶ 15.	**C-0186,** pp. 15, 22 and 23.
Low probability of coincidence of the Project Area with C. *caretta*, given the depth and temperature.	Memorial, ¶¶ 159 and 267. Reply, ¶ 51. Douglas Clarke WS1, ¶ 74.5. Sergio Flores ER1, ¶¶ 28, 113 and 128. Deltares ER1, p. 4.	**C-0186**, pp.17, 18, 74 and 93.
Food source, lobster and benthic organisms.	Memorial, ¶¶ 154, 159 and 274-275. Flores WS2, ¶¶ 14, subsection b. and d. and 19-22. Reply, ¶ 45 subsection h.	**C-0186,** pp. 39-41, 44-48., **C-0140,** pp. 23- 25.
The Project's impacts, considering its dimensions and mitigation measures, do not affect C. *caretta*.	Memorial, ¶107 subsection f. Reply, ¶¶ 31, 45 and 50.	**C-0186,** pp. 51, 54 and 56.
The Project would not affect fishing.	Memorial, ¶ 107, subsection g. Reply, ¶ 55.	**C-0186,** 50, 94 and 115.
On-the-fly suction technique minimizes impact.	Memorial, ¶¶ 66 and 67. Deltares ER, Sec. 3.1- 3.2 and pp. 13-14. Douglas Clarke WS1, ¶¶ 34-37. Richard Newell WS1, ¶¶ 25 and 26.2.	**C-0186**, pp. 59, 71 and 73.
Sediment return affects protected species.	Memorial, ¶¶ 96, 99 and 107 subsections b and c.	**C-0186,** p. 50.
Project design and mitigation measures.	Reply, ¶¶ 6, 31, 32, 43 and 54-56	**C-0186,** pp. 92 and 93.
(iv) Claims related to the use of scientific evidence		
Mexico ignores scientific evidence.	Reply, ¶¶ 6,8, 40, 44, 207 and 325.	**C-0186,** pp. 22, 26, 32 and 98.
The MIA's denial was not based on scientific evidence.	Reply, ¶¶ 39, 40, 206 and 228.	**C-0186,** pp.38 and 144.
Incorrect analysis of the scientific evidence.	Reply, ¶¶ 358, subsection c and 383.	**C-0186,** pp.15, 29-30, 33 and 180.

27. Table 1 makes it possible to verify that whatever the result of the nullity trial before the TFJA, it will invariably have an effect on the Claimant's claim.[19] Additionally, it is evident that the only substantial difference between ExO's facts, arguments and claims before the TFJA and those raised by the Claimant before this Tribunal, is that in this arbitration the Claimant alleges the alleged existence of "secret marching orders" that [redacted].[20] In Mexico's view, this aspect, together with the testimonial statements of Mr. Pacchiano himself, the evidence in the record and, significantly, [redacted], constitutes an element that demonstrates that the Claimant has had to appeal to create a theory of "secret marching orders" to be able to present its claim in this arbitration.

2. The Claimant tries to unduly circumscribe the Tribunal's jurisdiction to the aspects that are subject to review by the TFJA, which demonstrates that it resorts to this arbitration as an appeal instance

28. In the Reply, the Claimant has indicated that "[…] the debate about environmental issues that do not affect sea turtles is irrelevant, as they were not the grounds upon which SEMARNAT denied ExO's MIA under Article 35(III)(b) of LGEEPA".[21] This affirmation confirms that the Claimant seeks that the Tribunal limit its analysis to the technical-scientific aspects that are precisely the object of review by the TFJA. Additionally, the Claimant intends for the Tribunal itself to work as a national court and review the scientific evidence, contrasting it with the DGIRA's determinations, which is demonstrated by the following statement:

> Mexico has not engaged with, and therefore does not challenge, the expert reports and evidence submitted by Odyssey from experienced biologists and other scientists which comprehensively address the potential environmental impacts described by SEMARNAT in the 2018 Denial.[22]

29. In fact, the Claimant claims that "Mexico now attacks the Project's environmental soundness by relying on Technical Opinions and submissions that were not part of the reasoning

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19 *See* Second Solcargo-Rábago Report, ¶¶ 102-106.

20 Memorial, ¶ 221.

21 Reply, ¶ 21.

22 Reply, ¶ 44.

of the Denial […]".[23] However, this assertion is contradictory since, on the one hand, the Claimant intends to restrict the Tribunal's review topics, as well as Mexico's arguments, to those aspects expressed by the DGIRA in the 2018 Resolution[24] and, on the other hand, it itself presents new evidence that was not the subject of the analysis carried out by the DGIRA that led to the 2018 Resolution. For example, the Claimant indicates that "Mexico does not challenge the Expert Reports prepared by Deltares […]",[25] however, it was not part of the PEIA and it is only now that it has presented it in this arbitration proceeding, which confirms that, basically, the Claimant wants the Tribunal to rule on the Don Diego project's viability.[26]

30. Based on the foregoing, it is clear that the Claimant intends that the Tribunal limit itself to analyzing the technical and scientific aspects that are subject to review by the TFJA and that the Tribunal rules on whether the denial of the authorization by the DGIRA is supported by the additional scientific evidence presented in this arbitration. Mexico considers that, ultimately, the Claimant asks the Tribunal to perform a function that does not correspond to it. Due to this insistence of the Claimant, and in order to provide an objective context to the Tribunal on the alleged environmental sustainability of the Don Diego Project, Mexico has been forced to submit, together with this Rejoinder Memorial, three expert reports that will allow for the Tribunal to weigh the evidence presented in this arbitration and confirm that the decision of the environmental authority was technically, scientifically and legally reasonable. Additionally, as discussed below, these reports also show that the DGIRA correctly resolved that the Don Diego Project represents a serious threat to the ecosystem of the Gulf of Ulloa region and to the sustainability of marine species such as whales and other turtles, including the *Caretta caretta* ones.

a. It is false that the 2018 Resolution did not address the impact of the Don Diego Project on whales

31. It is questionable that the Claimant asserts that "Odyssey did not serve an expert report on the Project's effect on whales with its Memorial because impact on whales did not form any part

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23 Reply, ¶¶ 64-76.

24 Reply, ¶¶ 64-76.

25 Reply, ¶ 45.

26 "Deltares concludes that the Project would have used proven technology with well-established techniques to minimize potential environmental impacts (which are known and can be addressed), […]". Reply, ¶ 45.

of the 2016 and 2018 Denials".[27] This statement is false. The 2018 Resolution does reflect the DGIRA's concerns regarding whales and, in fact, constitutes one of the reasons that led DGIRA to deny the authorization of the 2015 MIA.[28] Indeed, the 2018 Resolution makes express reference to large marine mammals in the following terms:

> […] under the technical analysis performed to **MIA-R, IF, IA, and IC,** the scientific information this **DGIRA** follows, and which is contained in Legal Reasonings No. XVI and XVII, as well as the adverse effects derived from the project, […], that **AP** is located in the Gulf of Ulloa, which tridimensional space constitutes the habitat of the loggerhead sea turtle, which species is classified as endangered […], also reporting the existence of other three species of sea turtles also classified as endangered, such as "Lepidochelys olivacea" or the Pacific ridley sea turtle, the "Dermochelys coriacea" or leatherback sea turtle, the "Chelonia mydas" or green turtle and the "Eretmochelys imbricate" or hawksbill sea turtle, with respect to which there are no specific analysis, […], considering that the chelonians species mentioned above, as well as the sea big mammals species mentioned in the Legal Reasoning No. XVII of this Resolution, what proceeds is the **DENIAL OF THE AUTHORIZATION** so requested, […] also the mitigation measures proposed by **petitioner**,, […], fail to guarantee that all the effects of the **project** will not adversely affect the sea species […], and that have been referred to, in Legal Reasoning No. XVII of this instrument..[29]

32. Additionally, within the Considerando XVII of the 2018 Resolution itself the "Gulf of Ulloa" is examined as "habitat of other species" and, in fact, the DGIRA pointed out the following:

> Regarding sea mammals, this environmental authority replicates and owns the information transcribed in previous paragraphs regarding the fact that out of the 47 species known in Mexico, 35 have been reported in the Eastern coast of the Baja California peninsula. Among them, the blue whale *(Balaenoptera musculus)* can be mentioned as well as the fin whale *(B. physalus)*, Bryde's whale *(B. edeni)*, sperm whales *(Physeter macrocephalus)*,spinner dolphin *(Stenella longirostris)*, Risso's dolphin *(Grampus griseus)*, striped dolphin *(Stenella coeruleoalba)*, killer whales *(Orcinus orca)*, and California sea wolf *(Zalophus californianus)*, short-beaked common dolphin *(Delphinus delphis)*, pacific white-sided dolphin *(Lagenorhynchus obliquidens)*, the humpback whale *(Megaptera novaeangliae)* and the grey whale *(Eschrichtius robustus)*.All these species of mammals are subject to special protection in the Mexican standard.[30]

33. Even ExO has acknowledged before the TFJA that the DGIRA did address the project's impact on whales, and specifically, indicated that: "[i]n Rebuttal XVII. GULF OF ULLOA, HABITAT OF OTHER SPECIES, included in 295 to 316 of the Contested Resolution, the DGIRA

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27 Reply, ¶ 85.

28 Urbán-Viloria Report, ¶ 44.

29 **C-0009**, pp. 515-516 (emphasis added).

30 **C-0009**, p. 316 (emphasis added).

includes multiple references to species that inhabit the Gulf of Ulloa and are included in NOM 059. Specifically, the DGIRA refers to various species of whales, birds and turtles other than Caretta caretta. These observations are resumed between pages 472-473".[31] Therefore, it is inexplicable that the Claimant considers that the impact on the whales constitutes a "[a]dditional example […] of how Respondent seeks to rely on new reasons to justify".[32]

b. The Claimant's position regarding the impact of the Don Diego Project on whales shows that its claim is premature since it is based on the same allegations presented before national courts

34. The Claimant's position on the whale issue before the Tribunal seems to replicate the same argument that ExO adopted before the TFJA, *i.e.*, the alleged "defective statement of reasons to the […] affecting of species other than the Caretta caretta turtle".[33] Particularly, ExO argued the following:

> [t]he DGIRA referred to various species of whales, […]. However, the generic data that it includes, notably within Rebuttal XVII and other sections of the Contested Resolution, is presented isolated and decontextualized.[34]

35. This line of argument coincides precisely with that stated by the Claimant in the Reply, namely, "[t]he 2018 Denial refers to impact on sea turtles and other protected species of sea turtles […] but does not give any reasons for denying the Project based on an impact on whales, […]".[35] Once again, it can be verified that the Claimant's claim is based on the same facts and allegations that it raises at the domestic level before national courts, therefore the Tribunal must be careful to avoid ruling on technical-scientific aspects related to the Project's viability, since it is a matter that corresponds primarily to the specialized Mexican authorities (*i.e.*, to the DGIRA) and, where appropriate, the TFJA.

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31 **C-0186**, p. 79.

32 Reply, ¶¶ 77-87.

33 **C-0186**, p. 78.

34 **C-0186**, pp. 80-81.

35 Reply, footnote 204.

c. There is a possibility that the TFJA will issue another decision that allows addressing and correcting any additional aspect that SEMARNAT considers pertinent

36. Although ExO asked the TFJA to definitively resolve on the MIA's authorization, that is, to order the DGIRA to authorize the MIA on a conditional basis,[36] the TFJA itself has the power to be deferential to the DGIRA and determine that it is the latter who decides "with full freedom in the use of their powers and attributions",[37] as it did with respect to the 2016 Resolution. Indeed, the TFJA recognized that it should not be substituted in the powers of the DGIRA, a specialized authority with the technical capacity to analyze the scientific aspects that are the subject of the dispute, in particular, the TFJA explained the following:

> […] this Court has the power to analyze the legality of the resolution of Refusal of authorization of the MIA (appealed resolution), and is able to sentence the authority to grant the authorization of the MIA to the plaintiff or not, however, the law requires that this Jurisdictional Body have the sufficient elements to do this, which does appear to happen in the specific case.
>
> The foregoing, because this Tribunal does not have sufficient means of proof to analyze the MIA,nor does it have the necessary technical resources to analyze whether or not the mitigation proposals of the project would be effective in preventing damage to the habitat of the loggerhead turtles and the 4 species in danger of extinction, which is the subject of judgment, nor could it technically determine which measures might be sufficient for that purpose.
>
> [...], -as already mentioned- the Tribunal does not have the technical capacity to analyze these proposals, and if they are analyzed by this Court, it would be replaced in the powers that are proper and exclusive to the Secretariat of Environment and Natural Resources (SEMARNAT).[38]

37. It follows from the preceding paragraphs that, in the procedure that is *sub judice*, the TFJA could again determine that it does not have the technical capacity or the sufficient elements to order the MIA authorization. If this is the case, the TFJA may again grant due deference to the DGIRA to resolve what it deems appropriate.[39] Under this assumption, the DGIRA could even address other effects that the Project could have on other species and correct, with the proper

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36 **C-0186**, p. 197.

37 **C-0170**, p. 212. *See* Second Solcargo-Rábago Report, ¶¶ 102-106.

38 **C-0170**, pp. 186-187 (emphasis added).

39 *See* Second Solcargo-Rábago Report, ¶¶ 102-106.

justification and motivation, any additional aspect that had been identified by the TFJA,[40] as it happened and was recognized in the judgment regarding the 2016 Resolution:

> In addition to the above, a further impediment for this Tribunal to determine whether or not the actor's MIA should be authorized is that the *litis* raised in the trial at hand, deals exclusively with the possible damage that could be caused to the species of turtles in question, however, in the content of the administrative file in which the refusal was issued to the MIA, it is warned that there are several additional species that could be affected by the project, such as: the gray whale, dolphins, sharks, fish, mollusks, migratory ales, among others, and this Judge does not have the technical resources to carry out an analysis in that sense.
>
> Likewise, this Tribunal could not analyze other possible environmental impacts that the project in question represents, such as: water, air, sound pollution, among others.[41]

38. Therefore, and despite the fact that the Claimant has omitted to address it, it is evident that there is a possibility that the TFJA may decide that it is the DGIRA itself that once again must determine the viability of the MIA authorization.[42]

d. ExO has not fully participated in the TFJA procedure despite having the opportunity to do so

39. In the procedure that resolved ExO's challenge against the 2016 Resolution, the TFJA recognized that it required various expert evidence in environmental matters to be able to verify the viability of the mitigation measures proposed by ExO for the purpose that the 2015 MIA was authorized.[43] In fact, the TFJA was clear in stating that in order to decide on the authorization of the 2015 MIA it would have needed various technical opinions regarding all the topics analyzed during the PEIA. In particular, the TFJA noted the following:

> […] este Cuerpo Colegiado considera que, para valorar la *causa petendi* que expresa la parte actora, es necesaria la opinión técnica y especializada de expertos en la ciencia ambiental, en todas y cada una de las disciplinas implicadas en el asunto que nos ocupa.[44]

40. Although the nullity trial is still pending resolution,[45] ExO submitted only one expert evidence in marine biology, for which Mexico considers that this offer does not adhere to what

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40 *See* Second Solcargo-Rábago Report, ¶¶ 94-98.

41 **C-0170**, p. 187 (emphasis added).

42 *See* Second Solcargo-Rábago Report, ¶¶ 102 and 104.

43 **C-0170**, p. 187.

44 **C-0170**, p. 188.

45 *See* Second Solcargo-Rábago Report, ¶¶ 98, 102 and 106.

was indicated and reiterated by the TFJA, *i.e.*, that "a efecto de estar en condiciones de entrar al estudio de dicha propuesta, se requiere de la opinión de expertos en las diversas ciencias implicadas en el asunto de mérito".[46] It is strange that Odyssey and ExO chose not to take the opportunity to present expert reports to the TFJA, but instead submitted them to the Tribunal in this proceeding. This suggests that the Claimant itself does not believe that its evidence is convincing enough to satisfy Mexican domestic legal requirements. Instead, it hopes that the Tribunal will be the one to decide on its claim, ruling on technical issues beyond its competence.

e. The expert opinion presented by SEMARNAT before the TFJA is consistent with the 2018 Resolution and is part of the pending trial before the TFJA

41. The Claimant tries to make the Tribunal believe in the existence of an alleged contradiction of SEMARNAT in relation to the turtles' density in the Project area, however, this accusation is based on a wrong reading of the Resolutions.[47] Indeed, the Claimant argues that "[i]n both Denials, SEMARNAT erroneously justified its conclusion that *Caretta caretta* would be impacted as a species on the basis that academic literature demonstrates that there are one to 28 *Caretta caretta* turtles […] and 54 to 85 *Caretta caretta* turtles per km^2".[48] In this regard, it should be noted that, although the 2016 Resolution referred to these figures, such reference was made to support the conclusion that the Gulf of Ulloa is the habitat of the *Caretta caretta* species.[49] In this sense, even if these figures were incorrect, this would not alter the indisputable fact that the Gulf of Ulloa is the *Caretta caretta* turtle's habitat.[50] Furthermore, this situation was clarified in the 2018 Resolution in the following terms:

> Based on information contained in figure 2, created by this DGIRA and based on the overlap of the polygon of the project area, it is determined that the surface of the AP is located within the Gulf of Ulloa, which is considered a Caretta caretta critical habitat and in which, specifically concerning the first three polygons, it was identified the

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46 **C-0170**, p. 192.

47 Memorial, ¶¶ 272-273 and 275. *See* Reply, ¶¶ 58-62.

48 Reply, ¶ 59.

49 Within the AP surface and specifically in the first three polygons, it was identified that there is an abundance of 1-28 turtles per km^2, and in polygons 4 and 5, the abundance is 54 to 85 turtles per km^2, therefore this authority concludes that, according to article 3, section XXIII, of the General Wildlife Law, the Gulf of Ulloa: is habitat for the *Caretta caretta* species. *See* **C-0008**, p. 220.

50 Group of Experts on Sea Turtles Report, ¶ 27. Verónica Morales Report, ¶¶ 76 and 89.

> existence of an abundance from 1 to 28 Turtles per km2, and with respect to polygons 4 and 5, abundance corresponds to 54 to 85 turtles per km^2.
>
> In order to comply with the guidelines indicated by the jurisdictional authority, this DGIRA proceeded to analyze the best available scientific evidence to precise that the existence of a habitat does not onlydepend on the presence of certain species, but also on the use such species make of the same.[51]

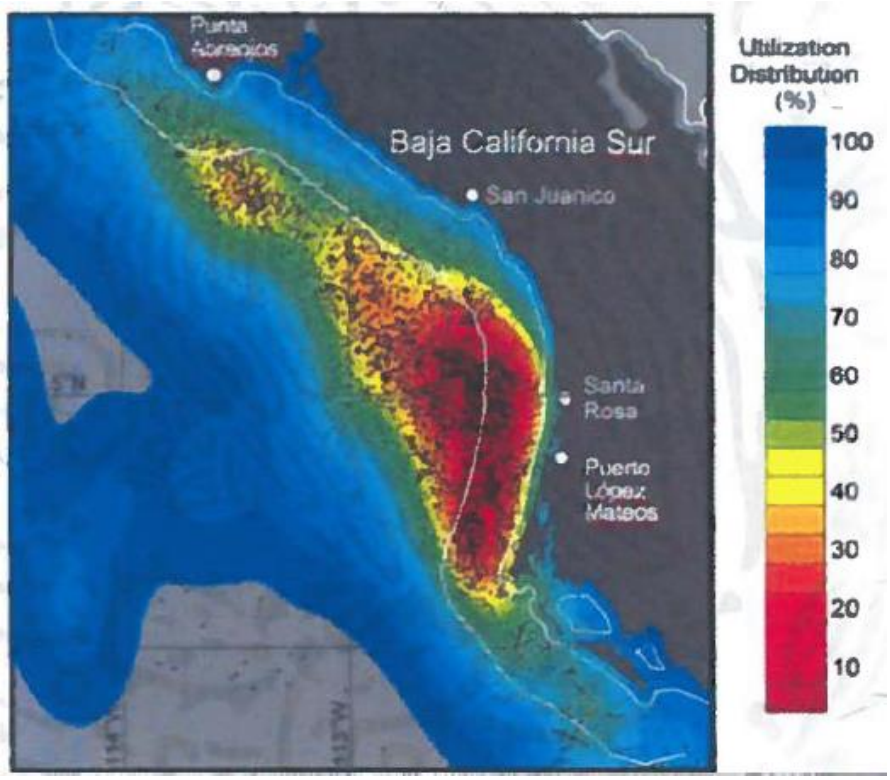
42. As can be seen from the previous quote, although in the first paragraph the DGIRA again quotes the figures with respect to which the Claimant argues an alleged contradiction, it is clear that it did so solely to clarify their scope. This is confirmed precisely in the second paragraph, in which the authority indicates that it "proceeded to analyze the information […] to specify that the existence of a habitat does not depend only on the presence of certain species […]".[52] In fact, in subsequent paragraphs the DGIRA explains the study by *Peckham et. al., 2007*, specifying that Figure 1 addresses the positions (not the density), as well as "the distribution and use of space of juvenile loggerhead turtles within the Península de Baja California":[53]

51 **C-0009**, pp. 290-291.

52 **C-0009**, p. 291.

53 **C-0009**, p. 291.

Figure 1. Positions and percentage of habitat use determined for 43 loggerhead turtles monitored by satellite telemetry between 1996 and 2006. (Peckham et al., 2007)



Source: C-0009, p. 291.

43. Based on Figure 1, it is clear that, unlike the 2016 Resolution, in which the term "position" was erroneously mixed with that of "abundance", the 2018 Resolution clarified this aspect,[54] which coincides with what was declared by [redacted] in her expert statement.[55] For the Tribunal's benefit, Table 2 presents a comparative analysis of the 2018 Resolution and the

[54] In the 2016 Resolution, Figure 1 was erroneously named "Abundancia de Tortugas amarilla Caretta caretta" (**C-0008**, p. 221), while in the 2018 Resolution the title of Figure 1 was corrected to "Densidad de Kernel del Uso de hábitat de la Tortuga Caretta caretta en el Pacífico Norte". *See* **C-0009**, p. 289. Although on pp. 295 and 467 it is mentioned that it exists "a specimen abundance between 28 and 85 *Caretta caretta* per km2", this reference seems to be an involuntary error by the DGIRA since these figures and their scope are previously and exhaustively clarified from pages 291 to 294 of the 2018 Resolution. In accordance with the aforementioned, Mexico considers it deplorable that the Claimant intends to take advantage of this situation to make the Tribunal believe that there is an inconsistent act of the DGIRA.

[55] **C-0453**, pp. 38-40.

Biologist Lenka's expert report regarding the supposed density of the *Caretta caretta* turtle in the Project area.

Table 2. Comparative analysis that shows the congruence between the 2018 Resolution and the [redacted]s expert report regarding the supposed density of the *Caretta caretta* turtle

2018 Resolution challenged before the TFJA	Biologist [redacted] expert report before the TFJA
In this figure, Peckham, according to the telemetry results, shows the use that is given superficially to the habitat of the Caretta caretta turtle, that is, the percentage of use and position within the habitat where they move the longest time to carry out the foraging activities. The range of colors represents the percentage of use and position in the habitat ranging from 0 to 100%, thus each color represents a percentage, in general the range of reds represents 0 to 20% while the range of oranges shows a percentage 20 at 30%, yellow from 30-40, green from 40 to 50%, light blue from 50 to 80%, sky blue from 70 to 80% and dark blue from 80 to 100%. Based on the information contained in figure 4, constructed by the DGIRA and the superposition of the polygon of the project area, it is determined that the total surface of the five polygons that make up the AP are within the habitat of the Caretta caretta species, which gives an AP use between 10-30%.	7. The expert will analyze the following transcript of the Contested Resolution (visible on pages 289 and 467 thereof), which contains an inference made by SEMARNAT in relation to the population density of the Cartetta caretta turtle in the Bay of Ulloa. In this regard, the expert will determine whether the conclusions that emerge from the transcript coincide with the conclusions of the scientific article by Peckham (2007) and will explain the reasons for his statement. […] The map is interpreted as follows: Two of the project's maneuvering polygons are located in part within the area corresponding to 50% of that studied by Peckham 2007 with the highest use of the habitat of the Caretta caretta turtle within the Gulf of Ulloa, with an index of turtle positions per km^2 from 85 to 130 approximately; the other three polygons are located within 75% and 95% of the area in which an index of 28 to 85 turtle positions per km^2 was detected.
e) The results obtained for the density of the Caretta caretta turtle were 0.643 for 2005, 0.747 for 2006 and 0.577 for Caretta caretta per km^2 for 2007. The abundance for 2005 was 42,786, for 2006 it was 49,712 and for 2007 it was 38,396 *Caretta caretta* turtles. […]	8. In relation to the previous question, is the value of 1 to 85 turtles per km^2 of the Contested Resolution valid to reflect the population density of the *Caretta caretta* turtle in the Bay of Ulloa? No. According to Seminoff 2014, the population density of the Caretta caretta turtle in the Gulf of Ulloa is 0.577 to 0.747 turtles per km^2, with an average of 0.650 *Caretta caretta* turtles per km^2.
f) According to Seminoff et. al, 2007 the density of the *Caretta caretta* turtles found in the Gulf of Ulloa (0.650 / km^2), is the second highest aerial survey effort for any type of foraging […]	
Source: C-0009, pp. 285, 286, 292 and 293 and **C-0453**, pp. 38-40.	

44. Pursuant to Table 2, the Tribunal will be able to verify that, contrary to what was indicated by the Claimant, there is no inconsistency between what was indicated by SEMARNAT in the 2018 Resolution and what was declared by [redacted]. On the contrary, the DGIRA was exhaustive in addressing the main point that it sought to support with the figures referred by the Claimant regarding the index of positions (erroneously referred to as density) of turtles per km^2, *ie*, that the Gulf of Ulloa is the habitat of the *Caretta caretta* turtle.

45. In any event, the Claimant appears to overlook an indisputable scientific fact, namely that the abundance estimate of the *Caretta caretta* turtle in the Baja California peninsula is up to ~30,000 turtles not including other species of turtles.[56] This number contrasts with the 3 scarce sightings reported by the Claimant derived from a field campaign carried out for 13 days, and which differs significantly in timing and data collection time from the studies conducted by Dr. Seminoff.[57] This divergence of information can be explained by the lack of rigor and scientific methodology on the part of ExO and the Claimant,[58] as well as the few days dedicated to the study despite the magnitude of the project.

46. It should be noted that the Claimant itself has acknowledged that the number on the abundance of the *Caretta caretta* turtle in the Baja California Peninsula has been updated by Dr. Seminoff, who in an article subsequent to the one cited by the DGIRA in the 2018 Resolution, states that "[t]he mean annual abundance of 43,226 loggerhead turtles […] represents the first abundance estimate for foraging North Pacific loggerheads based on robust analytical approaches".[59] With this number, it is not very serious for the Claimant to question that "the Gulf of Ulloa is an area that has been long considered as a critical habitat for *Caretta caretta* juveniles turtle" and that, "it is an area of great importance for an important proportion of the entire population of the North Pacific *Caretta caretta* turtle".[60]

3. The TFJA expressly recognized that SEMARNAT could issue another resolution denying the 2015 MIA, subject only to proper motivation and justification

47. In the Reply, the Claimant argues that it "never argued […] that the TFJA ordered SEMARNAT to approve the MIA".[61] This statement is false. Both in the Notice of Intent, as in the Notice of Arbitration, and even in the Memorial, the Claimant indicated that "[i]n plain

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56 **C-0009**, p. 251. Seminoff, Jeffrey A. et. al, *Loggerhead turtle density and abundance along the Pacific Coast of the Baja California Peninsula, Mexico determined through Aerial surveys: A preliminary assessment* en 26th Annual Symposium on Sea Turtle Biology and Conservation, 2006, p. 321. **R-0208.** *See* WS Jeffrey Seminoff, ¶ 17.

57 **C-0009**, p. 287 and **R-0208**, p. 321.

58 Group of Experts on Sea Turtles Report, ¶¶ 20, 115, 144. Verónica Morales Report, ¶ 80.

59 *See* **C-0072**. *See* WS Jeffrey Seminoff, ¶ 17.

60 **C-0009**, p. 287. *See* WS Jeffrey Seminoff, ¶ 17.

61 Reply, ¶ 120.

contempt of the March 2018 order of the Tribunal, the second refusal issued by SEMARNAT again failed to evaluate ExO's technical proposal, […]".[62] For the Claimant, the only acceptable result for the DGIRA to comply with the TFJA's order was to issue a resolution authorizing the Don Diego Project. This is confirmed by the statements made by his legal expert, Mr. Herrera, who affirms the following:

> Indeed, if the case to deny the AIA provided for in Article 35, section III, b) of the LGEEPA had been reconsidered, the environmental authority should have authorized the MIA plain and simple; or should have granted the conditional authorization, establishing the corresponding conditions (referred to in Article 28 of the LGEEPA) in the resolution, if the environmental authority wanted to require mitigation measures, instead of denying the authorization based on the grounds of Article 35 of the LGEEPA, which was not updated, as evidenced in paragraph III.C. of this opinion.[63]

48. As the Respondent pointed out in its communication to the Tribunal of August 30, 2021, the Claimant —and its expert— erroneously assume that the TFJA ordered SEMARNAT that it should grant the Authorization of the 2015 MIA. On the contrary, TFJA's decision shows that granting the conditional authorization was a mere hypothetical possibility that depended solely on the DGIRA's determination,[64] as established by the judgment itself:

> […] the appropriate thing is to declare the contested decision null and void […], to the effect that the authority, […] issue a new resolution, which resolves the application for authorization of the MIA [...], in which it analyzes each and every aspects that were exposed in the application and its scope by the claimant, [...], as well as analyzes, where appropriate, other additional measures of prevention and mitigation, so that they are avoided, mitigate or compensate the environmental impacts likely to occur with the project submitted to authorization, so that in the event that the authority determines to authorize the project conditionally – a determination that must be reasoned and reasoned – in terms of section II, of the aforementioned legal precept, the authority conditions said authorization on compliance with said prevention and mitigation measures; and done the above, the defendant authority properly founds and motivates its determination, based on the most reliable scientific data available, with full freedom in the use of its powers and attributions, the aspects already commented and specified in this ruling, [...], leaving safe the powers of the Ministry of Environment and Natural Resources (SEMARNAT) to resolve what corresponds in law.[65]

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62 Notice of Intent, January 4, 2019, ¶ 104, *see* also, ¶¶ 7, 103-104 and 120; Notice of arbitration, April 5, 2019, ¶¶ 7, 115-118 and 133; and Memorial, ¶ 220.

63 Second Héctor Herrera Report, ¶ 80.

64 *See* Second Solcargo-Rábago Report, ¶¶ 99-101.

65 **C-0170**, pp. 211-212 (emphasis added).

49. From the previous paragraph it can be deduced that: *i)* the TFJA preserved SEMARNAT's powers, that is, ordered it to decide with full freedom in the use of its powers; and *ii)* the justification and motivation of the DGIRA should deal with the aspects commented on and specified in the judgment, that is, those points in which it was determined that "la autoridad fue omisa en analizar en su integridad y dar contestación".[66] Therefore, this reinforces the fact that it was not only possible but foreseeable that the authorization would again be denied since it was recognized that its determination was only subject to correcting the omissions that led to the invalidity of the 2016 Resolution, as it happened. This scenario was even the most likely considering that the TFJA itself, when using the phrases "en su caso" and "para que en el caso de que",[67] recognized as a mere hypothetical possibility to decide on the authorization of the project in a conditional manner.[68]

50. In accordance with the aforementioned, it is understandable, nothing surprising, much less arbitrary, the fact that "[d]e la lectura de la nueva resolución, se desprend[a] que la agencia ambiental buscó robustecer la decisión negativa que ya había tomado de antemano".[69] In fact, despite the fact that ExO challenged the 2018 Resolution before the TFJA arguing "[t]hat the aforementioned resolution by again denying the granting of the authorization of the Environmental Impact Statement [was] "grosslyillegal","[70] the TFJA itself rejected that argument and acknowledged that "by issuing the new resolution [...] the authority did indeed attend to all the points indicated in the judgment that resolved the present trial".[71] In particular, the TFJA acknowledged that its decision implied that the DGIRA had the power to decide in whatever sense it wanted with the sole condition that its decision was duly founded and motivated:

> […] the judgment of March 21, 2018, was clear in the sense of specifying that "the powers of the Ministry of Environment and Natural Resources (SEMARNAT) to resolve what corresponds in law were left safe", that is, that the nullity decreed by this Judge in no way constrained the environmental authority to grant the authorization of the MIA, but that the nullity decreed was only for the purpose of issuing a new resolution, duly founded and reasoned, in which the authority analyzed the aspects that

66 **C-0170**, p. 183. *See* Second Solcargo-Rábago Report, ¶¶ 99-101.

67 **C-0170**, p. 212.

68 *See* Second Solcargo-Rábago Report, ¶¶ 99-101.

69 Second Héctor Herrera Report, ¶ 80.

70 **R-0140**, p. 32.

71 **R-0140**, p. 81 (emphasis added). *See* Second Solcargo-Rábago Report, ¶¶ 99-101.

> it unduly omitted to do in its first resolution - specified in the respective ruling and resolved what corresponded in law.[72]

51. Therefore, it is evident that the TFJA expressly determined that SEMARNAT could issue another resolution that would correct the aspects that were omitted to analyze in the 2016 Resolution and that were identified by TFJA itself, namely, that it was recognized that the 2015 MIA could again be denied, subjecting that decision to a proper motivation and justification to do so.[73]

4. Odyssey seeks for the Tribunal to conduct a *de novo* review of the 2015 MIA

52. The Claimant insistently argues in its Reply that "Mexico ignores […] Odyssey's Scientific Evidence"; "Mexico has not engaged with, […], the expert reports and evidence submitted by Odyssey from experienced biologists and other scientists";[74] and "Mexico does not challenge the he expert evidence".[75] This type of assertion contradicts the Claimant's position according to which "Odyssey is not seeking to appeal an adverse environmental decision, nor is it asking the Tribunal to determine the MIA afresh".[76] For Mexico, the Claimant's claim is clear because it seeks for the Tribunal to evaluate *de novo* the DGIRA's decision. This is reflected throughout the Reply as evidenced in the following paragraphs.

53. First, the Claimant claims that *"*Mexico does not challenge the Expert Reports prepared by Deltares"[77] and argues that "Deltares explains why the mining activities described in papers on deep seabed mining referenced by SEMARNAT in the 2018 Denial are not relevant to ExO's Project".[78] In this regard, Deltares points out that the activities covered by said articles focus on "deep/abyssal sea mining using different techniques in different habitats […]".[79] The previous citation constitutes a clear example that the Claimant intends for the Tribunal to examine the

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72 **R-0140**, p. 113.

73 *See* Second Solcargo-Rábago Report, ¶¶ 99-101.

74 Reply, ¶ 44.

75 Reply, ¶ 53.

76 Reply, ¶ 17.

77 Reply, ¶ 45.

78 Reply, ¶ 46.

79 Reply, ¶¶ 45-46.

findings made by DGIRA and contrast them with the expert reports submitted in the arbitration by Odyssey, that is, for the Tribunal to analyze the 2015 MIA again. The aforementioned despite the fact that the 2018 Resolution is the result of what was ordered by the TFJA, namely, a new resolution that "fund[a] y motiv[a] adecuadamente su determinación, con base en los datos científicos más fidedignos disponibles".[80]

54. In this regard, and to address the issue of seabed mining, the DGIRA indicated:

> […] this DGIRA, proceeded to consider the information contained in all the studies performed by Kathryn A. Miller, Kirsten F. Thompson, Paul Johnston1 and David Santillo, "An Overview of Seabed Mining Including the Current State of Development, Environmental Impacts, and Knowledge Gaps, 2018", which due to its specificity, knowledge, marketing and recent data, is considered the most reliable scientific information; thus, it is owned and adopted by the agency as technical support for the assessment of the project.[81]

55. Based on the foregoing, the Tribunal will be able to verify that the Claimant questions in this arbitration the scientific articles used by the DGIRA to carry out its analysis and determination and, consequently, intends for the Tribunal to rule on their relevance and applicability, which is unsustainable. For the benefit of the Tribunal, Table 3 presents a comparative analysis of the findings made by the DGIRA in the 2018 Resolution and the questions raised by the Claimant in this arbitration regarding said findings. It is striking that, at the 2015 MIA, ExO presented the expert reports of Messrs. Newell and Clarke, which were analyzed in the 2018 Resolution. However, now within the framework of this arbitration, the Claimant presents the testimonial statements of these two people to refute the analysis contained in the 2018 Resolution.

Table 3. Comparative analysis of the 2018 Resolution and the Claimant's arguments in this arbitration, which shows that the Claimant intends for the Tribunal to formulate a *de novo* analysis of the MIA

2018 Resolution	Odyssey's claims in the arbitration
The AP is located in the Gulf of Ulloa, which is considered a critical habitat for the *Caretta caretta* turtle. It is also the habitat of three other species of turtle in danger of extinction. Proposing mitigation measures to prevent impacts on *Caretta caretta* turtles indicates that ExO considered possible impacts from dredging activities.	Second, Mexico does not question the Expert Report delivered by Professor Flores-Ramírez, […] • very low probability that Caretta caretta or other sea turtles could be affected by dredging or Project operations on the surface,

80 **C-0170**, p. 212.

81 **C-0009**, p. 318.

2018 Resolution	Odyssey's claims in the arbitration
Due to the characteristics of the Gulf of Ulloa, it allows a high concentration of lobster, the main source of food for the *Caretta caretta* turtle in this region. There are no proven mitigation measures that can return the *Caretta caretta* turtle habitat to its original condition. **(C-0009, p. 235, 239, 286, 287, 290, 293, 472 503, 515)**	• dredging would not be carried out in an area frequented by sea turtles, nor where their food sources are found. • the effectiveness of the protection and mitigation measures established for the turtles protection **(Reply, ¶ 50)**
Despite not being included in the MIA file, the DGIRA analyzed the opinion of Dr. Douglas Clarke, *Comments on the measures proposed in the Don Diego dredging project for the protection of turtles referring to the resolution of SEMARNAT*, submitted before TFJA, and determined that this was not consistent with the available scientific information. **(C-0009, p. 469, 471)**	Third, Mexico does not contest the evidence presented by Dr. Clarke […] Dr. Clarke's opinion is that the package of measures proposed by ExO to protect sea turtles represents a "gold standard for projects elsewhere" and "as comprehensive a package of protection measures as occurred anywhere in the world", even when "the scientific assessment determined that turtles would be encountered rarely if at all, because dredging in the Project would occur in waters where turtles are not likely to be found". **(Reply, ¶ 52)**
In the way that ExO carried out the studies, it was not possible to obtain sufficient data to calculate the abundance and distribution of the *Caretta caretta* turtles, likewise, the proposed programs were not sufficient since they did not establish specific measures to be carried out once the environmental impact had been caused. **(C-0009, p. 472, 502, 509)**	Fourth, Mexico does not contest the expert evidence […] provided by Mr. Pliego, […] It concludes that ExO's MIA is "more complete and detailed, particularly with regard to mitigation measures, than that of other MIAs and mitigation programs that I have been able to know […] the mitigation measures proposed would be effective and could be adequately monitored by SEMARNAT […] He also considers that the Project would have caused no impact on protected species, nor on pelagic organisms or fishing. **(Reply, ¶¶ 53, 54)**
The prevention and mitigation measures proposed by ExO do not demonstrate that the project will not cause a danger of serious or irreversible harm. Likewise, the DGIRA analyzed the information presented based on studies carried out by Dr. Newell such as the Seabed Restoration Program and the bacterial diversity existing in the dredging area. **(C-0009, p. 104, 142, 504, 512, 520)**	Fifth, Mexico does not challenge […] the Testimonial Statement of Dr. Richard Newell [who] considered that ExO's MIA "comprehensively identified and addressed the relevant environmental impacts and contained a range of monitoring and mitigation provisions that met the best international standards and practices" and concluded: "[…] I clearly know when a dredging project will have a non-mitigatable impact on the environment. This Project will have no such impact." **(Reply, ¶¶ 56, 57)**

56. As described in this section and the content of Table 3, it is evident that the Claimant wants the Tribunal to conduct a *de novo* analysis of the MIA, which is unsustainable and should be rejected by the Tribunal.

5. Mr. Pacchiano's *twitter* statements regarding the sense of the 2018 Resolution are not inappropriate since it was foreseeable that it would be issued again in the negative sense

57. Contrary to what the Claimant asserts, Mr. Pacchiano's statement on the sense of the 2018 Resolution is not surprising, inappropriate, nor does it demonstrate that the denial of the 2015 MIA responded to Mr. Pacchiano's determination "to burnish his environmental credentials with the public that [,] was willing to violate Mexican law by publicly announcing that the Don Diego Project would be again denied in advance of the actual decision".[82]

58. The 2018 Resolution was issued in response to what was ordered in the TFJA's ruling of March 21, 2018,[83] *i.e.*, to issue a new resolution that was duly founded and motivated, which did not imply that SEMARNAT should re-evaluate the 2015 MIA.

59. In this sense, Mr. Pacchiano's *twitter* statement was consistent and attended to the technical-scientific analysis previously carried out by the DGIRA, which should only strengthen the justification and motivation of some aspects ordered by the TFJA (*e.g.*, analyze the prevention and mitigation measures proposed by ExO), leaving the DGIRA's decision-making powers safe. Therefore, the sense of the TFJA's ruling contemplated the possibility that, in exercise of its powers as a technical authority, the DGIRA would once again deny the 2015 MIA.[84]

60. In this regard, Mr. Pacchiano himself has clarified the following:

> Although the Claimant argues again that I allegedly ordered that the press be informed that Don Diego would be denied for the second time and that I allegedly "promoted" the second denial through my Twitter account, I would like to point out that the management of my Twitter account was controlled both by myself and the Social Communication Unit of SEMARNAT, and the latter took advantage of the reach of my account to share communications from SEMARNAT and other government agencies and public officials. Therefore, it was totally normal that from my account retweets were given to different communications of the general actions of SEMARNAT and the federal government of which I was part.[85]

61. Therefore, the fact that Mr. Pacchiano's official *Twitter* account was used to comment on the 2015 MIA's sense is a common practice, since as the head of SEMARNAT, he must pronounce

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82 Reply, ¶ 113.

83 Second Solcargo-Rábago Report, ¶¶ 4, subsection o, 101 and 103.

84 Second Solcargo-Rábago Report, ¶¶ 107 and 108.

85 Second WS Rafael Pacchiano, ¶ 36 (emphasis added).

on sensitive environmental issues or of public interest, without implying inappropriate or arbitrary conduct.[86]

6. The Claimant's references to the TFJA's ruling regarding an alleged lack of due process are irrelevant because this aspect has already been corrected by the 2018 Resolution

62. The Claimant argues that "Mexico's TFJA itself confirmed SEMARNAT's rejection of due process",[87] however, Odyssey omits to clarify that this determination was made with respect to the 2016 Resolution, which was corrected as ordered by the TFJA with the issuance of the 2018 Resolution.[88] In fact, the extracts on the alleged lack of due process cited in the Reply correspond to the TFJA's decision regarding the first ExO's contest against the 2016 Resolution. However, in a second challenge —now against the 2018 Resolution—, the Claimant only claimed two aspects that had nothing to do with a lack of due process, namely: i) alleged failure of the DGIRA to comply with what was ordered by the TFJA in the 2018 ruling on the 2016 Resolution;[89] and ii) an alleged repetition of the act by the DGIRA when again denying the authorization of the 2015 MIA through the 2018 Resolution.[90] The TFJA rejected both claims in the following terms:

> Therefore, it is clear that at the date of filing the complaint for omission, that is, on October 4, 2018, the term of four months had not elapsed, [...], to comply with the judgment of March 21, 2018, issued by this Superior Chamber, hence the COMPLAINT FOR OMISSION is inadmissible.
>
> [...] although it is true, both the annulled resolution and the one issued in compliance with the judgment of this Jurisdictional Plenary, resolved to deny the authorization of the MIA requested by the claimant, on the grounds that the works and activities of the project subject to study, would affect species declared in danger of extinction, specifically the loggerhead turtle, loggerhead, or Caretta caretta; the truth is that the new

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86 As the Respondent pointed out in its communication of August 30, 2021, "es común que la postura de la SEMARNAT se exprese a través de comunicados de prensa cuando se trata de temas ambientales sensibles o que son de interés para el público general. Por ejemplo, recientemente, la SEMARNAT se ha pronunciado en contra del uso del glifosato y continúa manifestándose en ese sentido, a pesar de que existen impugnaciones judiciales en curso". *See* **R-0165**, **R-0166**, **R-0167**, **R-0168** and **R-0169**.

87 Reply, Section II.D., p. 55.

88 *See* **C-0009**. It should be noted that the TFJA rejected the challenge filed by ExO for an alleged repetition of the act by the DGIRA, when issuing the 2018 Resolution. In this regard, the TFJA indicated that "[…] to the extent that, in complying with the final judgment, the defendant environmental authority did not issue a decision in the same terms as the one annulled, due to the considerations set out above; hence the UNFOUNDED complaint of repetition that concerns us". *See* R-**0140**, p. 113.

89 **R-0140**, pp. 3, 11-20.

90 **R-0140**, pp. 27-117.

> resolution of October 12, 2018 incorporated new grounds and reasons for the effect of supporting such a refusal, which were not expressed by the authority in the annulled resolution dated April 7, 2016.
>
> [...] therefore, it cannot be said that there is a repetition of the annulled act,in so far as, in complying with the final judgment, the defendant environmental authority did not issue a decision in the same terms as the annulled one, due to the considerations set out above; hence the UNFOUNDED complaint of repetition that concerns us.[91]

63. Thus, given that ExO's claims were rejected by the TFJA, the company filed a third challenge —again against the 2018 Resolution— which remains *sub judice.*[92] In this regard, in its third challenge, as in the second, ExO did not raise any claim regarding any alleged lack of due process. Therefore, it is evident that the facts cited by the Claimant in relation to an alleged lack of due process[93] are irrelevant because they have already been corrected by the DGIRA with the issuance of the 2018 Resolution.

B. The Claimant's claim is based on the alleged existence of "secret marching orders" [redacted]

64. As already demonstrated in the previous section, the Claimant presents in this arbitration the same claims as ExO did before national courts, which makes it evident its intention that this Tribunal act as an appeal body and even carry out an evaluation *de novo* of the MIA. Since the NAFTA does not allow this course of action, the Claimant has also based its claim on the [redacted], alleging the existence of alleged "secret marching orders" [redacted]".[94] Without prejudice of noting that the Claimant has dropped any reference to the phrase "secret marching orders", because it evoked the same claim in *Vento Motorcycles v. Mexico* that was rejected by that tribunal —and whose similarity with the facts of the present case is significant—, [redacted].

65. In the following subsections are elaborated in detail some aspects that are enable further clarity to the Tribunal on the lack of credibility of [redacted] and [redacted]. In particular: *i)* that [redacted] and [redacted]

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91 **R-0140**, pp. 20, 112-113 (emphasis added).

92 Second Solcargo-Rábago Report, ¶¶ 102-106.

93 *Cfr.* **C-0170,** pp. 108, 192-211 and Reply, 120-121.

94 Memorial, ¶ 221.

[redacted]

iii) that [redacted] and [redacted] *v)* that neither Odyssey, nor [redacted] and [redacted]; and *vi)* there is no contemporary documentary evidence that shows that [redacted].

1. [redacted] and [redacted]

66. It is unquestionable the fact of [redacted] and [redacted].[98] [redacted].[99] [redacted],

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95 *See* Second Solcargo-Rábago Report, ¶¶ 203-204.

96 For greater clarity, the arguments made by Mexico regarding the allegations of [redacted] and [redacted] contained in their testimonies do not imply an acceptance of their content. On the contrary, and solely for the purposes of argumentation, the Respondent starts from the general premise that "assuming without granting" that what [redacted] and [redacted] affirm in their testimony were true — which is denied — [redacted]

97 Aticle 4, seccion I LGRA, **R-0057** and Article 2 LFRASP, **R-0058**.

98 First WS [redacted], ¶ 2. First WS [redacted], ¶ 3.

99 Article 7 of LGRA, **R-0057** y Article 7 of LFRASP, **R-0058**.

[redacted][100]

67. [redacted] and [redacted] In this regard, the Internal Regulation of SEMARNAT set out that DGIRA has the obligation of assessing environmental impact manifestations.[101] The Internal Regulation set out that is the General Director who is in charge of DGIRA, who assumes its technical and administrative direction and is responsible before superior authorities of its correct operation.[102]

68. In his second testimonial statement, [redacted] indicates that "[redacted]," while [redacted] declares that [redacted].[103] Assuming without granting that their statements were true --which Mexico denies and the evidence presented by the Respondent confirms it--, both assertions imply [redacted] ".[104] Even [redacted] affirms that [redacted].[105] In fact, he acknowledges [redacted][106], and even so, [redacted].

69. It is also surprising that in the event [redacted] and [redacted]

100 Article 7 of LGRA, **R-0057** y Article 7 of LFRASP, **R-0058**.

101 Article 28 section II of RISEMARNAT, **R-0053**.

102 Article 18 of RISEMARNAT, **R-0053**.

103 Second WS [redacted], ¶ 34 (emphases added).

104 *See* Reply, ¶ 166.

105 Second WS [redacted], ¶ 32.

106 First WS [redacted], ¶ 32 and Second WS [redacted], ¶ 32.

107 *See* Second Solcargo-Rábago Report, ¶ 212.

[redacted] The Claimant cannot blame the Respondent for evidence that was or should have been [redacted] and [redacted] and that [redacted]

70. Although the Claimant intends to victimize [redacted] and [redacted] arguing that [redacted].[108] The Respondent respectfully takes issue with this, since what is surprising is that the Claimant seeks to justify [redacted] and [redacted]

71. Furthermore, it is clear for the Respondent that there is also an issue of ethical principles, considering that [redacted] and [redacted][109] The performance of a person before an apparent dilemma of that nature says a lot about its probity and honor.

72. Based on the Claimant's allegations, assuming without granting that what [redacted] and [redacted] say was true — which is denied — [redacted].[112] For Mexico, it is clear that if the statements of [redacted] and [redacted] were true — which is rejected — it would mean that [redacted]

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108 Reply, ¶ 166.

109 Second WS Salvador Hernández, ¶ 16.

110 Second WS [redacted] ¶¶ 11 and 22 and Second WS [redacted], ¶¶ 32-34.

111 Reply, ¶ 166.

112 Second WS [redacted], ¶ 28.

[redacted].[113]

a. [redacted]

73. In the Counter Memorial, the Respondent pointed out that "in the working meetings the clear possibility was even raised that [redacted]"[114] In spite of this, [redacted] claims that "[redacted]".[115] This is false. Mr. Romero has submitted a witness statement in which he confirms that as a former representative of the Government of Mexico, he expressed the possibility that [redacted]:

> While explaining the generalities of the arbitration, I pointed out [redacted] Although it is possible to affirm that this does not constitute a formal request, the truth is that this possibility was mentioned. [redacted].[116]

74. This statement coincides with what was indicated by Mr. Hernández, who also participated in said meeting [redacted] In particular, Mr. Hernández has stated the following:

> The clear example of this is the meeting on February 7, 2019, in which the officials of the Ministry of Economy raised the possibility that, if the case progressed, [redacted]

113 *See* Second Solcargo-Rábago Report, ¶ 212.

114 Counter-Memorial, ¶ 209. First WS Salvador Hernández, ¶ 7.

115 Second WS [redacted], ¶ 32.

116 WS Hugo Romero, ¶ 17.

[redacted][117]

75. Although it is true that in those first meetings with SEMARNAT, the defense team of Mexico (DGCJCI) could hardly clearly identify who its witnesses would be[118] --except for Mr. Pacchiano considering the Claimant's direct accusations-- [redacted].

76. In any case, [redacted]

b. [redacted]

77. Although the Respondent has indicated [redacted]"[120], however, that assertion is false.[121] [redacted].[122] This allegation is incorrect.

78. Mr. Romero has clarified the scope [redacted]

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117 Second WS Salvador Hernández, ¶ 11 (emphasis added).

118 WS Hugo Romero, ¶ 18 (emphasis added).

119 Counter-Memorial, ¶ 388.

120 Second WS [redacted] ¶ 25.

121 Second WS Salvador Hernández, ¶¶ 7-8.

122 Second WS [redacted], ¶ 26.

[redacted] In particular, Mr. Romero has explained the following:

> I am also struck by the fact that [redacted]. Although the legal area of SEMARNAT was the point of contact, it was for the purpose of having a single communication channel such as coordinating meetings, delivering information, but it was not, in my understanding, only to allow an official of the legal area to take a position. If this had been the case, we would only have met with the SEMARNAT legal division. For this reason, I consider that the statement in the sense that "[redacted] is incorrect.[123]

79. [redacted][124] Notwithstanding, Mr. Hernández has testified that at the meeting on February 7, 2019 —which [redacted] to the Ministry of Economy lawyers that, from a technical and environmental point of view, and in accordance with the applicable legal framework, Don Diego project could not obtain environmental authorization for the reasons that were already stated in the resolutions issued by DGIRA".[125] Although Mr. Hernández has indicated that ""[redacted]"", he has also clarified that ""[redacted].[126] This recounting of the events matches with what was expressed by Mr. Romero, who also participated in the meeting on February 7, 2019. In fact, at that meeting SEMARNAT explained that the conclusion of the DGIRA Resolutions was due to purely [redacted], as explained by Mr. Romero:

> At the meeting, SEMARNAT officials explained that the rejection was due to technical issues, such as the impact on the fauna in the Gulf of Ulloa --*Caretta caretta* turtle and whales, or the food for them--, the unknown impact on the ecosystem, the novelty of the project. These officials also informed us that similar projects had been denied in other

123 WS Hugo Romero, ¶ 13 (emphasis added).

124 Second WS [redacted], ¶ 27.

125 Second WS Salvador Hernández, ¶ 12.

126 Second WS Salvador Hernández, ¶ 12.

> countries. As defense lawyers, my interest was always to know in detail and give deference to the authorities, on that occasion SEMARNAT was no exception.
>
> [redacted] there was no doubt that the reason for the rejection was a technical issue. [127]

80. Pursuant to the foregoing, it is false that [redacted].[128] [redacted]

c. [redacted] on the Mexico's legal strategy for this arbitration

81. Regardless of [redacted], there is also evidence that [redacted].[129] In that paper, SEMARNAT''s position regarding the content of the notice of intent submitted by Odyssey was expressed.[130] The aforementioned paper was physically delivered to the Ministry of Economy lawyers in a meeting on April 1st, 2019[131], [redacted].[132] These facts coincide with what was referred by Mr. Romero in his witness statement:

> […] At the end of the meeting, I was informed by my colleagues from the Ministry of Economy at that time, of a paper prepared by the Coordinating Unit for Legal Affairs (UCAJ) and the DGIRA in which they expressed the SEMARNAT's position regarding the content of the Notice of Intent submitted by Odyssey. [redacted].

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127 WS Hugo Romero, ¶¶ 20-21 (emphasis added).

128 Second WS [redacted], ¶ 27.

129 Second WS Salvador Hernández, ¶ 13. *See* WS Hugo Romero, ¶ 22 and **HGRM-001**.

130 Second WS Salvador Hernández, ¶ 13. *See* WS Hugo Romero, ¶ 22 and **HGRM-001**.

131 Second WS Salvador Hernández, ¶ 13. *See* WS Hugo Romero, ¶ 22 and **HGRM-001**.

132 Second WS [redacted], ¶ 29.

82. Although Mr. Romero did not engage in the meeting on April 1, 2019, the lawyers who did engage witnessed the delivery of the aforementioned paper mentioned by Mr. Hernández, which is confirmed by the mail by which one of the lawyers who were at the meeting shared this paper with the rest of the DGCJCI team that also attended that meeting:

> Dear.
>
> I enclose the scanned memo that the Ministry of Environment and Natural Resources shared with us today about the Odyssey case.
>
> Greetings.
>
> Antonio.[133]

83. The Tribunal may verify that the content of the Memorandum prepared by the UCAJ and [redacted][134] coincides with the position expressed by the SEMARNAT officials in the meetings held with the lawyers of the DGCJCI,[135] as well as with the content of the Resolutions issued by DGIRA.[136] Therefore, it is evident [redacted].[139]

2. [redacted]

84. [redacted]

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133 **HGRM-001**.

134 **HGRM-001**.

135 Second WS Salvador Hernández, ¶¶ 9, 10, 11 and 12. *See* WS Hugo Romero, ¶ 12, 20, 21 and 25.

136 **C-0008** and **C-0009**.

137 "Accordingly, in April 2019, Mr. Orlando Pérez, General Director of the DGCJCI, informed to SEMARNAT group about Odyssey's proposal to hold a meeting at the technical level in order to seek possible solutions". Second WS Salvador Hernández, ¶ 15. Email from April, 2019, **R-0069**. Email from May 31, 2019, **R-0071.**

138 "On the occasion of the arbitration notification, on April 5, 2019, the General Director forwarded that notification [redacted]". WS Hugo Romero, ¶ 24 and **HGRM-003.**

139 Second WS [redacted], ¶ 26.

140 Article 4.5 (a) of IBA Rules on Trial Practice in International Arbitration. **RL-0004.**

[redacted]

85. [redacted]

[redacted].

a. [redacted]

86. [redacted]

[redacted]

141 PO1, ¶ 19.2.3.

142 PO3, Annex B, Request, justification and objection to Request No. 17, pp. 92-93.

143 Reply, ¶ 147.

144 The only expenses that Mexico covers the witnesses are the cost of the plane tickets, the lodging and the necessary to appear at the face-to-face hearings. *See* Second Solcargo-Rábago Report, ¶¶ 193- 197.

145 Accordingly, pay is reasonable per hour of work dedicated to providing or preparing your Witness Statement. *See* Sergio Huacuja Report, ¶ 96.

146 *See* Second Solcargo-Rábago Report, ¶¶ 217-220.

87.

88.

89.

147 **C-0364**, ¶¶ 2.c and 2.d and **C-0365**, ¶¶ 2.c. and 2.d (emphasis added).

148 *See* Second Solcargo-Rábago Report, ¶¶ 194- 197.

149 **C-0364**, ¶ 5 and **C-0365**, ¶ 5 (emphasis added).

150 Second WS ¶ 5.

151 Second WS ¶ 3.

152 **C-0364**, ¶ 2.b and **C-0365**, ¶ 2.b.

153 **C-0364**, ¶ 2.a and **C-0365**, ¶ 2.a.

[redacted]

b. [redacted]

90. [redacted]

91. [redacted]

92. [redacted]

93. [redacted]

154 **C-0364**, ¶ 2.d and **C-0365**, ¶ 2.d.

155 **C-0364**, ¶ 2.c and **C-0365**, ¶ 2.c.

156 Counter-Memorial, ¶ 430.

157 Second WS [redacted], ¶ 5.

158 Second WS [redacted], ¶ 3.

159 **C-0364**, ¶ 5 and **C-0365**, ¶ 5.

160 **C-0364**, ¶ 2.a and **C-0365**, ¶ 2.a.

[redacted].[162]

c. [redacted]

94. [redacted][165]

95. [redacted].

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161 **C-0364**, ¶ 4 and **C-0365**, ¶ 4.

162 **C-0364**, ¶ 8 and **C-0365**, ¶ 8.

163 First WS [redacted] ¶ 37.

164 Second WS [redacted], ¶ 3.

165 Second WS [redacted], ¶ 28.

3. [redacted] and [redacted]

96. As mentioned in the Counter Memorial,[166] both the LFRSP (current and applicable for the 2016 Resolution), and the LGRA (applicable for the 2018 Resolution), establish that public officials have the obligation to "[r]eport the acts or omissions that in the exercise of their functions they will warn, that may constitute administrative misconduct ".[167] Also, although public officals also have the obligation to "[f]ollow instructions from their superiors", this obligation is subject to such orders "being in accordance with the provisions related to public service".[168] It is incontrovertible that [redacted]".[169]

97. [redacted] and [redacted] Mexico understands that this is because the Claimant did not consider it necessary [redacted].[170] Instead, the Claimant presented Mr. Huacuja's report, who instead of acknowledging the existence of an obligation to report alleged administrative misconduct, [redacted]

166 Counter-Memorial, ¶¶ 187-196.

167 Article 49 section II of LGRA. **R-0057**. *See* also article 8 section XVIII of LFRSP. **R-0058.** *See* Second Solcargo-Rábago Report, Apart XIII.A, ¶¶ 189-190.

168 Article 49 section III of LGRA. **R-0057**. *See* also article 8 section VII of LFRSP. **R-0058.** Second Solcargo-Rábago Report, ¶ 190.

169 Article 49 section III of LGRA. **R-0057**. *See* Second Solcargo-Rábago Report, ¶¶ 190-191.

170 **C-0364**, ¶ 2.a y **C-0365**, ¶ 2.a.

171 Sergio Huacuja Report, ¶ 30.

172 Sergio Huacuja Report, ¶ 31.

173 Sergio Huacuja Report, ¶ 31.

[redacted][174] [redacted] which has been rejected by Mr. Pacchiano.[175]

98. For its part, the Claimant justifies [redacted] and [redacted] failure [redacted]. [176] Without prejudice to the fact that Mr. Pacchiano has specified that "[redacted][177] what is unrealistic is that the Claimant intends to base its claim on the words [redacted] It is also surprising that the Claimant defends the [redacted],[redacted] [redacted][180]

99. Regardless of the justifications that the Claimant and its expert indicate regarding the [redacted],[181] [redacted] and [redacted] both the Claimant and its expert seem to agree that there is an obligation to report in accordance with Mexican legislation,[182] as explained in the following section.

a. The Claimant and his expert do not dispute the fact that [redacted] and [redacted]

100. Based on Mr. Huacuja''s opinion, the Claimant indicates that "[t] he regime in force at the time of the First Denial in 2016, the […] ("LFRASP"), is not structured to encourage public

174 Sergio Huacuja Report, ¶ 32.
175 Second WS Rafael Pacchiano, ¶ 7.
176 Reply, ¶ 166.
177 Second WS Rafael Pacchiano, ¶ 7.
178 Second WS [redacted], ¶ 31.
179 Reply, ¶ 166.
180 *See* Second Solcargo-Rábago Report, ¶¶ 203-204.
181 Sergio Huacuja Report, ¶ 10.
182 Sergio Huacuja Report, ¶ 19.

officials to report irregularities "because supposedly" it was impossible for the whistleblower official to remain anonymous".[183] Likewise, it alleges that despite the fact that "[t]he LRGA governed […] at the time that SEMARNAT issued its Second Denial in October 2018 […], it was not until 2019, […] that the possibility of submitting anonymous complaints became a reality ".[184]

101. As indicated in the paragraph above, it is evident that the Claimant and Mr. Huacuja do not dispute the fact that [redacted].[185]

102. It is questionable for Mexico that the Claimant asserts that "[redacted][186] since it is based on a mere assumption. In fact, this statement is contradicted by the facts that show that [redacted].[187]

103. [redacted][188]

183 Reply, ¶ 167.

184 Reply, ¶ 168.

185 Reply, ¶ 169 and 171. *See* Second Solcargo-Rábago Report, ¶¶ 191-195 and 199-200.

186 Reply, ¶ 171.

187 *See* **R-0177- R-0187.** *See* also Second Solcargo-Rábago Report, ¶¶ 207- 208.

188 Reply, ¶ 171. *See* Second Solcargo-Rábago Report, ¶¶ 201-206.

b. [redacted]

104. [redacted]

105. [redacted]

189 Article 55 of LGRA**. R-0057**.

190 Reply, ¶ 152.

191 Reply, ¶ 1521

192 First WS [redacted] p. 5.

193 **C-0365**, p. 1.

[redacted][195]

106. [redacted]

[redacted][198]

108. [redacted]

4. La Claimant has not provided contemporary evidence that shows that [redacted] and [redacted]

109. [redacted][199] For his part, [redacted].[200] Although the Claimant argues that "[redacted]

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194 Article 55. The public officer who acquires for himself or for the persons referred to in article 52 of this Law, real estate, movable property and securities that may increase their value or, in general, improve their conditions, will incur in misuse of information, as well as obtaining any private advantage or benefit, as a result of inside information of which he has had knowledge.

Article 56. For the purposes of the article above, privileged information is considered to be that obtained by the public officer as a result of its duties and that is not in the public domain. The restriction provided for in the article above will be applicable even when the public officer has retired from its job, position or commission, up to a period of one year. (emphasis added). *See* **R-0057.** *See* also Counter-Memorial, ¶¶ 410-412.

195 Sergio Huacuja Report, ¶ 79.

196 Sergio Huacuja Repor, ¶ 79.

197 Sergio Huacuja Report, ¶ 79. *See* Second Solcargo-Rábago Report, ¶¶ 221-224.

198 **C-0364**, p. 1.

199 *See* Second WS [redacted] ¶¶ 11 and 21.

200 *See* Second WS [redacted] ¶¶ 13 and 14.

[redacted][201]

110. In any event, [redacted]. The Respondent does not have to satisfy the Claimant''s burden of proof, and cannot be required to produce documents that are non-existent. [redacted].

111. Without prejudice of the foregoing, the Tribunal must take into account that the production of documents in international arbitration in "comparison with Anglo-American practice has been variously described as "conservative", or as a procedure destined to "filling in the gaps" "as opposed to building up the factual record".[202] Indeed, ""in arbitration is that a party will establish its case based largely (if not entirely) on the documents within its own possession".[203] [redacted].

112. The Tribunal must take into account that it is common [redacted].[204]

113. [redacted] and [redacted]

201 Letter from Mexico to Claimant's representatives, May 18, 2021. **R-0160.**

202 O'Malley, Nathan D. *Rules of Evidence in International Arbitration: An Annotated Guide*: Lloyd's Arbitration Law Library. Taylor and Francis, p. 39. **RL-0078.**

203 O'Malley, Nathan D. *Rules of Evidence in International Arbitration: An Annotated Guide*: Lloyd's Arbitration Law Library. Taylor and Francis, p. 40. **RL-0078.**

204 Article 23 Federal Archives Law. **R-0175.**

[redacted] and [redacted]

114. [redacted]. The emails from Mr. Narvaez do not show that [redacted] and [redacted] In fact, the March 22, 2016 email only reports hearsay information about what Mr. Limón —ExO and Odyssey''s legal advisor— "said was commented" in an alleged meeting with SEMARNAT, *i.e.*, "the outbursts of the Mr. Ancira they will cost you dearly". It should be noted that in an email dated August 10, 2016 -- after the 2016 Resolution -- Mr. Narvaez refers to this situation as ""whatever that means"",[205] that is, he did not know what this meant.

115. On the other hand, Mr. Lozano's witness statement only gives an account of his impressions [redacted][206] The same situation occurred with the November 2015 meeting that Mr. Lozano says he had with CONANP officials, whose impressions he describes as follows: "[W]e withdraw from the meeting with a feeling of extreme confidence that we had correctly addressed all CONANP's environmental concerns and that the Project would be authorized soon".[207] The impressions of Mr. Lozano do not coincide with the official opinion of CONANP that manifested against the Project, as stated in the Resolutions.[208]

116. In accordance with the above, [redacted].

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205 **C-0416**

206 First WS Claudio Lozano, ¶ 39.

207 First WS Claudio Lozano, ¶ 64.

208 *See* Second WS Rafael Pacchiano, ¶ 16.

5. The Claimant and ExO allege that they were aware of Mr. Pacchiano's alleged instructions but chose not to do anything about it

117. The Claimant seeks to support the credibility of [redacted] and [redacted][209] [redacted]. Mexico does not know the reasons why the Claimant decided not to report Mr. Pacchiano for any alleged irregularity and [redacted].

118. For the Respondent, the course of action adopted by the Claimant is problemtic, [redacted] which is unsustainable and even questionable. In this sense, [redacted] reject the MIA for having felt personally insulted by Mr. Ancira —who, by the way, has breached a reparation agreement with the Government of Mexico derived from the crime of operations with resources of illicit origin in the sale of Agro Nitrogenados—;[210] and *ii)* that the alleged order of Mr. Pacchiano was motivated by the concern of affecting his political position.[211]

119. To this end, some of the "elements" provided by the Claimant consist of the following:

- Email from Mr. De Narváez to Mr. Longley dated March 22, 2016, in which he mentioned that the alleged "outbursts of Mr. Ancira are going to cost him dearly".[212] This email only reflects information heard by Mr. Narvaéz. Apparently he reports what a third party (Mauricio Limón), who was acting as representative of ExO, said at a meeting, based on a

209 Reply, ¶ 88.

210 "If Alonso Ancira breaches with agreement signed with PEMEX, he will lose his company and hornos," Forbes, September 2, 2021. **R-0176.**

211 Reply, ¶ 88.

212 Reply, ¶ 88 a. *See* **C-0416**.

mere assumption of something that could happen. It also highlights the fact that, supposedly one day before the issuance of the 2016 Resolution, [redacted][214]

- Email from Mr. De Narváez to Mark Gordon and other Odyssey's representatives dated on August 10, 2016. Notwithstanding that it is an email that the Claimant submitted incompletely choosing to reveal certain sentences and hiding others, based on an alleged *attorney-client privilege* despite the fact that Mr. Narvaez is not Odyssey's lawyer, the note seems to account for the mere opinion of Mr. Narvaez who points out "the negative resolution of our MIA was political and not technical in nature […] ", blaming that on "Alonso's outbursts with Pacchiano",[215] but without really knowing what it meant, by referring to this situation as "whatever that means".[216] In any case, in that email, Mr. Narvaez maintains that "[i]t is very clear to us that [redacted] [sic]) are not the force holding back our project, it is Secretary Pacchiano".[217] Notwithstanding the fact that Mr. Pacchiano has rejected to have been confronted by Mr. Ancira,[218] it is evident that Odyssey's representatives failed to submit any complaint due to the supposed clarity of an apparent irregularity.[219] It is also clear that the alleged existence of "command orders" has never been part of ExO's allegations in the annulment trial before the TFJA. In other words, only in this arbitration does the Claimant seek to base its claim on the allegation of an alleged existence of "command orders".

- Statement by Mr. Claudio Lozano, stating CONANP and DGIRA "had previously endorsed the project".[220] The meetings referred to by Mr. Lozano were prior to the issuance

213 First WS [redacted], ¶26 and Second WS [redacted], ¶ 30.

214 Second WS Rafael Pacchiano, ¶ 13.

215 **C-0416.**

216 **C-0416.**

217 Reply, ¶ 88 b. *See* **C-0416**.

218 Second WS Rafael Pacchiano, ¶ 30.

219 Second WS Rafael Pacchiano, ¶ 13. Second Solcargo-Rábago Report, ¶¶ 4 y 209.

220 Reply, ¶ 88 c.

of the first resolution, that is, in April 2015 [redacted],[221] and on February 18, 2016 with CONANP.[222] What [redacted] irrelevant because the facts outweighed their words, [redacted] The same thing happens with CONANP that submitted a technical opinion, which considered that Don Diego was an environmentally unviable project.[223]

- Statement from Dr. Lozano in which he affirms that [redacted].[224] This supposed meeting was held one day before the issuance of the 2016 Resolution, which reveals Mr. Lozano's own perception of the scope of the Project as regards the protection of turtles. In fact, to support his saying he refers to a meeting with NOAA. However, as will be seen *infra*, Dr. Seminoff has submitted a statement confirming that what was stated by Odyssey's representatives regarding the meetings he held with them was actually exaggerated.[225] Mexico considers that Mr. Lozano's enthusiasm for the project was such that his judgment is probably clouded and his opinions do not necessarily reflect reality. On the other hand, it is revealing that Odyssey's representatives were satisfied that [redacted].[226]
- The video of Mr. Pacchiano from September 12, 2018 in which he apparently indicates that the Project would be rejected.[227] Mr. Pacchiano has already stated that [redacted],[228] so it was clear to Mr. Pacchiano that the second resolution would be issued in the same sense as the first. Furthermore, the fact that Mr. Pacchiano had pronounced on the meaning of the Resolution, [redacted]

221 First WS Claudio Lozano, ¶ 39.

222 First WS Claudio Lozano, ¶¶ 62-64. Second WS Claudio Lozano, ¶ 19.

223 Second WS Benito Bermúdez, ¶¶ 33 and 35.

224 Reply, ¶ 88 d. *See* First WS Claudio Lozano, ¶ 70.

225 WS Jeffrey Seminoff, ¶¶ 9-17.

226 *See* Second WS Rafael Pacchiano, ¶ 13.

227 Reply, ¶ 88 e. **C-0176.**

228 *See* First WS Rafael Pacchiano, ¶ 42 and Second WS Rafael Pacchiano, ¶¶ 10 and 12.

[redacted].[229] [redacted]

[redacted].[230]

- Newspaper articles that refer to an "*information sheet*" that they received from SEMARNAT stating that the Project would be denied.[231] As already mentioned in the communication of August 30, 2021, the Claimant intends to give the information sheet a scope that it does not have.[232] Indeed, the Claimant's argument regarding the informative sheet is based on a wrong assumption of the TFJA's decision. The fact that DGIRA has declared days after the TFJA's decision that it would again deny the MIA's authorization has nothing illegal, much less surprising.[233] In fact, the TFJA's own decision recognized that DGIRA was the technical authority empowered to resolve the concerns it raised and allowed it to be the one to resolve with the proper rationale and motivation.[234] This decision contrasts with the erroneous perception that the Respondent and ExO had, who assumed that with their legal strategy adopted through the nullity trial, the TFJA would authorize

229 "[…], it would be very debatable that a State Secretary would be responsible for carrying out the technical functions of an of an environmental impact assessment. Furthermore, [redacted]". Second WS Rafael Pacchiano, ¶ 7.

230 Second WS Rafael Pacchiano, ¶¶ 33-35.

231 "The representatives of Mexico have shown me an 'information card' that was allegedly provided in April 2018 to media related to the Don Diego Project. This is the first time I have seen such a document and I state that I was not aware of its existence, although I do not highlight any information that could be considered 'sensitive' or 'inappropriate'. Second WS Rafael Pacchiano, ¶ 37.

232 Respondant's communication from August 30, 2021. **R-0209**.

233 "[T]he SEMARNAT will comply with the judgment with the conviction that said project represents a threat to the integrity of the ecosystem, for which it will reinforce the technical and scientific justification to confirm the original resolution, meaning, to deny the authorization". **C-0470.**

234 **C-0170,** p. 212.

the Project.[235] This did not happen and this confirms that it was not "an excuse",[236] but a real environmental concern that still persists today.

120. Mexico finds it strange and absurd that, if the Claimant knew about an alleged irregularity in the Project's PEIA, it would not have done anything about it. This omission to report a potential illegality is not minor as it assumes that there were no elements [redacted] This situation is addressed by Mr. Pacchiano who denies [redacted] and notes the absence of complaints against them:

> Finally, if [redacted]. Furthermore, [redacted]. I also find it unusual that, knowing this information, ExO's representatives have not proceeded to file a complaint against me. [redacted][237]

121. Regardless of how questionable the constant meetings of [redacted], the failure to report a possible unlawfulness by ExO seems to have an explanation related to these meetings. Indeed, said omission of ExO is explained because it possibly followed a strategy recommended [redacted][238] *i.e.*, obtaining a resolution from the TFJA that confirmed and authorized Don Diego Project, however, the TFJA's decision shows that DGIRA's environmental concerns were legitimate. Further, it is strange that the Claimant has consented to

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235 "The beauty of the annulment case in the courts, in our view, is that it would make life very easy for Pacchiano since consent would be given not by a SEMARNAT decision but by a court ordered decision, it would have no political toll for him which was apparently his motivation in the refusal decision of consent". *See* **C-0416**.

236 Reply, ¶ 8, 43, 212, 225, and First WS [redacted], ¶ 25.

237 Second WS Rafael Pacchiano, ¶ 13.

238 "[redacted]". **C-0363.**

[redacted] and [redacted] twice [redacted].

C. The law is clear in establishing that the responsibility for resolutions on environmental impact rests with the signing official

122. In his second witness statement, [redacted] has indicated that he does not agree with the "[redacted]",[239] in particular, with the fact that "only DGIRA determines whether the MIAs without any intervention of the Secretary or the Undersecretary".[240] However, [redacted] himself acknowledges, in paragraphs subsequent to said statement, that "the responsibilities of approving the Projects, assessing the MIA information and supporting documents, and responding to requests for additional information and opinions of third parties rests with DGIRA".[241]

123. [redacted] himself also agrees [redacted][242] This is an unquestionable fact, although Messrs. Flores and Villa intend to qualify it by pointing out that the DGIRA is not an independent director and that it depends hierarchically on the Undersecretary of Management for Environmental Protection and the Secretary of SEMARNAT. The hierarchical structure in the chain of command is irrelevant for the purposes of determining the responsibility of an act in accordance with the attributions and powers that the law grants to public officials.

124. [redacted]. As shown in Table 4, [redacted]

239 Second WS [redacted], ¶ 12.

240 Second WS [redacted], ¶ 12.

241 Second WS [redacted] ¶ 15.

242 Second WS [redacted], ¶ 10.

[redacted]

Table 4. [redacted]

FILE NUMBER	SUBJECT	COMPLAINT
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	Recommendation of consulting companies to promoters of MIAs ensuring that, if the corresponding [redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]".
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

Fuente: **R-0177, R-0178, R-0179, R-0180, R-0181, R-0182, R-0183, R-0184** and **R-0185**.

125. For example, [redacted]

[redacted]

[…] [redacted][243]

126. The aforementioned reasoning applies *mutatis mutandis* to the case of the attributions that RISEMARNAT [redacted].

1. The Secretary Pacchiano did not have any interference in the technical-scientific evaluation or in the meaning of the Resolutions made by [redacted] and [redacted]

127. Mr. Pacchiano has already stated that he had no involvement in the PEIA, much less in the meaning of Don Diego Project Resolutions. In fact, he has stated that he was always respectful of the technical-scientific determinations issued by the DGIRA:

> As I mentioned in my first witness statement, I was always respectful of the law with regard to the attributions, competences and powers of each administrative area of SEMARNAT and I never interfered in the technical-scientific work carried out by DGIRA.[245]

128. The foregoing matches with the applicable legal framework that governed the functions of Mr. Pacchiano in his capacity as Undersecretary and Secretary of SEMARNAT. As mentioned above, [redacted] the fact that the DGIRA was responsible for

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243 [redacted] p. 21. **R-0186.**

244 Article 28 section II of RISEMARNAT. **R-0053**.

245 Second WS Rafael Pacchiano, ¶ 8.

evaluating and approving or rejecting the MIA,[246] however, they suggest that the hierarchical relationship of the Secretary implies that he is also responsible for the behavior of his subordinates. This is false and, although the Claimant attempts to dispute this situation, it relies on the expert report of Mr. Herrera, who performs a general analysis of RISEMARNAT without going into detail about the specific provisions that regulate the actions of the various officials involved. It is no accident that the Claimant makes the following erroneous assertions based on Mr. Herrera's analysis:

- *The Secretary of SEMARNAT is responsible for the approval of environmental impact statements.*[247] This is false, although the Secretary is the highest authority of the Secretariat, this does not mean that he is responsible for all the acts carried out by the officials in his charge. In fact, the expert omits to analyze the extraordinary power that RISEMARNAT confers on the Secretary to resolve MIA requests when he expressly requests it due to the interest of the subject. Accepting the position of the Claimant and its expert that the Secretary is generally responsible for the resolution of the MIA would imply that this provision in question would be meaningless, which is untenable.

- *The Secretary has the right to directly exercise the powers he enjoys, although he may also delegate them, including the approval of the MIA.* [248] The Claimant herself acknowledges that the Secretary is assisted by his subordinates to carry out the tasks that are the responsibility of SEMARNAT. In this sense, the RISEMARNAT is clear in pointing out that the determination of a technical-scientific nature that the evaluation of an MIA implies corresponds to the Director General of DGIRA. As mentioned above, the Secretary may exercise that power, but it is an extraordinary assumption that must adhere to what is expressly provided by law and that did not occur in that case.

- *The Secretary is responsible for all actions carried out by SEMARNAT.*[249] This proposition is absurd because it would imply that any act carried out by a SEMARNAT official would

246 Second WS [redacted] ¶ 10 and Second WS [redacted], ¶ 15.

247 Reply, ¶ 90 a.

248 Reply, ¶ 90 b.

249 Reply, ¶ 90 c.

be the responsibility of the Secretary, meaning, there would be no legal distinction between the Secretary's conduct and those of any other subordinate.[250] This would mean that the laws on administrative responsibility would be irrelevant, which is inconsistent with the very application of these laws. [redacted].

- *The DGIRA is not an independent authority, but an administrative unit of SEMARNAT in charge of the Secretary and Undersecretary whose subordinates must follow its instructions.*[251] Mexico does not dispute that the DGIRA is not an independent administrative unit, the issue to consider is that legally there is a distribution of powers and attributions for the proper exercise of the tasks that are the responsibility of SEMARNAT. The Claimant's proposal [redacted] Precisely the distribution of powers and the existence of laws on administrative responsibility entail the recognition that it is legally impossible to hold a single person responsible for the conduct of their subordinates.

- *The Director General of DGIRA must agree with his immediate superior on the resolution of the issues, such as the evaluation and determination of the MIA, in addition, the Director General and Undersecretary must follow their instructions.*[252] This statement is misleading since the fact that the Director General must report on the issues to his superior is not synonymous with having to "agree" on the meaning of the resolution of an MIA. This determination corresponds solely to the Director General in his capacity as an expert covering the technical-scientific profile to adopt such determination. Therefore, it is false that the Director General of DGIRA must follow instructions regarding the meaning to be resolved by an MIA. Such a statement contradicts the applicable legal framework.

250 *See* Second WS Salvador Hernández, ¶ 6.

251 Reply, ¶ 90 d.

252 Reply, ¶ 90 e.

Furthermore, [redacted]

- *The DGIRA must keep informed to the Secretary and Undersecretary about the evaluation of any important MIA.*[253] Mexico does not dispute this aspect either, in fact, Mr. Pacchiano has indicated that [redacted] In addition, the fact that the General Director must keep informed his hierarchical superiors, in no way exempts him from the legal responsibility that falls under his charge on the meaning that he will give to the resolutions on environmental impact based on the information that there is on the file of each case in particular.

- *The Secretary and Undersecretary of SEMARNAT have the power to confirm, modify or revoke the authorizations of the MIA by virtue of an appeal for review, and they have the duty to resolve them.*[254] As the Claimant points out, the review is an extraordinary resource that implies that the hierarchical superior resolves any decision of his subordinate with which the governed does not agree. This fact justly confirms that the responsibility to resolve an MIA falls on the Director General. Furthermore, the Claimant omits to point out that in the nullity proceedings it filed, [redacted].

129. Accordingly, Mexico's legal experts also disagree with the interpretation that Mr. Herrera makes of the scope and powers of the Director General under the law. In particular, Mexico's legal experts have noted:

> As indicated in the First Report, contrary to what was maintained by the Claimant, the Director General of DGIRA is the highest authority in the PEIA, in accordance with the Organic Law of the Federal Public Administration (the "LOAPF"). The powers of DGIRA are set out in article 28 of the SEMARNAT Internal Regulations and those related to an environmental impact assessment procedure of the characteristics of Don Diego are found in sections I, II, IV, V, VI, VII, VIII, XIII, XV, XIX, XX of Article 28 of RISEMARNAT.
>
> The Claimant's Expert erroneously cites article 18 of the RISEMARNAT to point out that said regulation "establishes a relationship of responsibility of the superiors (such as the Secretary and Undersecretary) with respect to the correct functioning of the inferiors (such as the DGIRA)" [...]

253 Reply, ¶ 90 f.

254 Reply, ¶ 90 g.

> [Article 18 of RISEMARNAT] does not mention either the Secretary or the Undersecretary. In reality, the wrong justification by the Claimant's Expert can only be explained by his claim to hold the Secretary and the Undersecretary legally responsible for the results of the PEIA, which does not find support in the applicable regulations, nor is it clear from the exhibited documentaries.
>
> In other words, the assertions of the Claimant's Expert in the sense that the Undersecretary and the Secretary were responsible for the Negative Resolutions, in addition to lacking a legal basis under Mexican law, are contrary to the conduct observed by the Claimant herself, by means of ExO, in the appeals of said Negative Resolutions.[255]

130. Therefore, it is clear that, contrary to what was argued by the Claimant, Mr. Pacchiano did not have the legal authority to interfere in the MIA's resolution of Don Diego Project — and in fact, he did not do so—.

2. [redacted] and [redacted]

131. [redacted] and [redacted][257] Clearly, the Claimant did not consider it necessary [redacted] and, therefore, preferred to submit an expert report to support its position that "Secretary Pacchiano had the power to cause the MIA to be denied".[258]

132. Without prejudice of addressing the inaccuracies of the Claimant and its expert in the following section, it suffices to point out that its premises are based on erronously considering that

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255 Second Solcargo-Rábago Report, ¶¶ 19, 20, 21 and 35.

256 *See* Second WS of [redacted], ¶¶10

257 C-0364, ¶ 2.a y C-0365, ¶ 2.a.

258 Reply, ¶¶ 88-119

the mere fact that the Secretary of SEMARNAT is the highest ranking official in the chain of command within of SEMARNAT, is sufficient to make him accountable for all the decisions adopted by its subordinates in the performance of their duties and functions.[259]

133. This assertion is absurd since it would be as much as asserting that the President of Mexico is responsible for each and every one of the conducts carried out by the officials of the APF regardless of the powers and attributions that the law itself confers on them. Accepting this assumption would render null and void the laws that govern the distribution of powers, the actions of officials, as well as the laws on the responsibility of public officials. This situation is unsustainable.

134. Therefore, Claimant cannot [redacted]. This is simply implausible.

3. [redacted] responsible for the decisions on environmental impact assessment

135. Contrary to what was asserted by the Claimant [redacted].[261]

136. [redacted]

> Thus, and by virtue of the above, it is noteworthy that in accordance with the provisions of article 27 in section II of the Internal Regulations of the Ministry of Environment and Natural Resources in force during the time when the facts denounced arose, the General

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259 *See* Second WS of Salvador Hernández, ¶¶ 4-6.

260 See First WS of [redacted], ¶ 2. First WS of [redacted], ¶ 2. Second Expert Solcargo-Rábago, ¶¶ 40-43.

261 Counter- Memorial, ¶¶ 179 and 180.

> Directorate of Environmental Impact and Risk is the authority empowered to evaluate and resolve the Environmental Impact Statements […].[262]

137. [redacted][264] [redacted][265]

138. [redacted]

139. [redacted]

> [redacted][266]

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262 [redacted] (emphasis added). **R-0181**.

263 [redacted]

264 [redacted].

265 [redacted] **R-0185**.

266 [redacted] (emphasis added). **R-0187**.

140. In this regard, it is clear that [redacted].[267]

141. The Respondent's attention is drawn to the fact that [redacted]

[redacted][269]

142. The foregoing [redacted].

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267 Article 28, fraction II of the RISEMARNAT. **R-0053**.

268 [redacted] **R-0185**.

269 [redacted] (emphasis added). **R-0186**.

4. The accusations of the Claimant and her witnesses against Mr. Pacchiano are unsustainable and disproportionate

143. The Claimant allocates more than 15 pages to indicate that Mr. Pachiano had an interest in issuing a negative resolution in order not to "harm to his political standing"[270], and attempts to strengthen its claims by arguing that Mr. Pachiano's political aspirations were not limited to seeking an elected office, but "also includes survival as a political appointee in a presidential administration".[271] His statements are mere assumptions that seek to support his theory about the alleged existence of orders of command.

144. As has been recognized by Mr. Pacchiano himself —and by the Claimant—, in 2014 the project called Los Cardones was authorized [redacted] Despite the public reaction that was generated against the authorization of the Los Cardones project and Mr. Pacchiano, he was always respectful of the work of DGIRA and the sense of that resolution, regardless of the possible impact on his image. Mr. Pacchiano has given an account of this:

> [redacted] […] Firstly, all projects evaluated during the time in which I was SEMARNAT's Secretary were given the same importance, since the law does not allow any distinction to be made between applicants and type or relevance of the projects that are submitted for approval of environmental impact authorizations. Secondly, I never put my "public image" or my "political career" above my responsibility as Secretary of State. As I mentioned in my first witness statement, I was always respectful of the law regarding the attributions, competences and powers of each administrative area of SEMARNAT […].
>
> The case of "Los Cardones" is the best example that my position was always based on the primacy of technical and scientific issues determined by the DGIRA and that I never intervened in its decisions, nor did I seek to influence it for political or public image reasons. As in all projects during my tenure, the DGIRA made decisions in accordance with the law and, although the Don Diego project was also a project that generated concerns, I did not relinquish in any way to pressure and/or public opinion.
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> […] I consider that Claimant's argument lacks logic since, if the exhortations, media opinions or points of agreement had any legal effect on the technical-scientific determination of the DGIRA (which they clearly do not), Los Cardones project would also have been denied considering its media relevance. However, this did not occur precisely because the DGIRA's determinations are based on technical-scientific aspects

270 Reply, ¶ 88.

271 Reply, ¶ 95.

> and conform with an evaluation of that nature in which neither the Secretary, nor the Undersecretary of SEMARNAT, much less the deputies or senators have any interference whatsoever in accordance with the legal framework that governs the actions of the DGIRA (SEMARNAT's Internal Regulations).[272]

145. The Claimant goes to the extreme of resorting to any device to try to convince the Tribunal that the meaning of the resolutions is attributable to Mr. Pacchiano. He even involves his wife, unduly and without support, to try to support his allegations, which is disproportionate and unsustainable, and in the same way inappropriate.[273] Indeed, as mentioned by Mr. Pacchiano, his wife was elected as a plurinominal Senator, which meant that her election was not subject to the citizen vote:

> The Claimant now points out that another alleged reason why I ordered the denial of the authorization of the MIA of the Don Diego Project was due to the risks it posed to my wife's nomination as Senator of the Republic. Without prejudice to the fact that this statement is also false and meaningless, I find it disrespectful that the Claimant is now using the reputation of my wife and my family to support its claims against me and against the Mexican State. Furthermore, my wife, Alejandra Lagunes, was elected as a plurinominal Senator, that is to say, her nomination and her designation as Senator did not require campaigns to promote the citizen vote, nor to appear on the election ballots, much less to compete against candidates of other political parties. For this reason, it is untenable to affirm that the approval of the Don Diego Project would affect her nomination and designation as Senator of the Republic.[274]

146. The foregoing shows the Claimant's desperation to support its case and make the Tribunal believe that Mr. Pacchiano was responsible for denying the MIA 2015 of the Don Diego Project, however, [redacted] This decision was the product of the DGIRA's technical-scientific reasoning. Therefore, it is false that the DGIRA Resolutions have addressed an alleged aspiration or protection of the political image of Mr. Pacchiano.

D. The EIA Procedure and the 2018 Resolution were carried out in accordance with environmental legislation

147. As already noted above, Odyssey's allegations are confusing and contradictory since, on the one hand, it states that its claims do not seek to "appeal an adverse environmental decision, nor

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272 Second WS of Rafael Pacchiano, ¶¶ 8, 9 y 22. *See* First WS of Rafael Pachianno, ¶¶ 46 y 47.

273 Reply, ¶ 111.

274 Second WS Rafael Pacchiano, ¶ 20.

275 *See* Second Solcargo- Rábago Report, ¶¶ 4 d) y 19. First Solcargo- Rábago Report, ¶¶80-81.

is it asking the Tribunal to determine the MIA afresh",[276] However, on the other hand, the Claimant affirms that the controversy of this arbitration centers on "whether the scientific and other factual evidence demonstrates that the Project was illegitimately denied".[277] Regardless of Odyssey's claim, the function of the Tribunal does not consist on acting as an appellate court, or conducting a *de novo* analysis of the 2015 ExO's MIA application and the 2018 DGIRA Resolution.[278]

148. Although Odyssey seeks to challenge various aspects of the 2018 Resolution - which is an administrative decision of a technical, legal and scientific nature of more than 500 pages - it is established in investment arbitration under the NAFTA that an investor's dissatisfaction with the result of a decision issued by a public authority does not mean that it violates the Treaty.[279]

149. In this sense, the Respondent will refute the criticisms made by Odyssey, its experts and its witnesses against the 2018 Resolution, but it is emphatic that the fact that any of them are not addressed does not mean that Mexico admits to them. On the contrary, when dealing with issues that have already been analyzed by DGIRA —the specialized technical-scientific entity empowered to decide on requests for an environmental impact statement—,[280] the Tribunal should grant it the appropriate margin of deference because it is the administrative and regulatory entity empowered to pronounce on technical and scientific matters.[281]

1. The application of article 35 III (b) of the LGEEPA was carried out in a reasonable manner and in accordance with the law

150. Odyssey alleges that the 2018 Resolution violates NAFTA because, in its opinion, DGIRA incorrectly applied Article 35 III (b) of the LGEEPA. As has already been mentioned above, this provision establishes the grounds on which the DGIRA can deny a MIA request. In this regard, the relevant part of said provision establishes:

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276 Reply, ¶ 17.

277 Reply, ¶ 19.

278 *See* Counter- Memorial, ¶¶ 2, 5, 469.

279 *Robert Azinian, Kenneth Davitian, & Ellen Baca v. Estados Unidos Mexicanos*, Caso CIADI No. ARB (AF)/97/2, Laudo, 1º de noviembre de 1999, ¶ 83. **RL-0009.**

280 *See* Counter- Memorial, ¶¶ 2, 5, 469.

281 *Joshua Dean Nelson and Jorge Blanco v. Estados Unidos Mexicanos*, Caso CIADI No. UNCT/17/1, Laudo, 5 de junio de 2020, ¶257, **CL-0127**. *S.D. Myers, Inc. v. Government of Canada*, UNCITRAL, Laudo Parcial, 13 de noviembre de 2001, ¶ 263, **CL-0103**.

> ARTÍCULO 35. After the environmental impact study is presented the Secretary will initiate the evaluation procedure, for which it will review that the application is made in accordance with the formalities stipulated in this Law, its Regulations and the applicable Official Mexican Standards, and will integrate it into the respective file within a period not greater than ten days.
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> […]
>
> Once the environmental impact study is evaluated, the Secretary will issue the corresponding resolution, duly based and motivated by the law, in which it will:
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> […]
>
> III. Deny the requested authorization, when:
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> […]
>
> b) The project or activity in question may lead to one or more species being declared threatened or endangered or when one of those species is affected […][282]

151. In accordance with Article 35 III (b) of the LGEEPA, DGIRA has the power to reject the AIA of a project when its works or activities i) may lead to one or more species being declared threatened or endangered; or ii) affect a threatened or endangered species. The wording and purpose of the environmental law in Mexico is clear since it regulates two assumptions, namely, i) the mere declaration and ii) the affectation of species in two perfectly identifiable risk categories, *i.e.*, threatened or endangered species.[283] In fact, DGIRA has already interpreted this provision in this way,[284] as discussed below.

152. Thus, in accordance with the first assumption, if the work or activity of a project can cause the declaration of threat or danger of extinction of one or more species, then the project must be denied. *A fortiori*, and in accordance with the second assumption, the mere affectation of one or more threatened or endangered species is enough for the project to be susceptible of denial. It is evident that the affecting of a species - which is already threatened or in danger of extinction - can occur when the work or activity affects even an individual of the species.

153. Despite the foregoing, Claimant seeks to generate controversy in the application and interpretation of this legal provision. On the one hand, Odyssey alleges that DGIRA may reject a MIA when the project in question affects an entire endangered species.[285] On the other hand, the

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282 LGEEPA, **C-0014**.

283 Second Solcargo-Rábago Report, ¶ 84.

284 Second Solcargo-Rábago Report, ¶¶ 99 y 100.

285 Reply, ¶¶ 22-25. Second Héctor Herrera Report, ¶¶ 56, 57 y 62.

position adopted by DGIRA in the 2018 Resolution - and shared by Solcargo- Rábago - consists of the DGIRA being able to reject the MIA of a project when it affects an entire species or individuals that make up populations of an endangered species.[286]

154. Notwithstanding that the text of the law does not qualify in any way the impact (significant, minimal, etc.),[287] nor is the term "all" found, which the Claimant and its expert use to formulate the superfluous distinction between species and individual, the Respondent considers this discussion futile. The fact that a species is considered in danger of extinction is precisely due to the critical mortality of individuals and populations of a species. The 2018 Resolution itself explains this situation:

> This DGIRA notes that, in spite of other sections of IF and even in the IA, the petitioner states that the project does not affect in any way whatsoever marine turtles, particularly loggerhead turtles which, in their juvenile phase, inhabit the Gulf of Ulloa, and which is also located in the AP, since, as indicated, they are found at twenty meters of depth, whilst the dredging activities are performed at greater depths. Proposing mitigation measures with respect to impact over loggerhead turtles shows that the petitioner does foresee direct impact over turtle individuals, derived from the dredging activities, which is why, regardless of whether the adverse effect rely over one single or many individuals, it is clear that in the case of a species classified as endangered any adverse effect deserves special attention, hence the statement made by the petitioner is unacceptable, in the sense that potential deaths of sea turtles derived from the project are not relevant […][288]

155. To assert that the application of Article 35 III (b) of the LGEEPA is limited to the affectation of an entire species would render nugatory the inclusion of species in special protections according to national and international classifications.[289]

156. The Claimant and its experts have avoided mentioning NOM-59-SEMARNAT, which lists several endangered species, including the *Caretta caretta* turtle and the gray whale. NOM-059-SEMARNAT also establishes methodologies and standards to determine the different risk categories of endangered species.[290] Some of these criteria include real and potential factors that produce a decrease in the size of species populations, *e.g.*, genetic deterioration; modifications in

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286 *See* Resolution of 2018 of the DGIRA, pp. 515-516, C-0008. Second Solcargo-Rábago Report, ¶ 89.

287 Article 35 III (b) of the LGEEPA, **C-0014**.

288 DGIRA 2018 Resolution, pp. 503-504, **C-0008**.

289 First Solcargo-Rábago Report, ¶ 190.

290 *See* NOM-059-SEMARNAT, p. 19, **R-0038**.

habitat; rarity (*i.e.*, those whose populations are naturally sparse), uniqueness or taxonomic relevance, ecological, or intrinsic attributes of a species.[291]

157. Part of the problems of the MIA of the Don Diego Project is due to the fact that it included deficient information regarding the number of individuals of *Caretta caretta* turtle, without leaving aside the fact that the Gulf of Ulloa is a critical habitat for this species in danger of extinction.[292] The following excerpt from the 2018 Resolution is relevant:

> In conclusion, in accordance with the best available scientificevidence based on the results obtained by Seminoff et al. (2006), the Gulf of Ulloa is an area that has been long considered as a critical habitat for Caretta carettaturtle juveniles. Pursuant to the studies conducted by Peckham et al. (2007, 2008) and by Koch et al (2013), which were quoted by Seminoff 2014, it is an area of great importance for an important proportion of the entire population of the North Pacific Caretta carettaturtle.[293]

158. Although the example of the vaquita marina referred to by Odyssey and Dr. Sergio Flores is illustrative, it is used incorrectly. The vaquita marina is indeed an animal species in danger of extinction, and the affecting of an individual of this species clearly reduces its population and the survival of the entire species.[294] The population of the *Caretta caretta* tortoise is not in the same critical situation that the vaquita marina, but that does not mean that the authority can authorize in a permissive way the increase in the mortality of individuals of this type of sea turtle. The North Pacific Marine and Regional Ecological Planning Program (OEMR-PN Program), published in 2018 by SEMARNAT, provides greater context:

> The trend and contextual scenarios revealed profound changes in the gray whale population in the UGA. These changes are that in both scenarios a point is reached from which the number of individuals decreases suddenly.
>
> […]
>
> Trend and contextual scenarios suggest that the loggerhead turtle population may remain viable, as long as it is not captured beyond a certain number of individuals..[295]

159. It is disquieting that Odyssey, Dr. Herrera and Dr. Sergio Flores minimize the characteristics of the *Caretta caretta* turtle and its classification as an endangered species. This

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291 NOM-059-SEMARNAT, p. 8, **R-0038**.

292 Group of Experts on Sea Turtles Report, ¶¶ 29, 67, 132 and 133. Verónica Morales Report, ¶¶ 6 and 19. Urbán-Viloria Report, ¶ 13.

293 Resolution of 2018, p. 287, **C-0009** (emphasis added).

294 Reply, ¶ 29. Second Sergio Flores Report, ¶¶ 32-33.

295 OEMR-PN Program, p. 20, **C-0438**.

animal species carries out a natural phenomenon, consisting of a migratory cycle that comprises the waters of the Gulf of Ulloa, where it remains for several years in the juvenile and sub-adult stage, to later return to the beaches of Japan to reproduce and nest.[296] As explained by the Biologist Bermúdez, the Mexican State has made significant efforts to achieve the conservation of this species given its high degree of vulnerability.[297]

160. In desperation, the Claimant and Dr. Herrera perform numerical and comparative exercises based on nine AIAs in which, in their consideration, DGIRA interpreted Article 35 III (b) of the LGEEPA according to their position in this arbitration.[298] Odyssey and Dr. Herrera's claim is incorrect.

161. First, none of the AIAs identified by Odyssey and Dr. Herrera are related to dredging projects in the Gulf of Ulloa and its impact on, *inter alia*, Caretta *caretta* turtles and gray whales.[299]

162. Second, the Claimant's and Dr. Herrera's interpretation of these nine AIAs is carried out in isolation and without providing any additional element to support their position pursuant to Article 35 (III) (b) of the LGEEPA. Furthermore, as indicated above, the protection of endangered species would be futile if the prohibition of environmental impact authorizations depended on whether the project in question affects or may affect an entire species.[300]

163. Third, [redacted] and [redacted].[301] [redacted] [redacted] [redacted].[302] [redacted] [redacted]

296 Firstt WS of Benito Bermúdez, ¶ 15. Report of the Group of Experts on Sea Turtles, ¶¶ 31, 32, 33 y 131. Verónica Morales Report, ¶ 47.

297 First WS Benito Bermúdez, ¶ 24.

298 Reply, ¶¶ 25-26.

299 Second Solcargo-Rábago Report, ¶¶ 118. 122, 123 y 151.

300 Second Solcargo-Rábago Report, ¶¶ 84, 150 y 151.

301 *See*, AIA of the MIA "recinto minero El Concheño", p. 74, **C-0345**; AIA of the MIA "recinto minero Tayaha", p. 66, **C-0346**; AIA of the MIA "Recinto Minero Ana Paula", p. 98, C-0348; AIA of the MIA "Proyecto de Explotación Minera Los Gatos", p. 114, **C-0348**; AIA of the MIA "Central La Jacaranda", p. 55, **C-0350**; AIA of the MIA "Plantas Metalúrgicas", pp. 85-86, **C-0351**, and AIA of the MIA "Planta CIL Los Filos", p. 61, **C-0352.**

302 First WS [redacted], ¶ 2. First WS [redacted], ¶ 2.

[redacted][303] With this, [redacted] intends [redacted], which is false. Previously, DGIRA has used article 35(III)(b) of the LGEEPA as a legal basis to deny a MIA authorization, *i.e.*, in the "Central Termoeléctrica Rosarito" case.[304] In fact, the application and interpretation of said provision in that case coincides with the interpretation of the Respondent and Solcargo-Rábago, as reflected in the two denials of the Don Diego Project.

164. The Claimant and Dr. Herrera have not identified a legal basis - either in a national law or in an international treaty signed by Mexico - in which it is expressly established that the authorizations of environmental projects must be rejected when they put an entire endangered species at risk, which they clearly will not find because it simply does not exist.[305]

165. Again, Article 35(III)(b) of the LGEEPA does not contain the term "all" by which the Claimant intends to make the superfluous distinction between "individual" and "species" in order to support its *ad hoc* interpretation of said provision. The logic behind this article is the same *i.e.*, the protection of threatened and endangered species, avoiding that a species whose risk category is already threatened is eventually declared endangered or, that a species that is already in danger of extinction is affected, which obviously can occur when an individual of the species is affected, without it being necessary to affect all the individuals of the entire species,[306] as the Claimant erroneously suggests.

166. In any case, it should be noted that in 2019 ExO challenged the legality of the 2018 Resolution before the TFJA arguing, *inter alia*, the way in which DGIRA applied article 35(III)(b) of the LGEEPA.[307] Indeed, ExO mentioned the AIA of the Manzanillo Project, just as Dr. Herrera

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303 First WS [redacted], ¶ 34 and Second WS [redacted], ¶ 27.

304 Second Solcargo-Rábago Report, ¶¶ 99 y 100.

305 First Solcargo-Rábago Report, ¶ 189.

306 Second Solcargo-Rábago Report, ¶¶ 89 y 90.

307 Application for annulment filed on August 19, 2019 by ExO before the TFJA, pp. 51, 74 y 78, **C-0186** ("This situation implies that the DGIRA denied the authorization even when the elements of the normative hypothesis of article 35, section III, subparagraph b), of the LGEEPA are not met; and that the DGIRA incorrectly applied said precept, based on the incorrect perception that individuals, populations and species are interchangeable concepts […] it is clear that the DGIRA based its decision to deny the authorization of the MIA on an undue understanding of article 35, section III, subparagraph b), of the

did in his second expert report.[308] This confirms that the Claimant seeks the Tribunal to rule on interpretive questions of Mexican environmental law that are specific to domestic courts.

167. The Claimant and [redacted] try to make the Tribunal believe that the 2018 Resolution denied the AIA of the Don Diego Project because the death of a single individual of *Caretta caretta* turtle endangered the biological viability of the species, pursuant to Article 35(III)(b) of the LGEEPA.[309] This position is incorrect. The problem is not the death of a single *Caretta caretta* turtle individual, but rather that ExO did not provide sufficient scientific evidence in the 2015 MIA to determine how many specimens could be affected by the activities of the Don Diego Project.[310] The following transcript shows this:

> It is important to say that petitioner collected field data under a turtle sighting campaign from August 1 to 13, 2013, pursuant to IF provided by petitioner, whose campaign only lasted 13 days and differs, in terms of period and time of data collection, from the sighting studies carried out by Seminoff et al. (2006), the results of the prospection and exploration studies of petitioner not showing a statistical rigorous analysis conducted under a scientific methodology, since petitioner only observed three sea turtle specimens. The foregoing raises uncertainty for this DGIRA, namely the lack of information and data collection in the AP. […]
>
> On that regard, this DGIRA, based on information analyzed in the preceding paragraphs, concludes that the habitat of turtles scientifically corresponds to the entire water column, from the surface to the bottom of the sea, without the possibility of making any technical or legal distinctions, in the sense that habitats are limited only to certain parts within a surface. An assertion in that sense would favor constructions that would result in the fragmentation of the habitat.[311]

168. It should be noted that Dr. Seminoff in his Witness Statement submitted along with the Rejoinder Memorial, confirms that, based on his research work as an expert in the study of the behavior of the *Caretta caretta* turtle species, the presence of this species is found in the entire Gulf of Ulloa. Consequently, and since they are curious creatures, even with the implementation of the most demanding mitigation mechanisms, it cannot be said that the Don Diego Project will

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LGEEPA, which states that the impacts should affect an entire species -defined as a group of individuals- and, in any case, that they could result in an affectation in itself.").

308 Application for annulment filed on August 19, 2019 by ExO before the TFJA, p. 51y 53, **C-0186**. Reply, ¶¶ 25 y 26. First Héctor Herrera Report, ¶ 56. Second Héctor Herrera Report, ¶¶ 63-64.

309 Second Sergio Flores Report, ¶ 25.

310 Group of Experts on Sea Turtles Report, ¶¶ 24, 26, 113, 116 and 145.

311 DGIRA 2018 Resolution, pp. 287, 291-295. **C-0009** (emphasis added).

not impact the population of this species, particularly if it is considered that there are more than 40,000 turtles in that area.[312]

169. In any event, the Respondent considers it inappropriate and inadmissible to claim the interpretation of a provision of the LGEEPA as a violation of NAFTA, especially when it also presents that same claim before a national court whose procedure remains *sub judice*.

2. The allegations of the Claimant and its experts regarding the instruments issued by the Mexican State to protect the *Caretta caretta* turtle in the Gulf of Ulloa are confusing and incorrect.

170. It is disconcerting that the Claimant, [redacted] and [redacted] and Dr. Sergio Flores confuse the content of the 2018 Resolution and the content of legal orders issued by SAGARPA and SEMARNAT to protect the *Caretta caretta* turtle populations that inhabit the Gulf of Ulloa, with the sole purpose of alleging that "the impact of the Project on the Caretta caretta turtles was adequately addressed in the MIA" and that "[redacted][313]

171. As a starting point, there is no doubt that the Don Diego Project would have affected the *Caretta caretta* turtle.[314] Although Odyssey qualifies it as "extremely conservative", in the 2015 MIA itself, ExO, on its own initiative, recognized that the dredging activities of the Don Diego Project could kill specimens of this species.[315] This means that there was a risk that the dredging of the Don Diego Project could cause the death of *Caretta caretta* turtle specimens, thus being an anthropogenic cause (*i.e.*, due to human means) that would increase the mortality of this species.[316]

172. Given the relevance of the Gulf of Ulloa, the Mexican State has effectively decreed various instruments to protect the Gulf of Ulloa and the endangered species that inhabit it, including: i) the Fishing Refuge Agreement published in 2015 by SAGARPA; ii) the Fishing Refuge Agreement published in 2016 by SAGARPA; iii) the Fishing Refuge Agreement published in 2018 by

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312 WS Jeffrey Seminoff, ¶ 17.

313 First WS [redacted], ¶¶ 35-36. First WS [redacted], ¶ 13. Reply, ¶¶ 43, 225.

314 Group of Experts on Sea Turtles Report, ¶¶ 16, 42, 87, 127, 140, 142, and 149. Verónica Morales Report, ¶¶ 51-68.

315 Reply, ¶ 32.

316 Second Solcargo-Rábago Report, ¶ 86.

SAGARPA; iv) the Agreement establishing the Gulf of Ulloa as a refuge for the *Caretta caretta* turtle published in 2018 by SEMARNAT, and iv) the OEMR-PN Program published in 2018 by SEMARNAT.[317]

173. Fishing is an activity that can affect endangered species.[318] It appears that the Claimant seeks to criticize the fact that Mexican authorities have established a mortality limit for *Caretta caretta* turtles as a consequence of fishing activities. This is because fishing is an important source of resources in the Baja California Sur area, just as it was explained in the Counter-Memorial.[319] The concerns of the inhabitants and fishermen of Comondú expressed regarding the Don Diego Project during the PEIA of the 2015 MIA provide proof of this.[320] It is not unusual for a government to authorize the "bycatch" of turtles and marine mammals in fishing operations, along with animal population assessments. In fact, the US NOAA Department of Fisheries issues such permits.[321]

174. Fisheries Refuge Agreements issued by SAGARPA (a Secretary of State other than SEMARNAT) are intended to resolve the effects that fishing activities cause to species that are subject to protection regimes (*e.g.*, the *Caretta caretta* turtle) and reduce the possible interaction of fishing with these species.[322] Through the Fisheries Refuge Agreements, the Mexican State established a mortality limit of 90 specimens of *Caretta caretta* turtles per year as a result of fishing activities and, if this limit is exceeded, commercial fishing operations should be suspended in order not to affect more specimens.[323]

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317 Fisheries Refuge Agreement issued by SAGARPA on April 10, 2015. **R-0035**. Fisheries Refuge Agreement issued by SAGARPA on June 23, 2016, pp. 1-9. **C-0010.** extending the validity of the fishing refuge area and new SAGARPA measures of June 25, 2018. **C-0011**. Agreement establishing the SEMARNAT loggerhead turtle refuge area of June 5, 2018. **R-0040**. North Pacific Marine and Regional Ecological Management Program published on August 9, 2018 by SEMARNAT. **C-0438**.

318 *See* First Solcargo-Rábago Report, ¶ 188.

319 Counter-Memorial, ¶ 299.

320 Counter-Memorial, ¶¶ 299-301.

321 S*ee* Permit No. 16230 that authorizes the incidental capture of five threatened and endangered species of sea turtles in the gillnet fishery. **R-0210**. Certificate of December 29, 2020 authorizing fishermen in the South Pacific tuna fishery with purse seines to kill and injure marine mammals. **R-0211**.

322 Fisheries Refuge Agreement of June 23, 2016, p. 2. **C-0010.**

323 Fisheries Refuge Agreement of June 23, 2016, p. 2 and 5. **C-0010**.

175. The Fisheries Refuge Agreements and the mortality limits established in them are part of a public policy of conservation aimed at weighing fishing activities (an essential economic activity for thousands of people who live on the coasts of Baja California Sur) and the protection of an endangered species.[324] The Fisheries Refuge Agreements themselves establish that only specimens of *Caretta caretta* turtle that have died due to fishing activities will be quantified and not due to natural causes or other anthropogenic causes such as, for example, marine mining.[325]

176. During the production of documents, the Respondent presented two technical opinions prepared in 2015 and 2016 by INAPESCA, referred to in the 2016 SAGARPA Fishing Refuge Agreement.[326]

177. These technical opinions are not related to marine mining activities and much less to the Don Diego Project.[327] The purpose of INAPESCA's analysis was to confirm that INAPESCA had no objection to decreeing the western coast of Baja California Sur as a fishing refuge, and explained the methodologies by which the mortality limit of 90 specimens of *Caretta caretta* turtle was determined with the help of research centers and in accordance with scientific methodologies.

> Under the coordination of the National Commission of Natural Areas, under SEMARNAT, the Interdisciplinary Center for Marine Sciences [CICIMAR] Research

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[324] During the Don Diego EIA Procedure, INAPESCA presented a technical opinion to the DGIRA, [redacted], in which he emphasized the commercial importance of fishing in the Gulf of Ulloa Area, identified deficiencies in the 2015 MIA and highlighted their concerns about a long-term project and the effect of climate change ("MIA has been reviewed in detail, as well as the additional information provided by the promoter. In the revised documentation there is no quantitative analysis of the effect of dredging operations on fisheries, only qualitative assertions [...] Additionally, and given that the promoter expresses his interest in continuing with direct extraction activities for a period of 50 years (until at least 2065); it is of particular attention to formally consider the following: The potential effects of climate change. By 2050 most of the effects of climate change will be palpable in most of the planet. In the region of the western coast of Baja California, these effects are already measurable at this time and have begun to alter the patterns of distribution and abundance of important populations of fishing interest [...] Potential long-term conflicts between the presented project [Don Diego] and the large-scale mariculture industry should be minimized."), pp. 6 y 10. **R-0133.**

[325] Fisheries Refuge Agreement of April 10, 2015, p. 5. **C-0035**. Fisheries Refuge Agreement of June 23, 2016, p. 5**. C-0010**.

[326] INAPESCA technical opinion of June 3, 2016. C-0347. See Procedural Order 3, p. 37. Fisheries Refuge Agreement published on June 23, 2016 by SAGARPA, p. 2. **C-0010.** ("That the National Fisheries Institute has recommended through its technical opinion established with official number RJL/INAPESCA/DGAIPP/0790/2016, ratify the fishing mortality limit for the species of loggerhead turtle (Caretta caretta) of 90 specimens per year throughout the Fishing Refuge Zone, considering the precautionary approach.").

[327] *See* Second WS Rafael Pacchiano, ¶¶ 23-24.

> Centers and the Autonomous University of Baja California Sur initiated in 2013 an inter-institutional and interdisciplinary study with the objective of knowing the causes of the deaths of the loggerhead turtle in the Gulf of Ulloa. The results of the final report of the "Study on the causes of death of the loggerhead turtle (*Caretta caretta*) on the west coast of Baja California Sur (Gulf of Ulloa)" presented by the three Research Centers were inconclusive, given the multiplicity of factors identified as causes of death of loggerhead turtles found on the beaches. The argument for this conclusion is based on the fact that in addition to the stranding of sea turtles, hundreds of tons of shrimp and some marine mammals were also recorded, so it can be deduced that the small-scale fishing activities could hardly be considered as a direct cause of the morality of this fauna, considering the equipment and fishing gear used.
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> […]
>
> In order to provide a possible solution to the *conflict* between the conservation sector and fishing in this area, the report "Sustainable fishing exploitation and protection of the loggerhead sea turtle in the Golf de Ulloa" of SEMARNAT's "North Pacific Marine Ecological and Regional Management Program" presents an analysis using a combination of a geospatial model and a dynamic simulation model as tools. The vulnerability of the juvenile loggerhead sea turtle population was estimated in terms of risk or probability of population size reduction in 100 years.
>
> […]
>
> As a recommendation it is stated that "[...]the bycatch in the Gulf of Ulloa should not exceed a total of 200 individuals per season"; therefore, it is recommended that "... the total bycatch of loggerhead turtles in the Gulf of Ulloa may not exceed 200 individuals per year. If this number is exceeded, all fishing activities in UGA GU-03, UGA GU-04 and UGA GU-05 must be suspended until the following year" because "...if this maximum limit of total bycatch per year is exceeded, the risk of losing 25% of the loggerhead sea turtle population in the Gulf of Ulloa is unacceptable".
>
> This recommendation is analogous to that established by the United States […], where the fishing is closed with 34 interactions with loggerhead turtles.
>
> However, considering that [...] the species is in danger of extinction, under a precautionary approach oriented toward the recovery of the loggerhead sea turtle population, the value of co should be less than 1.
>
> Therefore, a maximum of 90 turtles per season, equivalent to 0.45 turtles per boat per season, instead of the 200 proposed in the analyzed study, is proposed as an acceptable value to favor the recovery of this species and at the same time allow fishing as an economic activity.[328]

178. As can be seen, at no time did SEMARNAT or INAPESCA propose that the bycatch of the *Caretta caretta* turtle be limited to 200 individuals, as stated by the Claimant.[329] INAPESCA's technical opinions only made reference to a study that recommended not to exceed the mortality

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328 INAPESCA technical opinions of March 23, 2015 and June 3, 2016, pp. 8-9. **C-0347**.

329 Reply, ¶ 38.

of 200 individuals per year. However, due to the character of the loggerhead turtle as an endangered species, INAPESCA determined a lower mortality limit, *i.e.*, 90 specimens.

179. Apparently the Claimant intends to compare fishing activities with the dredging operations of the Don Diego Project, in order to argue that the impact of the Don Diego Project on the *Caretta caretta* turtle was adequately addressed in the 2015 MIA, a situation that is not comparable, since the project would be an additional source of mortality to that previously analyzed and considered by SEMARNAT and INAPESCA.[330]

180. Once again, the decision to declare the Gulf of Ulloa a refuge for the *Caretta caretta* turtle and limit the mortality of this species under an exceptional allowance limited to 90 specimens a year is part of a public policy of conservation.[331] The above is an example of the sovereign exercise of a State to regulate and implement measures and policies of an environmental nature, in accordance with Article 1106.6 of NAFTA, Article IV of the Inter-American Convention for the Protection and Conservation of Sea Turtles (CIT)[332], and Article 3 and 6 of the Convention on Biological Diversity (CBD).[333]

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330 Second Solcargo-Rábago Report, ¶ 86.

331 *See* Second WS Rafael Pacchiano, ¶¶ 23-24.

332 Article IV of the CIT ("IV. 1. Each Party shall take appropriate and necessary measures, in accordance with international law and on the basis of the best available scientific evidence information useful for the adoption of the measures referred to in this Article, […] 2. c. To the extent practicable, the restriction of human activities that could seriously affect sea turtles, especially during the periods of reproduction, nesting and migration […] h. The reduction, to the greatest extent practicable, of the incidental capture, retention, harm or mortality of sea turtles in the course of fishing activities, through the appropriate regulation of such activities, as well as the development, improvement and use of appropriate gear, devices or techniques, including the use of turtle excluder devices (TEDs) pursuant to the provisions of Annex III, and the corresponding training, in keeping with the principle of the sustainable use of fisheries resources;[…] 3.a. Each Party may allow exceptions to Paragraph 2(a) to satisfy economic subsistence needs of traditional communities,"). **RL-0080**.

333 Convention on Biological Diversity, ("Article 3. in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. **RL-0081**.

Article 6. Each Contracting Party shall, in accordance with its particular conditions and capabilities:

a) Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity […] b) Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans.")

181. On the other hand, the Claimant criticizes that neither the 2016 Resolution nor the 2018 Resolution made reference to the OEMR-PN Program, which has been referred to as "the undisclosed study of SEMARNAT".[334] This instrument was published on 9 August 2018, *i.e.*, two years after the 2016 Resolution and two months before the issuance of the 2018 Resolution. For evident reasons, DGIRA was unable to translate the textual content of the OEMR-PN Program into the 2016 and 2018 Resolutions.

182. However, the Claimant ignores that within the EIA Procedure of the 2015 MIA, [redacted] the technical opinion of the General Directorate of Environmental Policy and Regional and Sector Integration of SEMARNAT (Environmental Policy Directorate) to determine whether the Don Diego Project was consistent with the OEMR-PN Program, at that time still pending completion and publication.[335] On October 19, 2015, the Environmental Policy Directorate issued the technical opinion [redacted], and concluded that Don Diego was not consistent with what was established in the OEMR-PN Program.[336]

183. The Claimant also criticizes that the Counter-Memorial and the First Report of Solcargo-Rábago did not analyze the OEMR-PN Program because, in its consideration, "the study [OEMR-PN Program] […]demonstrates unequivocally that SEMARNAT's Denial of the Project on the basis of its purported impact on *Caretta caretta* was baseless and ignored the contemporaneous evidence that demonstrated the Project would have no impact".[337]

184. Claimant apparently forgets that Biologist Bermúdez emphasized the importance of this instrument for the protection of the Gulf of Ulloa and the *Caretta caretta* turtle.

> Due to the relevance of Gulf of Ulloa in the life cycle of yellow turtle species and in order to ensure its protection, the site was declared a "wildlife refuge area for the yellow turtle" in 2018
>
> In 2018, the North Pacific Marine and Regional Ecological Planning Program was completed, also including the area that comprises the Gulf of Ulloa. This document is

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334 Reply, ¶¶ 39-40.

335 Resolution of 2019 of the DGIRA, p. 5. **C-0009**. [redacted] **R-0078**. ("[…] since there is a draft project of "Decree for the conservation and protection of the Pacific loggerhead sea turtle (Caretta caretta) within its critical habitat for feeding and development in the Gulf of Ulloa, Baja California Sur", which is about to be published and entered into force, therefore said decree is not legally applicable to the project ").

336 Technical opinion of the Environmental Policy Directorate of October 19, 2015, p. 4. **R-0131**.

337 Reply, ¶ 40.

> the product of many years of work and is intended to preserve the environmental conditions that support a viable minimum population of yellow turtles; to prevent sub-lethal effects on priority species caused by harvesting activities; to prevent ecological imbalances generated by direct, indirect, cumulative and synergistic environmental impacts of fishing and mining activities on the seabed; to preserve the functional integrity of the areas of high biological productivity of the neritic (lower) ecosystems and of the Center of Biological Activity of the Gulf of Ulloa, which support the habitat of priority species and the use of target species for fishing.[338]

185. The OEMR-PN Program and the Loggerhead Turtle Refuge Agreement are two SEMARNAT instruments published in 2018 and aimed at protecting the *Caretta caretta* turtle, which is subject to "strong anthropogenic pressures, which has led to the design and application of conservation policies whose fundamental objective is the recovery of the populations of the aforementioned chelonians".[339] An example of this are the following excerpts from the OEMR-PN Program:

- Favor the protection of the habitat of the *Caretta caretta* turtle over the mining activities of the seabed.[340]
- Reduce the mortality rate of loggerhead turtle populations - evidently made up of individuals of this species - through sustainable fishing use.[341]
- Like the Fisheries Refuge Agreements, it establishes a mortality limit of 90 individuals of *Caretta caretta* turtle due to bycatch of fishing.[342]
- It recognizes that a mortality greater than 200 individuals per year due to anthropogenic actions in the Gulf of Ulloa constitutes an unacceptable level of risk for the long-term viability of the species.[343]
- It identifies marine mining and its infrastructure, and specifically phosphorite extraction, as an environmental problem and conflict with conservation and fishing.[344]

186. The reality is that the Claimant's allegations regarding the Fishing Refuge Agreements, the 2015 and 2016 technical opinions of INAPESCA and the OEMR-PN Program do not support its

338 First WS Benito Bermúdez, ¶¶ 16-17 (emphasis added).

339 SEMARNAT Loggerhead Turtle Refuge Agreement, p. 1. **R-0040**.

340 OEMR-PN program, p. 70. **C-0438**.

341 OEMR-PN program, p. 70. **C-0438**.

342 OEMR-PN program, p. 140. **C-0438**.

343 OEMR-PN program, p. 140. **C-0438**.

344 OEMR-PN program, p. 149. **C-0438**.

claims, nor do they demonstrate the alleged "low probability" of mortality impacts in *Caretta caretta* turtles during the activities of the Don Diego Project.

3. The 2018 Resolution analyzed the possible impact of various species, including sea turtles and cetaceans

187. The Claimant asserts that the 2018 Resolution did not take into account the impact of the Project on whales because the concerns of NGOs, national and international authorities and research centers were addressed by ExO through the additional information it presented during the EIA Procedure.[345] Furthermore, Dr. Sergio Flores alleges that the 2018 Resolution does not scientifically support any negative impact of the Project on whales that inhabit the Gulf of Ulloa.[346] Both allegations are incorrect.

188. The 2018 Resolution describes in detail the possible negative effects of the Don Diego Project on endangered and vulnerable species, and emphasized the *Caretta caretta* turtle and the gray whale.

189. As explained above, the 2018 Resolution considered that 35 of 47 marine mammals existing in Mexico, including the blue whale, killer whale, California sea lion, humpback whale and clearly the gray whale (see Image 1) and subject to special protections, inhabit the Gulf of Ulloa.[347]

Image 1. Gray whale and humpback whale

345 Reply, ¶¶72(d), 85.

346 Second Sergio Flores Report, ¶ 12(a).

347 DGIRA 2018 Resolution, p. 473. **C-0009**.

Source: Conanp, "100 years of conservation in Mexico, 1917-2017". **R-0194**.

190. The 2018 Resolution also considered that four additional endangered sea turtles to the *Caretta caretta* turtle inhabit the Gulf of Ulloa.[348]

191. Regarding whales, the 2018 Resolution has a specific section called "Gulf of Ulloa, Habitat of Other Species", in which scientific information and academic sources were analyzed, which determined that the environmental characteristics of the Gulf of Ulloa and its high productivity and biodiversity make it a unique habitat for feeding, refuge and reproduction of several vulnerable marine species, both resident and seasonal, which was considered by DGIRA at the time of denying the AIA of the Don Diego Project.[349]

192. One aspect not refuted by the Claimant is that the Gulf of Ulloa is an internationally recognized whaling sanctuary.[350] In this situation, some species of cetaceans that inhabit the Gulf of Ulloa are protected by NOM-059-SEMARNAT and NOM-131 -SEMARNAT, which establish guidelines and specifications on the protection and conservation of their habitat.[351]

193. Furthermore, contrary to what the Claimant may point out - including the *ex post facto* allegations of Dr. Sergio Flores - CONANP considered that the 2015 MIA did not contain scientific information on the noise pollution produced by dredging activities and its impact on the gray whale and other marine mammals, and on direct, cumulative and residual impacts on gray whale behavior.[352]

194. In addition, the Claimant has failed to explain that the OEMR-PN Program emphasizes that dredging activities constitute an environmental conflict that affects the gray whale breeding and rearing habitat:

> Whales (mysticetes) have complex acoustic behaviors to carry out vital activities such as foraging, breeding calves, migration, and mate selection. Therefore, increasing background noise levels within the frequency bands used by whales can decrease their

348 DGIRA 2018 Resolution, p. 473. **C-0009**.

349 DGIRA 2018 Resolution, pp. 295-317, 474-475, 507-508. **C-0009.**

350 Urbán-Viloria Report, ¶¶ 11, 13 y 14.

351 *See* Counter- Memorial, ¶¶ 87-88. NOM-0031-SEMARNAT. **R-0031**. NOM-059-SEMARNAT. **R-0038.**

352 First WS Benito Bermúdez, ¶ 22. Technical opinión of CONANP, pp.15-17, 15 y 32. **C-0006.**

> ability to send and receive information, negatively affecting their vital activities (Hatch, et al., 2012). Noise has been documented to increase the risk of whale habitat abandonment.[353]

195. The 2018 Resolution contains more than 25 pages dedicated to analyzing the situation of whales in the Gulf of Ulloa and the possible impacts caused by the Don Diego Project.[354] The reason for this is because the relevance of the Gulf of Ulloa "relevance lies in it being a local and regional sea ecosystem of great importance for food, shelter, and reproduction purposes with respect to vulnerable sea species".[355]

4. The Claimant seeks to minimize the concerns of Mexican authorities, NGOs and international organizations regarding Don Diego

196. The Claimant argues that the technical opinions received by DGIRA during the EIA Procedures of the 2014 MIA and the 2015 MIA seek to "mask" the lack of contemporary documentation and evidence on the evaluation of the EIA Procedure, and seek to "distract" the Tribunal.[356] This is also wrong.

197. The Claimant and [redacted].[357] [redacted] frequently requests these types of opinions as part of the evaluation of an MIA.[358] The Claimant also does not refute the fact that the DGIRA received opinions in addition [redacted] and that were part of the EIA Procedure of the 2015 MIA, mainly from NGOs.[359]

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353 OEMR-PN Program, pp. 48, 53, 143. **C-0438**.

354 DGIRA 2018 Resolution, pp. 295-317, 474-475, 507-508. **C-0009.**

355 DGIRA 2018 Resolution, p. 507. **C-0009.**

356 Reply, ¶ 67.

357 Counter-Memorial, ¶¶ 215 y 305.

358 Second WS [redacted], ¶ 15.

359 Counter-Memorial, ¶ 279-284.

198. Claimant and its witnesses claim that the Don Diego Project AIA was denied for political reasons. If that were true - which is rejected - [redacted]. This shows that there is inconsistency in Odyssey's claims and facts.

199. Contrary to what Odyssey and its witnesses and experts infer, the Respondent has not indicated that the opinions [redacted] were binding on the DGIRA.[360] As Solcargo-Rábago explained in its first expert report, all the opinions that the DGIRA received during the EIA Procedure constitute a useful element to "provide the DGIRA with additional elements to guide its resolution", which in fact happened.[361]

200. Based on the technical opinions received, DGIRA informed ExO that there were insufficiencies and inconsistencies in the 2015 MIA, and requested ExO to expand, rectify or clarify the information related to the Don Diego Project.[362] In other words, due to concerns reflected in the technical opinions required by the DGIRA, ExO presented "additional information", missing information "and" information in scope or complementary ", which was analyzed by the DGIRA at the time of issuing the 2018 Resolution.[363] However, this additional information or missing information did not answer the questions and concerns of the authority.

201. It is highly questionable that the Claimant and its witnesses affirm, on the one hand, that the concerns of third parties (*e.g.*, CONANP) were successfully addressed by ExO through the additional information it presented in the PEIA and, on the other hand, they intend to point out that DGIRA did not take into consideration the technical opinions [redacted], mainly if it is taken into account that some of them were issued by recognized research centers, authorities and international organizations.[364]

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360 Reply, ¶ 69.

361 First Solcargo-Rábago Report, ¶ 103.

362 Counter-Memorial, ¶¶ 306-307. Official letter of October 30, 2015 from the DGIRA, p. 1. **C-0004**.

363 DGIRA 2018 Resolution, pp. 1,515, C-0009.

364 Reply, ¶¶ 70-71.

202. The Respondent does not consider it necessary to re-explain in this Rejoinder all the concerns that authorities, NGOs, international organizations and research centers communicated to DGIRA during the EIA Procedure of the 2015 MIA, but the following examples are illustrative:

- The UNESCO World Heritage Center stated that "[t]he submitted EIA does not evaluate potential impacts of the Project on the Outstanding Universal Value (OUV) of the Whale Sanctuary El Vizcaino property […] particular attention should be paid to the assessment of potential direct impacts on the marine species, such as the gray and the blue whale, as well as four species of marine turtles".[365]
- Scientists from The Society for Marine Mammalogy concluded that "[t]he study incorrectly interpreted available information and in other cases there was a lack of sufficient information to fully evaluate the impact of the dredging operations on blue and gray whale populations."[366]
- Contrary to what Odyssey and its witnesses may affirm, the institutional opinion of CONANP is reflected in the technical opinion of November 26, 2015 prepared by the team of Biologist Benito Bermúdez, in which it considered that the Don Diego Project was contrary to environmental regulations for not taking into consideration and analyzing a series of environmental effects that could cause affections, *inter alia*, to the gray whale and the loggerhead turtle.[367]

203. It appears that the Claimant seeks to minimize the right of the interested public to participate in the PEIA of a project, just as happened in the PEIA of the Don Diego Project. In this regard, the IACHR has indicated the following:

> La Corte considera que la participación del público interesado, en general, permite realizar un examen más completo del posible impacto que tendrá el proyecto o actividad, así como si afectará o no derechos humanos. En este sentido, es recomendable que los Estados permitan que las personas que pudieran verse afectadas o, en general, cualquier persona interesada tengan oportunidad de presentar sus opiniones o comentarios sobre el proyecto o actividad antes que se apruebe, durante su realización y después que se emita el estudio de impacto ambiental.[368]

204. The Claimant criticizes the fact that Mexico has referred to the opinions received by DGIRA in the Counter-Memorial and considers them to be "*ex post facto* justifications."[369] Again, the opinions provide adequate context for the authority, are of a guiding nature and the DGIRA

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365 Communication from the World Heritage Center of April 18, 2016. **R-0139**.

366 Society for Marine Mammalogy technical opinion dated March 28, 2016. **R-0128**.

367 CONANP's technical opinion of November 20, 2015, pp. 33-34. **C-0006**.

368 Advisory Opinion OC-23/17 issued on November 15, 2017 by the Inter-American Court of Human Rights, ¶ 168. **RL-0082**.

369 Reply, ¶¶ 74 and 77.

has the discretion to take those aspects contained in the opinions received during a PEIA that in its consideration are relevant at the time of solving with regard to a MIA.

205. What the Claimant has not been able to refute is that no institution, authority, international body, research center or NGO supported the Don Diego Project.

5. Letters Sent to ExO and suspensions during PEIAs demonstrate DGIRA's concerns

206. Claimant's argument that SEMARNAT was satisfied with the information provided by Odyssey and, on the other hand, DGIRA's actions within the EIA Procedures of 2014 MIA and 2015 MIA, are inconsistent. As indicated in the Counter-Memorial, on November 21, 2014 (within the EIA Procedure of the 2014 MIA), DGIRA notified ExO of an official letter informing ExO of its concerns about the Don Diego Project.[370] The October 30, 2015 (during the 2015 MIA EIA Procedure), [redacted].[371] The following transcript accounts for this:

> In this regard and derived from the analysis carried out to the MIA-R of the project, this DGIRA identified insufficiencies and inconsistencies in the environmental and technical information presented that do not allow an objective evaluation of the studies presented [...] this administrative unit requests for the only time to the promoter, to continue with the evaluation in terms of Environmental Impact of the project, the extension, rectification or clarification of the information contained in the following chapters ...
>
> [...]
>
> [...] the evaluation period for the project is suspended as long as the requested information is not available, in order to have all the necessary elements to conclude the procedure established in this DGIRA.[372]

207. The insufficiencies and inconsistencies of the MIA 2015 [redacted] are contained in the official letter of October 30, 2015 and have been summarized in the Counter-Memorial.[373] There is no evidence to demonstrate that [redacted]

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370 Counter-Memorial, ¶ 240. Letter of November 21, 2014 from the DGIRA. **C-0100**. ("Sobre el particular y derivado del análisis realizado a la MIA-R del proyecto, esta DGIRA identificó insuficiencias e incongruencias en la información ambiental y técnica presentada que no permiten realizar una evaluación objetiva de los estudios presentados").

371 Counter-Memorial, ¶¶ 306- 309.

372 Official letter of October 30, 2015, pp. 2 and 11. **C-0004**.

373 Counter-Memorial, ¶¶ 308-309.

[redacted] the 2014 and 2015 official letters, and to suspend the EIA Procedures until ExO submitted additional information.

208. The Claimant and [redacted] and [redacted][374]

209. The Claimant goes to the extreme by pointing out that Mexico has not produced any contemporary evidence (documentary or testimonial) that demonstrates that the EIA Procedure of the 2015 MIA was carried out in its entirety.[375] However, DGIRA's own 2014 and 2015 documents, [redacted], diminish the credibility of Odyssey's allegations and the statements of his witnesses. Likewise, the 2018 Resolution is the clearest evidence that the 2015 MIA did not comply with environmental legislation for Don Diego to obtain the environmental impact authorization.

E. There is contemporary evidence that confirms that the refusal of authorization from SEMARNAT is based on a valid justification for protecting the ecosystem in the Gulf of Ulloa and the sustainability of marine species

1. Possible impacts that the Don Diego Project would have had on the ecosystem of the Gulf of Ulloa

210. The Claimant seems to try to minimize the possible negative impacts that sea turtles would suffer if the Don Diego Project had been authorized, characterizing these concerns as "mere pretexts".[376] However, the scientific literature has been emphatic in pointing out that activities such as those related with Don Diego are harmful, in various areas, for various species that inhabit the Gulf of Ulloa, including marine mammals and sea turtles. In this regard, the Respondent presents, together with this Rejoinder, expert opinions on the matter, which will provide the Tribunal with greater context and will assist it in having an objective understanding regarding the

374 Second WS [redacted], ¶¶ 15, 18. Second WS [redacted], ¶¶ 17.

375 Reply, ¶ 231.

376 Counter- Memorial, ¶ 149 y 153. Reply ¶ 225

Claimant's arguments related to the fact that its project was friendly to the laws. turtles and other marine species. However, it should be clarified that the Respondent does not intend that this arbitral tribunal carry out a *de novo* analysis and assume the responsibility of an environmental authority. The Respondent reiterates that this analysis of the Don Diego Project adhered to the provisions of national legislation and was carried out by the expert authority on the matter based on technical-scientific information that led it to conclude that the Project was not environmentally sustainable.

211. In this sense, Dr. Morales develops three major effects that the Don Diego Project could have generated in sea turtles, including *Caretta caretta*,[377] (see Image 2).

212. The first affectation is the obstruction for free swimming and a potential collision. As Dr. Morales describes it, taking into consideration the magnitude of the vessels, the fact that there would be at least two vessels operating simultaneously and given that they would operate close to each other "they have the potential to obstruct the free passage of turtles and increase the risks of collision of turtles both on the surface with the vessels and other mobile infrastructure present, and in mid-water with the vessels' live work, pipelines, piping and hoses".[378]

Image 2. *Caretta caretta* turtle

Source: Héctor Rodríguez, "Sea turtles: a global conservation success", National Geographic. **R-0193**.

Source: Javier Sandoval, CONABIO. **R-0192**.

377 Verónica Morales Report, Section III.B.2.

378 Verónica Morales Report, ¶ 41.

213. In the same sense, Mr. Flores-Ramírez assures that "las embarcaciones de apoyo tienen el potencial de golpear a las tortugas marinas" and even receive "impactos directos que produzcan lesiones graves o mortalidad".[379] However, Mr. Flores-Ramírez, in contradiction to this same statement, argues that the tickling chains have been mitigation measures for the protection of sea turtles whose effectiveness has been proven in dredging operations carried out in the United States,[380] without even citing a source about it. On this point, Dr. Morales emphasizes that these measures have not been tested in national waters and there is no scientific evidence to demonstrate their effectiveness in Mexico or in any other part of the world.[381]

214. The second problem implied by the Don Diego Project is the suction entrapment of the dredge. Being that the Gulf of Ulloa is the habitat of diverse marine turtles, among them, the loggerhead turtle, ridley, leatherback, and prieta; and considering that the leatherback turtle and the olive ridley turtle (just to mention a few) can be submerged to depths greater than those of the project, it is not remote that some of them would be caught by the suction of the dredge.[382] Even Mr. Flores-Ramírez acknowledges that turtles could be affected by dredging with TSHD dredgers.[383]

215. Dr. Morales delves into this issue with respect to *Caretta caretta* turtles, and points out that, contrary to what Mr. Flores-Ramírez suggests regarding the remote probability of finding individuals of *Caretta caretta* in deep waters due to low temperatures,[384] *Caretta caretta* turtles could actually go down to the depths that the project would operate because the turtles are used to the temperatures in the Gulf of Ulloa.[385] Therefore, it would be possible that the turtles could be affected by the dredging.

379 First Sergio Flores-Ramírez Report, ¶ 122.

380 First Sergio Flores-Ramírez Report, ¶ 26.

381 Verónica Morales Report, ¶ 41.

382 Verónica Morales Report, ¶ 42.

383 First Sergio Flores-Ramírez Report, ¶ 124.

384 First Sergio Flores-Ramírez Report, ¶ 23 iii).

385 Verónica Morales Report, ¶ 60.

216. Finally, the third potential negative impact on sea turtles would be the emission of noise. On this point, both Dr. Morales[386] and the Claimant's expert[387] agree that the turtles could be affected by the noise of the dredging activity.

217. The Group of Experts on Sea Turtles explains that, if the Don Diego Project were authorized, it would have direct and indirect repercussions on turtle mortality, as well as on their habitat:

> The Don Diego project, which is intended to be carried out within one of the most important C. caretta turtle aggregation areas in the North Pacific, would create additional sources of mortality, both direct, due to its operations, and indirect, due to habitat destruction, adding its negative impacts to those that already exist for this species.[388]

218. The direct effects are reflected in the mortality of an endangered species, a situation that must be considered in the projection of biological viability of a species (i.e., its projection of growth or extinction). Therefore, in the specific case the *Caretta caretta* turtle, Respondent's experts confirm that SEMARNAT's resolución is adequate, in accordance with a scientific analysis and support.[389] Specifically, the experts indicated:

> Given that the critical values of annual mortality levels estimated for *C. caretta* in the GU that compromise the viability of the species were being exceeded, the negative decision of the DGIRA for the mining project is justified in the understanding of a high probability that it would cause additional mortalities, either by direct bycatch or indirect impacts by reducing the quantity or quality of its feed.[390]

219. Despite Claimant's and its experts' combined attempts to assert that the AP does not coincide with the endangered species here cited, experts Jorge Urbán and Lorena Viloria, based on the most accurate and reliable contemporary scientific information, conclude otherwise:

> The gray whales, blue whales and humpback whales, among several other species of marine mammals, use the GU, including the Project Area during various times of the year for activities such as breeding, feeding and transit.[391]

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386 Verónica Morales Report, ¶ 45.

387 First Sergio Flores-Ramírez Report, ¶ 124.

388 Group of Experts on Sea Turtles Report, ¶ 47.

389 Group of Experts on Sea Turtles Report ¶¶ 148 and 149. Urbán-Viloria Report ¶¶ 11.h, 44, and 50. Verónica Morales Report, ¶¶ 85 y 107.

390 Group of Experts on Sea Turtles Report, ¶ 109 (emphasis added).

391 Urbán-Viloria Report, ¶ 46.

> The MIA and the Additional and Complementary Information do not consider the presence of these species in the Project Area.[392]
>
> The project area ("AP") coincides with 100% of the migratory routes of gray whales (2-35 km from the coast), humpback whales (4-80 km from the coast) and with the migratory route and feeding zone of blue whales.[393]
>
> The PA overlaps or coincide with the area used by species such as the blue whale, gray whale and humpback whale.[394]

220. The above is shared with the analysis and conclusion made by the Marine Turtle Expert Group in relation to *Caretta caretta*:

> As has been widely mentioned and demonstrated in this document and in the resolutions of 2016 and 2018, the coincidence of the AP with the habitat of the *C. caretta* turtle is not marginal: the most complete maps of the distribution of the turtle, those based on aerial sightings, clearly show that *C. caretta* use the entire GU, including the AP. In addition, the movements and densities of the turtles change over time based on several factors (Figures 3 and 5 of this report).[395]

221. Therefore, as can be seen, contrary to what the Claimant might think, it is evident that the dredging activities that the Claimant intended to carry out could significantly affect marine mammals and sea turtles, and the implementation of the Project would have been no exception.

2. The information presented by the Claimant in the 2015 MIA, as well as the aditional information submitted, contained deficiencies and inaccuracies, meaning that SEMARNAT's 2018 Resolution is correctly supported

222. On September 3, 2014, ExO submitted the 2014 MIA. [396] In order to provide a response to the 2014 MIA, SEMARNAT requested the Claimant on November 21, 2014, to submit additional information, [397] which was delivered by ExO in March 2015.[398]

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392 Urbán-Viloria Report, ¶ 47.

393 Urbán-Viloria Report, ¶ 6.

394 Urbán-Viloria Report, ¶ 11. c.

395 Group of Experts on Sea Turtles Report, ¶ 128.

396 Counter-Memorial, ¶ 211. Memorial ¶ 107.

397 Counter-Memorial, ¶¶ 240-241. Memorial ¶ 121.

398 Counter-Memorial, ¶ 245. Memorial ¶ 127.

223. ExO submitted a new MIA on June 26, 2015,[399] to which SEMARNAT requested to rectify errors on June 30, 2015.[400] ExO subsequently submitted, in substitution to the MIA of June 26, a new MIA on August 21, 2015,[401] and on December 3, 2015 submitted the additional information for that MIA.[402]

224. The Claimant appeared to respond to the observations made to the MIA, however, this did not mean that the observations were properly addressed and, [redacted], [403] the reality is that the additional information submitted by ExO, far from being "detailed", presented clear deficiencies and inaccuracies.[404] Moreover, assuming without conceding that the information had been "detailed", this does not mean that it resolved the concerns expressed by SEMARNAT, much less that it was ascertaining information or that it effectively responded to the questions raised by the authority.

225. Among the many deficiencies in the additional information of the MIA, there were statements lacking scientific support, errors, and out-of-context statements that Dr. Morales identifies in a very precise manner in her report.[405]

226. Some of the many failures of ExO, were:[406]

- Assertions about the infauna found in the area, indicating that they are opportunistic type r species, with no real support or backing.
- No precise information on the dimensions of the vessels or the process barge, the suction force of the dredge, the technical specifications of the pipes connected to the dredge drag head, or how the dimensions of the dredge drag head were calculated.

399 Counter-Memorial, ¶ 260. Memorial, footnote 300.

400 Counter-Memorial, ¶ 260.

401 Counter-Memorial, ¶ 263, Memorial ¶ 133, and footnote 300.

402 Additional Information. **C-0005**. Memorial ¶ 140.

403 "[redacted] Second WS of [redacted], ¶ 17.

404 Group of Experts on Sea Turtles Report, ¶¶ 24, 26, 113, 116 and 145.

405 Verónica Morales Report, Section V.

406 Verónica Morales Report, ¶ 69.

- In various sections of the document, illustrations were without scale and in a generic manner, rather than presenting specific technical diagrams of all parts of the process.
- There is no indication of where the brine from this reverse osmosis process will be disposed, nor is there any mention of the amount of water that will be required for this sediment washing process, nor of the temperature or any other characteristic at which it will be returned, nor whether the excess humidity will go along with the rest of the water back to the seabed; or how the deposit of shells and materials is minimized just because the process on the barge is "mechanical and continuous".
- Regarding the return of inert material without phosphate content / rehabilitation, there is no indication of what type of ecological process this rehabilitation is related to, nor the more precise positioning of the coarse sands.
- No information is provided on the final destination of the transport of the phosphate material, navigation routes, route of the vessel, how the barge is transferred, etc.
- The parameters do not specify what happens to the depth of the seafloor in all scenarios, nor do they explain how the frequency of the transporting vessels is determined.
- It does not explain how they will avoid re-dredging material that was returned.

227. Another relevant aspect confirmed by SEMARNAT's 2018 Resolution is that the MIA does not consider all the impacts on biodiversity in the Gulf of Ulloa. Particularly, the effects on the *Caretta caretta* turtle, where not only would it have direct and immediate effects, but also the growth of the future population of this species would be compromised by indirect actions, which imply the imminent risk of a species in danger of extinction. The report of the Group of Experts on Sea Turtles presented by the Respondent states:

> Only direct impacts are mentioned in the MIA-R (e.g., turtles that could be trapped in dredging operations). However, there are no estimates of indirect impacts due to modifications of the seabed habitat, due to the intervention derived from the project. These habitat modifications and changes are considered significant threats in U.S. Endangered Species Act evaluations and can cause reductions in the growth rate of individuals by affecting the quantity and quality of food available.[407]

[407] Group of Experts on Sea Turtles Report, ¶ 88 (emphasis added).

228. It is important to note that, despite Claimant's insistence on the lack of use of scientific evidence by the Mexican authorities, especially the DGIRA in the 2018 Resolution, it has been evidenced throughout this Memorial that this was not the case. SEMARNAT denied the MIA in a reasoned and substantiated manner. This is confirmed by Respondent's experts, Dr. Urbán Ramírez, Dr. Morales Zárate and the Group of Experts on Sea Turtles, who upon conducting a comparative analysis of the available information and the conclusions contained in the 2018 Resolution,[408] argue that:

> After having analyzed the Resolution issued in 2018 by the DGIRA, in particular the section on marine mammals, we consider that it does present the necessary scientific evidence on distribution, temporality, estimates and density of marine mammals in the GU, as well as its coincidence with the AP. Therefore, the DGIRA's decision to reject the MIA is consistent.[409]
>
> DGIRA shows sufficient scientific evidence on distribution in space and time, estimates of abundance and density of the main species of marine mammals in the GU.[410]

229. In this regard, the Group of Experts on Sea Turtles agrees with the above, concluding as follows:

> For the above mentioned, we consider that both SEMARNAT resolutions were scientifically sound and have sufficient arguments that amply justify the denial of the Project due to its potential impacts on the *C. caretta* population and its habitat.[411]
>
> For all of the above, this group of experts considers that SEMARNAT's resolutions of 2016 and 2018, have an adequate analysis regarding the possible affectations *to C. caretta* turtles, in accordance with scientifically sound information and arguments that justify their resolutions due to the negative impacts to the GU ecosystem and the affectations of an endangered species, mainly by applying the precautionary principle. [412]

230. Also, Dr. Morales, shares this criterion, stating:

> In my opinion, the DGIRA made the correct decision and it was well-supported based on the best technical and scientific information available, which includes the review and detailed technical opinion of prestigious academic institutions with experts in different disciplines, as well as civil organizations and considering the feelings of the society from Baja California Sur. The DGIRA is clear in stating that the Gulf of Ulloa is a critical habitat for the *Caretta caretta* turtle and, in turn, in evidencing that the Project area coincides with the habitat of *Caretta caretta* turtles. The 2018 Resolution provides

408 Urbán-Viloria Report, ¶ 1.

409 Urbán-Viloria Report, ¶ 44.

410 Urbán-Viloria Report, ¶ 50 (emphasis added).

411 Group of Experts on Sea Turtles Report, ¶ 28 (emphasis added).

412 Group of Experts on Sea Turtles Report, ¶ 149 (emphasis added).

> ample and adequate rationale and justification for this. Likewise, the DGRIA rightly states that this would generate a negative impact to the GU ecosystem.[413]

231. Although Claimant argues that it submitted complete information that should have led to the approval of the MIA,[414] it was denied because, according to Dr. Morales, the Claimant "submitt[ed] incomplete information, which does not reach the technical sufficiency, which is inconsistent, is not detailed and in many cases presents unsubstantiated arguments".[415]

232. It is worth mentioning that, regardless of the fact that the Mexican authorities did use the necessary scientific information, those who actually have the obligation to prepare and present specific and sufficient evidence is, on the contrary, the Claimant,[416] in order to demonstrate the viability of its Don Diego Project and its non-impact on the ecosystem. This is clearly stated by Dr. Urbán and Dr. Viloria:

> The MIA and the supplementary information do not present evidence of the NO affectation of the Project to marine mammals.[417]
>
> Specific studies are required on the activities and the area of action to determine that a project like Don Diego does not affect a species, and, for this Project, they were not carried out.[418]
>
> Neither the MIA nor the Claimant in this arbitration has demonstrated that the Project does **not** affect marine mammals found in the area of action, which was their obligation. The Claimant is the one who must submit sufficient studies, analysis and information to support its conclusions on the non-impact of the Project on the Gulf of Ulloa and its marine species, including the gray, humpback and blue whale.[419]
>
> To this day, there are no specific studies on the distribution and abundance of cetaceans in the Gulf of Ulloa. In the absence of such studies, there is no way to detect changes arising from the Project and it cannot be said that the Project would not affect the cetaceans that inhabit the GU, as the Claimant maintains. However, there is information derived from different studies that fully or marginally include the study area for certain periods of time.[420]

233. In this regard, Dr. Morales likewise shares the aforementioned conclusion, stating that:

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413 Verónica Morales Report, ¶ 85 (emphasis added).

414 Reply,¶¶ 43, 44, 45, 58, 59 and 60.

415 Verónica Morales Report, ¶ 86.

416 Second Solcargo-Rábago Report, ¶ 96.

417 Urbán-Viloria Report, ¶ 9.

418 Urbán-Viloria Report, ¶ 11 subparagraph d.

419 Urbán-Viloria Report, ¶ 11 subparagraph c.

420 Urbán-Viloria Report, ¶ 11 subparagraph e.

> The Claimant does not submit any information of its own regarding the abundance and distribution of *Caretta caretta* turtles in the GU […][421]
>
> The Claimant continues to maintain a confusing wording that does not allow to clearly differentiate when the information is its own or comes from previous independent work. Likewise, the technical details of its processes, as well as its equipment, continue to be omitted. Neither are the methods used in their simulation models detailed nor do they explore them in depth, from which it does not provide any evidence of the input information used, nor the assumptions on which they are based, nor the degree of uncertainty that their results have, removing by default any validity from their results and therefore it cannot be argued that none of these processes or risks to sea turtles of any species are affected by the equipment.[422]

234. From the foregoing, a simple question arises, if the Claimant did not use correct and sufficient information to carry out its study, consequently, the results it obtained are simply erroneous. An example of the foregoing is the mitigation measures proposed by the Claimant both in the MIA and in the additional and complementary information, on which experts Urbán and Viloria have concluded that "[t]he mitigation measures are based on misinformation, therefore, they are not adequate."[423] For further context, said experts argue the following:

> The mitigation measures proposed in the MIA with respect to marine mammals are based on wrong premises about the presence, temporality and migration routes of gray, blue and humpback whales. For example, pointing out that gray whales migrate 2 km from the coast, and that it is scarce, or that there is no presence of other species in the AP consist of incorrect statements. Therefore, the proposed mitigation measures on the temporary suspension of Project activities are inappropriate.[424]

235. The Group of Experts on Sea Turtles agrees:

> The mitigation measures proposed by the Claimant are insufficient and present deficiencies because they have not been demonstrated under conditions such as those that would be presented in the GU and in a series of time sufficient to guarantee adequate protection for *C. caretta* and the ecosystem. [425]

236. Likewise, the aforementioned concurs with the conclusions of Dr. Morales to this respect:

> The information submitted by the Claimant lacks detailed information and methodological and scientific support [...] [it does not] specify timelines, logs or other details in this regard, [...] [it does not] provide technical information nor does it refer to any scientific document that supports its operation and effectiveness, to repeat in several

421 Verónica Morales Report, ¶ 78 (own emphasis).

422 Verónica Morales Report, ¶ 87 (own emphasis).

423 Urbán-Viloria Report, ¶ 10.

424 Urbán-Viloria Report, ¶ 43.

425 Group of Experts on Sea Turtles Report, ¶ 146.

> ocasions that they are widely used around the world and efficient is not a valid argument to assume it as a fact.[426]

237. Despite the Claimant's and its experts' combined attempts to assert that the AP does not coincide the endangered species here cited, experts Jorge Urbán and Lorena Viloria, based on the most accurate and reliable contemporary scientific information, conclude otherwise:

> The gray whale, blue whale, and humpback whale, among several other marine mammal species, use the GU, including the Project Area during various periods of the year for activities such as breeding, feeding, and transit.[427]
>
> The MIA and the Additional and Supplementary Information do not consider the presence of these species in the Proyect Area.[428]
>
> The project area ("AP" by its acronym in Spanish) coincides with 100% of the migratory routes of gray whales (2-35 km from the coast), humpbacks (4-80 km from the coast) and with the migratory route and feeding zone of blue whales.[429]
>
> The AP overlaps or coincides with the area used by species such as the blue whale, gray whale and humpback whale.[430]

238. The above is shared with the analysis and conclusion made by the Marine Turtle Expert Group in relation to *Caretta caretta*:

> As it has been amply mentioned and demonstrated in this document and in the 2016 and 2018 resolutions, the concurrence of the PA with *C. caretta* turtle habitat is not marginal: the most complete turtle distribution maps, those based on aerial sightings, clearly show that *C. caretta* use the entire GU, including the PA. In addition, turtle movements and densities change over time based on several factors […].[431]

239. According to the foregoing, it is notorious that the Claimant submitted incorrect, incomplete and insufficient information both in the 2015 MIA and in the additional information submitted, and that SEMARNAT's 2018 Resolution is clear and correctly supported.

F. Claimant has not been able to prove its allegations of having held meetings with Mexican authorities [redacted]

240. Once again, Claimant and its witnesses refer to a series of alleged meetings between representatives of AHMSA and Odyssey with SEMARNAT officials, particularly with Mr. Rafael

426 Verónica Morales Report, ¶ 80.

427 Urbán-Viloria Report ¶ 46.

428 Urbán-Viloria Report ¶ 47.

429 Urbán-Viloria Report ¶ 6.

430 Urbán-Viloria Report ¶ 11. c.

431 Group of Experts on Sea Turtles Report, ¶ 127.

Pacchiano, in order to support that the 2014 MIA was withdrawn by ExO at Mr. Pacchiano's request, and to support that the 2015 MIA was denied for political reasons and as a result of an alleged confrontation between Mr. Ancira and Mr. Pacchiano.[432]

241. In addition, Odyssey notes that, [redacted].[433]

242. The foregoing is sought to be demonstrated with "hearsay" and some internal emails. As will be explained *infra*, these elements are insufficient to support Odyssey's allegations.

1. There is no evidence on the alleged meetings and issues discussed between AHMSA and ExO executives with Secretary Pacchiano referred by Odyssey

243. The Reply contains serious accusations against Mr. Pacchiano. The Claimant goes to the extreme in asserting that factors beyond Don Diego, such as, for example, the high levels of pollution in Mexico City, the impact on the vaquita and the teporingo – endangered species –, an alleged conflict between fishermen and environmentalists over the creation of the turtle protection refuge in the Gulf of California,[434] among other factors, [redacted].[435] All of these allegations lack veracity and simply consist of a "smokescreen" that seeks to distract the Tribunal from what really happened during the PEIA of the 2014 MIA and the 2015 MIA, in order to build a false appreciation of Mr. Rafael Pacchiano.

244. What is paradoxical is that Odyssey alleges that the Mexican State has the burden of proof to demonstrate that SEMARNAT's denial of the 2015 MIA was "driven by anything else but Mr. Pacchiano's personal, political motivations."[436] This is incorrect. It is the Claimant that has the

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432 *See* Memorial, ¶150. Reply, ¶ 88.

433 Reply, ¶¶ 484-487.

434 *See* Second WS of Rafael Pacchiano, ¶¶ 23-24.

435 Reply, ¶¶ 103-110.

436 Reply, ¶ 118.

burden of proof to demonstrate allegations of such gravity, being necessary to provide evidence that meets a high evidentiary standard as will be explained below.

245. Since the Memorial Odyssey has made reference to a series of meetings betweem representatives of AHMSA and Odyssey-ExO with SEMARNAT officials and Mr. Rafael Pacchiano.[437] This situation is repeated in the Reply. Because of this, it is important to recount the facts and confront them with the alleged evidence provided by Odyssey.

a. 2015 Meetings

246. In 2015, two meetings were held between representatives of ExO and AHMSA with SEMARNAT officials, including Mr. Pacchiano, then Undersecretary of SEMARNAT. The first meeting was held on June 10, 2015.[438] The Respondent has been able to confirm that Messrs. Ancira, Gonzalez Merla and De Narvaez, on behalf of AHMSA and ExO, and Messrs. Pacchiano, Schiaffino, Kuri [redacted], were present at the meeting. As stated by Mr. Pacchiano in his first witness statement, as of 2015 Mr. Ancira started to be the main interlocutor of the Don Diego Project and, during the meeting, Mr. Pacchiano informed AHMSA and ExO that the Project would be authorized only if it complied with the law and if it demonstrated that it would not affect the environment.[439] As can be seen from the contemporaneous evidence, the 2014 MIA resolution was due to be issued on June 22, 2015, that is, within days of the meeting.

247. Days later, on June 18, 2015, Mr. Pacchiano received Mr. Ancira again at the latter's insistence. The Claimant and its witnesses assert that at this meeting Mr. Pacchiano requested Mr. Ancira that ExO withdraw the 2014 MIA, which they seek to demonstrate with:

- The statements of Mr. Claudio Lozano, a person who did not participate in the June 18, 2015 meeting, but states that subsequent to it, Mr. Ancira commented to him that Undersecretary Pacchiano suggested that ExO should withdraw the MIA and resubmit it along with certain letters of support, which was the only thing necessary to approve the Project, since "there were no environmental reasons to reject the MIA".[440]

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437 Memorial, ¶¶ 130-132, 143-151.

438 First WS Rafael Pacchiano, ¶¶ 58-60.

439 First WS Rafael Pacchiano, ¶ 60.

440 First WS Claudio Lozano, ¶¶ 40-42.

- [redacted] a person who was also not present at the June 18, 2015 meeting and who has only provided confusing testimony. In the first statement, [redacted][4] [redacted].[442] Now, in his second statement, [redacted]".[443] Apparently, [redacted].[444]

- The statements of Mr. Mark Gordon, a person who was also not present at the June 18, 2015 meeting, but who apparently received a phone call that day from Mr. Ancira to comment him that Mr. Pacchiano requested that the 2014 MIA be withdrawn, to be subsequently evaluated in an "expedited" manner and thus be approved.[445]

- An email dated October 19, 2015 (i.e., 4 months after the meeting) exchanged between Mr. Greg Stemm (founder of Odyssey) and Ms. Barrera (assistant to Mr. Ancira), persons who are not involved in this arbitration and who were also not present at the June 18, 2015 meeting.[446] Being clear, this e-mail does not contribute anything in this regard.

248. The Tribunal will be able to observe that these elements are not sufficient to demonstrate that a Secretary of State required an applicant to withdraw its environmental impact assessment request that in the next few days was going to be resolved by the competent area (i.e., the DGIRA).[447] In fact, Mr. Pacchiano himself has categorically denied that he has made such a request:

> I understand that Odyssey again alleges that on June 18, 2015, I met with Mr. Ancira and that at that meeting I recommended to Mr. Ancira that ExO withdraw the MIA and

441 *See* Second WS Rafael Pacchiano, ¶ 14.

442 First WS [redacted], ¶ 13.

443 Second WS [redacted], ¶¶ 17-18.

444 *See* Second WS Rafael Pacchiano, ¶ 14.

445 First WS Mark Gordon, ¶¶ 69-71.

446 Email dated October 19, 2015. **C-0389**.

447 *See* Reply, ¶ 205.

> resubmit it to DGIRA along with letters of support from the Governor of Baja California Sur, the Municipal President of Comondú and INAPESCA. As I stated in my first witness statement, it is false that I made the alleged requests referred to by the Claimant.[448]
>
> […]
>
> It is also false that [redacted]. Although I do not know the reasons why ExO's representatives withdrew the MIA in 2015, probably it was because [redacted] that the Don Diego Project was not feasible under the terms that were submitted.[449]

249. Contrary to the Claimant's allegations regarding the alleged requests for withdrawal of the MIA and submission of letters of support: *i)* Mr. Pacchiano has provided a factual account of what actually happened in the meetings with representatives of AHMSA, Odyssey and ExO; *ii)* there are Odyssey's press releases addressed to the investing public on Nasdaq and to the company's own shareholders that contradict those allegations; and *iii)* there are annual reports filed by Odyssey before the SEC in which the Claimant itself confirmed that it voluntarily withdrew the 2014 MIA in order to evaluate it and gather further information.[450]

b. 2016 Meetings

250. The Claimant, through Mr. Claudio Lozano, asserts that on March 12, 2016, he attended a meeting in which Mr. Pacchiano, by then Secretary of SEMARNAT, as well as Messrs. Ancira and Koltheniuk, representing AHMSA and ExO, were present. Based on this meeting, the Claimant asserts that Mr. Ancira "became impatient with the lack of response" from Mr. Pacchiano, argued that ExO would challenge the DGIRA's decision – by then not yet issued – before the Mexican courts, which ended in confrontations between Mr. Ancira and Mr. Pacchiano.[451] In other words, Claimant seeks to claim that Mr. Pacchiano felt insulted by Mr.

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448 Second WS Rafael Pacchiano, ¶ 29.

449 Second WS Rafael Pacchiano, ¶ 14.

450 *See* Memorial, ¶ 336, Odyssey's press release dated June 22, 2015. **R-0107.** 2019 Annual Report (Form 10-K) of Odyssey, p. 7. **C-0190**.

451 Memorial, ¶ 145. First WS Claudio Lozano, ¶ 65-67.

Ancira and thus, "in an apparent fit of rage," ordered the denial of the AIA for the Don Diego Project.[452]

251. Claimand seeks to demonstrate these serious accusations with:

- The witness statements of Mr. Claudio Lozano, a person who initially stated that the meeting took place on March 12, 2016, *i.e.*, on a weekend, but in his second witness statement he states that he is "certain" that the meeting occurred during the first half of March 2016.[453]

- [redacted] were not present at the alleged March 2016 meeting. In addition, [redacted][455]

- Emails dated March 22, 2016 and August 10, 2016, exchanged by Odyssey executives, persons who were also not present at the alleged March 2016 meeting and who only refer to conjectures by Mr. Mauricio Limón about Mr. Ancira's alleged "outbursts" against Mr. Pacchiano.[456]

252. With these limited elements, Claimant seeks to prove a very serious accusation, i.e., that the 2015 MIA was denied due to apparent "personal caprices" and "political caprices" of the then Secretary of SEMARNAT. In this regard, Mr. Pacchiano has again rejected these accusations as follows:

> I understand that Mr. Claudio Lozano again asserts in his second witness statement that in March 2016 a meeting was held in which Messrs. Ancira, Koltheniuk and Lozano were allegedly present, and in which Mr. Ancira confronted me by pointing out that "ExO would be forced to appeal to the Mexican courts to force a decision." [36] Likewise, Mr. Lozano states that he recalls another meeting "in May 2016 in my office, in which

452 Memorial, ¶ 150. Reply, ¶¶ 88, 93, 198, 204.

453 First WS Rafael Pacchiano, ¶ 66. Second WS Claudio Lozano, ¶ 25.

454 First WS Claudio Lozano, ¶ 20.

455 First WS [redacted], ¶¶ 8-9.

456 *See* emails dated March 22, 2016 and August 10, 2016. **C-0405** and **C-0416**.

> Messrs. Ancira, Fernández de Cevallos and Lozano were present."[37] Notwithstanding what I already pointed out in my first witness statement on such allegations, no meeting in the months of March or May 2016 appears in my agenda. The reality is that I do not recall the alleged meetings in 2016, much less that Mr. Ancira confronted me.[457]

253. As is evident from the above referenced quote, Mr. Pacchiano has testified that he has no recollection of the March 2016 meeting, nor of an apparent May 2016 meeting, which to this day still remains unspecified by Claimant and its witnesses.[458]

c. 2017 Meetings

254. By 2017, the 2015 MIA had already been rejected by the DGIRA and the Appeal for Review 74/2016 filed by ExO against the 2016 Resolution was ongoing, which in turn was resolved in February 2017.[459]

255. Claimant and Mr. Claudio Lozano assert that prior to that, on January 31, 2017, Mr. Pacchiano met with Messrs. Ancira and Elvira, the latter a former Secretary of SEMARNAT and by then an executive of AHMSA.[460] It is remarkable that the Claimant included among its interlocutors a former Secretary, apparently its objective was to influence the technical-scientific nature of the DGIRA's resolution and to generate pressure on the officials. In this regard, Mr. Pacchiano reports this fact:

> I do recall participating in a meeting at the end of January 2017 in which Messrs. Elvira and Ancira were present. I also recall that at that meeting Mr. Ancira, by way of an informal comment, sarcastically pointed out that he had had to hire Mr. Elvira, former Secretary of SEMARNAT, to "convince" SEMARNAT that the Don Diego Project was viable. I did not give great importance to that comment, a bit out of place, since any DGIRA decision is independent of the personal or professional opinion that any former SEMARNAT Secretary may have on a given project. Therefore, I insisted again to Mr. Ancira that he should present technical and scientific information to the DGIRA and that it was not a matter of personal conviction.[461]

256. The Claimant and Mr. Lozano state – without having been present at the meeting – that at the January 2017 meeting, Mr. Pacchiano commented that he wanted to avoid a nullity judgement

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457 Second WS Rafael Pacchiano, ¶ 30 (emphasis added).

458 First WS Rafael Pacchiano, ¶¶ 66-67.

459 *See* Counter-Memorial, ¶¶ 349-353. Resolution of Appeal for Review 74/2016 dated February 27, 2017. **C-0160**.

460 Second WS Claudio Lozano, ¶¶ 26-27. 2017 AHMSA's Annual Report, p. 96. **R-0008**.

461 Second WS Rafael Pacchiano, ¶ 31 (emphasis added).

"and that he preferred to resolve the ExO MIA through an appeal for review [Recurso de Revisión 74/2016], but that he needed time to approve the Project after the COP13 conference and therefore, after the media coverage on SEMARNAT and the environment had already passed."[462] In this regard, two clarifications should be made:

- First, Mr. Pacchiano has denied Mr. Lozano's accusation stating that "[t]his is false. My position was always that the DGIRA would resolve in accordance with the applicable legal framework and based on the information that was integrated during the PEIA. I never suggested legal alternatives to contravene a technical decision of the DGIRA. Furthermore, I am not a lawyer to make suggestions of that nature".[463]

- Second, it seems that the Claimant and Mr. Claudio Lozano forgot that COP13 took place in December 2016, *i.e*. practically two months *before* the January 31, 2017 meeting.

257. This same argument was made in Mr. Claudio Lozano's first statement, but based on the alleged meeting of May 2016, for which there is no evidence whatsoever:[464]

> Secretary Pacchiano agreed to meet with us in May 2016 at the SEMARNAT office. Messrs. Ancira, Fernández de Cevallos and I also attended the meeting. When we arrived at Secretary Pacchiano Alamán's office, his assistant greeted us and told us that Secretary Pacchiano only wished to meet with Messrs. Ancira and Fernández de Cevallos and that I should wait in the hallway.
>
> […]
>
> […] Secretary Pacchiano had said that there was a timing problem. COP 13 (The United Nations Conference of the Parties to the Convention on Biological Diversity) was scheduled to occur in Cancun, Mexico, in December 2016. Mr. Ancira said that, from an image perspective, Secretary Pacchiano did not believe it would be convenient to grant the MIA before this occurred, because Mexico wanted to avoid any environmental controversy related to a "mining project" in an environmentally sensitive area such as the Gulf of Ulloa. Secretary Pacchiano assured them that after COP13 he would support the Project and approve the MIA.[465]

258. Claimant's allegations are inconsistent and are based solely on "hearsay". The Tribunal should not give any probative value to such alleged evidence.

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462 Reply, ¶ 118 and footnote. 318. Second WS Claudio Lozano, ¶¶ 26-27.

463 Second WS Rafael Pacchiano, ¶ 32.

464 Second WS Claudio Lozano, ¶¶ 26-27. Email dated February 15, 2017. **C-0363**.

465 First WS Claudio Lozano, ¶¶ 74-75 (emphasis added).

2. There is no evidence on the alleged meetings and issues discussed between AHMSA and ExO executives with CONANP, CONAPESCA and INAPESCA officials

259. Again, Claimant alludes to a February 2016 meeting between AHMSA and ExO executives with CONANP officials, including Commissioner del Mazo, in which CONANP's concerns about the Don Diego Project and its impact on the environment were apparently resolved.[466] This allegation is incorrect.[467] As noted by Biologist Bermudez, CONANP's institutional position is reflected in the technical opinion that CONANP presented in the PEIA of the 2015 MIA in November 2015, [redacted].[468]

260. Previously, the Claimant made the same allegations in relation to meetings held in January and February 2015 with officials from INAPESCA and CONAPESCA, in which ExO apparently addressed the concerns of both entities about the 2014 MIA, and thanks to the "feedback" received from both authorities implemented new aspects to be carried out in the Don Diego Project.[469] Regardless of the veracity of these alleged meetings, the reality is that INAPESCA's technical opinion (*i.e.*, its institutional position) is highly critical of Don Diego.[470]

261. For the aforementioned, the assertions of Claimant and its witnesses regarding meetings with Mexican authorities lack credibility, and the contemporaneous evidence (*e.g.*, technical opinions presented in the PEIA of the Don Diego Project) support to this fact.[471]

3. There is no evidence of the alleged meetings and issues discussed between AHSMA and ExO executives [redacted]

262. Claimant alleges that between 2014 and 2018, representatives of AHMSA and Odyssey [redacted]

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466 Reply, ¶ 71. Second WS [redacted], ¶¶ 122. *See* Memorial, ¶ 142.

467 *See* Second WS Rafael Pacchiano, ¶ 16.

468 First WS Benito Bermúdez, ¶¶ 26-27. Technical opinion dated November 20, 2015. **C-0006**.

469 Memorial, ¶ 124. First WS Claudio Lozano, ¶¶ 36-37. WS Richard Newell, ¶¶ 25.4-25.5.

470 *See* Counter-Memorial, ¶¶ 294-298. Technical opinion from INAPESCA dated March 29, 2016. **R-0133.**

471 *See* Second WS Rafael Pacchiano, ¶ 15.

[redacted].[472]

263. Respondent finds no explanation for these assertions, furthermore, the elements provided by Claimant are confusing and unconvincing. Claimant seeks to prove the assertions [redacted] with:

- Mr. Mark Gordon's second witness statement. [473]
- Five internal emails, including a map of the Don Diego Project site,[474] and
- The business cards [redacted].[475]

264. In this regard, the Tribunal must take into account four aspects.

265. *First*, there is no evidence about the meetings allegedly held between 2014 and 2016 [redacted], and much less evidence about the alleged advice provided [redacted].

266. *Second*, [redacted].[477] At the

472 Reply, ¶¶484

473 Second WS Mark Gordon, ¶¶ 4-39.

474 [redacted]

475 [redacted]

476 Reply, ¶ 484. Second WS Mark Gordon, ¶ 13.

477 Second WS Mark Gordon, ¶ 14.

document request stage, Mexico requested, *inter alia*, copy of any memorandum of understanding, letter of intent, purchase and sale agreement or similar documents [redacted][478] The Claimant did not produce <u>any</u> documents in this regard clearly because they do not exist. This is confirmed [redacted]:

> [redacted][479]

267. *Third*, [redacted].[480]

268. *Fourth*, Claimant and Mr. Gordon assert [redacted].[481] [redacted] has testified that the meeting in which he participated in connection with the Don Diego Project was conducted as a courtesy. The following explanation of [redacted] is relevant:

> [redacted]

478 Procedural Order No. 3, Annex B, p. 88.

479 WS [redacted], ¶ 10.

480 *See* WS [redacted], ¶ 12.

481 Reply, ¶¶ 484-487. Second WS Mark Gordon, ¶¶ 13, 26-34.

[redacted].[482]

269. As can be seen, the Claimant's and Mr. Mark Gordon's allegations are questionable and there is no contemporaneous evidence to support them, much less demonstrate the possibility that Don Diego [redacted]. Moreover, the alleged expectations created about the possible growth of ExO in Mexico were fostered by Odyssey's own intermediaries, including Mr. Ancira, [redacted].[483]

4. Dr. Seminoff's testimony reveals a lack of credibility in the allegations of Odyssey and its witnesses.

270. Claudio Lozano and Mark Gordon referred in their declarations to a meeting with Drs. Seminoff and Squires of NOAA Fisheries. Based on that meeting, Claimant asserts that both scientists allegedly opined that Don Diego and the turtles could coexist in the Gulf of Ulloa and that the Project was environmentally sound and socially responsible.[484]

271. In the Reply, the Claimant insists on relying on this premise to argue that: *i)* the Don Diego Project does not put the *Caretta caretta* species at risk; [485] *ii)* the impact of the Project "was adequately addressed in the MIA and with the mitigation measures implemented it was very unlikely that there would be any mortality"; [486] *iii)* the Project "was environmentally sustainable and should be approved with the implementation of the mitigation measures proposed by ExO";[487] *iv)* that the scientific evidence established that there was no environmental impact;[488] and *v)* that

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482 WS [redacted] Tovar, ¶¶ 5-7.

483 WS Mark Gordon ¶¶ 18 and 33 ("[redacted]").

484 First WS Claudio Lozano, ¶¶ 58-59. WS Richard Newell, ¶¶ 26.4-26.8. First WS Mark Gordon, ¶¶ 76-77. Email from D. De Narvaez to various, November 18, 2015. **C-0137**. Memorial, ¶ 139.

485 Reply, Section II.B.2.

486 Reply, ¶ 43.

487 Reply, ¶ 6.

488 Reply, Section II.B.3

the Claimant recruited world-class dredging and environmental experts to assist in the development of the dredging operations and to protect the environment.[489]

272. All of the aforementioned aspects are false, and the DGIRA's Resolutions are evidence of this, supported by various technical-scientific elements on the basis of which it formulated its determination. In fact, the Claimant has acknowledged that the DGIRA relied heavily on Dr. Seminoff's studies to deny the MIA.[490]

273. Although at the document production stage Mexico requested from Claimant the communications exchanged between Odyssey and ExO managers and executives with Dr. Seminoff and Dr. Squires, as well as the documents regarding the November 2015 meeting,[491] the documents exhibited by the Claimant are inconclusive and do not prove its assertions.[492]

274. Despite this, Mr. Claudio Lozano insists that he disagrees with Mexico that the Project was environmentally unsustainable and that the 2015 MIA was significantly flawed.[493] Similarly, in the Reply, Claimant reiterated —and criticized— that Mexico, *inter alia*, did not challenge environmental aspects of the Project.[494] As a result, Respondent found it necessary to turn to Dr. Seminoff to clarify Claimant's allegations regarding his opinion on the alleged environmental soundness of the Don Diego Project.

275. In this regard, Dr. Seminoff has confirmed the following about the "impressions" of the Claimant's representatives about the November 2015 meeting:

> In reading the excerpts from [Memorial and Reply; excerpts of the first witness statements of Messrs. Richard Newell, Mark Gordon and Claudio Lozano; and certain documents produced by the Claimant in the arbitration relating to a meeting that took

489 Reply, Section II.E.

490 Memorial, ¶ 139.

491 Procedural Order No. 3 dated April 23, 2021, Annex B, Request No. 31 of the Respondant, pp. 66-67.

492 In essence, the documents produced by the Claimant consisted of internal emails; emails exchanged with NOAA officials to schedule the meeting; an academic article by Dr. Squires; and a photograph outside the NOAA Fisheries facility. *See* emails from Messrs. Narvaez and others. dated April 14, 2016. **R-0188**. Photograph produced on April 9, 2021 by the Claimant. **R-0189**. and Dale Squires, Fisheries buybacks: a review and guidelines, Fish and Fisheries, 2010. **R-0190**.

493 Second WS Claudio Lozano, ¶ 6.

494 Reply, ¶ 56. First WS Richard Newell, ¶¶ 3, 23-28.

> place in November 2015], it is readily apparent that Odyssey has mischaracterized the sentiments I shared about the project during the November 18, 2015 meeting.
>
> First, […] Mr. Lozano's and Mr. Gordon's statements suggests that I somehow had the authority to render Agency decisions regarding the efficacy of the Project; this is fundamentally inaccurate. Specifically, I did not and would never put myself in a position to speak on behalf of NOAA, nor did I indicate in any way to Odyssey or to any NGO that I had the authority to make statements about NOAA's approval or endorsement of any project.
>
> Second, […] At this meeting, I did not express any view regarding whether the Project and turtles could co-exist. Instead, I listened politely to the presentation, […] I did not state or express that the Project seemed to be environmentally sound or socially responsible. In fact, I do not recall any discussions about social or economic development programs on which to conclude that the Project was socially responsible. Further, I do not recall Dr. Squires expressing the sentiments or views attributed to him about the project.[495]

276. Dr. Seminoff's statement is compelling and makes it clear that the statements of Claimant's witnesses are seriously questionable. Indeed, Mr. Claudio Lozano's erroneous impressions of his meeting with Drs. Seminoff and Squires show that these appear to be the result of his enthusiasm for the Project, as well as the natural bias that he himself probably generated due to his interest in the authorization of the Project. For example, Mr. Claudio Lozano assumed —wrongly— that Dr. Seminoff would have refuted his assessment that the Don Diego Project would not affect turtles if he had not agreed with that assessment. In this regard, Dr. Seminoff has specified that:

> This is an unfounded assumption, as Mr. Lozano and I had never previously met and he did not know me. In general, while I welcome informational meetings of this nature when discussing projects that might interact with sea turtles, I would need far more information than that emerging from a single in-person meeting, with no follow-up, prior to reaching any conclusions about the efficacy or impacts of such a project on sea turtles. Simply put, the information shared by Odyssey at the November 2015 meeting did not permit me to express any conclusions regarding whether and how the Project would impact sea turtles.
>
> I recall that during the meeting I was encouraged that officials for a large mining project such as Don Diego were considering ways to reduce impacts to sea turtles. However, I believe that Mr. Lozano's statement conflates my being "pleased" or encouraged with endorsement or approval.[496]

277. Contrary to what Claimant may assert, in reality Dr. Seminoff: (1) never stated his —or NOAA's— support for the Project; (2) never asserted that the Don Diego Project's mitigation efforts were sufficient to prevent loggerhead turtle interactions; or (3) much less communicated

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495 WS Jeffrey Seminoff, ¶¶ 9-11.

496 WS Jeffrey Seminoff, ¶¶ 12-13.

that there would likely be no potential impact on loggerhead turtles in the area of operation.[497] For the benefit of the Tribunal, each of these aspects that were explained by Dr. Seminoff is transcribed in detail below:

> With respect to (1), I have been a scientist at NOAA for 19 years and I am well aware of our organizational norms and protocols for approval processes. I did not and would never put myself in a position to speak on behalf of NOAA, nor did I suggest in any way to the meeting participants that I had the authority to make statements about NOAA's approval or endorsement.
>
> With respect to (2), as a professional sea turtle scientist, I focus my research on sea turtle ecology and habitat use. I am not involved in the field of sea turtle interaction mitigation for dredge operations such as the proposed substrate extraction activities of the Don Diego Project, and I do not have expertise on this topic. Due to this lack of expertise and my cautious personal nature, I did not and would not make broad statements about the efficacy of sea turtle interaction mitigation protocols such as those proposed by the Don Diego team.
>
> With respect to (3), based on my own research, I know that loggerheads occur throughout the Gulf of Ulloa and are present in areas outside of the "hotspots." (*See* maps from Seminoff et al. 2014). Therefore, even with the most stringent interaction mitigation procedures, there is always a possibility that loggerheads will be interacted with; sea turtles are curious creatures and even at low population density there is some probability of interaction with fisheries or dredging gear. Also, considering the large number of loggerheads that can be present in the Gulf of Ulloa— approximately 40,000—I did not and would not suggest that the Don Diego Project could move forward with no impact to the local loggerhead population.[498]

278. It is important to note that Dr. Seminoff himself has confirmed that even with the most stringent mitigation procedures, it cannot be argued that the Don Diego Project will not have an impact on the *Caretta caretta* turtle species, as established by DGIRA in its Resolutions.

5. People related to AHMSA were the main interlocutors of the Project

279. As mentioned in the Counter-Memorial and by Claimant itself, as of 2015, AHMSA began to be the interlocutor of ExO and Don Diego before SEMARNAT.[499] What stands out in this situation is the insistence of several people related to AHMSA to seek "empathies" from SEMARNAT in order to obtain the AIA for the Project. This course of action evidences ExO's need to politically influence a decision whose analysis involved a technical-scientific nature by the

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497 WS Jeffrey Seminoff, ¶ 14.

498 WS Jeffrey Seminoff, ¶¶ 15-17.

499 Counter-Memorial, ¶¶ 37, 43.

DGIRA.[500] If Don Diego had been technically feasible, as the Claimant asserts, there would have been no need to devote so many resources to try to push its project through controversial and wealthy members of the private sector or from the national political life to try to get the Project off the ground.

280. Respondent requests the Tribunal to take the following into account:

- Mr. Alonso Ancira, an influential businessman and the main executive of AHMSA, served as the main interlocutor for the Don Diego Project.[501]
- Mr. Diego Fernández de Cevallos, an influential businessman and politician, served as ExO's business advisor and was also an interlocutor of the Don Diego Project before SEMARNAT, and Claimant has even confirmed that Mr. Fernández de Cevallos had an economic interest in Don Diego. [502] Mr. Fernández de Cevallos has been repeatedly accused of abuse of power and influence peddling, due to the fact that he previously served as a congressman and senator, as well as of owing millions of dollars to the Respondent.[503] ExO apparently hoped that, given the lack of technical support, Mr. Fernández de Cevallos' influence would be sufficiently relevant for the approval of the Don Diego Project through political channels, which did not occur.
- Mr. Mauricio Limón, former Undersecretary of Environment, [504] was an advisor to ExO [redacted] to discuss the 2015 MIA.[505]

500 Second WS Rafael Pacchiano, ¶ 31.

501 Memorial, ¶ 130. Counter-Memorial, ¶¶ 258-59.

502 First WS Claudio Lozano, ¶ 69. First WS Mark Gordon ¶ 83. First WS Rafael Pacchiano, ¶ 50.

503 Proceso, Diego and his millionaire litigations with the power of power, May 26, 2010. **R-0195.** El Universal, "El Jefe Diego", winner in controversial and millionaire trials, October 2, 2019. **R-0196.** SDP Newsias, Diego Fernández de Cevallos, from influence peddling to the contrast campaign, October 15, 2021. **R-0197.**

504 Memorial, ¶ 92. Counter-Memorial, ¶ 202.

505 *See* Reply, ¶ 88. Email dated March 22, 2016. **C-0405**.

- Mr. Juan Elvira, a former Secretary of SEMARNAT and now an executive of AHMSA, also [redacted] to discuss the 2015 MIA, including during periods when the Project was not even subject to evaluation by the DGIRA.[506]

281. While it is true that SEMARNAT officials may have courtesy meetings with representatives of MIA applicants, the situation of the Don Diego Project was atypical. It is highly questionable that the Claimant fostered an intense lobbying exercise around Don Diego with the support of certain businessmen and politicians.[507] It is noteworthy that none of ExO's main interlocutors before SEMARNAT were presented as witnesses in this arbitration.

G. [redacted] and [redacted] are unfounded.

282. Claimant's Reply has "recycled" some allegations directed against the Mexican State, previously set forth in the Request for Provisional Measures, [redacted] and [redacted].[508]

283. The Respondent does not consider it necessary to transcribe again what was stated in the Response to the Request for Provisional Measures, considering that this situation was resolved by the Tribunal in the PO 4.[509] [redacted].[510] There is no evidence to show this, just as the Tribunal found in PO 4.[511]

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506 *See* email dated August 10, 2016. **C-0416**. *See* email dated January 14, 2017, **C-0363**.

507 *See* Second WS Rafael Pacchiano, ¶¶ 33-35.

508 Reply, ¶¶ 6, 145-171, 198. Second WS of [redacted], ¶¶ 5-9. Second WS of [redacted], ¶¶ 6-11.

509 *See* Response to the Request for Provisional Measures of April 23, 2021. PO 4 of May 25, 2021, ¶¶ 60-68.

510 Reply, ¶¶ 6, 145-148.

511 PO 4, ¶¶ 62-67 [redacted].").

284. Respondent is merely exercising a legitimate right to present its defense in this arbitration, to provide factual and legal counter-arguments, to adduce evidence, and to challenge Claimant's allegations and evidence, [redacted] and [redacted]

285. As explained in the Response to the Request for Provisional Measures, [redacted].[512]

286. Notwithstanding this, the dispute settlement mechanism provided for in Chapter 11 of NAFTA does not grant immunity to individuals or legal entities from any facts that may give rise to administrative sanctions or crimes, and that must be investigated under the national legislation of each of the Parties, such as, for example, those investigations against former public officials in charge of the OIC of SEMARNAT. In Mexico – as in any country where the rule of law exists – administrative sanction procedures and criminal proceedings are based on the principle of presumption of innocence, access to justice, due process and legality.[513]

287. As set forth in this Rejoinder Memorial, the Tribunal will be able to corroborate that there is no proportion between the serious allegations made by Claimant against Mr. Pacchiano and the Mexican State –lacking any evidence– [redacted].[514]

288. Therefore, [redacted] are unfounded, [redacted]

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512 Response to the Request for Provisional Measures of April 23, 2021, ¶¶ 3, 39-42. [redacted]mal letter dated April 21, 2021 from SEMARNAT's OIC, p. 4. **R-0158.**

513 Response to the Request for Provisional Measures of April 23, 2021, ¶¶ 41-44.

514 *See* Second WS [redacted], ¶¶ 27-31.

H. Other countries have been skeptical and cautious about authorizing marine dredging projects similar to the Don Diego Project

289. There are a number of pending controversias regarding proposed seabed mining projects. For example, the company Namibian Marine Phosphate (NMP) has been seeking to conduct seabed mining for phosphates in Namibian waters for a number of years. In June 2021, in a lawsuit initiated by fishermen's organizations, a Namibian court ruled that the company had violated a mining license when it carried out what it had called "trial mining" and "bulk sampling" without a valid environmental clearance certificate. Previously, an environmental clearance certificate issued to NMP in 2016 had been set aside, a court ruled that the environmental agency had not followed correct procedural requirements, and the application process restarted.[515]

290. Similarly, the company Chatham Rock Phosphate (CRP) was granted a permit to mine for phosphate from the seabed, but its application for an environmenal permit was denied in 2015. A paper recently published by the Society of Environmental Toxicology and Chemistry in its journal Integrated Environmental Assessment and Management stated that:

> Interested parties objected to the project on the grounds that it would adversely affect fishing, seabirds, marine mammals, and primary productivity. Experts representing all of the interested parties analyzed these issues and decided that it was unlikely that there would be any significant impacts on them. The phosphate on the Chatham Rise has a number of environmental benefits (e.g., extremely low cadmium, low runoff into waterways, reduced CO2 emissions from transport) but there was almost no vocal support for the project from the agricultural or environmental sectors.
>
> Ultimately the decision-making committee declined the application because they did not consider the environmental risks were sufficiently well understood, did not believe the proposed conditions or adaptive management could address possible adverse environmental effects, and thought the benefits of the project were not sufficient to outweigh these uncertainties.
>
> CRP has since identified the work required to fill the data gaps to support another environmental consent application. It is awaiting the outcome of court appeals arising from a marine mining project closer to shore that will clarify the interpretation of the governing legislation before starting its reapplication process.[516]

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515 *Confederation of Namibian Fishing Associations, et al. v. Environmental Commissioner Teofilus Nghitila, et al*., Case No. HC-MD-CIV-MOT-REV-2016/00335 (High Court of Namibia Main Division, Windhoek) (30 June 2021). **R-0202**.

516 Amanda Reichelt-Brushett, Judi Hewitt, Stefanie Kaiser, Rakhyun Kim, and Ray Wood, *Deep seabed mining and communities: A transdisciplinary approach to ecological risk assessment in the South Pacific*, in Integrated Environmental Assessment and Management (2021), p. 7 (Available online). **R-0203.**

291. The court case to which the foregoing article refers is a dispute involving an environmental approval for another seabed mining project in the territorial waters of New Zealand by the company Trans-Tasman Resources (TTR), which involves the mining of iron sands. In 2017, in a split decision, the "Decision-Making Committee" (DMC) appointed by the New Zealand environmental authority voted, in a split decisión, to grant an environmental approval for the project. The decision was appealed by a group of environmental and fisheries organizations. The High Court set aside the approval, holding that the DMC had applied an "adaptive management approach" not authorized by the law. TTR appealed the decisión to the Court of Appeal, but the claimants also cross-appealed, arguing that there were additional grounds on which the approval should have been overturned. The Court of Appeals rejected TTR's appeal and agreed with certain arguments of the environmental and fisheries groups, as follows:

> [258] The conditions imposed by the DMC reflect a high level of uncertainty about the baseline in relation to the presence and distribution of seabirds and marine mammals, and about the likely effects of TTR's mining activities on seabirds and marine mammals. That uncertainty was the product of incomplete information about those matters.
>
> [259] We consider that the DMC's response to this level of uncertainty was inconsistent with the EEZ Act for a number of overlapping reasons:
>
> (a) The level of uncertainty identified in the DMC decision, and reflected in the conditions imposed, engaged the requirement to favour caution and environmental protection in ss 61(2) and 87E (2). Granting consent on the basis of this level of information, and conditions of the kind imposed by the DMC, was not in our view consistent with that requirement.
>
> (b) To the extent that the relevant effects were caused by the sediment plume, and thus relevant to the marine discharge consent sought by TTR, the high level of uncertainty meant that the DMC could not be satisfied that the s 10(1)(b) objective of protecting the environment from pollution caused by such discharges would be achieved.
>
> (c) Imposing very general conditions about avoiding adverse effects on these fauna, and leaving the specific controls required in order to avoid such effects to management plans prepared by TTR and submitted to the EPA for certification, was inconsistent with the scheme of the EEZ Act and the public participation rights for which it provides. Submitters should have an opportunity to be heard on these topics. The result of deferring these issues to management plans was to remove submitters' rights to be heard by the decision-maker with responsibility for determining these important issues.[517]

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[517] *Between Trans-Tasman Resources Limited AND Taranaki-Whanganui Conservation Board, Cloudy Bay Clams Limited, Fisheries Inshore New Zealand Limited, Greenpeace of New Zealand Incorporated, Kiwis Against Seabed Mining Incorporated, New Zealand Federation of Commercial Fishermen Incorporated, Southern Inshore Fisheries Management Company Limited, Talley's Group Limited, Te Ohu Kai Moana Trustee Limited, Te Rūnanga O Ngāti Ruanui Trust, The Royal Forest and*

292. TTR appealed the decision of the Court of Appeals to the New Zealand Supreme Court, and the case remains pending.[518]

293. Meanwhile, a prospective seabed mining company naned DeepGreen Metals recently was merged into an existing publicly held corporation named Sustainable Opportunities Acquisition Corp, becoming The Metals Company. DeepGreen/The Metals Company has been seeking to mine polymetallic nodules in an ocean región known as the Clarion-Clipperton Zone (CCZ). A "proxy statement" filed with the U.S. Securities and Exchange Commission by Sustainable Opportunities Acquisition Corp in support of the merger includes the following statements:

> Potential future commercial-scale nodule collection operations in the CCZ are certain to disturb wildlife in the operating area. The nature and severity of these impacts on CCZ wildlife are expected to vary by species and are currently subject to significant uncertainty. DeepGreen's studies cataloguing wildlife and ecosystem function, piloting the nodule collection system and assessing impacts arising from the use of this system are all currently in progress. Given the significant volume of deep water and the difficulty of sampling or retrieving biological specimens in the Area, a complete biological inventory might never be established. Accordingly, impacts on CCZ biodiversity may never be, completely and definitively known. For the same reasons, it may also not be possible to definitively say whether the impact of nodule collection on global biodiversity will be less significant than those estimated for land-based mining for a similar amount of produced metal.
>
> It is also currently not definitively known how the risk of biodiversity loss in the CCZ could be eliminated or reduced through mitigation strategies or how long it will take for disturbed seabed areas to recover naturally. Prior research indicates that the density, diversity and function of fauna representing most of resident biomass (including mobile, pelagic and microbial life) are expected to recover naturally over years to decades. However, a high level of uncertainty exists around recovery of fauna that requires the hard substrate of nodules for critical life function. The extent to which planned measures, such as leaving behind 15% of nodule cover (by mass) and setting aside no-take zones, would aid recruitment and recovery of nodule-dependent species in impacted areas will depend on factors like habitat connectivity, which is an area that is still under study.[519]

Bird Protection Society of New Zealand Incorporated and The Trustees of Te Kahui O Rauru Trust AND Environmental Protection Authority, CA573/2018 [2020] NZCA 86 (3 April 2020), ¶¶ 258-259. **R-0204.**

518 *Trans-Tasman Resources' seabed mining appeal under way in Supreme Court*, New Zealand Herald Whanganui Chronicle (17 Nov. 2020). **R-0205**.

519 Amendment No. 4 to Form S-4 Registration Statement of Sustainable Opportunities Acquisition Corp., *Proxy Statement for Extraordinary General Meeting of Sustainable Opportunities Acquisition Corp. Prospectus for 62,000,000 Common Shares and 24,500,000 Warrants of Sustainable Opportunities Acquisition Corp. which will be Renamed "TMC The Metals Company Inc." as a Result, and Upon the Consummation, of the Continuance as a Company Existing Under the Laws of British Columbia as Described Herein*, Form 424B3 (Aug. 13, 2021), p. 50. **R-0206**. *See also* p. 126 ("… although DeepGreen

294. It is interesting to note that this disclosure was added after inquiries from the Securities Exchange Commission about why the company had not discussed in the document, as it had in other publications, impacts on disturbed seabed.[520]

295. The Respondent has described the above examples to demonstrate two key points:

- *First*, that as a factual matter it is not credible to claim that there can be perfect knowledge that a large scale deep sea mining project such as Don Diego will have no negative effects on sea life, as the Claimant argued both to SEMARNAT and to this Tribunal.
- *Second*, that it is not unusual, and certainly not a violation of the customary international law's minimum standard of treatment, to apply the precautionary principle to a proposed project of this nature, as will be seen *infra*.

III. LEGAL ARGUMENT

A. Claimant has failed to meet the burden and evidentiary standard necessary to prove the serious allegations made against Mr. Pacchiano and the Mexican State

296. The burden of proof and the standard of proof are two fundamental elements of evidence in international dispute settlement proceedings. The burden of proof is governed by the "*onus probandi incumbit actori*" principle and its objective is to ensure that the party making a certain allegation bears the burden of proving it. [521] On this basis, in investment arbitration, the burden of

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believes that the lifecycle ESG impacts of metal production from polymetallic nodules are significantly lower than land-based mining, given that no seafloor polymetallic nodule deposit has been collected on a commercial scale to date, there is some uncertainty regarding the ultimate potential impact of commercial-scale operations on wildlife and ecosystem function on the CCZ abyssal seafloor and overlying water column. There can be no assurance that the ESG impacts of metal production from nodules are not greater than anticipated.").

[520] See letter dated July 28, 2021 from Sustainable Opportunities Acquisition Corp to Securities and Exchange Commission. **R-0207.**

[521] *Military and Paramilitary Activities in and against Nicaragua* (Nicaragua v. United States of America), ICJ, Judgement, 26 de noviembre de 1984, ¶101. **RL-0083.** ("Ultimately, however, it is the litigant seeking to establish a fact who bears the burden of proving it"). *Case Concerning Avena and Other Mexican Nationals* (Mexico v. United States of America), ICJ, Judgement, 31 de marzo de 2004, ¶ 55. **RL-0084** ("Both Parties recognize the well-sellled principle in international law that a litigant seeking to establish the existence of a fact bears the burden of proving it."). *Marvin Feldman v. United Mexican States*

proving the impact of a measure taken by a respondent State is indisputably on the claimant investor.[522]

297. The Claimant appears not to understand that it has the burden of proof to demonstrate the allegations made in this arbitration against the Mexican State and, particularly, against Mr. Pacchiano. [523] The burden of proof cannot be avoided by Odyssey and the risk of not meeting it implies that the Tribunal cannot be persuaded of the facts alleged and, as a consequence, has to dismiss the claim.[524]

B. The Claimant has not met the burden and standard of proof necessary to demonstrate the serious allegations made against Mr. Pacchiano and the Mexican State.

298. Regarding the burden of proof, it consists of the burden of proof necessary to prove a fact or allegation, i.e., it responds to the question of how much evidence is necessary to demonstrate an aspect in question or the entire case presented by one party. The Rompetrol court v. Romania explained it as follows:

> "the burden of proof is an absolute principle that defines which party has to prove what in order for its case to prevail. The standard of proof defines how much evidence is needed to establish either an individual issue or the party's case as a whole[525]."

299. Generally, it has been accepted that the disputing party who alleges facts or claims of considerable gravity against a State - such as illegal acts, acts of corruption, crimes, fraud, among

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(ICSID Case No. ARB(AF)/99/1), Award, December 16, 2002, ¶ 177. **CL-0068**. *Rompetrol Group N.V. v. Romania*, ICSID Case No.ARB/06/3, Award, May 6, 2013, ¶ 178. **RL-0085**.

522 *Tokios Tokelés v. Ukraine*, ICSID Case No. ARB/02/18, July 26, 2007, ¶ 121. **RL-0086** ("[…] the burden of demonstrating the impact of the state action indisputably rests on the Claimant. The principle of onus probandi actori incumbit – that a claimant bears the burden of proving its claims – is widely recognized in practice before international tribunals."). *See also International Thunderbird Gaming Corporation v. United Mexican States*, Award, January 26, 2006, ¶ 95, **CL-0168** ("[…]t he party alleging a violation of international law giving rise to international responsibility has the burden of proving its assertion").

523 Reply¶ 118 ("Respondent has produced no documentary evidence to support its contention that SEMARNAT's Denial of the MIA was driven by anything else but Mr. Pacchiano's personal, political motivations.").

524 *Plama Consortium Limited v. Republic of Bulgaria*, ICSID Case No. ARB/03/24, Award, August 27, 2008, ¶¶ 248-249. **RL-0087**. *See Windstream Energy LLC v. Canada*, PCA Case No. 2013-22, Award, September 27, 2016, ¶351. **CL-0124**. *Generation Ukraine Inc. v. Ukraine*, ICSID Case No. ARB/00/9, Award, September 16, 2003, ¶¶ 19.2, 19.15 and 19.26. **RL-0057**.

525 *Rompetrol Group N.V. v. Romania*, ICSID Case No.ARB/06/3, Award, May 6, 2013, ¶ 178. **RL-0085**.

other conducts - must meet a high burden of proof[526]. This situation is due to the recognized conclusion reached by Judge Higgins in Case Concerning Oil Platforms, consisting in that "[t] he graver the charge, the more confidence there must be in the evidence relied on".[527] This means that the party that alleges facts of considerable gravity, not only has the burden of proof to prove the said allegation but also, the evidence presented must meet a clear and convincing standard burden of proof, ie, a high burden of proof threshold ("high threshold").

300. With a different wording ("conclusive evidence", "clear and convincing evidence", "more persuasive evidence", "irrefutable proof", "sufficient to exclude any reasonable doubt", among others), but with the same objective, several courts have reiterated that it is necessary to meet a high standard of proof when claims are related to wrongdoings. Given this, claimant investors who allege these types of claims must fully comply with the burden of proof and irrefutably demonstrate their allegations[528].

301. In this case, the Claimant has not demonstrated (i.e., met the burden of proof) with any clear and convincing evidence that it meets the required high threshold (i.e., standard of evidence) in accordance with the seriousness and gravity of its allegations. By way of example, the Claimant has failed to demonstrate:

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526 *Corfu Channel* (United Kingdom of Great Britain and Northern Ireland v. Albania), Judgment on Merits, April 9, 1949, p. 17. **RL-0088** ("A charge of such exceptional gravity against a State would require a degree of certainty that has not been reached here"). *Application of the Convention on the Prevention and Punishment of the Crime of Genocide* (Croatia v Serbia), ICJ, Judgment, February 3, 2015, ¶ 177-178. **RL-0089** ("The Court, after recalling that "claims against a State involving charges of exceptional gravity must be proved by evidence that is fully conclusive").

527 *The Case Concerning Oil Platforms* (Iran v. U.S.), Opinion Judge Rosalyn Higgins, 2003, ¶ 33. **RL-0090**.

528 Waguih Elie George Siag v. Arab Republic of Egypt, ICSID Case No ARB / 05/15, Award, June 1, 2009, ¶ 326, **RL-0091** ("It is common in most legal systems for serious allegations such as fraud to be held to a high standard of proof"). *EDF (Services) Limited v. Romania*, ICSID Case No. ARB / 05/13, Award, Oct. 8, 2009, ¶ 221. CL-0043 ("The evidence before the Tribunal in the instant case concerning the alleged solicitation of a bribe is far from being clear and convincing."). *Chemtura Corporation v. Government of Canada* (UNCITRAL) Award, 2 August 2010, ¶ 137. **CL-0033** ("in accordance with well established principles on the allocation of the burden of proof, and the standard of proof for allegations of bad faith or disingenuous behavior is a demanding one"). *Liman Caspian Oil BV and NCL Dutch Investment BV v Republic of Kazakhstan*, ICSID Case No ARB / 07/14, Excerpts from the Award, June 22, 2010, ¶¶ 422-424. **RL-0092.** The foregoing has also been confirmed in communications from non-disputing parties in investor-State arbitrations. *See Omega Engineering LLC and Oscar Rivera v. Republic of Panama*, ICSID Case No.ARB / 16/42, Submission of the United States of America, Feb. 3, 2020, ¶ 45. **RL-0093**.

- The alleged request - by way of demand - from Mr. Pacchiano, made on June 18, 2015, to Mr. Ancira for ExO to withdraw the MIA 2014, in order for it to be presented again to the DGIRA accompanied by letters of support[529].
- The alleged meetings held in March and / or May 2016 in which Mr. Ancira apparently got upset with Mr. Pacchiano (already Secretary of State at that time), as a result of which Mr. Pacchiano felt "insulted", [redacted][530].
- The allegation that the Don Diego Project AIA was rejected due to Mr. Pacchiano's political and personal motivations, in order not to be dismissed as Secretary of State and not to affect his political career and that of his wife.[531]
- The allegation that once the TFJA's March 2018 judgment was issued, Mr. Pacchiano [redacted] as Secretary of State, [redacted].[532]
- [redacted].[533]

302. Considering that these allegations are the factual basis for the violations of NAFTA Articles 1105[534] and 1110[535] alleged by Odyssey in this investment arbitration, it is questionable when the Claimant has failed to prove any of these allegations.

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529 Memorial, ¶¶ 130, 254. Reply, ¶ 88.

530 Memorial, ¶¶ 144-146. Reply, ¶ 88.

531 Memorial, ¶¶ 130, 254. Reply, ¶¶ 2, 111-113, 194.

532 Memorial, ¶¶ 262. Reply, ¶ 198.

533 Reply, ¶¶ 6, 148.

534 Reply, ¶¶ 190, 194, 198, 204-210 ("A decision taken for political reasons and cloaked in the exercise of a state's regulatory powers is the epitome of arbitrary treatment and thus constitutes a breach of the MST standard […] the MIA was denied for purely political reasons.").

535 Reply, ¶¶ 237, 238, 250-256 ("the MIA Denial was executed based on Mr. Pacchiano's political decision rather than on legitimate environmental concerns […] the decision of the scientific team was annulled by the Secretary for reasons not allowed under Mexican law […] scientific and environmental processes were completely subverted by the political will of Secretary Pacchiano").

303. The Tribunal may corroborate that the Claimant's accusations are extremely serious and even inappropriate in an investor-State arbitration.[536] Regardless, these types of accusations cannot be taken lightly[537].

304. The seriousness of Odyssey's accusations imply that a Secretary of State ordered that the 2015 MIA of the Don Diego Project be rejected for mere "personal whims" and in order not to affect his image and political career[538]. These accusations are false.[539]

305. The Claimant intends to prove these accusations with: i) the testimonial statements of Mr. Gordon and Mr. Claudio Lozano, persons who cannot be considered "first-hand" witnesses because they did not witness many of the facts that they allege (ie, "hearsays");[540] ii) the testimonial statements of [redacted] and [redacted], which, in the Respondent's opinion, lack credibility and veracity, are erroneous and inconsistent with the information contained in this arbitration and are not sufficient to support the allegations of Odyssey;[541] iii) four emails

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536 *See* Response to the Request for Provisional Measures of April 23, 2021 and Second WS Rafael Pacchiano, ¶¶ 5, 7 and 20.

537 *See* Counter-Memorial, ¶¶ 194-195.

538 Reply, ¶ 113 ("[…] Mr. Pacchiano was apparently so determined to burnish his environmental credentials with the public that he was willing to violate Mexican law […]").

539 First WS Rafael Pacchiano, ¶¶ 11, 30, 33, 36, 39, 43 and 51. Second WS Rafael Pacchiano, ¶¶ 5 and 7.

540 *See* supra, Section III.A. In Moin v Iran, the Iran-United States Claims Tribunal did not consider the evidence for not being "firsthand" but simply "hearsay", which could not be substantiated. Jalal Moin v The Islamic Republic of Iran, Case No. 950, Award No. 557-950-2, May 24, 1994, ¶ 19. **RL-0094** ("The Tribunal considers this to be hearsay evidence, on which it cannot rely, unless the evidence is substantiated. Such substantiation is missing").

541 *See* supra, Section III.A. In *Generation v Ukraine*, *PSEG v Turkey*, and *Fraport v Philippines*, the courts dismissed witness statements as highly questionable and conflicts of interest. Generation Ukraine Inc. v. Ukraine, ICSID Case No. ARB / 00/9, Award, September 16, 2003, ¶¶ 19.7. **RL-0057**. *PSEG v Turkey*, ICSID, Award, January 19, 2007, ¶¶ 177–178. **CL-0092**. *Fraport AG v Republic of the Philippines*, ICSID Case No.ARB / 03/25, Award, August 16, 2007, ¶¶ 328–329. **RL-0095**.

Unlike what happened in this case, in *Vivendi v. Argentina*, there was evidence, including official minutes from public notaries, on alleged meetings held between representatives of the parties. Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic, ICSID Case No. ARB / 97/3, Award, August 20, 2007. ¶¶ 4.13.6–4.13.10 (Aug. 20, 2007). **RL-0096**.

In *Azinian*, the court dismissed a claimant's witness statement for lack of credibility, this being the only "evidence" provided to support the investors' claims. Robert Azinian, Kenneth Davitian, & Ellen Baca v. United Mexican States, ICSID Case No. ARB (AF) / 97/2, Award, November 1, 1999, ¶¶ 119, 122–123. **RL-0009.** Plama Consortium Limited v. Republic of Bulgaria, ICSID Case No. ARB / 03/24, Decision on Jurisdiction, February 8, 2005, ¶¶ 177–178. **RL-0097** (case in which the court considered a claimant's

exchanged between representatives of Odyssey, ExO and AHMSA;[542] iv) fragments of no more than 1 minute of a press conference by Mr. Pacchiano that has been decontextualized by the Claimant;[543] v) two press articles and a 2018 information note from SEMARNAT; [544], and vi) a "retweet" from Mr. Pacchiano to a "post" published in October 2018 on the SEMARNAT Twitter account.[545]

306. The Respondent explained in the Counter-Memorial that this "evidence" is neither clear nor convincing and does not meet the evidentiary threshold to demonstrate the serious allegations made by Odyssey against the Mexican State, particularly against Mr. Pacchiano and now against his family.[546]

307. Contrary to the action of the Claimant, the Respondent has provided the direct testimony of Mr. Pacchiano by means of which it refutes the accusations made against him.[547] Given that it is evident that Odyssey has failed to meet the burden of proof, nor with the standard of evidence required to support the serious allegations it makes against the Mexican State, the Respondent requests the Tribunal to dismiss the Claimant's claims.

C. Jurisdiction

308. In the Reply, the Claimant completely mischaracterized the Respondent's position regarding the distinction between Articles 1116 and 1117 of the NAFTA, either intentionally or more likely because it failed to understand the provisions of the Treaty. The Respondent did not argue that a claimant investor cannot file a claim for its own account under Section 1116 and also

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testimony "[n] ot only largely unsupported by contemporary documentation but that it is materially inconsistent with parts of that documentation and also contradicted by other statements").
Noble Ventures, Inc. v. Romania, ICSID Case No. ARB / 01/11, October 12, 2005, ¶¶ 96–98. **RL-0098** (the court refused to consider an "uncorroborated and disputed evidence", consisting of a testimonial around a telephone call).

542 Emails dated October 19, 2015. **C-0389**, March 22, 2016. **C-0405** and August 10, 2016, **C-0416**. Email dated February 15, 2017. **C-0363**.

543 Counter-Memorial, ¶ 494. First TS Rafael Pacchiano, ¶¶ 74-75. See C-0174 and C-0176 (video provided by Claimant on March 1, 2021).

544 Excelsior, "Negarán dragado de arena en Ulloa", April 19, 2018, **C-0171**. La Crónica Jalisco, "Insistirá Semarnat en frenar proyecto minero submarino en BCS", **CL-0173**. Nota informativa SEMARNAT. **C-0470**

545 *See* **C-0177**.

546 Counter-Memorial, ¶¶ 494-506.

547 *See* Second WS Rafael Pacchiano, ¶¶ 13-24.

on behalf of an investment under Section 1117; rather, the Respondent explained that there is a distinction between the types of damages that are available under NAFTA Article 1116 and 1117 and also a difference as to who should be paid the possible financial compensation that is ordered in an award. As explained in more detail below in the Damages Section, Claimant cannot separately assert damages for itself as a shareholder and damages for the value of ExO, as this would result in a double counting. The Claimant also cannot claim damages for itself based on the portion of ExO that is also owned by Mexican investors.

309. There is another important distinction between Articles 1116 and 1117 of NAFTA. Article 1105 (1) clearly establishes that "[each of the Parties shall grant to the investments of the investors of another Party, treatment in accordance with international law, […]". Thus, unlike NAFTA Article 1102, for example, Article 1105 does not impose obligations with respect to investors, but only applies to the treatment of investments.[548] Consequently, the Claimant cannot file a claim for violation of the Article 1105 as an investor under Article 1116 of NAFTA. Similarly, the Claimant may seek expropriation compensation pursuant to Article 1110 only as an investor and only in connection with its ownership interest.

310. In the Counter-Memorial, the Respondent raised questions as to whether the Claimant actually owns and controls ExO, especially in light of Claimant's filings with the SEC indicating that it has pledged most of its assets to MINOSA and Monaco, and that AMHSA and Mexican citizen Alonso Ancira appeared to have control of ExO's activities in Mexico. In the Reply, the Claimant did not address the role of the Mexican investor in ExO, but has presented additional evidence to establish his (indirect) role in the ownership and control of ExO. Given the circumstances, the Respondent does not believe that it is necessary for the Tribunal to rule on this issue, because there are other broad grounds for dismissing the Claimant's claims.

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548 Various academics have confirmed this point in the following terms: "The first paragraph of Article 1105 is limited to treatment of investments, unlike the second paragraph of Article 1105, and indeed other provisions such as Article 1102 and 1103, which refer to treatment accorded to both investments and investors. This limitation was present even in the earliest drafts of what became Article 1105 (1). " Meg N. Kinnear et al., Article 1105 - Minimum Standard of Treatment, in Investment Disputes Under NAFTA, An Annotated Guide, p. 1105-17 (Kluwer 2008). **RL-0144.**

D. The Testimony of [redacted] and [redacted] Is Neither Credible Nor Admissible

311. The Claimant alleges that the fact that [redacted] "were willing to provide sworn evidence that could be (and, indeed, has been) construed as anti-Mexican—particularly in the current political climate—makes their testimony more, not less, credible".[549] [redacted].[550] These assertions are meaningless for the following reasons:

- Mexico does not know what the Claimant refers to by "the current political climate."
- It is paradoxical that the Claimant [redacted]
- The lack of credibility of [redacted] is magnified considering that the [redacted] does not alter the fact that their credibility is now seriously questionable.

312. Although the Claimant weakly attempts to defend the admissibility and credibility of [redacted] testimonial statements, the following points clearly demonstrate that the Tribunal should consider both statements as inadmissible or, where appropriate, lacking credibility.

313. In the first place, it is incontrovertible that according to Mexican regulations, [redacted].[551] [redacted] T— could not seriously

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549 Reply, ¶ 146.

550 Reply, ¶ 146.

551 *See* supra, Sections II.C. and II.C.1. Counter-Memorial, ¶¶ 174, 175, First Solcargo-Rábago Report, ¶¶ 79, 80, 114, 201 and Second Solcargo-Rábago Report, Section IV.B, ¶¶ 19-42.

552 Second WS [redacted], ¶ 10.

question this fact.[553] Although the Claimant intends to question this point with a generic and ad hoc interpretation of the Mexican regulations,[554] accepting it would imply attributing to a single person —the Secretary— absolutely all the acts carried out by each and every one of the public officials within a Secretary of State. Obviously, this interpretation is erroneous because it would imply that the administrative responsibility of public servants would become null and void by eliminating any type of responsibility for public officials other than the Secretary.

314. Mr. Salvador Hernández, a person who has been in charge of the DGIRA, [redacted] gives an account of this:

> The fact that the Secretary of SEMARNAT and the Undersecretary of Management for Environmental Protection are hierarchically above the General Director of the DGIRA, does not mean that the Secretary and the Undersecretary are the officials responsible for evaluating requests for environmental impact assessment.[555].

315. The aforementioned points have also been addressed by Mr. Pacchiano, who has rejected in the following terms the accusations made against him[556] [redacted]:

> For example, [redacted][557].

316. Secondly, it is questionable [redacted],[558] [redacted]. This fact is implausible considering [redacted]

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553 First WS [redacted], ¶ 2.

554 Reply, ¶ 90. Second Héctor Herrera Report, ¶¶ 24-29.

555 Second WS Salvador Hernández, ¶ 6.

556 *See* supra, Section II.C.1.

557 Second WS Rafael Pacchiano, ¶ 6 (emphasis added).

558 First WS [redacted], ¶ 2 and First WS [redacted], ¶ 2.

[redacted][559] Strangely, it is up to this moment that, due to the arbitration, [redacted].[560] It is also implausible [redacted] The Claimant's allegations are based on the mere statement of its witnesses whose credibility is seriously questionable.

317. Third, it is indisputable that Mexican regulations provide for checks and balances for the hierarchical structure that is organized vertically through lines of authority or command of the executive branch.[561] [redacted].[562] The only challenge in which mention is made of this theory of "secret command orders" is the present arbitration.[563] However, there are no complaints in this regard [redacted] or by ExO before SEMARNAT supervisory bodies or those in charge of investigating any wrongdoing that confirm their statements. This is not only a legal issue, but also an ethical one,[564] as stated by Mr. Salvador Hernández:

> [redacted].[565]

559 *See* supra, Sections II.C.1 and II.C.3.

560 First WS [redacted], ¶¶ 26, 27, 30 and 31 and First WS [redacted], ¶ 11.

561 Counter-Memorial, ¶¶ 460-462.

562 *See* supra, Sections II.C. and II.C.1.

563 *See* Second Solcargo-Rábago Report, ¶ 212

564 *See* supra, Sections II.B.4, II.C.2 and II.C.3.

565 Second WS Salvador Hernández, ¶ 16.

318. [redacted].[566] However, this omission is not accidental [redacted] Instead, the Claimant intends to cover [redacted][568]

319. Fourth, [redacted][569] Notwithstanding that this statement [redacted],[570] it is revealing that ExO has also failed to proceed to file the corresponding complaint with the pertinent authorities.[571] Said omission is questionable, especially considering that one of the interlocutors who allegedly heard [redacted] was Mr. Diego Fernández de Cevallos, legal and corporate advisor to ExO,[572] and who has a long career as a political actor and as a litigator in lucrative matters against the interests of the State.[573]

320. Although the Claimant alleges that the references [redacted] in Sections II.C and IIC.3. [redacted].[575] [redacted]

566 *See* supra, Section II.C.2.

567 **C-0364**, ¶ 2.a and **C-0365**, ¶ 2.a.

568 Sergio Huacuja Report, Section V.A.3, ¶¶ 30-32. See supra, Sections II.B.5 and II.C.1.

569 Second WS [redacted], ¶ 31. See Second Solcargo-Rábago Report, ¶¶ 186-189.

570 *See* Second Solcargo-Rábago Report, ¶¶ 201-202.

571 *See supra*, Sección II.B.5.

572 Counter-Memorial, ¶¶ 33-34. Oceánica Resources public deed dated May 15, 2020. R-0007. C-0134, p. 50. First WS. Claudio Lozano, ¶ 69. **C-0057**, p. 8.

573 Drafting, Proceso, Diego, the devils' advocate, May 25, 2010. **R-0173**.

574 Reply, ¶ 148.

575 *See supra*, Section II.C.3.

[redacted] legally viable mechanisms existed to report any irregularity by public servants, ie, both could and should report through those mechanisms provided for in the law.[576] Therefore, it is scandalous that the Claimant and ExO have also failed to simultaneously denounce the alleged "command orders" [redacted].[577]

321. Fifth, [redacted] once Mr. Pacchiano left office at the end of November 2018. However, [redacted] Indeed, during the meetings held by the lawyers of the Ministry of Economy (representatives of the Respondent) with the DGIRA, [redacted].[578] This [redacted]:

> […] [redacted].[579]

322. Sixth, and related to the previous point, [redacted].[580] In fact, [redacted].[581] For Mexico, this meant that [redacted] that the DGIRA's determinations were made in accordance with the law and, consequently, it implicitly disputed Odyssey's claims.[582]

323. [redacted][583] however, that was precisely the most plausible conclusion that could be drawn

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576 *See supra*, Sections II.C and II.C.3.

577 *See supra*, Section II.B.5

578 *See* Second WS Salvador Hernández, ¶¶ 7-17.

579 Second WS [redacted], ¶ 28.

580 Second WS Salvador Hernández, ¶¶ 16-17.

581 Second WS [redacted], ¶ 28.

582 *See* supra, Sections II.B.1.b and II.B.1c.

583 Second WS [redacted] ¶ 28.

from his actions, particularly when he failed to clarify the contrary knowing the meaning of Odyssey's claims derived from the public notice of intention[584] [redacted].[585] Therefore, and unless [redacted].[586]

324. In seventh place, [redacted] "to review SEMARNAT's concerns directly with its scientists and the specific mitigation measures Odyssey and ExO have proposed".[588] At that time, [redacted].[589] In fact, derived from the position expressed by the DGIRA, [redacted][590] the Ministry of Economy indicated to the SEMARNAT officials that if considered feasible to accept the meeting proposal at the technical level, "it would be worthwhile for the investor to bring a proposal that they are looking for. It must be solved with true mitigation measures"[591] and not those that he presented in the MIA [redacted], as reflected in the Resolution of 2018 itself.[592]

325. It should be noted that the representatives of Mexico expressly requested the DGIRA — [redacted] — to behave with the truth and reveal any

584 Odyssey's Notice of Intent was made public on the website of the Ministry of Economy as of March 22, 2019. *See*. Mail of Mr. Sergio Sánchez Berumen of March 25, 2019. **R-0174.**

585 **SHS-001.**

586 *See* supra, Sections II.B.1.b and II.B.1c.

587 *See* **SHS-002** and **SHS-003**.

588 **SHS-003**.

589 *See* supra, Section II.B.1.a.

590 Second TS [redacted], ¶ 28.

591 **SHS-002**, p. 1.

592 **C-0009**.

information that could be relevant to the case. Indeed, Mr. Romero, a former representative of the Respondent, confirms this fact by detailing what happened at that meeting:

> On February 7, 2019 and due to this arbitration, three lawyers of the DGCJCI held the first working meeting with SEMARNAT officials. This first meeting was held at the SEMARNAT offices and we attended: on behalf of the DGCJC […] [redacted], […]
>
> It was common to explain during the first meetings with the involved authorities (i) the attributions of the DGCJCI according to the Internal Regulations of the Ministry of Economy regarding the defense of the Mexican Government, which was fundamental to let them know that the objective of the lawyers was to know the facts but not to judge them, and it was essential to know the truth, in order to prepare the best possible defense, […] In particular, I recall that I explained to SEMARNAT officials that it would be necessary to have their full cooperation and willingness to be able to prepare Mexico's defense should the arbitration move forward. The above, as part of the protocol that normally followed the lawyers of the DGCJCI in this type of meetings with the authorities whose acts are claimed. In fact, I said that we needed to know all the details, details and information that they considered relevant in order to understand Odyssey's claim and know its merits..
>
> I even expressly requested them to share with us the information that, even if not in our favor, would be necessary to know in order to be able to formulate a reasonable explanation of those points to the Tribunal, favoring transparency.[593]

326. This request to behave truthfully was also made by e-mail, insisting to the SEMARNAT officials that the information they could provide us […] on the technical aspects of the case was vital.[594] "For this reason, they were required, "to send a document with a detailed explanation of the matter in response to the Notice of Intent […], the relevant aspects of the request for the environmental impact authorization and the other facts that it considers pertinent."[595] The foregoing, as part of the information that was required "to better understand the matter" and in preparation for the consultations [redacted].[596] In response, SEMARNAT provided a Memorandum prepared by the UCAJ [redacted].[597]

327. Eighth, and precisely related to the previous point, it is strange [redacted]

[redacted]

593 WS Hugo Romero, ¶¶ 9-10.

594 **R-0068**, p. 3. and **HGRM-002,** p. 3.

595 **R-0068**, p. 3. and **HGRM-002**, p. 3.

596 Second WS [redacted], ¶ 30. *See* WS Hugo Romero, ¶ 23 and HGRM-002.

597 **HGRM-001**. See WS Hugo Romero, ¶ 22. Second WS Salvador Hernández, ¶ 13.

[redacted]".[598] In this regard, Mr. Romero has stated that he is entirely surprised that [redacted]: "[i]n the first meeting, the explanation, questions and openness to receive comments from DGCJCI officials was made to all SEMARNAT officials present at the meeting; [redacted]".[599] Furthermore, "[t]he statements in the meetings were addressed to all the officials and we always emphasized the importance of knowing the truth in order to be able to make an evaluation of the matter and prepare an adequate defense"[600]. Even at the meeting of February 7, 2019, [redacted].[602]

328. In the ninth place, [redacted][603] [redacted].[604] [redacted].[605] This action is clearly contradictory.

329. In tenth place, although the Claimant affirms that [redacted]

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598 Second WS [redacted], ¶ 28.

599 WS Hugo Romero, ¶ 12.

600 WS Hugo Romero, ¶ 13.

601 *See* supra, Section II.B.1.a.

602 *See supra*, Section II.C.3.

603 Second WS [redacted], ¶ 34.

604 *See* supra, Section II.B.1.

605 *See* supra, Section II.B.4.

[redacted]

330. Although the Claimant claims that [redacted]. It should be noted that Mexico did not compensate [redacted] or any other witness in any of the arbitrations in which it has been sued.

331. Thus, the testimonial statement of Mr. Pacchiano, as well as all the points explained in this Section and Sections II.B and II.C., show that the testimonial statements of [redacted] must be considered with reservations by the Tribunal. Therefore, the evidence cited above strongly supports the Respondent's position that [redacted] and that both [redacted] have conducted themselves, at least, in an unethical manner.

332. Finally, it should be noted that the Claimant is wrong when it states that the evidence can only be excluded if it is proven that it was obtained illegally.[612] In the case *EDF (Services) v. Romania* cited by the Respondent in the Counter-Memorial,[613] the tribunal excluded the evidence

606 Reply, ¶ 147.

607 *See* supra, Section II.B.2.a.

608 *See* Second Solcargo-Rábago Report, ¶¶ 203-204.

609 [redacted].

610 *See* supra, Section II.B.2.

611 Reply, ¶ 147.

612 Reply, ¶ 156.

613 Counter-Memorial, ¶ 418.

in question because it was obtained "contrary to the principle of good faith and fair treatment required in international arbitration."[614] In *Libananco Holdings Co. v. Republic of Turkey*, the Turkish State had intercepted approximately 1,000 privileged or confidential emails through state surveillance methods, a situation in which the court decided to dismiss these communications as evidence.[615] As the court explained, the surveillance was not illegal, but rather, a legitimate exercise of the sovereign right of the State to counter crime.[616]

333. Even if the Tribunal decides not to exclude the evidence of [redacted], it has been established that their testimony is completely implausible. The actions of [redacted] the lack of any contemporary evidence to corroborate his statements, the denial by [redacted] the testimony of Mr. Pacchiano who denies these accusations, among other things, makes it clear that his motivation is based on expectations of an economic gain[617] or otherwise by a general grievance against the Government of Mexico. The Court should not give any credence to their testimonies.

E. The Claimant's Failure to Disclose Contingent Economic Incentives

334. Seeking to disavow its own SEC 10-K filing,[618] the Claimant vehemently asserts that "it is plainly false on the fase of the document that . . . contingency fees are dependent on the outcome

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614 *EDF (Services) v. Romania*, ICSID Case No. ARB/05/13, Procedural Order No. 3 (August 29, 2008), ¶ 38. **RL-0007**.

615 Libananco Holdings Co. Limited v. Republic of Turkey, ICSID Case No. ARB / 06/8, Pre-Trial Decision (June 23, 2008) ¶ 19. **RL-0079.**

616 Libananco Holdings Co. Limited v. Republic of Turkey, ICSID Case No. ARB / 06/8, Pre-Trial Decision (June 23, 2008) ¶ 78. **RL-0079.**

617 Second WS Rafael Pacchiano, ¶ 7.

618 Odyssey Marine Exploration, Inc. Form 10-K for the period ending Dec. 31, 2019, filed Mar. 20, 2020, p. 69 ("During January 2020, our Board of Directors approved two four-month contracts with two advisory consultants in connection with the litigation of our NAFTA arbitration which would allow them to receive 1.5 million new equity shares each if they proved to be successful in the facilitation of the process. This equity is only issuable upon the Mexican's government approval and issuance of the Environmental Impact Assessment ("EIA") for our Mexican subsidiary. All possible grants of new equity shares were also approved by the Administrators of Oceanica. We also owe consultants contingent success fees of up to

of the arbitration."[619] While the Claimant asserts that neither of its unnamed "consultants" are to serve as "experts or consultants" in this arbitration and that none of its experts or consultatnts "is testifying on a contingency basis,"[620] the Claimant fails to disclose the identity of the unnamed consultants or to put into the record copies of the underlying contingency agreements.[621] Thus, the Tribunal has no record basis for concluding that the written and oral testimony in this arbitratoin is not motivated by economic incentives that could affect the reliability of such testimony. All the Tribunal knows is that two unnamed "consultants" are to receive 1.5 million equity shares in Odyssey as well as $700,000 "in connection with the litigation of our NAFTA arbitration."[622]

335. Earlier this year, a Canadian court in its decision addressed a similar incentive structure for a consultant. The court emphasized that the consultant conducted its investigation "because they were being paid a very large amount of money to do so by someone"[623]. The following transcript is relevant:

> I am also somewhat concerned about what inferences the specifics of Black Cube's retainer give rise to. Their base fee was $1.5 million U.S. A bonus structure – the particulars of which I will not elaborate on – provided for maximum fees up to $11 million U.S. Catalyst was the party ultimately paying Black Cube's fees. Even for Catalyst, $11 million is a big number. A natural inference is that the payor of such a significant sum will want to know what it is they are paying for. How else will they know if the fees are reasonable? The alternative is that they do not want to know. Actual knowledge and willful blindness are close cousins.[624]

336. As set out in more detail in the Counter-Memorial[625], the IBA Guidelines on Party Representation in International Arbitration do not permit "success" or "contingency"

$700,000 upon the approval and issuance of the EIA. The EIA has not been approved as of the date of this report."). **C-0190.**

619 Reply, ¶ 173.

620 Reply, ¶ 174.

621 *See* Reply, ¶ 174.

622 Odyssey Marine Exploration, Inc. Form 10-K for the period ending Dec. 31, 2019, filed Mar. 20, 2020, p. 69. **C-0190.**

623 *The Catalyst Capital Group Inc. v. West Face Capital Inc*., 2021 ONSC 125, No. CV-17-587463-00CL, Ruling on Privilege Motions, Jan. 11, 2021, ¶ 367. **RL-0099.**

624 *The Catalyst Capital Group Inc. v. West Face Capital Inc*., 2021 ONSC 125, No. CV-17-587463-00CL, Ruling on Privilege Motions, Jan. 11, 2021, ¶ 379. **RL-0099.**

625 Counter-Memorial, ¶¶ 427

compensation because, as tribunals have found, "[o]bjectivity could be impaired if an expert participated in an arbitration proceeding and it was shown that she/he would obtain an economic benefit if the outcome of the proceeding were favorable to the retaining party."[626] Jeffrey Waincymer, citing the Chartered Institute of Arbitrators Protocol, states the obvious in opining that "most would see a contingency fee based on success in the proceedings as being an unacceptable interference with independence."[627] For the same reason, bar ethics rules expressly prohibit the practice.[628]

F. Merits

1. The Claimant has not demonstrated the existence of a violation of the Minimum Level of Treatment standard of Article 1105 of the NAFTA

337. As discussed below, (i) the Claimant has not demonstrated the existence of the standard under customary international law that it requests the Tribunal to apply; (ii) the Claimant's claim based on alleged "command orders" does not meet the threshold of violation of customary international law; (iii) the Claimant has not established arbitrary conduct or conduct that is inconsistent with due process; (iv) the Claimant has no legitimate expectation that can be protected under customary international law; (v) the Claimant has not exhausted the means of defense available under the Mexican legal system; and (vi) the Claimant has waived its claim on "Full Protection and Security".

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626 *Italba Corp. v. Oriental Republic of Uruguay*, Case CIADI No. ARB/16/9, Award, March 2, 2019. ¶ 157. **RL-0011**.

627 Jeffrey Waincymer, Procedure and Evidence in International Arbitration (Kluwer 2012), pp. 942-43. **RL-0012**

628 For instance, see Model Rule 3.4(3) de las Model Rules of Professional Conduct de la American Bar Association ("it is improper to pay an expert witness a contingent fee"). **RL-0100**. Rule 3.4(b) of the New York Rules of Professional Conduct (counsels are prohibited "[to] offer an inducement to a witness that is prohibited by law or pay, offer to pay or acquiesce in the payment of compensation to a witness contingent upon the content of the witness's testimony or the outcome of the matter"). **RL-0101**. Rule 3.4 de las California Rules of Professional Conduct ("A member shall not […] (B) Directly or indirectly pay, offer to pay, or acquiesce in the payment of compensation to a witness contingent upon the content of the witness's testimony or the outcome of the case."). **RL-0102**. Rule 4.4(a) of the Washington, D.C. Rules of Professional Conduct ("In representing a client, a lawyer shall not use means that have no substantial purpose other than to embarrass, delay, or burden a third person, or knowingly use methods of obtaining evidence that violate the legal rights of such a person."). **RL-0014.**

a. The Claimant has not shown the existence of the standard under customary international law that it asks the Tribunal to apply

338. The Claimant has still failed to establish the content of the mínimum standard of treatment under customary internaiontal law that it asks the Tribunal to apply, which is a burden it must carry. Although the mínimum standard of treatment may evolve, "there is no confirmation that States when referencing FET in treaties meant anything other than the minimum standard of treatment, *as classically understood*."[629] Moreover, "[p]roving advances to existing customary norms is difficult. This has put a natural breaking effect on the expansion of the FET standard, understood as a customary minimum norm [in the NAFTA context]."[630]

339. Simply citing to some arbitral awards, as the Claimant does, does not suffice to establish a new standard of treatment under customary international law.[631] In contrast, "State endorsement of a particular articulation of an international rule by an arbitral tribunal is itself evidence of State practice and of *opinion juris*,"[632] and the NAFTA Parties have made clear that they exclude from FET coverage legitimate expectations, discrimination based on national treatment, and transparency.[633]

340. The Claimant is mistaken in citing indiscriminately to non-NAFTA awards in discussing the FET standard. As should be plain, "[t]he manner in which the notion of fairness and equity to

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629 Christophe Bondy, *Fair and Equitable Treatment – Ten Years On*, in Evolution and Adaptation: The Future of International Arbitration (Kluwer 2019), p. 216 (emphasis added). **RL-0103.**

630 Christophe Bondy, *Fair and Equitable Treatment – Ten Years On*, in Evolution and Adaptation: The Future of International Arbitration (Kluwer 2019), p. 214. **RL-0103.**

631 *See, e.g.*, *Mesa Power Group LLC v. Government of Canada*, PCA Case No. 2012-17, Canada's Response to Non-Disputing Party Submissions, June 26, 2015, ¶ 12 ("the Claimant cannot turn to the decisions of international tribunals as evidence of State practice that the protection of an investor's expectations is required by the customary international law minimum standard of treatment"), **RL-0104**; *Mesa Power Group LLC v. Government of Canada*, PCA Case No. 2012-17, United States Non-Disputing Party Submission, July 26, 2014, ¶ 6 ("[a]rbitral decisions interpreting 'autonomous' fair and equitable treatment and full protection and security provisions in other treaties, outside of the context of customary international law, do not constitute evidence of the content of the customary international law standard"), **RL-0105**.

632 Christophe Bondy, *Fair and Equitable Treatment – Ten Years On*, in Evolution and Adaptation: The Future of International Arbitration (Kluwer 2019), p. 215. **RL-0103.**

633 Christophe Bondy, *Fair and Equitable Treatment – Ten Years On*, in Evolution and Adaptation: The Future of International Arbitration (Kluwer 2019), p. 214. **RL-0103.**

be granted to the investor is represented a treaty may vary," and "[t]he manner in which a treaty structures the standard and its association with other standards will be decisive in defining its meaning."[634] "[C]laimants have relied upon decisions of arbitral tribunals interpreting FET as a stand-alone treaty standard, to assert novel content for FET as a customary standard[,] [but t]ribunals typically have rejected such attempts, on the understanding that arbitral tribunals' decision do not count as State practice."[635] Whereas NAFTA tribunals must "apply the minimum standard of treatment existing under custom,"[636] the same, of course, is not true of all multi- or bilateral investment treaties. "The result [under NAFTA] has been a standard that includes a more limited range of obligations than FET as a treaty standard open to arbitral interpretation, and one with a relatively higher threshold for breach."[637]

341. For example, "[t]he conclusion reached by NAFTA tribunals that Article 1105 does not include any obligation of transparency is in sharp contrast with that prevailing under BITs outside of the NAFTA context where tribunals have recognized that transparency is an element of the FET standard",[638] and unlike NAFTA, "a great number of BITs that include an FET clause contain […] additional substantive content, such as specific prohibition of arbitrary, unreasonable and discriminatory measures."[639]

342. For these reasons, the *Glamis* tribunal rejected the assertion by the Claimant here that "it is not a valid argument" to distinguish the mínimum standard of treatment under NAFTA from awards that discuss an autonomous or treaty-specific mínimum standard of treatment.[640] The *Glamis* tribunal explained:

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634 Marcela Klein Bronfman, *Fair and Equitable Treatment: An Evolving Standard*, 10 Max Planck Yearbook of United Nations Law (2006), pp. 625-26. **RL-0106.**

635 Christophe Bondy, *Fair and Equitable Treatment – Ten Years On*, in Evolution and Adaptation: The Future of International Arbitration (Kluwer 2019), p. 214. **RL-0103.**

636 Andrew Newcombe & Lluís Paradell, *Law and Practice of Investment Treaties: Standards of Treatment* (Kluwer 2009), p. 128. **RL-0029.**

637 Christophe Bondy, *Fair and Equitable Treatment – Ten Years On*, in Evolution and Adaptation: The Future of International Arbitration (Kluwer 2019), p. 214. **RL-0103.**

638 Patrick Dumberry, *The Fair and Equitable Treatment Standard: A Guide to NAFTA Case Law on Article 1105* (Kluwer 2013), p. 180**. RL-0022.**

639 *Id*., p. 201. **RL-0022.**

640 Reply, ¶ 178.

> Certainly, it is possible that some BITs converge with the requirements established by customary international law; there are, however, numerous BITs that have been interpreted as going beyond customary international law, and thereby requiring more than that to which the NAFTA State Parties have agreed.[641]

343. Indeed, the Claimant basically concedes that the FET standard under NAFTA is more limited than it previously claimed by stating that "these concepts . . . are merely lenses, each grounded in canonical sources of public international law, that are available to assist tribunals in construing what 'fair and equitable treatment' means in any given context."[642] Indeed:

> Out of the large number of elements that are typically enumerated by writers as components of the FET standard, NAFTA tribunals have found that only a few of them are actually covered by Article 1105. In this respect, NAFTA case law sharply contrasts with the position adopted by non-NAFTA tribunals. Thus, non-NAFTA tribunals have been increasingly willing to recognize new requirements as components of the ever-enlarged concept of the FET.[643]

344. Regarding good faith, the Claimant now appears to concede that good faith is not a free-standing obligation.[644] Rather, "[w]hat is clear is that good faith is not an autonomous stand-alone obligation under the FET standard (such as arbitrariness or denial of justice)."[645] As such, good faith "adds only negligible assistance in the task of determining or giving content to a standard of fair and equitable treatment."[646]

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641 *Glamis Gold, Ltd. v. The United States of America*, UNCITRAL, Award, June 8, 2009, ¶ 609. **CL-0055**.

642 Reply, ¶ 179.

643 Patrick Dumberry, *The Fair and Equitable Treatment Standard: A Guide to NAFTA Case Law on Article 1105* (Kluwer 2013), p. 264 (emphasis added). **RL-0022.**

644 Reply, ¶¶ 181-83.

645 Patrick Dumberry, *The Fair and Equitable Treatment Standard: A Guide to NAFTA Case Law on Article 1105* (Kluwer 2013), pp. 222-23**. RL-0022.**

646 *ADF v. United States*, ICSID Case No. ARB(AF)/00/1, Award, January 9, 2003, ¶ 191, **CL-0005**; *see also Técnicas Medioambientales Tecmed, S.A. c. México*, ICSID Case No. ARB (AF)/00/2, Award, May 29, 2003 ¶ 153, **CL-0112**; *Sempra Energy International c. Argentina, ICSID Case No. ARB/02/16, Award, Sept. 28, 2007, ¶ 298.* ***RL-0032***; *Siemens AG v. Argentina*, Award and Separate Opinion, Jan. 17, 2007, ¶ 308, **RL-0108.** *Siemens AG c. la República Argentina, Caso CIADI No. ARB/02/8,* Separate Opinion from Professor Domingo Bello Janeiro, Arbitrator, 30 de enero de 2007. **RL-0109**.

b. The Claimant has not been able to demonstrate that its claim based on "secret command orders" constitutes a violation of customary international law.

345. As already mentioned *supra*, the Claimant was the one who initially based its claim under Article 1105 on the alleged existence of "secret command orders."[647] However, because Mexico identified the coincidence of its claim with the one formulated in the Vento v. Mexico case, the Claimant has omitted to refer to that concept and, instead, now asserts that Mexico "mischaracterizes Odyssey's claim."[648] This is erroneous. Although the Claimant points out that "what matters is the reason for that refusal" i.e., "political motivations and personal conflicts",[649] in *Vento v. In Mexico*, the Claimant indeed argued that the officials were given a command order to arrive at a predetermined result for an improper purpose,[650] as precisely the Claimant argues in this arbitration.

346. Despite the fact that the Claimant has tried to identify "factual grounds for the decision in Vento" that in its opinion "are completely different from those in this case,"[651] all of them are actually irrelevant as they are aspects that deviate from the part Claimant's claim, as demonstrated below:

- *Vento is related to motorcycle import tariffs.*[652] This difference is meaningless since obviously there is no single arbitration case that specifically addresses a denial of environmental impact authorization for a dredging project to extract phosphorite. Furthermore, the only non-arbitral cases with these characteristics have not been authorized or suspended.[653] In any case, the Don Diego Project planned to be carried out in an area unique to its biodiversity, affecting various species of turtles and other threatened or

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647 Memorial, ¶ 221.

648 Reply, ¶ 194.

649 Reply, ¶ 194.

650 Vento Motorcycles Inc. v. United Mexican States, ICSID Case No. ARB (AF) / 17/3, Award, July 6, 2020, ¶¶ 270, 273, 302 and 317. **RL-0020.**

651 Reply, ¶ 197.

652 Reply, ¶ 197 a.

653 Even some more advanced projects like Chatam Ridge and Sandpiper have not been able to obtain the necessary permits to start operations. First WGM Report, ¶ 22.

threatened marine animals in danger of extinction,[654] which hardly makes it comparable to any other project.

- *Validation of the authorities' decision by domestic courts*.[655] Although the Claimant also argues that her case is different from Vento's because in the latter the Mexican courts confirmed that the authorities' decision was legally correct, it should be remembered that DGIRA's own decision is also being validated by a Mexican court at the request of ExO.[656]

- *Lack of identification of the official who gave the orders*.[657] It is true that in the Vento case the court indicated that of the four former public officials who acted as witnesses, only one declared that he had acted under orders of command. It is also true that the testimony of that former official was rejected not only for having failed to identify the hierarchical superior who supposedly issued the command orders, but also for his lack of credibility, as occurs in these proceedings.[658] Although the Claimant argues that "there is no doubt as to who was responsible for the order to deny the MIA and the circumstances in which said order was given,"[659] the truth is that, unlike in the Vento case, the person identified and accused by the Claimant's witnesses supposedly issuing the "command orders" has appeared in this arbitration rejecting those accusations.[660]

- *In Vento, the former public official who claimed to have received orders of command was responsible for ensuring the legality of the resolution*.[661] This is another aspect on which the Claimant intends to rely to distinguish its case from that of *Vento*, however, it also is unfavorable. Although the Claimant erroneously asserts that "[redacted]",[662] in

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654 *See* Verónica Morales Report, ¶¶ 6-10. Urbán-Viloria Report, ¶ 13-14; Group of Experts on Sea Turtles Report, ¶¶ 7-27.

655 Reply, ¶ 197 a.

656 *See supra*, Section II.A.1.

657 Reply, ¶ 197 b.

658 *See* supra, Section II.B.

659 Reply, ¶ 198.

660 *See* First WS Rafael Pacchiano and Second WS Rafael Pacchiano.

661 Reply, ¶ 197 b.

662 Reply, ¶ 199.

Vento the court highlighted the fact that it was not credible that the former public official who claimed to have received command orders has been the one who "was personally and directly involved […] in the drafting and issuance of the resolutions, [and who, in fact, was the one who] initialed the resolution […] before […] signed it",[663] the official responsible for doing so in accordance with the powers established by law. [redacted] as clearly established by Mexican regulations (RISEMARNAT) and as confirmed by the legal experts of Mexico.[664]

347. Following the foregoing, and without prejudice to the similarities already identified in the Counter-Memorial,[665] the *Vento* case is illustrative to show what are the relevant factors to consider to determine [redacted] command orders is seriously compromised. On the pretext that "this Tribunal [is not] in any way constrained by the factual findings of the *Vento* tribunal,"[666] the Claimant has avoided addressing the following aspects that led to the dismissal of Vento's claim:

- [redacted].[667]
- Considering the existence of checks and balances in the hierarchical structures of authority or command, it is difficult to believe that [redacted].[668]
- [redacted]

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663 *Vento Motorcycles Inc. c. Estados Unidos Mexicanos*, Caso CIADI No. ARB(AF)/17/3, Award, July 6, 2020, ¶¶ 290. **RL-0020**.

664 *See* Second Solcargo-Rábago Report, ¶¶ 19-42.

665 Counter-Memorial, ¶ 456.

666 Reply, ¶ 196.

667 *Vento Motorcycles Inc. v. Estados Unidos Mexicanos*, Caso CIADI No. ARB(AF)/17/3, Award, July 6, 2020, ¶ 290. **RL-0020**. *See* Counter-Memorial, ¶¶ 458-459. *See supra,* Sections II.C.

668 *Vento Motorcycles Inc. v. Estados Unidos Mexicanos*, Caso CIADI No. ARB(AF)/17/3, Award, July 6, 2020, ¶¶ 291 and 312. **RL-0020**. *See* Counter-Memorial, ¶¶ 460-462. *See supra,* Sections II.B.3.

[redacted][669]

- [redacted] —[670] has very little credibility.[671]

348. All of the aforementioned points are applicable *mutatis mutandis* to the Claimant's claim. Therefore, contrary to what it asserts, the case of *Vento v. Mexico* is comparable and applicable to the facts of this arbitration.

c. The Claimant has not established arbitrary conduct nor conduct that fails to accord due process

349. As discussed below, (i) the Claimant misapprehends the meaning of "arbitrary" under international law, (ii) the evidence overwhelmingly shows that the denial of the 2015 MIA was carried out in an appropriate manner, and (iii) the arguments of the Claimant regarding "political motivation" that allegedly caused the 2015 MIA to be rejected by DGIRA are without merit.

(1) The Claimant mischaracterized the meaning of "arbitrary" under international law

350. Claimant´s discussion of arbitrariness and due process in administrative decision making is no more than a distraction. Under customary international law, "arbitrariness" means "a wilful disregard of due process of law, an act which shocks, or at least surprises, a sense of juridical propriety."[672] However, this standard is not intended to impede states' ability to make policy choices – even if mistakes are made in implementing those choices.[673] Indeed, "[a] finding that the State has committed an international delict by failing to afford fair and equitable treatment in

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669 *Vento Motorcycles Inc. c. Estados Unidos Mexicanos*, Caso CIADI No. ARB(AF)/17/3, Award, July 6, 2020, ¶ 291. **RL-0020**. *See Counter-Memorial*, ¶¶ 463-464. *See supra,* Sections II.B.5.

670 In the case of [redacted]. *See* Second Solcargo-Rábago Report, ¶¶ 203-204.

671 *Vento Motorcycles Inc. c. Estados Unidos Mexicanos*, Caso CIADI No. ARB(AF)/17/3, Award, July 6, 2020, ¶ 292. **RL-0020**. *See* Counter-Memorial, ¶¶ 465-470. *See supra,* Sections II.B.1 y 2.

672 *Sicula S.p.A. (ELSI)* (United States v. Italy), ICJ Rep. 1989, Judgment, July 20, 1989, p. 124. **CL-0028**.

673 *S.D. Myers, Inc. v. Canada*, First Partial Award, Nov. 13, 2000, ¶ 261, **CL-0103;** *Cargill, Inc. c. Estados Unidos Mexicanos,* Caso CIADI No. ARB(AF)/05/2, Award, September 18, 2009, ¶¶ 292-93, **CL-0027**.

its regulatory processes requires misconduct of a particularly serious kind."[674] That is because "[t]he processes of administrative decision-making cannot be judged by the standards expected of judicial proceedings."[675] Further, as stated by the International Court of Justice in the *ELSI* case:

> … the fact that an act of a public authority may have been unlawful in municipal law does not necessarily mean that that act was unlawful in international law, as a breach of treaty or otherwise. A finding of the local courts that an act was unlawful may well be relevant to an argument that it was also arbitrary; but by itself, and without more, unlawfulness cannot be said to amount to arbitrariness.[676]

351. The Claimant improperly puts heavy reliance on the discredited majority opinion in *Bilcon v. Canada*, where the tribunal took it upon itself "to step into the shoes of" a Canadian Federal Court to rule an environmental measure unlawful under domestic law and thus "arbitrary" for purposes for Article 1105.[677] As dissenting panel member of *Bilcon* tribunal, Professor Donald McRae explained:

> [A] potential breach of Canadian law does not meet the high threshold of the Waste Management standard. Thus, the only basis for meeting the high threshold of Article 1005 is the assertion that the JRP's conduct was arbitrary. But here, with respect, I find the majority's reasoning somewhat circular. The majority concludes that the [Canadian administrative] Panel actions were arbitrary. But the manifest arbitrariness seems to be that instead of applying Canadian law, the Panel 'effectively created, without legal authority or notice to Bilcon, a new standard of assessment'. In short, by deviating from Canadian law, the Panel acted arbitrarily. This reasoning suggests that any departure from Canadian law is arbitrary and thus any departure from Canadian law meets the threshold of arbitrariness under the *Waste Management* standard. Breach of NAFTA Article 1105, then is equated with a breach of Canadian law.[678]

352. Like McRae, all three NAFTA parties have voiced their disapproval of the *Bilcon* majority's finding of arbitrariness.[679] The United States, for example, has stated in its capacity as

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674 Campbell McLachlan, Laurence Shore & Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford 2017), ¶ 7.195. **RL-0021.**

675 Campbell McLachlan, Laurence Shore & Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford 2017), ¶ 7.193. **RL-0021.**

676 *Sicula S.p.A. (ELSI)* (United States v. Italy), ICJ Rep. 1989, Judgment, July 20, 1989, p. 74. **CL-0028**.

677 Reply, ¶¶ 186-87.

678 *William Ralph Clayton and others v. Government of Canada*, PCA Case No. 2009-04, Dissenting Opinion of Professor Donald McRae, Mar. 17, 2015, Dissent ¶¶ 36-38. **RL-0110.**

679 *Mesa Power Group LLC v Government of Canada*, UNCITRAL, PCA Case No 2012-17, Canada Observations on the Bilcon Award, May 14, 2015; **RL-0111** *Mesa Power Group LLC v Government of Canada*, UNCITRAL, PCA Case No 2012-17, Mexico Submission on the Bilcon Award, June 12, 2015,

a non-disputing party in a subsequent proceeding: "International tribunals [...] do not sit as appellate courts with authority to review the legality of domestic measures under a Party's own domestic law. A failure to satisfy requirements of national law, moreover, does not necessarily violate international law."[680] This is significant because with this, the concurrent and harmonious briefs and arguments of the NAFTA Parties show a "subsequent practice," or "subsequent agreement" for the purposes of the interpretation of the treaty.[681]

353. After all, "where a respondent state makes general submissions about treaty interpretation and these are supported by the other treaty parties, they may evidence agreement," similarly, "[w]here interventions by all of the other treaty parties support interpretations by the respondent state, this subsequent practice constitutes good evidence of an agreement on interpretation and thus should be given considerable weight."[682]

354. Like the NAFTA parties, McLachlan has likewise been highly critical of the "controversial" majority opinion in *Bilcon*, explaining that:

> [t]he standard will not be breached simply because the host State's administrative procedures did not comply with its internal law. In the same way that legality under national law does not determine legality under international law, so too illegality under national law does not ipso facto lead to a breach of international law. This is the principal difficulty with the controversial award in *Bilcon*.[683]

355. Other commentators have referred to the majority's reasoning on arbitrariness as the "misdirected *Bilcon* approach to domestic regulation and administrative decision-making,"[684] and have explained that "the reasoning given by the majority in *Bilcon* for adopting a lower threshold

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RL-0112; *Mesa Power Group, LLC, v. Government of Canada*, PCA Case No. 2012-17, Second Submission of the United States of America, June 12, 2015, **RL-0035**.

680 *Mesa Power Group, LLC, v. Government of Canada*, PCA Case No. 2012-17, Second Submission of the United States of America, June 12, 2015, ¶¶ 21-22. **RL-0035**.

681 *See, e.g.*, Lee M. Caplan & Jeremy K. Sharpe, *United States*, en Chester Brown, "Commentaries on Selected Model Investment Treaties", (2013), p. 833, **RL-0113**; Anthea Roberts, *Power and Persuasion in Investment Treaty Interpretation: The Dual Roles of States*, 104 AJIL 179 (2010), p. 219, **RL-0114**; Tarcisio Gazzini, *Interpretation of International Investment Treaties* (2016), pp. 193-95, **RL-0115.**

682 Anthea Roberts, *Power and Persuasion in Investment Treaty Interpretation: The Dual Roles of States*, 104 AJIL 179 (2010), pp. 217, 219. **RL-0114.**

683 Campbell McLachlan, Laurence Shore & Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford 2017), ¶ 7.198. **RL-0021.**

684 Kate Miles, *Investment*, en The Oxford Handbook of Environmental Law (Lavanya Rajamani & Jacqueline Peel eds., Oxford 2008), p. 777. **RL-0117.**

in finding a breach of FET under Article 1105, rests on faulty assumptions and a misreading of the development and content of the MST of aliens at CIL [customary international law]."[685] What is more, the recent NAFTA decision in *Joshua Dean Nelson v. Mexico*, while referring to *Bilcoin*, declined to adopt its standard on arbitrariness.[686] As such, *Bilcon* is a misguided deviation from NAFTA jurisprudence:

> NAFTA tribunals and tribunal members issuing separate opinions have referred on several occasions to the diserability of deference, policy space, regulatory autonomy and the expertise of primary decisión-makers, and have stated that their rule was not to second-guess the policy decisions of governments. NAFTA tribunals have rarely adopted an excessively strict approach to the standard of review in relation to regulatory or administrative acts of states.[687]

356. The repeated efforts of the Claimant to rely on *Tecmed* and *Abengoa* are misplaced. The Respondent already distinguished *Tecmed* in the Memorial de Contestacíon, but will repeat the key points here:

- *Tecmed* arose under a different treaty (Mexico-Spain BIT) with different legal standards.[688]
- The tribunal in *Tecmed* found that there had been a failure to give notice, which is not alleged here.[689]
- In *Tecmed*, the investor's hazardous waste facility was well-established and the renewal of its permit was denied, which is not analogous to the situation in this case, in which the project never came close to starting.[690]

357. The Respondent also emphasizes that it does not agree with the *dicta* in *Tecmed*, and that the award's persuasive authority has been eviscerated by wide-ranging subsequent criticism.[691]

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685 Michael Carfagnini, *Too Low a Threshold: Bilcon v. Canada and the International Minimum Standard of Treatment*, 53 Can. Y.B. Int'l L. 244 (2015), p. 276. **RL-0118.**

686 *Joshua Dean Nelson v. Estados Unidos Mexicanos*, Caso CIADI No. UNCT/17/1, Award, June 5, 2020, ¶ 326. **CL-0127**.

687 Caroline Henckels, *Proportionality and Deference in Investor-State Arbitration: Balancing Investment Protection and Regulatory Autonomy* (Cambridge 2015), p. 180 n.26 ("The majority decisión in *Bilcon v. Canada* was also criticized on this basis by the dissenting arbitrator."). **RL-0119.**

688 Counter-Memorial, ¶ 451.

689 Counter-Memorial, ¶ 490.

690 Counter-Memorial, ¶ 499, 554.

691 *See, eg:* Zachary Douglas, *Nothing If Not Critical for Investment Treaty Arbitration: Occidental, Eureko and Methanex*, 22 Arb Int'l 27 (2006), p. 28 ("The Tecmed 'standard' is actually not a standard at all; it is rather a description of perfect public regulation in a perfect world, to which all states should aspire but very few (if any) will ever attain.") **RL-0044**; Campbell McLachlan, Laurence Shore & Matthew

358. The Respondent has also explained that in *Abengoa*, also arising under the Mexico-Spain BIT, the plant at issue had already been issued all of the administrative and environmental authorizations necessary to operate, and the tribunal found that governmental authorities had repeatedly confirmed that the plant met all applicable requirements.[692]

359. The situation, in this case, is far different: The Claimant never obtained the necessary approvals and never started operations, the review of the proposed MIA was conducted on the record with total transparency, and the decision was exhaustively justified in writing.

360. Importantly, "the NAFTA [exhibits a] general reluctance to substitute arbitral for governmental decision-making on matters within the purview of each NAFTA Party."[693] NAFTA Article 1114, as consistently interpreted by the NAFTA parties, "recognizes the sovereign right to protect the environment."[694] Similarly, the *Metalclad* tribunal noted that Article 1114 "permits a

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Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford 2017), ¶ 7.180-7.181("In the first phase of investment treaty arbitral case law, a number of tribunals referred to the formulation of legitimate expectations given in Tecmed v Mexico […] This formulation cannot be taken at face value.") **RL-0021**; Christophe Bondy, *Fair and Equitable Treatment – Ten Years On, in* Evolution and Adaptation: The Future of International Arbitration (Jean Engelmayer Kalicki & Mohamed Abdel Raouf eds., Kluwer 2019), pp. 209-210 ("The challenge with this doctrine [as expressed by by the *Tecmed* tribunal] was that it risked imposing a standstill requirement on States. Indeed, even within the four corners of VCLT interpretation, the approach adopted in relation to investor expectations has tended to soften over time.") **RL-0103**; *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile*, ICSID Case No. ARB/01/7, Decision on Annulment, March 21, 2007, ¶ 67 (**"**TECMED Tribunal's apparent reliance on the foreign investor's expectations as the source of the host State's obligations (such as the obligation to compensate for expropriation) is questionable. The obligations of the host State towards foreign investors derive from the terms of the applicable investment treaty and not from any set of expectations investors may have or claim to have. A tribunal which sought to generate from such expectations a set of rights different from those contained in or enforceable under the BIT might well exceed its powers, and if the difference were material might do so manifestly"). **RL-0041**; *White Industries Australia Ltd. V. The Republic of India*, Final Award, Nov. 30, 2011, ¶¶ 10.3.5-10.3.6 ("[T]he Tribunal notes that the [*dicta* in *Tecmed* regarding legitimate expectations] has been subject to what it considers to be valid criticism.") **RL-0120**; *Biwater Gauff Ltd v. United Republic of Tanzania*, ICSID Case No ARB/05/22, July 24, 2008, ¶ 600 ("The Arbitral Tribunal notes . . . that certain expressions of a lower threshold have been the subject of some criticism – even outside of NAFTA. In particular, the frequently cited test set out in *TECMED v. Mexico*.") **RL-0121**; *El Paso Energy International Company c. La República Argentina*, Caso CIADI No. ARB/03/15, Award, ¶ 343 ("Este Tribunal encuentra interesante que el comité de anulación del caso *MTD* haya optado por apartarse de la amplia definición del caso *Tecmed* citada por el tribunal de *MTD*.") **RL-0122**.

692 Counter-Memorial, ¶ 552.

693 *United Parcel Service of America Inc. v. Government of Canada*, ICSID Case No. UNCT/02/1, Separate Statement of Dean Ronald A. Cass, 24 May 2007, ¶ 125. **RL-0037.**

694 Meg Kinnear, Andrea Bjorklund & John Hannaford, *Investment Disputes under NAFTA: An Annotated Guide to NAFTA Chapter 11* (Kluwer 2006), p. 1114-9. **RL-0123.**

party to ensure that investment activity is undertaken in a manner sensitive to environmental concerns."[695] This explicit treaty provision thus builds upon customary international law's deferential posture toward sovereigns' acts to protect the environment. In McLachlan's words, "[i]nternational tribunal[s] should give particular weight to governmental regulatory decisions taken in good faith in the interests of public morals, health or the environment."[696]

361. Regrettably, instead of engaging with the appropriate legal standard that this Tribunal should apply to the evidentiary record, the Claimant, unfortunately, limits itself to arguing that it is not really "asking this Tribunal to second-guess good faith, science-based decision-making by a specialized Mexican agency."[697] The evidence shows otherwise and the Respondent is emphatic that this claim is totally inappropriate.

(2) The denial of the MIA was carried out in a fully reasonable and transparent manner

362. The DGIRA's second resolution is very thorough and exhaustively explains the basis of its decisión. To be clear, notwithstanding the effort of the Claimant to distract the Tribunal by arguing that the denial was based only on potential impacts on turtles,[698] the second resolution of 2018 expressly states that the denial was also based on the potential impact on whales and other cetaceans, as explained in Sections II.A.2.a and II.D.3 of this Rejoinder [699]. In said Sections, the DGIRA analysis reflected in the 2018 Resolution on the potential impact of the Don Diego Project on whales that inhabit the Gulf of Ulloa is explained in an exhaustive manner. Similarly, Drs. Urbán and Viloria, leading academics and researchers specialized in marine mammals give an account of this.[700]

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695 *Metalclad Corporation c. los Estados Unidos Mexicanos*, Caso CIADI No. ARB(AF)/97/1, Award, August 30, 2000, ¶ 98. **CL-0071.**

696 Campbell McLachlan, Laurence Shore & Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford 2017), ¶ 7.24 **RL-0021.**

697 Reply, ¶¶ 224.

698 *See, eg.,* Reply, ¶¶ 18, 21, 77, 81-85.

699 **C-0009**, p. 516 ("… considering that the, chelonians species mentioned above, as well as the large sea mammals species mentioned in the Legal Reasoning No. XVII of this Resolution, …" (emphasis added)

700 Urbán-Viloria Report, ¶11, 44-45.

363. In the Counter-Memorial, the Respondent explained in detail that multiple governmental and nongovernmental organizations raised serious concerns about the proposed project, including the following [701]:

- La Comisión Nacional de Áreas Naturales Protegidas (CONANP) (government agency)
- Centro Mexicano de Derecho Ambiental, A.C. (nonprofit)
- Oceans Future Society (nonprofit)
- La Asociación Interamericana para la Defensa del Ambiente (AIDA) (nonprofit)
- WildCoast/Costa Salvaje (nonprofit)
- Greenpeace (nonprofit)
- Centro de Investigaciones Biológicas del Noreste, S.C. (research institute)
- El Instituto de Ciencias del Mar de la UNAM (university institute)
- Society for Marine Mammalogy (scientific association)
- UNESCO (United Nations Agency)
- Sociedadas Pesqueras de Baja California (association of fishermen)
- Baja California Sur Congress (State Government Congress)

364. The involvement of these organizations reinforces that there were serious reasons to be concerned about the impact of the Project on the Golfo de Ulloa. The Claimant arrogantly dismisses the concerns of all these organizations, asserting that all of them were totally wrong, and that ExO had proven conclusively that the project was completely safe for all aspects of the environment.[702]

365. Strangely, the Claimant argues that resolution 2018 states that all the concerns expressed by the organizations, during the EIA procedure of the Don Diego Project, were resolved. However, the resolution 2018 (including the pages cited by the Claimant in paragraph 72 of the Reply) only says that the DGIRA incorporated the questions and the concerns of the comments into its own requests to ExO.[703] The resolution 2018 does not say that the questions and concerns were resolved by ExO.

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701 Counter-Memorial, ¶¶ 279-305.

702 *See, e.g.*, Reply, ¶ 83.

703 *See, e.g.*, **C-0009**, p. 177-178:

366. The Claimant supports its claim that the concerns were resolved with (i) the testimony of [redacted], who cannot point to any documentary evidence, and (ii) its obviously false claim that the 2018 resolution did not discuss any impact on whales (ignoring the express conclusions of the DGIRA and Section XVII of the resolution).

367. Further, the resolution carefully explains that DGIRA is relying on the "principio precautorio," stating:

> The application of the precautionary principle is justified not only from the legal point of view, as can be appreciated from the scientific papers analyzed below, which, due to their specificity, knowledge, advertisement and recent data, are considered the most reliable scientific information; thus, this agency makes it theirs, adopting it as technical grounds for the project's assessment.[704]

368. The resolution analyzed this issue in great detail, stating:

> The international experience above mentioned reinforces the certainty of this environmental authority in the sense that it is not possible to apply the prevention principle for the case where there are any projects with a risk, with effects that are yet unknown and hence unforeseeable (*Berros, 2013*), in that sense, the precaution principle shall be privileged**.**
>
> Therefore, if the project does not guarantee that, as a result of the activities for the dredging of the seabed in the project area AP, in the influence area of the project (Gulf of Ulloa) and in SAR (Baja California Peninsula) and the prevention and mitigation measures proposed by the petitioner do not prove that the project would not cause any serious or irreversible damage, this DGIRA deems that the appropriate thing would be that, given the insufficiency of scientific evidence, the decision made thereby shall invariably be subject to the precaution principle.
>
> Scientists know a great part of harmful effects, but in some occasions, science lacks the necessary explanations. That is why it is convenient to adopt precautionary measures with which it is possible to act in favor of the environment and the ecosystems, in that sense DGIRA, instead of establishing additional prevention and mitigation measures, applies the precaution principle, which consists in whenever there is an evident threat or a serious or irreversible damage against the environment, the lack of scientific evidence may not represent an obstacle to propose measures that prevent environmental

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"This DGIRA requested the petitioner to submit additional information to clarify several aspects expressed in the opinion of CIBNOR, including:-clarify the criteria used to define physical, chemical and biological characteristics and the magnitudes of biotopes identified in the SAR, as well as to explain the conglomerate analysis used to group said characteristics, and their level of significance-broaden the documented and field data on the characterization of the SAR on a scale of the order of hundreds of meters to a few kilometers in the space domain, and from weeks to the annual cycle, on the time scale-elaborate and analyze physical-chemical interactions that occur in the project area using the Stomel methodology." There is nothing in the above quotation that indicates the concerns were resolved.

704 **C-0009**, p. 329.

> deterioration, without that meaning that the lack of scientific certainty obliges the authority to approve the performance of projects and "alleviate" the adverse effect thereof through theoretical or dogmatic "mitigation" measures. Consequently, the precaution principle obliges not to approve or even cancel all those activities that suppose a threat against the environment, even in those cases where scientific evidence was not conclusive.[705]

369. Since the MIA 2015 was submitted, ExO affirmed that it was "very unlikely that there were turtles close to the dredge".[706] In the Memorial and in the Reply, Odyssey affirms that it is "unlikely", "there is a low probability", "there is a small chance" or that it would be "very limited" that the Project might affect the *Caretta caretta* turtle.[707] The witnesses of Odyssey talk about a "high probability that the Project will not cause the death of the loggerhead turtle.[708] The experts of Odyssey characterize the spatial coincidence between the dredging and individual activities of the loggerhead turtle in the Don Diego Project area and its impacts, as "unlikely" or "very limited".[709] All these assertions are debunked by the witness statement of Dr. Smirnoff, who has confirmed that even with the most stringent mitigation procedures, it cannot be confirmed that the Don Diego Project will not cause any impact on the *Caretta caretta* turtles.[710] The foregoing, along with the fact that the Claimant submitted inaccurate information lacking scientific rigor and methodology about the number of specimens that might be affected by the project,[711] evidences the fact that there is no exact scientific information to determine that the activities of the Don Diego Project will not affect the environment and the endangered species.

370. Resolution 2018 considered that the MIA 2015 and the information provided by ExO, during the EIA Procedure, created uncertainty because it did not show a rigorous analysis. To arrive at this conclusion, the DGIRA also took into consideration the information presented by ExO during the whole EIA Procedure of the MIA 2015:

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705 *Id*., ps. 512-513 (emphasis original).

706 MIA 2015, p. 424. C-0002.

707 Memorial, ¶107 (f). Reply, ¶¶ 31, 45, 50.

708 First WS Doug Clarke, ¶ 74.5.

709 See First Sergio Flores Report, ¶¶, 28, 113. Deltares Report about extraction of sands and its impacts, p. 4.

710 WS Jeffrey Seminoff, ¶ 17.

711 C-0009, pp. 287. See Verónica Morales Report, ¶¶ 85-87. Group of Experts on Sea Turtles Report, ¶¶ 135-139.

> Thus, this DGIRA conclusively considers, based on the information submitted in the MIA, IF and IC**,** as well as the most reliable scientific information available when accrediting the existence of the *Caretta caretta* turtle habitat, and underwater mining having irreversible impacts on the habitat where it is developed, without no proven mitigation measures that can reveres it, as much as possible, to its original condition, just as analyzed in Consideration XVIII of this Resolution.[712]

371. Given that, the DGIRA took into consideration the prevention and precaution principles, which are recognized by the international environmental law.[713]

> In this sense, in addition to the technical aspects that this DGIRA is making its own, there is a legal reference that can clarify the reach of an adverse consequence derived from mining, which entails the application of the precautionary principle provided in article 5, section II, of the General Law for Wildlife, according to which in no case may the lack of scientific certainty be used as a justification to delay the adoption of efficient measures for the comprehensive preservation and handling of wildlife and its habitat. .[714]

372. As it was established in the First Report of Solcargo-Rábago, the precautionary principle is applicable when there is an empiric and scientific knowledge that warns the existence of possible consequences, which makes it necessary to adopt preventive measures to avoid it. The precautionary principle establishes that, in light of the existence of a danger of a serious and irreversible harm, necessary measures must be taken to avoid any negative affectation to the environment, even if there is no scientific certainty about the harm that might be caused.[715] In this sense, "la aplicación del principio precautorio justifica la negativa de la AIA, pues ExO no desvirtuó la presunción de impactos inaceptables sobre las especies amenazadas".[716]

373. Resolution 2018 further explains the support for the decisión to apply el principio precautorio by discussing the Rio Declaration on Environment and Development, United Nations Convention on the Law of the Sea, and Wildlife General Law, article 5º, secction 11.[717]

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712 DGIRA Resolution 2018, pp. 471-475. C-0009.

713 In the judgment of April 24, 2019 that was resolved an appeal submitted by ExO –from which the Claimant has prefered not to make any mention- the TFJA recognized that the DGIRA founded and motivated the 2018 Resolution in accordance with the precaution principle, as established in article 15 of the Rio Declaration, article 194 of UNCLOS, article 15 of the General Law of Wildlife and the principles established in article 15 of the LGEEPA. Judgment of the TFJA, pp. 112-113. **R-0140**.

714 DGIRA Resolution 2018, p. 329. **C-0009**.

715 Counter-Memorial, ¶¶ 151-152. First Solcargo-Rábago Report, ¶¶ 88-92.

716 Second Solcargo-Rábago Report, ¶¶ 4 m, 86, 87 and 150.

717 **C-0009**, pp. 513-514. Principles 2 and 15 of the Rio Declaration. R-0055. Articles 192, 193 and 194 of the United Nations Convention on the Law of the Sea. **RL-0124**. (**CL-0130** english version) ("The

374. Both principles are part of customary international law, as resolved by the Inter American Court of Human Rights in the Advisory Opinion OC-23/17.[718] Similarly, in the Advisory Opinion of "*Legality of the Threat or Use of Nuclear Weapons*", the ICJ established that "[T]he existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment".[719]

375. In *Gabčíkovo-Nagymaros Project*, the ICJ resolved, in respect of the construction of dam and its environmental impact in the Danube river:

> The Court is mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage. Throughout the ages, mankind has, for economic and other reasons, constantly interfered with nature. In the past, this was often done without consideration of the effects upon the environment. Owing to new scientific insights and to a growing awareness of the risks for mankind - for present and future generations - of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past. This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development.[720]

376. In the recent award issued by the tribunal in *The South China Sea Arbitration*, articles 192 y 194 of the UNCLOS, that establish the international obligation to protect the sea environment, were analyzed:

States have the obligation to protect and preserve the sea environment"). Article 14 of the Convention on Biological Diversity. **RL-0081.**

[718] Advisory opinion OC-23/17 issued on November 15, 2017 by the Inter American Court of Human Rights, ¶¶ 129 y 177. **RL-0082** ("The principle of prevention of environmental damage is part of customary international law. Such protection not only covers land, water and the atmosphere, but also includes flora and fauna [...] the precautionary approach has initiated a tendency to become part of customary international law.").

[719] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion*, July 8, 1996, CIJ, ¶ 29. **RL-0125**. The International Court of Justice adopted the same position in the Pulp Mill on the River of Uruguay ("The Court points out that the principle of prevention, as a customary rule, has its origins in the due diligence that is required of a State in its territory."). *Case concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment of April 20, 2010, ICJ, ¶ 101. **RL-0126**

[720] *Case Concerning Gabčíkovo-Nagymaros Project* (Hungary/Slovakia), Judgment, September 25, 1997, ICJ, ¶140. **RL-0127**.

> Article 192 of the Convention provides that "States have the obligation to protect and preerve the marine environment". Although phrased in general terms, the Tribunal considers it well established that Article 192 does impose a duty on States Parties, the content of which is informed by the other provisions of Part XII and other applicable rules of international law. This "general obligation" extends both to "protection" of the marine environment from future damage and "preservation" in the sense of maintaining or improving its present condition. Article 192 thus entails the positive obligation to take active measures to protect and preserve the marine environment, and by logical implication, entails the negative obligation not to degrade the marine environment. […] Thus States have a positive "'duty to prevent, or at least mitigate' significant harm to the environment when pursuing large-scale construction activities. […]
>
> Articles 192 and 194 set forth obligations not only in relation to activities directly taken by States and their organs, but also in relation to ensuring activities within their jurisdiction and control do not harm the marine environment. […]
>
> The fifth paragraph of Article 194 covers all measures under Part XII of the Convention (whether taken by States or those acting under their jurisdiction and control) that are necessary to protect and preserve "rare or fragile ecosystems" as well as the habitats of endangered species.[721]

377. The claims of Odyssey and the expert reports provided in this arbitration are based on "probabilities" –not to say speculations-, which evidences a high degree of uncertainty in respect of the damage that the Don Diego Project might cause to the environment and its impact on endangered species, *e.g.* sea turtles and whales.

378. La Demandante has only addressed this aspect of the resolution in the Memorial , asserting that the precautionary principle does not apply because "there is no risk of serious or irreversible damage to the environment."[722] This statement is both ludicrous on its face and is thoroughly contradicted by the evidence and analysis in the resolution itself. The Claimant and its experts are minimizing the effect of the precautionary and prevention prnciples, which establish that a State has "a duty to prevent, or at least mitigate significant harm to the environment when pursuing large-scale construction activities".[723]

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721 *The South China Sea Arbitration (The Republic of The Philippines v The People's Republic of China)*, PCA No 2013-9, Award, July 12, 2016, ¶¶ 941-944. RL-0128. *See Chagos Marine Protected Area Arbitration (Mauritius v. United Kingdom)*, Award, March 18, 2015, ¶¶ 320, 538. ("Article 194 is accordingly not limited to measures aimed strictly at controlling pollution and extends to measures focused primarily on conservation and the preservation of ecosystems.").

722 Memorial, ¶ 6.

723 *Indus Waters Kishenganga Arbitration* (Pakistan v. India), PCA, Partial Award, February 18, 2013, ¶ 451. RL-0130. ("the "principle of general international law" that States have "a duty to prevent, or at least mitigate" significant harm to the environment when pursuing large-scale construction activities."), citando Arbitration Regarding the Iron Rhine (Kingdom of Belgium v. the Kingdom of the Netherlands) PCA, Award, May 24, 2005, ¶ 59.

379. In essence, the Claimant is requesting that the Tribunal stand in the place of the DGIRA, evaluate or disregard the thousands of pages of evidence, analyses and comments that were submitted, reject the precautionary principle in its entirety, and conclude that the Project was totally safe for turtles, whales, and all other sealife in the Gulf of Ulloa. In doing do, the Tribunal would also have to conclude that the decisión of the DGIRA was completely unsupported and "arbitrary." There is simply no basis under the NAFTA or on the factual record for the Tribunal to make such radical findings.

380. The second resolution was correct in its result and moreover, even if for some reason the Tribunal thought the outcome was wrong, it is obvious that the decision was well-supported with substantial evidance and comprehensive reasoning.[724]

(3) The Claimant has not established any "political motivation"

381. Claimant's argument that the denial is based on "political motivation" falls apart when put in the proper context. The essence of the argument of the Claimant is that (i) one individual could arbitrarily make the decisión without regard to the record evidence and technical anlysis by DGIRA and (ii) that criticism of an administrative agency by the media, the general public, or other interest groups creates an irrefutable presumption that all decisions are improperly motivated by politics in violation of international law.

382. With regard to the first element, the Claimant has already established that no individual person, including Mr. Pacchiano, had the legal authority to compel a decision not already developed and supported by technical and scientific evidence.[725]

383. With regard to the second element, it is a fact that governments are constantly subject to criticism of some form, and therefore the position of la Demandante would mean that every decisión by the governments of Mexico, the United States and Canada must be deemed politically motivated and somehow therefore a violation of the NAFTA. That position is not sustainable.

384. Also, as explained by Mr. Pacchiano in his second statement:

> Being a public servant, and especially a Secretary of State, implies being under constant pressure, and it is part of the work and responsibility that one assumes. In this regard,

724 *See* Group of Experts in Sea Turtles Report, ¶ 125. Urbán-Viloria Report, ¶ 44.

725 *See* supra, Section II.C.1.

> my work was always in accordance with the law, regardless the repercussions or opinions that could affect my personal and public image. Contrary to what [redacted] and Odyssey assume, my position as Secretary of State was always to comply with the law and not to be popular.[726]

385. La Demandada refers the Tribunal to paragraphs 518 to 523 of the Counter-Memorial, where the Respondent set out the discussions of complex regulatory matters by the tribunals in *Methanex, S.D. Meyers, Thunderbird, Glamis Gold Chemtura* y *Johua Dean Nelson*. It is particularly important to focus again on the statement por el tribunal en *S.D. Myers c. Canada*:

> When interpreting and applying the "minimum standard," a Chapter 11 tribunal does not have an open-ended mandate to second-guess government decision-making. Governments have to make many potentially controversial choices. In doing so, they may appear to have made mistakes, to have misjudged the facts, proceeded on the basis of a misguided economic or sociological theory, placed too much emphasis on some social values over others and adopted solutions that are ultimately ineffective or counterproductive. The ordinary remedy, if there were one, for errors in modern governments is through internal political and legal processes, including elections.[727]

386. Also in relation to this issue, the effort of the Claimant to distinguish *Vento* is unavailing. The Claimant simply provides a short summary that says Vento involved a different fact pattern involving the customs treatment of imports of motorcycles.[728] The Claimant did not claim that the present case involved the same industry sector or domestic laws, rather the Claimant explained in great detail the similar nature of the types of arguments regarding "marching orders" that were made in *Vento*, [redacted].

387. In this case, the Claimant has no answer for the facts that (i) [redacted] the MIA, (ii) there is a well-established structure and system within SEMARNAT that prevents the Secretary or Undersecretary from interfering in technical decisions by the DGIRA, (iii) [redacted], and (iv) [redacted].[729]

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726 Second WS Rafael Pacchiano, ¶ 18.

727 *S.D. Myers, Inc. v. Government of Canada*, UNCITRAL, Partial Award, Nov. 13, 2000, ¶ 261. **CL-0103**.

728 Reply, ¶ 197.

729 Counter-Memorial, ¶¶ 455-470.

388. In summary, la Demandante has not demonstrated that the denial of the MIA was the result of any improper conduct.

d. The Claimant had no legitimate expectations that would be protected under customary international law

389. As the Claimante now concedes,[730] the concept of "legitimate expectations" is not an element of FET under customary international law – and in turn not under NAFTA Article 1105(1).[731] Rather, expectations, to the extent that they are legitimate, may at most constitute a factor to be considered in evaluating an alleged FET breach.[732]

390. But that categorization issue alone is only the beginning of the required analysis. Once again, the Claimant skips over the meaning of "legitimate expectations" – thus failing to carry its burden. In particular, as explained in the Counter Memorial,[733] legitimate expectations stand or fall depending on whether, objectively, specific representations have in fact been made. Such expectations must "arise through targeted representations or assurances made explicitly or implicitly by a state party"[734] so as to so "definitive, unambiguous and repeated" as to constitute a quasi-contractual relationship.[735]

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730 Reply, ¶ 202.

731 Patrick Dumberry, *The Fair and Equitable Treatment Standard: A Guide to NAFTA Case Law on Article 1105* (Kluwer 2013), pp. 158-59 ("[T]here is little support for the assertion that there exists under customary law any obligation for host States to protect investors' legitimate expectations."); *see also.*, p. 265 ("In the present author's view, there is indeed little evidence to support the assertion that there exists under custom an obligation for host States to protect investors' legitimate expectations. Scholars have also interpreted the concept of legitimate expectations as a general principle of law based on its recognition in many domestic legal systems. This argument is of limited relevance in the specific context of Article 1105. This is because the binding FTC Note is clear to the effect that NAFTA tribunals should look solely to custom as a source of international law in their interpretation of Article 1105, and not at general principles of law."). **RL-0022.**

732 Campbell McLachlan, Laurence Shore & Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford 2017), ¶ 7.179 (legitimate expectations are "a relevant factor in the application of the investment treaty's guarantee of fair and equitable treatment and does not supply an independent treaty standard of its own"). **RL-0021.**

733 Counter-Memorial, ¶¶ 509-527.

734 *Grand River Enterprises Six Nations, Ltd., et al. v. United States of America*, UNCITRAL, Award, Jan. 12, 2011, ¶¶ 141-42. **CL-0057.**

735 *Glamis Gold Ltd. v. United States of America*, Award, June 8, 2009, ¶ 802 (quoting *Metalclad*). **CL-0055.**

391. Importantly, the Claimant now agrees that "Odyssey could not have an expectation that the Project would be approved …."[736] Instead, the Claimant shifts to claiming that it had a vague expection "that Mexico would follow its own laws …."[737] But general complaints of injustice and perceived subjective "expectations" are insufficient to support a violation of the standard on fair and equitable treatment. Thus, "the absence of representations is a material factor in leading to a finding that the standard has not been breached."[738]

392. The Claimant also tosses out a casual allegation that it was promised that the MIA would be approved if certain letters of support were obtained, but in support repeatedly cites to a single email exchange not involving any SEMARNAT officials in which a representative of ExO discusses that there has been no request for such letters in relation to the resubmission of the MIA.[739] The Claimant also cites to a witness statement of Mr. Lozano, a former employee, who presented "hearsay" testimony that Mr. Pacchiano told Mr. Ancira (the chairman of AHMSA) that the MIA would be approved if the letters of support were submitted;[740]

393. The Tribunal should take note that the Claimant has not submitted a statement from Mr. Ancira, thereby making the testimony of Mr. Lozano wholly incredible. The new claim by [redacted] strains credibility, and is strongly denied by Mr. Pacchiano.

e. The Claimant has not exhausted all the available remedies in Mexico

394. The allegations of the Claimant that it was denied due process and that it was the victim of an arbitrary decision constitutes a claim of denial of justice by SEMARNAT in its role as adjudicator of requests for environmental approvals. Apart from the reasons set forth above, the claim of the Claimant must fail because it has continued to pursue remedies in the Mexican courts, which remain pending, and therefore it cannot demonstrate a failure of the Mexican legal system.

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736 Reply, ¶ 204.

737 Reply, ¶ 204.

738 Campbell McLachlan, Laurence Shore & Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford 2017), ¶¶ 7.185, 7.187. **RL-0021.**

739 Reply, ¶¶ 88, 101, 118, 205.

740 Reply, ¶ 205.

In this regard, it is important to note that the Claimant has not complained in any manner about its treatment in the courts.

395. As established in Section II.A., the Claimant pretends that the Tribunal review the same claims that were submitted to domestic courts. Effectively, Tables 1 and 3 evidenced the similarity between the arguments and claims presented by ExO and the Claimant either in front of domestic courts or in the present arbitration.

396. As explained in Section II.A.1, the appeal submitted by ExO –which is pending of resolution from the TFJA- will invariably affect the arguments of the Claimant in this arbitration. This is so, because there is a chance that the denial to the MIA authorization be confirmed as legal. In accordance with this, the argument of the Claimant will lack any merit because the conclusion of the TFJA will be contrary to the allegations of the Claimant, which are based in the denial of the MIA due to political motives. It has to be considered that the Claimant has not submitted any claims against Mexican judicial or administrative tribunals.

397. Another possible scenario for the appeal initiated by ExO before domestic tribunals could be that the TFJA determines that the Resolution 2018 is not properly founded and motivated. In that case, the TFJA might order the DGIRA to issue a new resolution to remedy the deficiencies that were identified, such as what happen with resolution 2016. Finally, even if there is also a chance that the TFJA might authorize the MIA and order the DGIRA to do it, it is clear that in that case, the Claimant, while seeking an economic compensation for a measure that is not a matter in this arbitration, would obtain a double remedy.

398. Even if the legal experts of the Claimant have omitted to discuss this important aspect, the legal experts of Mexico (Solcargo-Rábago) explained this scope of the appeal procedure in the Resolution 2018 before the TFJA.[741] In this sense, the legal experts of Mexico agree that the procedure remains pending and is not definitive, thus, there are multiple scenarios that might derive from the TFJA decision, specially they established the following:

> The fact that ExO has promoted a nullity lawsuit against this second resolution does not imply that the DGIRA must authorize the Project. Again, the TFJA will have to rule on the validity of the resolution and, where appropriate, may order the DGIRA to issue a new resolution. In this order of ideas, if the resolution issued again by the TFJA is contrary to the interests of ExO, it has the opportunity to challenge it via a direct amparo

741 Second Solcargo-Rábago Report, Section VII.C

> trial. [...] if the resolution of October 12, 2018 is decreed again, it is likely that SEMARNAT will have to issue a new resolution, in accordance with the points indicated by the TFJA. The Experts of Mexico understand that the nullity trial initiated by ExO against the resolution of October 12, 2018 is still pending, therefore, there is still no final judgment.[742]

399. In *Corona Materials, LLC c. Dominican Republic*, the Environment Ministry of the Dominican Republic had denied the claimant an approval for a concession on the basis that the project was not environmentally viable. In dismissing a claim for denial of justice within the context of fair and equitable treatment, the tribunal stated:

> … Tribunal does not believe that an administrative act, in and of itself, particularly as the level of a first instance decisionmaker, can constitute a denial of justice under customary international law, when further remedies or avenues of appeal are potentially available under municipal law.[743]

400. The tribunal stated further that "[e]xhaustion of local remedies is, as the Claimant correctly pointed out in its Rejoinder, typically not a jurisdictional prerequisite to an investor's submitting an international claim, but the exhaustion of local remedies is relevant in a consideration of the merits, as a substantive element of the alleged breach."[744] The tribunal added:

> In order to exhaust local remedies, the general requirement (subject to the futility exception discussed below) is as expressed by the United States in its intervention: the investor must proceed to the highest court in the whole system, which may include more than one line of tribunals or courts where the legal system of the respondent or host state has a multiple hierarchy of fora which can provide redress.[745]

401. Thus, the tribunal concluded that "a finding of denial of justice under international law necessarily depends on the final product of the State's domestic legal system," and "there can be no denial of justice without a final decision of a State's highest judicial authority."[746]

402. The same principle has been affirmed by other tribunals, such as in *Apotex v. United States*:

> [A] claimant cannot raise a claim that a judicial act constitutes a breach of international law, without first proceeding through the judicial system that it purports to challenge, and thereby allowing the system an opportunity to correct itself. In the words of Jan Paulsson, Denial of Justice in International Law 108 (2005): "For a foreigner's

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742 Second Solcargo-Rábago Report, ¶¶ 102, 104 y 106.

743 *Corona Materials LLC v. República Dominicana*, ICSID Case No. ARB(AF)14/3, Award, May 31, 2016, ¶ 248. **RL-0132.**

744 *Id*., ¶ 259. **RL-0132.**

745 *Id*., ¶ 260 (citation and internal quotation marks omitted). **RL-0132.**

746 *Id*., ¶ 264. **RL-0132.**

> international grievance to proceed as a claim of denial of justice, the national system must have been tested. Its perceived failings cannot constitute an international wrong unless it has been given a chance to correct itself."[747]

403. The *Loewen* tribunal said similarly:

> The purpose of the requirement that a decision of a lower court be challenged through the judicial process before the State is responsible for a breach of international law constituted by judicial decision is to afford the State the opportunity of redressing through its legal system the inchoate breach of international law occasioned by the lower court decision.[748]

404. Following the *Loewen* tribunal's holding, the tribunal in *Waste Management II* highlighted that, for an investor to succeed in a denial of justice claim, "the [domestic judicial] system must be tried and have failed, and thus in this context the notion of exhaustion of local remedies is incorporated into the substantive standard and is not only a procedural prerequisite to an international claim."[749]

405. As summarized by Professor Douglas, "international responsibility towards foreign nationals for acts and omissions associated with an adjudicative procedure can only arise at the point at which the adjudication has produced its final result; it is only at that point that a constituent element of that responsibility has been satisfied, which is the existence of damage to the foreign

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[747] *Apotex Inc. v. United States of America*, ICSID Case No. UNCT/10/2, Award on Jurisdiction and Admissibility, June 14, 2013, ¶ 282. **RL-0036**.

[748] *Loewen Group, Inc. and Raymond L. Loewen* v. *United States*, ICSID Case No. ARB(AF)98/3 Award, June 26, 2003, ¶ 156. **RL-0038**. *See also International Thunderbird Gaming Corp. c. México*, UNCITRAL, Laudo, 26 de enero de 2006 (**RL-0003)**:

> "As to the alleged failure to provide due process (constituting an administrative denial of justice) and the alleged manifest arbitrariness in administration (constituting proof of an abuse of right) in the SEGOB proceedings, the Tribunal cannot find sufficient evidence on the record establishing that the SEGOB proceedings were arbitrary or unfair, let alone so manifestly arbitrary or unfair as to violate the minimum standard of treatment." ¶ 197.
>
> "Finally, the SEGOB proceedings (including the Administrative Resolution) were subject to judicial review before the Mexican courts. The Tribunal notes in this regard that EDM filed a nullification (juicio de nulidad) of the 10 October Ruling before the federal tax and administrative court (in which it did not raise any complaint about Lic. Aguilar Coronado's absence at the Administrative Hearing). EDM went on to appeal the court's decision on the nullification (juicio de amparo), but subsequently withdrew from the proceedings, which decision cannot be attributed to Mexico." ¶ 201.

[749] *Waste Management Inc. c. Estados Unidos Mexicanos*, ICSID Case No. ARB (AF)/00/3, Laudo, April 30, 2004, ¶¶ 97, 116. **RL-0133.**

national.").[750] To the same effect, McLachlan summarizes that "[t]here is now a consistent line of investment treaty jurisprudence, considering denial of justice within the context of fair and equitable treatment, to the effect that: 'As long as such decisions are not final and binding and can be corrected by the internal mechanisms of appeal, they do not deny justice. . . .'"[751]

406. In this case, where the resolution is still being reviewed by the TFJA, there has not been a final result, and therefore the allegations of la Demandante cannot amount to a violation of Article 1105.

f. The Claimant Has Waived Its "Full Protection and Security" Claim

407. In its Memorial, the Claimant asserted, in a summarized way, that the Respondent violated the obligation of full protection and security "[b]y denying Claimants environmental approval based on improper motives, and where based on the law and reason, the permit should have been granted ….".[752] The Counter-Memorial provided a detailed explanation of why the scope of "full protection and security" under NAFTA Article 1105 is limited to *physical* protection, and therefore is not applicable to the facts as alleged by the Claimant.[753]

408. The Claimant's Reply does not even mention its full protection and security claim (except in its petition for relief) and does not respond in any manner to the points made by the Respondent.[754] Therefore, it is obvious that the Claimant has dropped – or should be deemed to have waived – its full protection and security claim, in accordance with NAFTA.

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750 Zachary Douglas, International Responsibility for Domestic Adjudication: Denial of Justice Deconstructed, 63(3) Int'l. & Comp. L.Q. (2014), p. 28. **RL-0134.**

751 Cambell McLachlan, Laurence Shore & Matthew Weiniger, *International Arbitration: Substantive Principles* (Oxford 2017), ¶ 7.140. **RL-0021**.

752 Memorial, ¶¶ 298.

753 Counter-Memorial, ¶¶ 528-44.

754 The sole reference to "full protection and security" in la Demandante's 240-page reply appears in the request for relief, where la Demandante requests that the Tribunal "DECLARE that Mexico violated NAFTA Article 1105(1) by failing to accord . . . full protection and security." Reply, ¶ 585.

2. The Claimant has not been the object of an indirect expropriation, as established in NAFTA article 1110

409. The Claimant is still not clear about what exactly was taken from it: was it ExO (which belongs under the same property), a business opportunity that belongs to ExO (but not to Odyssey), or is it something else? Is important to establish that the reference to "indirect expropriation" in NAFTA article 1110 refers to a regulatory expropriation, and not to the taking of an investment in which a person only has an indirect property. Also, if the alleged investment that was taken is ExO, then the Claimant has not tried to explain why it would have a right to compensation for the 47% of ExO that it decided not to possess.

410. In any case, the Claimant cannot escape the fact that it had no right capable of expropriation. As explained previously, the Claimant had no vested right to exploit the deposits.[755] In fact, the Claimant had never received the necessary approvals to mine these deposits, any other deposits in Mexico, or any other deposits anywhere else in the world.[756] As such, the purported rights of the Claimant were merely *contingent* in nature and thus *incapable* of expropriation.

411. In a weak attempt to circumvent this issue, the Claimant continues to state the obvious in arguing a different point – namely, that intangible property rights would be capable of expropriation.[757] Similarly ineffective, the Claimant quotes its own expert report to the effect that Mexican tax law defines "intangible assets" as including those that "*shall* generate future financial benefits."[758] There is no indication here that the Claimant's contingent right will generate any future benefit, and the tax law is thus irrelevant.

412. Even if the Claimant could establish a contingent right to develop the deposit at some future point in time, such right would not be cognizable for expropriation purposes. That is so because not every potential harm to future valuation of an investment constitutes a protected property interest for expropriation purposes.[759]

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755 Counter-Memorial, ¶¶ 546-50.

756 Counter-Memorial, ¶ 549.

757 Reply, ¶ 242.

758 Reply, ¶ 245.

759 *Generation Ukraine Inc. v. Ukraine*, ICSID Case No. ARB/00/9, Award, Sept. 16, 2003, ¶ 6.2 ("Since expropriation concerns interference in rights in property, it is important to be meticulous in identifying the rights duly held by the Claimant at the particular moment when allegedly expropriatory acts

413. Next, the Claimant´s attempt attempt to align the factual matrix of this case with those in prior awards fails for a simple reason: The Claimant omits the fact that the rights involved in those cases differed from the contingent right purportedly held by Odyssey that was subject to an extensive range of regulatory approvals.[760]

414. In particular, the *Tethyan v. Pakistan* decision, currently stayed by ICSID itself and additionally still subject to an annulment proceeding before the federal district court in Washington, D.C.,[761] concerned a joint venture agreement between the investor and the state to convert an exploration license into a mining lease.[762] This led the claimant to spent "more than US$240 million on its exploration work" only to then see the government itself use the feasibility study of the claimant to effectively take over the project.[763] In *South American Silver v. Bolivia*, the "Bolivian authorities themselves in their public statements referred to the measures as a 'nationalization,'"[764] which means that the respondent conceded that the claimant's rights had been expropriated, and that the only remaining question was whether the expropriation was nevertheless lawful.[765] None of these dispositive facts are present here. As to *Bear Creek v. Peru*, the Claimant

occurred." (emphasis added)), **RL-0057**; *Methanex v. United States*, UNCITRAL, Award, Final Award on Jurisdiction and Merits, Aug. 3, 2005, Part IV, ¶ 17 (holding that "items such as goodwill and market share may . . . constitute . . . an element of the value of an enterprise and as such . . . . may figure in valuation. But it is difficult to see how they might stand alone, in a case like the one before the Tribunal[.]"), **CL-0074.**

760 Reply, ¶ 246.

761 *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, Docket No. 1-19-cv-02424, D.C. District Court, Request for Annulment of the Award dated 12 July 2019, Nov. 8, 2019, **RL-0058;** *see also Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, Docket No. 1-19-cv-02424, D.C. District Court, Joint Status Report, Mar. 23, 2021 ("On March 16, 2021, the Secretary General of ICSID notified the parties that she registered the Application, and that the "enforcement of the Award is provisionally stayed" in accordance with ICSID Rule 54, which provides for an automatic stay on request pending a decision by the arbitral tribunal regarding whether a stay of enforcement should be continued pending further ICSID proceedings."), **RL-0135**.

762 *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No. ARB/12/1, Decision on Jurisdiction and Liability, November 10, 2017, ¶ 217. **RL-0058.**

763 *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No. ARB/12/1, Decision on Jurisdiction and Liability, November 10, 2017, ¶ 1328-29. **RL-0058.**

764 *South American Silver Limited (Bermuda) c. El Estado Plurinacional de Bolivia*, CPA Caso No. 2013-15, Laudo, Nov. 22, 2018, ¶ 650. **CL-0108.**

765 *South American Silver Limited (Bermuda) c. El Estado Plurinacional de Bolivia*, CPA Caso No. 2013-15, Laudo, Nov. 22, 2018, ¶ 551. **CL-0108.**

cannot deny that the investor in this case had already obtained the authorizations to "acquire, own, and operate the corresponding mining concessions.[766] That is not the case here.

415. On the role of investor expectations, the Claimant do not contest that "[l]egitimate expectations . . . have also entered the law governing indirect expropriations"[767] As stated in the Counter Memorial, McLachlan establishes that, "the absence of specific representations is a material factor in leading to a finding that the standard has not been breached."[768] Indeed:

> [A]s a matter of general international law, a non-discriminatory regulation for a public purpose, which is enacted in accordance with due process and, which affects, *inter alios*, a foreign investor or investment is not deemed expropriatory and compensable unless specific commitments had been given by the regulating government to the then putative foreign investor contemplating investment that the government would refrain from such regulation.[769]

416. The Claimant does not address these or any of the legal authorities used by the Respondent. Instead, the Claimant, without offering a single authority, merely seeks to draw a terminological distinction between "investment-backed expectations" and "legitimate expectations,"[770] but, *e.g.*, McLachlan and the many authorities cited discuss expectations in the context of indirect expropriation as "legitimate expectations" – not, as the Claimant would have it, "investment-backed expectations."[771] At any rate, this is nothing but a weak attempt at a semantic distinction with no substantive effect on the case.

417. In sum, aside from the inability of the Claimant to point to a non-contingent right, likewise the Claimant fails to identify any specific representations that could have given rise to legitimate expectations from the investor.

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766 *Bear Creek Mining Corporation v. Republic of Peru*, ICSID Case No. ARB/14/21, Award, Nov. 30, 2017, ¶ 149. **CL-0016.**

767 Rudolph Dolzer & Christoph Schreuer, *Principles of International Investment Law* (Oxford 2012), p. 115. **RL-0031.**

768 Campbell McLachlan, Laurence Shore & Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford 2017), ¶¶ 7.187, 8.122 n. 228 (cross-referencing the legitimate expectations discussion in the FET context). **RL-0021.**

769 *Methanex v. United States*, UNCITRAL, Final Award on Jurisdiction and Merits, Aug. 3, 2005, Part IV, ¶ 7. **CL-0074.**

770 Reply, ¶ 252.

771 Campbell McLachlan, Laurence Shore & Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford 2017), ¶¶ 8.121-122, 8.133, 8.134, 8.154. **RL-0021.**

418. In fact, the Claimant concedes that "states are vested with a legitimate right to exercise police powers."[772] That is so, for instance, where an environmental agency renders a determination as to the discontinuation of a certain chemical.[773] Most importantly, however, as discussed above an international investment tribunal should not second-guess the findings of such an agency.[774]

3. The Claimant has not been able to prove that it received less favorable treatment as established in NAFTA article 1102

419. As the Claimant states, "[t]he parties appear to be in general agreement on the components of the national treatment analysis," including "treatment" "in like circumstances" that is "no less favorable."[775]

420. As previously addressed by the Claimant, "[t]he legal burden to establish the affirmative requirements of the national treatment standard rests always on the claimant."[776] The Claimant also reiterates that the circumstances are necessarily context dependent[777]:

> The Parties did not take issue with the concept expressed by the *Pope & Talbot* tribunal, that "'circumstances' are context dependent and have no unalterable meaning across the spectrum of fact situations." In addition, the Parties accepted, as the Archer Daniels tribunal put it, that "all 'circumstances' in which the treatment was accorded are to be taken into account in order to identify the appropriate comparator." These obviously include the legal and regulatory regime that governs parties that are being compared for the purposes of NAFTA Article 1102.[778]

421. Even if treatment violates the standard, it may nevertheless be justified if it has "a reasonable nexus to rational government policies that (1) do not distinguish, on their face or de

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772 Reply, ¶ 255.

773 *Crompton (Chemtura) Corp. v. Government of Canada*, PCA Case No. 2008-01, Award, Aug. 2, 2010, ¶ 29. **CL-0033.**

774 *Crompton (Chemtura) Corp. v. Government of Canada*, PCA Case No. 2008-01, Award, Aug. 2, 2010, ¶¶ 134-35. **CL-0033.**

775 Reply, ¶ 257.

776 Campbell McLachlan, Laurence Shore & Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford 2017), ¶ 7.275. **RL-0021.**

777 Counter-Memorial, ¶ 577.

778 *Apotex v. United States of America*, ICSID Case No. ARB(AF)/12/1, Award, Aug. 24, 2014, ¶ 8.42. **RL-0036.**

facto, between foreign-owned and domestic companies, and (2) do not otherwise unduly undermine the investment liberalizing objectives of [the treaty]."[779]

422. As established in the Counter-Memorial, the National Treatment claim submitted by Odyssey lacks any merit, which again is demonstrated in the Reply.

423. As a starting point, the Respondent finds it unconvincing for Odyssey to assert that Don Diego is "fundamentally different" from the Chatham Rise in New Zealand and Sandipiper in Namibia, based on "technological" aspects, despite the fact that all three (Don Diego, Chatham Rise and Sandpiper) are offshore seabed dredging projects focused on removing phosphate ore.[780] Contrary to this situation, the Claimant presents unconvincing arguments to cliam that the Don Diego project "is comparable" with the Six Projects. In a simplistic way, Odyssey argues that the Don Diego project was similar to the Six Projects because the activities were the dredging, transporting, and deposit of sands to another place.[781] In other words, the Claimant is trying to differentiate the Don Diego Project from Sandipiper and Chatham Rise, since they do not have the same "geology, environment, resource characteristics, and other circumstances", but, at the same time, is trying to equate the Don Diego project with harbor and infrastructure projects which have no similarity with it.[782] This situation lacks any basis.

424. Notwithstanding that the Respondent explained in detail in its Counter-Memorial that it did not breach the National Treatment standard, as established in NAFTA article 1102, the Respondent reiterates that: *i)* the Six Projects are not comparable subjects or objects; *ii)* the subjects or objects indentified by the Claimant are not under genuine similar circumstances to the ones of the Don Diego Project, and *iii)* the SEMARNAT had not granted a less favorable treatment to the Don Diego Project.[783] Thus, the Tribunal might conclude that the Claimant did not breach the standard of National Treatment. An explanation of the elements of this standard is featured below.

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779 *Pope & Talbot Inc. v. Government of Canada*, UNCITRAL, Award on the Merits of Phase 2, Apr. 10, 2001, ¶ 78. **CL-0090.**

780 Reply, ¶ 47-49, 366, 460-461. *See* Counter-Memorial, ¶¶ 524-527.

781 *See* Reply, ¶ 282.

782 Reply, ¶ 461.

783 *See* Counter-Memorial, ¶¶ 579-611.

a. The agencies in charge of the Six Projects are not comparable subjects or objects

425. The Claimant chose six projects from different industries and activities carried on by public agencies, with the purpose of supporting its claims related to discriminatory treatment. Solcargo-Rábago considers that "the selection of the same [Six Projects] does not imply that the Mexican State has given preferential treatment to the subjects of public law, but simply, the Claimant found six dredging projects authorized by the Mexican State in environmental matters, which were promoted by parastatal entities."[784]

426. Indeed, some of the agencies in charge of the Six Projects belong to local governments (Proyecto Sayulita of the Comisión Estatal de Agua y Alcantarillado de Nayarit), are sate-owned companies (Proyecto Laguna Verde a cargo de CFE), or are entities of the state (Proyecto El Chaparrito a cargo de ESSA; Proyecto Puerto Veracruz de la API Veracruz; Proyecto Santa Rosalía de la API Baja California Sur, y Proyecto Matamoros de la API Tamaulipas). Clearly, none of these entities in charge of the Six Projects has a stock listing abroad like Odyssey.

427. In any case, the reality is that the Claimant had to at least identify one national investor (of public or private nature) that was looking to start a dredging project in the Gulf of Ulloa for the extraction of phosphate stone, and, that had obtained an environmental authorization from the DGIRA, to be able to present a case of National Treatment, as established in NAFTA article 1102. However, Odyssey never did that.

428. The Claimant correctly points out that the standards and environmental evaluation procedures do not make a distinction between projects, or whether were handled by private or public entities.[785] The problem of the claim of Odyssey about National Treatment is that it has not proved that the DGIRA has "relaxed" the environmental standards to approve the AIA of the Six Projects, or that the DGIRA granted a more favorable treatment to ESSA, the API Veracruz, the API Baja California Sur, the API Tamaulipas, the CFE or the Comisión de Aguas de Nayarit, with prejudice to ExO.

784 Second Solcargo-Rábago Report, ¶ 158.

785 Reply, ¶ 266.

429. Again, the cherry-picking (*"selección a modo"*) of the Six Projects is aimed at providing a false appearance that public entities received a more favorable treatment from the DGIRA.

b. The Six projects are not under the same circumstances as the Don Diego Project

430. The Claimant considers that the activities of a national investor might be compared with the activities of a foreign investor, even if there are clear disparities between both of them. This argument is not only wrong and unsustainable, but it might also create a dangerous precedent in investment arbitration. The Second Report of Solcargo-Rábago illustrates this situation:

> The Applicant tries to compare its project against projects in other sectors whose only resemblance is that they contemplate marine dredging activity, being almost as absurd its comparison, as comparing the excavation involving a pit mine with the excavation of the construction of a building. That disparity was even pointed out to the applicant by the dredging specialist Boskalis, who would be its potential contractor.[786]

431. Contrary to the affirmations of Odyssey, the Six Projects cannot be "comparable subjects/objects" to Don Diego since they are not genuinely under the similar circumstances. The fact that in all of those projects exist some type of activities of sea dredging does not mean that they can be comparable, and much less, if there are clear differences about the magnitude, extension, duration, temporality, location, ecosystems, vegetation, and fauna, environmental impacts, industry sectors or exploitation activities, among other factors.[787]

432. The Respondent does not consider necessary to explain again some of the differences between the Don Diego Project and the Six Projects which were explained in the Counter-Memorial (*i.e.,* sector, investment area; *lex specialis* of the mining concession; legal framework applicable to the mining sector; products or goods object of the investment).[788] However, the Respondent is under the necessity to reiterate those five aspects.

433. *First*, in the Six Projects, maintenance dredging is made and not capital dredging as it might had happened with the Don Diego Project. Even this situation was identified by Boskalis, who would have been the contractor of ExO during the activities of the Project.[789]

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786 Second Solcargo-Rábago Report, ¶ 162.

787 Second Solcargo-Rábago Report, ¶ 170-173.

788 Counter-Memorial, ¶¶ 587-590.

789 Second Solcargo-Rábago Report, ¶¶ 162-165.

434. In simple terms, the magnitude, duration, and conditions of the type of dredging of the Six Projects and Don Diego are totally different. Just the capital dredging of the Don Diego Project, which had been made for 50 years –the 365 days of the year and 24 hours a day- is not comparable to the maintenance dredging of the Six Projects that was made on one occasion or in a partial way, and in private places that were previously dredged, with the exclusive purpose of taking away sediments.[790]

435. *Second*, the Claimant argues that NAFTA article 1102 does not require investors to be under *identical* but under *similar* circumstances.[791] The Respondent does not question the scope of NAFTA article 1102. The problem is not the claims of Odyssey, but the fact that the Don Diego Project and the alleged "comparable subjects/objects" (the Six Projects) are not under the same circumstances and, much less, under *identical* circumstances; on the contrary, the Don Diego Project and the Six Projects are under totally *different* circumstances.[792]

436. *Third*, the simple fact that the Six Projects and the Don Diego Project were subject to environmental impact procedures in accordance with the LGEEPA ("legal regime") does not mean that they are under similar circumstances, as baselessly alleged by Odyssey.[793] This argument just shows a clear ignorance of the domestic and international environmental legal framework. The obligation to obtain environmental authorization for projects that might produce environmental impacts, deriving from environmental impact procedures, is established in national legal systems and international treaties.[794]

437. *Fourth,* in contrast to the Six Projects, for the implementation of the Don Diego Project, ExO needed a mining concession, without prejudice of obtaining an environmental authorization

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790 Second Solcargo-Rábago Report, ¶¶ 169, 184.

791 Counter-Memorial, ¶ 271.

792 Veronica Morales Report ¶¶ 89-92, 108. Urbán Viloria Report ¶¶ 12-14. Group of Experts in Sea Turtles Report, ¶¶ 52-69.

793 *See* Reply, ¶ 289.

794 First Solcargo-Rábago Report, ¶¶ 81, 85. Advisory Opinion OC-23/17 of November 15, 2017 of the Inter American Court of Human Rights, ¶ 157. **RL-0082**. ("the Court notes that the obligation to make an environmental impact assessment also exists in relation to any activity that may cause significant environmental damage".) Principle 17 of the Rio Declaration. Case concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, April 20, 2010, CIJ, ¶¶ 204-205. **RL-0126**

to carry on extraction activities.[795] The Respondent is not trying to "deviate the attention" of the Tribunal, as argued by Odyssey.[796] On the contrary, the Respondent is just emphasizing something evident: the regulatory regime applicable to the Don Diego Project is a factor of comparison that distinguish it from the Six Projects .

438. *Fifth*, it is not true that the Six Projects and the Don Diego Project might cause similar environmental risks only based on the fact that in all them there will be dredging activities in coastal areas.[797] In particular, Mr. Pliego points out that the Six Projects are comparable with the Don Diego Project because "son proyectos que tienen un potencial impacto ambiental similar en función de la actividad humana que se realiza, el dragado del fondo marino".[798] The Respondent disagrees with the argument of Mr. Pliego. Again, the type and purpose of the dredging is not the same.

439. Without prejudice to the fact that the Six Projects are not carried on in the Gulf of Ulloa, as would have happened with the Don Diego Project, the Respondent has provided sufficient evidence that shows the relevancy of the Gulf of Ulloa, as well as the importance of the protection of that zone from environmental impacts that could affect its flora and fauna. In fact, the Six Projects presented by the Claimant are different from the Don Diego Project in multiple substantial aspects that have been discussed by the Respondent's experts:

- The comparison of the presence of turtles in the Gulf of México or in the Golf of California taking into consideration only one species is not valid. The region of the Golf of Ulloa presents a density of loggerhead turtles which is well above any of the Six Projects, thus, it is not possible to compare them in terms of "presence/absence" of sea turtles.[799]
- In opposition to the places of the other Six Projects, the Gulf of Ulloa presents a high degree of concentration of *Caretta caretta* turtles, which are in its juvenile and pre-adult stages,

795 Memorial, ¶ 587.
796 *See* Reply, ¶ 291.
797 Reply, ¶ 272.
798 Second Vladimir Pliego Report, ¶ 90.
799 Verónica Morales Report ¶ 90.

and they use the Golf of Ulloa as a feeding zone for long periods, and also as an area of reproduction.[800]

- The Golf of Ulloa is the only place among the compare projects in which the permanence and concentration of sea turtles makes it a critical habitat.[801]
- The Don Diego Project is the only project with a permanent dredging activity.[802]
- The Don Diego Project is the only one that is not in the vicinity of the coastline and/or in the navigation channels established in the past.[803]
- None of the Six Projects pretend to dredge in depths over 20 mts.[804]
- The Don Diego Project is the only one that proposes to return the dredge and treated material to the place from where it was extracted.[805]
- The Don Diego Project is the only one whose dredge product has commercial purposes.[806]
- The Don Diego Project is the only project whose dredging activities require multiple ships working simultaneously.[807]
- Mr. Pliego presents aspects that are not applicable to the effects of comparison of projects, like the determination of a minor or mayor biodiversity in the areas of the projects.[808]

440. All the foregoing was confirmed by the experts in subsistence and conservation of the *Caretta caretta* turtle, because after a proper analysis of each project, they conclude that these projects are not comparable with the Don Diego Project, due to the differences in the circumstances regarding each zone and regarding the biodiversity of the Gulf of Ulloa (*e.g.*, critical habitat, the situation in highly disturbed areas, etc.) In particular, the Group of Experts in

800 Verónica Morales Report ¶ 89.
801 Verónica Morales Report ¶ 92.
802 Verónica Morales Report ¶ 92.
803 Verónica Morales Report ¶ 92.
804 Verónica Morales Report ¶ 92.
805 Verónica Morales Report ¶ 92.
806 Verónica Morales Report ¶ 92.
807 Verónica Morales Report ¶ 92.
808 Verónica Morales Report ¶ 93 and 94.

Sea Turtles has explained that the Gulf of Ulloa is a "center of biological activity", with high levels of biological production and with a great biodiversity, which is used in its entirety by sea turtles:[809]

> It should be noted that, although all the projects mentioned by Mr. Pliego were carried out or will be carried out within Natural Protected Areas (ANPs) or in neighboring areas, none of these places has been recognized as a center of biological activity, such as the Gulf of Ulloa. In addition, none of the projects mentioned by Mr. Pliego is carried out in an area of aggregation and critical habitat for C. caretta or another species of sea turtle. Finally, the sites mentioned for the other dredging projects occurred or will occur in areas highly disturbed particularly by anthropogenic activity.[810]

441. The Biologist Bermudez has explained that the Golf of Ulloa is a Sea Priority Region for the conservation and it has been declared as a refugee wildlife area for the loggerhead turtle, and also is part of the Western Coast of Baja California Sur that was declared as a fishing refugee zone.[811]

442. Dra. Morales has explained that the Gulf of Ulloa is a critical habitat of maximum concentration of the *Caretta caretta* (which was confirmed by Dr. Seminoff).[812] The following conclusion of the Dra. Morales is relevant:

> In this context, none of the sites referred by Mr. Pliego compares with the Gulf of Ulloa, particularly with regard to the *Caretta caretta* since, as has been widely argued in previous sections, the GU is a critical habitat of maximum concentration of this species in its juvenile and sub adult stage, because the Caretta Caretta uses it as a feeding area for long periods (7-20 continuous years) and there are recently documented indications that it is also a breeding área.
>
> All species of marine turtles in Mexico are classified in the risk category of "Endangered" (P), according to the Official Mexican Standard NOM-059-SEMARNAT-2010. This in itself justifies the protection of the turtles throughout the national territory. However, in the GU, not only is this mandate fulfilled, but the area is also protected due to the use that the high concentrations of sea turtle *Caretta caretta* makes on the site. […][813]

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809 Group of Experts in Sea Turtles Report, ¶¶ 48-49, 82.

810 Group of Experts in Sea Turtles Report, ¶ 53.

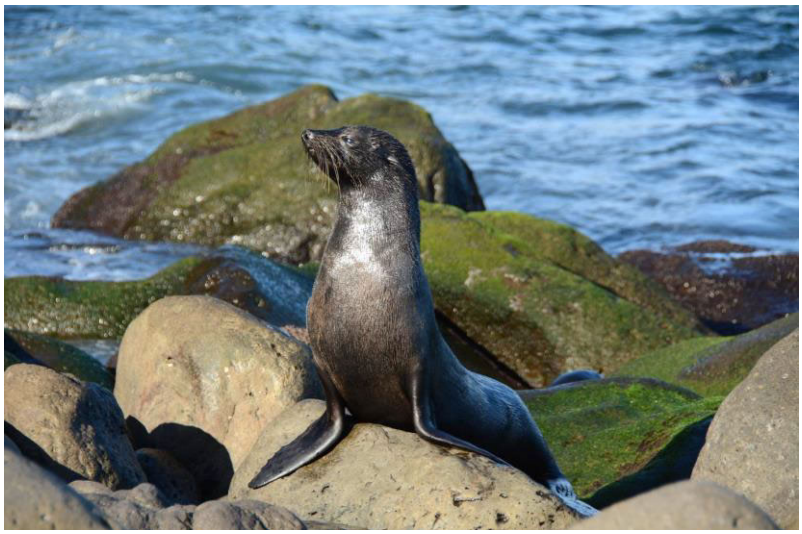
811 Second WS Benito Bermúdez ¶ 7.

812 WS Jeffrey Seminoff, ¶ 17 ("[…] based on my own research, I know that loggerheads occur throughout the Gulf of Ulloa and are present in areas outside of the "hotspots […] considering the large number of loggerheads that can be present in the Gulf of Ulloa—approximately 40,000—I did not and would not suggest that the Don Diego Project could move forward with no impact to the local loggerhead population.)."

813 Verónica Morales Report, ¶¶ 89 and 91.

443. As well, Drs. Urbán and Viloria had explained that the area of the project would have coincide with the migration routes of gray, hunch, and blue whales, and with the feeding zone of the fine wolf of Guadalupe (*see* image 3), and all of them are endangered species.[814]

Imagen 3. Guadalupe Fur Seal.



Source: Urbán et al., "Diversity of marine mammals on the coast of Baja California Sur", p. 24. **Anexo UV-015**.

444. The following conclusion of Drs. Urbán and Viloria is also relevant:

> In the Gulf of Ulloa there are unique natural phenomena of their kind, such as the migratory route of the *Caretta Caretta* turtle from Japan, as well as the migratory routes of whales from Russia and North American coasts.
>
> There is a need to observe each project in context, since the main difference lies in the area and the kind of activity to be carried out in it. In this case, the area where Don Diego would be carried out, i.e. the Gulf of Ulloa, is an area that, given its peculiarities, such as its wealth and biological productivity, is considered unique in the world.[815]

445. The analyss of Drs. Urbán and Viloria is reflected in the conclusions of the World Heritage Center of the UNESCO in relation to the Don Diego Project:

> […] the submitted EIA does not evaluate potentlal impacts of the project on the Outstandlng Universal Value (OUV) of the Whale Sanctuary El Vizcaíno property […] particular attention should be paid to the assessment of potentlal direct impacts on the marine species, such as the grey and the blue whale, as well as four species of marine

814 Urbán-Viloria Report, ¶¶ 6 y 38.

815 Urbán-Viloria Report, ¶¶ 13-14.

> turtles and other specias found in the property, taking into account that these direct impacts can also occur in the areas outside the properties boundaries, far example during migration periods. Indirect impacts on these species should also be assessed, such as from sedimenta released during the extraction operations.[816]

446. In a simplistic way, the Claimant argues that the similarities also derive from the fact that the Six Projects and the Don Diego Project are projects to carry on in coastal areas; both had the potential to cause impacts in the seabed, and in all of them exists the presence of sea turtles.[817] Again, the activities of the Six Projects are not made in centers of biological activity like in the case of the Golf of Ulloa.[818] In this way, the differences of the Don Diego Project with other presented projects, the way in which they are carried on, the differences between the places in which they take place, including the concentration of *Caretta caretta* in the Golf of Ulloa and the fact of being a critical habitat for this endangered species, makes that both projects are not comparable. Thus, the presence of sea turtles in the Don Diego and in the Six Porjects is not the problem, but the concentration, time of residence and the use of the habitat that these species make of a specific zone.[819]

447. The Tribunal should conclude that none of the places in which the Six Projects are carried on is considered as a critical habitat of the loggerhead turtle, and is not the feeding zone of an endangered marine mammal, much less is a zone in which natural phenomenon occur in opposition to the Gulf of Ulloa. Due to that, the environmental impacts are not comparable.

448. Table 5 shows in an objective manner some of the aspects that were not consider by the Claimant and Mr. Vladimir Pliego in the Reply, which evidences that there are not similar circumstances between the Six Projects and the Don Diego Project.[820]

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816 Communication of the World Heritage Center of UNESCO, April18, 2016.

817 Reply, ¶ 292, 294.

818 Group of Experts in Sea Turtles Report, ¶ 53.

819 Verónica Morales Report, ¶ 88.

820 The table was taken from the Report of Dr. Morales Zárate, *See* Verónica Morales Report, ¶ 92.

Table. 5. The Don Diego Project is not in similar circumstances with the other Six Projects.

	El Chaparrito	Laguna Verde	Sayulita	Puerto de Veracruz	Puerto Matamoros	Puerto Santa Rosalía	Don Diego
Is there a clear presence of sea turtles in the specific place of the dredging area?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
The permanence and concentration of sea turtles in the area is such to be consider a critical habitat?	No	No	No	No	No	No	Yes
The dredging activity will be permanent in the project area?	No (just maintenance)	No	Parcially	No	No	No (just maintenance)	Yes
The project is close to the coast line and/or in the navigation channels established in the past?	Yes	Yes	Yes	Yes	Yes	Yes	No
The Project pretends to dredge in sea depths of more than 20 mts?	No (max depth. 6.7m)	No (max depth. 6 m)	No.	No (max depth. 18 m)	No (max depth. 8 m)	No (max depth. 8.5 m)	Yes
The projects intends to give back the dredge and treated material to the place of the extraction?	No	No	No	No	No	No	Yes
The dredge product has any commercial purposes?	No	No	No	No	No	No	Yes
The dredging activity requires, in its daily business, of a vessel working simultaneously?	No	No	No	No	No	No	Yes

Source: Verónica Morales Report.

c. SEMARNAT did not give a less favorable treatment to the Don Diego Project

449. The Claimant has not proven that the Don Diego Project received a less favorable treatment than the one granted to the Six Projects or that it was "more stringently evaluated than the other comparable projects".[821] As established *supra*, the Respondent does not consider necessary to transcribe what was discussed in the Counter-Memorial to explain that the SEMARNAT did not grant a less favorable treatment to the Don Diego Project.[822]

450. It is enough for the Tribunal to review the AIA resolutions of the Six Projects to corroborate that all were authorized subject to dozens of conditions, [823],and even one of the projects was submitted twice to an environmental impact assessment because the promoter (API Tamaulipas) withdrew from the first MIA, just as happened in the MIA 2014 of the Don Diego Project.[824]

451. Based on technicalities, the Claimant and Mr. Pliego pretend to affirm that the level of scrutiny of the PEIA of the Don Diego Project was higher than the one applied in the PEIA of the Six Projects.[825] This type of claim requires a high degree of evidence to be proved, which is not the case in this arbitration.

452. Again, it cannot be ignored that [redacted] of the Matamoros Projects, Sayulita,Veracruz and Laguna Verde.[826]

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821 Reply, ¶¶ 286, 304.

822 Counter-Memorial, ¶¶606-611.

823 The project was subjected to 15 conditions (Resolution AIA of the Project El Chaparrito, pp. 73-77, C-0104); The Laguna Green Project was subjected to 14 conditions Resolution AIA of the Project Laguna Verde, pp. 52-58, **C-0110**); the Puerto de Veracruz Project depended of 15 conditions Resolution AIA of the Puerto de Veracruz Project, pp. 126-139, **C-0119**); The Matamoros Project depended of 16 conditions (Resolution AIA of the Matamoros Project, pp. 146-168; The Santa Rosalía Project was subjected to 15 conditions (Resolution AIA of the Santa Rosalía (Resolution AIA of the Santa Rosalía Project; pp. 35-39, **C-0122**), and the Sayulita Project depended of 16 conditions (Resolution AIA Sayulita Project, pp. 38-45, **C-0116**).

824 Memorial, ¶ 603. Resolution of January 20, 2015 from the DGIRA about the waiver of the MIA from the Proyecto Puerto Matamoros.

825 *See* Reply, ¶¶ 304-306, 313-314, 316-317.

826 Counter-Memorial, ¶¶ 610-611. *See* AIA Resolution of the Matamoros Project, p. 168. **C-0130**; AIA Resolution of the Sayulita, p. 45. **C-0116**; AIA Resolution of the Puerto Veracruz, p. 139. **C-0119** and AIA Resolution of the Laguna Verde, p. 57. **C-0110**.

The Claimant and Mr. Vladimir Pliego have preferred to remain silent on this fact, since it makes it clear that their claims about alleged discriminatory treatment are unfounded.

IV. DAMAGES

453. The following submissions are without prejudice to the Respondent's legal submissions. Nothing in this section shall be interpreted as an admission of liability or as waiver of the defenses on the merits in this case.

A. Introduction

454. As will be elaborated upon in the following sections, the Claimant's claim for damages continues to suffer from fundamental problems that can be summarized as follows:

- The Claimant has not adequately specified its claim. In particular, it has not clarified what damages were caused by each of the alleged violations of which it accuses Mexico. Nor has it clarified whether the damages it alleges are claimed on its own behalf, pursuant to NAFTA Article 1116 or on behalf of ExO under Article 1117. This has implications for the type of damages that can be claimed and who should receive payment in the event of a positive outcome for the investor.
- The approval of the MIA was a necessary but not a sufficient condition for the Project becoming a profitable business. The Claimant has failed to demonstrate that, but for the alleged violation, it would have been able to: (i) exploit the Project profitably; (ii) confirm the volumes and characteristics of the mineral resources that it claims exist in its concessions; (iii) obtain the other permits that were required; (iv) obtain the financing necessary to start the business; (v) develop and implement the new extraction and production techniques it intended to use; (vi) establish an adequate customer base and gain the significant a market share as its experts assume. In simple terms, it has failed to demonstrate the existence of the necessary causal link between the breach and the damages it claims.
- Claimant's claim for damages is not consistent with the measure of damages it has proposed and considers applicable under the full reparation standard. On the one hand, it submits that damages must be determined on the basis of the fair market value of the investment determined immediately before the MIA's denial. However, it instructed its experts to value the project under the assumption that the MIA would have been approved. The Respondent contends that ExO must be valued in the state that it was on April 6, 2016, without assumptions of any kind regarding the approval or denial of the MIA.
- Investor-state precedents concerning disputes in the mining sector are clear that, in order to use the DCF methodology to value a mining project in the pre-production stage, it is necessary for the project to reach a higher stage of development than that achieved by the Don Diego Project. In particular, international tribunals reject the use of this methodology for non-productive projects that do not have feasibility studies, proven or probable reserves and adequate sources of financing. The Project did not have any of these elements.

- Internationally recognized standards and guidelines (such as CIMVAL and VALMIN) also reject the DCF methodology for projects, such as the Don Diego Project, that are in an exploration stage and do not have a technical and economic feasibility study.
- There is no contemporaneous evidence establishing the economic and technical viability of the Project. On the contrary, the contemporary evidence shows that, as of the date of valuation, the Project had no Reserves, no feasibility or pre-feasibility studies, nor had it entered into contracts or letters of intent with potential customers, nor secured financing for the project.
- The contemporaneous evidence also demonstrates that the foundations of the Claimant's DCF (operating costs, prices, volumes, product grade) lack a sufficiently solid basis to be considered reliable for the determination of damages through a DCF model.
- Pre-award interest is requested at an exorbitant rate of 13.95% based on the Project's WACC, which explains why nearly 44% of the damages claimed are attributable to interest. Interest determined at such a rate would compensate the Claimant for risks that it never assumed.

455. In light of the foregoing, the only possible conclusion is that the Claimant's claim for more than USD $ 2,364,700,000 plus interest is exaggerated, speculative and, therefore, cannot serve as the basis for a determination of damages.

456. The Respondent submits together with this brief, a second expert report from WGM (experts in the mining industry) and Quadrant Economics (damages expert) as well as a first expert report from Taut Solutions (expert in maritime issues). The second WGM report addresses the technical aspects of the Project and opines, among other things, on the level of development it had at the Valuation Date and the viability of the Project. Quadrant's second report responds to Compass Lexecon's criticism of its first report and provides an alternative valuation based on Odyssey's market capitalization that places the value of Odyssey's stake in the Project at $ 43.2 million.[827] Quadrant's valuation is based on the fair market value (FMV) of the investment determined immediately before the alleged breach and takes into account the development status of the Project, the technical opinion of WGM, the guidance provided by the standards and guidelines of CIMVAL and VALMIN and the Claimant's contemporary evidence.

457. Alternatively, if this Tribunal determines that the applicable compensation measure is not the investment FMV determined immediately prior to the violation, the Respondent maintains that the damages must be based on the Claimant's sunk costs under the principle of full reparation, since there was no reasonable certainty about the future profitability of the Project as of the

827 The total value of the Project under this calculation would amount to USD $ 84.7 million.

Valuation Date. Quadrant estimates these sunk costs in its second report at USD $ 13.0 million as of the Valuation Date and USD $ 14.6 million as of October 2018.

B. The Claimant has failed to clarify whether the damages it alleges are claimed on its own behalf or on behalf of ExO

458. In its Counter-Memorial, the Respondent observed that it was unclear whether Odyssey had submitted its claim on its own behalf under Article 1116 or on behalf of ExO under Article 1117.[828] The clarification was important for *quantum* because it has implications over the type of damages that can be claimed and who should receive payment in case of a favourable outcome. Despite the request for clarification in the Counter-Memorial, the Claimant failed to provide it.

459. Article 1116 of the NAFTA allows an investor of Party to submit a claim on its own behalf for loss or damage caused by a breach of any substantive obligation in Section A of Chapter Eleven. Damages associated with this type of claim are limited to the those suffered directly as an investor, which is apparent from the condition established in Article 1116(1) of NAFTA. In the present case, the only loss or damage that Odyssey could have suffered *qua* investor would be the loss of value of its shares in ExO, as it has not identified any other qualified investment under Article 1139.[829] Those damages, if proven, would be payable directly to the Claimant.

460. Importantly, under Article 1116 an investor cannot claim loss or damages suffered by an enterprise in which he participates as a shareholder. A claim of this nature must be submitted under Article 1117 and is subject to the restrictions set out therein, namely, that the enterprise be a "juridical person that the investor owns or controls directly or indirectly". Damages associated to an Article 1117 claim submitted on behalf of ExO would be limited to damages suffered by ExO and would be payable to ExO pursuant to Article 1135(2)(b).

461. In this particular case, the damages araising from a claim brought under Article 1116 would completely overlap with the damages araising from a claim brought under Article 1117.[830] For this reason, these claims cannot be pursued simultaneously. At the very least, the Claimant

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828 Counter-Memorial, ¶¶ 619-622.

829 The Respondent is aware that the Claimant has identified other alleged investments, such as the Don Diego Concessions. However, title of those concessions and assets belong to ExO, not the Claimant and therefore, any loss or damages related to those assets or rights would need to be claimed under Article 1117.

830 This is because any damage suffered by ExO would affect the value of Odyssey's stake in ExO.

needs to specify what breach and damages are claimed to arise under Article 1116, and what breach and damages are claimed to arise under Article 1117.

462. Since the Claimant has failed to clarify this important aspect of its claim, despite being forewarned of the problem and the clarification requested in the Counter-Memorial, the Respondent takes the position that the claims for breaches of Articles 1102 (National Treatment) and 1105 (Minimum Standard of Treatment) are asserted on behalf of ExO under Article 1117 and the claim for breach of Article 1110 (Expropriation and Compensation) is asserted on its own under Article 1116. That being the case, any expropriation damages would be limited to the fair market value of the Claimant's stake in ExO, since Odyssey is not the owner of ExO.

C. Burden and standard of proof

1. Burden of Proof

463. In its Counter-Memorial, the Respondent took the position that it is a well-established principle that a claimant party has the burden of proving its damages. In particular, the Respondent referred to the three crucial elements of any damages claim: the fact of the loss or damage, the amount of the loss or damage, and the existence of a causal link between the breach and the alleged loss or damage.[831] In the words of the tribunal in *Rompetrol v. Romania*:

> [...] To the extent, however, that a claimant chooses to put its claim (as in the present Arbitration) in terms of monetary damages, then it must, as a matter of basic principle, be for the claimant to prove, in addition to the fact of its loss or damage, its quantification in monetary terms and the necessary causal link between the loss or damage and the treaty breach. [...][832]

464. The Claimant does not dispute that it bears the burden of proof; it alleges that it has met it. The Respondent will prove further below that this is not the case.

465. The Claimant also argues that the Respondent has the burden of proving the factual allegations made in asserting its defense to Odyssey's claims for compensation.[833] The Respondent

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831 Ripinsky & Williams, "Damages in International Investment Law", British Institute of International and Comparative Law (2008), p. 162. **RL-0065.**

832 See also, *The Rompetrol Group N.V. v. Romania*, ICSID Case No. ARB/06/3, Award, 6 May 2013, ¶ 190. **RL-0085**.

833 Reply, ¶ 334.

agrees, with the caveat that a respondent party is not required to disprove facts that the claimant has the burden of proving and has failed to prove.

2. Standard of proof

466. Having omitted any discussion in its Memorial on the standard of proof for damages, the Claimant now takes the position that the applicable standard is the "balance of probabilities".[834] However, the Claimant does not specify whether this applies to the fact of loss or damage, to the existence of the necessary causal link between the breach and the damages, to *quantum*, or to these three elements.

467. The Respondent, in turn, maintains its position that the legally relevant loss is defined by the principle of "reasonable certainty" and that such principle applies to both the fact and the amount of the loss. Mexico discussed this principle in its Counter-Memorial,[835] noting that "[w]hile it is true that damages need not to be proven with absolute certainty, international tribunals have consistently held that claims that are too uncertain, speculative, or unproven should be rejected, even if the State's liability is established."[836] It then offered numerous examples of tribunals applying it. The Claimant has not disputed that the principle exists and that it delimits the legally relevant damages.

468. Mexico also referred to various cases in which the application of the principle of reasonable certainty led the Tribunal to the rejection of the DCF methodology because the tribunal believed it would lead to speculative results absent a sufficient track record of profitable operations to reliably project future cash flows. This also has not been disputed by the Claimant. To avoid unnecessary repetition, the Respondent refers the Tribunal to section IV.B.4.b of the Counter-Memorial.

469. The issue of how much uncertainty or speculation can be tolerated in an assessment of damages is still an open question, one that international tribunals often resolve by looking into the

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834 *Id.*, ¶ 335.

835 Counter-Memorial, ¶¶ 644-645.

836 *Id*., ¶ 644 citing to *Amoco Int'l Finance Corp. v. Iran*, **RL-0067**; *Gemplus, S.A., SLP, S.A. and Gemplus Industrial, S.A. de C.V. v. United Mexican States***, CL-0054**; *BG Group Plc. v. Republic of Argentina*, **RL-0068**; *Asian Agricultural Products LTD (AAPL) v. Republic of Sri Lanka*, **CL-0011**; and, *S.D. Myers Inc. v. Government of Canada*, **RL-0069**.

specific facts and circumstances of the case and exercising the wide discretion they enjoy to determine damages. However, as eloquently put by the *Amoco* tribunal: "[o]ne of the best settled rules of the law of international responsibility of States is that no reparation for speculative or uncertain damage can be awarded. This holds true for the existence of the damage and of its effect as well."[837]

470. The Respondent's position is that while the "balance of probabilities" standard may make a certain amount of sense in the context of the fact of the loss, it is not practicable in the context of *quantum*. After all, how could a tribunal determine whether a particular figure is more or less likely than another? And even if it could, could damages that have a slightly better than 50% chance of occurring be considered not speculative? Who could seriously argue that his survival is a "reasonable certainty" while jumping from a airplane with a 51% chance of his parachute deploying correctly?

471. The Respondent's position is that what should guide the Tribunal's analysis is the avoidance of excessive speculation. In fact, the authorities cited by Odyssey, far from supporting the application of the standard of balance of probabilities to *quantum* compensation, they support the application of the principle of reasonable certainty.

472. The passage from *Ioannis Kardassopoulos v. Georgia* on which the Claimant relies does not identify "balance of probabilities" as the applicable standard for damages. The tribunal relied instead on a passage from *Sapphire v. Iran* that speaks of "sufficient probability" of the existence and amount of the damage and its amount, without defining what that probability would be:

> With respect to proof of damages in particular, the Tribunal finds the following passage quoted by the Claimants in their written submissions from the award in *Sapphire International Petroleums Ltd. v. National Iranian Oil Co.* to be apposite:
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> "It is not necessary to prove the exact damage suffered in order to award damages. On the contrary, when such proof is impossible, particularly as a result of the behaviour of the author of the damage, it is enough for the judge to be able to admit with sufficient probability the existence and extent of the damage."[838]
>
> [Emphasis added]

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837 *Amoco Int'l Finance Corp. v. Iran*, Iran-US Claims Tribunal, Partial Award, 14 July 1987, ¶ 238. **RL-0067**.

838 *Ioannis Kardassopoulos and Ron Fuchs v. The Republic of Georgia*, ICSID Case Nos. ARB/05/18 and ARB/07/15, Award, 3 March 2010, ¶ 229. **CL-0169**.

473. In *Impregilo v. Argentina*, the tribunal also did not refer to a standard of balance of probabilities in the context of *quantum*. It ruled that "*reasonable probabilities* and estimates" have to suffice as a basis for claims for compensation, although it did not clarify what it meant by "reasonable probabilities".[839]

474. The tribunal in *Vivendi v Argentina* also did not identify the "balance of probabilities" as the applicable standard of proof for damages. The tribunal referred generally to the principle that damages need not be determined with absolute certainty –a proposition with which the Respondent agrees and expressly noted in its Counter-Memorial– and then referred to the famous passage from *Chorzów Factory* that speaks about placing the investor in "the situation which would, *in all probability* have existed":

> [...] Nonetheless, in this regard, it is worth remembering that international law does not demand absolute certainty in valuing the damages sustained by the Claimants but only, in the words of the Permanent Court of International Justice in the Chorzów Factory Case, to place the Claimants "in the situation which would, in all probability, have existed" if Argentina had not committed its illegal acts (emphasis supplied). In order to accomplish that, the Tribunal and its Independent Financial Expert had necessarily to engage in the hypothetical exercise of building a scenario to determine the financial fate of the Claimants in the situation where Argentina had accorded the Claimants' investments fair and equitable treatment.[840]

475. As further articulated in one of the leading texts on damages in international arbitration:

> In the context of damages, the standard of proof becomes a serious hurdle when the compensation claimed includes lost future gains. As discussed elsewhere in this study, one of the attributes of legally relevant damage is its *certainty*. Dictionary definition of the word 'certain' are: 'free form doubt or reservation', 'sure to happen' and 'inevitable. Interpretation of the 'certainty' requirement in line with these meaning would entail a very high standard of proof akin to 'beyond a reasonable doubt'. Such a strict interpretation would deprive aggrieved parties of adequate protection. Consequently, international law has followed the lead of most legal systems which 'relax the standards of proof and are satisfied if the profits would have been *probable* in light of the circumstances'.[841]
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> [Emphasis in the original, underlining by the Respondent]

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839 *Impregilo S.p.A. v. Argentine Republic*, ICSID Case No. ARB/07/17, Award, 21 June 2011, ¶ 371. **CL-0167**.

840 *Suez, Sociedad General de Aguas de Barcelona S.A., and Vivendi Universal S.A. v. The Argentine Republic (II)*, Caso CIADI No. ARB/03/19, Award, April 9, 2015, ¶ 30. **CL-0189**.

841 Ripinsky & Williams, "Damages in International Investment Law", British Institute of International and Comparative Law (2008), p. 164. **RL-0065**.

476. Citing to numerous cases, the authors go on to explain that "arbitral tribunals have held that future losses must be proved with [a] 'sufficient (degree of) certainty, 'sufficient degree of probability', 'some level of certainty' or 'comparative likelihood' and that they must be 'probable and not merely possible'."[842] The authors also cite to the Commentaries to the ILC Articles, which indicate that "sufficient certainty" is required for an income stream to become a legally protected interest, and to the UNIDROIT Principles of International Commercial Contracts, which require a "reasonable degree of certainty" when establishing future harm.[843]

477. As will explain below, the Respondent maintains that the Claimant failed to demonstrate that the future flows on which it bases its claim for damages have a sufficient degree of certainty to become a protected interest. In simple terms, the Claimant has not demonstrated that it would have been able to operate the Project profitably.

a. Fact of loss or damage

478. The Respondent maintains its position that the mere existence of phosphate deposits in the Don Diego Project area did not confer any value to ExO and, for that reason, is not necessarily true that the MIA's denial has caused it damages that can be quantified in the way the Claimant's experts do. In order for the investment to have any value in the eyes of a reasonably informed buyer, it is necessary to demonstrate that the deposit could be exploited profitably. This has not been proven, not even on the basis of the balance of probabilities. As Quadrant's valuation demonstrates, the market attributed a certain value to the Project because the possibility for success, but that value was modest precisely because the Project was at a very early stage of development and had not demonstrated its future profitability.

b. Causation

479. The Claimant maintains that it has proven that Mexico's NAFTA breaches were the proximate cause of its losses. At paragraph 335 of the Reply, it claims that "it was objectively foreseeable that if SERMARNT denied the MIA, Odyssey would be unable to exploit the

842 *Id.*

843 *Id.*

Concession and would experience a complete loss for both ExO, its special purpose vehicle to develop and operate the Don Diego Project, and the Don Diego Project itself."[844]

480. While it is true that ExO required the approval of the MIA to proceed with its project, it does not follow that ExO would have advanced through the several stages of development that lay ahead, obtained the remaining permits, obtained the necessary financing to put the Project in operation, implemented new extraction techniques in a cost-efficient manner, established a reliable customer base for its products and gained the significant market share it projected in the DCF.[845] In simple terms, the MIA was a necessary but not a sufficient condition for the Project becoming a profitable business.

481. Contrary to what Claimant suggests, the MIA was neither the only nor the last hurdle that ExO needed to clear in order to transform the pre-production project it had into the highly profitable mining operation that forms the basis of its damages assessment. It is important not to lose track of the fact that the denial of the MIA, at most, deprived the Claimant of a business opportunity, not a running business with a proven track record of profitable operations.

482. From the point of view of causation, the relevant question is whether the MIA's denial caused the damages that Odyssey claims in this proceeding. The answer to that question is "no", and it is this sense that the Respondent maintains that the Claimant has failed to establish the necessary causal link between the breach and the damages it claims.

c. Amount of the loss

483. As explained in the section devoted to the standard of proof, there is no shortage of tribunals holding that damages claims that are too speculative should be rejected.

484. The Claimant engages in undue speculation in various material respects. Despite its vehement claims that the Respondent is ignoring the evidence that it the has put forth, it does not seem to dispute several material facts that undermine its position and demonstrate that, under generally accepted mining industry guidelines, international best practices, and investor-state jurisprudence, the damages in this case cannot be determined using the income approach.

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844 Reply, ¶ 335.

845 Counter-Memorial, ¶ 664.

485. In particular, the Claimant does not dispute that:

- No company, including the world's largest mining companies, has established anywhere in the world an offshore mining operation like the one the Claimant intended to develop in Mexico;
- Odyssey had no prior experience in the mining sector or the phosphate business (i.e., no track record of profitable operations in Mexico or anywhere else);
- ExO did not have a scoping study or a Preliminary Economic Assessment (PEA) prepared or validated by an independent expert;
- ExO did not have a Feasibility Study (FS) or even a Pre-Feasibility Study (PFS) establishing the economic viability of the Project;
- ExO had no Proven or Probable Mineral Reserves, as those terms are understood in the context of the mining industry[846];
- ExO had not finished defining the basic engineering of the Project. The Boskalis Proposal was a preliminary proposal that did not have a sufficient level of detail;
- ExO had not secured the necessary funding for the Project;
- ExO had not fully defined its product nor established the potential market for its product; and
- Exo had not secured various other permits that were required to put the Project into operation.

486. The Respondent has researched all publicly known awards in investor-state cases involving non-producing mining projects and there is not a single case in which the tribunal has awarded damages based on a DCF (or any other methodology under the income approach) where the project did not have a Feasibility Study or Reserves. The Respondent submits that this is indicative of the high level of uncertainty that characterizes mining projects in their pre-production stage (such as the Don Diego Project) and international tribunals' adherence to the principle of reasonable certainty when awarding damages.

487. Under these circumstances, the Claimant's choice to ignore the facts and focus instead on the 24 expert reports that it has filed in this proceeding comes as no surprise. The reality is that, by following this strategy, the Claimant is simply trying to side-step inconvenient facts, such as:

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[846] As explained at ¶ 649 of the Counter-Memorial, "a Mineral Reserve is defined as 'the economically mineable part of a measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.'"

that it had not established the technical and economic viability of the Project as of the Valuation Date and, as evidenced by its own documents, the Project was still in the exploration stage.

488. The Claimant asserts that its expert reports are based on information that was available prior to Valuation Date, but that misses the point.[847] The types of reports that would be necessary for the project to be considered even potentially viable, such as feasibility studies and engineering studies, are new facts themselves. It is revealing that the Claimant has only recently invested in such reports, and failed to do so while seeking to develop the Project. It shows that the Claimant (and its new investors) value the arbitration claim much more than they ever did the Project.

489. Further, while it is reasonable to assume that a hypothetical willing buyer would have reviewed all the information that was available as of the valuation date, the Claimant cannot seriously argue that it would have reached the same conclusions reached by its experts do in this case. Most likely is that, a hypothetical willing buyer would have retained its own qualified expert, such as WGM, that would have confirmed that the project was in the exploration stage and that a profitable outcome was still very much uncertain at that point. He would have also retained a valuation expert, such as Quadrant, who would have confirmed that significant risks remained and that the Project was not worth what the Claimant claims in in this proceeding.

D. Measure of compensation

490. The parties to this arbitration seem to agree that the appropriate measure of compensation in this case is the fair market value of the investment determined immediately before the expropriation.

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847 In support of its argument about practices based on *post-hoc* information, the Claimant relies primarily on a quotation from a report of a "special master" (not a judge) from a case from the U.S. district court of Kentucky, without even attempting to explain how that ruling reflects international law or how the facts in that case relate to those in this arbitration. Reply, ¶ 378. If the Tribunal decides that U.S. court rulings are relevant, there are examples of valuations based on post-valuation data being rejected. *See, for example, Regents Park Partners*, 1992 Tax Ct. Memo LEXIS 357 (Tax Ct. 1992), p. *47 (**RL-0107**) ("We are persuaded that Roddewig's use of the income approach is in error to the extent that he incorporated data for years following 1981, and likewise we are persuaded that the use of the post-valuation date sales in the sales comparison and cost approaches was in error."); *Estate of Gillet v. Comm'r*, 1985 Tax Ct. Memo LEXIS 227 (Tax Ct. 1985), p. *34-35 (**RL-0116**) ("In our view neither the foregoing testimony nor anything else in the record establishes that the plug figures for the variables used in Hanley's formulas, which figures were derived from known data for the period 1978 through 1982, were foreseeable as of the valuation date. Thus, Hanley's use of actual figures derived from events post-dating the valuation date is inappropriate.").

491. In its Memorial, the Claimant argued that "[t]o give effect to the principle of full reparation, compensation in this case should reflect the fair market value of the entirety of Claimant's investment in Mexico [...]".[848] The Claimant also cited the ILC Articles on State Responsibility and *Crystallex v. Venezuela* in support of the proposition that "[c]ompensation reflecting the capital value of property taken or destroyed as the result of an internationally wrongful act is generally assessed on the basis on the 'fair market value' of the property lost"[849], and that "awarding compensation based on the investment's fair market value ensures that the injured party is restored to the situation it would have been in but for the internationally wrongful acts".[850] Based on the foregoing, the Claimant concluded: "Accordingly, the appropriate measure of damages, pursuant to the Chorzów Factory standard, is the fair market value of the Don Diego Project prior to SEMARANT's first denial of the MIA, regardless of whether the Tribunal finds a breach of only one or of all three of the aforementioned articles."[851] [Emphasis added]

492. In its Counter-Memorial, the Respondent agreed with the conclusion that compensation should be determined based on the fair market value of ExO determined immediately before the expropriation, if the Tribunal were to hold that the Respondent either expropriated its investment in violation of Article 1110, or breached Articles 1102 and/or 1105 and those violations were tantamount to an expropriation. (This is implicit in the Claimant's position that the amount of compensation should be the same "regardless of whether the Tribunal finds a breach of only one or of all three of the aforementioned articles".[852]) The Respondent further noted that what the Claimant identified as the "appropriate measure of damages" was in fact the measure of compensation provided for in Article 1110(2), which applies to expropriation cases brought under the NAFTA, such as the present case.[853]

493. In the Reply, the Claimant asserts that "there is no dispute that the appropriate standard of compensation is ExO's FMV at the time of expropriation" and that "Mexico itself accepts the

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848 Memorial, ¶ 373.

849 Memorial, ¶ 373.

850 *Id.*, ¶ 375.

851 *Id.*, ¶ 376.

852 Counter-Memorial, ¶¶ 631-632.

853 *Id.*, ¶ 631.

Chrozow Factory full reparation standard and agrees that full reparation requires an award of ExO's (or the Project's) FMV."[854] This is a crude mischaracterization of the Respondent's position.

494. The Respondent did not "accept the *Chorzow Factory* full reparation standard", nor did it agree that the appropriate "standard of compensation is ExO's FMV at the time of expropriation", nor that "full reparation requires an award of ExO's (or the Project's) FMV." To be clear, the Respondent's position is that, in this case, the amount of compensation under Article 1110(2) and also under the full reparation standard, would be the ExO's FMV determined immediately before the expropriation.[855] These seemingly minor differences have important repercussions and should not be taken lightly, as will explained later.

495. The Respondent also noted that Odyssey's claim for damages was inconsistent with the measure of damages it had identified first. Although the Claimant asserts that the damages must be determined immediately before the decision of the MIA, nevertheless, it instructed its damages experts to assume for valuation purposes that the MIA would have been granted. Respondent contends that ExO should be valued in the state in which it was in on April 6, 2016, with no assumptions of any kind regarding the approval, conditional approval, or denial of the MIA.

496. If the Tribunal rejects the FMV of the investment determined immediately prior to the expropriation as the applicable measure of damages in this cases, the Respondent alternatively submits that, in accordance with the standard of full reparation, that the damages be determined on the basis of the Claimant's sunk, costs as has been done by numerous international tribunal in the context of expropriation claims associated with pre-production mining projects that do not have reserves or feasibility studies. More on this point in Section F of this damages section.

E. Date of expropriation

497. The Claimant alleges that its investment was expropriated on 7 April 2016 through SEMARNAT's decision on the MIA request for the Don Diego Project. Thus, under both Article 1110(2) and the Claimant's own interpretation of the full reparation standard, the fair market value

854 Reply, ¶ 322.

855 Counter-Memorial, ¶ 632.

of ExO should be determined as of 6 April 2016.[856] Yet, in its Reply the Claimant insists that the valuation date should be 7 April 2016 and argues that the Respondent's position is "misconceived on several levels".[857]

498. According to the Claimant, the first alleged misconception is that the Respondent is sidestepping the Claimant's case; particularly that the denial of the MIA was a wrongful act in breach of several provisions of the NAFTA.[858] According to the Claimant, "because Denial of the MIA is the wrongful act, the valuation must assume that the MIA was granted in the but for scenario, regardless of the Valuation Date that is used."[859] The Claimant, however, fails to address the incompatibility of this assumption with its position on the applicable measure of compensation.

499. As explained in the previous section, it was the Claimant who argued that "the appropriate measure of damages, pursuant to the *Chorzów Factory* standard, is the fair market value of the Don Diego Project prior to SEMARANT's first denial of the MIA".[860] The Claimant also claimed that "Compass Lexecon [had] calculated the compensation payable for Mexico's breaches based on the Project's fair market value at a date immediately before SEMARNAT denied the MIA [...]"[861] Since the denial of the MIA occurred on 7 April 2016, there can be no serious argument that the valuation date should be 6 April 2016 (or on April 7, but before the determination on the MIA) .[862]

500. The Claimant also made it clear what it understood by the term "fair market value" by relying on the definition espoused by the Iran-U.S. Claims Tribunal, namely: "the price that a willing buyer would pay to a willing seller in circumstances in which each had good information, each desired to maximize his financial gain, and neither was under duress or threat."[863] Therefore,

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856 *Id*., ¶ 634; Memorial, ¶ 380.

857 Reply, ¶ 341.

858 *Id.*, ¶ 341.

859 *Id*., ¶ 341.

860 Memorial, ¶ 376. Emphasis added.

861 *Id.*, ¶ 380. Emphasis added.

862 The same conclusion can be reached from a plain reading of Article 1110(2), which establishes that "[c]ompensation shall be equivalent to the fair market value of the expropriated investment immediately before the expropriation took place ("date of expropriation") and shall not reflect any change in value occurring because the intended expropriation had become known earlier."

863 Memorial, ¶ 374.

under the Claimant's own analysis, full reparation in this case would entail awarding damages in an amount equivalent to the price that a willing buyer would pay to a willing seller for ExO immediately before the first denial of the MIA, in circumstances in which each had good information and neither was under duress or threat.[864]

501. Because the decision on the MIA 2015 application was issued on 7 April 2016, it follows that the fair market value of ExO as of 6 April 2016 (or on 7 April immediately before the decision) cannot reflect *any* particular outcome concerning the MIA application. Put differently, no reasonably informed buyer would have assumed on 6 April 2016 that ExO's MIA application had been favorably resolved and agreed to pay a price consistent with that assumption. The Respondent thus reiterates that the assessment of damages must be premised on the assumption that the decision on the MIA was pending and therefore, the uncertainty surrounding the approval of the MIA in the Valuation Date must be factored into the damages analysis.[865]

502. The second alleged misconception is no misconception at all. The Claimant simply states that the "the reason for fixing the valuation date at the moment immediately before a state's wrongful act is to ensure that the value of the investment is not reduced by those acts".[866] Then, it goes on to reaffirm that both the Memorial and Compass Lexecon used 7 April 2016 as the valuation date.

503. The Respondent agrees that the reason for valuing the investment immediately before the alleged expropriation took place is to avoid any impact (for better or worse) of the alleged breach in the valuation exercise. This is clear from the second part of Article 1110(2) which specifically provides that the FMV determined immediately before the expropriation "shall not reflect <u>any change in value</u> occurring because the intended expropriation had become known earlier." However, it does not follow from that proposition that the proper valuation date in this case should be 7 April 2016, or that it is open to the Claimant and its damages expert to assume, for valuation purposes, that the MIA would have been approved. By making that assumption, the Claimant's

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[864] The Respondent observes that if the claim is limited to Odyssey's 1116 claim, damages would be limited to the value of Odyssey's shareholding in ExO (i.e., the fair market value of 53.89% of the shares in ExO as of 6 April 2016)

[865] Counter-Memorial, ¶ 638.

[866] Reply, ¶ 342.

damages experts are not determining the FMV of ExO as it stood on 6 April 2016 (or 7 April immediately before the decision on the MIA) but something else entirely.

504. The idea that "valuation must assume that the MIA was granted in the but for scenario, regardless of the Valuation Date that is used"[867] misses the mark in another material respect. The alleged breach is not the denial of the MIA *per se*, but the manner in which the Claimant alleges that it was denied. The Claimant specifically alleges that the decision was discriminatory (Article 1102 claim) and that it violated Mexico's obligation to accord its investment fair and equitable treatment and full protection and security (Article 1105 claim). However, that does not mean that in the absence of the alleged discrimination and the alleged unfair and unequitable treatment, the MIA for the Don Diego Project would have been approved by SEMARNAT. Such an assumption would imply that SEMARNAT had no other choice but to grant the MIA 2015 application to avoid violating the NAFTA, which is untenable.

505. In this context, the Respondent observes that not even the Claimant's witnesses believe that the MIA would have been approved outright. [redacted].[868] [redacted].[869]

506. It is simply incorrect to assume that the MIA would have been approved, or to speculate under which conditions it would have been approved. The correct approach is the one that the Claimant initially proposed and for which it advocated, but then failed to follow.

F. Investor-state cases involving mining projects

507. The Claimant contends that several international tribunals have recognized that non-operating assets can be valued using the DCF method.[870] According to the Reply, "their analysis

867 Reply, ¶ 341.

868 First WS [redacted], ¶ 19 [Emphasis added].

869 First WS [redacted], ¶ 7 [Emphasis added].

870 Reply, ¶ 344.

has focused on whether it is reasonably certain that, but for the state's wrongful acts, the asset could have brought goods to market and generated a profit from their sale".[871] However, the Claimant does not identify what factors are typically considered by tribunals in deciding whether or not the future profitability of a mining project in the pre-production stage has been established with reasonable certainty.

508. To complete this analysis, the Respondent has reviewed all publicly available decisions in investor-State cases involving disputes in the mining sector. This analysis started with the identification of 44 mining cases.[872] Of this total: 24 were decided in favor of the State and thus, no decision on damages is available; 4 are not publicly available[873]; and 4 cases are not relevant because damages were not based on the value of the mine or project.[874] This leaves a total of 12 cases in which the arbitral tribunal awarded damages to the claimant party.

509. Next, the Respondent attempted to identify the factors that were considered by those tribunals when deciding the valuation approach or method to be used to determined damages. It found useful information in at least three of those cases.

510. In *Bahgat v. Egypt*, the tribunal observed that the DCF method has been narrowly used when the factors that allow for a reliable estimation have been proven. Among these factors were the availability of reserves, financing and the possibility of the product being sold:

> The Tribunal summarizes the jurisprudence as follows. Although the DCF method has been used to value going concerns, this methodology has also been applied under certain narrowly defined conditions to investments that are not going concerns. However, the DCF method has been used only if factors were proven that permitted reliable estimation

871 *Id*,, ¶ 344.

872 Cases were identified using the UNCTAD Policy Hub advanced research tool (https://investmentpolicy.unctad.org/investment-dispute-settlement/advanced-search). The search included concluded cases (*i.e.*, cases decided in favour of the State, investor or neither party) in the following sub-sectors within the mining and quarrying sector: "Mining of coal and lignite", "Mining of metal ores", and "Other mining and quarrying". The search excluded: "Extraction of crude petroleum and natural gas" and "Mining support service activities". The research took place in August 2021.

873 There are no publicly available decisions in: Swissbourgh and others v. Lesotho, Mytilineos v. Serbia (II), WWM and Carroll v. Kazakhstan, and WWM and Carroll v. Kazakhstan.

874 Antoine Goetz & Consirte et S.A. Affignage des Metaux v. Republic of Burundi, ICSID Case No. ARB/01/2, Award, June 21, 2012, **RL-0136**. White Industries Australia Limited v. The Republic of India, Final Award, 30 November 2011**, RL-0120**. Oxus Gold v. The Republic of Uzbekistan, Final Award, 17 December 2015, **RL-0137**. Glencore International and C.I. Prodeco S.A. v. Republic of Colombia (I), ICSID Case No. ARB/16/6, Award, 27 August 2019, **RL-0138**.

> of the investment's future profits. These include the existence of detailed business plans, substantiated information on the price and quantity of the products and services, on the availability of financing, and on the existence of a stable regulatory environment. Even in cases involving commodities that have predictable sale prices, before applying the DCF method, tribunals have assured themselves of the availability of reserves, financing, appropriate methods of exploration, and the possibility of the product being sold.[875]
>
> [Emphasis added]

511. The second case is *Khan Resources v Mongolia*. In this case, the Tribunal concluded that when in a mine has "proven reserves", a DCF model is often considered appropriate for calculating the FMV:

> The Claimants advocated using a DCF method, which they state is appropriate for determining the fair market value of a mine with proven reserves.[746] According to the Claimants, once these reserves are known, together with the costs associated with development and production, the market price for the relevant resource can be applied to estimate future earnings with reasonable certainty. It therefore does not matter that the mine has not actually come into full production or is not a functioning "going concern." The Tribunal agrees that, in the case of a mine with proven reserves, the DCF method is often considered an appropriate methodology for calculating fair market value.[876]
>
> [Emphasis added]

512. The third case is *Crystalex v. Venezuela*. The tribunal in that case noted that the exploration phase had been concluded, that the company had Feasibility Studies that were approved by the Ministry of Mines of Venezuela and that the mine had Proven and Probable Reserves. These and other factors supported its conclusion that the Claimant had proven the fact of future profitability:

> First, it cannot be cast into doubt that Las Cristinas is one of the most important mines in Latin America, and the Venezuelan authorities also clearly viewed it as such. During the years in which it was active on the ground, Crystallex had completed the exploration (drilling and testing) activities and the feasibility studies produced by the Claimant (and approved by the Ministry of Mines) show that that the nature of the Las Cristinas deposit was well known. In particular, the MDA 2007 Technical Report confirmed that Las Cristinas had proven and probable reserves estimated at 16.86 million ounces of gold in situ, and measured and indicated resources of 20.76 million ounces and inferred resources of 6.28 million ounces. The Tribunal sees no reason to cast into doubt the accuracy of the studies that those well-known consultants prepared contemporaneously for the Claimant throughout the years. As noted by the tribunal in *ADC v. Hungary*, a

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875 *Mohamed Abdel Raouf Bahgat v. Egypt*, CA Case No. 2012-07, Final Award, 23 December 2019, ¶ 438. See also ¶ 442. **RL-0139.**

876 *Khan Resources Inc., Khan Resources B.V. and Cauc Holding Company Ltd. v. the Government of Mongolia and Monatom Co., Ltd.*, PCA Case No. 2011-09, Award, 2 March 2015, ¶ 391 (emphasis added). **RL-0140.**

> business plan "constitutes the best evidence before the Tribunal of the expectations of the parties at the time of expropriation for the expected stream of cash flows".[877] [Emphasis added]

513. In another passage, that same tribunal referred to the CIMVAL Guidelines and again to the Feasibility Study and its approval by the Ministry of Mines of Venezuela to conclude that "Las Cristinas should thus be considered a 'development property'":

> The CIMVal Guidelines define "development property" as "a Mineral Property that is being prepared for mineral production and for which economic viability has been demonstrated by a Feasibility Study or Prefeasibility Study and includes a Mineral Property which has a Current positive Feasibility Study or Prefeasibility Study but which is not yet financed or under construction". It is undisputed that the Ministry of Mines had approved Crystallex's Feasibility Study on 6 March 2006. Las Cristinas should thus be considered a "development property" within the meaning of the Guidelines (as opposed to a less advanced "exploration property"). In relation to "development properties", the CIMVal Guidelines advise in favor of the application of income- and market-based methodologies, and against the use of cost-based methodologies.[878]

514. In view of this common thread in international awards, the Respondent reviewed each of the available 12 decisions in order to determine: (i) whether the operation/project at issue was in pre-production (pre-operative) at the time of the breach and if so, in what stage; (ii) whether the claimant party had completed a Pre-Feasibility (PFS) or Feasibility Study (FS) at the time of the breach; (iii) whether the operation/project had Proven or Probable Reserves at the time of the breach; and (iv) what approach and method was used to determine damages. The following table summarizes the results and includes the Don Diego Project for comparative purposes. (Cases in which the tribunal opted for the DCF method are highlighted in grey):

Investor-state cases in the mining sector decided in favor of the claimant party[879]

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877 *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2, ¶ 878. **CL-0042**.

878 *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2, ¶ 884. **CL-0042**.

879 *Quiborax S.A., Non Metallic Minerals S.A. and Allan Fosk Kaplún v. Plurinational State of Bolivia*, ICSID Case No. ARB/06/2, Award, 16 September 2015. **RL-0141**; *Bilcon of Delaware et al v. Government of Canada*, PCA Case No. 2009-04, Award on Damages, 10 January 2019, **CL-0123**; *Gold Reserve Inc. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/09/1, Award, September 22, 2014, **CL-0056**; *Mohamed Abdel Raouf Bahgat v. The Arab Republic of Egypt*, PCA Case No. 2012-07,Final Award, 23 de diciembre de 2019, **RL-0139**; *Cooper Mesa Mining Corporation v. Republic of Ecuador*, PCA No. 2012-2, Award, **CL-0040**; *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2, Award, 4 April 2016, **CL-0042**; *Khan Resources Inc., Khan Resources B.V. and*

No.	Short Name	Stage	Resources	Reserves	Pre-feasibility study	Feasibility study	Approach	Method
1	*Quiborax v. Bolivia*	Production	Yes	Yes			Income	DCF
2	*Clayton/Bilcon v. Canada*	Pre-production (Early development stage)					Market	Prior transactions
3	*Gold Reserve v. Venezuela*	Not specified		Yes		Yes	Income	DCF (agreed by experts)
4	*Bahgat v. Egypt*	Pre-production (Early exploration stage)		Disputed		Disputed	Cost	Sunk costs
5	*Copper Mesa v. Ecuador*	Pre-production (Early exploration stage)					Cost	Sunk costs
6	*Crystallex v. Venezuela*	Pre-production (Development)		Yes		Yes	Market	Market capitalization & Market multiples
7	*Khan Resources v. Mongolia*	Pre-production (Development)	Yes	Yes	Yes	Yes	Market	Offers made for the mine or shares
8	*Rusoro Mining v. Venezuela*	Not specified	Yes	Yes	Yes	Yes	Composite	Composite
9	*Tethyan Copper v. Pakistan*	Pre-production (Advanced stage exploration)	Yes	Disputed	Yes	Yes	Income	Modern DCF
10	*South American Silver v. Bolivia*	Pre-production (Mineral resource property)	Yes	No	No	No	Cost	Sunk costs
11	*Stans Energy v. Kyrgyzstan (II)*	Pre-production (Early stage)		No	No	No	Cost	Sunk costs
12	*Bear Creek Mining v. Peru*	Pre-production (Early stage)	Yes	Yes		Yes	Cost	Sunk costs
*	**Don Diego Project**	**Pre-Production (parties disagree on specific stage within pre-production)**	**Yes**	**No**	**No**	**No**		

515. It bears noting that, with one exception (*Quiborax*), all cases involve pre-production projects, such as the Don Diego Project. Among these 11 pre-production mines, the most widely used approach to determine damages was the cost approach (5 cases), followed by the market approach (3 cases) and the income approach (2 cases[880]). In one case (*Rusoro*), the tribunal used a hybrid or composite valuation approach that combined, *inter alia*, market value and book value.

Cauc Holding Company Ltd. v. the Government of Mongolia and Monatom Co., Ltd., PCA Case No. 2011-09, Award on the Merits, 2 March 2015, **RL-0140**; *Rusoro Mining Ltd. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/12/5, Award, 22 August 2016, **CL-0099**; *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No. ARB/12/1, Award, 12 July 2019, **CL-0116**; *South American Silver Limited (Bermuda) v. the Plurinational State of Bolivia*, PCA Case No. 2013- 15, Award, 22 November 2018, **CL-0108**; *Stans Energy Corp. and Kutisay Mining LLC v. Kyrgyz Republic (II)*, PCA Case No. 2015-32, Award, 20 August 2019, **RL-0142**; *Bear Creek Mining Corporation v. Republic of Peru*, ICSID Case No. ARB/14/21, Award, 30 November 2017, **CL-0016**.

880 A DCF was also used in *Quiborax*, but the property at issue in that case was already in the production stage.

516. It is important to note that, in the two cases where the tribunal opted for a DCF analysis to determine damages to pre-production projects (*Gold Reserve* and *Tethyan*), the claimant party had completed a Feasibility Study and demonstrated the existence of Probable or Proven Reserves. In other words, it had contemporaneous evidence of the economic and technical viability of the project and a precise estimate of the mineral volumes that could be extracted economically.

517. In contrast, the Don Diego project had no Reserves and had not completed a Pre-Feasibility Study. In fact, it did not even have an independent scoping study, also known as a preliminary economic assessment (PEA).[881] All it had in the way of a financial assessment of the Project's economic viability was the [redacted], does not comply with the requisites of a PEA and, therefore, cannot be used for the purposes of financial analysis.[882] No reasonably informed buyer would have relied on it for the purposes of establishing a price for the Project.

518. It is also important to note that in *Gold Reserve v. Venezuela* –i.e., one of two cases in which the Tribunal opted for a DCF valuation in a pre-production project– the tribunal opted for the DCF method in no small part because the damages experts from both sides agreed that it could be reliably applied in the circumstances of that case.[883] Needless to say that no such agreement exists in the present case. In fact, the Respondent's damages and industry experts agree that the use of a DCF to value the Don Diego Project would be wholly speculative.[884]

519. The following sections discuss the cases cited by the Claimant to support its position and the Claimant's criticisms to the cases cited by the Respondent in its Counter-Memorial.

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881 In its first report, WGM explained in its first report that "Such studies [scoping studies or preliminary economic assessments] are primarily conceptual in nature and are used to assess the potential economic viability of a project at a level of capital and operating cost estimates of +-30-50% for internal planning purposes before progressing to advanced planning." First WGM report, ¶ 40, fourth bullet.

882 First WGM Report, ¶ 40, fifth bullet.

883 *Gold Reserve Inc. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)09/1, Award, 22 September 2014, ¶ 687 and 690. **CL-0056**.

884 First WGM Report ¶¶ 12 y 56; First Quadrant Report, ¶ 31.

1. The cases cited by the Claimant do not support of the use of a DCF in the circumstances of this case

520. The Claimant cites *Gold Reserve, Crystallex, Mohammad Ammar, Rusoro and Tethyan* in support of its contention that "Investor-State Awards Recognize That a Forward-Looking Income Valuation Method Is Appropriate for Pre-Production Properties Like Don Diego"[885] and that "[t]here is a substantial body of investment treaty cases where tribunals have endorsed using a DCF as the valuation methodology for projects without an operating track record or a history of profitability, including mining properties that are not yet in production".[886]

521. As will be explained next, all these cases can be distinguished from the present case, particularly with respect to the availability of contemporaneous evidence concerning the economically and technical viability of the project, which is a crucial factor in deciding whether future profitability has been established and thus, whether it is appropriate to use a DCF, ROV or any other methodology under the income approach.

522. But before entering the analysis of these cases, Mexico will address the Claimant's mischaracterization of its position. The Claimant asserts that "Mexico contends that a DCF valuation cannot be used for an investment like Don Diego, which has not yet commenced commercial operation, on the grounds that it lacks a 'sufficient track record of profitable operations to reliably project cash flows.'"[887] The Claimant then cites paragraph 645 of the Counter-Memorial in which the Respondent was generally discussing the principle of reasonable certainty as a defining element of the legally relevant loss or damage; not the particular facts and circumstances surrounding the Don Diego Project or whether a DCF could be used in this particular case:

> The fact that the principle of reasonable certainty applies to *quantum* is further confirmed by the vast number of cases in which international tribunals have rejected the use of the DCF methodology on the grounds that its use would be too speculative absent a sufficient track record of profitable operations to reliably project future cash flows: [...][888]

885 Reply, heading of section V.C.1.

886 *Id.*, ¶ 356. See footnotes 865 and 866.

887 *Id*., ¶ 343.

888 Counter-Memorial, ¶ 645.

523. The Respondent identified four concrete examples where tribunals had made a finding along those lines and concluded with the following remark:

> "As will be further developed below all of this is relevant because the Claimant's expert has resorted to a DCF approach to estimate the damages despite the fact that ExO never operated and the economic viability of the Project had not been established by the Valuation Date."[889]

524. As can be seen, the Respondent's position is not based exclusively in the absence of a track record of profitable operations, but rather the combination of the absence of a track record and the absence of contemporaneous evidence of the Project's economic and technical viability.

a. *Gold Reserve v. Venezuela*

525. The Claimant cites this case in support of the idea that a DCF could be appropriate in cases where the project under valuation has no proven track record of profitability. The Claimant highlights the fact that the Las Brisas project was never a functioning mine and nonetheless, the experts for both parties agreed that a DCF could be reliably used, and the tribunal accepted their position.[890] The suggestion appears to be that because two damages experts agreed, in another case, that a DCF could be used to value a particular mine that was in the pre-production stage, that is generally true for all mines in the pre-production stage. What is most remarkable about this simplistic proposition it that, despite acknowledging that investment treaty cases are fact-specific[891], the Claimant did not conduct an analysis of the facts and circumstances that led those experts to agree that a DCF could be used or to the tribunal to accept it.

526. The Respondent will start by pointing out the obvious: the parties' experts in this case do not agree that a DCF can be reliably used. Likewise, the fact that two experts in another case have reached agreement on the appropriateness of using a DFC model, does not in any way support the use of said methodology in the present case. To suggest otherwise, would be a "gross generalization" of the kind the Claimant complains about in its Reply.[892]

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889 Counter-Memorial, ¶ 646.

890 Reply, ¶ 354.

891 *Id*., ¶ 344.

892 Reply, ¶ 343.

527. Even a cursory review of the award in *Gold Reserve* reveals that the Claimant's experts agreed that the DCF could be used because of the commodity nature of the product and detailed cashflow analysis previously performed:

> Claimant's experts have modelled an alternative value based on a weighted average of a DCF valuation, comparable publically traded company and comparables transactions. Although the Brisas Project was never a functioning mine and therefore did not have a history of cashflow which would lend itself to the DCF model, the Tribunal accepts the explanation of both Dr Burrows (CRA) and Mr Kaczmarek (Navigant) that a DCF method can be reliably used in the instant case because of the commodity nature of the product and detailed mining cashflow analysis previously performed. The Tribunal also notes that the experts agreed on the DCF model used, and it is only the inputs that are contested. Many of these have already been discussed above, with the remaining variables discussed below.[893] [Emphasis added]

528. The tribunal also noted that "any DCF calculation is dependent upon an assessment of the quantum of the mineral deposits likely to be extracted"[894] and appears to have factored in the fact that Gold Reserve, unlike ExO, had Mineral Reserves:

> Clearly, any DCF calculation is dependent upon an assessment of the quantum of the mineral deposits likely to be extracted over the 20 year period of the extended concession. The DCF valuation by both Mr Kaczmarek (Navigant) and Dr Burrows (CRA) was initially based on reserves estimated using a layback on the North Parcel of land. Pursuant to Procedural Order No. 2, the experts adjusted the valuation for a no-layback scenario which excluded the North Parcel. This revision required a re-estimation of mineral deposits which in turn required examination of the following issues by the mining and metallurgical experts: (i) pit shape and design; (ii) need for a buffer zone; (iii) impact of stockpiling; (iv) likely delays for obtaining permits in the no-layback scenario; (v) metallurgical issues including ramp-up, mill capacity, and metal recovery rates and concentrate grades; and (vi) their saleability.[895] [Emphasis added]

529. The Tribunal's findings on what was termed "additional resources" in that case –i.e., Inferred Resources– is also relevant in this case because the Claimant is including Inferred Resources in its DCF analysis (the Compass Lexecon valuation) as well as the market-based valuation (the Agrifos valuation):

> However, the Tribunal must consider what the value that a willing buyer would have been likely to ascribe to such resources as at April 2008. Given that, as described by

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893 *Gold Reserve Inc. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)09/1, Award, 22 September 2014, ¶ 830. **CL-0056.**

894 *Id*., ¶ 691.

895 *Gold Reserve Inc. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)09/1, Award, 22 September 2014, ¶ 691. **CL-0056.**

> Respondent, these resources have the "lowest level of geological confidence"[626] and that the Canadian Institute of Mining, Metallurgy and Petroleum on Valuation of Mineral Properties ("CIMVal") Guidelines, to which Claimant refers, acknowledges the "higher risk or uncertainty" associated with these resources and cautions that they should only be used with great care, the Tribunal finds the additional resources to be too speculative to include in the present valuation. The Tribunal concludes in this case that for the purposes of a fair market valuation, it will not ascribe any value to the additional resources in its calculations.[896] [Emphasis added]

530. The Claimant also ignores important details about the development stage of the project. Gold Reserve had a "Geo-exploratory and Techno-economic" feasibility study[897] as well as a "Technical Financial and Environmental Feasibility Study", both approved by the Venezuelan Ministry of Mines.[898] In this case, ExO did not even have an independent PEA, let alone a PFS or FS. Clearly, these two projects are not comparable in terms of their stage of development.

b. *Crystallex v. Venezuela*

531. *Crystallex v. Venezuela* is a case involving a dispute arising from the termination of a mine operation contract over a gold deposit in Venezuela. In its Memorial, the Claimant relied on this case to argue that international tribunals have accepted that "income in mining projects can be forecasted with a reasonable degree of certainty".[899]

532. In the Counter-Memorial, the Respondent discussed important differences between *Crystallex* and this case, and showed, in a comparative table, how the Claimant took out of context the findings of that tribunal.[900] The Claimant did not address any of those points in its Reply, but insists that "the *Crystallex* tribunal found that a forward-looking income-based approach was appropriate to value that project, despite the fact that the company did not have a proven track record of profitability and never started operating the mine".[901]

533. The Claimant also relies on *Crystallex* to argue that the tribunal opted for that approach because it found that Crystallex "had completed the exploration phase, the size of the deposits had been established, the value can be determined based on market prices, and the costs are well known

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896 *Id.*, ¶ 780.

897 *Id.*, ¶ 14.

898 *Id.*, ¶ 18.

899 Memorial, ¶ 394.

900 Counter-Memorial, ¶¶ 692-695.

901 Reply, ¶ 355.

in the industry and can be estimated with a sufficient degree of certainty".[902] What the Claimant leaves out is that Crystallex had Feasibility Studies (FS) and those studies had also been approved by the Ministry of Mines in Venezuela.[903] This is not an inconsequential detail that can be conveniently ignored.

534. Crystallex also had technical reports concluding that the mine had Proven and Probable Reserves of gold.[904] Importantly, the tribunal held that "Las Cristinas" (the name given to the project in that case) had to be considered a "development property" under the CIMVAL Guidelines because it had an approved Feasibility Study:

> The CIMVal Guidelines define "development property" as "a Mineral Property that is being prepared for mineral production and for which economic viability has been demonstrated by a Feasibility Study or Prefeasibility Study and includes a Mineral Property which has a Current positive Feasibility Study or Prefeasibility Study but which is not yet financed or under construction". It is undisputed that the Ministry of Mines had approved Crystallex's Feasibility Study on 6 March 2006. Las Cristinas should thus be considered a "development property" within the meaning of the Guidelines (as opposed to a less advanced "exploration property")1262. In relation to "development properties", the CIMVal Guidelines advise in favor of the application of income- and market-based methodologies, and against the use of cost-based methodologies.[905]
>
> [Emphasis added]

535. None of these important facts are present in this case.

c. *Mohammad Ammar Al-Bahloul v. Tajikistan*

536. *Mohammad Ammar Al-Bahloul v. Tajikistan* involves a claim arising from Tajikistan's failure to issue licenses under hydrocarbon exploration agreements executed between Mr. Al-Bahloul and Tajikistan State Committee for Oil and Gas. The tribunal found that Tajikistan had breached an umbrella clause obligation by not granting licenses pursuant the agreements.

537. While considering the claim for damages, the tribunal acknowledged that the DCF methodology could be justified in certain cases where the investment at issue has no history of

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902 *Id.*, ¶ 355.

903 *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2, Award, 4 April 2016, ¶ 884. **CL-0042.**

904 *Id.*, ¶¶ 878.

905 *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2, Award, 4 April 2016, ¶ 884. **CL-0042.**

operations.[906] However, it rejected its use because of the project's significant unknowns, which casted doubt as to whether it would have been successful had Tajikistan granted the licenses:

> In summary, Claimant asks the Tribunal to accept the assumption that he would have been able to acquire financing for the exploration (but he had no definite offer of financing, just expressions of interest), that upon exploration he would have found hydrocarbons (although the probabilities were low and there is no evidence that any other company seems to have found hydrocarbons so far) and that he would have been able to exploit and sell the oil (although he had no proven experience in this field).
>
> In the Tribunal's view, this entails simply too many unsubstantiated assumptions to justify the application of the DCF-method. The application of the DCF-Method fails from the outset by virtue of the failure to prove that financing was in fact available for the necessary exploration, even if the Respondent had issued the licenses in 2001. The Tribunal notes that this not only affects the application of the DCF-method, but also destroys the causality between the breach committed by the State and the loss of the alleged future cash flows (or "lost profits", as it is characterized by the Claimant).[907]
>
> [Emphasis in the original]

538. The Respondent maintains that the Don Diego Project was in a similar situation on the Valuation Date: there was no reasonable certainty that but for the denial of the MIA, the Project would have been successful, even with the approval of the MIA.

539. In any case, is clear that *Mohammad Ammar Al-Bahloul* does not provide any support for the proposition for which it is cited, namely, that "[t]here is a substantial body of investment treaty cases where tribunals have endorsed using a DCF as the valuation methodology for projects without an operating track record or a history of profitability including mining properties that are not yet in production".[908]

d. *Rusoro v. Venezuela*

540. *Rusoro Mining v. Venezuela* involves a series of measures adopted by Venezuela that altered the legal framework under which it intended to operate and concluded with the

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906 *Mohammad Ammar Al-Bahloul v. The Republic of Tajikistan*, SCC Case No. V064/2008, Final Award, 8 June 2010, ¶¶ 74-75. **CL-0177**.

907 *Mohammad Ammar Al-Bahloul v. The Republic of Tajikistan*, SCC Case No. V064/2008, Final Award, 8 June 2010, ¶¶ 95-96. **CL-0177**.

908 Reply, ¶ 356.

nationalisation of the claimant's investment. The Claimant cites *Rusoro* in support of the idea that international tribunals accept the DCF methodology to value projects without operating history.[909]

541. The Respondent will simply observe that the *Rusoro* tribunal held that the "inexistence of a proper DCF Valuation is –in the Tribunal's opinion– not an oversight, but rather the result of the very special characteristics surrounding Rusoro, which make the use of DCF inappropriate [...]".[910] These characteristics included: Rusoro's lack of a proven record of financial performance (*i.e.*, 75% of the cash flows to be valued derived from non-existing facilities); the high volatility of the price of the gold and; the fact that the mines required an additional USD 310 million in funding and there was no certainty that Rusoro would have been able to secure it.[911]

542. In this case, neither ExO nor Odyssey had a proven record of financial performance, the Project required (according to the Claimant) USS $229.7 million for Phase I and USD $510 million for Phase II (in real terms as of 2016) in CAPEX[912] and ExO had not yet secured any funding for these investments. Hence, under the *Rusoro* analysis, a DCF should not be used in this case.

543. It is also worth noting that the *Rusoro* case involved various projects and the claimant used different approaches to determine the value of projects that had Mineral Resources and those that had Reserves.[913] In the case of projects with Resources which, by definition, have a lower degree of geological confidence, the claimant used a market approach based on comparable transactions.[914] For two additional exploration projects, it opted for a "cost approach". Only the three projects with "defined reserves" were valued using a DCF method.[915]

544. On the use of a DCF, the tribunal further observed:

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909 *Id*., ¶¶ 345, 346.

910 *Rusoro Mining Ltd. v. Bolivarian Republic of Venezuela,* ICSID Case No. ARB (AF)/12/5, Award, 22 August 2016, ¶ 785. **CL-0099**.

911 *Rusoro Mining Ltd. v. Bolivarian Republic of Venezuela,* ICSID Case No. ARB (AF)/12/5, Award, 22 August 2016, ¶ 785. **CL-0099**.

912 First Compass Lexecon Report, ¶¶ 77 and 107.

913 *Rusoro Mining Ltd. v. Bolivarian Republic of Venezuela,* ICSID Case No. ARB (AF)/12/5, Award, 22 August 2016, ¶ 727. **CL-0099**.

914 *Id.*, ¶¶ 723-724.

915 *Id.*, ¶¶ 727 and 781.

> DCF, however, cannot be applied to all types of circumstances, and while in certain enterprises it returns meaningful valuations, in other cases it is inappropriate. DCF works properly if all, or at least a significant part, of the following criteria are met[596]:
>
> - The enterprise has an established historical record of financial performance;
> - There are reliable projections of its future cash flow, ideally in the form of a detailed business plan adopted in *tempore insuspecto*, prepared by the company's officers and verified by an impartial expert;
> - The price at which the enterprise will be able to sell its products or services can be determined with reasonable certainty;
> - The business plan can be financed with self-generated cash, or, if additional cash is required, there must be no uncertainty regarding the availability of financing;
> - It is possible to calculate a meaningful WACC, including a reasonable country risk premium, which fairly represents the political risk in the host country;
> - The enterprise is active in a sector with low regulatory pressure, or, if the regulatory pressure is high, its scope and effects must be predictable: it should be possible to establish the impact of regulation on future cash flows with a minimum of certainty.[916]

545. The Respondent contends that neither ExO or the Project meet most of these requirements: no track record, no independently verified business plan, no certainty around financing, no reasonable certainty about the price at which ExO would have been able to sell its products (in fact, the product was not precisely defined) and even if the mining sector could be regarded as one with low regulatory pressure (*quod non*), ExO was not active in that sector.

546. In any event, even for those projects with defined reserves, the *Rusoro* tribunal rejected the DCF and, instead, favoured a weighted average of the maximum market valuation, book value, and adjusted investment valuation.[917]

e. *Tethyan v. Pakistan*

547. Another case on which the Claimant relies to argue in favour of a DCF approach in this case is *Tethyan v. Pakistan*, which arose from Pakistan's refusal to grant a mining lease. The tribunal in that case noted that the application of income-based valuation methods depends strongly on the circumstances of the individual case, and identified two key issues: (i) "whether, based on the evidence before it, the Tribunal is convinced that in the absence of Respondent's breaches, the

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916 *Rusoro Mining Ltd. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB (AF)/12/5, Award, 22 August 2016, ¶ 759. **CL-0099**.

917 *Id.*, ¶¶ 787-789.

project would have become operational and would also have become profitable",[918] and (ii) "[whether the tribunal] is convinced that it can, with reasonable confidence, determine the amount of these profits based on the inputs provided by the Parties' experts for this calculation".[919] The tribunal concluded that, in the circumstances of that case, the appropriate valuation method was a "modern DCF" or "Certainty-Equivalent DCF".[920]

548. However, there are material differences between *Tethyan* and this arbitration that must be taken into consideration. In *Tethyan*, the claimant argued that it had Proven and Probable Reserves[921] and Pre-Feasibility and Feasibility Studies that were created at the time when the claimants decided to proceed with the project (*i.e.*, not prepared for purposes of the arbitration).[922] Odyssey cannot make such a claim.

549. Furthermore, the claimant in *Tethyan* had previous experience in operating copper mines and gold mines across the globe; it had demonstrated that the project was technically and economically feasible; and also, that it could have proceeded to the construction and operational stages if the mining lease had been granted.[923] None of these elements are present in this case. Odyssey had no Proven Reserves, no Feasibility Studies, no previous mining experience, and no funding for the project.

550. The following extracts demonstrate that the tribunal's decision strongly relied on the existence of a contemporaneous Feasibility Study, funding for the project and respondent's official's contemporaneous acknowledgment that the project was expected to become very lucrative:

> As for the first question, the Tribunal considers that for the reasons to be set out in more detail below, Claimant has established that if Respondent had not denied TCCP's Mining Lease Application in violation of Respondent's obligation under the Treaty, the Reko Diq project would have gone forward and become operational and profitable in due course. More specifically, the Tribunal is convinced that based on the Feasibility Study that Claimant delivered to the GOB on 26 August 2010 and the commitment shown by Claimant as well as its two owners, Antofagasta and Barrick, Claimant would

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[918] *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No. ARB/12/1, Award, 12 July 2019, ¶ 330. **CL-0116**.

[919] *Id.*, ¶ 330.

[920] *Id.*, ¶ 350.

[921] *Id.*, ¶ 462.

[922] *Id.*, ¶¶ 331-332.

[923] *Id.*, ¶¶ 331-332 y 1846.

> have been able to obtain the necessary funds and would also have brought the necessary experience to successfully execute the project in Balochistan.
>
> In particular, the Tribunal cannot follow Respondent's allegation that the Feasibility Study "*was a blueprint for another Mega Project failure*."[324] In the Tribunal's view, the fact that the Feasibility Study was produced at a time when Claimant and its owners were determined to proceed with the project and the fact that its owners combined their impressive experience in operating copper mines and in operating gold mines across the globe, had been sponsoring and overseeing the project during its exploration stage, and were willing to contribute large further amounts of equity into the project, are very strong indications that they believed that this project would become operational and profitable. The Feasibility Study itself was the result of several years of intensive work on the ground, which was overseen by both of Claimant's owners and in which numerous outside consultants and companies participated. To suggest that the team conducting the exploration work and compiling the Feasibility Study had no idea what they were doing is not credible, in particular considering that Antofagasta and Barrick were investing large amounts of equity as well as seconding their own personnel for the project.[924]
>
> […] In the Tribunal's view, the conclusion that the project did not have any value is simply not credible. The Feasibility Study and Expansion Pre-Feasibility Study had confirmed that Reko Diq contained enormous mineral resources and had further demonstrated how these could be extracted and processed to be sold on the metals markets. Contemporaneous statements made by Government officials as well as by Dr. Mubarakmand who led the GOB's own project demonstrate that the Governments shared the belief at the time that the mine was going to be very lucrative and attractive commercially […].[925]
>
> […] Claimant has further demonstrated that, contrary to Respondent's arguments, the project was technically and economically feasible and could have proceeded to construction and the operational stage if the mining lease had been granted. […][926]
>
> [Emphasis added]

551. The *Tethyan* tribunal also cited to Dr. Ripinksy's expert report, which referred to "several important fundamentals" that need to be in place "as at the date of valuation" for a DCF to be considered and certain "fundamental uncertainties" which generally preclude the use of a DCF:

> Respondent's expert **Dr. Ripinsky** stated in his expert report that while, as a general rule, a DCF calculation requires a proven track record of performance, it "appears to be acceptable where … the claimant is able to establish with sufficient certainty the principal assumptions and parameters in its DCF model despite the absence of a track record." He concluded from his review of recent awards concerning mining ventures that "the application of the DCF method to a mining project at an early stage requires several important fundamentals to be in place as at the date of valuation, such as inter alia the existence of confirmed financing necessary for the project as well as clarity

924 *Id.*, ¶¶ 331-332.

925 *Id.*, ¶ 337.

926 *Id.*, ¶ 1846.

> about the commercial terms of operation and a detailed (independently-verified) business plan." In addition, Dr. Ripinsky considered that "technological, logistical, infrastructure, regulatory and other risks" could also constitute "fundamental uncertainties" which generally preclude reliance on the DCF method.[927]
>
> [Emphasis added]

552. Again, none of these fundamentals exist in the present case. Even the Claimant's business plan would not qualify as an "independently verified business plan", as it was prepared by Odyssey for Black River and was not independently verified by anyone. In addition, significant technological, logistical, infrastructure and regulatory risks remained as of the Valuation Date.

2. Claimant's criticisms of the cases cited by the Respondent are superfluous and incorrect

553. In paragraphs 683 to 689 of the Counter-Memorial, the Respondent explained in detail the similarities between this case and *S.A. Silver v. Bolivia* and *Bear Creek v. Peru*. The Respondent will briefly address the Claimant's criticisms of these two cases next.

a. *Bear Creek v. Perú*

554. The Claimant argues that Mexico's reliance in *Bear Creek v. Peru* is misplaced because "a critical issue [in that case] was the indigenous communities' rights and whether the mine had a realistic prospect of obtaining the social license it would need to operate and its impact on valuation."[928] In addition, citing to the dissenting opinion of Professor Philippe Sands, the Claimant argues that "the facts of the instant case bear no resemblance to those of *Bear Creek*, where it was 'blindingly obvious that the viability and success of [the] project… was necessarily dependent on local [communities'] support'".[929]

555. The Respondent never argued that the facts and circumstances in *Bear Creek* were analogous to those in in this case, although they are in fact more similar than the Claimant would like to admit. The Respondent cited it for its conclusion that the focus should be on "whether, having regard to the factual circumstances of this case, a willing buyer might have been found who

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927 *Id.*, ¶ 329.

928 Reply, ¶ 352.

929 Reply, ¶ 353; *Bear Creek Mining Corporation v. Republic of Peru* (ICSID Case No. ARB/14/21) Award, 30 November 2017. **CL-0016**. Dissenting Opinion of Prof. Philippe Sands in *Bear Creek Mining Corporation v. Republic of Peru*, ICSID Case No. ARB/14/21, ¶ 6. **RL-0040**.

would have paid a price calculated by the DCF method, as Claimant alleges",[930] and as an example of a case in which the tribunal rejected the DCF method because the project was at an early stage and had not received many of the government approvals and environmental permits needed to proceed (as was the case for the Don Diego Project as at the valuation date).

556. Social opposition to the Don Diego Project should not be ignored as a factor contributing to the uncertainty surrounding the project (as was the case in *Bear Creek*). In its Counter-Memorial, the Respondent explained that during the public consultations of 2015, Comondú residents, fishermen, and institutions filed dozens of requests for presentations to express their concerns about the Project, which included: the increase of red tides, the effect of noise in different species, Odyssey's lack of expertise of Odyssey on marine mining activities; the long-term negative impacts caused by the project; and the lack of accuracy in the MIA 2015 regarding the cetacean species inhabiting the Golf of Ulloa.[931]

557. In addition, as noted in the legal section, the following governmental and nongovernmental organizations raised serious concerns about the Don Diego Project: La Comisión Nacional de Áreas Naturales Protegidas (CONANP) (government agency); Centro Mexicano de Derecho Ambiental, A.C. (nonprofit); Oceans Future Society (nonprofit); La Asociación Interamericana para la Defensa del Ambiente (AIDA) (nonprofit); WildCoast/Costa Salvaje (nonprofit); Greenpeace (nonprofit); Centro de Investigaciones Biológicas del Noreste, S.C. (research institute); El Instituto de Ciencias del Mar de la UNAM (university institute); Society for Marine Mammalogy (scientific association); UNESCO (United Nations Agency); Sociedades Pesqueras de Baja California (association of fishermen); and Baja California Sur Congress (State Government Congress), among others.[932]

b. *South American Silver v. Bolivia* (S.A. Silver)

558. In its Reply, the Claimant argues that *S.A. Silver* is "obviously distinguishable from the case at hand".[933] First, it points out that the parties to that dispute agreed that "the project qualified

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930 Counter-Memorial, ¶ 682, citing to *Bear Creek Mining Corporation v. Republic of Peru*, ICSID Case No. ARB/14/21, Award, 30 November 2017, ¶ 598. **CL-0016**.

931 *Id.*, ¶¶ 267-268.

932 *Id.*, ¶¶ 279-305. *See* Section II.D.4 *above*.

933 Reply, ¶ 348.

as a mineral resource property under CIMVAL, which meant it had mineral resources but had not been demonstrated to be economically viable in a PFS, feasibility study, or comparable analysis" and, therefore, "the experts for the parties agreed that a DCF approach to valuation was not appropriate."[934] The second objection to the Respondent's reliance on that case is that the mining project in *S.A. Silver* would implement a novel hydrometallurgical process to separate and recover metals contained in the mined sandstone, whereas the Don Diego project "uses conventional and proven dredging methods to lift the phosphate sands and conventional, commercially-available materials processing and handling equipment to separate the phosphate products from the coarse and fine waste."[935]

559. With respect to the Claimant's first observation, the Respondent notes that, from a developmental point of view, the project in *S.A. Silver* shared many characteristics with the Don Diego Project: neither was at an advanced stage, both had Resources but not Proven or Probable Reserves; neither had completed a PFS or FS and, therefore, there was no contemporaneous evidence that the minerals could be extracted economically. More significantly, the Claimant does not address the fact that the tribunal in *S.A. Silver* specifically identified these issues, and more generally "the Project's state of progress" as "preclude[ing] acceptance of the valuation presented by the Claimant", which is precisely the issue in this case:

> In sum, the Tribunal finds that, at the time of Reversion, (i) the Project was not at an advanced stage since it only had the PEA 2011 and had not conducted a prefeasibility or feasibility study; (ii) it did not have mineral reserves, but merely resources, most of them inferred; and (iii) there was no certainty that the metals could be economically extracted through the Metallurgical Process. The Tribunal considers that the Project's state of progress cast serious doubt as to its economic viability and, based on the reasons elaborated below, they preclude acceptance of the valuation presented by the Claimant.[936]
>
> [Emphasis added]

560. The Claimant's second observation is equally misplaced. The Claimant cannot seriously dispute the "novel" nature of the project it intended to pursue in Mexico. While it is true that dredging, in general, has been around for many years, there is not a single operation anywhere in the world that consists in extracting phosphate rock from the seabed and processing it into

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934 *Id.*, ¶ 349.

935 *Id.*, ¶ 351.

936 *S. A. Silver v. Bolivia*, PCA Case No. 2013-15, Award, 22 November 2018, ¶ 823, **CL-0108**.

commercially viable products. Also "novel" was the use of a "deeptrail" unit, which was a new technology in development, and the use of an FPSP.[937]

G. The Claimant continues to engage in undue speculation in determining *quantum*

1. The CIMVAL and VALMIN standards and guidelines

561. In its Reply, the Claimant complains that Mexico and its experts make logical and factual errors by arguing that mining standards forbid the use of forward-looking valuation methods such as DCF for mineral properties like Don Diego.[938] The Claimant summarizes these alleged errors in the following three points:

> a. First, Mexico and its experts implicitly assume that public reporting standards are mandatory and must be met even before a valid, accurate DCF can be developed privately by a sophisticated party. […]
>
> b. Second, Mexico and its experts mischaracterize the content of the mining industry standards and guidelines to which they refer, claiming, for example, that deposits must be classified as reserves or that projects must have a PFS issued before a DCF can be performed. […]
>
> c. Third, Mexico and its experts misapply mining industry standards and guidelines to the Don Diego deposit, stating that Don Diego does not meet certain standards or definitions (such as that of a Mineral Reserve) that are not claimed in this case and are irrelevant to the Deposit.[939]

562. Mexico will start by pointing out that it never argued that the CIMVAL or VALMIN standards and guidelines were mandatory. Mexico referred to these standards and guidelines because they reflect international best practices and because the Claimant argued in its Memorial that they had informed its damages experts' analysis.[940] It was in response to this purported reliance that the Respondent decided to analyze their contents, as evidenced by the following excerpt from the Counter-Memorial:

> 668. It is also worth noting that the mining sector has its own guidelines and standards for valuing mineral properties, which the Claimant not only acknowledges but claims to have applied in this case. Indeed, according to the Claimant, "Compass Lexecon was informed by the Canadian Institute of Mining, Metallurgy and Petroleum's guidelines and standards on the valuation of mineral properties ("CIMVAL")" and "the

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937 Second WGM Report, ¶ 43.

938 Reply, ¶ 358.

939 *Id.*, ¶ 358.

940 Memorial, ¶ 382.

> Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists ("VALMIN") Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets".[860] It is thus worthwhile to examine what those guidelines and standards recommend in situations like this.[941]

563. It is also inaccurate to say that "Mexico and its experts implicitly assume that public reporting standards are mandatory and must be met even before a valid, accurate DCF can be developed privately by a sophisticated party". The Respondent never argued nor implicitly assumed that they were. It simply described the recommendations contained in those standards and guidelines and applied them to the facts of this case.

564. Tellingly, the Claimant does not controvert that both the CIMVAL and VALMIN guidelines contain explicit recommendations regarding the valuation approach to follow depending on the development stage of the mineral property in question. The Claimant also does not dispute that the CIMVAL and VALMIN standards and guidelines reflect the industry's best practices and are therefore relevant to the issue of the assessment of damages in this case, particularly to the selection of the valuation approach. The Tribunal need not waste time determining whether they are mandatory because that is largely beside the point. The fact that the Claimant alleged to have relied on them and the fact that they embody international best practices in the mining industry suffices to establish their relevance.

565. The Claimant also accuses the Respondent of mischaracterizing "the content of the mining industry standards and guidelines to which they refer, claiming, for example, that deposits must be classified as reserves or that projects must have a PFS issued before a DCF can be performed".[942] However, as will be explained next, the Respondent's conclusions follow from CIMVAL and VALMIN's recommendations.

566. As per CIMVAL's Table 1 (reproduced below) the income approach is recommended for "Development Properties" and only "in some cases" for "Mineral Resource Properties". Notably, it is not recommended for "Exploration Properties".

941 Counter-Memorial, ¶ 668.

942 Reply, ¶ 358(b).

TABLE 1. Valuation Approaches for Different Types of Mineral Properties

Valuation Approach	Exploration Properties	Mineral Resource Properties	Development Properties	Production Properties
Income	No	In some cases	Yes	Yes
Market	Yes	Yes	Yes	Yes
Cost	Yes	In some cases	No	No

567. VALMIN contains analogous recommendations, albeit the categories have different names.

568. Thus, in order to determine what CIMVAL and VALMIN recommend for a project such as the Don Diego Project we would need to ascertain the Project's stage of development. The parties disagree on this point, and this is precisely why the issue of whether a Pre-Feasibility Study existed as of the Valuation Date, becomes particularly relevant.

569. As noted in the Counter-Memorial, CIMVAL defines a "Development Property" as: "a Mineral Property that is being prepared for mineral production and for which economic viability has been demonstrated by a Feasibility Study or Prefeasibility Study and includes a Mineral Property which has a Current positive Feasibility Study or Prefeasibility Study but which is not yet financed or under construction."[943] VALMIN, in turn, defines "Development Projects" as "[t]enure holdings for which a decision has been made to proceed with construction or production or both, but which are not yet commissioned or operating at design levels. Economic viability of Development Projects will be proven by at least a Pre-Feasibility Study."[944]

570. Since the Claimant and its experts have openly acknowledged that the Project did not have a PFS as of the Valuation Date,[945] it follows from a plain reading of the CIMVAL and VALMIN

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943 Counter-Memorial, ¶ 674 citing to CIMVAL 2003, p. 8 (p. 10 pdf.). **C-0196**.

944 *Id*., ¶ 674 citing to VALMIN Code 2015, p. 39. **C-0195**.

945 Second Compass Lexecon Report, ¶ 28: "We recognized that, although there was no formal document labeled as pre-feasibility or a definitive feasibility analysis, this does not mean that the Project could not have already been disaggregated to a level consistent with an SSP.". Memorial, ¶ 386: "In their approach to assessing the damages, Professor Spiller and Mr. López Zadicoff acknowledged that Odyssey and ExO were not planning (or preparing) to divest from the Project when SEMARNAT denied the MIA

guidelines that the Don Diego Project was not a Development Property/Project as the Claimant and its damages experts contend.[946] So, the question then becomes whether the Project qualifies as a "Mineral Resource Property" or a "Pre-development Project" and, whether under the circumstances of this case, a valuation under the income approach would be justified since both sets of guidelines recommend it only "in some cases".

571. The parties and their experts also disagree on this important point. However, even if the Project qualified as a Mineral Resource Property (which the Respondent denies), the CIMVAL guidelines specify the conditions that must be satisfied for the inclusion of Mineral Resources in a DCF analysis. Conditions that the Don Diego Project clearly did not meet:

> G4.4 It is generally acceptable to use Mineral Resources in the Income Approach if Mineral Reserves are also present and if, in general, mined ahead of the Mineral Resources in the same Income Approach model, provided that in the opinion of a Qualified Person the Mineral Resources as depicted in the Income Approach model are likely to be economically viable.
>
> G4.5 It is generally acceptable to use Measured and Indicated Mineral Resources in the Income Approach if Mineral Reserves are not present provided that in the opinion of a Qualified Person the Mineral Resources as depicted in the Income Approach model are likely to be economically viable.[947]

572. The Don Diego Project, as we all know now, did not have Mineral Reserves and therefore, G4.4 above does not apply. It is also a fact that, as of the Valuation Date, ExO did not have an opinion by a Qualified Person stating that the Mineral Resources identified in the [redacted] or NI 43-101 "are likely to be economically viable". In fact, the NI 43-101 Technical Report specifically states in section 23.7 that "Oceanica has not completed the basic engineering necessary for the reliable estimating of capital an operating costs estimates".[948] This is important because without a reliable estimate of the capital expenditures (CAPEX) and operating costs (OPEX), it would not be possible to assess the Project's economic viability. It follows from the foregoing that G4.5 quoted above also does not apply.

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and therefore had no need to do it. They had not yet collected and packaged the information that they would otherwise feed into a formal pre-feasibility study. […] ".

946 Memorial, ¶ 388.

947 CIMVAL Standards and Guidelines 2003, p. 24. **C-0196**.

948 NI 43-101 report prepared by Dr. Lamb, p. 83. **C-0084.** The text states: "Oceanica has not completed the basic engineering necessary for the reliable estimating of capital an operating costs estimates".

573. It is important to note that the Boskalis Proposal, on which the Claimant relies to estimate OPEX and CAPEX, *predate*s the NI 43-101 Technical Report.[949] Moreover, Mr. Bryson testifies that "[a]s we developed engineering optimisations with Boskalis, we communicated these with Mr. Lamb, who would offer his own comments, suggestions and/or proposed modifications in light of the ongoing improved understanding of the resource from coring and testing"[950]. It is therefore reasonable to conclude that Dr. Lamb was aware of the Boskalis Proposal and optimizations when he made the observation that "Oceanica has not completed the basic engineering necessary for the reliable estimating of capital an operating costs estimates".

574. WGM, the Respondent's mining expert, shares the view that basic engineering had not been completed. In its first expert report, WGM noted, for example, that metallurgical test work and process design work were at rudimentary level of effort and based largely on generalized assumptions and factor derived from engineering manuals, rather that actual test work or pilot scale work on the deposit" [951]. WGM also confirms that the Don Diego project does not meet the definition of a "mineral resource property" because it lacks the necessary attributes. Specifically, WGM identifies the following:

- the Don Diego project did not have an independent Prefeasibility Study or Feasibility study and thus no demonstrated economic viability;
- the Don Diego project had no market study demonstrating sale of product at the volumes and prices claimed in the [redacted];
- the Don Diego project had not completed any substantive bulk sampling and mineral processing test program to verify a technically and economically viable production process to produce a commercially acceptable product;
- available assay data indicated levels of deleterious elements such as cadmium were at levels which would preclude sale of the product in many markets;
- the Don Diego project had not secured any significant financing to advance the project;
- there was no demonstrated interest in investment in the project from any significant potential consumer of phosphate rock;
- Odyssey had no financial capability on its own to advance the project, and had not secured any substantial financial commitment from others to do so;

949 The Boskalis Proposal (**C-0059**) is dated 28 May 2013 and was revised on 20 December 2013 (**C-0219**). The NI 43-101 Technical Report is dated 30 June 2014 (**C-0084**).

950 Craig Bryson first witness statement, ¶ 87.

951 WGM First Report, ¶ 110.

- the quantum and grade of the mineral resources were subject to significant uncertainty, as noted in Section 3.3, above; and,
- capital cost and operating costs in the [redacted] were developed at a very preliminary level, as detailed in the Lomond Expert Report.[952]

575. Claimant complains that "Mexico and its experts treat CIMVAL and VALMIN with a doctrinaire rigidity".[953] By the same token, Mexico could argue that the Claimant and its experts casually dismiss internationally recognized standards and guidelines simply because they undermine its position in this proceeding.

2. The Don Diego Project was a high-risk project in the exploration stage

576. As noted by WGM in its initial report, to this day, there are no operating offshore phosphate projects. The absence of such operations reflects the considerable technical, economic and environmental risks associated with them, especially in comparison to traditional phosphate rock mining operations. It also reflects the fact that said projects have generally been promoted by junior mining companies, like Odyssey, which lack the technical and financial capabilities to advance them.[954]

577. The phosphate mining and processing industry, and the mining financing community, would have been well aware of the problems facing any offshore phosphate mining project given the well known technical, environmental, operational and financing challenges facing the Chatham Ridge project, the Sandpiper project, and Greenflash project. As noted in Dr. Lamb's Technical Report (C-0084) the Don Diego deposit had been known for over 50 years and, in fact, similar offshore and near shore concessions had been granted in Mexico in prior years but were abandoned for technical and economic reasons.[955]

578. Yet the Claimant continues to argue that the Project was sufficiently advanced to justify a valuation based on a DCF analysis, and that it was at a "pre-feasibility level", despite its acknowledgement that a PFS had not been prepared by April 2016. As explained in the Counter-

952 Second WGM Report, ¶ 95.

953 Reply, ¶ 369.

954 Second WGM Report, ¶ 39.

955 *Id.*, ¶ 46.

Memorial, this is nothing more than a disingenuous attempt to circumvent an inconvenient fact, namely, that a DCF cannot be used to value the Project in the circumstances of this case.[956]

579. The Claimant appears to be under the impression that the inexistence of a contemporaneous evidence of the Project's feasibility (i.e., a PFS, FS) is simply an inconvenience that can be side-stepped through the filing of numerous expert reports. Surprisingly, none of the Claimant's experts purports to conduct a PFS or claims that the Project's viability had been established as of the Valuation Date. Instead, each expert opines on a specific issue that would have been analyzed in the context of a PFS or FS, such as the volume and grade of the phosphates, the market conditions for their product and the estimation of CAPEX and OPEX, among others.

580. The argument appears to be that the Claimant must be deemed to have established the Project's economic and technical feasibility at the time because, in the opinion of its experts, the available information was consistent with the information and level of detail typically found in a PFS. Moreover, since the information on which the experts relied existed at the time of valuation, the suggestion is that their *post hoc* opinions should be given the same probative value as contemporaneous evidence. Both propositions should be rejected by this Tribunal.

581. The Claimant also argues that its evidence stands unrebutted because the Respondent did not specifically respond point by point to each of the 25 expert reports that it has filed in this proceeding.[957] This argument should also be dismissed. Both Quadrant and WGM have generally opined that the Project was at a very early stage of development, that additional studies were required to properly assess its viability and that a DCF is not appropriate under these circumstances. The Claimant is obviously attempting to exploit its funding advantage[958] to overwhelm the Respondent and attempt to circumvent the fact that it has no contemporaneous evidence to back its adventurous claims.

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956 Counter-Memorial, ¶ 656.

957 Reply, ¶¶ 357 and 388.

958 According to Odyssey's 2020 10-K, Claimant is funded up to $ 20 million: "On June 14, 2019, Odyssey executed an agreement that provided up to $6.5 million in funding for prior, current and future costs of the NAFTA action. On January 31, 2020 this agreement was amended and restated, as a result of which the $6.5 million availability increased to $10.0 million (See NOTE H – Litigation Financing). In December 2020, Odyssey announced it secured an additional $10 million from the funder to aid in our NAFTA case." **CLEX-0102,** p. 4.

582. Unlike the Claimant, the Respondent has grounded its position that the Project was in the exploration stage, not only on the opinion of its experts (WGM), but also in the Claimant's contemporaneous documents, such as its 2015 10-K SEC filing, which states that "we [Odyssey] have invested in marine mineral companies that to date are still in the exploration phase and have not begun to earn revenue from operations", and the NI 43-101 Technical Report, which notes that "[t]he Don Diego Phosphorite Project is in the exploration stage [...]"[959] The Claimant has no answer for this evidence other than to hide behind the alleged high bar set by reporting requirements and to suggest that a sophisticated buyer would pay no attention to these remarks that confirm that the Project was in the exploration stage.

583. The fact that further exploration was required is confirmed by the Claimant's own evidence. For example, Dr. Lamb's NI 43-101 Technical Report recommends additional drilling in Measured Resource areas to increase confidence on the continuity of the deposit.[960] Mr. Bryson, in turn, testifies that:

[redacted].[961]

[Emphasis added]

584. It is important to note that the pending decision on the MIA application did not impede this additional exploration work and, contrary to what the Claimant is arguing in this proceeding, the fact that it was not carried out at the time suggests that Odyssey was not entirely confident that the MIA application would be approved and/or that it did not have the financial resources to complete its research.

959 Counter-Memorial, ¶¶ 678-679.

960 **C-0084**, p. 13.

961 First WS Mr. Craig Bryson, ¶ 220.

3. The contemporary evidence does not demonstrate the economic and technical feasibility of the Project

585. In its second report, Quadrant rightly points out that determining the stage of the Project is a technical matter best left for the mining experts. However, from a valuation standpoint there are certain facts that would have been highly relevant to the hypothetical buyer.

586. Dr. Flores refers to several milestones that they Project had yet to achieve which included: establishing its economic viability through a FS, establishing the existence of Reserves, securing a market for its product and completing its development plans and finalize a contract with the contractor entrusted with the development and operation of the Project:

> The fact of the matter is that as of the Valuation Date there were essential milestones that the Project had not achieved. First, the Project had not proven its economic viability, as it did not have mineral reserves. Second, no PFS or more advanced FS was ever conducted by an independent engineering and mining company. Third, Don Diego had not secured a market for its product or interest from major mining companies. Fourth, the operating and development plans had not been finalized and no contract had been established with a third-party to develop or operate the Project. Lastly, Don Diego had not secured the necessary financing for development.[962]

587. He correctly points out that any mining company that is serious about developing their assets into a commercial operation will take certain steps towards completing these milestones before receiving all the necessary permits. However, there is little evidence that the Claimant or ExO took any of these steps in the two years that elapsed between the completion of the NI 43-101 Technical Report in June 2014 and the Valuation date.

588. The Claimant essentially relies on three pieces of contemporaneous evidence that it seeks to re-interpret and re-cast in this proceeding as evidence of pre-feasibility. These are: the NI 43-101 Technical Report prepared by Dr. Lamb, the Boskalis Proposal (with optimizations) and the [redacted]. In fact, Compass Lexecon's starting point for its DCF model is the [redacted] and the NI 43-101.[963]

589. In its first report, Dr. Spiller acknowledges that the project did not have a single document "condensing all the information that would be relied upon in an eventual transaction" and that "[c]ounsel has instructed us to rely, apart from our own review of ExO's business plan and

962 Quadrant Economics Second Report, ¶ 36.

963 Memorial, ¶ 396.

underlying geological, marketing and technical data, on the legal, technical and marketing expert reports prepared by Mr. Federico Kunz, Mr. David Fuller, Mr. Glenn Gruber, Dr. Ian Selby (including the cost analysis contained as annex 3 to his expert report and authored by Dr. Sheehan), and Dr. Peter Heffernan (all but Mr. Kunz jointly referred as the **Technical and Marketing Experts**)."[964] Clearly there is a need to rely on these *post hoc* expert reports because most of the work to establish the economic and technical feasibility of the Project had not been performed by the Valuation Date and the available contemporaneous evidence is insufficient to demonstrate that the project was sufficiently advanced to justify a DCF valuation.

590. It is also worth noting that practically all the expert reports on which Dr. Spiller relies are based on the same set of documents. For example:

- Mr. David Fuller (Lomond & Hill) opines on whether the CAPEX and OPEX estimates for the FPSPs and employee costs presented in the [redacted] are reasonable.[965]
- Mr. Glenn Gruber (Phosphate Beneficiation LLC) was directed to perform an independent assessment of the technical feasibility of the process component of [redacted].[966]
- Dr. Ian Selby evaluates the mineral characterization and technical feasibility of the project and the reasonableness of costs and production estimates, based on the NI 43-101 and the [redacted].[967]
- Dr. Sheehan: reviewed the Boskalis Phosphate Mining Proposal (C-0059) and Boskalis Update Estimates (email chain dated 16 July 2015) (C-0120), and Craig Bryson First Witness Statement.[968]

591. In the following subsections, the Respondent will elaborate upon the contemporaneous evidence on which all of these experts rely with the ultimate goal of justifying the use of a DCF approach to determine the FMV of the project immediately before the denial of the MIA.

a. Boskalis proposal and related documents

(1) The Boskalis Proposal

964 First Compass Lexecon Report, ¶ 7.

965 First Lomond & Hill Report, ¶ 2.2.1.

966 First Glen Gubber Report, p. 1.

967 First Ian Selby Report, ¶¶ 3-4.

968 First Dr. Sheenan Report, p. 1.

592. In response to a Request for Proposals (RFP) issued by Odyssey Marine Operations (OMO), on 28 May 2013, Boskalis submitted a proposal for the mining and processing of phosphates from the Don Diego area which was filed by the Claimant as exhibit C-0059. The document describes the proposal as a "a conceptual description of the mining and processing works"[969] and warns that "a thorough analysis of newly obtained information is highly recommended before final design can be made".[970]

593. The proposal included two different options for the mining side of the operation, which had significant differences in terms of the necessary capital expenditure (CAPEX) and their respective operating costs (OPEX). [redacted]

594. The Boskalis Proposal is replete with cautionary statements and disclaimers that demonstrate the preliminary nature of the work and the need for further planning, analysis, development and testing:

- "The presented proposal is a first step in the development of the optimal solution for the Don Diego phosphate mining. We are convinced that our concept has considerable merits in terms of practicality, feasibility, operability and economic benifits, [sic] with several opportunities for further optimization. We would very much appreciate the opportunity to enter into further development for the presented solution to make the Don Diego phosphate mining a success for Odyssey."[974] [Emphasis added]

969 Boskalis Proposal, p. 12. **C-0059**.

970 *Id.*

971 *Id.*, pp. 3-4.

972 *Id.*, pp. 5 and 46.

973 *Id.*, p. 4.

974 *Id.*, p. 5.

- "In this stage of tendering we have primarily focussed [sic] on the concept development of the mining and processing activities. More detailed plans for the project organisation and key personnel will be developed in subsequent stages."[975] [Emphasis added]
- [redacted][976] [Emphasis added]
- "During this preparation phase for tendering, we have encountered some topics that needs [sic] more investigation in the next stage, such as: [redacted][977] [Emphasis added]
- "[t]he available information is very limited. [redacted][978] [Emphasis added]
- [redacted][979] [Emphasis added]
- "For design purposes, we have assumed that the received sample is representative for the Don Diego phosphate deposit. [redacted][980] [Emphasis added]
- "[redacted]."[981] [Emphasis added]
- "[redacted]

975 *Id.*, p. 48.

976 *Id.*, p. 48.

977 *Id.*, p. 49.

978 *Id.*, p. 13.

979 *Id.*, p. 30.

980 *Id.*

981 *Id.*, p. 49.

[redacted].”[982] [Emphasis added]

595. According to Mr. Gordon’s testimony, on 19 July 2013, Boskalis and OMO signed an “exclusivity agreement” for the Project (Exhibit C-0199). The purpose of the exclusivity contract was to “investigate the feasibility of the business case” (through the “SubStudy”) and “investigate the technical, operational, economical, financial and extent of the Services to be provided by BOSC with regard to the Project” (through the “Study”).[983] Upon completion of both the Study and the SubStudy, the parties to the agreement would make a determination on the feasibility of the services and decide whether to proceed to the execution of an “engineering, procurement and construction contract” (EPC Contract).

596. The scope of the Sub-Study and Study are defined in the agreement as follows:

[redacted].[984]

[Emphasis added]

982 *Id.*, p. 45.

983 [redacted]

984 *Id.*, pp. 1-2.

597. [redacted] This glaring omission strongly suggests that these studies were never undertaken, otherwise they would have been submitted as evidence.

598. There is, however, some evidence of certain updates to Boskalis's original proposal. On 18 June 2014, Boskalis prepared a presentation entitled [redacted]". The Claimant submitted this presentation as Exhibit C-0087 and refers to this document as the [redacted]". The presentation has no detailed explanations on the material, the process or the results, nor does it have any conclusions. As such, it is evidence of nothing other than the conduct of a test.

599. On 25 February 2015, Boskalis submitted an "optimization summary" intended to "[formalize] the information exchanged under e-mail from B.J. Mooibroek to Craig Bryson on 21 March 2014 regarding 'Optimum production rate'."[986] The email is not in evidence, but Boskalis's executive summary notes that "[redacted][987] (i.e., [redacted]."[988]

600. [redacted]

985 *Id.*, p. 3.

986 [redacted]

987 *Id.*, p. 8.

988 *Id.*, p. 9.

989 *Id.* Note that the CAPEX and OPEX totals of the previous proposal were not included in the table. [redacted].

601. Importantly, even this second "optimized" proposal had an expected accuracy of +/- 25% and was presented with significant qualifications. For example, with regard to the , the new proposal notes that .[990]

602. The addition of thermal and does not appear to have been the only change. There were also adjustments in the "P2O5 Product" and "Mining quantity" figures which naturally affect all the OPEX figures expressed on a per ton basis. For example, the OPEX per ton attributed to "Mining" decreased [991] This kind of adjustments are expected as a project is further developed and refined, but they also serve as a reminder of the reasons why an "initial budget estimate" (how Boskalis described it) cannot be reliably used for the purposes of forecasting future cash flows of a project in its early stages.

603. Shifting specifications are also evident from an email dated 16 July 2015 from Mr. Mooibroek to Messrs. Bryson and Longley regarding the so-called "updated budget estimates Don Diego" (Exhibit C-0120). The new "budgetary update <u>with preliminary figures</u>" eliminates the , Note that this appears to have been a change of heart, since

990 *Id.*, Section 3.2.2, p. 9. Added emphasis. See also Quadrant Economics Second Report, ¶ 67.

991 .

[redacted] (see ¶ [591] *supra*). It is also necessary to take into account what WGM points out in its second report on the elimination of these [redacted] options. According to WGM, without [redacted], which would have resulted in significant price discounts in the best of cases.[992]

604. It is also important to consider that the Boskalis budget update expressly indicates that "such a quick update comes with a lot of qualifications and cautionary statements", among which are the following:

- [redacted][993] [Emphasis added]
- [redacted][994] [Emphasis added]
- "[redacted][995] [Emphasis added]
- "[redacted][996]
- [redacted][997]

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992 Second WGM Report, ¶ 12 (xii).

993 Email chain from B. Mooibroek (Boskalis) to C. Bryson and J. Longley, p. 1. **C-120**. [Emphasis added].

994 *Id.*

995 *Id.*, p. 2.

996 *Id*.

997 *Id.*, p. 2. **C-0120**. See also Quadrant Economics Second Report, ¶ 68.

605. México's industry experts (WGM) agree that Boskalis's figures were very much preliminary and do not provide a solid basis for a DCF analysis. WGM, in particular, observes in its second report that the "[c]ost estimates provided by Boskalis are conceptual and as noted below are based on volume, not actual tonnes and grade of material mined."[998] This is significant because "although Boskalis can accurately project the volume of material they can move over time, only test mining of this deposit will provide the range of density and grade that they can achieve in this particular deposit."[999] In addition, WGM notes that "Boskalis has clearly identified that its conceptual estimations are based on test work that is too limited and has identified several areas of insufficiency of information or data, indicating that more test work and research is required."[1000]

(2) The Fuller Report confirms the preliminary nature of the Boskalis estimate

606. The Fuller Report purports to validate Boskalis's CAPEX and OPEX figures for the Floating Production and Storage Platform (FPSP), which was a modified vessel designed to further process the dredged materials.

607. The "Scope and Instructions" section indicates that Mr. Fuller was tasked with determining *inter alia*, whether Boskalis's the CAPEX and OPEX figures for the FPSP were "reasonable", albeit it does not specify whether this refers to reasonableness as an input for a DCF or "reasonable" for a project in its early stages.[1001] The "Summary of Conclusions" section further indicates that "[t]he author is of the view that the Boskalis and, consequently, the Odyssey CAPEX estimates can be best characterized as Class 4 AACE estimates"[1002] and that he "cannot independently verify the accuracy level of +/-25% claimed by Boskalis although, based on upon the author's review and experience, it would appear to be a reasonable assertion."[1003]

998 Second WGM Report, ¶ 77.

999 *Id*., ¶ 79 (ii).

1000 *Id.*, ¶ 78.

1001 First Lomond & Hill Report, ¶ 2.2.

1002 *Id*., p. 2, "Summary of Conclusions".

1003 *Id.*

608. To put into context Dr. Fuller's classification of the Boskalis Proposal, the report contains the following table showing the classification of estimates under AACE International Recommended Practice No. 18R-97:[1004]

	Primary Characteristic	*Secondary Characteristic*			
ESTIMATE CLASS	**LEVEL OF PROJECT DEFINITION** Expressed as % of complete definition	**END USAGE** Typical purpose of estimate	**METHODOLOGY** Typical estimating method	**EXPECTED ACCURACY RANGE** Typical variation in low and high ranges [a]	**PREPARATION EFFORT** Typical degree of effort relative to least cost index of 1 [b]
Class 5	0% to 2%	Concept Screening	Capacity Factored, Parametric Models, Judgment, or Analogy	L: -20% to -50% H: +30% to +100%	1
Class 4	1% to 15%	Study or Feasibility	Equipment Factored or Parametric Models	L: -15% to -30% H: +20% to +50%	2 to 4
Class 3	10% to 40%	Budget, Authorization, or Control	Semi-Detailed Unit Costs with Assembly Level Line Items	L: -10% to -20% H: +10% to +30%	3 to 10
Class 2	30% to 70%	Control or Bid/ Tender	Detailed Unit Cost with Forced Detailed Take-Off	L: -5% to -15% H: +5% to +20%	4 to 20
Class 1	50% to 100%	Check Estimate or Bid/Tender	Detailed Unit Cost with Detailed Take-Off	L: -3% to -10% H: +3% to +15%	5 to 100

Notes: [a] The state of process technology and availability of applicable reference cost data affect the range markedly. The +/- value represents typical percentage variation of actual costs from the cost estimate after application of contingency (typically at a 50% level of confidence) for given scope.
[b] If the range index value of "1" represents 0.005% of project costs, then an index value of 100 represents 0.5%. Estimate preparation effort is highly dependent upon the size of the project and the quality of estimating data and tools.

609. Importantly, according to the AACE recommendations, "[o]nly the level of project definition determines the estimate class" and, as the table demonstrates, the level of project definition in a Class 4 estimate (expressed as a % of complete definition) is between 1% to 15%. This is further confirmed in the "Level of Definition Available" section of Dr. Fuller's report, which notes that "[t]he Project was at a relative early phase" and "consequently, the level of definition is relatively low".[1005]

610. The report goes on to explain that the intention was for Boskalis to be employed on a build-own-operate (BOO) basis and consequently, "much of the engineering detail was held proprietary to Boskalis and a typically limited breakdown of CAPEX and OPEX estimates was provided to

1004 *Id.*, ¶ 4.2.

1005 *Id.*, ¶ 5.1.1.a. Quadrant Economics Second Report ¶ 71.

Odyssey".[1006] There is no evidence to suggest that Boskalis was going to be employed on a build-own-operate basis.[1007] In fact, the exclusivity agreement referenced above indicates that upon completion of the studies, the parties to the agreement (OMO and Boskalis) would decide whether to proceed to the execution of an EPC Contract, not a BOO.[1008]

611. The Fuller report also explains that "[t]he impact on the Project of these issues is that key engineering deliverables are either not available or not adequately progressed, which limits the ability to independently audit the CAPEX estimates for the FPSPs."[1009] As examples of key engineering deliverables that were either not available or not adequately progressed, the report identifies the following:

> a. Discipline design criteria are not available.
>
> b. Detailed mechanical, electrical and instrumentation lists and specifications are not available.
>
> c. The only available process plant layout drawing is little more than a sketch.
>
> d. The required modifications to the bulk carrier are not set out in sufficient detail to independently audit.
>
> e. A detailed project execution plan (with a construction programme) is not available.
>
> f. Detailed CAPEX and OPEX estimates with auditable breakdowns, and a Basis of Estimate are not available.[1010]
>
> [Emphasis added]

612. The foregoing is relevant because it further confirms that the [redacted], which is based on the Boskalis Proposal that was reviewed by Mr. Fuller, is consistent with a preliminary budget that falls short of the support needed for a DCF analysis. It simply does not follow from Dr. Fuller's conclusions that Boskalis's OPEX and CAPEX estimations could be reasonably used to estimate future cash flows.

1006 First Lomond & Hill Report, ¶ 5.1.1.b.

1007 In this regard, the Quadrant Economics Second Report, ¶ 71, states: "In fact, the evidence indicates that, if a partnership would have materialized between Boskalis and Odyssey, it would have been formalized through an EPC Contract, not a BOO contract."

1008 Second WGM Report, ¶¶ 41-42.

1009 First Lomond & Hill Report, ¶ 5.1.2. Emphasis added.

1010 *Id.*, ¶ 5.1.2.

b. The NI-43 101 Technical Report

613. The NI 43-101 report was prepared by Mr. Henry Lamb on 30 June 2014. In its Reply, the Claimant describes the NI 40-101 report as a robust technical report "based on [redacted] taken from the seabed inside the Don Diego Concession and independently tested by a major phosphate laboratory, conservatively established a world class Mineral Resource of 494 million tons of high quality, uniform, and continuous unconsolidated phosphate sands".[1011]

614. Putting aside for the time being WGM's opinions regarding the lack of compliance of Dr. Lamb's report with the standards required for a NI 43-101 report, it is clear, even from a cursory review of the document, that it does not provide adequate support for a valuation under the income approach. A good example can be found under the section "Statement of Certification by the Principal Author and Editor", where Mr. Lamb states:

> 15. I have read National Instrument 43-101 and Form 43-101 F1. This report has been prepared in compliance with these documents to the best of my understanding; with the exception of the capital and operating cost estimates and the economic analysis that are relying on assumptions and general (non-specific deposit) estimates often applied in the phosphate industry for early stage projects. In additional activities are on-going with respect to mineral beneficiation options, no basic engineering has been performed, a feasibility study has not been prepared and the market potential has not been evaluated.[1012]
>
> [Emphasis added]

615. The NI 43-101 Technical Report also includes a series of recommendations that are not consistent with a project at pre-feasibility and, in any event, do not appear to have been followed by Odyssey or ExO. These recommendations are summarized in section 1.7 of the Report:

> 1.7 RECOMMENDATIONS OF THE QUALIFIED PERSON
>
> The QP recommends the following:
>
> - Implement a drilling, sampling and testing program when the additional mining licenses are granted;
>
> - Update and revise the phosphate rock concentrate resources with the additional data from the new mining licenses;
>
> - Complete a continuous wet process phosphoric acid pilot plant test using a representative bulk sample of the Don Diego Phosphate Rock Concentrate;
>
> - Apply for additional mining licenses within the Done Diego Mineral License for those areas that have been abandoned by other parties;

1011 Reply, ¶ 324.

1012 NI 43-101 prepared by Dr. Lamb, p. 81. **C-0084**.

- Commission a market analysis for the project and investigate the opportunities for off-take agreements;

- Develop a conceptual 20-year mine plan with a supporting production schedule;

- Begin a basic engineering assessment (FEL 3) of the project using a third-party engineering company experienced in marine mining and phosphorite mineral processing;

- Develop reliable capital and operating cost estimates; and,

- Develop a Financial/Economic model.[1013]

616. Particularly noticeable is the absence of the basic engineering assessment. Dr. Lamb recommended commissioning a feasibility study (FEL 3) of the project using a third-party engineering company experienced in marine mining and phosphorite mineral processing. Dr. Lamb estimated the cost for the study at $6 to $8 million. Dr. Lamb also offered the alternative of a lower cost option, which was to commission a two-stage program for a Pre-Feasibility Study and, depending upon the results, then move to a FEL 3 assessment:

20.7 FEASIBILITY STUDY

Commission a basic engineering assessment (FEL 3) of the project using a third-party engineering company experienced in marine mining and phosphorite mineral processing. The estimated cost for this study is estimated at $6 to $8 million. A lower cost option is to commission a two-stage program for a Pre-Feasibility Study and depending upon the results then move to a FEL 3 assessment.[1014]

617. There is no evidence that Dr. Lamb's recommendation of a "basic engineering assessment (FEL 3)" or the two-stage program were implemented.

c. The [redacted]

618. The [redacted]. According to Mr. Bryson, the [redacted] was done at the request of [redacted] who asked for an updated business plan that incorporated a new configuration and lined up production targets and pricing assumptions with commercial market opportunities.[1015]

1013 *Id.*, p. 14.

1014 *Id.*, p. 78.

1015 Craig Bryson First Witness Statement, ¶ 185.

619. The Claimant does not dispute that the [redacted] was not verified by an independent third party, nor WGM's assertion that, at best, the [redacted] can be considered an internal scoping study (*i.e.,* "Scoping Study").

620. In its Reply, the Claimant affirms that the [redacted] that was most developed at the time of the expropriation, and as such forms the point of departure for the hypothetical buyer's due diligence inquiry".[1016] The Claimant describes the [redacted] along with the MIA, as "the final configuration of the engineering solution immediately prior to Mexico's Denial of the MIA".[1017] These assertions fly in the face of the multiple references to the need of additional studies and analyses within the same document:

- [redacted]."[1018] [Emphasis added]
- [redacted]."[1019]
- [redacted]".[1020]
- [redacted]."[1021] (See section IV.G.3.d.2 below for a discussion of the phosphoric acid test performed by Jacobs Engineering)

621. Under the section entitled [redacted].[1022] This appears to be a reference the Boskalis Proposal dated 28 May 2013, [redacted] As shown in the preceding section

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1016 Reply, footnote 892.

1017 Memorial, ¶ 79.

1018 [redacted]

1019 *Id.*, p. 14.

1020 *Id.*, p. 7.

1021 *Id.*, p. 14.

1022 *Id.*, p. 7.

(*supra*) Boskalis's estimates were very much preliminary and do not provide a solid basis for a DCF analysis.

622. This is further confirmed in the [redacted]:

> [redacted].[1023]
>
> [Emphasis added]

623. This passage is especially relevant because, as noted in the Counter-Memorial, the [redacted] Compass Lexecon's valuation (and now the Agrifos valuation) rely on "inferred resources" to estimate the value of ExO. The Claimant has suggested that these statements are made in compliance to regulations intended to protect individual investors and that a sophisticated investor would turn a blind eye to them.[1024] The Respondent will simply point out that the regulations exist for a reason and the Tribunal should consider that Dr. Lamb's statement that "'Inferred mineral resources' have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility" is true and correct, unless the Claimant is prepared to acknowledge that the [redacted] contains false statements and should not be trusted.

624. The fact is that the [redacted] does not appear to have been prepared for valuation purposes but rather as an instrument to justify additional investment to further the development of the Project. Indeed, Quadrant describes it as "marketing material prepared by Claimant to raise capital for the Project in 2015".[1025] According to Quadrant, the information contained therein amounts to

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1023 *Id.*, p. 29.

1024 Reply, ¶ 360.

1025 Quadrant Economics Second Report, ¶ 192.

what has been described in financial literature as "sales puffery" that "overaccentuate the positive and minimize the negative… in an attempt to make investors believe that there is an urgent need to invest quickly".[1026] Quadrant also notes in its second report that, since [redacted] was not verified by an impartial third-party, any prudent potential investor would have taken it with a good dose of skepticism, perhaps concluding that the investment opportunity was too good to be true or that the model's assumptions were unrealistic.[1027]

625. In sum, while it is reasonable to assume that the [redacted] would have been part of any hypothetical buyer's due diligence, that does not mean that he/she/it would have taken it at face value. The hypothetical buyer would also consider other contemporaneous evidence and indicators, such as Odyssey's market capitalization and the call option agreement between Odyssey and MINOSA[1028] to ascertain the Project's value.

626. Lastly, the Respondent would like to draw the Tribunal's attention to the significant difference between the NPV of the Project [redacted][1029]) with the value according to Compass Lexecon ([redacted][1030]). The fact that Compass Lexecon's result is 75% lower speaks volumes about the accuracy and reliability of the [redacted] and is also a reminder of the dangers of using a DCF to value a project without basic engineering and other crucial information.

d. Other related contemporaneous evidence

627. The Claimant has referred to other documents in support of its contention that the Project's contemporaneous information and data was not limited to the [redacted] and "would have been available to a willing buyer as of the Date of Valuation."[1031] This section briefly discusses this evidence.

1026 *Id.*, ¶¶ 105 and 192.

1027 *Id.*, ¶¶ 104-106.

1028 This option gave MINOSA the opportunity to acquire Claimant's 54% interest in the Project for US $40 million (which would imply a value of US $74 million for the entire project). The Tribunal should note that the option could have been exercised on any date prior to its expiration on March 11, 2011 –i.e. shortly before the valuation date– however, MINOSA decided not to exercise the option, indicating that ExO's stake was not worth the 40 million.

1029 [redacted] pp. 3 and 7. **C-0134**.

1030 Second Compass Lexecon Report, Table 1, ¶ 26.

1031 Reply, ¶ 339.

(1) Dr. Lamb's Technical Memo on the Preliminary Assessment of the Potential to Produce Phosphate Rock (C-0112)

628. One of the documents that according to the Claimant would have been available to a willing buyer as of the Date of Valuation is Dr. Lamb's Technical Memo on the Preliminary Assessment of the Potential to Produce Phosphate Rock, dated 14 May 2015.

629. The Memo was prepared because Oceanica Resources S. de R.L. Panama requested a "resource estimate for mining and producing a sized phosphate rock product with the intent to produce a commercial phosphate rock with the intent of minimal processing at sea and at the lowest capital and operating cost".[1032] Dr. Lamb's conclusions suggest that further analysis was required, as evidenced below:

- [redacted].[1033]
- [redacted][1034]
- [redacted]."[1035]
- "[redacted]."[1036]
- [redacted]

[1032] Memorandum from Dr. Lamb, p. 1. **C-0112**.

[1033] *Id.*, p. 3.

[1034] *Id.*

[1035] *Id.*

[1036] *Id.*, p. 4.

[redacted]". [1037]

- [redacted] [1038]

630. As can be seen, Dr. Lamb's opinion was presented with many reservations and cautionary statements.

(2) Jacobs Engineering Acidulation Test (C-0469)

631. [redacted] [1040] A preliminary test was pefromed on May 19, 2015 by Jacobs Engineering, but it is not the rigorous test that the Claimant portrays it to be.

632. The Reply affirms that "[f]urther testing by global mining engineering firms, including Jacobs Engineering, demonstrated that this commercial-grade phosphate rock performed exceptionally well when 'acidulated' into phosphoric acid, making it commercially attractive as a feedstock for fertilizer".[1041] A fair reading of Jacbos's Report demonstrates nothing of the sort. In

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1037 *Id.*, p. 5.

1038 *Id.*, p. 5.

1039 [redacted], p. 6. **C-0134**.

1040 *Id.*, p. 14. **C-0134**.

1041 Reply, ¶ 385(iv).

fact, it only confirms the Claimat's propensity to embellish, as can br seen from the following excerpts of the document:

- [redacted]."[1042]
- [redacted]."[1043]
- [redacted][1044]

633. Respondent respectfully submits that no reasonably informed hypothetical buyer would have concluded that ExO had achieved this "primary goal for business plan development" based on a very small-scale experiment that did not even follow the examiner's procedural standards. Confirmation through a proper acidulation test clearly would have been required, however there is no evidence that such a test has been performed.

4. The Second WGM Report confirms that a DCF approach would be unwarrentd and highly speculative

634. At the request of Mexico, WGM has prepared a second expert report intended to answer Claimant's and experts' criticism to its first report. This section summarizes WGM's responses and confirms that a DCF approach to value ExO or Don Diego Project would be wholly speculative.

a. Mineral Resources estimates

635. WGM questions the mineral resources estimate prepared by Dr. Lamb. As further explained in its second report, a significant factor of resource definition and continuity is particle size distribution, and this information is absent from over a third of the drillhole database.[1045] Likewise, although there is a correlation between particle size and grade, actual results demonstrate a significant variation in this ratio. Hence the need for practitioners to "ensure that data abundance, appropriateness, and spatial distribution are adequate to produce acceptable experimental

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1042 [redacted] **C-0469**.

1043 *Id.*

1044 *Id.*

1045 Second WGM Report ¶ 50.

variograms/correlograms to which models can be fitted with confidence".[1046] Relying exclusively on assays to estimate particle size distribution and *vice versa* is not considered reliable and seriously undermines the credibility of spatial continuity.[1047]

636. On this point, WGM also notes that Dr. Lamb's recommendation to conduct further drilling in Measured Resources areas with the aim of increasing confidence in continuity, contradicts CIM's requirements for sufficient "exploration, sampling and testing" to define a Measured Mineral Resource, and is indicative of a lack of understanding and confidence in the deposit´s geological continuity. [redacted].[1048]

637. WGM concludes that Dr. Lamb's assumptions about the estimated distribution and thickness of the mineral deposit are based, to a large extent, on projections between holes, and there may be considerable variability between samples. This is also a factor that any reasonably informed buyer would have taken into consideration when considering whether a DCF analysis would produce a reasonable estimate of the value of the Don Diego Project.

638. Moreover, by CIM standards, the classification of industrial mineral resources must demonstrate the marketability of product, which Dr. Lamb did not adequately address. Unlike other "commodities" such as gold, the commercialization of industrial minerals is more complex and has significantly more barriers to entry.[1049] As resource classification categories increase their level of confidence, from "Inferred" to "Indicated" to "Measured", the ability for the product to meet specific customer specifications must be demonstrated. The documentation submitted into evidence does not indicate that a customer had been secured or that the specifications of any particular customer had been met.[1050]

1046 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019), p. 20, **RL-0143**.

1047 Second WGM Report, ¶ 50

1048 *Id.*, ¶ 53.

1049 *Id.*, ¶ 61.

1050 *Id.*, ¶ 62.

639. WGM concludes that, in the absence of the aforementioend data, the mineralization cannot be clasified as a Mineral Resource. At most it would be an Exploration Target as per the definition in the CRIRSCO standards.[1051]

b. Market size

640. WGM explains in its second report that CRU incorrectly puts the total import market for phosphate rock in 2015 at 30.3 Mt and therefore, overstates the size of the available importation market for the so-called "sized product" that the Project intended to produce.[1052]

641. According to the IFA statics, total phosphate rock imports in 2016 were approximately 27.6 Mt or 9% lower than CRU's estimate. WGM concludes from this new figure that the total potential available market for Don Diego Project in 2016 was 12.8 Mt and not the 15.2 Mt that CRU assumes. This means that the Project would have had to secure 38.93% of the available market to achieve the market volumes it projected.[1053]

642. Such a significant market share is unrealistic, particulary since various large-scale, export-oriented and far mor advanced projects, such as Hinda project (4Mt/yr) and Boabab (0.6 Mt/year), were being developed at the same time. As explained in the second WGM report, the entry of some of these projects into the market, even at reduced production rates, would have had a significant impact on phosphate rock prices and the market that would be available to the Don Diego Project. CRU does not take into account any of these considerations in its market analysis.[1054]

643. WGM also notes that, [redacted], the Project was going to produce [redacted] and no single independent phosphate rock mining operation has ever achieved product volumes in excess of [redacted]. Even large integrated producers typically do not have phosphate rock production in excess of [redacted] from a sinlge mine –the exceptions being integrated international fertilizer producers such as Mosaic, Nutrien, SImplot, OCP, Ma'aden, Jordan Phosphate, EuroChem and PhosAgro.[1055]

1051 *Id.*, ¶ 63.

1052 *Id.*, ¶ 18.

1053 *Id.*, ¶ 22.

1054 *Id.*, ¶ 23.

1055 *Id.*, ¶ 35.

c. Potential clients

644. According to WGM "[the]Statements by CRU that Don Diego could secure markets are completely unsupported and based on pure speculation."[1056] WGM points out that no factual data have been presented to demonstrate that ExO had secured any commitments for product offtake, even at the level of general interest inquiries.[1057]

645. On the other hand, CRU's statements that the Don Diego Project product would have been competitive in high-level products from other sources[1058] is based exclusively on an assumed price differential. However, while CRU purports to adjust the price received by Don Diego Project due to differences in quality, transportation costs and market entry discount, it has not submitted evidence demonstrating that such market opportunities existed on the Valuation Date, or that the discounts would have achieved the expected results of attracting market attention. The examples used by CRU as to the cost competitiveness of the Project's product are predicated on an estimated delivered cost in 2033, which is too distant in time to be used as a basis for any claim.[1059]

646. More specifically, neither the Claimant nor its expert have provided support for the contention that a customer base capable of absorbing the estimated offtake of [redacted] existed at the time. As WGM indicates in its second report, the potential clients identified by CRU had existing commitments with other parties and thus, they were unlikely to become ExO's clients.

647. [redacted]:

- [redacted]"[1060];
- [redacted]

1056 *Id.*, ¶ 14.

1057 *Id.*

1058 [redacted]

1059 Second WGM Report, ¶ 15.

1060 *Id.*, ¶ 24.

[redacted][1061]

648. [redacted][1064]

649. [redacted].[1066]

650. In fact, [redacted].”[1067]

1061 *Id.*, ¶ 25.

1062 [redacted] WS [redacted], ¶ 11.

1063 [redacted].

1064 Second WGM Report, ¶ 16.

1065 *Id.*, ¶ 31.

1066 *Id.*, ¶ 29.

1067 WS [redacted], ¶ 14.

651. In view of the foregoing, the Respondent contends that any assumption that ExO could have sold the volumes of product used in the DFC analysis is entirely speculative and not supported.

d. Price

652. Compass Lexecon DFC analysis relies on CRU's price estimates to derive future sales. To obtain these price estimates, CRU starts with the Moroccan K10 price and adjusts it to account for differences in various factors that affect quality. CRU also applies a discount to attract interest and secure access to other markets, as well as a freight adjustment to account for the different mix of customers relative to OCP in Morocco.[1068]

653. In its first report, the Respondent's industry expert (WGM) argued that, due to its closer similarity with the characteristics of the Project's intended product, the appropriate basis of comparison for the purposes of price assessment was the Egyptian FOB Price for phosphate rock, as opposed to the Moroccan K10 price, which is significantly more expensive. Subsequently, WGM obtained its own price estimate by adjusting the price of the Egyptian phosphoric rock to compensate for differences in moisture, Minor Element Ratio (MER) and CaO: P_2O_5 ratio. WGM then applied a market entry discount and a freight adjustment. [redacted]

654. In its second report CRU argues that WGM's assumption that the proper basis for the price estimate is the Egyptian price is wrong for a number of reasons, ranging from the inconsistency in Egypt's rock grade and quality specifications, to its suitability for the production of phosphoric acid and fertilizers. WGM disagrees with CRU's criticism, noting in its second report, *inter alia,* that:

- "As prices for Egyptian and other North African phosphate rock are already adjusted against the Moroccan K10 price benchmark, a direct comparison of the attributes of the proposed Don Diego product against a similar quality basket of Egyptian phosphate rock product is appropriate".[1069]

1068 First WGM Report, ¶¶ 89-93. Also *See* First CRU Report, p. 93.

1069 Second WGM Report, ¶ 12(ix).

- "Potential product from Don Diego would vary in phosphate content [redacted][1070]
- Egyptian phosphate rock is primarily sold on the spot market. Product from Don Diego would similarly be sold on the spot market; no long terms sales agreements, letters of intent or even expressions of interest were in hand as of 2016 to support an alternative market viewpoint.[1071]
- "The product characteristics [redacted][1072]

655. Based on these observations, WGM concludes that an analysis based on Egyptian phosphate price is reasonable and supported by the information available as the Valuation Date.[1073]

656. WGM also takes issue with CRU's assumption that the Project's potential product would be suitable for production of high-quality phosphoric acid, noting that no evidence has been adduced to support that assumption.[1074] The Tribunal will recall, from the discussion in section IV.G.3.d.2 *supra,* that the acidulation test performed by Jacobs's was "not conducted according to Jacob's standard testing procedure, but rather as a very small scale experiment."[1075]

657. Finally, when criticizing WGM for its analysis based on the Egyptian rock, CRU accuses WGM of "misstat[ing] that other phosphate rock prices are adjusted against this benchmark [Morocco K10] based solely on P_2O_5 content".[1076] As explained in its second report, WGM never argued such a thing. What WGM stated is that "everything else being equal, phosphate prices are adjusted against the K10 reference price in proportion to the contained P_2O_5."[1077] Dr. Heffernan, is of course entitled to his own opinion on how best to estimate prices, but he is not entitled to mischaracterize WGM's report in order to discredit its conclusions.

1070 *Id.*, ¶ 12(v).

1071 *Id.*, ¶ 12(iii).

1072 *Id.*, ¶ 12(ix).

1073 *Id.* ¶ 12(xi)

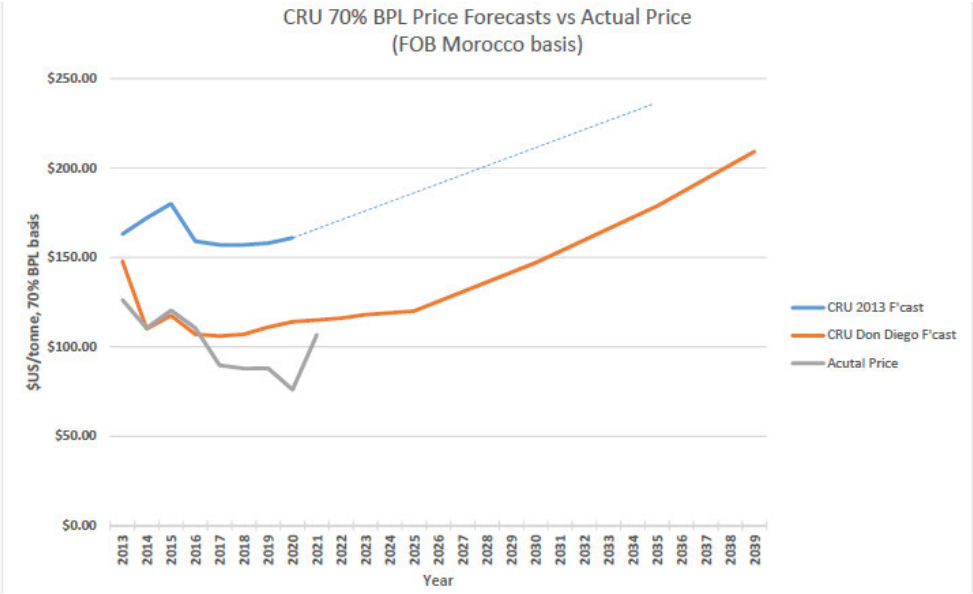
1074 *Id.*, ¶ 12.

1075 Jacobs Engineering Acid Test, p. 2. **C-0469**.

1076 Second CRU Report, p. 7. Emphasis in the original.

1077 First WGM Report ¶ 87, first bullet.

658. In any case, it is important to keep in mind that projecting prices into the distant future is a very difficult and imprecise endeavor. This is evidenced by a chart prepared by WGM which compares a forecast prepared by CRU for the Arianne Phosphate Project in 2013 (blue), the forecast for Don Diego Project (orange) and the available observed prices (grey). The chart demonstrates that both CRU forecasts overstated the price level by a significant margin:



659. Different expert opinions on variable as important as the price of the product will surely have a significant impact on the views of a hypothetical buyer. WGM's prices analysis yields results that are approximately 50% below CRU's estimates. The Respondent submits that any reasonably informed willing buyer, faced with such divergent expert views in one of the key variables in any DCF analysis, would be reluctant to rely on this methodology to estimate the Project's value or would discount the projected cash flows much more heavily than Compass Lexecon does.

e. Financing

660. Another factor that international tribunals consider when pondering whether a DCF analysis is appropriate is the existence of adequate financing. As noted earlier in this pleading, the Project required substantial financing to become a successful business. Yet, the Claimant has offered no evidence to confirm that it would have had the resources to transform the Project into a

running operation. Even Mr. Gordon points out: "Odyssey was facing a cash crunch and badly needed an infusion to finance our ongoing operations."[1078]

661. In its second report, WGM has identified additional circumstances that would have made it much more difficult for ExO to secure markets and financing, including: an extremely difficult financing environment for young phosphate mining companies in the 2014 to 2016 time period; the deterioration of the market price outlook for phosphate rock in the same period; the significant production expansions of the main integrated phosphate producers; and a decline in the market for free trade phosphate rock.[1079]

662. In view of the extremely difficult financing and market conditions that the Project faced, WGM is of the view that "any projections of project start-up and maximization of production capacity within the time period contemplated in the [redacted] and in the retrospective CRU market report are not credible."[1080]

f. Operational Considerations

663. In its second report, Mr. Gruber notes that dredging for phosphate mineralization is not a novel concept. While WGM accepts that the proposition may be true for small-scale dredging operations in land-locked, purpose-built shallow ponds in inland Florida, that is not the case for very large scale dredging operations in open ocean, like the one ExO intended to implement in Mexico.[1081]

664. As explained in WGM's second report, Mr. Gruber dismisses the technical risks associated with the Project as trivial based on a *post-hoc* engineering analysis of a conceptual process. However, as WGM indicates, the amount of test work to define particle size distributions, recoveries and grades that was completed by the Valuation Data were "extremely limited and at bench top level". In particular, no large-scale representative bulk samples of material had been processed in pilot plant operations simulating realistic flow rates, solids densities or other process conditions.[1082] Without this information it is impossible to properly assess the technical risk.

1078 WS Mr. Gordon, ¶ 67. Quadrant Economics Second Report, ¶ 74.

1079 Second WGM Report, ¶ 28.

1080 *Id*.

1081 *Id.*, ¶ 70.

1082 *Id.*, ¶ 71.

665. WGM notes that even projects that have completed significant metallurgical test work, and are based on well-known process flow sheets, and have been engineered by experienced consulting firms, have failed at start-up. As an example, WGM offers the *Elandfonstein* in South Africa which failed almost immediately after start-up in 2018 and has not returned to production despite substantial additional process test work and flow-sheet redesign.[1083]

666. The Don Diego Project faced many potential technical risks. WGM identifies at least two in its second report related to processing density and ship cycling. With regard to the first, WGM explains that maintaining the undertaking made to SEMARNAT to operate the project with only one discharge of tailings from the FPSP ship to the ocean floor, the operation would require to control for density. However, WGM considers that maintaining the density in the required range is not reasonable under the process flowsheet.[1084] With respect to the second, the operating schedule does not appear to make enough provisions for the required ship movements in the operating plan for the average weather conditions. [1085]

667. In relation to the previous point, the Respondent submits together with this brief, an expert report prepared by the firm Taut Solutions. Said report explains that the Boskalis Proposal was preliminary and conceptual and, therefore, did not have the level of detail, design and specification of equipment, nor did it consider provisions necessary to face contingencies such as tropical storms and other details of the operation. As an example of these omissions, WGM identifies the need for support vessels and other mooring solutions for the FPSP vessel in order to safely carry out an operation of this nature within the anticipated timeframe.[1086] For example, the Taut Report notes:

F. [redacted]

1083 *Id.*, ¶ 72.

1084 *Id.*, ¶ 79.

1085 *Id.*, ¶ 82, *et seq.*

1086 Taut Solutions Report, ¶ 8.

[redacted]

[redacted].[1087]

668. Moreover, the Respondent's shipping operations experts considers that [redacted]

[redacted]

[redacted]

[redacted].[1088]

669. Finally, the Mexico's expert points out that there are inconsistencies between the Boskalis Proposal and the [redacted] The most obvious is the fact that [redacted] This raises questions about what the [redacted] includes under the heading "Proven Technology and Process Assure Operation Success".[1089] The Respondent notes in this context that the Claimant has not provided a witness statement from Boskalis which explains these Project considerations.

1087 Taut Solutions Report, ¶ 15.F.

1088 Taut Solutions Report, ¶ 16.A.

1089 Taut Solutions Report, ¶ 10.

H. The Second Report of Quadrant Economics

670. This section provides a non-exhaustive summary of the main points addressed in the second Quadrant report.

1. Several companies in the past have tried unsuccessfully to exploit the Don Diego Project deposit.

671. Quadrant's second report indicates that the phosphate deposits in the Project's area have been known for more than 50 years and despite the fact that at least to other companies have obtained concessions to exploit the deposit, a commercial operation has never been developed.[1090] The report explains that Innophos, one of the companies that obtained concessions in the area and one of the largest phosphate producers in the world, expended considerable amounts to explore the area and try to develop the operation. However, after spending $10-15 million on exploration, Innophos decided not to pursue the opportunity and abandoned its concessions in 2014.

672. Quadrant's second report also explains that Odyssey's interest in Don Diego began at a time when phosphate prices were on an upward trend. By the end of 2011, prices had increased by 56% in the year and 117% compared to the levels reached at the beginning of 2010.[1091] Quadrant identifies this as an important fact, as reductions in market prices can derail development plans for mining projects.[1092]

673. All this would have been considered by a duly informed hypothetical buyer to set the price that he would have been willing to pay for the Project on the Valuation Date. In particular, he would have learned that two major companies had obtained concessions in the area and were interested in exploiting the deposit, and at least one had invested a considerable sum in exploration. Despite this investment of time and money, these projects never materialized into a commercial operation and were abandoned.[1093]

674. Finally, it should be noted that the foregoing debunks the Claimant's theory that the extraction and production techniques it intended to use were not novel and used technologies known for many years (*i.e.*, dredging). The Respondent observes that, if that were the case, both

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1090 Quadrant Economics Second Report, ¶¶ 19-31.

1091 *Id.*, ¶ 33.

1092 *Id.*

1093 *Id.*, ¶ 34.

PhosMex and Innophos (the two companies that had obtained concessions in the area) could have contracted the services of companies like Boskalis and implement their respective projects with relative ease. Also, as WGM observes in its second report, it is not true that the Project was based on "commercial off the shelf technologies and equipment", as Mr. Fuller points out. WGM specifically refers to the alleged use of the so-called "deeptrail" unit, which was a technology under development.[1094]

2. The market approach is the correct approach given the level of development of Don Diego Project

675. Based on the Project's development status, WGM's technical opinion, the guidance provided by the CIMVAL and VALMIN guidelines and the Claimant's own evidence, Quadrant concludes that the Project was still in the exploration stage and reaffirms that the correct valuation approach in this case is the market approach.[1095]

676. In particular, Quadrant argues that the market capitalization methodology –*i.e.,* one of the methods under the market approach– can be reliably used to determine the value of the Project because Odyssey was a publicly traded company primarily engaged in the development of the Project. Therefore, any movements in its share price before and after the denial of the MIA are a good indicator of the value of Odyssey's participation in ExO.[1096]

677. Quadrant also reiterates that the DCF methodology is not appropriate in this case because the Project was not a going concern as of the Valuation Date and it had not established Reserves or secured a market for its product. In addition, essential documents such as a FS or Offtake Agreements (OTAs) are not available and, therefore, any attempt to model future cash flows would be completely speculative and unreliable.[1097] Dr. Flores (from Quadrant Economics) notes that it is common to use the DCF method to valuate projects in a more advanced stage of development (as indicated in CIMVAL and VALMIN) for which there is sufficient information to project results –*i.e.,* a history of profitable operations.

1094 Second WGM Report, ¶ 43(i).

1095 Quadrant Economics Second Report, ¶¶ 88-89.

1096 *Id.*, ¶ 90.

1097 *Id.*, ¶¶ 91 *et seq.*

678. Quadrant insists that the World Bank Guidelines on the Treatment of Foreign Direct Investment (WB Guidelines) remain relevant and conform to current business practices.[1098] As proof of the foregoing, Quadrant refers to a recent case in which Dr. Flores acted as a damages expert for the respondent, in which the tribunal concluded, based on the WB Guidelines, that: "a DCF valuation may be suited to assess the FMV of a going concern with a proven record of profitability" and "as confirmed by a consistent line of cases, DCF is generally inappropriate if the company is not a going concern and lacks an established record of profitability."[1099]

679. Quadrant also disagrees with Compass Lexecon's reliance on the information contained in the [redacted] in the absence of corroborating studies (e.g., PFS, FS, OTA), a technical assessment demonstrating the existence of Reserves, or even a contemporaneous valuation by independent third party.[1100] All that ExO had at the time in terms of evidence of economic viability was a DCF model [redacted] that was prepared in-house and, as noted above, appears to have been developed for the purpose of raising capital, not for valuation purposes.[1101]

3. Quadrant's adjusted valuation

a. Valuation based on Odyssey market capitalization

680. Quadrant offers an alternative valuation based on Odyssey's market capitalization. As explained in its second report, this approach has the advantage of being based on a contemporary assessment of the company by market participants which incorporates not only the value attributable to the Project's Phases I and II but also any perceived strategic value.[1102]

681. Quadrant's second report explains that Odyssey's market capitalization was relatively stable in the first half of 2016, except for the six weeks prior to the denial of the MIA, in which the value of Odyssey's shares increased substantially. Since such increase did not appear to be

1098 *Id.*, ¶ 96-103.

1099 *Id.*, ¶ 101.

1100 *Id.*, ¶¶ 104.

1101 *Id.*, ¶¶ 104-106.

1102 *Id.*, ¶ 109.

related to the Project, Quadrant initially estimated the value of Odyssey's interest in the Project on the basis of Odyssey's market capitalization immediately prior to said share price increase.[1103]

682. In its second report, Compas Lexecon criticizes the assumption used by Quadrant and argues that the increase in the price of Odyssey's shares in the weeks leading up to the MIA denial was directly related to positive market expectations about the approval of the mine. In support of this position, he cites various documents that include two press releases dated March 22 and 24, a report to the SEC dated March 20, 2016, and a conference call with analysts.[1104]

683. Quadrant explains that it is not clear whether these documents explain Odyssey's market capitalization behaviour before the Valuation Date, however, it acknowledges that the news articles published after the Valuation Date, which Compass Lexecon cites in its second report, support the idea that Odyssey's market capitalization immediately prior to the denial of the MIA incorporated: "market expectations of a positive MIA permit decision."[1105]

684. Based on the foregoing, in its second report, Quadrant adjusted the way of estimating the value attributable to the Project based on the capitalization value of Odyssey. Quadrant's new valuation is based on the difference between the company's market capitalization as of the Valuation Date and its market capitalization prior to the share price increase that occurred in previous weeks. This is explained in the following passage:

[redacted][1106]

685. Using this approach, Quadrant concludes that the value of Odyssey's interest in the Project was [redacted] as of April 6, 2016.[1107] Alternatively, in order to take into account short-

1103 *Id.*, ¶ 113.

1104 *Id.*, ¶ 115.

1105 *Id.*, ¶¶ 116-119.

1106 *Id.*, ¶ 121.

1107 *Id.*, ¶ 110.

term fluctuations, the value can be obtained as the difference between the average market capitalization in the month of April, prior to the Valuation Date, and the average market capitalization in the four days before February 29, 2016. The resulting estimated value is [redacted].[1108] Because both variants are valid, Quadrant takes the average of these two estimates to take the position that the fair market value of Odyssey's interest in ExO on the Valuation Date is [redacted]

686. The Respondent's damages expert also indicates in his second report that the result can be further confirmed by two subsequent events. The first is the [redacted] reduction in Odyssey's market capitalization immediately after the announcement of the MIA's denial on April 11, 2016.[1109] The second event is the announcement of the revocation of the denial of the MIA by the Federal Court of Administrative Justice that occurred on March 21, 2018. Quadrant observes that the increase in Odyssey's market capitalization immediately after the revocation of the MIA denial was [redacted].[1110] Both values corroborate Quadrant's estimate of the Project's value. The following graph taken from Quadrant's second expert report illustrates this point:

[redacted]

1108 *Id.*, ¶¶ 121-122.

1109 *Id.*, ¶ 124.

1110 *Id.*, ¶ 125.

687. Quadrant's second report also offers a rebuttal of Compass Lexecon's criticisms to its first report. To avoid unnecessary repetition, the Claimant refers the reader to Quadrant's second expert report, Section B (¶¶ 127 *et seq*).

b. Estimation of the Claimant's sunk costs

688. As noted in previous sections, numerous international tribunals tasked with settling disputes arising from non-productive mining projects have determineddamages based on the claimant's sunk of costs. For this reason, the Respondent asked Quadrant to estimate Claimant's sunk costs.

689. The Claimant alleges that the Project has incurred sunk costs for [redacted] plus an additional [redacted] in financial costs as of December 31, 2020.[1111] However, since its first report, Quadrant has pointed out that there were several deficiencies around this figure. For example: (1) the company's financial statements are not audited; (ii) the calculation of expenses is derived from the income statement and is not based on actual cash disbursements; (iii) 87% of the total expenses, excluding financial costs, is related to inter-company administration payments; (iv) there is no support for the [redacted] in finance costs, and (v) some costs were incurred after the second denial of the MIA.[1112]

690. In Quadrant's opinion, intercompany payments should be excluded from the analysis for two reasons: (i) they do not represent actual disbursements, and (ii) the Respondent has not submitted any analysis demonstrating that these payments were necessary and reasonable to advance the Project. Consequently, the sunk cost amount should be reduced by [redacted].[1113]

691. Quadrant is also of the opinion that the so-called "mark-ups" between companies should be eliminated. The Respondent's expert observes that, according to the documents provided by Compass Lexecon, OMEX (Odyssey Marine Exploration) received invoices from the different service providers and subsequently sent quarterly invoices to ExO grouping all of these expenses. This is reasonable, however, Quadrant detected additional charges that are not related to services

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1111 *Id.*, ¶ 156.

1112 *Id.*, ¶ 156.

1113 *Id.*, ¶¶ 159-160.

provided by third parties. For example, in the third quarter of 2013 OMEX added a "mark-up" or surcharge to OMO (*i.e.*, Oceanica Marine Operations) and OMO, in turn added a second "markp-up" when submitting the invoice to ExO. These "mark-ups" should be eliminated because they are the product of organizational decisions of the corporate group and do not reflect the Project's needs. Based on the above, Quadrant estimates that an additional [redacted] should be excluded from the sunk cost computation.[1114]

692. Dr. Flores is also of the opinion that sunk costs should exclude financing costs that represent more than half of the total. This is because it is not a strictly necessary expense for the Project. And even if it were determined that financing costs should be included, Dr. Flores explains that the cost of financing between related parties should be excluded (*i.e.*, between ExO and OMEX). For example, Dr. Flores notes that, according to a September 2015 note, ExO had to pay interest at a rate of 18% to OME (Oceanica Marine Enterprises) which is well above the market rate. Based on all the above, Dr. Flores concludes that [redacted] corresponding to financing costs should be excluded from the total sunk costs.[1115]

693. Lastly, Quadrant notes that the Claimant's sunk costs include expenses incurred after the Valuation Date (in some cases up to four years after the denial of the MIA) and that some of these expenses also include costs of financing. The Claimant has not explained why it incurred these costs. Likewise, Quadrant notes that some expenses, far from being reduced, increased after the denial of the MIA. One possible explanation is that these costs and expenses include costs incurred in this arbitration.[1116]

694. Based on the foregoing, Quadrant estimates the total amount of sunk costs as of the Valuation Date at [redacted] and at [redacted], as of the date of the second denial of MIA.[1117]

1114 *Id.*, ¶¶ 161-164.

1115 *Id.*, ¶¶ 165-170.

1116 *Id.*, ¶¶ 171-173.

1117 *Id.*, ¶ 174.

c. Compass Lexecon's DFC and ROV analyzes are unreasonable and overestimate the value of ExO

695. In addition to the reasons offered in prior sections that militate against the use of a DFC to assess damages in this case, Quadrant has several observations and criticisms of the Compas Lexecon model. All of these criticisms are addressed in Annexes A and B of the Quadrant's second report and will not be addressed in this pleading to avoid unnecessary repetition. The Court is invited to review them carefully and to take them into account in its decision.

I. The Agrifos valuation must be dismissed

696. The Claimant has submitted an additional expert report with its Reply Memorial that purports to offer an alternative valuation based on the market approach. The Respondent objects to the late submission of this evidence because it could and should have been submitted with the Memorial. Nevertheless, it has asked its damages expert to opine on this new valuation by Agrifos and since the Agrifos valuation also contains numerous criticisms of WGM's first report, the Respondent has also asked WGM to offer a response.

697. Agrifos's valuation is based on comparable transactions. The idea behind this type of analysis is to obtain a multiple (often a ratio such as EV/EBITDA/) and then apply it to the case at hand to derive the value. In this particular case, the Agrifos valuation first derives an implicit price per ton that it obtains from two "comparable" transactions, and then derives the Project's value by multiplying the price obtained by the volume of Measured, Indicated and Inferred Resources identified in the [redacted]

698. Agrifos introduce subjectivity to the analysis in two ways: *first*, through the selection of transactions involving other projects that it considers comparable to the Don Diego Project, when in fact they are not; and *second*, through a series of unjustified adjustments. However, before addressing these problems, the Respondent wishes to direct the Tribunal's attention to two important issues that invalidate the analysis at the outset.

699. The first is that, like the Compass Lexecon valuation, the Agrifos valuation is based on the assumption that the MIA would have been granted. [1118] In fact, this is one of the reasons why Agrifos rejects highly relevant comparables like the *Sandpiper* and *Chatham Rise* Projects, which

[1118] Agrifos Report, ¶ 6.

are the only two other offshore phosphate projects in the world.[1119] As explained above, assuming a positive outcome in the MIA application is incompatible with the measure of compensation originally proposed by the Claimant.

700. Second, as noted in Quadrant's second report, Agrifos has not submitted any supporting documentation for its analysis and therefore, it cannot be verified.[1120] Uncorroborated data from private transactions cannot be used to determine damages in international arbitration because it denies the Respondent the opportunity to contest the evidence and present and adequate defense against the claim. It is further noted that the Agrifos report was submitted after the document production round, and therefore, the Respondent did not have an opportunity to request documents to challenge the Agrifos report. For these reasons, the report should be rejected in its entirety.

701. Turning to the Agrifos analysis, Quadrant observes that Agrifos has not only rejected relevant comparables but has accepted others that are clearly inappropriate. Agrifos, begins with a sample of nine projects and, after evaluating their comparability, it ends up with a sample of two: the *Boabab* and *Hinda* transactions.[1121]

702. Agrifos uses the Baobab transaction which consisted of an open pit phosphate mine that was almost ready to go into production. In contrast, the Don Diego Project was not even close to the production stage on the Valuation Date.[1122] The Boabab project also had a relatively low initial CAPEX (USD $15 million) and a short projection period of about one year. In contrast, according to the Claimant, the Don Diego Project would have required USD $236 million in CAPEX and three years to start operations. Even if these two projects were comparable (*quod non*), they would not be at a comparable stage of development.[1123]

703. The second comparable transaction used by Agrifos is the Hinda transaction, which is related to a phosphate project in the Republic of Congo. Agrifos acknowledges that this was a private transaction and that it became aware of its terms through one of the parties to the

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1119 *Id.*, footnote 2 y ¶ 44.

1120 Quadrant Economics Second Report, ¶ 255.

1121 *Id.*, ¶¶ 252-253.

1122 *Id.*, ¶ 257.

1123 *Id.*, ¶ 259.

transaction. Quadrant correctly points out that the information is therefore unverifiable and would constitute inadmissible hearsay.[1124]

704. In addition to the failures regarding the selection of comparable transactions, Agrifos unjustifiably expands the volume of mineral resources of the Don Diego Project by including the northern expansion. WGM note: "[t]he only independent estimate of the deposit as of the Valuation Date was that of Mr. Lamb (C-0084) which estimated tonnage and grade at a combined Measured, Indicated and Inferred level of 493.6 million tonnes "ore" grading [redacted]".[1125]

705. By including the northern expansion, Agrifos artificially increases the volume of resources of the Project by [redacted]. Likewise, the Tribunal should also take into account the fact that the [redacted] figure also includes [redacted] of Inferred Resources (approximately 40% of the total) which, as previously indicated, have the lowest level of geological confidence and are never included in the financial analysis.[1126]

706. Likewise, WGM identifies the following additional problems:

- "the size and grade of the deposit. The only independent estimate of the deposit as of the Valuation Date is that of Mr. Lamb (C-0084) which estimated tonnage and grade at a combined Measured, Indicated and Inferred level of 493.6 million tonnes "ore" grading [redacted] . Agrifos's resource summary incorrectly incorporates assumptions not in evidence as of the Valuation Date".[1127]
- "Agrifos incorrectly assumes a significantly longer mine life for the proposed Phase 1 of the Don Diego project, contrary to the [redacted]"[1128];
- "Agrifos incorrectly assumes a ready market for phosphate rock from the Don Diego project. As of the Valuation Date, no independent market analysis of the potential market had been undertaken; nor had any potential customers been definitively identified and interest confirmed by meaningful sampling and/or letters of intent to purchase product";[1129]
- "Agrifos incorrectly assumes that all engineering and operational issues related to phosphate mining, beneficiation and shipping had been resolved or could be resolved at minimal time and

1124 *Id.*, ¶¶ 260-261.

1125 WGM Second Report, ¶ 99.

1126 Quadrant Economics Second Report, ¶ 263.

1127 WGM Second Report, ¶ 99

1128 *Id*.

1129 *Id*.

expense and thus the Don Diego project was at a significantly more advanced stage of development than was the fact";[1130]

- "Agrifos fundamentally misunderstands WGM's comparison of Egyptian phosphate rock prices to those potentially available to the Don Diego product. The WGM analysis is not based on the Egyptian price as a benchmark, but on comparison of Egyptian phosphate rock quality and market opportunities to those potentially available to the Don Diego project; i.e. supply of a range of phosphate rock grades having similar chemical attributes and selling into the spot market"[1131]
- "Agrifos has assumed a [redacted] control premium for the selected comparable transaction, with no substantive support for this supposition".[1132]

707. Finally, Agrifos applies various subjective, unjustified and unsupported premiums to its results, such as a [redacted] control Premium. Quadrant notes that by eliminating those premiums and restricting the resource volumes to the levels that were initially considered by Compas Lexecon, the Agrifos result would be reduced by almost half.[1133]

J. The [redacted] Premium for the alleged strategic value of the Project is completely speculative and lacks support

708. The Claimant increases its claim for damages by including a Premium for the Project's alleged strategic value. This [redacted] Premium is added to the Compas Lexecon result.

709. In its Counter-Memorial, the Respondent noted that the Claimant's damages expert did not consider the premium in his valuation and, therefore, the only evidence supporting the inclusion of this [redacted] premium was Mr. Longley's witness statement. [1134] This was not denied by Claimant.

710. In its Reply, the Claimant argues "experts such as CRU describe specific market participants such as Agrium that would likely be investors motivated by strategic concerns"[1135] and that "[w]hen coupled [redacted] […] this indicates the likelihood of a premium that

1130 *Id*.

1131 *Id*.

1132 *Id.*

1133 Quadrant Economics Second Report, ¶ 264.

1134 Counter-Memorial, ¶ 705.

1135 Reply, ¶ 554.

could be captured by Odyssey based on geopolitical or geographic characteristics of the deposit aligning with the strategic interests of an acquirer."[1136]

711. The Claimant also explains that the premium was not included in Compass Lexecon's valuation because this type of premiums would not be captured in a DFC analysis, as it involves value calculations by the acquirer that are not included in the cash flows.[1137]

712. The Respondent has two observations in this regard. The first is that the concept of strategic value is different from that of fair market value and, as has already been analyzed, the measure of compensation proposed by the Claimant is the fair market value of the investment determined immediately before the denial of the MIA. The fundamental difference between strategic value and fair market value is that the latter does not include synergies that a potential buyer or seller could obtain from the investment. In other words, the FMV measures the value of the investment as a stand-alone operation, and not the value that the investment would have to a specific buyer or seller.

713. The Claimant has not identified any potential buyer willing to pay a [redacted] premium on account of the Project's alleged strategic value. Speculating that Agrium or someone else would have been willing to pay that additional premium would go against the principle of reasonable certainty, which implies the avoidance of undue speculation in the assessment of damages.

714. On the other hand, as Quadrant points out in its two reports, the market capitalization value that Quadrant uses, takes into account both the FMV of phase I and II, as well as any strategic value perceived by the market participants.[1138]

K. The damages claimed for the alleged "lost opportunity" are equally speculative and unsupported

715. The Claimant adds [redacted] to Compass Lexecon's damage assessment on account of the alleged "lost opportunity" to explore and develop parts of the Don Diego Project deposit that were not included in the NI 43-101 report prepared by Dr. Lamb.[1139] The Claimant

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1136 *Id.*, ¶ 555.

1137 *Id.*, ¶ 556.

1138 Quadrant Economics Second Report, fn, 130. Also *See*: Quadrant Economics First Report, ¶ 49.

1139 Memorial, ¶ 418.

argues that, by denying the MIA, Mexico unfairly deprived ExO of the opportunity to commence an additional exploration campaign to quantify, characterized and explore the unexplored resources within its concessions.[1140]

716. The Claimant argues that international tribunals and commercial arbitration tribunals have awarded damages for the loss of the opportunity to generate profits regardless of the difficulties that may exist in determining the lost value. In support of its claims the Claimant cites the cases: *Gemplus v México*, *Southern Pacific Properties v. Egypt*, *Marco Gavazzi and Stefano Gavazzi v. Romania* y *Bilcon v. Canada*.

717. The Respondent reiterates that this part of the claim is completely without merit. If the Claimant's valuation through a DCF is speculative for these reasons stated in previous sections, valuing the alleged "lost opportunity" at more than [redacted] is nothing more than a fantasy. The Claimant has not even demonstrated the volume that was technically and economically feasible to extract from the explored areas. Assuming the existence, characteristics and the technical and economic feasibility of extracting higher volumes in the explored and unexplored areas would be an exercise in speculation and, therefore, would be unacceptable as a basis for an award of damages.

718. Moreover, the amount claimed by the Claimant in this category of damages is based on a very rudimentary calculation prepared by Mr. Longley, who is not a damages expert and, even if he were, he would not be an independent expert. The fact is that this part of the claim for damages is not supported by expert evidence of any kind.

719. Mr. Longley's calculation is based on simple conjecture. He first estimates the volume of additional resources under the assumption that the unexplored areas contain a similar volume of phosphate rock than the explored areas. This first assumption lacks any foundation and support. Subsequently, he discounts the volume obtained by 60% and multiplies the result by a price that he considered "reasonable".[1141] Mexico reiterates that there is no support for the estimated volume, the discount, or the Price, since the characteristics and quality of the product are unknown (e.g.,

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1140 Reply, ¶ 567.

1141 Mr. Longley Second Witness Statement, ¶¶ 7-9.

the content of P205) that, if applicable, could have been extracted and processed from the mineral located in unexplored areas.

720. The costs associated with the extraction of these mineral resources are also unknown. As the Tribunal may recall, the Boskalis Proposal (which did not include these new areas) was preliminary and, as such, does note even have the necessary level of confidence to estimate the operating costs and CAPEX corresponding to the exploitation of the explored zones with reasonable certainty. If the operating costs and capital requirements estimate is inadequate for the explored zones, it would be even more so for the unexplored zones at a greater depth.

721. With respect to the cases cited by the Claimant in support of its lost opportunity theory, it is clear that they offer no support for its position. In all of these cases, the tribunal rejected the use of a DCF to calculate damages and used the "lost opportunity" as a way of compensating the claimant for the violation. In no case was this valuation criterion used to supplement a determination of damages, as the Claimant apparently requests.

L. Interests

722. Compass Lexecon contends that in order to fully compensate the Claimant, interest must be calculated at a rate that reflects the financial costs incurred by a typical investor in a pre-operational mining project in Mexico.[1142] Pursuant to this idea, it proposes the weighted average costs of capital (WACC), which is 13.95%.[1143]

723. The Respondent observes at the outset that the application of this incredibly high interest rate would be unprecedented in investor-State arbitration. To the Respondent knowledge, no arbitral tribunal has ever ordered pre-award or post-award interests to be calculated on the basis of the investor's WACC. In fact, Mr. Flores refers to a case in which he served as a damages expert in which the tribunal determined that the WACC "is not an appropriate measure for interest" in an arbitral award because it "reflects a variety of risks associated with doing business"[1144]

724. As explained in Quadrant's second report, Odyssey's WACC "includes business risks in the mining industry and is not suitable to calculate interest in this Arbitration, as a potential award

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1142 Compass Lexecon Second Report, ¶161

1143 *Id.*

1144 Second Report Quadrant Economics, ¶ 181, citing to *Vestey v. Venezuela.*

of damages will not have been subject to those risks."[1145] Quadrant further explains: "from an economic perspective, interest on compensation makes a claimant whole for the time value of money from the valuation date to the date the compensation is paid"[1146] and "[i]f one were to apply an interest rate that is the same as the WACC in the mining industry, then one would be compensating the investor for business risks the claimant did not bear, thereby granting the investor a windfall."[1147]

725. NAFTA article 1110(4) is clear: "if payment is made in a G7 currency, compensation shall include interest at a commercially reasonable rate for that currency from the date of exploration until the date of actual payment." Odyssey's WAAC is not a commercial rate for US-denominated debt, nor is it reasonable in this context. In response to Compass Lexecon's argument that the WACC is a commercial rate because investors use it to trade mining assets, Mr. Flores explains that this is incorrect and that he has never seen anyone agree to defer the receipt of money in exchange of interest calculated on the basis of a WACC.[1148]

V. REQUEST FOR COSTS

726. The Respondent request this Tribunal to order the Claimant to pay the costs and expenses it has incurred as a result of this arbitration, including:

(i) the portion of the Tribunal's expenses that correspond to Mexico;

(ii) the portion of the expenses of administration of the procedure before ICSID that correspond to Mexico;

(iii) the fees of Mexico´s external legal advisers; and d

(iv) the payment of experts hired by Mexico.

727. The Respondent is entitled to an award of cost on its favor for the following reasons: *i)* The Respondent did not violate any of its obligations under NAFTA, and *ii)* the Claimant has presented a claim without merit with the sole intention of obtaininig an undue benefit.

1145 Second Quadrant Economics Report, ¶ 176.

1146 *Id.*, ¶ 181.

1147 *Id.*

1148 *Id.*, ¶ 179.

VI. CONCLUSION

728. By virtue of the foregoing, this Tribunal is respectfully requested to dismiss in full the Claimant's claims and the corresponding determination of the payment of costs in favor of the Respondent, in accordance with the request for costs referred *supra*.

October 19, 2021

Respectfully submitted

El Director General de Consultoría
Jurídica de Comercio Internacional

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