

SEP_AIN3098

by Student Help

Submission date: 17-Apr-2023 06:25AM (UTC-0700)

Submission ID: 2067190102

File name: SEP_AIN3098_plagifile.docx (31.51K)

Word count: 5355

Character count: 32921

Introduction

Maritime pollution such as industrial, residential and agricultural waste, invasive organisms, and particles imbalance the aquatic lifestyle and pollute the maritime ecosystem in the world. The maritime population is a combination of chemicals and trusts that damages the environment and economic structures worldwide. In this context, the government of the UK focuses on introducing the “London dumping convention rules in 1972” in terms of controlling ⁵ all sources of marine pollution. In ² addition, MARPOL (The International Convention for the Prevention of Pollution from Ships) is a national plan for Maritime environmental emergencies which helps to prevent maritime pollution by eliminating all harmful substances discharged from the ship. The purpose of the study is to discuss the benefits of the “London dumping conventions and MARPOL norms in terms of reducing maritime pollution.

Main body

London dumping convention 1972

London dumping convention is a governmental law by the London government which helps to prevent maritime pollution in the global market. In this context, the “London dumping convention rules in 1972” is one of the first worldwide conventions in terms of protecting the marine environment from human activities (19). On the other hand, these rules increase the ability of the government to prevent the pollution of the sea through “regulation of dumping” into a sea of waste materials. In this context, it is fatally necessary to regulate maritime pollution in terms of reducing the extra waste in the ocean and addressing the oil leakage from the ships. Additionally, it also helps to promote the effective control of all resources such as biological diversity, oil and gases, and renewable energy resources of marine pollution. Moreover, maritime environmental emergencies also focus on taking all practicable steps in terms of preventing the pollution of the sea by the dumping of wastes. In this context, the parties have made a contract with the governments which helps to reduce maritime-related issues in terms of managing the pollutants over the sea. The government strictly prohibited maritime environmental emergencies for dumping hazardous materials in the sea. *Article 1* of the “London dumping convention rules in 1972” refers to the contracting parties collectively and individually promoting the effective steps which help to control the sources of pollution of the maritime environment (20). On the other hand, parties focus on using “low-sulphur fuels” which helps to decrease the impact of the ships on air quality. Moreover, *Article 2* of the “London dumping convention rules in 1972” refers to the scientific, economic

and technical abilities of the contracting parties in terms of preventing marine pollution by reducing the dumping of wastes in the sea. On the other hand, *article 3* of the “London dumping convention rules in 1972” helps to address the included substances of dumping in the sea. In turn, disposal at sea at aircraft, man-made structures, platforms, and vessels at sea. Thus, it can be stated that parties have understood the harmful substances which are the cause of dumping in the sea.

In addition, *Article 4* of the “London dumping convention rules in 1972” helps the parties which increase the understanding of identifying the materials which is the main reason for the dumping in the sea. Moreover, this regulation also increases the understanding or capabilities of maritime environmental emergencies which helps to make a special permit structure in terms of preventing maritime pollution over the sea worldwide. *Article 6* of the “London dumping convention rules in 1972” refers to designating an appropriate authority which is controlled by each contracting party in terms of developing the permit structure for reducing the dumping of materials in the sea (21). In this context, the government also restricts by generating this article of laws regarding keep recording the location, method of dumping, and qualities of permitting structure which helps to prevent maritime pollution. Moreover, it also helps maritime organisations for developing their plan and ideas in terms of reducing the extra waste in the sea. Additionally, the parties also collect the registered materials which are sustainable for the aquatic lifestyle. Thus, it can be stated that it increases the quality of the materials of the vessels or ships which helps to reduce water pollution in the sea. Moreover, *Article 7* of LDC says all parties focus on using the registered vehicles and aircraft in their territory and flying their flag. Additionally, the government has restricted the parties to avoid the old structured ships which cause the dumping of materials in the sea (22). The parties also cooperate in the improvement procedure regarding conserving the water and managing their ship speed for reducing water pollution in the sea. Moreover, the maritime industry also focuses on using weather routing, uses hull coating, and fuel switching in terms of developing their strategic plan in terms of reducing maritime pollution. Thus, it can be observed that the LDC is an effective law and regulation which has been controlled by the London government in terms of developing the waste management policy of marine organisations and preventing maritime pollution.

MARPOL norms

The MARPOL norms are an international convention which helps to prevent maritime pollution in the global market. It also helps maritime logistics organisations for managing their resources properly and reduces their operational and accidental incidents (23).

MARPOL 73 or 74 is a protocol which was generated by the government in terms of developing the transport process of the ships for increasing their management process. Additionally, it also helps the maritime industries to address the pollution from ships by oil, noxious liquid substances, sewage, garbage, and prevention of “air pollution” from crafts. In this context, it increases the ability of the maritime industry to ensure its shipping routes in terms of reducing the damaging mode of transport. On the other hand, the main aim of the government is to generate the MARPOL norms in order to prevent the marine environment by eliminating the harmful substances which have been discharged from the ships and vessels. *Article one* of MARPOL norms provides the details of the discharge requirements which helps to prevent pollution by oily materials (24). In this context, it increases the ability of maritime experts to identify the discharge requirements for developing their overall process in terms of reducing the pollutants in the sea. Additionally, Article One of MARPOL norms also suggests that the rate of discharge does not exceed “30 litres/nm” which helps to balance the aquatic lifestyle in the sea (25). It is a valuable regulation by the UK government which helps to reduce the marine accidents of ships in terms of reducing marine pollution. The convention of MARPOL norms refers to the management process of the marine industry for controlling their activities through a new chapter of the “London dumping convention rules in 1972”. On the other hand, the UK government also focuses on reducing oil spills which are caused for increasing maritime pollution in the global market. In this context, the convention of MARPOL norms includes administrative measures in terms of decreasing the rate of oil spills and noxious liquid substances which help to balance the aquatic lifestyle (26). In turn, the *ANNEX 6* of MARPOL norms includes the requirement applicable certification, fuel quality, and operations of vessels and manufacture which also helps to prevent water pollution by developing their management structure. In addition, the UK government also provides effective guidelines by generating the *ANNEX 6* of MARPOL norms which helps the maritime industry using administrative instruments in terms of preventing maritime pollution in the world (27). *ANNEX 6 of MARPOL norms* limit the use of air pollutants which are contained in exhaust gases in the ships such as nitrous oxides, sulphur oxides, and ODS (prohibits deliberate emissions of ozone-depleting substances). Thus, it can be stated that the UK government has properly created the legal terms and regulations in terms of reducing the air pollutants in the ship which balances maritime pollution. On the other hand, *ANNEX 5* of MARPOL norms includes all garbage that includes operational waste, domestic waste, all plastics, cooking oil and fishing gear all of which are completely banned by the UK government which helps to reduce maritime

pollution (28). Thus, it can be stated that MARPOL norms have been significant for the UK government in generating valuable regulations in terms of reducing maritime pollution.

Importance of regulations in maritime pollution

The London Dumping Convention (LDC) demonstrates that the prevention of pollution in the waters is necessary for making a healthy maritime environment. The LDC refers to the prevention of any kind of dumping in the sea through humans and ships (29). In this context, the ship-owners and shipping companies are bound to maintain the act in terms of reducing marine pollution effectively. It is important to reduce deliberate disposal in order to reduce the pollution level in the sea. Moreover, the LDC is an important factor for the shipping owners for understanding the level of disposal in the maritime. On the other hand, LDC includes control over the reduction of pollution in marine life (29). Similarly, the control at the international level helps the researchers to collect information on the pollution level of marine life through the disposal of dumping. Besides, the prohibition of hazardous materials through dumping is an important factor for utilising the regulations of LDC. In addition, the UK has established an act for preventing the cruel activities of humans on marine life. Therefore, it can be said that the "LDC Act 1972" plays an important role in protecting the life of marine creatures positively.

It is an important factor for the UN in deciding the capacity of the waste for the maritime in terms of preventing pollution. The "LDC Act 1972" elaborates that the recognition of sea capacity is important in order to reduce waste quantity (30). In this context, the authorities of the UN are able to gather data on the maximum quantity of waste in the sea for reducing pollution and dumping. The reduction of dumping can help the UN authorities to create opportunities for shipping companies in understanding the waste amount of their ships in the sea. Moreover, it is important to note that the authorities of the UN have commented that the states of the UK need to develop their products for reducing the waste amounts in marine life. In addition, it is a beneficial factor for the UN authorities in collecting information on the development of states in order to prevent water pollution. On the other hand, the "LDC Act 1972" elaborates that the UK authorities are able to discuss waste management-related issues regarding the reduction of marine pollution with the local states of the UK (31). Similarly, the discussion can prevent the risk to marine life by reducing the amount of disposal in marine life. Thus, the UK authorities are an important aspect of the UK states in maintaining the LDC act to reduce water pollution.

The dumping of grey-listed materials requires special permission from the UK authorities due to the regulations of Act 1972 LDC. The "LDC Act 1972" allows for discussion of the

dumping of materials-related issues with the states. In this context, the state governments and UK authorities analyse the amount of disposal of the shipping companies in marine life. Accordingly, the analysis helps the UK authorities to gather information on the generating of dumping by the shipping companies in marine life. Similarly, the analysis helps the UK authorities in suggesting shipping companies for using the developed products and technologies in terms of reducing the dumpings in sea life. Moreover, the UK authorities provide certain conditions to shipping companies for reducing the dumping of marine life. On a contradictory note, the authorities of the "LDC Act 1972" have blacklisted items that are prohibited for shipping companies in terms of reducing dumping in the maritime (32). Similarly, the prohibition of blacklisted items helps reduce the quantities of dumping in the sea which provides opportunities in establishing a healthy environment for marine creatures. Hence, it can be said that the LDC Act of 1972 is important for the reduction of pollution in marine life by generating regulations for shipping companies.

The role of the "LDC Act 1972" is prominent in order to elaborate the rules and regulations for the shipping companies in the UK. 3,89000 wastes disposed of in the year 2022 by the shipping companies of the UK (33). Therefore, it is necessary to publish the act for the shipping companies in controlling the dumping. Accordingly, the application of the act is necessary for the states of the UK in order to reduce the disposal of waste by shipping companies. Article 1 of the "LDC Act 1972" refers that the contractual parties are bound to promote the act in terms of controlling marine life pollution (34). In this context, the state authorities of the UK can utilise the contractual parties to influence the shipping companies and local people for reducing the number of waste in the sea. Moreover, the state government of the UK can follow Article 2 of the act in order to harmonise the policies regarding the prevention of pollution in the maritime. Besides, the maritime industry also focuses on using weather routing, uses hull coating, and fuel switching in terms of developing their strategic plan in terms of reducing maritime pollution. In this context, the maritime industries follow the guidelines of the "LDC Act 1972" to use minimum disposal products for reducing pollution in the marines. Thus, it can be highlighted that the "LDC Act 1972" is effective to demolish water pollution in the UK by managing the dumping of shipping companies.

The Marpol convention refers to the elimination of all the pollution conducted by ships in the UK. The state authorities of the UK use Marpol for reducing the amount of waste in the water by reducing the harmful substances discharged from the ships (35). In this context, the Marpol convention provides the opportunity for the states through reducing the pollution of water by providing guidelines to the shipping companies on less utilisation of the disposal of

material in the sea. Marpol convention helps in determining the number of wastes and harmful substances in the water through the annexes. There are six types of the annexe in the Marpol convention such as annexe 1, annexe 2, annexe 3, annexe 4, annexe 5 and annexe 6 (36). According to Annexe 1, shipping companies can not discharge crude oils into the sea in terms of avoiding pollution. This annexe is effective in terms of gathering information on the discharge of oil by shipping companies in the UK. However, the special area of Annexe 1 is the Mediterranean sea which helps the authorities to keep notice of the oil discharging ability of the shipping companies in the water. Therefore, the adoption of the Marpol norms annexe 1 can be effective in reducing the water pollution in the sea by eliminating the oil discharging process of shipping companies in the Mediterranean sea.

Annex 2 of the Marpol convention is able to mitigate the noxious elements in the Mediterranean sea. Annexe 2 of the Marpol refers to the elimination of carriages that carry noxious liquid substances in bulk (37). In this context, the UK government and higher state authorities apply the norm to demolish the discharge of noxious substances in seawater. Accordingly, the demolition of the noxious substances can help the state authorities in cleaning the condition of water in the sea. Moreover, the cleaning process in the sea can provide an opportunity for shipping companies to maintain the norms of Morpol effectively. Maintenance of Annexe 2 helps the shopping companies in achieving a positive brand image in the shipping industry due to reducing water pollution. On the other hand, annexe 3 of the Morpol norms refers to the set of regulations for eliminating the packaged harmful material with the intention of reducing pollution (38). Accordingly, the state authorities set regulations for shipping companies for demolishing harmful packaged materials to reduce water pollution in the sea. However, the shipping companies need to maintain the annex 3 norms of Morpol for creating a healthy environment for marine life.

Annex 4 of the Morpol norm is an important factor that the administration party of the UK need to use better quality materials and appliances in terms of reducing pollution. In this context, the government authority of the UK can utilise the norm effectively in order to influence local people and shipping companies to reduce the use of plastics and harmful appliances for eliminating pollution in the maritime. Annexe 5 is an important norm of Morpol that provides insight into the reduction of garbage during shipping activities. Annexe 5 of the Morpol norms are effective in order to reduce garbage including plastics and ashes for reducing water pollution (39). Similarly, the state authorities of the UK include the norm for the people and shipping companies to reduce the pollution level of waters in the sea. On a contradictory note, the ANNEX 6 of MARPOL norms includes the requirement applicable

certification, fuel quality, and operations of vessels and manufacture which also helps to prevent water pollution by developing their management structure. In addition, the UK government also provides effective guidelines by generating the ANNEX 6 of MARPOL norms which helps the maritime industry using administrative instruments in terms of preventing maritime pollution in the world.

Impact of the 1972 London Dumping Convention and MARPOL Norms on maritime pollution regulation

Impact of the “1972 London Dumping Convention” on reducing maritime pollution

The “1972 London Dumping Convention” seems to be mainly focused on the disposal of hazardous and non-degradable waste materials in oceans and seas. Accordingly, the Government of the UK strongly focused on prohibiting the dumping of waste substances such as plastic and metal pollutants in oceans by introducing the “1972 London Dumping Convention” (11). In turn, this administrative regulation has eventually proved to be significant in the context of controlling and regulating human activities which result in maritime pollution such as waste disposal. On the other hand, industrial waste has emerged as another critical issue in terms of increasing the rate of maritime pollution in the UK. Consequently, the legal guidelines of the “1972 London Dumping Convention” aimed at controlling the level of industrial waste disposed of in the sea through the implication of the administrative outlines (12). Thus, it can be stated that the enforcement of the “1972 London Dumping Convention” has been effective in the context of reducing the rate of maritime pollution throughout the nation.

However, the “1972 London Dumping Convention” has been effective in controlling and reducing the level of maritime pollution by strictly preventing waste disposal in the sea without administrative permission. The “1972 London Dumping Convention” incorporated a special permit for organisational bodies and other agencies in terms of dumping certain degradable and non-degradable waste materials in the sea (13). Consequently, the UK Government is likely to impose penalties on commercial industries and social communities who dispose of waste materials in the ocean without prior permission under the regulations of the 1972 Convention. It has been analysed that the polluter will have to ***bear the cost of pollution*** in terms of dumping hazardous waste components in the sea without legal permissions incorporated in the “1972 London Dumping Convention” (14). Accordingly, the enforcement of the “1972 London Dumping Convention” has been significant in terms of resolving disputes and conflicts between nations based on maritime pollution. For instance, the “*Case 15/17: Bosphorus Queen Shipping Ltd Corps v Rajavartiolaivos*” emerged as a

severe conflict between the involved international maritime organisations under the violations of the “1972 London Dumping Convention” protocol (15). In turn, the “Supreme Court” resolved this case by following the administrative guidelines of the convention effectively and further instructed the involved parties about conserving the legal protocols of the convention. Therefore, it can be determined that the imposition of the “1972 London Dumping Convention” has been valuable in terms of safeguarding the maritime ecosystem positively from the adverse impacts of pollution due to waste disposal.

On the other hand, the “1972 London Dumping Convention” also aimed at reducing the rate of atmospheric pollution which indirectly hampers the maritime ecosystem by increasing the level of carbon footprints. Accordingly, the “1972 London Dumping Convention” ensured the inclusion and application of advanced technologies such as *CO2 streams* and *CO2 capture processes* in order to reduce the rate of carbon in the marine environment due to human activities and industrial waste (16). Consequently, the UK Government has been able to safeguard the marine ecosystem and enhance their survival conditions by minimising the proportion of CO2 in oceans through the introduction of this convention. In addition, the implication of the “1972 London Dumping Convention” has also been effective for the UK Government in order to address carbon captures in sub-sea geological formations. The “1972 London Dumping Convention” enabled the UK Government in the context of using modern maritime climate engineering technologies like “*ocean fertilisation*” (17). Thus, it can be stated that the enforcement of the “1972 London Dumping Convention” has been significant for the Government of the UK in terms of implementing technological advancements for protecting the overall maritime ecosystem.

However, the administrative guidelines of this legal convention also aim to provide a list of pollutants which can be dumped in the sea under permission. Accordingly, waste such as *dredged elements, sewage waste, fish waste, organic elements, bulky items* and *man-made structures* can be dumped in the ocean after acquiring a legal permission (18). Contradictorily, polluters disposing of the aforementioned pollutants at an excessive rate are likely to face legal penalties for the violation of the regulations. Therefore, it can be analysed that the enforcement of the “1972 London Dumping Convention” has been advantageous for the UK Government in the context of controlling the level of marine pollution by eliminating hazardous waste disposal.

Impacts of “MARPOL Norms” on controlling maritime pollution and traffic

The “1972 London Dumping Convention” mainly aimed at reducing the rate of maritime pollution caused by human activities. On a contradictory note, “MARPOL Norms” strongly

focuses on eliminating the risk of maritime pollution by shipping activities (19). Accordingly, the application of the “MARPOL Norms” has been valuable for the UK Government in the context of regulating marine accidents of ships which further results in marine pollution. The “MARPOL Norms” have been imposed to control shipping activities through the inclusion of a new annexation chapter in the “1972 London Dumping Convention” (20). The “1972 London Dumping Convention” lacked in including administrative measures in the context of reducing the rate of oil spills which is a major cause that increases the level of maritime pollution in an uncontrollable manner. However, the introduction of the “MARPOL Norms” in “ANNEX 6” of the “1972 London Dumping Convention” turned out to be an appropriate administrative instrument for the UK Government in terms of controlling ship accidents by providing legal guidelines (21). Thus, it can be stated that the UK Government has successfully delivered effective legal guidelines for local and international shipping organisations in the UK regarding the reduction of oil spills.

Furthermore, the “MARPOL Norms” also aimed at providing appropriate preventive measures for oil shipping organisations in terms of introducing advanced features in oil tankers for reducing accidental risks. The “Annex 1 regulations” of the “MARPOL Norms” states that existing and new oil tankers need to have “*double hulls*” before transferring large volumes of oil through waterways (22). In turn, it can be determined that the inclusion of “MARPOL Norms” in the 1972 Convention has been significant for the UK Government in terms of assisting the shipping industry to avoid sudden accidents. In addition, the application of the “MARPOL Norms” also aimed at providing “*phase in-schedule*” for existing oil tankers in the context of incorporating inbuilt double hulls (23). On the other hand, the implementation of the “MARPOL Norms” has also been beneficial for the UK Government in terms of intervening international cases based on oil spills. For instance, the UK High Court imposed legal prosecution on Shell in the case “*Shell vs the Nigerians*” for spilling over 17.5 million litres of oil in the Nigerian Delta (24). Hence, it can be determined that the introduction of the “MARPOL Norms” has been effective in the context of safeguarding the overall maritime ecosystem from adverse oil spills. In addition, the implication of the “MARPOL Norms” has also been valuable for the UK Government in terms of taking legal actions against organisations contributing to the pollution of the sea due to oil spills at an extensive rate.

However, the UK Government has also framed administrative regulations for shipping companies based on reducing the level of marine pollution. For instance, the “Annex IV of the MARPOL Norms” states that oil carriages and tanker ships need to have an inbuilt

sewage treatment plant (25). Accordingly, disposing of sewage from ships has been strictly banned by the Government of the UK through the application of the “MARPOL Norms”. Consequently, marine waters are likely to be less polluted due to a reduction in the level of ship sewage which has remarkably enhanced sustainability of the maritime ecosystem. However, the “MARPOL Norms” allows oil containers with proper sewage treatment plants to dump the treated sewage ¹ at a distance of more than **12 miles** from the nearest land in order to avoid maritime ecosystem disruptions (26). On the other hand, the UK Government also aimed at prohibiting ³ the disposal of plastic in the sea from oil tankers and ships through the introduction of the “MARPOL Norms”. The “Annex V of the MARPOL Norms” strictly restricts oil carriages and tankers from disposing of plastic substances in the ocean in terms of improving the sustainability of the maritime ecosystem (27). Therefore, it can be analysed that the UK Government strongly emphasised on controlling and degrading the rate of maritime pollution through the enforcement of the “MARPOL Norms” throughout the nation. Finally, the UK Government has also set instructions for commercial and tourist ships in the context of preventing air pollution during their voyages in the sea by framing the “MARPOL Norms”. The “Annex VI of the Marpol Norms” has made it compulsory for ships to incorporate *“designated emission control areas”* in order to reduce the exhaust of ozone depleting elements such as “sulphur oxide” and “nitrogen oxide” (28). Accordingly, preventing ozone depletion through the application of the “MARPOL Norms” has been significant for the UK Government in protecting the marine ecosystem by degrading the level of global warming. Hence, the “MARPOL Norms” has been effective for the UK Government in successfully improving shipping activities in terms of reducing maritime pollution.

Conclusion

On a concluding note, it can be stated that this study has discussed the “London dumping convention rules in 1972” and the MARPOL norms which help to reduce maritime pollution on a global scale. In this context, these two are governmental regulations of the UK which are appropriate for developing the overall management of the marine industry in terms of reducing maritime pollution. On the other hand, MARPOL norms are significant regulations which enable the UK government to develop the marine ecosystem. It is also beneficial for the marine industry to enhance their survival conditions by reducing CO₂ emissions. In addition, the “London dumping convention rules in 1972” are also effective regulations which are created by the UK government in terms of preventing maritime pollution around the earth. In this context, the study has also discussed the impact of following the “London

dumping convention rules in 1972” and MARPOL norms which increases the ability of the UK government for reducing maritime pollution.

References

1. Imo.org, (2023). *Convention of the prevent.*
<<https://www.imo.org/en/OurWork/Environment/Pages/London-Convention-Protocol.aspx>>
2. Treaties.un.org, (2023). *Convention of the prevent.*
<<https://treaties.un.org/doc/publication/unts/volume%201046/volume-1046-i-15749-english.pdf>>
3. Treaties.un.org, (2023). *Convention of the prevent.*
<<https://treaties.un.org/doc/publication/unts/volume%201046/volume-1046-i-15749-english.pdf>>
4. Treaties.un.org, (2023). *Convention of the prevent.*
<<https://treaties.un.org/doc/publication/unts/volume%201046/volume-1046-i-15749-english.pdf>>
5. Byrnes, Troy A., and Ryan JK Dunn. "Boating-and shipping-related environmental impacts and example management measures: A review." *Journal of Marine Science and Engineering* 8.11 (2020): 908. <<https://www.mdpi.com/2077-1312/8/11/908/pdf>>
6. de Andres Gonzalez, O., Koivisto, H., Mustonen, J.M. and Keinänen-Toivola, M.M., 2021. Digitalization in just-in-time approach as a sustainable solution for maritime logistics in the baltic sea region. *Sustainability*, 13(3), p.1173. <<https://www.mdpi.com/2071-1050/13/3/1173/pdf>>
7. Grdović Gnip, Ana, and Žiga Velkavrh. "To pollute or not to pollute? Exploring MARPOL Efficiency in the Adriatic Sea." *Transactions on Maritime Science* 11.01 (2022): 0-0. <<https://hrcak.srce.hr/file/410805>>
8. Arleiny, Arleiny, et al. "Implementation Of Prevention Of Pollution Of The Marine Environment By Hazardous Substances According To MARPOL ANNEX II Abroad The SV. MARVELA 18." *LIGAHUKUM* 1.2 January (2021). <<https://scholar.archive.org/work/s7ofm4gr4zaq3prdc3y4icxkj4/access/wayback/http://ligahukum.upnjatim.ac.id/index.php/ligahukum/article/download/114/34>>
9. Kalepo, Sammy. "Challenges/issues of implementing MARPOL Annex VI in Papua New Guinea: an assessment from the regulator's point of view with recommendations for national implementation." (2021). <https://commons.wmu.se/cgi/viewcontent.cgi?article=2706&context=all_dissertations>

10. Muriithi, Annette Wangari. "A case study of the implementation and enforcement of MARPOL Annex VI sulphur regulations in Kenya." (2019).
<https://commons.wmu.se/cgi/viewcontent.cgi?article=2121&context=all_dissertations>
11. Imo.org, (2023). *Adoption: 13 November 1972; Entry into force: 30 August 1975; 1996 Protocol: Adoption: 7 November 1996; Entry into force: 24 March 2006*>
<<https://www.imo.org/en/About/Conventions/Pages/Convention-on-the-Prevention-of-Marine-Pollution-by-Dumping-of-Wastes-and-Other-Matter.aspx#:~:text=The%20London%20Convention%20contributes%20to,for%20other%20wastes%20or%20matter.>>>
12. Imo.org, (2023). *Adoption: 13 November 1972; Entry into force: 30 August 1975; 1996 Protocol: Adoption: 7 November 1996; Entry into force: 24 March 2006*>
<<https://www.imo.org/en/About/Conventions/Pages/Convention-on-the-Prevention-of-Marine-Pollution-by-Dumping-of-Wastes-and-Other-Matter.aspx#:~:text=The%20London%20Convention%20contributes%20to,for%20other%20wastes%20or%20matter.>>>
13. Imo.org, (2023). *Adoption: 13 November 1972; Entry into force: 30 August 1975; 1996 Protocol: Adoption: 7 November 1996; Entry into force: 24 March 2006*>
<<https://www.imo.org/en/About/Conventions/Pages/Convention-on-the-Prevention-of-Marine-Pollution-by-Dumping-of-Wastes-and-Other-Matter.aspx#:~:text=The%20London%20Convention%20contributes%20to,for%20other%20wastes%20or%20matter.>>>
14. Imo.org, (2023). *Adoption: 13 November 1972; Entry into force: 30 August 1975; 1996 Protocol: Adoption: 7 November 1996; Entry into force: 24 March 2006*>
<<https://www.imo.org/en/About/Conventions/Pages/Convention-on-the-Prevention-of-Marine-Pollution-by-Dumping-of-Wastes-and-Other-Matter.aspx#:~:text=The%20London%20Convention%20contributes%20to,for%20other%20wastes%20or%20matter.>>>
15. Europa.eu, (2019). *Bosphorus Queen Shipping Ltd Corp. v Rajavartiolaitos*.
<<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62017CC0015>>

16. Imo.org, (2023). *Adoption: 13 November 1972; Entry into force: 30 August 1975; 1996 Protocol: Adoption: 7 November 1996; Entry into force: 24 March 2006*>
<<https://www.imo.org/en/About/Conventions/Pages/Convention-on-the-Prevention-of-Marine-Pollution-by-Dumping-of-Wastes-and-Other-Matter.aspx#:~:text=The%20London%20Convention%20contributes%20to,for%20other%20wastes%20or%20matter.>>>
17. Imo.org, (2023). *Adoption: 13 November 1972; Entry into force: 30 August 1975; 1996 Protocol: Adoption: 7 November 1996; Entry into force: 24 March 2006*>
<<https://www.imo.org/en/About/Conventions/Pages/Convention-on-the-Prevention-of-Marine-Pollution-by-Dumping-of-Wastes-and-Other-Matter.aspx#:~:text=The%20London%20Convention%20contributes%20to,for%20other%20wastes%20or%20matter.>>>
18. Imo.org, (2023). *Adoption: 13 November 1972; Entry into force: 30 August 1975; 1996 Protocol: Adoption: 7 November 1996; Entry into force: 24 March 2006*>
<<https://www.imo.org/en/About/Conventions/Pages/Convention-on-the-Prevention-of-Marine-Pollution-by-Dumping-of-Wastes-and-Other-Matter.aspx#:~:text=The%20London%20Convention%20contributes%20to,for%20other%20wastes%20or%20matter.>>>
19. Imo.org, (2023). International Convention for the Prevention of Pollution from Ships (MARPOL). <[https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)>
20. Gov.uk, (2023). Pollution Prevention.
<https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1111782/MSIS27.15_R.10.22.pdf>
21. Imo.org, (2023). International Convention for the Prevention of Pollution from Ships (MARPOL). <[https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)>
22. Imo.org, (2023). International Convention for the Prevention of Pollution from Ships (MARPOL). <[https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)>

23. Imo.org, (2023). International Convention for the Prevention of Pollution from Ships (MARPOL). <[https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)>
24. Telegraph.co.uk, (2023). *Shell faces thousands of new claims in High Court over repeated oil spills*. <<https://www.telegraph.co.uk/global-health/climate-and-people/faces-high-court-action-repeated-oil-spills/>>
25. Imo.org, (2023). International Convention for the Prevention of Pollution from Ships (MARPOL). <[https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)>
26. Imo.org, (2023). International Convention for the Prevention of Pollution from Ships (MARPOL). <[https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)>
27. Imo.org, (2023). International Convention for the Prevention of Pollution from Ships (MARPOL). <[https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)>
28. Imo.org, (2023). International Convention for the Prevention of Pollution from Ships (MARPOL). <[https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](https://www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)>
29. Harrington, Alexandra R. *International Law and Global Governance: Treaty Regimes and Sustainable Development Goals Implementation*. Routledge, (2021).
30. Ferraro, Gianluca, and Pierre Failler. "Governing plastic pollution in the oceans: Institutional challenges and areas for action." *Environmental Science & Policy* 112 (2020): 453-460.
31. Messerli, Peter, et al. "Global sustainable development report 2019: the future is now—science for achieving sustainable development." (2019).
32. Zicha, Jiří, et al. "Management of Municipal Waste in the EU Member States: Best Practices." (2021).
33. Sas.org.uk, (2023). *Water quality facts and figures*. <<https://www.sas.org.uk/water-quality/water-quality-facts-and-figures/>>
34. Ahmed, JSD Ishtiaque. "Safe & Environmentally Sound Recycling of Ships." *Fordham Environmental Law Review* 31.1 (2020): 60-106.

35. Osmundsen, Lori Anne. *From Ship to Shore: Port Reception Facilities and the Regulatory Framework for Controlling Marine Plastic Pollution in the Arctic*. MS thesis. 2021.
36. Mantoju, Capt Deepak. "Analysis of MARPOL implementation based on port state control statistics." *Journal of International Maritime Safety, Environmental Affairs, and Shipping* 5.3 (2021): 132-145.
37. Joung, Tae-Hwan, et al. "The IMO initial strategy for reducing Greenhouse Gas (GHG) emissions, and its follow-up actions towards 2050." *Journal of International Maritime Safety, Environmental Affairs, and Shipping* 4.1 (2020): 1-7.
38. CHUMA, OWEN CHARLES. *Inland Waters Shipping (Prevention of Pollution by Oil and Noxious Liquid Substances in Bulk) Regulations 2020*. Diss. United Nations, 2020.
39. Chmieliński, Mirosław. "Inspection of containers of the explosives materials in the maritime transport." *Inżynieria Bezpieczeństwa Obiektów Antropogenicznych* 3 (2019).

ORIGINALITY REPORT

1 %	1 %	1 %	0 %
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.basel.int Internet Source	<1 %
2	aaltodoc.aalto.fi Internet Source	<1 %
3	commons.wmu.se Internet Source	<1 %
4	eur-lex.europa.eu Internet Source	<1 %
5	J. Ashley Roach, Robert W. Smith. "Excessive Maritime Claims", Brill, 2012 Publication	<1 %

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		