THE UNIVERSITY OF SYDNEY

The University of Sydney Law School

Legal Studies Research Paper Series

No. 20/24

April 2020

Can Free Trade Agreements and their Dispute Resolution Mechanisms Help Protect the Environment and Public Health? The CPTTP, MARPOL73/78 and COVID-19

Jie (Jeanne) Huang and Jiaxiang Hu

Can Free Trade Agreements and their Dispute Resolution Mechanisms Help Protect the Environment and Public Health? The CPTTP, MARPOL73/78 and COVID-19

HUANG Jie (Jeanne)* and HU Jiaxiang†

Abstract

Preventing or managing a global pandemic such as COVID-19 requires states to strictly comply with International Health Regulations 2005 (IHR). However, they lack a strong enforcement mechanism, like many multilateral environmental protection agreements. Over the past fifteen years, several such conventions have been incorporated into free trade agreements (FTAs) to enhance State compliance and therefore promote environmental protection. A typical example is the International Convention for the Prevention of Pollution from Ships and its Protocols (MARPOL 73/78). Vessels, like viruses, are globally mobile. Vessel-sourced pollution also mirrors human-carried viral infection, because the locations of potential harm are unpredictable and widespread. This Chapter examines first whether FTAs (especially mega-regional FTAs) can effectively encourage States to comply with MARPOL 73/78. Through this analysis, it generates implications regarding whether the IHR regime could also rely on new or renegotiated FTAs, or be reformed directly, to enhance state compliance with public health initiatives.

Key words: Free trade agreements, dispute resolution, MARPOL 73/78, International Health Regulations 2005, COVID-19 pandemic

---

This paper is a considerably updated and expanded version of Jie (Jeanne) Huang and Jiaxiang Hu, *Can Free Trade Agreement Enhance MARPOL 73/78 Compliance?* 43 Tulane Maritime Law Journal 59, 59-91 (Winter 2018).

* Associate Professor, Law School, University of Sydney, Australia, humility_us@hotmail.com. Duke SJD (2010).

† Professor, KoGuan Law School, Shanghai Jiao Tong University, China jxhu@sjtu.edu.cn.

I. INTRODUCTION

Whether free trade agreements (FTAs) can be used to promote trade-related environmental concerns has been quite widely debated.[1] Since the North American Free Trade Agreement (NAFTA) signed in 1993, the United States has strongly pushed its trading partners to sustainable trade liberalization without scarifying the environment.[2] Vessel-sourced pollution is a serious threat for the global marine environment. The major international conventions to regulate vessel-sourced pollution are the International Convention for the Prevention of Pollution from Ships and its Protocols (collectively MARPOL 73/78)[3] and the United Nations Convention on the Law of the Sea (UNCLOS).[4] Starting from 2006, the United States has incorporated references to MARPOL 73/78 into four of its bilateral FTAs and thereby used trade law to help combat vessel-sourced marine pollution.[5] Most recently the U.S.-Mexico-Canada Agreement (replacing NAFTA) also incorporates MARPOL 73/78.[6] Signed in 2018 by 11 Asia-Pacific states, but not for now the United States under the Trump Administration, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) became the first mega-regional FTA to incorporate MARPOL 73/78. This incorporation was presumably based on a proposal from the U.S., given its recent treaty practice in this respect, as well as the general influence from the U.S. on the topics and provisions typically found in many Asia-Pacific trade and investment treaties.[7] All these U.S. FTAs

---

1. E.g. Matthew Rimmer, Greenwashing the Trans-Pacific Partnership: Fossil Fuels, the Environment, and Climate Change, 14 Santa Clara J. Int'l L. 488 (2016); Andrew Jensen Kerr, The Trans-Pacific Partnership and the Construction of a Syncretic Animal Welfare Norm, 27 Duke Envtl. L. & Pol'y F. 155 (2016); Manjiao Chi, The 'Greenization' of Chinese Bits: An Empirical Study of the Environmental Provisions in Chinese Bits and its Implications for China's Future Bit-Making, 18 J. Int'l Econ. L. 511 (2015); Kevin Kolben, A Development Approach to Trade and Labor Regimes, 45 Wake Forest L. Rev. 355 (2010); Duncan French, The Changing Nature of 'Environmental Protection': Recent Developments Regarding Trade and the Environment in the European Union and the World Trade Organization, 47 Neth. Int'l L. Rev. 1 (2000); Ambler H. Moss, Jr., Global Trade as a Way to Integrate Environmental Protection and Sustainable Development, 23 Envtl. L. 711 (1993); Thomas J. Schoenbaum, Free International Trade and Protection of the Environment: Irreconcilable Conflict?, 86 Am. J. Int'l L. 700 (1992).

2. Chris Wold, Taking Stock: Trade's Environmental Scorecard after Twenty Years of "Trade and Environment", 45 Wake Forest L. Rev. 319, 319-20 (2010).

3. United Nations Convention on the Law of the Sea, 1833 U.N.T.S. 397 (Dec. 10, 1982) [hereinafter UNCLOS]; International Convention for the Prevention of Pollution from Ships, 1340 U.N.T.S. 184, (Nov. 2, 1973), amended by Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1340 U.N.T.S. 61 (Feb. 17, 1978) [hereinafter MARPOL 73/78].

4. United Nations Convention on the Law of the Sea, 1833 U.N.T.S. 397 (Dec. 10, 1982) [hereinafter UNCLOS]; International Convention for the Prevention of Pollution from Ships, 1340 U.N.T.S. 184, (Nov. 2, 1973), amended by Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1340 U.N.T.S. 61 (Feb. 17, 1978) [hereinafter MARPOL 73/78].

5. The four FTAs are the United States–Peru Trade Promotion Agreement (PTPA), the United States—Columbia Trade Promotion Agreement (Columbia TPA), the United States—Panama Trade Promotion Agreement (Panama TPA), and the U.S.—Korea FTA (KORUS FTA). See Free Trade Agreements, Office of the United States Trade Representative, https://ustr.gov/trade-agreements/free-trade-agreements/ (last visited Nov. 2, 2018).

6. Arts. 24.8 and 24.10 of the U.S.-Mexico-Canada Agreement, https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/agreement-between (last visited 10 April 2020).

7. Comprehensive and Progressive Agreement for Trans-Pacific Partnership, ch. 20 art. 20.6 (Mar. 8, 2018), https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements-concluded-

and the CPTPP require its members to "adopt, maintain, and implement laws, regulations, and all other measures to fulfil their obligations" under MARPOL 73/78.[8] However, whether an FTA can effectively encourage states to comply with MARPOL 73/78 has not been well researched. This Chapter attempts to fill in that gap. Moreover, the literature on big oil tanker pollution incidents often focuses on civil dispute resolution and compensatory liability between the parties.[9] This Chapter explores vessel-sourced pollution from a different perspective: how to prevent such disasters from happening in future, by strengthening national compliance with international law.

The following lays out a hypothetical scenario largely mirroring the recent Sanchi incident.[10] Suppose, the M/V Oceanside, a Panama-registered oil tanker, collided with a Hong Kong-registered bulk freighter. The tanker was sailing from Iran to South Korea to deliver tonnes of condensate, an ultralight crude oil which is highly volatile when exposed to air and water. The bulk freighter was carrying grain from the United States to China. The Oceanside caught fire as soon as she hit the freighter. Further suppose that the collision site is within the Zhoushan Fishing Ground, which is one of the biggest in

---

but-not-in-force/cptpp/comprehensive-and-progressive-agreement-for-trans-pacific-partnership-text/ (last visited Nov. 2, 2018) [hereinafter CPTPP]. For comments on CPTPP, see VIVIENNE BATH & LUKE R. NOTTAGE, *International Investment Agreements and Investor-State Arbitration in Asia* 6–8 (2020), https://papers.ssrn.com/abstract=3544458 (last visited Apr 13, 2020).

8. United States–Peru Trade Promotion Agreement, art. 18.2 (Apr. 12, 2006), https://ustr.gov/sites/default/files/uploads/agreements/fta/peru/asset_upload_file953_9541.pdf [hereinafter PTPA]; United States–Columbia Trade Promotion Agreement, art. 18.2, (Nov. 22, 2006), https://ustr.gov/sites/default/files/uploads/agreements/fta/colombia/asset_upload_file644_10192.pdf [hereinafter Columbia TPA].

9. E.g. James D. Fry & Inna Amesheva, Oil Pollution and the Dynamic Relationship Between International Environmental Law and the Law of the Sea, 47 Geo. J. Int'l L. 1001 (2016); John D. Kimball, The Central Role of P&I Insurance in Maritime Law, 87 Tul. L. Rev. 1147 (2013); Hongjun Shan, International Recent Developments: China-Vessel-Source Oil Pollution Compensation, 36 Tul. Mar. L. J. 563 (2012); Muhammad Masum Billah, The Role of Insurance in Providing Adequate Compensation and in Reducing Pollution Incidents: The Case of the International Oil Pollution Liability Regime, 29 Pace Envtl. L. Rev. 42 (2011); Natalie Klien & Nikolas Hughes, National Litigation and International Law: Repercussions for Australia's Protection of Marine Resources, 33 Melb. U. L. Rev. 163 (2009); Ling Zhu, Can the Bunkers Convention Ensure Adequate Compensation for Pollution Victims?, 40 J. Mar. L. & Com. 203 (2009); Yunfu Yang & Cuizhu Lin, Scope of Losses of Compensation for Damages Due to Oil Pollution of Ships in Chinese Waters, 2 US-China L. Rev. 55 (2005); Måns Jacobsson, Oil Pollution Liability and Compensation: An International Regime, 1 Unif. L. Rev. n.s. 260 (1996); Lance D. Wood, An Integrated International and Domestic Approach to Civil Liability for Vessel-Source Oil Pollution, 7 J. Mar. L. & Com. 1 (1975).

10. According to the International Maritime Organization (IMO), the Sanchi's registered owner is Hong Kong-based Bright Shipping Ltd., which is on behalf of the National Iranian Tanker Co. The National Iranian Tanker Co. is a publicly traded company based in Tehran and describes itself as operating the largest tanker fleet in the Middle East. The Sanchi had been rented to Hanwha Total Co., which is a 50-50 partnership between the Seoul-based Hanwha Group and the French oil giant, Total. Iranian oil tanker burning off China's coast at risk of exploding, with 32 crew members still missing, ABC News (Jan. 8, 2018), http://www.abc.net.au/news/2018-01-08/32-missing-oil-tanker-on-fire-after-collision-off-china/9310276; Amanda Erickson, Four Days on, the Sanchi Oil Tanker is Still on Fire the East China Sea, The Washington Post (Jan. 10), https://www.washingtonpost.com/news/worldviews/wp/2018/01/08/a-giant-oil-tanker-is-on-fire-and-could-explode-in-the-south-china-sea/?utm_term=.6413da7975b9; A Costly Message from the Sanchi, The Japan Times (Jan. 22, 2018), https://www.japantimes.co.jp/opinion/2018/01/22/editorials/costly-message-sanchi/#.WtHiJJP1WuU ("[T]he leakage has split into four separate slicks that cover about 101 square kilometres in total, and could affect an area of up to 200 nautical miles long.").

the East China Sea, particularly for mackerel and Atlantic croaker. After collision, the Oceanside slowly drifts into Japan's exclusive economic zone, where she ultimately explodes and sinks.

The condensate carried by the Oceanside is an ultralight, highly toxic, colourless and odourless version of crude oil, which is difficult to detect and even more combustible than regular crude oil. In our scenario, the explosion would likely have expelled the Oceanside's bunker fuel or the heavy fuel engine oil. While bunker fuel is not as explosive as condensate, it is the dirtiest kind of oil and extremely toxic. Similarly, although bunker fuel is relatively easy to contain and extract from water, even small volumes can damage marine life. If this type of large-scale spill indeed occurs, it would be devastating to the marine life and fishery economy in the East China Sea.

Suppose that after examining the Oceanside shipwreck, the investigators concluded that had the Oceanside fully complied with the technical requirement for ship building under MARPOL 73/78 the collision would not have led to such a large-scale oil spill. This failure would be largely due to the flag states' failure to effectively require the Oceanside to comply with MARPOL 73/78. The Oceanside hypothetical should be alarming to coastal states as vessel-sourced pollution creates a serious threat to the surrounding marine environment and species. But the question is: can China or Japan have a remedy under international law?

In addition, the pollution in the Oceanside hypothetical also resembles the spread of COVID-19 pandemic in 2020. On 31 December 2019, China informed the World Health Organization ("WHO") China Country Office about cases of pneumonia with unknown etiology detected in Wuhan City, Hubei Province of China.[11] From 31 December 2019 through 3 January 2020, China reported a total of 44 cases to the WHO. On 11 and 12 January 2020, China provided further detailed information to WHO that the outbreak was associated with exposures in one seafood market in Wuhan City. China isolated a new type of coronavirus on 7 January 2020 and shared the genetic sequence of the virus for countries to use in developing specific diagnostic kits on 12 January 2020. As of 8 April 2020, this new virus (COVID-19) had infected a total of 1,353,361 people and caused 79,235 deaths worldwide.[12] As the sanction that the Chinese police imposed on Dr. Li Wenliang shows,[13] China is accused of failing to provide a timely report on the virus to the WHO.[14] China disputes whether COVID-19 originated from its territory, although its media had widely reported that the virus first came from people illegally selling, handling, or eating wild animals in January and February 2020.[15] It is not the

---

[11] Coronavirus disease 2019 (COVID-19)Situation Report-1, https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/(last visited 8 April 2020).

[12] Coronavirus disease 2019 (COVID-19)Situation Report-79, https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/ (last visited 8 April 2020).

[13] Andrew Green, *Li Wenliang*, 395 THE LANCET 682 (2020).

[14] Peter Tzeng, *Taking China to the International Court of Justice over COVID-19*, EJIL: TALK! (2020), https://www.ejiltalk.org/taking-china-to-the-international-court-of-justice-over-covid-19/ (last visited Apr 12, 2020).

[15] Evidence is Confirmed that Virus is found at Huanan Fish Market, http://finance.sina.com.cn/7x24/2020-01-23/doc-iihnzahk6049908.shtml. Lancet Published Chinese

intention of this Chapter to discuss the origin of COVID-19 or who should be liable. Instead, it focuses on whether the WHO's International Health Regulations of 2005 ("IHR")[16] contains a mechanism for member states to efficiently and effectively resolve their disputes, and whether incorporating this international instrument into FTAs may enhance state compliance and therefore better protect public health.

Vessels are like viruses because they are globally mobile. Vessel-sourced pollution also mirrors human-carried viral infection, because the locations of potential harm are unpredictable and widespread. In three aspects, the Oceanside hypothetical is similar to the spread of COVID-19. First, both incidents are arguably caused by one state who may not comply with an international instrument. For Oceanside, the relevant treaty is MARPOL 73/78, while the IHR is involved for COVID-19.[17] Second, both incidents generate harm to other states. In the Oceanside hypothetical, fishery industries in China and Japan suffered damage from the environmental pollution. Similarly, COVID-19 has caused tremendous losses to people and states regionally and world-wide. Third, neither MARPOL 73/78 nor IHR contain a strong enforcement mechanism to ensure state compliance.

This Chapter aims to explore whether FTAs can enhance state compliance to MARPOL 73/78 and then what implications may follow for the IHR. This Chapter is divided into four Parts. The first Part analyses the role of MARPOL 73/78 in marine environmental protection. It also explains why the United States decided to use FTAs to enhance MARPOL 73/78 compliance. The second Part compares MARPOL 73/78 with the CPTPP. It uses the Oceanside hypothetical to demonstrate the CPTPP's achievements and deficiencies in enhancing MARPOL 73/78 compliance from four aspects: flags of convenience, the vague role of coastal states, effects on trade or investment, and dispute resolution. The third Part discusses the implications for IHR in the contexts of COVID-19 pandemic. The final Part concludes with proposals to address the deficiencies.

II. THE ROLE OF MARPOL 73/78

Oil tankers first appeared in the late nineteenth century and became very much larger after World War II.[18] In order to address the environmental issues associated with

---

Scholar's Comment: the Relationship between Novel Coronavirus and Consumption Wild Animals, https://m.chinanews.com/wap/detail/zw/sh/2020/02-12/9087971.shtml (last visited April 2, 2020).

16 The International Health Regulations (2005)(hereinafter "IHR") is an agreement concluded by 196 countries including all WHO member states. For its texts, see https://www.who.int/ihr/publications/9789241580496/en/. For its member states, see https://www.who.int/ihr/legal_issues/states_parties/en/

17 The International Health Regulations (2005)(hereinafter "IHR") is an agreement concluded by 196 countries including all WHO member states. For its texts, see https://www.who.int/ihr/publications/9789241580496/en/. For its member states, see https://www.who.int/ihr/legal_issues/states_parties/en/

18. According to MARPOL 73/78, "'oil tanker' means a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and includes combination carriers and any 'chemical tanker' as defined in Annex II of [MARPOL 73/78] when it is carrying a cargo or part cargo of oil in bulk." MARPOL 73/78, supra note 3, annex I ch. 1 reg. 1(4), at 197.

large oil tankers, the United Kingdom organized an international conference in 1954 where The International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL) was adopted.[19] The OILPOL represents a commitment by participating states to explore solutions to oil tanker pollution.[20]

In 1973, the International Maritime Organization (IMO) held a conference, attended by seventy-one countries, where they adopted the International Convention for the Prevention of Pollution from Ships (MARPOL 73).[21] MARPOL 73 incorporated OILPOL and its various amendments into Annex I to become the primary treaty for eliminating vessel pollution.[22] MARPOL 73 contains two Protocols: Provisions concerning Reports on Incidents involving Harmful Substances (Protocol I), and Arbitration (Protocol II).[23] MARPOL 73 was subsequently amended by the Protocols of 1978, becoming MARPOL 78, at the International Conference on Tanker Safety and Pollution Prevention which was convened by the IMO in February of 1978.[24] MARPOL 78 absorbed MARPOL 73 to form MARPOL 73/78, which entered into force on October 2, 1983.[25] MARPOL 73/78 has five Annexes, corresponding to five different sources of vessel-sourced pollution.[26] MARPOL 73/78 was amended by the Protocol of 1997, whereby a sixth Annex was added.[27] MARPOL states must accept Annexes I and II.[28] Whereas compliance with Annexes III-VI is voluntary; but once accepted, compliance becomes mandatory.[29] As of June 2017, MARPOL 73/78 and Annexes I and II have been accepted by 157 states, representing 99.15% of the world's merchant tonnage,[30] and have contributed to a noticeable decrease in pollution from international shipping.[31]

MARPOL 73/78 and FTAs used to be two parallel lines. They became crossed ever since the United States' bipartisan agreement on trade policy relating to FTAs was

---

19. Jeff B. Curtis, Comment, Vessel-Source Oil Pollution and MARPOL 73/78: An International Success Story?, 15 Envtl. L. 679, 684 (1985); see International Convention for the Prevention of Pollution of the Sea by Oil, 1954, 327 U.N.T.S. 3.

20. Curtis, supra note 19, at 684-85.

21. International Convention for the Prevention of Pollution from Ships, 1340 U.N.T.S. 184 (Nov. 2, 1973), [hereinafter MARPOL 73].

22. MARPOL-25 years, International Maritime Organization [IMO] 5 (Oct. 1998), http://www.imo.org/en/KnowledgeCentre/ReferencesAndArchives/FocusOnIMO(Archives)/Documents/Focus%20on%20IMO%20-%20MARPOL%20-%2025%20years%20(October%201998).pdf.

23. MARPOL 73, supra note 21, protocol I & II, at 194-97.

24. Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, 1340 U.N.T.S. 61 (Feb. 17, 1978).

25. Id.

26. MARPOL 73/78, supra note 3, annex I-V, at 66-88, 233-65.

27. The Protocol of 1997 (MARPOL Annex VI), IMO, http://www.imo.org/en/OurWork/environment/pollutionprevention/airpollution/pages/the-protocol-of-1997-(marpol-annex-vi).aspx

28. MARPOL 73/78, supra note 3, art. 14, at 189.

29. Id.

30. Status of Treaties, IMO, http://www.imo.org/en/About/Conventions/StatusOfConventions/Documents/StatusOfTreaties.pdf.

31. The global trend of oil spills shows that after MARPOL became effective, statistics for spills greater than seven tonnes from tankers show a marked downward trend. See Oil Tanker Spill Statistics 2017, ITOPF, http://www.itopf.com/knowledge-resources/data-statistics/statistics/ (last visited Nov. 2, 2018).

announced in May 2007.[32] The bipartisan agreement creates a new trade policy template that incorporates a specific list of multilateral environmental agreements (MEAs) into FTAs, which includes MARPOL 73/78.[33] The bipartisan agreement explains that MARPOL 73/78 is included because the United States is a party to the treaty and takes seriously the commitments thereunder.[34] The current Administration and Congress consider that the United States has "nothing to fear from taking on FTA commitments for [MARPOL 73/78] as well and subjecting those commitments to the FTA dispute settlement process where trade or investment are affected."[35]

The PTPA, the Columbia TPA, the Panama TPA, and the KORUS FTA all incorporate MARPOL 73/78.[36] The United States also brought MARPOL 73/78 to the TPP concluded on February 4, 2016.[37] Nevertheless, the TPP does not require its members to ratify all five annexes of MARPOL 73/78.[38] Its members can maintain existing obligations and make future reservations, exemptions, and exceptions applicable to it under MARPOL 73/78.[39] Therefore, for the first time, MARPOL 73/78 is incorporated into a mega-regional FTA.

MARPOL 73/78 aims to reduce deliberate, negligent, or accidental release of oil and other harmful substances from ships and protect the marine environment.[40] FTAs, such as the CPTPP, affirm the signatories' commitment to "promote high levels of environmental protection and effective enforcement of environmental laws" and enforce MEA environmental obligations on the same basis as the FTA commercial provisions.[41] However, MARPOL 73/78 and the CPTPP are not perfect agreements. Even the IMO acknowledged that "a greater effort to impose [the MARPOL 73/78] compliance must be carried out."[42] One of the key deficiencies of MARPOL 73/78 is its predominant reliance on flag states to ensure MARPOL compliance while neglecting the role of coast states.[43] A large number of vessels are registered in flag of convenience (FOC) states,

---

32. See Bipartisan Trade Deal, Office of the United States Trade Representative, https://ustr.gov/sites/default/files/uploads/factsheets/2007/asset_upload_file127_11319.pdf.

33. Id. at 2. The list also includes "the Convention on International Trade in Endangered Species (CITES), Montreal Protocol on Ozone Depleting Substances . . . Inter-American Tropical Tuna Convention (IATTC), Ramsar Convention on Wetlands, International Whaling Convention (IWC), and Convention on Conservation of Antarctic Marine Living Resources (CCAMLR)." Id.

34. Id.

35. Id.

36. See Free Trade Agreements, supra note 5.

37. The original twelve TPP countries are Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam. TPP: What is it and Why Does it Matter?, BBC (Jan. 23, 2017), https://www.bbc.com/news/business-32498715.

38. CPTPP, supra note 7, ch. 20 art. 20.6.

39. Id.

40. MARPOL 73/78, supra note 3, Preamble, at 184.

41. CPTPP, supra note 7, ch. 20 art. 20.2.

42. MARPOL Annex I- Prevention of Pollution by Oil, IMO, http://www.imo.org/en/OurWork/Environment/PollutionPrevention/OilPollution/Pages/Default.aspx (last visited Nov. 4, 2018).

43. See MARPOL 73/78, supra note 3, arts. 3-8, at 185-88. A Flag State is the state of the flag a vessel flies. It is also where the vessel is registered.

which are not incentivised to fully comply with MARPOL 73/78.[44] Though coastal states are often the biggest victims of vessel-sourced oil spills, MARPOL 73/78 provides vague jurisdiction for them to require foreign vessels to meet MARPOL 73/78 standards.[45] As for FTAs, at the core they are not agreements with a primary focus on the environment. For example, the CPTPP has been widely accused as weak and unlikely to address environmental concerns.[46] In these contexts, can FTAs enhance the compliance of MARPOL 73/78? This Article tries to provide a tentative answer from four aspects: FOC; the vague role of coastal states; affecting trade or investment between the parties; and dispute resolution.

III. CHALLENGES FOR FTAS TO ADDRESS VESSEL-SOURCED POLLUTION AND PROPOSED SOLUTIONS

A. FOC

Because of the traditional primacy of flag state jurisdiction, MARPOL 73/78 relies on the flag states to enforce shipping standards,[47] despite FOC states having limited resources or no incentives to fully comply with MARPOL 73/78.[48] Flag states have a primary obligation to inspect or "survey" vessels when they are put into service or when they apply for a five-year International Oil Pollution Prevention Certificate (IOPP).[49] MARPOL 73/78 also requires flag states to conduct mandatory initial, annual, intermediate, and periodical surveys for "[e]very oil tanker of 150 tons gross tonnage and above, and every other ship of 400 tons gross tonnage and above."[50] Furthermore, the flag state must ensure that a vessel meets the MARPOL standards with respect to the design, construction, equipment, or manning of vessels before they go into operation.[51] The flag state must immediately investigate MARPOL violations irrespective of where the violation or pollution caused by the violation has occurred.[52]

If a vessel has a valid IOPP, she is regarded for all purposes to be covered by MARPOL 73/78 to the extent of the validity of the certificate, and port states shall accept

---

44. Jim Shaw, Flag of Convenience—or Flag of Necessity?, Pacific Maritime Magazine (Sept. 1, 2016), https://www.pacmar.com/story/2016/09/01/features/flag-of-convenience-or-flag-of-necessity/455.html.

45. See MARPOL 73/78, supra note 3, arts. 3-10, at 185-88.

46. Chris Wold, Empty Promises and Missed Opportunities: An Assessment of the Environmental Chapter of the Trans-Pacific Partnership, at 2 (Jan. 4, 2016), https://law.lclark.edu/live/files/20857-assessing-the-tpp-environmental-chapter; see Matthew Rimmer, The Trans-Pacific Partnership: Intellectual Property, Public Health, and Access to Essential Medicines, 29 I.P. J. 277, 280, 292-95 (2017).

47. For example, according to UNCLOS, flag states shall ensure that vessels flying their flag comply "with applicable international rules and standards." UNCLOS, supra note 4, art. 217(1), at 486. They shall enact domestic laws according to applicable international laws to control pollution from ships flying their flag. Id. art. 211, at 483-85.

48. Robert Beckman & Zhen Sun, The Relationship Between UNCLOS and IMO Instruments, 2 Asia-Pac. J. Ocean Law Policy 201, 227 (2017).

49. MARPOL 73/78, supra note 3, annex I ch. 1, reg. 5, at 201.

50. Id. annex I ch.1 reg. 4(1), at 200.

51. UNCLOS, supra note 4, art. 217(2), at 487.

52. Id. art. 217(4), at 487.

it.[53] Only when clear grounds exist for believing that the condition of the vessel or her equipment "does not correspond substantially with the particulars of that certificate" can port states conduct a complete survey of the vessel.[54] Additionally, a port state may inspect a vessel to verify whether the vessel has discharged any harmful substances violating MARPOL 73/78.[55] If an inspection indicates a MARPOL 73/78 violation, the port state cannot conduct a prosecution and must forward a report with the evidence to the flag state for them to take appropriate action.[56] Upon receiving such evidence, the flag state must investigate the violation and may request further or better evidence from the port state.[57] If the flag state is satisfied with the evidence, it must bring proceedings against the vessel in accordance with its domestic laws as soon as possible.[58] It shall also promptly inform the reporting port state, as well as the IMO, of the actions taken.[59] Therefore, compared with flag states, port states have limited jurisdiction and capacity concerned with MARPOL 73/78 violations.

Since the MARPOL 73/78 enforcement mechanism relies primarily on the flag states,[60] a vessel may evade MARPOL 73/78 standards if a flag state cannot or is not willing to enhance its MARPOL compliance.[61] Over 60% of vessels around the world use FOCs in 2016.[62] A FOC vessel flies the flag of a country other than the country of ownership. A genuine link between the owner of the vessel and the flag state is not required.[63] As vessel registration brings fiscal revenue, states are incentivised to open their registries to foreign vessels. Some FOC states, like Mongolia, do not even have a coastal port but still open their registry to foreign vessels. FOC states have been widely criticised for their ineffectiveness in enforcing MARPOL 73/78 either due to a lack of administrative machinery, power, or their simple refusal to investigate or prosecute violations.[64] Enforcing environmental regulations less strictly further incentivises

---

53. MARPOL 73/78, supra note 3, annex I, ch. 1 art. 5(1), at 201; see also UNCLOS, supra note 4, art. 217(3), at 487. If a vessel has no valid IOPP, the port state "shall take such steps as will ensure that the [vessel] shall not sail until it can proceed to sea without presenting an unreasonable threat of harm to the marine environment." MARPOL 73/78, supra note 3, art. 5(2), at 186.

54. MARPOL 73/78, supra note 3, art. 5(2), at 186.

55. Id. art. 6(2)-(3), at 187.

56. Id.

57. Id. at art. 6(4), at 187.

58. Id.

59. Id.

60. Secretariat of the Int'l Mar. Org., Implications of the United Nations Convention of the Law of the Sea for the International Maritime Organization, 12, IMO Doc. LEG/MISC.8 (Jan. 30, 2014) [hereinafter Implications of the UN Convention], http://www.imo.org/en/OurWork/Legal/Documents/LEG%20MISC%208.pdf.

61. Andrew Rakestraw, Open Oceans and Marine Debris: Solutions for the Ineffective Enforcement of MARPOL Annex V, 35 Hastings Int'l & Comp. L. Rev. 383, 392 (2012).

62. Craig Moran, Flags of Convenience: Panama Papers on the High Seas, World Policy (July 20, 2016), https://worldpolicy.org/2016/07/20/flags-of-convenience-panama-papers-on-the-high-seas/ ("[P]erhaps unsurprisingly, Panama is one of the most sought out destinations for ship registrations, followed by Liberia and the Marshall Islands. Together, these 'registration havens' account for more than 60 percent of shippers, up from a measly 4 percent in the 1950s."). The figure was around thirty percent in the 1990s. Mark L. Boos, The Oil Pollution Act of 1990: Striking the Flags of Convenience?, 2 Colo. J. Int'l Envtl. L. & Pol'y 407, 412 (1991) (footnote omitted).

63. Boos, supra note 62, at 410 & n.22.

64. G.P. Pamborides, International Shipping Law: Legislation and Enforcement 10 (1999)

shipowners to register in those countries.[65] In other words, FOC states waive or weaken their obligations under MARPOL 73/78 in order to attract trade or investment (i.e. registration of foreign vessels). The International Transport Worker's Federation has identified thirty-two FOC states.[66] Eleven other countries on the list of FOC states may have a "high" or "very high" risk of inspection violations according to the 2009 annual report by the Paris Memorandum of Understanding (Paris MoU) on their "black list."[67] FOC vessels are more likely to cause accidents and pollution, be in poor physical condition, have communication problems, or have inadequately trained and certified crews.[68] Environmental compliance cannot be realized if FOC states are not effectively enforcing MARPOL 73/78.[69]

Moreover, all FOC countries are the least developed countries or countries still developing.[70] These countries often lack resources and/or political will to achieve MARPOL 73/78 compliance. There are two main reasons for this. First, the development of MARPOL 73/78 was closely associated with major marine environmental casualties in developed countries, "like Torrey Canyon, Amoco Cadiz, Argo Merchant, Exxon Valdez, Erika, and Prestige" therefore, MARPOL 73/78 is considered as mainly endorsing the environmental concerns of developed countries.[71] The MARPOL 73/78 drafting process did not attract the attention or fully reflect the needs of developing countries. Second, MARPOL 73/78 fails to provide sufficient support for developing countries to fully implement it.[72] While MARPOL 73/78 together with UNCLOS require "developed countries and international organizations [to provide] financial help, technical assistance, and technology transfer to developing countries," these obligations have never been practically implemented.[73]

The four United States FTAs that incorporate MARPOL 73/78 all impose procedural obligations on its member states regarding investigation and sanctioning of MARPOL 73/78 violations, and disclosure of information and public participation.[74]

(quoting omitted source); Curtis, supra note 19, at 708 (quoting D. Abecassis, The Law and Practice relating to Oil Pollution from Ships 4, 77 (1978)); Gini Mattson, MARPOL 73/79 and Annex I: An Assessment of Its Effectiveness, 9 J. Int'l Wildlife L. & Pol'y 175, 191 (2006).

65. Rebecca Becker, MARPOL 73/78: An Overview in International Environmental Enforcement, 10 Geo. Int'l Envtl. L. Rev. 625, 632 (1998) (citing Curtis, supra note 19, at 708).

66. This includes Panama where Oceanside, our hypothetical vessel, is registered. See Flags of Convenience, International Transport Workers' Federation, http://www.itfglobal.org/en/transport-sectors/seafarers/in-focus/flags-of-convenience-campaign/ (last visited Nov. 3, 2018).

67. Port State Control, Paris Memorandum of Understanding, 29 (2009) https://parismou.org/sites/default/files/gecorrigeerd%20jaarverslag%202009_0.pdf. The Paris MoU on Port State Control is an organization consisting of twenty-seven participating maritime Administrations in North America and Europe. It aims to eliminate the operation of sub-standard ships through a harmonized system of port state control. See id. at 4.

68. Becker, supra note 65, at 634.

69. Rakestraw, supra note 61, at 394; Becker, supra note 65, at 633.

70. Andrew Griffin, MARPOL 73/78 and Vessel Pollution: A Glass Half Full or Half Empty?, 1 Ind. J. Global Legal Stud. 489, 507 (1994).

71. Saiful Karim, Implementation of the MARPOL Convention in Developing Countries, 79 Nordic J. Int'l L. 303, 331 (2010).

72. See id. at 336-37.

73. Id. at 336.

74. See, e.g., Panama TPA, ch. 17 arts. 17.3-17.4, 17.7-17.8 (June 28, 2007), https://ustr.gov/sites/default/files/uploads/agreements/fta/panama/asset_upload_file314_10400.pdf.

The CPTPP not only contains these two obligations but also allows sub-central governments, third state,[75] and non-governmental organizations to play an active role in enforcing MARPOL 73/78 compliance. Therefore, this Article uses the CPTPP as our example for its discussion.

The CPTPP imposes on its members new procedural obligations to investigate and sanction MARPOL violations. MARPOL 73/78 avoids interference with its members' domestic law and allows its members to fulfil their investigations and sanctions according to their domestic law. It requires that the sanction for violations specified under domestic law "shall be adequate in severity to discourage violations . . . and shall be equally severe irrespective of where the violations occur."[76] The CPTPP imposes two new obligations on its member states. The first is a permissive obligation that sanctions or remedies for MARPOL violations may include a right for victim(s) to seek damages or injunctive relief directly against the violator, or a right to seek governmental action.[77] The second is a compulsory obligation. A CPTPP member state must provide judicial, quasi-judicial, or administrative methods of enforcement for environmental laws; and importantly, to ensure "that those proceedings are fair, equitable, transparent and comply with due process of law."[78] The CPTPP does not explicitly indicate how to interpret the fairness, equity, transparency, and due process of law.[79] This leaves the possibility that these concepts may be interpreted according to international law and held to the international due process standard rather than the domestic law of the relevant member states. In contrast, MARPOL 73/78 explicitly provides that domestic law shall be applied to investigate and sanction violations.[80]

MARPOL 73/78 only adjusts rights and obligations between states. Disputes involving an interested person residing or established in the territory of MARPOL 73/78 members usually fall into that country's domestic jurisdiction.[81] However, the CPTPP clearly goes beyond state-to-state relationships to explicitly require that a member state should ensure an interested person has the right to request that state authorities investigate alleged MARPOL 73/78 violations according to the member state's law.[82] This not only represents a breakthrough with the MARPOL 73/78 regulations, but also may pose a significant challenge to the administrative system and judicial order of the CPTPP member states.[83]

---

75. A "third state" refers to a state other than the requesting or the responding state in a vessel-sourced pollution dispute.

76. MARPOL 73/78, supra note 3, art. 4(4), at 186.

77. CPTPP, supra note 7, ch. 20 art. 20.7(5).

78. Id. ch. 20 art. 20.7(3).

79. See id.

80. MARPOL 73/78, supra note 3, art. 4, at 185-86.

81. Id.

82. CPTPP, supra note 7, ch. 20 art 20.7(2).

83. See Patricia Ranald, The Trans-Pacific Partnership Agreement: Reaching Behind the Border, Challenging Democracy, 26 Econ. Lab. Rel. Rev. 241, 245-46 (2015).

B. The Vague Role of Coastal States

Coastal states are different from port states and flag states.[84] In our hypothetical, China would be neither a port state nor a flag state for the Oceanside, because the Oceanside is registered in Panama and it did not plan on entering any port in China. However, on the Oceanside's voyage from Iran to South Korea, she would pass China's exclusive economic zone. China is a coastal state but not a port state. Compared with port states and flag states, the jurisdiction of coastal states is trickier considering the traditional supremacy of freedom of navigation. When MARPOL 73/78 was negotiated, states were contemplating on whether to negotiate UNCLOS. Therefore, MARPOL 73/78 deliberately contains vague provision for the jurisdiction of coastal states.[85] Under article 4 of MARPOL 73/78, the coastal state can prohibit MARPOL violations "within the jurisdiction" of the state, but the exact meaning of "jurisdiction" is not clear.[86] In cases where coastal states discover a MARPOL violation within their jurisdiction, they shall either initiate proceedings in accordance with their own laws or transmit information and evidence to the vessel's flag state for further action.[87]

The degree to which coastal states may regulate foreign ships to prevent vessel-sourced pollution during innocent passage within their territorial waters or navigating their exclusive economic zone is provided by UNCLOS.[88] UNCLOS limits coastal state jurisdiction to two areas: territorial sea, and the exclusive economic zone or the continental shelf.[89] Within their territorial sea, coastal states can exercise sovereignty and adopt laws to control marine pollution from foreign vessels, to the extent that those laws do not hamper innocent passage of foreign vessels.[90] In respect of exclusive

---

84. See Port State Measures, Food and Agriculture Organization of the United Nations (2002), http://www.fao.org/3/y3536e09.htm#bm9; Flag State Responsibilities, Food and Agriculture Organization of the United Nations (2002), www.fao.org/3/y3536e07.htm.

85. See MARPOL 73/78, supra note 3, art. 4, at 185-86; UNCLOS, supra note 4, art. 217(6)-(7), at 487; Alan Khee-Jin Tan, Vessel-Source Marine Pollution: The Law and Politics of International Regulation 192 (2006) (indicating "jurisdictional questions remained side-stepped [in MARPOL 73/78] given that the UNCLOS negotiations were by then underway.").

86. MARPOL 73/78, supra note 3, art. 4(2), at 186.

87. Id. arts. 6(2)-(3), 8(3), at 187-88.

88. Implications of the UN Convention, supra note 60, at 12-13. Prior to UNCLOS, the right of the coastal state to intervene on the high seas in case of oil spill was solely regulated by the Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties and the Protocol Relating to Intervention on the High Seas in Cases of Pollution by Substances Other than Oil. Id. Article 221(1) of UNCLOS codifies the basic principles in these instruments. UNCLOS, supra note 4, art. 221(1), at 489.

89. UNCLOS, supra note 4, art. 210(5), at 483.

90. Id. at art. 211(4), at 484; see Anna Miheva-Natova, The Relationship Between United Nations Convention on the Law of the Sea and the IMO Conventions 20 (2005), http://www.un.org/depts/los/nippon/unnff_programme_home/fellows_pages/fellows_papers/natova_0506_bulgaria.pdf. This jurisdiction is subject to two conditions. First, if the coastal state has clear grounds to believe a foreign vessel is conducting "any act of wilful and serious pollution" in its territorial sea, it may physically inspect the vessel and institute proceedings, including detention of the vessel according to the state's laws. UNCLOS, supra note 4, arts. 19(2)(h), 220(2), at 404, 488. The coastal states may not take any preventative measures against a foreign vessel that does not meet the MARPOL requirement for marine pollution while passing its territorial water. Second, the coastal state's jurisdiction should not harm the right of innocent passage of foreign vessels. Id. art. 211(4), at 484. Therefore, coastal states cannot

economic zones, coastal states may enact laws according to generally accepted international rules and standards to control marine pollution from foreign vessels.[91] UNCLOS also permits coastal states to clearly define a particular area of their respective exclusive economic zones and apply special mandatory measures to control marine pollution from vessels in this area, if the international rules and standards cannot meet their special circumstances.[92] If a coastal state has clear grounds to believe that a vessel has violated applicable international rules and standards for marine pollution in its exclusive economic zone, that state may require the vessel to provide information to establish whether a violation has occurred.[93]

Can a coastal state bring a case against a flag or port state for a MARPOL 73/78 violation under an FTA? What remedies are available under FTAs to a coast state involved in an incident of vessel-sourced pollution? Notably, it is UNCLOS, not MARPOL 73/78, which provides for coastal state jurisdiction of vessel-sourced pollution. The United States is not a signatory to UNCLOS. So, the question is, by only incorporating MARPOL 73/78 and not UNCLOS as well, does the United States' FTAs create rights and remedies for coastal states in vessel-sourced marine pollution?[94] The application of successive treaties relating to the same subject-matter is regulated by article 30 of the Vienna Convention on Law of Treaties (VCLT) which the United States has signed, but not ratified.[95] The UNCLOS should not be considered incompatible with MARPOL 73/78, because it contains several provisions, "which require States to 'take account of', 'conform to', 'give effect to' or 'implement' the relevant international rules and standards developed by or through the 'competent international organization.'"[96] These provisions are considered to include MARPOL 73/78.[97] Moreover, article 311(2) of UNCLOS provides that UNCLOS "shall not alter the rights and obligations of States Parties which arise from other agreements compatible with this Convention and which do not affect the enjoyment by other States Parties of their rights or the performance of their obligations under this Convention."[98] Article 311(2)

---

actively inspect foreign vessels for compliance with the MARPOL 73/78 standards as flag states and port states can.

91. UNCLOS, supra note 4, art. 211(5), at 484; Tan, supra note 85, at 196.

92. UNCLOS, supra note 4, art. 211(6), at 484. The special circumstances are strictly defined and should be concerned with oceanographical and ecological conditions, utilization, the protection of resources, and the particular character of the traffic in the particular area. Id.

93. Id. art. 220(3), at 489. The information is limited to the vessel's identity, port of registry, its last and its next port of call, etc.

94. Panama, Columbia, and South Korea are member states of UNCLOS. See Chronological Lists of Ratifications of, Accessions and Successions to the Convention and the Related Agreements, United Nations Division for Ocean Affairs and the Law of the Sea (Apr. 3, 2018), http://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.htm.

95. Vienna Convention on the Law of Treaties, art. 30, 1155 U.N.T.S. 332, 339-40 (Jan. 27, 1980). While the United States has not ratified the VCLT, it "considers many of the provisions of the [VCLT] to constitute customary international law on the law of treaties." Vienna Convention on the Law of Treaties, U.S. Department of State, https://www.state.gov/s/l/treaty/faqs/70139.htm (last visited Nov. 3, 2018) [hereinafter VCLT].

96. Implications of the UN Convention, supra note 60, at 8; see also, Oliver Dörr & Kristen Schmalenback, Vienna Convention on the Law of Treaties: A Commentary 545 (2018) ("[T]reaties are incompatible with each other if their obligations cannot be complied with simultaneously.").

97. Implications of the UN Convention, supra note 60, at 8-10.

98. UNCLOS, supra note 4, art. 311(2), at 519.

conflicts with article 311(1), which clearly provides for the priority of UNCLOS.[99] Therefore, according to Article 30(2) of the VCLT, the provisions of MARPOL 73/78 should prevail.[100] Additionally, article 30(4) further provides that "[w]hen the parties to the later treaty [i.e., UNCLOS] do not include all the parties to the earlier one [i.e., MARPOL 73/78] . . . [a]s between a State party to both treaties and a State party to only one of the treaties, the treaty to which both States are parties governs their mutual rights and obligations."[101] Accordingly, MARPOL 73/78 rather than UNCLOS should regulate the legal rights and obligations between the United States and its FTA partners.

Nevertheless, if relevant UNCLOS provisions for coastal states jurisdiction on marine environmental protection can be considered a "international custom" as defined in the United Nations Charter these provisions can be applied to the United States.[102] UNCLOS provides that "[s]pecific obligations assumed by States under special conventions, with respect to the protection and preservation of the marine environment, should be carried out in a manner consistent with the general principles and objectives of this Convention."[103] The general practice in the application of MARPOL 73/78 and UNCLOS in the international communities also demonstrate states' consensus that MARPOL 73/78 and UNCLOS should be combined so as to provide a complete picture of international law for vessel-sourced marine pollution. Therefore, an argument could be made that the United States is bound by the relevant UNCLOS provisions for coastal states jurisdiction on marine environmental protection although it is not a party to the UNCLOS.

Notably, Peru is also not a UNCLOS member, but the PTPA incorporates MARPOL 73/78. However, it is unclear whether UNCLOS provisions for coastal states jurisdiction on marine environmental protection should be applied to both the United States and Peru in the context of their FTA. If these provisions have become international custom (as in the authors' opinion they are) they should be applied to the United States and Peru.

In footnote 6 of article 20.6 of the CPTPP it explicitly indicates that this provision pertains to pollution regulated by MARPOL 73/78.[104] Nothing about UNCLOS is mentioned in the CPTPP. However, the CPTPP is different from the United States' FTAs that incorporate MARPOL 73/78, because the CPTPP members are all parties to UNCLOS. Therefore, a stronger argument can be made among the CPTPP members that coastal states can rely on article 20.6 of the CPTPP, because MARPOL 73/78 needs to be implemented in a manner consistent with the general principles and objectives of UNCLOS, and UNCLOS is considered to be international custom.[105]

---

99. Article 311(1) of the UNCLOS provides that "[t]his Convention shall prevail, as between States Parties, over the Geneva Conventions on the Law of the Sea of 29 April 1958." UNCLOS, supra note 4, art. 311(1), at 519.

100. Article 30(2) of the VCLT provides that when a treaty "specifies that the treaty is subject to, or that it is not to be considered as incompatible with, an earlier or later treaty. . . . [T]he provisions of that other treaty prevail." Mark E. Villiger, Commentary on the 1969 Vienna Convention on the Law of Treaties 405 (2009) (quoting VCLT, supra note 95, art. 30(2), at 339).

101. VCLT, supra note 95, art. 30(4), at 339; see also Dörr & Schmalenbach, supra note 96, at 549.

102. U.N. Charter art. 38(1)(b).

103. UNCLOS, supra note 4, art. 237(2), at 494.

104. CPTPP, supra note 7, ch. 20 art 20.6(1), at n.6.

105. Implications of the UN Convention, supra note 60, at 56-57.

C. Affecting Trade or Investment Between the Parties

Besides MARPOL 73/78, the CPTPP and the United States FTAs that incorporate MARPOL 73/78 all expressly refer to two other MEAs: the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol).[106]

Regarding environmental protection, all the United States bilateral FTAs require that in order to establish a violation of the FTA, "[a] Party must demonstrate that the other Party has failed to adopt, maintain, or implement laws, regulations, or other measures to fulfil an obligation under a covered [MEA] in a manner affecting trade or investment between Parties."[107] Therefore, a violation of an MEA, including MARPOL 73/78, that does not affect trade or investment between Parties is not covered by the dispute resolution mechanisms under the FTAs.

Article 20.4 of the CPTPP clearly confirms the original commitments of the CPTPP members to prior MEAs.[108] However, the circumstances in which a member may invoke the CPTPP dispute resolution mechanism for violation of these MEAs vary among the agreements. Although members are encouraged to address any related disputes through CITES, a member's failure to adopt, maintain, and implement its laws and regulations incorporating CITES obligations allows other CPTPP members to bring a claim by utilising the CPTPP's dispute resolution mechanism.[109] Nevertheless, for MARPOL 73/78 and the Montreal Protocol, a member's failure to maintain its laws and regulations implementing the two conventions does not allow other CPTPP members to bring a claim by utilising the same dispute resolution mechanism. The claimant needs to prove that the non-implementation affected trade or investment between the parties.[110] Along this vein, commencing the CPTPP dispute settlement mechanism requires more than a violation of MARPOL 73/78; the violation must be (1) sustained and recurring, and (2) affecting trade or investment between the parties.[111] Therefore, a MARPOL 73/78 violation is not a violation of the CPTPP unless it affects trade or investment between the parties.

In the World Trade Organization (WTO) report, Thailand—Customs and Fiscal Measures on Cigarettes from the Philippines, the Appellate Body of the WTO laid down a test to determine whether a domestic measure affects trade between the parties:

> The analysis . . . requires a careful examination "grounded in close scrutiny of the 'fundamental thrust and effect of the measure itself'", including of the

106. See Montreal Protocol on Substances that Deplete the Ozone Layer, 1522 U.N.T.S. 29 (Jan. 1, 1989); Convention on International Trade in Endangered Species of Wild Fauna and Flora 993 U.N.T.S. 244 (July 1, 1975). The Bipartisan Agreement on Trade Policy published in 2007 by Congress and Office of the U.S. Trade Representative identified seven MEAs for inclusion in FTAs, but only three of them are included in the CPTPP. This is possibly because the three are the only MEAs that all CPTPP parties have ratified. International Centre for Trade & Sustainable Development, Environment in the Trans-Pacific Partnership: A Legal Analysis 4 (Dec. 2016) [hereinafter ICTSD], https://www.ictsd.org/sites/default/files/research/environment_in_the_trans-pacific_partnership_a_legal_analysis_0.pdf.

107. Panama TPA, supra note 74, ch. 17 art. 17.2, at n.1 (emphasis added).

108. See CPTPP, supra note 7, ch. 20 art. 20.4.

109. Id. ch. 20 art. 20.17(2), at nn.22-24.

110. Id. ch. 20 art. 20.5.1, 20.6(1), at nn.5 & 8.

111. See id. ch. 20 art. 20.3(4); ICTSD, supra note 106, at 6.

> implications of the measure for the conditions of competition between imported and like domestic products. This analysis need not be based on empirical evidence as to the actual effects of the measure at issue in the internal market of the Member concerned. Of course, nothing precludes a panel from taking such evidence of actual effects into account.[112]

In other words, when imported and like domestic products are subject to a single regulatory regime, only the imported products must comply with additional requirements. This would imply that imported products are treated less favourably, so the measure affects trade between the parties. Without requiring empirical evidence on negative trade effects, this test is favourable for environmental-related trade disputes.

CPTPP requires each member state to list measure(s) implementing its obligations under MARPOL 73/78, or adopts any subsequent measure(s) that provide an equivalent or higher level of environmental protection as the measure(s) listed. The US-Mexico-Canada Agreement further provides that if a member state has maintained the measure(s) listed, a violation of MARPOL 73/78 must be in a manner affecting trade or investment between the Parties. This means "(i) a person or industry that produces a good or supplies a service traded between the Parties or has an investment in the territory of the Party that has failed to comply with this obligation; or (ii) a person or industry that produces a good or supplies a service that competes in the territory of a Party with a good or a service of another Party."[113] Consequently, a state may violate MARPOL 73/78 if a person or industry in its territory fails to comply with MARPOL 73/78. Furthermore, according to the US-Mexico-Canada Agreement, when resolving disputes, a panel shall presume that a failure is in a manner affecting trade or investment between the Parties, unless the responding Party demonstrates otherwise.[114] This allocation of onus of proof favours the member states who suffer from vessel-sourced marine pollution. This allocation of onus of proof does not exist in MARPOL 73/78, so The US-Mexico-Canada Agreement in this aspect may enhance the protection of marine environment.

D. Dispute Resolution

MARPOL 73/78 requires parties to negotiate disputes before initiating arbitration.[115] However, it does not provide a clear procedure or timeline for the negotiation, which may prolong the process and delay the establishment of an arbitration tribunal. In contrast, the CPTPP provides a three-step consultation procedure with strict timelines.[116] The three steps are referred to as environment consultations, senior representative consultations, and ministerial consultations. Combined, they should not extend beyond sixty days after the date of receipt of a request under article 20.20 of the CPTPP, except where the parties agree otherwise.[117] If the dispute is not resolved, the

---

112. Appellate Body Report, Thailand-Customs and Fiscal Measures on Cigarettes from the Philippines, [129], WTO Doc. WT/DS371/AB/R (adopted June 17, 2011) (footnoted omitted).

113 Footnote 15 of Chapter 24 of the U.S.-Mexico-Canada Agreement.

114 *Id.* Fn 16.

115. MARPOL 73/78, supra note 3, art. 10, at 188.

116. CPTPP, supra note 7, ch. 20 art. 20.23.

117. Id. ch. 20 art. 20.20-20.23.

requesting party may request consultations under the CPTPP Dispute Resolution Chapter (i.e., Chapter 28),[118] or request the establishment of a panel.[119]

Therefore, compared with MARPOL 73/78 negotiations, the CPTPP consultation procedures are more fully-fledged out and detailed. The CPTPP procedures better facilitate dispute resolution because, after a dispute occurs, it is usually difficult for parties to agree upon the consultation procures. Differently from MARPOL 73/78, which provides no procedure for consultation, the tight timeline and clear steps of the CPTPP consultation procedure may be more effective in encouraging parties to focus on negotiations and, if that fails, on establishing the panel.

The most fundamental difference between MARPOL 73/78 and the CPTPP dispute resolution mechanism is that the former adopts an ad hoc "arbitration" model, whereas the latter resorts to a "panel" procedure similar to inter-state arbitration but inspired also by WTO dispute settlement. They are significantly different in two respects.

The first difference concerns the rules of procedure. MARPOL 73/78 does not provide arbitration procedural rules, but rather allows the arbitration tribunal to decide its own rules.[120] In contrast, the CPTPP provides detailed procedural rules for panels.[121] At the end of the arbitration, MARPOL arbitration tribunals will issue an arbitration award, which is final and cannot be appealed.[122] However, the CPTPP panel will first issue an initial report, which is not immediately final and binding.[123] The disputing parties are then allowed to submit written comments on the initial report to the panel.[124] After considering the comments, the panel may modify its report and make any further examinations it considers appropriate.[125] Then, it will issue a final and binding report.[126] The former type of arbitration procedure is a more traditional way to resolve inter-state disputes, whereas the CPTPP's "initial report + final report" panel system is more innovative. The latter mechanism has been borrowed from the WTO, and is sometimes found in other Asia-Pacific FTAs (such as the investor-state dispute settlement procedure in the Australia-Indonesia FTA signed in 2019, as noted in Chapter 5 of this volume). Arguably, the panel procedure is more concerned with ensuring an accurate representation of the parties' arguments and that all matters have been taken into account, rather than providing an opportunity to re-argue points of law or fact. This mechanism may help the panel fully deliberate the parties' positions. Ultimately, as the disputing parties' feedback has been taken into account, the final report will more likely be accepted and enforced successfully.

The second difference is in the enforcement mechanism. Unlike trade law, international environmental law traditionally makes use of soft measures such as persuasion, public opinion, international environmental reputation, technical assistance, and financial support to guarantee its implementation, rather than imposing real

---

118. Id. ch. 28 art. 28.5.
119. Id. ch. 28 art. 28.7.
120. MARPOL 73/78, supra note 3, protocol II art. VIII, at 196.
121. CPTPP, supra note 7, ch. 28 art. 28.13.
122. MARPOL 73/78, supra note 3, protocol II art. X(1), at 197.
123. CPTPP, supra note 7, ch. 28 art. 28.17.
124. Id. ch. 28 art. 28.17(7).
125. Id. ch. 28 art. 28.17(8).
126. Id. ch. 28 art. 28.18.

sanctions. MARPOL 73/78 requires states to immediately comply with any arbitration awards.[127] However, it does not provide a mechanism for enforcement in cases of non-compliance. Therefore, it is not surprising that one commentator has described the MARPOL 73/78 system as "depend[ing] entirely on voluntary compliance. . . . [T]he Member Governments themselves determine whether or not they are in compliance with [MARPOL] regulations a majority of the time."[128] The IMO does not have the funding and institutional mechanisms to establish a MARPOL enforcement authority.

In contrast, the CPTPP has a stronger enforcement mechanism. Also seemingly inspired by WTO dispute settlement, it allows the complaining state to retaliate by suspending benefits of equivalent effect if the responding state fails to comply with the panel's final report within a reasonable period of time.[129] In considering what benefits to suspend, the complaining state "should first seek to suspend benefits in the same subject matter as that in which the panel has determined non-conformity".[130] However, if the complaining state considers that to be impracticable or ineffective, and that the circumstances are serious enough, "it may suspend benefits in a different subject matter."[131] Compensation, suspension of benefits, and the payment of a monetary assessment must be temporary and cannot replace full implementation of the panel report.[132] Thus, the CPTPP enforces its environmental obligations with the threat of real trade sanctions. Linking trade retaliation in FTAs with obligations to environmental protection represents a striking progression or cross-fertilisation from international trade law.

So far, the MARPOL 73/78 state-to-state arbitration has never been invoked, and there may be two reasons for this. The first has an institutional dimension. The IMO, like many other UN special agencies,[133] considers itself as "primarily a technical organisation seeking to avoid all political controversy and dispute[s]".[134] Therefore, most of the marine pollution treaties concluded under the auspices of the IMO contain no or very limited dispute settlement mechanisms. The arbitration mechanism under MARPOL is already comparatively strong, despite the ad hoc nature of the procedure.[135] States hesitate to submit their disputes on the interpretation or implementation of MARPOL 73/78 to arbitration because they hope that disputes will be dealt within the institutional machinery of MARPOL 73/78 (by commission, meeting of the parties, or the Marine Environment Protection Committee of the IMO) rather than by a decision rendered by an arbitration tribunal.[136]

---

127. MARPOL 73/78, supra note 3, protocol II art. X(1), at 197.

128. Becker, supra note 65, at 638.

129. CPTPP, supra note 7, ch. 28 art. 28.20(1)-(2).

130. Id. ch. 28 art. 28.20(4)(a).

131. Id. ch. 28 art. 28.20(4)(b).

132. Id. ch. 28 art. 28.20(15).

133. For example, the World Intellectual Property Organization defines its objectives as "(i) to promote the protection of intellectual property throughout the world through cooperation among States and, where appropriate, in collaboration with any other international organization, (ii) to ensure administrative cooperation among the Unions." Convention Establishing the World Intellectual Property Organization signed at Stockholm on July 14, 1967, art. 3(i)-(ii), 828 U.N.T.S. 5, 11.

134. Robin Churchill, International Law and Dispute Settlement: New Problems and Techniques 164 (2010).

135. See id.

136. See id. at 165-66.

Second, the low number of disputes regarding non-compliance may be due to the fact that states are generally not directly affected by another state's non-compliance, or cannot prove the causalities between the oil spill, the environmental damage suffered, and the defects in the implementation of MARPOL 73/78 by a flag state.[137] The direct maker of an oil spill is the vessel, not the state that fails to fulfil MARPOL 73/78 requirements. In addition, the possibility that the victim coastal states are not complying with MARPOL 73/78 themselves may also contribute to the low number of disputes.[138]

Although all four of the U.S. bilateral FTAs previously mentioned have incorporated MARPOL 73/78, the dispute resolution mechanism under these FTAs has so far never been invoked for vessel-sourced marine pollution. The traditional practice of consensual dispute settlement may reflect the fact that states still believe that the problem of marine pollution is better approached through cooperation rather than unilaterally initiated litigation.[139] The question is whether the strong and compulsory trade dispute resolution system under the CPTPP is compatible with or will change this tradition. Notably, coastal states impacted by vessel-sourced pollution can seek compensation according to the 1969 International Convention on Civil Liability for Oil Pollution Damage (1969 CLC), the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1971 Fund Convention), and the protocols to these conventions.[140] Therefore, states may not have incentives to go through the three-stage consultation, the structured arbitration mechanism under the panel procedure, and ultimately the retaliation mechanism provided by the CPTPP. However, the availability of the CPTPP's compulsory dispute resolution mechanism is an undeniable important symbolic success to encourage MARPOL 73/78 compliance. The shadow it casts may promote diplomatic cooperation in settling issues such as with FOCs.

IV. IMPLICATIONS FOR IHR IN THE CONTEXT OF THE COVID-19 PANDEMIC

The IHR require each state party to "notify WHO, by the most efficient means of communication avaiable…within 24 hours of assessment of public health information, of all events which may constiute a public health emergency of international concern within its territory in accordance with the decision instrument [in Annex 2 of the IHR], as well as any health measure implemented in response to those events".[141] For events thatdo not consitute a public health emergency of international concern but are considered an unexpected or unusual public health concern, a state party shall also notify WHO within 24 hours of assessment of public health information according to the decision instrument in Annex 2.[142] If there is insufficient information avaiable for a state to complete the

137. See id. at 166.
138. Id.
139. See id. at 165.
140. See International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (supplementary to the International Convention on Civil Liability for Oil Pollution Damage, 1969), 1110 U.N.T.S. 58 (Dec. 18, 1971); International Convention on Civil Liability for Oil Pollution Damage, 973 U.N.T.S. 4 (Nov. 29, 1969).
141 Art.6.1 of IHR.
142 Art. 7 of IHR.

decision instrument in Annex 2 of IHR, a state may nevertheless keep WHO advised and consult with WHO on appropriate health measures.[143]

Article 56 of the IHR provides a dispute resolution mechanism in the event of a dispute between parties concerning the above obligations. State parties should first try to resolve their disputes through negotiation, good offices, medication, conciliation, or any other peaceful means of their own choice.[144] If parties fail to reach an agreement, they can refer the dispute to the WHO Director-General, who shall make every effort to settle it.[145] If all of disputing member states accept arbitration as compulsory, states can submit their disputes to inter-state arbitration. The arbitration then shall be conducted in accordance with the Permanent Court of Arbitration Optional Rules for Arbitrating Disputes between Two States. The arbitral awards shall be binding and final to states who accept arbitration.[146]

In four aspects, Article 56 may not effectively and efficiently resolve disputes between member states, which may explain why the mechanism has not been invoked so far.[147] Addressing the following issues would help member states to use Article 56 to resolve disputes effectively and therefore enhance IHR compliance and public health outcomes.[148] First, there is no time limit for negotiation, good offices, medication, and conciliation. If one party delays the procedure, it is unclear whether the other party can move to other dispute resolution methods. Second, the legal nature of referring the dispute to the Director-General is unclear. Does this mean that the Director- General can control the dispute resolution and has authority to issue a binding decision (rather than acting as a settlement facilitator or sort of mediator) even if one party decides to default after referring a dispute for consideration? What is the procedure and time limit for the Director-General to resolve the dispute after being referred? If intended to operate as a sort of mediator, what standards of independence or impartiality and natural justice should s/he be bound by? The second paragraph of Article 56 merely provides generally that the Director-General should "make every effort to settle [the dispute]".

A third issue of uncertainty is the relationship between referring a dispute to the Director-General under the second paragraph of Article 56 and to arbitration according to its third paragraph. Article 56 does not indicate that referring a dispute to the Director-General is a precondition to an arbitration. Arguably, therefore, states can initiate an arbitration without referring the dispute to the Director-General. (This possibility therefore would contrast, for example, with the host state being able to require a foreign investor to attempt mediation, before commencing arbitration, under the 2019 Australia-

---

143 Art.8 of IHR.

144 Art. 56.1

145 Art. 56.2.

146 Art. 56.3

147 Gian Luca Burci, The Outbreak of COVID-19 Coronavirus: are the International Health Regulations fit for purpose?, https://www.ejiltalk.org/the-outbreak-of-covid-19-coronavirus-are-the-international-health-regulations-fit-for-purpose/ (last visited 11 April 2020).

148 Lawrence Gostin, Mary DeBartolo & Eric Friedman, *The International Health Regulations 10 Years On: The Governing Framework for Global Health Security*, GEORGET. LAW FAC. PUBL. WORKS, 4 (2015), https://scholarship.law.georgetown.edu/facpub/1532 (arguing that States Parties should consider pursuing dispute resolution through the Director-General or compulsory arbitration, and "[s]uccessful cases by States Parties harmed by travel or trade restrictions or human rights violations would be a powerful precedent to enhance compliance.")

Indonesia FTA as discussed in Chapter 5 of this volume.) However, there still remains a question as to whether any IHR arbitration step could involve the Director-General as the arbitrator. Perhaps this issue could be agreed separately by the disputing parties if and when agreeing to arbitration. That raises however a fourth and key issue: the IHR, unlike MARPOL or the CPTPP, do not provide advance consent of the states to arbitration.

The IHR enforcement mechanism of IHR resembles MARPOL 73/78 in two respects. First, if a state fails to provide a timely notification to the WHO regarding a public health emergency of international concern or unexpected or unusual public health event, WHO and other member states cannot compel this state to carry out its obligation. The IHR also does not provide WHO and other member states a channel to verify whether a state genuinely has insufficient information avaiable to complete the decision instrument in Annex 2 of IHR. This is like the role of coastal states in MARPOL 73/78. Although they may be severely impacted by vessel-sourced pollution, they have very limited means to compel the flag state to carry out MARPOL 73/78 obligations.

Second, both MARPOL 73/78 and especially IHR have a weak dispute resolution mechanim. Neither convention provides a clear procedure or a timeline for negotiation, good offices, medication and conciliation. Further, unlike MARPOL 73/78 where all member states have advance consent to compulsory arbitration, the IHR allows its members to declare in writing at any time whether it accepts arbitration as compulsory with regard to all disputes concerning IHR or with regard to a specific dispute in relation to any other member state accepting the same obligation. Yet no member state has made such a declaration so far, thus providing advance consent to arbitration (as under MARPOL 73/78).

In addition, compared with the panel system and the retaliation provisions in the CPTPP discussed above in Part III, the IHR has limited deterrent effect to force non-conforming members to perform their obligations. As one commentator argues: "[c]ritics have even questioned the binding legal nature of the IHR 2005 given the lack of enforcement or even compliance monitoring mechanisms and the apparent disregard of states parties for WHO's recommendations".[149] The lack of a strong dispute resolution mechanism in IHR is not surprising because the WHO, like the IMO, has been "a technical organization based on evidence and science".[150] The ethos of the WHO is to foster good faith performance of obligations among member states.[151] Similar to the IMO, the WHO mainly sets technical standards and provides scientific guidance for its member states. The IMO and WHO are science-based organizations rather than legal

---

149 Gian Luca Burci, The Outbreak of COVID-19 Coronavirus: are the International Health Regulations fit for purpose?, https://www.ejiltalk.org/the-outbreak-of-covid-19-coronavirus-are-the-international-health-regulations-fit-for-purpose/ (last visited 11 April 2020).

150 Gian Luca Burci, The Outbreak of COVID-19 Coronavirus: are the International Health Regulations fit for purpose?, https://www.ejiltalk.org/the-outbreak-of-covid-19-coronavirus-are-the-international-health-regulations-fit-for-purpose/ (last visited 11 April 2020).

151 Gian Luca Burci and Jakob Quirin, Implementation of the International Health Regulations (2005): Recent Developments at the World Health Organization (indicating that the IHR rely "largely on a horizontal compliance mechanism, in which states parties can review each other's level of compliance on the basis of reports provided annually to the Health Assembly (Article 54.1)"), https://www.asil.org/insights/volume/22/issue/13/implementation-international-health-regulations-2005-recent-developments (last visited 12 April 2020).

rule-based regimes, such as the CPTPP. Therefore, differently from the CPTPP, neither IHR nor MARPOL 73/78 use sanctions and retaliation options to encourage compliance. However, MARPOL 73/78 started to change this approach by requiring advance consent to arbitration of disputes. The United States and several others have further started to change its nature by adding, through FTAs, extra timelines and sanctions for non-compliance with arbitration awards.

V. CONCLUSION AND PROPOSALS

Recent U.S. bilateral FTAs and the CPTPP make a creative contribution to enhance MARPOL 73/78 compliance by imposing new procedural obligations on MARPOL member states to investigate and sanction violations, and expanding obligations for information disclosure and public participation. Moreover, the CPTPP has included sub-central governments, third state, and non-governmental organizations in its implementation mechanism. Its three-step consultation system may promote negotiation between parties, and its retaliation system may help deter MARPOL 73/78 violations. All these efforts could help to enhance MARPOL 73/78 compliance. However, there are no reports that the FTAs, such as the Panama TPA, has significantly improved compliance with MARPOL 73/78.

Besides the FOC issue, in practice, the FTAs might not significantly enhance MARPOL 73/78 compliance. Theoretically, the CPTPP could encourage non-MARPOL member states that want to join the CPTPP to sign MARPOL 73/78. However, the majority of states in the world have already ratified MARPOL 73/78 and its two compulsory Annexes, and the CPTPP does not require its members to accept the other four optional Annexes. Accordingly, it is unlikely that the CPTPP can significantly increase MARPOL 73/78 membership. The same argument applies to countries that want to conclude an FTA with the United States. While FTAs have a strong dispute resolution mechanism, they are still subject to the threshold of "[a]ffecting trade or investment between the Parties."[152] As the Oceanside hypothetical demonstrates, it is difficult to prove causation between an oil spill and its negative effects on trade or investment. Moreover, because of the different approaches towards dispute resolution in the law of the sea and international trade law, and because of the existence of the 1969 CLC and the 1971 Fund Convention, states may not be incentivised to establish a panel and utilise the retaliation mechanism. The ambiguous status of UNCLOS in U.S. FTAs may limit coastal states's jurisdiction and remedies under the FTAs. All these factors may largely inhibit the capacity of the FTAs to control vessel-sourced pollution.

This leaves two remaining questions. First, are FTAs an effective tool to enhance MARPOL 73/78 compliance? Second, if states do incorporate MARPOL 73/78 into FTAs, can they do better? Regarding the first question, vessel and marine transport are indispensable to international trade, but MARPOL 73/78 is hardly related to trade compared with other MEAs, such as CITES.[153] FTAs may be a sort of "paper tiger" to

---

152. Panama TPA, supra note 74, ch. 17 art. 17.3, at n.1.

153. The WTO compiled a matrix on measures related to trade to select MEAs, but MARPOL 73/78 was not included. See, e.g., WTO Matrix on Trade-Related Measures Pursuant to Selected Multilateral Environmental Agreements (MEAs), WTO, https://www.wto.org/english/tratop_e/envir_e/envir_matrix_e.htm (last visited Nov. 4, 2018).

control vessel-sourced pollution if their membership is either not large enough or does not include major FOC states. As for the second question, if states are strongly commited to using FTAs to enhance MARPOL 73/78 compliance, they should consider deleting or broadly interpreting the requirement of "[a]ffecting trade or investment between the Parties" when determing whether parties are allowed to invoke FTAs to punish a MARPOL 73/78 violation.[154] FTA dispute resolution tribunals may invoke UNCLOS by treaty interpretation in MARPOL cases. In addition, FTAs may require its members to ratify all MAPROL annexes rather than allow them to simply accept the compulsory annexes I and II only.

The same observations apply to the IHR as well. Preventing and combating diseases like COVID-19 requires mutilateral joint efforts. However, FTAs are generally bilateral. CPTPP is one of the largest mega-regional FTAs including 11 signatory states, with the possibility of the U.S. one day reinstating its signature and then ratifying along with some further Asia-Pacific states. However, even such membership may not be large enough to controlling global infectious diseases such as COVID-19. Enhance IHR compliance should therefore proceed by direct reform of IHR Article 56. First, the WHO should consider adding time limits to dispute resolution by negotiation, good offices, mediation or conciliation. Second, the legal nature of referring the dispute to the WHO Director-General should be clarified. Third, the WHO should consider making arbitration complusory. Members could be required to consent in advance to submitting their disputes to the Permanent Court of Arbitration at the Hague or purely ad hoc state-to-state arbitration. The world needs a stronger dispute resolution mechanism to safeguard global health under the IHR. If direct reforms are not feasible, then as with MARPOL 73/78 through the CPTPP, incorporating the IHR into FTAs is worth exploring to prevent or manage the next pandemic.[155]

---

154. See, e.g., Panama TPA, supra note 74, ch. 17 art. 17.3, at n.1.

155 See LAWRENCE O. GOSTIN & REBECCA KATZ, *The International Health Regulations: The Governing Framework for Global Health Security*, 94 MILBANK Q. 264–313, 305 and 306 (2016).