INTERNATIONAL COURT OF JUSTICE

THE PEACE PALACE
THE HAGUE, THE NETHERLANDS

THE CASE CONCERNING
OCEAN FERTILIZATION AND MARINE BIODIVERSITY

THE FEDERAL STATES OF AEOLIA
(APPLICANT)

V.

THE REPUBLIC OF RINNUCO
(RESPONDENT)

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MEMORIAL FOR APPLICANT
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2016
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STATEMENT OF JURISDICTION

The Federal States of Aeolia and the Republic of Rinnuco submit their dispute to this Honorable Court on 1 June 2016, pursuant to Article 79, paragraph 10, of the Rules of Court. On 11 July 2016, Applicant and Respondent have submitted a copy of the Joint Written Statement to the Registrar of the Court. See the Joint Statement of the Federal State of Aeolia and the Republic of Rinnuco regarding the questions of the Court’s Jurisdiction and the merits raise in the Application.

The Registrar addressed notification to the parties on 23 June 2016.
QUESTIONS PRESENTED

I. WHETHER THE INTERNATIONAL COURT OF JUSTICE HAS JURISDICTION TO DETERMINE THE MATTER.

II. WHETHER THE REPUBLIC OF RINNUCO VIOLATED INTERNATIONAL LAW BY CONDUCTING THE INITIAL PHASE OF ITS OCEAN FERTILIZATION PROJECT IN THE MUKTUK OCEAN AND THAT ANY RE-INITIATION OF THIS PROJECT WOULD VIOLATE INTERNATIONAL LAW.
STATEMENT OF FACTS

The Federal State of Aeolia ("Applicant") and the Republic of Rinnuco ("Respondent") are neighboring coastal sovereign States surrounded by the Muktuk Ocean in the Arctic Circle (Record ["R"].1). Narwhals inhabit the Muktuk Ocean and are commonly seen in the waters off the coasts of Applicant and Respondent. Applicant’s ecotourism industry includes numerous whale-watching and other excursions that focus on Narwhals (R.3).


In November 2014, Respondent announced its plans to engage in an ocean fertilization project ("OFP") and a month after, it passed a law approving and fully funding the same (R.12,15). Applicant expressed its concern over Respondent’s OFP as this project could upset the entire food web and negatively impact the marine biodiversity in and around the Muktuk Ocean (R.13). Respondent declined, stating that they have conducted an Environmental Impact Assessment ("EIA") before planning this project, and that it is for mitigating climate change (R.12,14). Despite Applicant’s objections, Respondent still initiated the OFP in January 2015 (R.16) and completed its initial phase in February 2015 (R.19). In April 2015, nine dead narwhals were found off the coast of Respondent (R.20). After a series of failed negotiations between the parties, Applicant
requested that Respondent agree to submit the matter to the International Court of Justice (“ICJ”) in accordance with Article 287 of UNCLOS, but Respondent refused (R.22). Applicant instituted proceedings before the ICJ on 4 April 2016 (R. Annex B). Respondent submitted a Preliminary Objection and contested the jurisdiction of the ICJ over the matter (R. Annex C).
SUMMARY OF ARGUMENTS

Pursuant to the compromissory clauses under the UNCLOS and the CBD, the ICJ has jurisdiction over the dispute. The ICJ also has jurisdiction by virtue of the dispute settlement provision of the LC/LP. In any case, the specificity of the LC/LP does not divest the ICJ of jurisdiction under the UNCLOS and CBD.

Respondent breached its Treaty and Customary Law Obligations when it proceeded with its OFP by dumping large amounts of ferrous sulfate in the Muktuk Ocean. It does not qualify as legitimate scientific research under the LC/LP, and the CBD. The OFP caused harm to the marine environment which led to the death of nine narwhals. Thus, Respondent violated its obligations to conserve and protect the marine environment under the CBD and UNCLOS, and to protect narwhals which are a threatened species under the CMS.

Further, Respondent contravened its obligation to prevent Transboundary Harm. The death of narwhals significantly harmed Applicant as narwhals are shared resources and form part of Applicant’s ecotourism industry, and culture. The OFP likewise violates the Precautionary Principle. Despite scientific uncertainty on the effects of large-scale ocean fertilization, Respondent proceeded and did not follow the Assessment Framework.

Respondent will further violate its international law obligations if it re-initiates its OFP, as the subsequent phases will be larger in scale.
ARGUMENTS

I. THE ICJ HAS JURISDICTION TO DETERMINE THE MATTER.

The ICJ Statute grants the ICJ the jurisdiction over all cases which parties refer to it and all matters specifically provided for in treaties and conventions in force.\(^1\) The ICJ determines its jurisdiction as a question of law resolved in light of the relevant facts.\(^2\)

A. THE ICJ HAS KOMPETENZ-KOMPETENZ TO DETERMINE JURISDICTION.

Under the principle of Kompetenz-kompetenz, the ICJ can determine its own jurisdiction should any dispute arise on the matter.\(^3\) The ICJ has consistently exercised this power before determining the merits of the case.\(^4\) Thus, the ICJ can exercise its jurisdiction over the dispute upon finding that the arguments in favor thereof are preponderant.\(^5\)

B. THE ICJ HAS JURISDICTION UNDER ARTICLE 36(1) OF THE ICJ STATUTE.

The ICJ can assume jurisdiction over matters concerning the interpretation or application of a treaty when there is a compromissory clause therein.\(^6\) To sustain jurisdiction, the claims made


must reasonably relate to, or be capable of being evaluated in relation to the legal standards of the
treaty in point.7

C. THE ICJ HAS JURISDICTION OVER DISPUTES CONCERNING THE
INTERPRETATION OR APPLICATION OF A TREATY.

Under Article 36(1), the ICJ can exercise jurisdiction upon the concurrence of two
elements: first, there must be a dispute,8 and second, some genuine relationship exists between the
object of the claim and the provisions invoked.9

a. There is a dispute between the parties.

A dispute exists when there are positively opposing claims between parties on a point of
law or fact.10 Applicant maintains that Respondent violated a host of treaties and customary norms
(R.17,20), and demanded that Respondent abandon its OFP because of its unknown and potentially
disastrous effects on the marine environment (R.13). Conversely, Respondent denies that it
violated any international obligation, and alleges that its OFP could possibly benefit the marine
environment (R.14,18,21). Here, there is a dispute because the parties disagree on several points
of law and fact.

b. A genuine relationship exists between the object of the claim and the
provisions invoked.

9ROSENNE, JURISDICTION, supra note 6 at 517; citing Judgements of the Administrative Tribunal of the I.L.O. Upon
10East Timor (Port. v. Austl.), Jurisdiction, 1995 I.C.J. 90, ¶ 22; South West Africa Cases (Eth. v. S. Afr.; Liber. v. S.
To determine the existence of such genuine relationship, the ICJ must ascertain whether it has jurisdiction *rationae materiae.*\(^{11}\) In determining such jurisdiction, the concern is whether the object of the claim is capable of violating a treaty provision.\(^{12}\) Here, there is a genuine relationship between Applicant’s claims and the treaty provisions invoked.\(^{13}\)

**D. THE ICJ HAS JURISDICTION BY VIRTUE OF THE CBD.**

**a. The CBD applies to the dispute.**

The CBD applies in two instances: *first,* in the case of components of biological diversity, in areas within the limits of its national jurisdiction; and *second,* in the case of processes and activities, regardless of where their effects occur, carried out under its jurisdiction or control, within or beyond the limits of its national jurisdiction.\(^{14}\) Here, both modalities for the applicability of the CBD have been satisfied.

**i. Respondent’s OFP affected components of biological diversity within its national jurisdiction.**

(a) Respondent’s OFP affected components of biological diversity.

Biological diversity (“Biodiversity”) is defined as the variability within and between species, and of ecosystems.\(^{15}\) It has three components, namely, (1) ecosystem diversity, (2) species

\(^{11}\)Oil Platforms (Iran v U.S.), Preliminary Objection, 1996 I.C.J. 803, ¶ 16.

\(^{12}\)Id. 1996 I.C.J. ¶ 51.


\(^{14}\)CBD art. 4.

\(^{15}\)Id. art. 2.
diversity, and (3) genetic diversity. Iron fertilization adversely affects ecosystem diversity by reducing nutrient availability in the ocean, and causes ocean acidification, among others. Hence, ferrous sulfate damages an important component of the ecosystem.

(b) These components are within Respondent’s national jurisdiction.

A coastal State’s national jurisdiction extends to its Exclusive Economic Zone (“EEZ”). The OFP was conducted within Respondent’s EEZ in the Muktuk Ocean (R.16) and thus, the affected components are within Respondent’s national jurisdiction.

ii. Respondent’s processes and activities within its jurisdiction and control, affected biological diversity.

The CBD also applies in cases of processes and activities under the jurisdiction and control of a State, regardless of where the effects occur. The processes and activities contemplated are those likely to produce significant adverse impacts on the conservation of Biodiversity. Here, Respondent, using its government vessel, engaged in a State-sponsored activity of depositing

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19Secretariat of the CBD, supra note 17 at 27-28.

20UNCLOS arts. 55, 56(b); Glowka, et al., supra note 16 at 28.

21CBD art. 4(b).

22Id. arts. 7(c), 3.

15,000 kilograms of ferrous sulfate in its EEZ,\textsuperscript{24} causing irreparable harm to the marine ecosystem and killed nine narwhals in the process (R.15,16,19,20).

\textbf{b. Applicant can invoke Respondent’s responsibility under the CBD.}

Applicant can invoke the responsibility of Respondent because it is an Injured State.\textsuperscript{25} Respondent’s OFP caused direct injury to Applicant by adversely affecting the latter’s ecotourism industry, and culture.\textsuperscript{26}

Even if Applicant was not directly injured, it can invoke Respondent’s violations of \textit{erga omnes} obligations.\textsuperscript{27} Environmental law obligations are considered \textit{erga omnes}.\textsuperscript{28} The conservation of biological diversity is a common concern of humankind and is prioritized above the sovereign rights of States over their own biological resources.\textsuperscript{29} Thus, any State whether directly affected or not, has the right to invoke a violation against another State performing an environmental wrong.\textsuperscript{30} Consequently, Applicant is afforded the right to invoke Respondent’s responsibility.

\textbf{c. The dispute must be referred to the ICJ pursuant to Article 27 of the CBD.}

\footnotesize{\textsuperscript{24}UNCLOS art. 56.\\
\textsuperscript{26}See \textit{infra} Part II(B)(1).\\
\textsuperscript{27}AOSR, art. 48(b). Barcelona Traction, Light and Power Company, Limited (Belg. v. Spain) Judgment, 1970 I.C.J. 3 ¶ 33.\\
\textsuperscript{28}Gabcikovo-Nagymaros Project (Hung./Slovk.), Judgment, 1997 I.C.J. 7 (Opinion of Weeramantry, J.); \textsc{Christian J. Tams}, \textsc{Enforcing Obligations Erga Omnes in International Law}, 118-119 (2005).\\
\textsuperscript{29}Glowka, et al., \textit{supra} note 16 at 3\\
\textsuperscript{30}Jorge Viñuales, \textsc{The Rio Declaration on Environment and Development: A Commentary}, 607 (2015).}
Under the CBD, States may negotiate in the event of a dispute, and if the parties do not come to an agreement, mediation may be sought.\(^{31}\) Finally, the parties may agree that dispute settlement by the ICJ is compulsory if it cannot be resolved after negotiation or mediation.\(^{32}\)

Here, the parties were unable to settle their dispute after 14 months of negotiation and mediation (R.22), and have declared in writing that they shall submit disputes covered by the CBD to the ICJ (R.6). Thus, the dispute was properly referred to the ICJ under Article 27 of the CBD.

d. **The CBD applies independently of the LC/LP.**

The CBD expressly provides that it applies independently from other international agreements.\(^{33}\) Treaties may be parallel in their contents and a single act of a State may violate multiple treaties.\(^{34}\) Thus, even if the LC/LP is applicable, it does not preclude the application of the CBD.

E. **THE ICJ HAS JURISDICTION BY VIRTUE OF THE UNCLOS.**

a. **The UNCLOS applies to the dispute.**

The UNCLOS mandates States to conserve Highly Migratory Species\(^{35}\) and to protect the marine environment.\(^{36}\) The failure to protect threatened species constitutes a harm to the marine environment and triggers the application of the UNCLOS.\(^{37}\)

\(^{31}\)CBD art. 27(1, 2).
\(^{32}\)Id. art. 27(1, 2, 3).
\(^{33}\)Id. art. 22.
\(^{34}\)Southern Bluefin, Arbitral Tribunal, 2000, ¶ 52.
\(^{35}\)UNCLOS art. 64.
\(^{36}\)Id. art. 65.
\(^{37}\)South China, 2016 P.C.A. 960, ¶ 941; Southern Bluefin, Arbitral Tribunal, 2000, ¶ 52.
i. **The dispute concerns Highly Migratory Species.**

Coastal States shall cooperate with a view to conserve marine mammals and cetaceans. Narwhals are among those listed in the Annexes of the UNCLOS as Highly Migratory Species sought to be conserved. Hence, the dispute falls under the UNCLOS.

ii. **The dispute concerns the protection of the marine environment.**

States must protect and preserve the marine environment, protect threatened species, and ensure that activities under their jurisdiction and control do not cause damage by polluting the environment. Respondent polluted the Muktuk Ocean by dumping 15,000 kilograms of ferrous sulfate therein (R.15). This pollution also caused the death of nine narwhals (R.20), a threatened species. Therefore, the UNCLOS applies to this dispute.

b. **The dispute must be referred to the ICJ pursuant to Article 287 of the UNCLOS.**

In case of disputes, parties may elect the ICJ as the forum to settle issues concerning the interpretation or application of the UNCLOS. An agreement to submit the dispute to the ICJ

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38UNCLOS art. 64(1).

39Id. Annex I.

40Id. arts.192, 194; South China Sea Arbitration (Philippines v. China), 2016 P.C.A. 495, ¶ 960.


43UNCLOS art. 287(1).
precludes other means of settlement. Here, the parties chose the ICJ to settle disputes concerning the UNCLOS by making written declarations pursuant to Article 287 (R.9).

c. **Respondent’s notice of revocation cannot divest the ICJ of its jurisdiction.**

States may submit a notice of revocation with respect to any written declaration made under Article 287(1) of the UNCLOS, but such revocation cannot take effect until 3 months after its notice of deposit with the Secretary-General of the United Nations. Once an application is filed with the ICJ, the subsequent effectivity of a previously filed notice of revocation will not divest the ICJ of its jurisdiction over the dispute.

Here, Respondent deposited its notice of revocation on 28 March 2016 (R.9, Clarifications “Cl.”12). Hence, the revocation will only take effect 3 months thereafter, or on 28 June 2016. Applicant instituted proceedings against Respondent on 4 April 2016 (R. Annex B), which was long before the revocation could take effect. Thus, the notice of revocation cannot divest the ICJ of its jurisdiction over the dispute.

d. **The UNCLOS applies regardless of the applicability of the LC/LP.**

The presence of other treaty obligations does not preclude the application of the UNCLOS to a dispute, even if the rights and obligations under a treaty are similar to the UNCLOS. Hence, even if the LC/LP also applies to the dispute, this cannot preclude the application of the UNCLOS.

F. **THE ICJ HAS JURISDICTION OVER DISPUTES CONCERNING THE CMS.**

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44UNCLOS art. 287(4).

45Id. art. 287(6).

46ICJ Statute art. 40(1); Nottebohm, 1955 I.C.J.

47Southern Bluefin, Arbitral Tribunal, 2000, ¶ 52.

a. **The CMS applies to the dispute.**

Under the CMS, Range States must endeavor to reduce or control factors which endanger migratory species, particularly those which have an unfavorable conservation status.\(^{49}\) Moreover, the fundamental principle of the CMS is the immediate protection of migratory species listed in its Appendices.\(^{50}\) The narwhals are specifically listed as an endangered species sought to be protected.\(^{51}\) Respondent’s OFP dumped ferrous sulfate into the Muktuk Ocean (R.16) which caused detrimental changes to the habitat of the narwhals,\(^{52}\) and resulted in the deaths of nine narwhals (R.20). Therefore, the CMS applies to the dispute.

b. **The dispute can be referred to the ICJ by virtue of Article 287 of the UNCLOS.**

To determine whether a State has complied with its general obligations to protect and preserve the marine environment under the UNCLOS, other applicable treaties which specifically tackle the same must be taken into consideration, including those which require the prevention of harm that would affect threatened species.\(^{53}\) Hence, disputes concerning the CMS also arise under the UNCLOS, and can be referred to the ICJ through the latter treaty’s compromissory clause.

G. **THE ICJ HAS JURISDICTION BY VIRTUE OF THE LC/LP.**

a. **The LC/LP apply to the dispute.**

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\(^{49}\)CMS arts. 2-3.

\(^{50}\)Id. art. 2.

\(^{51}\)Id. appendix 1.

\(^{52}\)Secretariat of the CBD, *supra* note 17 at 26-27.

\(^{53}\)*South China*, 2016 P.C.A. ¶ 959; CMS arts. 2-3; *Southern Bluefin*, Arbitral Tribunal, 2000, at 52.
The LC/LP prohibit all acts of dumping wastes and other matter causing pollution in the ocean,\textsuperscript{54} which includes ocean fertilization.\textsuperscript{55} Here, Respondent engaged in prohibited dumping by conducting its OFP in the Muktuk Ocean (R.16,19). Therefore, the LC/LP apply.

\textit{b. The dispute must be referred to the ICJ by virtue of Article 287 of the UNCLOS.}

Disputes under the London Protocol must be settled by negotiation, mediation, or conciliation.\textsuperscript{56} If no resolution is possible within 12 months, the parties may arbitrate.\textsuperscript{57} States party cannot choose the arbitral proceedings if they have chosen to submit the dispute to the ICJ under Article 287 of the UNCLOS.\textsuperscript{58}

Here, after 14 months of negotiation and mediation, the parties failed to settle their dispute (R.22), and thus, they are bound by their outstanding agreement to submit disputes to the ICJ pursuant to Article 287 of the UNCLOS (R.9).

\textsuperscript{54}London Protocol art. 2.


\textsuperscript{56}London Protocol art 16(1).

\textsuperscript{57}\textit{Id.} art 16(2).

\textsuperscript{58}\textit{Id.}
II. RESPONDENT VIOLATED INTERNATIONAL LAW BY CONDUCTING THE INITIAL PHASE OF ITS OFP IN THE MUKTUK OCEAN.

An internationally wrongful act exists when there is a breach of an international obligation attributable to a State,\(^{59}\) triggering state responsibility.\(^{60}\) Respondent violated both Treaty and Customary International Law.

A. RESPONDENT VIOLATED ITS TREATY OBLIGATIONS.

Respondent ratified several treaties concerning the protection of the environment, including the UNCLOS, CBD, LC/LP, and the CMS (R.6-9). Respondent is bound to comply in good faith with its treaty obligations,\(^{61}\) and in conducting its OFP, Respondent breached the same.

a. Respondent violated the LC/LP.

States are required to adopt national laws to prevent and regulate dumping which meet the standards\(^{62}\) currently found in the LC/LP,\(^{63}\) and control all sources of pollution of the marine environment.\(^{64}\) One form of dumping is ocean fertilization,\(^{65}\) which is any activity undertaken by

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\(^{59}\)AOSR art. 2.

\(^{60}\)Id. art. 1


\(^{62}\)UNCLOS art. 2.


humans with the principal intention of stimulating primary productivity in the oceans.\footnote{LC/LP.1} It is generally prohibited and is only allowed for legitimate scientific research.\footnote{LC/LP.1 on the Regulation of Ocean Fertilization, ¶ 8; PHILIPPE SANDS, PRINCIPLES OF INTERNATIONAL ENVIRONMENT LAW, 369 (2012).} Respondent’s OFP violated the LC/LP because it constitutes dumping, and was not for legitimate scientific research (R.16).

\textit{i. The OFP was an act of dumping.}

Dumping is any deliberate disposal into the sea of wastes or other matter from vessels.\footnote{LC/LP.1, ¶ 1.} Here, Respondent intentionally dumped 15,000 kg of powdered ferrous sulfate into the Muktuk Ocean through its government vessel (R.15,16,19).

\textit{ii. The OFP was not for a legitimate scientific research.}

To qualify as legitimate scientific research, dumping should place matter not contrary to the aims of the LC/LP,\footnote{Id. ¶ 3.} and must not be for commercial purposes.\footnote{Resolution LC-LP.2 (2010), On the Assessment Framework for Scientific Research involving Ocean Fertilization, IMO Doc LC-LP.2 (October 14, 2010). [“LC-LP.2”]} Moreover, States must follow all steps under the Assessment Framework of the LC/LP to determine if the proposed activity constitutes legitimate scientific research, and should only conduct the activity after obtaining the consent of potentially affected States.\footnote{LC-LP.2 § 4. 20; Resolution LP.4 (8), Annex 4, On the Amendment to the London Protocol to Regulate the placement of matter for Ocean Fertilization and other Marine Geo-engineering activities, IMO Doc LP.4 (8) (Oct. 18, 2013). [“LP”]; G.A. Res. 70/235, U.N. Doc. A/Res/70/235 (Mar.15, 2016).}

One of Respondent’s stated purposes is the stimulation of fish production and the generation of carbon credits (R.12). Moreover, Respondent admitted that it did not follow the
Assessment Framework (R.18) and unilaterally conducted its OFP despite Applicant’s objections (R.13,17,20). Therefore, Respondent cannot claim that its OFP is for legitimate scientific research, as it did not comply with the substantive and procedural requirements for conducting such activity. Hence, the OFP violated the LC/LP.

b. **Respondent violated the CBD.**

The CBD mandates States party to conserve ecosystems, maintain the populations of species,\(^72\) and to promote the recovery of threatened species.\(^73\) The dumping of ferrous sulfate into the ocean adversely affects the ecosystem,\(^74\) and is only allowed in small-scale scientific research studies within coastal waters.\(^75\) Here, Respondent’s OFP caused harm to the Muktuk Ocean and does not qualify as a small-scale scientific study.

i. **The OFP caused harm to the Muktuk Ocean.**

The dumping of ferrous sulfate into the ocean creates a harmful imbalance in the ecosystem\(^76\) because it (1) increases the concentration of greenhouse gases,\(^77\)  (2) causes ocean acidification,\(^78\) (3) robs nutrients, disrupting the food web and productivity,\(^79\)  (4) reduces food

\(^{72}\)CBD art. 2.

\(^{73}\)Id. art. 2, ¶ 6.

\(^{74}\)Secretariat of the CBD, *supra* note 17 at 46.


\(^{76}\)Secretariat of the CBD, *supra* note 17.

\(^{77}\)Id.; Sagarin, *supra* note 75 at 5.

\(^{78}\)Secretariat of the CBD *supra* note 17 at; Wallace, *supra* note 18.

\(^{79}\)Secretariat of the CBD; Wallace *supra* note 18 at 8-9.
sources to the detriment of fisheries,\textsuperscript{80} (5) creates toxic algal blooms and causes hypoxia in the ocean,\textsuperscript{81} where narwhals reside.\textsuperscript{82}

Here, Respondent’s OFP released an obscene amount of ferrous sulfate into the Muktuk Ocean (R.15,16,19), further endangering the narwhals, (R.3) a threatened species.\textsuperscript{83}

\textit{ii. The OFP is not a small-scale scientific study.}

To be considered a small-scale scientific study, the activity must be: (1) justified by the need to gather specific scientific data, (2) subjected to a thorough prior assessment of the potential impacts of the research studies on the marine environment, (3) strictly controlled, and (4) not be used for generating and selling carbon offsets or any other commercial purposes.\textsuperscript{84} Here, Respondent’s OFP does not meet the exception.

(a) \textbf{There is no justified need to gather specific scientific data.}

Ocean fertilization activities should not take place until there is an adequate scientific basis to warrant the same.\textsuperscript{85} Although a State party to the CBD may determine whether a study is

\textsuperscript{80}Intergovernmental Panel on Climate Change, IPCC Fourth Assessment Report: Climate Change (2007); Secretariat of the CBD supra note 17; Sagarin, \textit{supra} note 75 at 6

\textsuperscript{81}UNESCO-SCOPE-UNEP. \textit{Engineering the Climate: Research Questions and Policy Implications}. Pol. Brief Ser.14 (Nov. 2011).

\textsuperscript{82}IUCN Red List, \textit{supra} note 42.

\textsuperscript{83}\textit{Id.}

\textsuperscript{84}Secretariat of the CBD \textit{supra} note 17.

\textsuperscript{85}S Convention on Biological Diversity, 11\textsuperscript{th} Meeting, Oct. 8-19, 2012, Climate-related geoengineering, UNEP/CBD/COP/DEC/XI/20; Convention on Biological Diversity,10\textsuperscript{th} Meeting., Oct., 18-29, 2010, Biodiversity and Climate Change, UNEP/CBD/COP/DEC/X/33. [“CBD X/33”]
justified by the need to gather specific scientific data, it is always subject to the obligation to prevent Transboundary Harm, which Respondent failed to uphold.86

(b) The OFP was not subjected to a thorough prior assessment of its potential impacts.

Parties to the CBD are mandated to assess scientific research proposals in accordance with the LC/LP Assessment Framework,88 which requires the use of mitigation strategies to lower the risks of ocean fertilization.89 Although Respondent conducted an EIA, it admitted that it did not follow the Assessment Framework under the LC/LP (R.18).

(c) The OFP was not strictly controlled.

Ocean fertilization should place controls on the quantity used, spatial scale, rate of addition, duration, location, and time of year.90 Further, ocean fertilization studies have been limited to amounts of 350 to 2,000 kilograms of iron injected in an area of 64 to 1,000 km².91 Here, Respondent dumped an unprecedented 15,000 kilograms of ferrous sulfate in a 2,000 km² area over a six-week period, in the Arctic Circle during the height of winter when narwhals are most

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87See Infra Part II(B).

88Convention on Biological Diversity, 10th Meeting, October, 18-29, 2010, Marine and Coastal Biodiversity, Unep/Cbd/Cop/X/29; UNGA Res. 63/111 supra note 55; IUCN Ocean Fertilization, supra note 55.

89LC-LP.2.

90Secretariat of the CBD, supra note 17 at 48.

91Wallace, supra note 18 at 48.
vulnerable, and even planned to increase the magnitude in succeeding phases (R.15-16). Clearly, the OFP was not strictly controlled.

(d) The OFP was used for generating carbon offsets and other commercial purposes.

Ocean fertilization activities are not to be used for producing and selling carbon offsets or any other commercial purposes. Here, Respondent conducted the OFP for the prohibited purpose of generating carbon offsets to meet emission commitments, and stimulate fish production (R.12).

c. **Respondent violated the UNCLOS.**

States party to the UNCLOS are obliged to protect and preserve the marine environment and marine living resources. States are further required to harmonize their policies to prevent, reduce, and control pollution of the marine environment from any source, such as dumping. Here, Respondent polluted the Muktuk Ocean with large amounts of ferrous sulfate (R.15-16). As a result, nine narwhals died (R.20).

i. **The OFP polluted the Muktuk Ocean with ferrous sulfate.**

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93 CBD Decision X/33, ¶ 3.

94 UNCLOS, art. 192; Sands, *supra* note 67 at 396.

95 UNCLOS, art.194.

96 Id. art. 210(1).
Pollution of the marine environment refers to the introduction of substances that results or is likely to result in deleterious effects by harming living resources and marine life.\textsuperscript{97} Dumping ferrous sulfate into the ocean has been proven to damage the marine environment.\textsuperscript{98}

\textit{ii. Respondent failed to protect marine mammals.}

Respondent, as a Coastal State, is obligated to protect and conserve Highly Migratory Species listed in Annex I of the UNCLOS, including narwhals.\textsuperscript{99} There is circumstantial evidence\textsuperscript{100} showing the Respondent violated this obligation. \textit{First}, the OFP is an unprecedented project that was conducted before the death of the narwhals. \textit{Second}, the dead narwhals were found off the coast of Respondent (R.20). \textit{Third}, there had been no prior instances of multiple narwhal deaths in either country (Cl.27). \textit{Fourth}, the incident occurred two months after the release of the ferrous sulfate into the Muktuk Ocean (R.20).

\textit{d. The OFP violated the CMS.}

Parties that are Range States shall endeavor to conclude agreements for the conservation and management of migratory species listed in Appendix II of the CMS.\textsuperscript{101} The conservation and management of migratory species require the concerted action of all Range States.\textsuperscript{102} Here,

\textsuperscript{97}UNCLOS, art. 1.

\textsuperscript{98}See Infra Part II(A)(2)(a).

\textsuperscript{99}UNCLOS, arts. 64-65; Sands, supra note 67 at 591; ROBIN CHURCHILL ET AL., SUSTAINING SMALL CETACEANS: A PRELIMINARY EVALUATION OF THE ASCOBANS AND ACCOBAMS AGREEMENTS IN INTERNATIONAL LAW AND SUSTAINABLE DEVELOPMENT (1999) at 229.

\textsuperscript{100}Corfu Channel Case (U.K. v. Albania) Dec. 15, 1949, 15 XII 49, ICJ.

\textsuperscript{101}CMS arts. 1, 4.

\textsuperscript{102}Convention on Migratory Species, Conference of Parties, 11th Meeting, Quito, Nov. 4-9, 2014, Concerted and Cooperative Actions, UNEP/CMS/Resolution 11.13; CMS art. 2.
Respondent failed to comply with its obligations under the CMS because it failed to protect narwhals.

i. **Respondent is obligated to protect narwhals.**

   The narwhal is classified as a migratory species with an unfavorable conservation status. Here, Respondent is a Range State as narwhals migrate through its EEZ (R.8, Cl.24). Thus, Respondent is obliged to protect the narwhals.

ii. **Respondent failed to protect the Narwhals.**

   Range States are required to enter into agreements for the benefit of the species with a view to restoring them to a favorable conservation status. In the absence of such agreements, States party shall comply with the recommendations issued by the Conference of Parties to the CMS. Specifically, the Conference of the Parties recommended the concept of “Cooperative Action” to conserve and protect narwhals.

   Worse, Respondent gravely endangered the narwhals by implementing its large-scale OFP (R.15-16), which polluted and upset the balance of the ecosystem of the narwhals’ habitat.

**B. RESPONDENT VIOLATED CUSTOMARY INTERNATIONAL LAW.**

a. **Respondent violated its obligation to prevent Transboundary Harm.**

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103 CMS appendix II; CMS art. 4.

104 Id. art. 4(3).

105 Id. art. 6(f).

106 CMS, Concerted and Cooperative Actions, supra note 102.
The principle of Transboundary Harm is part of Customary International Law, and is enshrined in the UNCLOS, CBD, and LC/LP, of which Respondent is a contracting party (R.6,7,9). States must ensure that activities within their jurisdiction and control respect the environment of other States. A State violates this principle when it (1) causes significant harm to another State, and (2) fails to observe due diligence to prevent the same.

i. *The OFP caused significant harm to Applicant.*

To be “significant,” the damage to the environment of another State must be more than “detectable” but not necessarily at the level of “serious” or “substantial.” Such harm is also determined by a value determination which depends on the circumstances of a particular case.

Migratory species, such as narwhals, are considered as transboundary resources or shared resources. As a shared resource, the death of the narwhals caused significant harm, since Applicant’s ecotourism industry, and culture focus on narwhals (R.3).

ii. *Respondent failed to observe due diligence to prevent significant harm.*

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110 *Transboundary Harm, 3; Certain Activities carried out by Nicaragua in the Border Area, 104*

111 *Transboundary Harm, art. 2, commentary 4.*

112 *Id.*

113 *CMS, appendix 2.*

114 *SHARELLE HART, SHARED RESOURCES: ISSUES OF GOVERNANCE, (2008).*
Due diligence\textsuperscript{115} requires the State of origin to take all appropriate measures to prevent significant Transboundary Harm.\textsuperscript{116} Here, Respondent failed to comply with its due diligence obligation. At any rate, Respondent failed to cooperate with Applicant.

\textit{iii. Respondent’s EIA was insufficient.}

Where there is a treaty obligation on the source State to make an impact assessment, its international obligation is clear.\textsuperscript{117} To fulfill its due diligence obligation, Respondent is obligated under the LC/LP to apply the Assessment Framework before conducting its OFP.\textsuperscript{118} Here, Respondent flatly admitted that it did not use the Assessment Framework (R.18). Clearly, its EIA was insufficient.

\textit{iv. In any case, Respondent did not cooperate.}

The duty to cooperate is a fundamental principle in the prevention of pollution of the marine environment.\textsuperscript{119} Consultations and negotiations between the two States must be genuine, made in good faith, and not be mere formalities.\textsuperscript{120} This cannot be fulfilled when either of them insists upon its own position without contemplating any modification of the same.\textsuperscript{121} Respondent failed to cooperate with Applicant when it disregarded the latter’s objections to the OFP and insisted on its position without offering any concessions whatsoever (R.13,14,18). It was only after completing the initial phase of its OFP, when Respondent temporarily suspended its activities

\begin{footnotes}
\footnote{115}{Transboundary Harm art. 3, commentary § 7.}
\footnote{116}{Id. commentary § 3.}
\footnote{117}{Xue, supra note 109 at 167.}
\footnote{118}{See supra II, A&B}
\footnote{119}{Mox Plant, I.T.L.O.S. 2001, at 82.}
\footnote{120}{Lac Lanoux (Fr. v. Spain), Arbitral Tribunal, 1957, 24 I.L.R. 101, 15-16.}
\footnote{121}{North Sea Continental Shelf (Ger. v. Den.; Ger. v. Neth.), 1969 I.C.J. 3, at ¶ 85.}
\end{footnotes}
Worse, Respondent reserved the right to resume the OFP at its discretion (R.18). Clearly, Respondent did not cooperate because it negotiated in bad faith.

b. **Respondent violated the Precautionary Principle.**

The Precautionary Principle forms part of Customary International Law\textsuperscript{122} and has been codified in numerous environmental treaties.\textsuperscript{123} It requires States to regulate activities and substances which may be harmful to the environment, despite the lack of scientific certainty,\textsuperscript{124,125} e.g. ocean fertilization.\textsuperscript{126} Under such principle, the lack of full scientific certainty as to the threat of serious or irreversible damage to the environment, shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.\textsuperscript{127}

i. **The OFP threatens serious and irreversible damage to the Muktuk Ocean.**

The effects of large-scale ocean fertilization are serious and irreversible.\textsuperscript{128} Even small-scale ocean fertilization experiments could result in significant adverse impacts to the marine


\textsuperscript{124}Rio Declaration; CBD preamble; Gabčíkovo-Nagymoros 1997 I.C.J. 25, ¶ 144; Sands, supra note 67 at 222.

\textsuperscript{125}Activities in the Area, 2011, I.T.L.O.S. 131.

\textsuperscript{126}Secretariat of the CBD, supra note 17 part C; LC-LP.2.

\textsuperscript{127}Rio Declaration; CBD preamble; Southern Bluefin Tuna Arbitral Tribunal, 2000 at ¶ 77-79; Mox Plant I.T.L.O.S. 2001, ¶ 51.

\textsuperscript{128}IUCN Ocean Fertilization, supra note 55 at 2.
environment.\textsuperscript{129} As discussed,\textsuperscript{130} the potential impacts of ocean fertilization are destructive to the marine ecosystem, such as ocean acidification and hypoxia.\textsuperscript{131}

\textit{ii. Even assuming that there is scientific uncertainty regarding the OFP's threat of serious and irreversible damage, Respondent should have taken the required preventive measures.}

The mere prospect of destroying the marine environment,\textsuperscript{132} should have prompted Respondent to take the required precautionary measures. However, Respondent did not. Moreover, the possible benefits of the OFP are negligible at best, as studies have shown that an excessive amount of iron would be needed to achieve any significant carbon reduction in the environment.\textsuperscript{133}

Respondent openly admits that the benefits of its OFP are merely potential (R.14). Despite these uncertainties, Respondent did not comply with the standard of care required, i.e. the Assessment Framework (R.18), and embarked on a large-scale ocean fertilization activity (R.16,19).

\textbf{C. THE RE-INICIATION OF THE OFP WILL FURTHER VIOLATE INTERNATIONAL LAW.}

\textsuperscript{129}IUCN Ocean Fertilization, \textit{supra} note 55 at 2.

\textsuperscript{130}See \textit{supra} Part II(A)(2)(a).


\textsuperscript{132}See \textit{supra} Part II(A)(2)(a).

\textsuperscript{133}Secretariat of the CBD, \textit{supra} note 16 at 21, 23.
To begin with, the initial phase of the OFP already violated international law.\textsuperscript{134}

Considering that the subsequent phases will be successively larger in scale in terms of area and amount (R.15, Cl.16), any re-initiation of the same will further violate international law.\textsuperscript{135}

\textsuperscript{134}See supra Part II(A) and (B).

\textsuperscript{135}LP.4
CONCLUSION AND PRAYER FOR RELIEF

Applicant, the Federal State of Aeolia, respectfully requests the Court to adjudge and declare that:

1. The ICJ has jurisdiction to determine the matter.

2. Rinnuco violated International Law by conducting the initial phase of its OFP in the Muktuk Ocean and that any re-initiation of this project would violate International Law.