

**INTERNATIONAL COURT OF JUSTICE**

THE PEACE PALACE  
THE HAGUE, NETHERLANDS



QUESTIONS RELATING TO  
**OCEAN FERTILIZATION AND MARINE BIODIVERSITY**  
2016 GENERAL LIST No. 170

**THE FEDERAL STATES OF AEOLIA**  
(APPLICANT)

v.

**THE REPUBLIC OF RINNUCO**  
(RESPONDENT)

\*  
\*   \*  
\*

**MEMORIAL ON BEHALF OF APPLICANT**

2016-17

## TABLE OF CONTENTS

---

TABLE OF AUTHORITIES .....	5
ABBREVIATIONS .....	12
STATEMENT OF JURISDICTION.....	14
QUESTIONS PRESENTED .....	15
STATEMENT OF FACTS.....	16
SUMMARY OF ARGUMENTS.....	17
ARGUMENTS ADVANCED.....	18

### PRELIMINARY OBJECTIONS

<b>I. THIS HON’BLE COURT HAS JURISDICTION RATIONE MATERIAE TO ADUJUDICATE ON THE CLAIMS RAISED BY AEOLIA.....</b>	<b>18</b>
<b>A. CHARACTERIZATION OF THE SUBJECT MATTER OF THE INSTANT DISPUTE.....</b>	<b>18</b>
<b>B. THE SUBJECT MATTER OF THIS DISPUTE ARISES UNDER UNCLOS .....</b>	<b>18</b>
<b>1. Art.192 requires Rinnuco to protect and preserve marine environment .....</b>	<b>19</b>
<b>2. Art.194 requires Rinnuco to not pollute the marine environment.....</b>	<b>20</b>
<i>a. Ocean Fertilization constitutes pollution of marine environment .....</i>	<i>20</i>
<i>b. Ocean Fertilization has a transboundary character.....</i>	<i>21</i>
<b>3. Art.195 requires Rinnuco to not transfer pollution.....</b>	<b>21</b>
<b>4. Art.210 requires Rinnuco to regulate disposal of waste or other matter .....</b>	<b>22</b>
<b>5. Art.65 requires Rinnuco to conserve and protect cetaceans.....</b>	<b>23</b>
<b>6. Art.64 requires Rinnuco to conserve highly migratory species.....</b>	<b>23</b>
<b>C. RINNUCO’S REVOCATION OF ITS ART.287 DECLARATION IS WITHOUT ANY EFFECT .....</b>	<b>24</b>
<b>1. Rinnuco’s declaration was in force at the time of initiation of proceedings ..</b>	<b>24</b>
<b>2. Rinnuco’s sudden withdrawal violates the principle of good faith .....</b>	<b>24</b>
<b>3. Rinnuco cannot rely on the action or inaction of Secretary General.....</b>	<b>24</b>
<b>D. JURISDICTIONAL REQUIREMENTS OF PART XV ARE SATISFIED .....</b>	<b>25</b>

1. There has been an exchange of views.....	25
2. Parties made an attempt to settle disputes peacefully .....	25
3. LP does not restrict the application of Section 2 of Part XV .....	25
<i>a. LP is not the ‘agreed means’ to settle all dispute arising out of UNCLOS.</i> .....	25
<i>b. LP requires parties to settle dispute under Part XV of UNCLOS.....</i>	26
<i>c. Non Compliance Procedure under LP is not binding .....</i>	26
<b>E. THE SUBJECT MATTER OF THIS DISPUTE FALLS WITHIN THE SCOPE OF CBD...27</b>	
<b>1. Art.3 of CBD applies to Projects which may cause transboundary harm .....</b>	<b>28</b>
<b>2. Art.14 of CBD requires Parties to prevent/minimize damage to biodiversity28</b>	
<i>a. Rinnuco’s Project has significant adverse effects on biodiversity.....</i>	<i>28</i>
<i>b. Rinnuco’s Project caused grave damage to biodiversity .....</i>	<i>29</i>
<b>3. Art.8 of CBD requires protection of <i>in situ</i> biological diversity .....</b>	<b>29</b>
<b>F. AEOLIA’S APPLICATION IS ADMISSIBLE .....</b>	<b>30</b>
<b>1. Aeolia is an injured State .....</b>	<b>30</b>
<b>2. Aeolia has a legal interest to have the dispute resolved .....</b>	<b>30</b>
<i>a. Conservation of biodiversity is an obligation erga omnes partes.....</i>	<i>30</i>

MERITS

<b>II. RINNUCO HAS VIOLATED INTERNATIONAL LAW BY CONDUCTING ITS OCEAN FERTILIZATION PROJECT .....</b>	<b>31</b>
<b>A. AT THE OUTSET, OCEAN FERTILISATION IS AN IMMATURE TECHNIQUE, WHICH POSES RISK OF IRREVERSIBLE HARM TO MARINE BIODIVERSITY .....</b>	<b>31</b>
<b>B. RINNUCO HAS VIOLATED ITS TREATY OBLIGATIONS.....</b>	<b>33</b>
<b>1. Rinnuco’s project is not legitimate scientific research and constitutes dumping under International Law .....</b>	<b>33</b>
<i>a. The Assessment Framework under LP is binding .....</i>	<i>34</i>
<i>b. Rinnuco’s project does not constitute a legitimate scientific research.....</i>	<i>35</i>
i. The project violates the small scale and controllable area requirement...35	
ii. Rinnuco’s EIA is inconclusive under its international obligations .....	36
iii. Rinnuco’s project constitutes ‘dumping’ under International Law.....	37

<b>2. Rinnuco has Violated its International Obligations to Conserve Marine Biodiversity.....</b>	<b>38</b>
<i>a. UNCLOS and CMS require Rinnuco take measures for the protection of narwhals.....</i>	<i>38</i>
<i>b. Rinnuco’s OF project has caused severe harm to narwhals and marine biodiversity.....</i>	<i>40</i>
<i>c. Rinnuco has violated its treaty obligation under CBD and UNCLOS.....</i>	<i>41</i>
<i>d. Rinnuco’s OF project has harmed Aeolia’s economic and scientific interests .....</i>	<i>42</i>
<b>C. RINNUCO HAS VIOLATED CUSTOMARY INTERNATIONAL LAW.....</b>	<b>42</b>
<b>1. Rinnuco has violated the precautionary approach.....</b>	<b>42</b>
<b>2. Rinnuco’s project has caused transboundary harm.....</b>	<b>43</b>
<b>D. RINNUCO HAS VIOLATED GENERAL PRINCIPLES OF INTERNATIONAL LAW.....</b>	<b>45</b>
<b>1. Rinnuco violated the principle of Sustainable Development .....</b>	<b>45</b>
<b>E. RINNUCO HAS INCURRED INTERNATIONAL RESPONSIBILITY.....</b>	<b>46</b>
<b>1. Rinnuco cannot invoke the defense of necessity.....</b>	<b>46</b>
<b>CONCLUSION .....</b>	<b>47</b>

## TABLE OF AUTHORITIES

---

### TREATIES AND CONVENTIONS

#### United Nations Convention on the Law of the Sea, Dec. 10, 1833 U.N.T.S. 3 (1982)

Art.64 .....	2, 19, 23, 25, 37, 43
Art.65 .....	2, 19, 23, 25, 23, 37
Art.165 .....	40
Art.192 .....	2, 19, 20, 25
Art.193 .....	33
Art.194 .....	2, 19, 20, 25, 33, 34, 37, 42
Art.194(3).....	34
Art.195 .....	2, 19, 21, 25
Art.210 .....	2, 19, 22, 25, 37
Art.210(1).....	22
Art.210(6).....	22, 34
Art.234 .....	42
Art.282 .....	26
Art.287 .....	2, 24, 26
Art.287(6).....	24

#### Convention on Biological Diversity, 1760 U.N.T.S. 79 (1993)

Art.14 .....	3, 28, 29
Art.3 .....	3, 27
Art.4 .....	27

#### 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter.....

22, 56, 31, 34, 36, 37, 41

Convention on Environmental Impact Assessment in a Transboundary Context, 30 ILM 802 (1991).....	36
Draft articles on Prevention of Transboundary Harm from Hazardous Activities, with commentaries 2001, Yearbook of the International Law Commission, 2001, vol. II, Part Two. at p. 151 .....	34, 36, 43
Stockholm Convention on Persistent Organic Pollutants 2256 U.N.T.S. 119 (2000).....	42
Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331 .....	33, 37

## **JUDICIAL DECISIONS**

### **INTERNATIONAL COURT OF JUSTICE**

Continental Shelf (Tunisia/Libyan Arab Jamahiriya), ICJ Reports 1982.....	44
Fisheries Jurisdiction, (Spain/Canada), Jurisdiction, ICJ Rep 1998 .....	23
Land and Maritime Boundary (Cameroon/Nigeria), Preliminary Objections, ICJ Rep 1998 .	24
Military and Paramilitary Activities (Nicaragua/USA), Jurisdiction and Admissibility, ICJ Reports 1984 .....	19
Nuclear Tests (New Zealand v. France), Order (22 June 1973), ICJ Reports 1973 .....	44
San Juan (Nicaragua/Costa Rica), Merits, ICJ Report 2015.....	29
Whaling in the Antarctic, (Australia and New Zealand/Japan), Judgment, ICJ Report 2015 .	35

### **ITLOS**

Dispute concerning delimitation (Bangladesh/Myanmar), Merits, ITLOS Rep 212.....	24
MOX Plant Case (Ireland/United Kingdom), Provisional Measures, ITLOS 41 ILM (2001) 26	
Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, Advisory Opinion, ITLOS Report 2011 .....	34, 42

### **OTHER CASES**

Iron Rhine Arbitration (‘Ijzeren Rijn’) (Belgium/Netherlands), Award, RIAA XXVII 2005	44
Prosecutor v. Blaskic, ICTY Appeals Chamber, 110 ILR 699 .....	30

Southern Bluefin Tuna Case (Australia and New Zealand/Japan), Jurisdiction and Admissibility 39 ILM (2000).....	26
Trail Smelter Arbitration (US/Canada), 3 U.N. Rep Int'l Arb Awards 1905 (1941) .....	33
United States–Import Prohibition of Certain Shrimp and Shrimp Products, Appellate Body Report, WT/DS58/AB/R (Oct. 12, 1998) [Shrimp/Turtle].....	43

## INTERNATIONAL DOCUMENTS

29 <sup>th</sup> Meeting to the London Convention LC 29/17, Annex 7 .....	27
Arctic Ocean Acidification Assessment: Summary for Policymakers, AMAP (Arctic Council Work Group).....	39
CBD Decisions X/29, para 59, 60.....	33
CBD SBSTT Report UNEP/CBD/SBSTTA/19/INF/2.....	32
CBD Technical Document No.66, Geoengineering in relation to the CBD, Technical and Regulatory Matters, 23 (2012).....	31, 32
CBD Technical Series No. 84, Update on Climate Geoengineering in relation to CBD: Potential Impacts and Regulatory Framework, 57 (2016) .....	32
CBD, SBSTTA, UNEP/CBD/SBSTTA/19/INF/2.....	33
CBD/COP Decision IX/16 (2008) .....	33
CBD/COP Decision X/33 .....	33
CBD/COP Decision X/33 (2010).....	33
CBD/COP Decision XI/20.....	33
CBD/COP Decision XI/20 (2008) .....	32, 33
CBD/COP Decision XII/20.....	33
COP 9, Decision IX/16, 'Biodiversity and climate change', (Secretariat of the Convention on Biodiversity, Germany 2010).....	28
European Commission, The Law of Sustainable Development. General Principles, 2000.....	44
G.A. Res. 65/37, UN Doc. A/65/37A .....	36

I.L.C., Articles on the Responsibility of States for Internationally Wrongful Acts, GA U.N.Doc. A/56/10 (2001).....	30, 31
'ILA First Report, Helsinki Conference' (1996) in Franckx (ed.), Vessel-source Pollution and Coastal State Jurisdiction, the Work of ILA Committee on Coastal State Jurisdiction relating to Marine Pollution, 21-4 (1991-2000).....	34
IMO Doc. LC 34/4, “Report of the 4 <sup>th</sup> Meeting of the Intersessional Working Group on Ocean Fertilisation” July 27, 2012, para 2.18. ....	36
IMO, Marine Geo-engineering – Types of Schemes Proposed to Date, submitted by the Chairman of Scientific Groups, IMO Doc. LC 332/4 (July 28, 2010) .....	31
Implications of the United Nations Convention on the Law of Sea, 1982, for the International Maritime Organisation, Study by the IMO Secretariat, doc. LEG/MISC/1 (1986), para. 20 .....	34
Report of the World Commission on Environment and Development (the Brundtland Report), Our Common Future 43 (1987) .....	44
Resolution LP.4(8) on the Amendment to the London Protocol to Regulate the Placement of Matter for Ocean Fertilisation and Other Marine Geoengineering Activities (adopted on Oct. 18, 2013), IMO Doc. LC 35/15 Annex 4, Art. 6 <i>bis</i> .....	31
Rio Declaration on Environment and Development, UN Doc.A/CONF.151/26 (1992).....	33

#### **BOOKS AND TREATISES**

4 UNITED NATIONS CONVENTION ON THE LAW OF THE SEA: A COMMENTARY (M.H. Nordquist et al., eds., 1991) .....	19
BENEDICTE SAGE-FULLER, THE PRECAUTIONARY PRINCIPLE IN MARINE ENVIRONMENTAL LAW (2013).....	29, 30, 34
BENEDICTE SAGE-FULLER, THE PRECAUTIONARY PRINCIPLE IN MARINE ENVIRONMENTAL LAW, 22 (2013).....	34
BIRNIE ET AL., INTERNATIONAL LAW AND THE ENVIRONMENT (2010).....	20, 44



C. MARK EAKIN ET AL., GLOBAL CLIMATE CHANGE AND CORAL REEFS: RISING TEMPERATURES, ACIDIFICATION, AND THE NEED FOR RESILIENT REEFS, IN STATUS OF CORAL REEFS IN THE WORLD, 29 (Clive Wilkinson ed., 2008).....	39
CATHRIN ZENGERLING, GREENING INTERNATIONAL JURISPRUDENCE: ENVIRONMENTAL NGOS BEFORE INTERNATIONAL COURTS, TRIBUNALS, AND COMPLIANCE COMMITTEES 55 (2013) 34	
CHRISTIAN J. TAMS, ENFORCING OBLIGATIONS ERGA OMNES IN INTERNATIONAL LAW (2005) .....	31
David Heywood, <i>Straddling and Highly Migratory Fish Stocks</i> , in IX MAX PLANCK ENCYCLOPAEDIA OF PUBLIC INTERNATIONAL LAW (2008) .....	23
ELENA MCCARTHY, INTERNATIONAL REGULATION OF UNDERWATER SOUND: ESTABLISHING RULES AND STANDARDS TO ADDRESS OCEAN NOISE POLLUTION 16 (2004) .....	40
FITZMAURICE, ET AL., RESEARCH HANDBOOK ON INTERNATIONAL ENVIRONMENTAL LAW 195 (2010).....	42
JAMES CRAWFORD, STATE RESPONSIBILITY 220 (2013).....	35
KAMRUL HOSSAIN, GOVERNANCE OF ARCTIC OCEAN MARINE RESOURCES, 247-5 (Randall S Abate ed. 2015).....	29
Karen N Scott, <i>Non-Compliance Procedures and Dispute Resolution Mechanisms under International Environmental Agreements</i> , Appendix II, in INTERNATIONAL LAW AND DISPUTE SETTLEMENT (Duncan Fench et al., eds., 2012) .....	27
Lana Kovac, <i>Ocean Fertilization – What Next?</i> 9 MqJICEL 42 (2013) .....	21
MICHAEL H. HUESEMANN, OCEAN FERTILIZATION AND OTHER CLIMATE CHANGE MITIGATION STRATEGIES: AN OVERVIEW 247 (2008) .....	39
Randall S. Abate, <i>Ocean Iron Fertilization: Science, Law, and Uncertainty</i> , in CLIMATE CHANGE GEOENGINEERING: PHILOSOPHICAL PERSPECTIVES, LEGAL ISSUES & GOVERNANCE FRAMEWORK (Wil C.G. Burns & Andrew L. Strauss eds., 2013).....	21
Rosemary Rayfuse et al., <i>Ocean Fertilization and Climate Change: The Need to Regulate Emerging High Seas Uses</i> , 23(2) IJMCL 1, (2008).....	20, 21, 22
YOSHIFUMI TANAKA, THE INTERNATIONAL LAW OF THE SEA, (2 <sup>nd</sup> ed. 2015).....	19, 20

## ESSAYS, ARTICLES AND JOURNALS

Boyd PW et al., <i>A new database to explore the findings from large-scale ocean iron enrichment experiments</i> , 25 <i>Oceanography</i> 64-71 (2012).....	35
Ch.C. Joyner, <i>Biodiversity in the Marine Environment: Resource Implications for the Law of the Sea</i> , 28 <i>Vand. J. Transnat'l L.</i> 635 (1995).....	27
David Freestone & Rosemary Rayfuse, <i>Ocean Iron Fertilization and International Law</i> , 364 <i>Mar Ecol Prog Ser</i> 22, (2008).....	20
Doug W.R. Wallace et al., <i>Ocean Fertilisation : A Scientific Summary for Policy Makers</i> IOC/UNESCO, Paris, 12 (2010).....	32
Elvira S. Poloczanska et al., <i>Global Imprint of Climate Change on Marine Life</i> , 3 <i>Nature Climate Change</i> , 919 (2013).....	31
Ginzky H & Frost R, <i>Marine geo-engineering: Legally binding regulation under the London Protocol</i> , 2 <i>CCLR</i> 93 (2014) .....	35
Grant Wilson, <i>Murky Waters: Ambiguous International Law for Ocean Fertilization and Other Geoengineering</i> , 49 <i>TILJ</i> 507, 533 (2014) .....	21
K.L. Laidre et al., <i>Deep-ocean predation by a high Arctic cetacean</i> , 61 <i>ICES Journal of Marine Science</i> 430 (2004) .....	40
Karen N. Scott, <i>International Law in the Anthropocene: Responding to the Geoengineering Challenge</i> , 34 <i>MICH. J. INT'L L.</i> 309, 321 (2013).....	32
Ken Caldeira et al., <i>The Science of Geoengineering</i> , 41 <i>Ann. Rev. Earth &amp; Planetary Sci.</i> 231 (2013).....	32
Kimberly S. Davis, <i>International Management of Cetaceans under the New Law of the Sea Convention</i> , 3 <i>B.U. INT'L L.J.</i> 477 (1985) .....	23
Kristy J. Krocker et al., <i>Impacts of Ocean Acidification on Marine Organisms: Quantifying Sensitivities and Interaction with Warming</i> , 19 <i>GCB</i> 1884-96 (2013).....	39
L.A. De La Fayette, <i>The London Convention 1972: Preparing for the Future</i> , 13 <i>IJMCL</i> 516 (1998).....	22
Phillip W. Boyd et al., <i>Mesoscale Iron Enrichment Experiments 1993-2005 : Synthesis and Future Directions</i> , 315 <i>SCI.</i> 612-617(2007).....	32

Rosemary Rayfuse, <i>Drowning Our Sorrows to Secure a Carbon Free Future? Some International Legal Considerations Relating to Sequestering Carbon by Fertilising the Oceans</i> , 31 UNSW LJ 919 (2008) .....	22
Rudiger Wolfrum and Nele Matz, <i>The Interplay of the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity</i> , 4 UNYB Max Planck 459 (2000) 27	

#### MISCELLANEOUS

Koski, W.R. & Davis, R.A. 1994. Distribution and Numbers of Narwhals ( <i>Monodon monoceros</i> ) in Baffin Bay and Davis Strait. <i>Meddelelser om Grønland, Bioscience</i> 39: 15-40.....	39
Margaret Klinowska, <i>Dolphins, Porpoises and Whales of the World: The IUCN Red Data Book</i> , 77 (1991) .....	43
Paul Johnston et al., <i>Ocean Disposal/Sequestration of Carbon Dioxide from Fossil Fuel Production and Use: An Overview of Rationale, Techniques and Implications</i> (Greenpeace Research Laboratories, Technical Note 01/99, March 4 <sup>th</sup> 1999) at 24-25 .....	21
T.A. Jefferson et al., <i>Monodon monoceros</i> , The IUCN Red List of Threatened Species: e.T13704A17691711 at p. 1.....	23

## ABBREVIATIONS

---

CBD	-	Convention on Biological Diversity
CDR	-	Carbon Dioxide Removal
CIL	-	Customary International Law
CO <sub>2</sub>	-	Carbon Dioxide
COP	-	Conference of the Parties
EEZ	-	Exclusive Economic Zone
EIA	-	Environmental Impact Assessment
EJIL	-	European Journal of International Law
HMS	-	Highly Migratory Species
ICJ	-	International Court of Justice
ICTY	-	International Criminal Tribunal for the former Yugoslavia
ILC	-	International Law Commission
ILR	-	International Law Reports
IMO	-	International Maritime Organization
IPCC	-	Intergovernmental Panel on Climate Change
ITLOS	-	International Tribunal for the Law of the Sea
IUCN	-	International Union for the Conservation of Nature
IWC	-	International Whaling Commission

LP	-	London Protocol
MPA's	-	Marine Protected Areas
NCP	-	Non Compliance Procedure
OF	-	Ocean fertilization
OIF	-	Ocean Iron fertilization
OSPAR	-	Convention for the Protection of the Marine Environment of the North- East Atlantic
UN	-	United Nations
UNCLOS	-	United Nations Convention on the Law of the Sea
UNFCCC	-	United Nations Framework Convention on Climate Change

## STATEMENT OF JURISDICTION

---

The Federal States of Aeolia [hereinafter **Aeolia or Applicant**] submits the following dispute to the International Court of Justice [hereinafter **this Court or ICJ**]. Pursuant to Article 36 paragraph 1 of the Statute of the ICJ, jurisdiction of this Court comprises of all cases and matters provided in treaties and conventions in force.

The present dispute arises out of UNCLOS and CBD. Aeolia, therefore, invokes the compromissory clauses of CBD (Art.27) and UNCLOS (Art.287).

The Registrar acknowledged the receipt of the application instituting proceedings against the Republic of Rinnuco (hereinafter **Rinnuco or Respondent**) on 4 April 2016; and the preliminary objection submitted by the Rinnuco dated 10 May 2016.

The parties have agreed that the jurisdiction question and merits of this matter be heard and determined simultaneously. The President of this Court, in light of the agreement reached by the parties, has decided to join Rinnuco's preliminary objections to the merits of this case.

## **QUESTIONS PRESENTED**

---

- I. WHETHER THIS COURT HAS JURISDICTION TO DETERMINE THE MATTER**
  
- II. WHETHER RINNUCO VIOLATED INTERNATIONAL LAW BY CONDUCTING THE INITIAL PHASE OF ITS OCEAN FERTILIZATION PROJECT IN THE MUKTUK OCEAN AND THAT WHETHER ANY RE-INITIATION OF THIS PROJECT WOULD VIOLATE INTERNATIONAL LAW**

## **STATEMENT OF FACTS**

---

### **BACKGROUND OF THE PARTIES**

Aeolia and Rinnuco are neighbouring coastal states with adjacent EEZs in the Arctic Circle. They are parties to the Statute of ICJ, UNCLOS, CBD, LC-LP, UNFCCC, CMS and Kyoto Protocol.

### **RINNUCO'S OCEAN FERTILIZATION PROJECT**

Rinnuco conducted a large scale ocean iron fertilization project in its EEZ. Its objective was to generate carbon offsets, stimulate fish production and carbon sequestration. Rinnuco planned to increase the area and quantity of ferrous sulfate, in successive stages.

### **AEOLIA'S OBJECTIONS**

Aeolia expressed its concern about the environmental harm particularly on narwhals, migratory specie in the Arctic. In light of the scientific uncertainty, Aeolia emphasized on the need to act with precaution.

### **THE DISPUTE**

Within few months from the date of commencement of Rinnuco's project, nine dead narwhals were found off the coast of Rinnuco. Aeolia claimed that Rinnuco's project has caused trans-boundary harm whereas Rinnuco disputed the existence of any causal link between its project and the harm caused. Negotiations and mediation between the two States failed to resolve the dispute, and hence Aeolia applied for instituting proceedings against Rinnuco and Rinnuco submitted Preliminary Objection's contesting the ICJ's jurisdiction over the matter.



## **SUMMARY OF ARGUMENTS**

---

### **THIS COURT HAS THE JURISDICTION RATIO MATERIAE**

Aeolia submits that Rinnuco's project has harmed the marine environment including the living resources therein. These claims arise under the provisions of UNCLOS and CBD. Hence, this Court has jurisdiction pursuant to the Compromissory clauses of UNCLOS and CBD read with Art.36(1) of ICJ Statue. Furthermore, Aeolia is an injured state and it has a legal interest in having the dispute settled. Hence, Aeolia's application is admissible.

### **RINNUCO HAS VIOLATED INTERNATIONAL LAW**

OF is an immature technique. The Assessment Framework under LP is binding as scientific developments are accepted standards under law. Rinnuco's project doesn't qualify the elements of legitimate research and constitutes dumping. Rinnuco violated obligations of conservation as the project caused damage to narwhals and Arctic biodiversity. Rinnuco didn't act with precaution and has caused significant transboundary damage to Aeolia. Carbon off sets breach sustainable development. Rinnuco has incurred state responsibility.

## **ARGUMENTS ADVANCED**

---

### **I. THIS HON'BLE COURT HAS JURISDICTION RATIONE MATERIAE TO ADJUDICATE ON THE CLAIMS RAISED BY AEOLIA**

The subject matter of Aeolia's application falls under the provisions of UNCLOS and CBD; as a consequence, the dispute is one which the Court has jurisdiction *ratione materie* to entertain.<sup>1</sup> Furthermore, Aeolia's application is admissible.

#### **A. CHARACTERIZATION OF THE SUBJECT MATTER OF THE INSTANT DISPUTE**

This dispute relates to the damage caused and threats posed to the environment of the Muktuk Ocean<sup>2</sup> and to the sustainable economic and social development of Aeolia by the initial phase of Rinnuco's project,<sup>3</sup> which is conducted at a particularly sensitive region, and the likely recommencement of successively larger phases of this project elsewhere in the section of the Muktuk Ocean,<sup>4</sup> common to the Parties.<sup>5</sup>

#### **B. THE SUBJECT MATTER OF THIS DISPUTE ARISES UNDER UNCLOS**

---

<sup>1</sup> Oil Platforms (Iran/USA), Preliminary Objections, ICJ Report 1996, ¶16.

<sup>2</sup> Record, ¶13.

<sup>3</sup> *Id.*

<sup>4</sup> *Id.* at ¶18.

<sup>5</sup> *Id.* at ¶1.

Rinnuco's large scale OF project attracts the application of UNCLOS<sup>6</sup> which provide for the duty to: protect marine environment<sup>7</sup> [1] from pollution<sup>8</sup> [2] and transfer of damage<sup>9</sup> [3] as well as the duty to adopt global standards while regulating dumping<sup>10</sup> [4].

Furthermore, the causal link between Rinnuco's project and the death of nine narwhals<sup>11</sup> attracts the application of UNCLOS provisions pertaining to the conservation and protection of Highly Migratory Species<sup>12</sup> [5] and Marine Mammals<sup>13</sup> [6].

### **1. Art.192 requires Rinnuco to protect and preserve marine environment**

Aeolia's claim that Rinnuco's project harmed the marine environment is reasonably connected<sup>14</sup> to Art.192 of UNCLOS which requires States to protect and preserve the marine environment.<sup>15</sup> This obligation contains no qualification<sup>16</sup> and has attained the status of CIL.<sup>17</sup>

---

<sup>6</sup> United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 3 [hereinafter UNCLOS].

<sup>7</sup> UNCLOS, Art.192.

<sup>8</sup> *Id.* Art.194.

<sup>9</sup> *Id.* Art.195.

<sup>10</sup> *Id.* Art.210.

<sup>11</sup> Record.¶20.

<sup>12</sup> UNCLOS, Art.64.

<sup>13</sup> *Id.* Art.65.

<sup>14</sup> Military and Paramilitary Activities (Nicaragua/USA), Jurisdiction and Admissibility, ICJ Reports 1984, pg.392.

<sup>15</sup> YOSHIFUMI TANAKA, THE INTERNATIONAL LAW OF THE SEA, 276 (2<sup>nd</sup> ed. 2015) [hereinafter TANAKA].

<sup>16</sup> *Id.*

<sup>17</sup> 4 UNITED NATIONS CONVENTION ON THE LAW OF THE SEA: A COMMENTARY ¶192.8 (M.H. Nordquist et al., eds., 1991).

The term ‘marine environment’, used in Art.192, includes the ocean as a whole,<sup>18</sup> without distinguishing marine spaces under and beyond national jurisdiction.<sup>19</sup> Hence, Rinnuco’s project, despite being conducted in its EEZ,<sup>20</sup> is covered under the scope of Art.192.

## **2. Art.194 requires Rinnuco to not pollute the marine environment**

Art.194 requires State Parties to not cause transboundary harm by pollution.<sup>21</sup> This obligation operates as *erga omnes*<sup>22</sup> and reflects CIL.<sup>23</sup> This duty extends to OF because it falls under the definition of pollution [a] which is capable of spreading [b].

### *a. Ocean Fertilization constitutes pollution of marine environment*

Pollution of marine environment is defined under Art.1(4) of UNCLOS as the introduction of substance which is likely to result in deleterious effect.<sup>24</sup> This definition focuses not on the nature of substance but rather the potential deleterious effects that the introduction of substance may have.<sup>25</sup>

OIF constitutes pollution because *firstly*, it introduces a ‘substance’ i.e. ferrous sulphate in high quantities<sup>26</sup> and *secondly* such introduction has the potential to cause irreversible

---

<sup>18</sup> TANAKA, *supra note 15*, at 276.

<sup>19</sup> *Id.*

<sup>20</sup> Record.¶15.

<sup>21</sup> TANAKA, *supra note 15*, at 273.

<sup>22</sup> BIRNIE ET AL., *INTERNATIONAL LAW AND THE ENVIRONMENT* 145 (2010) [hereinafter BIRNIE].

<sup>23</sup> *Id.* at 137.

<sup>24</sup> UNCLOS, Art.1(4).

<sup>25</sup> David Freestone & Rosemary Rayfuse, *Ocean Iron Fertilization and International Law*, 364 *Mar Ecol Prog Ser* 22, 229 (2008).

<sup>26</sup> Record.¶15.

damage to the marine biodiversity.<sup>27</sup> Such interpretation is consistent with the ordinary meaning of Art.1(4) in light of the overarching goals of UNCLOS.

*b. Ocean Fertilization has a transboundary character*

It is widely recognised that OIF has the potential to cause, *inter alia*, damage to marine ecosystem;<sup>28</sup> eutrophication;<sup>29</sup> changes in dominant phytoplankton species;<sup>30</sup> the creation of dead zones in the oceans and the release of greenhouse gases.<sup>31</sup> These impacts are not confined to any one national jurisdiction.<sup>32</sup> Therefore, Rinnuco's OIF project in the Muktuk Ocean, a shared resource of the parties, can result in transboundary harm to the environment of Aeolia.<sup>33</sup>

**3. Art.195 requires Rinnuco to not transfer pollution**

Art.195 requires State Parties to not transfer hazards, which include green houses gases,<sup>34</sup> from one area (atmosphere) to another (ocean).<sup>35</sup> This article has important implication

---

<sup>27</sup> Randall S. Abate, *Ocean Iron Fertilization: Science, Law, and Uncertainty*, in CLIMATE CHANGE GEOENGINEERING: PHILOSOPHICAL PERSPECTIVES, LEGAL ISSUES & GOVERNANCE FRAMEWORK (Wil C.G. Burns & Andrew L. Strauss eds., 2013) [hereinafter BURNS].

<sup>28</sup> Rosemary Rayfuse et al., *Ocean Fertilization and Climate Change: The Need to Regulate Emerging High Seas Uses*, 23(2) IJMCL 1, 8-9 (2008) [hereinafter Rayfuse].

<sup>29</sup> Lana Kovac, *Ocean Fertilization – What Next?* 9 MqJICEL 42 (2013) [hereinafter Kovac].

<sup>30</sup> Rayfuse et al, *supra note 28* , at 10.

<sup>31</sup> Paul Johnston et al., *Ocean Disposal/Sequestration of Carbon Dioxide from Fossil Fuel Production and Use: An Overview of Rationale, Techniques and Implications* 24-25 (1999)

<sup>32</sup> Kovac, *supra note 29* , at 42.

<sup>33</sup> *Id.*

<sup>34</sup> Grant Wilson, *Murky Waters: Ambiguous International Law for Ocean Fertilization and Other Geoengineering*, 49 TILJ 507, 533 (2014) [hereinafter Wilson].

<sup>35</sup> UNCLOS, Art.195.

with respect to Rinnuco's project which is designed at reducing atmospheric CO<sub>2</sub> by transferring them into oceans.<sup>36</sup> Hence, its application is warranted in the instant case.

#### **4. Art.210 requires Rinnuco to regulate disposal of waste or other matter**

UNCLOS defines dumping as deliberate disposal of wastes or any other matter.<sup>37</sup> Ferrous sulphate falls under the category of 'any other matter'.<sup>38</sup> Hence, Rinnuco's Project must adhere to the norms laid down in Art.210.

Art.210 requires Rinnuco to adopt global rules and standards<sup>39</sup> while regulating dumping activities within its jurisdiction.<sup>40</sup> Such global rules are embodied in London Protocol<sup>41</sup> which requires Rinnuco to follow an assessment framework<sup>42</sup> before conducting OF.<sup>43</sup> Rinnuco admitted that it did follow the assessment framework.<sup>44</sup> Hence, there exists a dispute as to whether Rinnuco breached Art.210 by not applying global standards.

---

<sup>36</sup> Karen, *supra note* 111.

<sup>37</sup> UNCLOS, Art.1(5)(a).

<sup>38</sup> Rosemary Rayfuse, *Drowning Our Sorrows to Secure a Carbon Free Future? Some International Legal Considerations Relating to Sequestering Carbon by Fertilising the Oceans*, 31 UNSW LJ 919, 924 (2008).

<sup>39</sup> UNCLOS, Art.210(6).

<sup>40</sup> *Id.* Art.210(1).

<sup>41</sup> L.A. De La Fayette, *The London Convention 1972: Preparing for the Future*, 13 IJMCL 516 (1998) [hereinafter Fayette].

<sup>42</sup> *Infra.*

<sup>43</sup> *Id.*

<sup>44</sup> Record.¶18.

## **5. Art.65 requires Rinnuco to conserve and protect cetaceans**

The effective interpretation<sup>45</sup> of Art.65 requires States to avoid the risk of extinction of cetacean species.<sup>46</sup> Narwhals are marine mammals in the order *cetacea* and are classified as near threatened species.<sup>47</sup> Nine narwhals were found dead pursuant to the commencement of Rinnuco's Project.<sup>48</sup> There were no earlier instances of such multiple dead narwhals.<sup>49</sup> Hence, Aeolia's claim that Rinnuco violated its duty to conserve marine mammals falls within the scope of Art.65.

## **6. Art.64 requires Rinnuco to conserve highly migratory species**

Art.64 requires Rinnuco to cooperate with Aeolia in order to conserve HMS listed in Annex I, which includes narwhals. Such obligation extends to activities under EEZ.<sup>50</sup> Rinnuco's unilateral action warrants the application of this article in light of the harm caused to narwhals as well as the failure to co-operate with Aeolia.

---

<sup>45</sup> Fisheries Jurisdiction, (Spain/Canada), Jurisdiction, ICJ Rep 1998, ¶5.

<sup>46</sup> Kimberly S. Davis, *International Management of Cetaceans under the New Law of the Sea Convention*, 3 B.U. INT'L L.J. 477, 514 (1985).

<sup>47</sup> T.A. Jefferson et al., *Monodon monoceros*, The IUCN Red List of Threatened Species: e.T13704A17691711. at p. 1 [hereinafter Jefferson].

<sup>48</sup> Record.¶20.

<sup>49</sup> Clarifications, A27.

<sup>50</sup> David Heywood, *Straddling and Highly Migratory Fish Stocks*, 614-615 in IX MAX PLANCK ENCYCLOPAEDIA OF PUBLIC INTERNATIONAL LAW (2008).

## **C. RINNUCO'S REVOCATION OF ITS ART.287 DECLARATION IS WITHOUT ANY EFFECT**

### **1. Rinnuco's declaration was in force at the time of initiation of proceedings**

Rinnuco's revoked its Art.287 declaration on 28 March 2016.<sup>51</sup> Such revocation will not take effect until three months.<sup>52</sup> Hence, on 04 April 2016, when Aeolia filed its application before this Court,<sup>53</sup> Rinnuco's Art.287 declaration was valid and in force.<sup>54</sup>

### **2. Rinnuco's sudden withdrawal violates the principle of good faith**

Rinnuco revoked its Art.287 declaration pursuant to Aeolia's request to settle disputes under UNCLOS.<sup>55</sup> Such conduct violates Art.300 of UNCLOS which imposes the duty to act in good faith. ICJ has extended this duty to unilateral declaration and has held that withdrawal of declaration with indefinite duration requires a reasonable time to elapse.<sup>56</sup>

### **3. Rinnuco cannot rely on the action or inaction of Secretary General**

The legal effect of a declaration does not depend upon subsequent action or inaction of the Secretary General.<sup>57</sup> Hence, Rinnuco's declaration stays in force despite the transmission of its notice to revocation to State Parties by the Secretary General.

---

<sup>51</sup> Record.¶9.

<sup>52</sup> UNCLOS, Art.287(6).

<sup>53</sup> Record.¶23.

<sup>54</sup> Dispute concerning delimitation (Bangladesh/Myanmar), Merits, ITLOS Rep 212, p.66 .

<sup>55</sup> Clarifications, A13.

<sup>56</sup> Land and Maritime Boundary (Cameroon/Nigeria), Preliminary Objections, ICJ Report 1998, ¶33.

<sup>57</sup> Right of passage (Portugal/India), Preliminary Objections, ICJ Report 1957 p.146, 195.



#### **D. JURISDICTIONAL REQUIREMENTS OF PART XV ARE SATISFIED**

Part XV is devoted to dispute settlement procedure concerning UNCLOS. The requirements under this part have been satisfied.

##### **1. There has been an exchange of views**

The dispute arose between Parties when Rinnuco notified Aeolia about its planned project.<sup>58</sup> Ever since, both the Parties exchanged views expeditiously.<sup>59</sup> While doing so, Aeolia has expressly invoked the provisions of UNCLOS and CBD.<sup>60</sup>

##### **2. Parties made an attempt to settle disputes peacefully**

Aeolia and Rinnuco have attempted at length to resolve the dispute by negotiations and mediation.<sup>61</sup> However, this procedure has failed to resolve the dispute.<sup>62</sup>

##### **3. LP does not restrict the application of Section 2 of Part XV**

*a. LP is not the 'agreed means' to settle all dispute arising out of UNCLOS*

LP extends the scope of Art.210 of UNCLOS by providing global rules and standards.<sup>63</sup> However, LP does not cover UNCLOS conservation obligations under Arts.64, 65 and 192 and

---

<sup>58</sup> Record.¶13.

<sup>59</sup> *Id.*¶13,14,17,18,20,21 and 22.

<sup>60</sup> *Id.*¶20.

<sup>61</sup> *Id.*¶22.

<sup>62</sup> *Id.*

<sup>63</sup> Fayette, *supra* note 41.

also the issues pertaining to transboundary harm and transfer of pollution under Arts.194 and 195.

In the *Southern Bluefin Tuna* case,<sup>64</sup> the Arbitral Tribunal held that a dispute can arise under UNCLOS and its implementing agreement.<sup>65</sup> Hence, in the instant case a dispute can simultaneously arise out of UNCLOS and LP.

Further, in the *MOX Plant* case,<sup>66</sup> ITLOS ruled that even if other treaties contained identical obligations as that of UNCLOS, such obligations under those treaties have a separate existence because of, *inter alia*, their respective contexts.<sup>67</sup> Therefore, even if the present dispute is central to LP the jurisdiction of this Court under Art.287 of UNCLOS will not be affected.

*b. LP requires parties to settle dispute under Part XV of UNCLOS*

LP incorporates the provisions of Part XV of UNCLOS.<sup>68</sup> Therefore, any dispute arising out of LP has to be resolved through this Court pursuant to the Parties Art.287 declarations.

*c. Non Compliance Procedure under LP is not binding*

Compulsory settlement under UNCLOS can be precluded only when the agreement between Parties provides for a binding procedure.<sup>69</sup> LP requires parties to resolve disputes

---

<sup>64</sup> Southern Bluefin Tuna Case (Australia and New Zealand/Japan), Jurisdiction and Admissibility 39 ILM (2000) [hereinafter Bluefin].

<sup>65</sup> *Id.* ¶54.

<sup>66</sup> MOX Plant Case (Ireland/United Kingdom), Provisional Measures, ITLOS 41 ILM (2001).

<sup>67</sup> *Id.* ¶49-53.

<sup>68</sup> London Protocol, Art.16.

<sup>69</sup> UNCLOS, Art.282.

under its NCP.<sup>70</sup> However it is not specified as to whether this procedure is binding.<sup>71</sup> Further, NCP is without prejudice to dispute resolution clause of LP<sup>72</sup> and this procedure can only resolve disputes arising out of LP and not the ones arising out of UNCLOS.<sup>73</sup>

**E. THE SUBJECT MATTER OF THIS DISPUTE FALLS WITHIN THE SCOPE OF CBD**

CBD provides an integrated approach<sup>74</sup> for the conservation of biodiversity.<sup>75</sup> CBD applies to marine environment.<sup>76</sup> Its scope extends to areas within the national jurisdiction.<sup>77</sup> Maritime areas under national jurisdiction include the EEZ.<sup>78</sup> Rinnuco's Project took place within its EEZ<sup>79</sup> i.e. within its national jurisdiction.<sup>80</sup> Thus, Rinnuco's Project falls under the norms provided under CBD.

---

<sup>70</sup> London Protocol, Art.11.

<sup>71</sup> Karen N Scott, *Non-Compliance Procedures and Dispute Resolution Mechanisms under International Environmental Agreements*, Appendix II, in *INTERNATIONAL LAW AND DISPUTE SETTLEMENT* (Duncan Fench et al., eds., 2012).

<sup>72</sup> 29<sup>th</sup> Meeting to the London Convention LC 29/17, Annex 7, p.5.

<sup>73</sup> *Id.*

<sup>74</sup> Convention on Biological Diversity, 1760 UNTS 79 (1993); Rudiger Wolfrum and Nele Matz, *The Interplay of the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity*, 4 UNYB Max Planck 459 (2000) [hereinafter Rudiger].

<sup>75</sup> CBD, Preamble, Third recital.

<sup>76</sup> Ch.C. Joyner, *Biodiversity in the Marine Environment: Resource Implications for the Law of the Sea*, 28 Vand. J. Transnat'l L. 635 (1995) [hereinafter Joyner].

<sup>77</sup> CBD, Art.4.

<sup>78</sup> Rudiger, *supra note 74*, at 459.

<sup>79</sup> Record.¶15.

<sup>80</sup> Joyner, *supra note 76*.

## **1. Art.3 of CBD applies to Projects which may cause transboundary harm**

Art.3 of CBD, which is based on Principle 21 of Stockholm Declaration,<sup>81</sup> imposes a duty on Rinnuco to not damage the environment of other states *viz.* Aeolia.<sup>82</sup> Rinnuco's OIF Project has a transboundary character.<sup>83</sup> It adversely affects the biodiversity of Muktuk Ocean – a shared resource.<sup>84</sup> Aeolia's claims thus arise out of the interpretation and application of Art.3.

## **2. Art.14 of CBD requires Parties to prevent/minimize damage to biodiversity**

The present dispute falls within the scope of Art.14 because Rinnuco's Project has significant adverse effects on biodiversity [a] and its implementation has caused grave damage to biodiversity [b].

### *a. Rinnuco's Project has significant adverse effects on biodiversity*

OF has widespread harmful effects on the environment.<sup>85</sup> The absence of scientific certainty and the significant environmental concerns surrounding OF on marine ecosystem were recognised by COP/CBD.<sup>86</sup> The potential harms of OIF become much more likely when

---

<sup>81</sup> PHILIPPE SANDS ET. AL. PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW, 454 (3rd ed. 2012) [hereinafter SANDS].

<sup>82</sup> CBD, Art.3.

<sup>83</sup> *Infra*, at Issue 1(2)(1)(b)

<sup>84</sup> Record.¶1.

<sup>85</sup> DOUGH W.R. WALLACE ET AL., OCEAN FERTILIZATION: A SCIENTIFIC SUMMARY FOR POLICY MAKERS IOC/UNESCO, PARIS, 12 (2010).

<sup>86</sup> COP 9, Decision IX/16, 'Biodiversity and climate change', (Secretariat of the Convention on Biodiversity, Germany 2010).

it is conducted in the delicate ecosystem of the Arctic.<sup>87</sup> Thus, OIF qualifies to be a project which has significant adverse effects on biodiversity.

*b. Rinnuco's Project caused grave damage to biodiversity*

Art.14(d) of CBD requires Rinnuco to initiate action to prevent/minimize danger/damage to biodiversity. Death of nine narwhals,<sup>88</sup> a near threatened species, constitutes a grave damage to biodiversity. Hence, a dispute arises out of this article.

Further, Rinnuco cannot rely on *San Juan* case<sup>89</sup> to challenge the normative value of Art.14(a).<sup>90</sup> Aeolia's claims do not concern Art.14(a) but the other paragraphs of Art.14 which requires Rinnuco to prevent/minimize damage to biodiversity.<sup>91</sup>

**3. Art.8 of CBD requires protection of *in situ* biological diversity**

The fundamental principle of CBD is the *in situ* conservation of biological diversity.<sup>92</sup> This is found in the Preamble<sup>93</sup> and Art.8 of the Convention. Rinnuco therefore is under an obligation to adopt measures to ensure that activities carried out under its jurisdiction will

---

<sup>87</sup> KAMRUL HOSSAIN, GOVERNANCE OF ARCTIC OCEAN MARINE RESOURCES, 247-5 (Randall S Abate ed. 2015) [hereinafter RANDALL].

<sup>88</sup> Record.¶20.

<sup>89</sup> *San Juan* (Nicaragua/Costa Rica), Merits, ICJ Report 2015.

<sup>90</sup> *Id.* at 60.

<sup>91</sup> CBD, Art.14(d).

<sup>92</sup> BENEDICTE SAGE-FULLER, THE PRECAUTIONARY PRINCIPLE IN MARINE ENVIRONMENTAL LAW, 169 (2013) [hereinafter FULLER].

<sup>93</sup> CBD, Preamble, Tenth recital.

protect *in situ* biological diversity of the environment.<sup>94</sup> Hence, Aeolia's claim that Rinnuco has caused harm to the marine biodiversity has reasonable connection with Art.8 of CBD.

## **F. APPLICATION OF AEOLIA IS ADMISSIBLE**

Aeolia has standing before this Court because it is an injured State [1] and it further has a legal interest in having the dispute resolved [2].

### **1. Aeolia is an injured State**

Rinnuco's project has a causal link to the death of nine narwhals, a near threatened species, whose conservation is essential for Aeolia's cultural,<sup>95</sup> environmental<sup>96</sup> and economical interests.<sup>97</sup> Therefore, Rinnuco's project has caused injury to Aeolia, thereby giving it an entitlement to file the present claim.<sup>98</sup>

### **2. Aeolia has a legal interest to have the dispute resolved**

Aeolia has a legal interest in having Rinnuco's project suspended because it poses a threat to the conservation of biodiversity which is an obligation *erga omnes partes* [a].

#### *a. Conservation of biodiversity is an obligation erga omnes partes*

Obligations *erga omnes partes* refer to treaty-based obligations in whose performance all contracting parties are said to have a legal interest.<sup>99</sup> These obligations are notably said to

---

<sup>94</sup> FULLER, *supra note 92*, 169.

<sup>95</sup> Record.¶3.

<sup>96</sup> *Id.*¶13.

<sup>97</sup> *Id.*

<sup>98</sup> I.L.C., Articles on the Responsibility of States for Internationally Wrongful Acts, Art.48, GA U.N.Doc. A/56/10 (2001) [hereinafter ASR].

<sup>99</sup> Prosecutor v. Blaskic, ICTY Appeals Chamber, 110 ILR 699-700 ¶26.

arise under CBD<sup>100</sup> owing to its universality and significance.<sup>101</sup> It follows that the obligation to conserve biodiversity under CBD<sup>102</sup> is a valid *erga omnes partes*.

Aeolia has, therefore, a legal interest in ensuring that Rinnuco does not violate the interdependent obligations of CBD.

## **II. RINNUCO HAS VIOLATED INTERNATIONAL LAW BY CONDUCTING ITS OCEAN FERTILIZATION PROJECT**

### **A. AT THE OUTSET, OCEAN FERTILISATION IS AN IMMATURE TECHNIQUE, WHICH POSES RISK OF IRREVERSIBLE HARM TO MARINE BIODIVERSITY**

Geo-engineering is an intervention in planetary environment.<sup>103</sup> It is premised on manipulation of natural processes<sup>104</sup> and has potentially causes deleterious effects on a large scale.<sup>105</sup> Marine ecosystems are severely threatened by increasing CO<sub>2</sub> concentration in

---

<sup>100</sup> ASR, Art.48.

<sup>101</sup> CHRISTIAN J. TAMS, ENFORCING OBLIGATIONS ERGA OMNES IN INTERNATIONAL LAW 120 (2005).

<sup>102</sup> CBD, Arts. 1,3,8,14.

<sup>103</sup> CBD Technical Document No.66, Geoengineering in relation to the CBD, Technical and Regulatory Matters, 23 (2012) [hereinafter CBD Technical Document No.66].

<sup>104</sup> IMO, Marine Geo-engineering – Types of Schemes Proposed to Date, submitted by the Chairman of Scientific Groups, IMO Doc. LC 332/4 (July 28, 2010).

<sup>105</sup> Resolution LP.4(8) on the Amendment to the London Protocol to Regulate the Placement of Matter for Ocean Fertilisation and Other Marine Geoengineering Activities (adopted on Oct. 18, 2013), IMO Doc. LC 35/15 Annex 4, Art. 6*bis* [hereinafter LP.4(8)].

water.<sup>106</sup> OF aims at further sequestration of CO<sub>2</sub> by causing phytoplankton blooms.<sup>107</sup> It is an immature technique with an improper scientific basis for mitigation of climate change.<sup>108</sup>

The Arctic ecosystem maintains the “physical, chemical and biological balance of the planet”.<sup>109</sup> Deliberate introduction of nutrients alters such balance and creates risk of biodiversity loss.<sup>110</sup> OF can lead to harmful algal blooms<sup>111</sup> and affects marine species by manipulating the food chain<sup>112</sup>. It is likely to increase ocean acidification<sup>113</sup> and produce toxic gases in water.<sup>114</sup> Further, previous experiments conducted have not been effective.<sup>115</sup>

Muktuk Ocean is a shared resource. It is pertinent that such an activity is done with precaution and in compliance with requisite scientific safeguards, in order to prevent

---

<sup>106</sup> Elvira S. Poloczanska et al., *Global Imprint of Climate Change on Marine Life*, 3 *Nature Climate Change*, 919 (2013).

<sup>107</sup> Ken Caldeira et al., *The Science of Geoengineering*, 41 *Ann. Rev. Earth & Planetary Sci.* 231, 250 (2013).

<sup>108</sup> CBD Technical Series No. 84, *Update on Climate Geoengineering in relation to CBD: Potential Impacts and Regulatory Framework*, 57 (2016) .

<sup>109</sup> CBD SBSTTA Report UNEP/CBD/SBSTTA/19/INF/2; CBD/COP Decision XI/20 (2008).

<sup>110</sup> Doug W.R. Wallace et al., *Ocean Fertilisation : A Scientific Summary for Policy Makers* IOC/UNESCO, Paris, 12 (2010).

<sup>111</sup> Karen N. Scott, *International Law in the Anthropocene: Responding to the Geoengineering Challenge*, 34 *MICH. J. INT’L L.* 309, 321 (2013) [hereinafter Karen].

<sup>112</sup> Terry Barker et al., *Mitigation from a Cross-Sectoral Perspective*, in RANDALL, *supra note 87* , at 3.

<sup>113</sup> Karen, *supra note 111*, at 321.

<sup>114</sup> CBD Technical Document No.66, *supra note 103*, at 12.

<sup>115</sup> Phillip W. Boyd et al., *Mesoscale Iron Enrichment Experiments 1993-2005 : Synthesis and Future Directions*, 315 *SCI.* 612-617(2007).



irreversible damage to the environment and rights of other states.<sup>116</sup> Rinnuco's conduct violates its treaty and customary obligations.<sup>117</sup>

## **B. RINNUCO HAS VIOLATED ITS TREATY OBLIGATIONS**

### **1. Rinnuco's project is not legitimate scientific research and constitutes dumping under International Law**

State's right over natural resources is pursuant to their duty to take measures for preventing environmental harm<sup>118</sup> to other states.<sup>119</sup> Such measures shall be based upon appropriate scientific criteria.<sup>120</sup> Rinnuco is a contracting party to the LP and CBD.<sup>121</sup> Parties

---

<sup>116</sup> Gabcikovo (Hungary/Slovakia), ICJ Reports 1997, ¶140.

<sup>117</sup> *Infra*, Issue II, Part B

<sup>118</sup> UNCLOS, Art.193.

<sup>119</sup> CBD, Art.3; UNCLOS, Art.194; Rio Declaration on Environment and Development, UN Doc.A/CONF.151/26 (1992) [hereinafter Rio] Principle 2; Trail Smelter Arbitration (US/Canada), 3 U.N. Rep Int'l Arb Awards 1905 (1941).

<sup>120</sup> UNCLOS, Art. 201.

<sup>121</sup> Record.¶7.

have collectively interpreted<sup>122</sup> that LP includes OF in its scope.<sup>123</sup> Successive COP decisions provide for implementation of LP<sup>124</sup> and its Assessment Framework.<sup>125</sup>

*a. The Assessment Framework under LP is binding*

The Assessment framework sanctions OF activities that constitute legitimate scientific research.<sup>126</sup> It incorporates new standards of evaluation and decision making. Scientific advancements provide for effective evaluation of environmental risks.<sup>127</sup> Such rules are considered as *lex specialis*.<sup>128</sup> Members of this court have previously applied scientific and regulatory developments, irrespective of their legal force.<sup>129</sup>

UNCLOS prescribes due diligence obligations to prevent dumping.<sup>130</sup> It mandates Rinnuco to take measures to 'the fullest possible extent'<sup>131</sup> and adopt rules at par with global norms.<sup>132</sup> The standard of due diligence must qualify the degree of harm<sup>133</sup> and incorporate

---

<sup>122</sup> Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331, Art.31(3).

<sup>123</sup> Resolution LC-LP.1 (2008), para 1.

<sup>124</sup> CBD/COP Decision IX/16 (2008), ¶C4; CBD/COP Decision X/33 (2010), ¶8(x); CBD/COP Decision XI/20 (2008), ¶10, 12.

<sup>125</sup> CBD/COP Decisions X/29, ¶59, 60; CBD/COP Decision XII/20, ¶1.

<sup>126</sup> CBD, SBSTTA, UNEP/CBD/SBSTTA/19/INF/2, p. 79, ¶216.

<sup>127</sup> Gabcikovo, *supra note* 116, ¶140.

<sup>128</sup> Continental Shelf (Tunisia v. Libyan Arab Jamahiriya), ICJ Reports 1982, ¶24.

<sup>129</sup> *Id.* ; Gabcikovo, *supra note* 116.

<sup>130</sup> Orellana A. Marcos, *Climate Change and International Law of the Sea: Mapping the Legal Issues*, in RANDALL, *supra note* 87 .

<sup>131</sup> UNCLOS, Art.194(3).

<sup>132</sup> UNCLOS, Art.210(6).

<sup>133</sup> Draft articles on Prevention of Transboundary Harm from Hazardous Activities 2001, vol. II, Part Two. at p.

151 [hereinafter APTH].

technical advancements.<sup>134</sup> Regulations adopted by IMO are ‘generally accepted’ standards under UNCLOS.<sup>135</sup> These standards are agreed by international community for protection of marine environment.<sup>136</sup> Legal form of such rules does not control their compulsory application.<sup>137</sup> Further, resolutions to a treaty do not require ratification by individual states.<sup>138</sup>

To this effect, the Assessment Framework adopted in LP.4(8) is relevant for determining legitimate scientific research.<sup>139</sup> The prohibition on OIF constitutes an obligation of result.<sup>140</sup> States engaging in legitimate scientific research are required to apply the Assessment Framework as a duty of subsequent conduct.<sup>141</sup>

*b. Rinnuco’s project does not constitute a legitimate scientific research*

*i. The project violates the small scale and controllable area requirement*

---

<sup>134</sup> Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, Advisory Opinion, ITLOS Report 2011 [States Sponsoring Persons].

<sup>135</sup> Implications of the United Nations Convention on the Law of Sea, 1982, for the International Maritime Organisation, Study by the IMO Secretariat, doc. LEG/MISC/1 (1986), para. 20.

<sup>136</sup> 'ILA First Report, Helsinki Conference' (1996) in Franckx (ed.), Vessel-source Pollution and Coastal State Jurisdiction, 21-4 (1991-2000).

<sup>137</sup> BENEDICTE SAGE-FULLER, THE PRECAUTIONARY PRINCIPLE IN MARINE ENVIRONMENTAL LAW, 22 (2013).

<sup>138</sup> CATHRIN ZENGERLING, GREENING INTERNATIONAL JURISPRUDENCE: ENVIRONMENTAL NGOS BEFORE INTERNATIONAL COURTS, TRIBUNALS, AND COMPLIANCE COMMITTEES 55 (2013).

<sup>139</sup> Ginzky H & Frost R, *Marine geo-engineering: Legally binding regulation under the London Protocol*, 2 CCLR 93 (2014) [hereinafter Ginsky].

<sup>140</sup> JAMES CRAWFORD, STATE RESPONSIBILITY 220 (2013).

<sup>141</sup> ASR, Art.21(2).

The CBD regulation on OF permits only small-scale research conducted in a controlled setting.<sup>142</sup> The court must consider the operative aspect of such projects to determine the legality of scale. Members of this court have adopted this approach.<sup>143</sup> Previous OF research experiments have been limited to a maximum area of 300 km.sq.<sup>144</sup> Rinnuco added 15 tonnes of iron sulphate in 2000 km.sq.<sup>145</sup> Further, it plans to increase such area covered and quantity added in successive stages.<sup>146</sup> Rinnuco's activity fails the small and controllable requirement.

ii. Rinnuco's EIA is inconclusive under its international obligations

Rinnuco's OF project has a transboundary character and impacts Aeolia's environment.<sup>147</sup> Rinnuco conducted an EIA as per its domestic standards. However, as State of origin, it is obligated to undertake internationally accepted assessment measures for determining preventive steps.<sup>148</sup> States follow similar assessment standards in transboundary contexts.<sup>149</sup>

---

<sup>142</sup> CBD/COP Decision X/33 (2010), ¶8(w).

<sup>143</sup> Whaling in the Antarctic, (Australia and New Zealand/Japan), Judgment, ICJ Report 2015; San Juan, *supra* note 89.

<sup>144</sup> Boyd PW et al., *A new database to explore the findings from large-scale ocean iron enrichment experiments*, 25 *Oceanography* 64-71 (2012).

<sup>145</sup> Record, ¶15.

<sup>146</sup> Clarifications, A.16.

<sup>147</sup> *Infra* Issue I, Part B(2)(b).

<sup>148</sup> APTH, *supra* note 133, at 153.

<sup>149</sup> Convention on Environmental Impact Assessment in a Transboundary Context, 30 ILM 802 (1991), Art. 4.

States agree that existing EIA processes need further development in order to effectively assess harms of OF activities.<sup>150</sup> The Assessment Framework provides a global regulatory mechanism for the same.<sup>151</sup> It assesses both scientific and impact attributes of an activity,<sup>152</sup> and further requires consent of all countries that can be impacted.<sup>153</sup> Permit conditions under Annex 5 are prescribed in a manner to prevent all risks due to uncertainty.<sup>154</sup> By conducting a domestic EIA, Rinnuco has failed to substantively assess the OF project.

iii. Rinnuco's project constitutes 'dumping' under International Law

Rinnuco has violated LP and its resolutions. It breached the duty to apply the assessment framework, take Aeolia's consent and adopt preventive measures. Thus, its project is not a legitimate scientific research.<sup>155</sup> The amendments to LP were adopted by majority of state parties.<sup>156</sup> Rinnuco has further breached its duty to act in accordance with in the object and purpose of LP.<sup>157</sup> Consequently, Rinnuco's OF activity constitutes dumping.<sup>158</sup> Dumping is

---

<sup>150</sup> G.A. Res. 65/37, UN Doc. A/65/37A ¶132.

<sup>151</sup> Bischen Bttina, *The Regulation of Ocean Fertilisation and Marine Geoengineering under the London Protocol*, in RANDALL, *supra note 87*, at 368.

<sup>152</sup> Ginzky, *supra note 139*, at 84.

<sup>153</sup> LP.4(8) ¶11.

<sup>154</sup> IMO Doc. LC 34/4, "Report of the 4<sup>th</sup> Meeting of the Intersessional Working Group on Ocean Fertilisation" July 27, 2012, para 2.18.

<sup>155</sup> LC-LP.1 (2008), para 7.

<sup>156</sup> LP, Art.21(2).

<sup>157</sup> VCLT, Art.18.

<sup>158</sup> LC-LP.1(2008), para 8 ; LP.4(8), Annex 4, 1(2).

prohibited under international law.<sup>159</sup> By dumping ferrous sulphate, Rinnuco has violated its treaty obligations to take preventive measures<sup>160</sup> and has caused marine pollution.<sup>161</sup>

## **2. Rinnuco has Violated its International Obligations to Conserve Marine Biodiversity**

As per the principle of *pacta sunt servanda*, states must comply with treaty obligations in good faith.<sup>162</sup> Rinnuco is required to take measures for protection of Narwhals. It has violated its obligations under UNCLOS, CBD and CMS by causing harm to marine biodiversity.

### *a. UNCLOS and CMS require Rinnuco take measures for the protection of narwhals*

Rinnuco's right to exploit living resources in its EEZ is subject to the duty to conserve and protect migratory species.<sup>163</sup> Art. 64 and 65 of UNCLOS create a special regulatory regime for conservation of marine mammals.<sup>164</sup> Such duty reflects customary international law.<sup>165</sup>

Narwhals are listed as "nearly threatened" to extinction species.<sup>166</sup> They are severely affected by climate change and are amongst the most sensitive species in Arctic.<sup>167</sup> Given their

---

<sup>159</sup> LP, Art.4.

<sup>160</sup> UNCLOS, Art.194.

<sup>161</sup> UNCLOS, Art.210.

<sup>162</sup> VCLT, Art.26.

<sup>163</sup> CMS, Art.2(1).

<sup>164</sup> CAMERON JEFFERIES, MARINE MAMMALS CONSERVATION AND THE LAW OF THE SEA, 184 (2016) [hereinafter Jefferies].

<sup>165</sup> *Id.*

<sup>166</sup> Jefferson, *supra note 87* .

<sup>167</sup> *Id.*

present state, Narwhals will soon qualify as threatened species and are undeniably a conservation-dependent species.<sup>168</sup>

CBD mandates States to take measures for the conservation of threatened species.<sup>169</sup> Further, UNCLOS prescribes the duty to take special measures to preserve threatened species and fragile ecosystems such as the Arctic.<sup>170</sup> Rinnuco's OF project has a causal link with the death of nine narwhals, as there have been no previous cases of multiple death of the species.<sup>171</sup>

---

<sup>168</sup> *Id.*

<sup>169</sup> CBD, Art.8(f).

<sup>170</sup> UNCLOS, Art. 164(5).

<sup>171</sup> Clarifications, A.27.

*b. Rinnuco's OF project has caused severe harm to narwhals and marine biodiversity*

OF intentionally increases the amount of carbon in the ocean<sup>172</sup> and contributes to ocean acidification.<sup>173</sup> Ocean acidification impairs the survival, growth and reproduction of marine species.<sup>174</sup> It further threatens the productivity and survival of coral reef systems.<sup>175</sup>

The Arctic Ocean is more susceptible to ocean acidification. Cold water has a higher capacity to absorb CO<sub>2</sub><sup>176</sup> due to decreased salinity and melting sea ice<sup>177</sup>. Since narwhals spend their entire life in the Arctic,<sup>178</sup> they are extremely vulnerable to changes in Arctic's ecosystem.

Pollution caused via heavy metals threatens narwhal population.<sup>179</sup> Rinnuco by artificially adding iron sulfate in the Muktuk Ocean increased such risk to narwhals. Narwhals

---

<sup>172</sup> MICHAEL H. HUESEMANN, OCEAN FERTILIZATION AND OTHER CLIMATE CHANGE MITIGATION STRATEGIES: AN OVERVIEW 247 (2008).

<sup>173</sup> CBD Technical Series No. 66, *supra note* 103.

<sup>174</sup> Kristy J. Krocker et al., *Impacts of Ocean Acidification on Marine Organisms: Quantifying Sensitivities and Interaction with Warming*, 19 GCB 1884-96 (2013).

<sup>175</sup> C. MARK EAKIN ET AL., GLOBAL CLIMATE CHANGE AND CORAL REEFS: RISING TEMPERATURES, ACIDIFICATION, AND THE NEED FOR RESILIENT REEFS, IN STATUS OF CORAL REEFS IN THE WORLD, 29 (Clive Wilkinson ed., 2008).

<sup>176</sup> Arctic Ocean Acidification Assessment: Summary for Policymakers, AMAP (Arctic Council Work Group).

<sup>177</sup> RANDALL, *supra note* 87, at 116.

<sup>178</sup> Koski, W.R. & Davis, R.A. 1994. Distribution and Numbers of Narwhals (*Monodon monoceros*) in Baffin Bay and Davis Strait. *Meddelelser om Grønland, Bioscience* 39: 15-40.

<sup>179</sup> CMS Report on *Monodon Monoceros* Linnaeus available at <[http://www.cms.int/reports/small\\_cetaceans/data/M\\_monoceros/m\\_monoceros.htm](http://www.cms.int/reports/small_cetaceans/data/M_monoceros/m_monoceros.htm)>.



being at the top of food chain<sup>180</sup> play a crucial role in the overall health of the marine environment. Further, an induced phytoplankton bloom misbalances the marine food web.<sup>181</sup>

*c. Rinnuco has violated its treaty obligation under CBD and UNCLOS*

CBD prohibits causing harm to migratory species<sup>182</sup>, and proscribes any state action that harms natural habitat of species.<sup>183</sup> Narwhals are key species in the marine food chain that form diet of top predators like polar bear and killer whale.<sup>184</sup> Threat to whales likely causes overall habitat degradation.<sup>185</sup> Rinnuco by conducting its project has violated CBD obligations to conserve marine biodiversity, species and their habitat.<sup>186</sup>

UNCLOS prohibits transfer of hazards from one area into another.<sup>187</sup> Rinnuco's OF project aims at reducing green house gases by transferring them to the ocean.<sup>188</sup> It has further breached the obligation to prevent transfer of pollution.<sup>189</sup> Therefore, any re-initiation of the project shall be detrimental to the environment and Aeolia's rights.

---

<sup>180</sup> Jefferies, *supra note* 164.

<sup>181</sup> *Id.*

<sup>182</sup> UNCLOS, Annex I.

<sup>183</sup> CBD, Art.8(d).

<sup>184</sup> K.L. Laidre et al., *Deep-ocean predation by a high Arctic cetacean*, 61 ICES Journal of Marine Science 430 (2004).

<sup>185</sup> ELENA MCCARTHY, INTERNATIONAL REGULATION OF UNDERWATER SOUND: ESTABLISHING RULES AND STANDARDS TO ADDRESS OCEAN NOISE POLLUTION 16 (2004).

<sup>186</sup> CBD, Preamble.

<sup>187</sup> UNCLOS, Art.165.

<sup>188</sup> Wilson, *supra note* 34, at 533.

<sup>189</sup> Albert C. Lin, *International Legal Regimes and Principles Relevant to Geoengineering*, in BURNS, *supra note* 27, at 182.

*d. Rinnuco's OF project has harmed Aeolia's economic and scientific interests*

Rinnuco has violated the principle of good neighbourliness.<sup>190</sup> Narwhals are culturally important to Aeolia's population.<sup>191</sup> It has a strong ecotourism industry which includes whale watching.<sup>192</sup> Whale watching is a vehicle for scientific observation and research.<sup>193</sup> Rinnuco's OF project has harmed migratory narwhals. It hampers scientific research and has negative implications on the livelihood of people who depend upon Aeolia's ecotourism industry.<sup>194</sup>

**C. RINNUCO has VIOLATED CUSTOMARY INTERNATIONAL LAW**

**1. Rinnuco has violated the precautionary approach**

The precautionary approach lies at the heart of this case.<sup>195</sup> Rinnuco's project poses threats of severe damage to Arctic.<sup>196</sup> In light of scientific uncertainty about OIF<sup>197</sup>, Rinnuco is primarily

---

<sup>190</sup> U.N. Charter, Art. 74.

<sup>191</sup> Record.¶3.

<sup>192</sup> *Id.*

<sup>193</sup> JEFFERIES, *supra note* 164, at 138.

<sup>194</sup> Arctic Ocean Acidification Assessment: Summary for Policymakers, AMAP (Arctic Council Work Group).

<sup>195</sup> CBD/COP Decision IX/16 (2008) at ¶C(4); CBD/COP Decision X/33 (2010) at ¶8(w); CBD/COP Decision XI/20 (2008) at ¶8; LP.1, 2008; LP.4(8), 2013.

<sup>196</sup> *Infra.* Issue II, Part B(2)

<sup>197</sup> CBD Technical Series No. 66, *supra note* 103, at 58-59.

obligated to take preventive measures.<sup>198</sup> This principle is incorporated in universal,<sup>199</sup> regional<sup>200</sup> instruments and forms a part of customary international law.<sup>201</sup>

Rinnuco was made aware about the potential harms of its project by Aeolia.<sup>202</sup> Rinnuco had the option of terminating the project or taking preventive measures. The duty to take preventive measures is customary and requires due diligence.<sup>203</sup> The standard of such compliance must qualify the degree of harm and incorporate scientific developments.<sup>204</sup> Rinnuco failed to apply the assessment framework and take specific protective measures<sup>205</sup> and thus, has violated customary and treaty obligations to act with precaution.

## **2. Rinnuco's project has caused transboundary harm**

States are primarily obligated to ensure that activities within their jurisdiction do not cause damage to environment of other States.<sup>206</sup> This 'no-harm' rule<sup>207</sup> has attained customary

---

<sup>198</sup> Rio, Principle 15; CBD, Preamble; London Protocol, Art.3.

<sup>199</sup> Montreal Protocol, Preamble (1987); UNFCCC, Art.3.3, 11; Stockholm Convention on Persistent Organic Pollutants 2256 UNTS 119 (2000), Preamble, Art. 8.

<sup>200</sup> Helsinki Convention on the Protection of the Baltic Sea 1507 UNTS 167 (1992), Art. 3(2); Black Sea Action Plan, Principle 9 (2009).

<sup>201</sup>States Sponsoring Persons, ¶135; FITZMAURICE, ET AL., RESEARCH HANDBOOK ON INTERNATIONAL ENVIRONMENTAL LAW 195 (2010).

<sup>202</sup> Record, ¶13.

<sup>203</sup> Pulp Mills (Argentina/Uruguay), ICJ Reports 2010, ¶101.

<sup>204</sup> ASR, *supra note* 98.

<sup>205</sup> UNCLOS, Art.234.

<sup>206</sup> Rio, Principle 2; Stockholm Declaration, Principle 21; UNCLOS, Art. 194(2); CBD, Art.3.

<sup>207</sup> RANDALL, *supra note* 87, at 262; Corfu Channel (UK/Albania), ICJ Reports 1948.

status.<sup>208</sup> Rinnuco's project has resulted in death of nine Narwhals and has caused transboundary harm to Aeolia's environment and economy.

Narwhals are highly migratory species<sup>209</sup>. They are found off the coast of both countries<sup>210</sup> and are subject to joint interests of conservation.<sup>211</sup> Such interest in the conservation of migratory species is recognised in international law.<sup>212</sup> Thus, the location of their death does not negate the transboundary impact. Further, there exists causal link between the project and the harm. Narwhals migrate to the coast in summers during April.<sup>213</sup> The project began impacting the ocean in January leading to death of Narwhals when they arrived in April.<sup>214</sup>

The harm caused is significant.<sup>215</sup> Narwhals are already 'nearly threatened' species<sup>216</sup> and are important to Aeolia's culture.<sup>217</sup> Furthermore, OF poses the risk of harmful algal blooms that can travel and damage a much larger area of the ocean.<sup>218</sup> Aeolia's EEZ is directly adjacent to

---

<sup>208</sup> Use of Nuclear Weapons, *supra note* , at ¶29; Pulp Mills, *supra note* 203, at ¶193.

<sup>209</sup> UNCLOS, Annex I.

<sup>210</sup> Record.¶3,8; Clarifications, A24.

<sup>211</sup> UNCLOS, Art.64.

<sup>212</sup> United States–Import Prohibition of Certain Shrimp and Shrimp Products, Appellate Body Report, ¶133, WT/DS58/AB/R (Oct. 12, 1998) [Shrimp/Turtle].

<sup>213</sup> Margaret Klinowska, Dolphins, Porpoises and Whales of the World: The IUCN Red Data Book, 77 (1991) .

<sup>214</sup> Record.¶16, 20.

<sup>215</sup> Pulp Mills, *supra note* 203, at ¶101; APTH, *supra note* , at Art.2(a).

<sup>216</sup> Jefferson, *supra note* 47, at 1.

<sup>217</sup> Record.¶3.

<sup>218</sup> Doelle M., *Climate Geoengineering and Dispute Settlement under UNCLOS and the UNFCCC*, in RANDALL, *supra note* 87, at 351.

Rinnuco's<sup>219</sup> and is likely to be affected.<sup>220</sup> Potential transboundary effects on environment are valid claims under international law.<sup>221</sup>

## **D. RINNUCO HAS VIOLATED GENERAL PRINCIPLES OF INTERNATIONAL LAW**

### **1. Rinnuco violated the principle of Sustainable Development**

Sustainable Development is the cornerstone principle of climate change mitigation.<sup>222</sup> It has a normative character<sup>223</sup> and constitutes a general principle of law.<sup>224</sup> Rinnuco conducted the project to gain carbon offsets.<sup>225</sup> It violates this norm as none of Rinnuco's emissions at source are being substantively reduced,<sup>226</sup> while it's altering the environment through its financial strength. Carbon offsets provide blanket protection to its industries to operate against the interest of future generations and long term solutions.<sup>227</sup>

Furthermore, Rinnuco's project does not qualify as a valid measure for climate change mitigation under the UNFCCC.<sup>228</sup> It interferes with natural adaptation of ecosystems<sup>229</sup> and

---

<sup>219</sup> Clarifications, A.31.

<sup>220</sup> APTH, *supra note 133*, at Art.2(e).

<sup>221</sup> Nuclear Tests (New Zealand v. France), Order (22 June 1973), ICJ Reports 1973, p.135.

<sup>222</sup> Report of the World Commission on Environment and Development (the Brundtland Report), Our Common Future 43 (1987).

<sup>223</sup> Gabčíkovo *supra note 116*, (Separate Opinion of Judge Weeramantry) p. 85.

<sup>224</sup> Iron Rhine Arbitration ('Ijzeren Rijn') (Belgium/Netherlands), Award, RIAA XXVII 2005 pp. 35-125; Continental Shelf (Tunisia/Libyan Arab Jamahiriya), ICJ Reports 1982, ¶222.

<sup>225</sup> Record.¶12.

<sup>226</sup> CBD Decision XI/20 (2008), ¶4.

<sup>227</sup> European Commission, The Law of Sustainable Development. General Principles, 2000.

<sup>228</sup> BIRNIE, *supra note 22*, at 162 and 164.

<sup>229</sup> UNFCCC, Art.2.

disrupts the environment-development balance.<sup>230</sup> Such geo-engineering activities are not a substitute course for reducing carbon emissions.<sup>231</sup>

## **E. RINNUCO HAS INCURRED INTERNATIONAL RESPONSIBILITY**

Rinnuco has materially breached its primary obligations to take preventive action and prevent environmental damage. It has caused transboundary damage to Aeolia and has thus, incurred international responsibility for its conduct.<sup>232</sup>

### **1. Rinnuco cannot invoke the defense of necessity**

Rinnuco's object of stimulating fish productivity and gaining carbon offsets do not qualify the criteria of necessity.<sup>233</sup> O.F. is not the 'only means' of safeguarding Rinnuco's interest of climate change mitigation.<sup>234</sup> It has the option of pursuing other recognised and permitted methods to meet its emission targets. Further, Rinnuco's conduct substantively impairs Aeolia's interests.<sup>235</sup>

---

<sup>230</sup> *Id.* Art.3(4).

<sup>231</sup> LP.4(8), Recital 11.

<sup>232</sup> ASR, *supra note 98*, Art. 2.

<sup>233</sup> *Id.*, Art.25.

<sup>234</sup> Gabcikovo, *supra note 116*.

<sup>235</sup> ASR, *supra note 98*, Art. 25(1)(b).

## CONCLUSION

---

For the forgoing reasons, Aeolia respectfully requests that this Court:-

1. Declare that the present Court has jurisdiction;
2. Declare that Rinnuco violated international law by conducting the Ocean Fertilization Project; and
3. Order Rinnuco to terminate its project.

/s/ \_\_\_\_\_

Cate Cane

Co-Agent and Minister of Foreign  
Affairs of the Federal States of  
Aeolia

/s/ \_\_\_\_\_

Greta H. Badunnelli

Co-Agent of the Federal States of  
Aeolia