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Criminal Liability for Ship-Source Pollution[1]

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Abstract

There have been long-standing arguments as to whether infringements of provisions to protect the marine environment are serious enough to deserve criminal sanctions. Indeed, criminal prosecution for environmental violations is not a recent innovation. Moreover, it is essentially national in nature, and the concept and application under each particular State's jurisdiction do not necessarily coincide—some States have asserted wide-ranging criminal jurisdiction, while others have adopted less inclusive criminal provisions. However, when a State does decide to exercise its criminal jurisdiction over a perpetrator of ship-source pollution, then a minimum consideration would be to incorporate international standards and to ensure the practical implementation of such international rules. This article examines environmental offences under two distinctive national States and one supranational body, i.e. the United States, China, and the European Union. It then delineates some of the characteristic features and assesses the rationales behind them.

1. Introduction

Criminal law has its own peculiar way of redressing inequitably distributed environmental harm. The idea of using criminal law for better protecting the environment, in particular in the anti-pollution sector, is not new in the light of enhanced public awareness of environmental issues and the serious nature of those that come before the courts.[4] No one disagrees that the environment needs protection; however, since the environment cannot speak for itself, such universal understanding is simply empty talk unless concrete measures, including criminal provisions, are established and translated into efficient application. Research records on environmental crime have described and publicized its potentially far-reaching harm to human life and health;[5] at the same time, a broad range and increased number of activities have given rise to diverse and inequitably distributed

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[4] Julie Adshead, "Doing Justice to the Environment", J. Crim. L. 2013, 77(3), 215-230. Page 225, "The emphasis in early environmental protection provisions was primarily upon the protection of public health from environmental pollution."

[5] Neal Shover and Aaron S. Routhe, "Environmental Crime", 32 Crime & Just. 321 (2005). Page 324: "It is not hyperbole to suggest that environmental crime can victimize entire population or nations; to the extent that natural resources belong to a nation's people, theft or destruction of them victimizes all".

environmental damage that extends beyond national borders and affects social wellbeing.[6] Historically, Disraeli's River Act of 1876 (Prevention of Pollution Act) in England first regulates clean water supplies and safe sewage disposal, and is considered to be the starting point in controlling pollution through national legislation.[7] In the United States, the Rivers and Harbors Act of 1899 is the oldest federal environmental criminal statute,[8] one that makes it a misdemeanor to discharge refuse into navigable waters of the United States without permit;[9] and the specific provision to prohibit the deposit of refuse is known as the Refuse Act.[10] In recent times, recognition of the power of criminal jurisdiction over perpetrators to prohibit pollution practices has changed a growing number of states' legislative texts.[11] Criminal sanctions in environmental law are now popular, and this trend is unlikely to change in the near future.[12] Furthermore, it seems likely that criminal law measures to protect the environment will be taken in more specific areas.[13] One of the most important sectors is ship-source pollution, which includes both deliberate and accidental discharge of waste, tanker oil and hazardous substances by sea-going vessels into the ocean zones during high-risk shipping activities in contravention of national and international laws, causing threat to the marine environment.[14]

It is clear that international conventions leave the decisions on whether and how to punish violations to the discretion of the legislative states. In order to map out the optimal criminal sanctions for ship-pollution mishaps in such a way as to sufficiently deter potential offenders, after a discussion of the necessity to develop criminal liability for ship-source pollution, this article will examine a number of important questions from a few selected jurisdictions including the United States, China and the European Union:

(1) What determines which environmental violations could result in criminal prosecution?
(2) Which persons, if any, can be prosecuted for ship-source pollution?
(3) What criteria should govern the penalties that should be adopted for ship-source pollution?

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[6] Shover and Routhe, ibid, 323-324.
[7] Susan Wolf & Neil Stanley, *Wolf and Stanley on Environmental Law*, (4th edn, Cavendish Publishing 2003) Page 124. See also Shover & Routhe (n 18) 321.
[8] David M. Uhlmann, "Environmental Crime Comes of Age: The Evolution of Criminal Enforcement in the Environmental Regulatory Scheme", Utah L. Rev. 2009, no. 4 (2009): 1223-52. Page 1223.
[9] 33 U.S.C. § 411 (2012).
[10] 33 U.S.C. § 407 (2012).
[11] Shover and Routhe (n 5), 322 "A growing number of states also provide criminal penalties for violating environmental laws."
[12] Robert Deeb, "Environmental Criminal Liability", 2 South California Environmental Law Journal, 159 (1993). At Page 160.
[13] "Case Law Analysis: Environment, Crime and EC Law", Journal of Environmental Law (2006) Vol. 18 No.2, 277-288. At Page 288.
[14] Phillippe Sands, Jacqueline Peel, Adriana Fabra and Ruth MacKenzie, *Principle of International Environmental Law*, (3rd edn, Cambrige 2012) Page 378-379. See also Alan Khee-Jin Tan, *Vessel-Source Marine Pollution: The Law and Politics of International Regulation*. (Cambridge University Press 2006). Page 3-4.

2. Why is Criminal Liability Necessary for Ship-Source Pollution?

Ship-source marine pollution is a byproduct of ocean transportation, and has become part of the world's consciousness[15] in the wake of several significant oil spill incidents that occurred during the second half of the twentieth century following on from the *Torrey Canyon*.[16] As a consequence, a number of international conventions have been adopted; among them, it is not unusual to find criminal liability being considered or imposed against the perpetrators of ship-source pollution to protect the integrity of the marine environment.[17]

First of all, the United Nations Convention on the Law of the Sea (UNCLOS, also called the Law of the Sea Convention), which is the "Constitution for the Oceans", has established some important landmarks on the international landscape for preventing and combating marine pollution through criminal law.[18] It has emerged as a negotiated international agreement to set down fairly detailed arrangements on the "rights and responsibilities of nations with respect to their use of the world's oceans, establish[ing] guidelines for businesses, the environment, and the management of marine natural resources."[19] The UNCLOS, in Section 5 "International rules and national legislations to prevent, reduce and control pollution of the marine environment" of Part XII "Protection and Preservation of the Marine Environment", highlights specific concerns over ship-source pollution in Article 221, "Pollution from vessels". According to UNCLOS, where applicable international rules and standards are violated, the flag State has the right "to take any measures . . . to impose penalties, irrespective of prior proceedings of another State",[20] and the penalties "shall be adequate in severity to discourage violations wherever they occur."[21] In respect of violations by ships flying a foreign flag, only monetary penalties can be imposed, except in the case of willful and serious acts of pollution in the territorial sea.[22] The UNCLOS also gives the competence of jurisdiction to the port States, even when the

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[15] Tan, Alan Khee-Jin Tan, *Vessel-Source Marine Pollution: The Law and Politics of International Regulation*. (Cambridge University Press 2006). Page 3.

[16] The *Torrey Canyon* oil spill represents one of the most serious marine pollution incidents (if not the worst one) in the twenties century. In 1976, the Liberian supertanker SS *Torrey Canyon* collided with another vessel and broke up off the west coast of United Kingdom, causing approximately 30 million gallons of crude oil spill into the ocean. UK, France and Spain suffered significant damage including damages to the natural resources. The *Torrey Canyon* incident has had profound international legacy both legally and environmentally.

[17] Michael Faure, "Criminal Liability for Oil Pollution Damage: An Economic Analysis", in Michael Faure, Lixin Han, and Hongjun Shan (eds.), *Marine Pollution Liability and Policy – China, Europe and The US* (Kluwer Law International, 2010), pp. 161-192, 164: "There are powerful arguments in favor of public regulation (in addition to using tort law) to deter marine . . . pollution and to use public enforcement to induce compliance with public regulation."

[18] Günter Heine, "Marine (Oil) Pollution: Prevention and Protection by Criminal Law—International Perspectives, Corporate and/or Individual Criminal Liability", in: Michael G. Faure & James Hu. (eds.), *Prevention and Compensation of Marine Pollution Damage: Recent Developments in Europe, China and the US*, (Kluwer Law International 2006). pp 41- 59. 46.

[19] Alla Pozdnakova, Criminal jurisdiction over perpetrators of ship-source pollution; international law, state practice and EU harmonization, (Brill/Nijhoff, 2012), Page 2.

[20] UNCLOS, Art. 228.3.

[21] UNCLOS, Art. 217.8.

[22] UNCLOS, Art. 230.1 & 2.

discharge has taken place outside the national boundaries of the states concerned.[23] However, this international instrument does not prescribe how individual States should shape their domestic criminal liability law provisions and practices with respect to ship-source pollution offences. It leaves the States free to choose whether to criminalize pollution offences and whether to prosecute the perpetrators under their domestic laws.

A second paradigm serves for the purpose of ensuring the adequacy, promptness and effectiveness of compensation to victims after a pollution incident has occurred. Indeed, the international approach for civil compensation has been skillfully constructed and has worked well over many years. Civil liability issues for cargo oil marine pollution are established through the International Convention on Civil Liability for Oil Pollution Damage 1969 (CLC) and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971 (the Fund Convention). The CLC, as modified in 1992, assigns strict liability on the part of the shipowner for third party claims, although the owner is entitled to limit his liability to a certain maximum amount beyond which he is not responsible. The Fund Convention supplements the CLC to afford the polluting victims greater compensation for their first-tier burden through a second-tier International Oil Pollution Compensation Fund (the IOPC Fund), which is financed collectively by the oil companies. It is notable that an identical approach was adopted in the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea 1996 (HNS Convention). Furthermore, in November 2008, the International Convention on Civil Liability for Bunker Oil Pollution Damage 2001 (the Bunkers Convention) came into force to fill the gap for liability and compensation arising from fuel oil carried in ship's bunkers. Since the realization of sufficient compensation has remained the critical issue,[24] all these said conventions mandate that the registered shipowner of a visiting ship must be fully insured up to the relevant liability limits. In practice, such compulsory insurance or financial security are usually provided by P&I insurers or other equivalent financial institutions with "deeper pockets". In addition, the person suffering pollution harm is allowed to bring direct action against the insurer/guarantor under national laws outside the international civil liability regimes.

By means of financial inducement, the above-discussed arrangements are assumed to forbid and prevent conduct that unjustifiably and inexcusably inflicts or threatens individual or public interests. Notwithstanding this assumption, a key issue is: Can these concrete compensatory mechanisms sufficiently deter and end ship-source pollution catastrophes? The answer appears to be uncertain. This is because, on the one hand, shipowners are inclined to escape from liability, because they are deeply upset by the rules that channel primary liability solely to them (and their insurers). For the shipowner, the idea of taking advantage of loopholes in the detection process to conceal his deliberate or

[23] UNCLOS, Art. 218.

[24] All civil liability compensation conventions confront three main basic questions: (1) To whom will compensation be paid if pollution damage occurs? (2) How can the compensation source be arranged to ensure that necessary and adequate funds will be available? (3) By what criteria is the actual level of compensation determined? Ling Zhu, "Can the Bunkers Convention Ensure Adequate Compensation for Pollution Victims?" 40 J. Mar. L. & Com. 203. Page 204.

negligent conduct involved in marine pollution is too lucrative to ignore.[25] In other words, if it seems that his offence may not be noticed, chances are that an audacious shipowner would decide to pollute at the public's expense. Clearly, most major spills, such as those that occurred with the *Erika*, *Prestige* and *Exxon Valdez*, occurred in the wake of the shipowner's poor management and control over the ship through its crew, rather than resulting from pure "bad luck", such as natural phenomena or acts of war. On the other hand, the current civil liability system precludes awarding punitive damages as a means of punishing the defendant for the harm that his wrongful conduct caused to the individual plaintiff, as the emerging criminal law wisdom does.[26] These conventions hold the defendant liable only for non-punitive compensatory damages, i.e. actual property damages, costs of reasonable reinstatement measures actually undertaken or to be undertaken, and consequential pure economic losses.[27] That is to say, the available paradigms of judicial remedies are quite limited for the actual plaintiffs before the court, not to mention for all of society. It is believed that this phenomenon has largely resulted in the under-deterrence of harmful behavior.[28]

The third dimension, "command-and-control regulations", lays down technical standards to prevent and mitigate pollution harm *ex ante*.[29] The main international instrument that regulates the pollution from ships through both accidental and operational causes is the International Convention for the Prevention of Pollution from Ships, 1973 and its 1978 Protocol (collectively known as MARPOL 73/78). By setting up ship discharge, construction and operating standards, with its focus on prevention of pollution, MARPOL has authorized the flag State or the state under whose authority the ship is operating, to bring proceedings against violations of the Convention's standards on ship building, equipping, operating and discharging.[30] Under MARPOL 73/78, a port State also has the right to inspect a vessel visiting its ports to ensure that the vessel is properly certified and does not release harmful substances in violation of related regulations.[31] However, even though most states agree that enforcing MARPOL would benefit both shipping activities and environmental protection, [32] such competence and obligation are not solidly

[25] Michael Faure, "Criminal Liability for Oil Pollution Damage: An Economic Analysis", in Michael Faure, Lixin Han, and Hongjun Shan (eds.), *Marine Pollution Liability and Policy – China, Europe and The US* (Kluwer Law International, 2010), pp. 161-192, Page 164-65.
[26] Thomas B. Colby, "Clearing the Smoke from Philip Morris v. Williams: The Past, Present, and Future of Punitive Damages", 118 Yale L.J. 392. Page 395.
[27] See generally Robert Force, "A Comparison of the Recovery of Compensation for Injury to Natural Resources under the 92 CLC and Fund Conventions with the US Oil Pollution Act of 1990", in: Michael Faure, Lixin Han, and Hongjun Shan (eds.), *Marine Pollution Liability and Policy – China, Europe and The US* (Kluwer Law International, 2010), pp 263-297.
[28] Thomas B. Colby, "Clearing the Smoke from Philip Morris v. Williams: The Past, Present, and Future of Punitive Damages", 118 Yale L.J. 392. Page 395.See also Faure (n 25), 168.
[29] Ellen Margrette Bass, "Environmental Liability—Modern Developments", 41 Scandinavian Stud. L. 31 2001, Page 31.
[30] MARPOL Convention, Art. 4.
[31] MARPOL Convention, Arts. 5 & 6.
[32] Wang Hui, "Prevention and Compensation for Marine Pollution". In Michael Faure, Lixin Han, and Hongjun Shan (eds.), *Marine Pollution Liability and Policy – China, Europe and The US* (Kluwer Law International, 2010), pp. 13-40, 27.

implemented in certain states.[33] The major weakness in the system possibly lies in the compatibility between national regulations and the international standards laid down in MARPOL.[34] A number of provisions in MARPOL set forth criteria that exempt certain discharges from general prohibition, and it may be understood that these exemptions impose limitations on national criminal law rules.[35] For example, the persons who may be subjected to criminal proceedings are, according to MARPOL, limited to the masters and owners of the vessel; whereas certain national legislations allow for the punishment of any persons responsible for the conduct of the vessel or its operation.[36] Another difference might be that MARPOL only sanctions a discharge where there is a higher degree of fault proved; whereas some domestic provisions make punishable the causing of a discharge by imprudence or negligence (i.e. mere fault).[37]

We must not forget that prevention through monitoring and licensing is more effective than ex post deterrence through sanctioning.[38] In the meantime, it is clear that the concrete compensatory mechanisms, including the international civil liability conventions, cannot sufficiently deter and end ship-source pollution catastrophes. Legal and economic scholars have been arguing that, compared with administrative sanctions that allow the imposition of monetary fines on convicted culprits as being a more effective punishment method,[39] the most effective deterrent is likely to be criminal penalties for actions that cannot be measured in currency.[40] With regard to ship-source pollution violations, the provisions in Part XII UNCLOS, as discussed above, directly set forth general guidance covering the institution of criminal proceedings and the criminal penalties thereof.[41] At the same time, though, some researchers refer to MARPOL as a source of "indirect" criminal law (for environmental offences).[42]

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[33] Günter Heine, "Marine (Oil) Pollution: Prevention and Protection by Criminal Law—International Perspectives, Corporate and/or Individual Criminal Liability", in: Michael G. Faure & James Hu. (eds.), *Prevention and Compensation of Marine Pollution Damage: Recent Developments in Europe, China and the US*, (Kluwer Law International 2006). pp 41- 59. 42.

[34] Pozdnakova (n 19), 15.

[35] Pozdnakova, ibid. 9.

[36] A typical example is Article 8 of the French law no. 83-583 of 5 July 1983 on the Prevention of Ship Pollution from Ships. When the oil tanker Erika broke in two in the French EEZ, the criminal enquiry showed that the persons who ought to be prosecuted on the basis of Article 8 were all persons responsible for the conduct or operation of the vessel which caused the oil discharge. The *Tribunal Correctionnel* of Paris confronted the issue by applying French penal provisions and basing its decision on French criminal law to punish the master and the owner of the Erika, three companies for the Total group, certain corporate officials, and the vessel's classification society. The Tribunal disregarded the international system organized by MARPOL. For more information, see Luc Grellet, "Avoiding International Legal Regimes: The Erika Experience", pp 141-153. Page 149, in: Bariş Soyer and Andrew Tetterborn (eds), *Pollution at Sea: Law and Liability* (informa 2012).

[37] See id.

[38] Michael G. Faure & Hao Zhang, "Environmental Criminal Law in China: A Critical Analysis". 41 Envtl. L. Rep. News & Analysis 10024. Page 10025.

[39] Faure (n 25) 168-69.

[40] Faure (n 25)171.

[41] Pozdnakova (n 19) 7.

[42] Pozdnakova (n 19) 8.

3. What determines which environmental violations would result in criminal prosecution?

This question considers the conditions for investigations into ship-source pollution accidents for criminal liabilities. Two aspects are tangled together in this first question, namely: (a) whether any fault (intention or negligence) is required to make a pollution conduct criminally punishable, or whether the strict liability, i.e. no-fault liability, applies; and (b) whether the pollution needs to be "willful and serious" and "substantial", or has caused "major damage to the environment".

It is important that the law specifies the kinds of ship-borne environmental violations that could incur criminal liability. There are cases of intentional acts, serious or gross negligence, and inadvertence, as well as purely accidental occurrences.

With regard to mental status, different rules can be identified at the national level. The United States ("US") has established an extraordinary example of enforcing criminal law through a multi-layer texture. According to US law, for most felony violations of the Clean Water Act (CWA)[43], the government must show that the defendant acted knowingly.[44] Criminal violations of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) are also limited to situations where the defendant acted knowingly.[45] Similarly, the misdemeanor provisions of the CWA apply only when the defendant acted negligently.[46] The government must show that defendants know at the time that they are engaging in a conduct which constitutes a violation of the law; the government is not required to show that defendants know they are breaking the environmental laws. Indeed, in some cases, the government is required to prove only that the defendant acted negligently; in other cases, the government is not required to show any mental state at all—they are strict liability violations.[47] By way of contrast, although Chinese Criminal Law does not literally illuminate the mental status requirement for constituting an Article 338

[43] There are five federal statutes that are the most potent in their arsenal when prosecuting water pollution crimes of various forms and which may result from a multitude of sources. The CWA is one of them. The others include: The Refuse Act, the Act to Prevent Pollution from Ships (APPS), the Oil Pollution Act of 1990 (OPA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA or the Superfund statute).
[44] 33 U.S.C. § 1319(c).
[45] 42 U.S.C. § 9603(b).
[46] 33 U.S.C. § 1319(c).
[47] David M. Uhlmann, "Prosecutorial Discretion and Environmental Crime". 38 Harvard Environmental Law Review, pp160-216 (2014). Page 169.

crime[48], scholars believe that proof of negligence by the prosecutors may suffice.[49] Under the EU Directive[50], intentional acts, recklessness and serious negligence are sorted into different tracks; however, the separate penalties are not so well developed as to be parallel.

Both Chinese law and EU legal instruments adopt wordings such as "serious consequences" and/or "significant damages" as a prerequisite for criminal liability.[51] These terms typically fall under the models of "concrete endangerment", for which at least a pollution emission is required. Putting it another way, a mere abstract danger, for example, that the illegal discharge of certain wastes from vessels might cause danger to the aqua environment, is therefore insufficient for asserting criminal liability. The concrete endangerment type of provision, however, does not require that actual harm also needs to be proven; usually, a threat of harm is sufficient, and all that needs to be shown is that the act violated certain administrative rules. To further complicate the issue, this is not to say that as long as the administrative rules are adhered to, no criminal liability will attach, just because the act will not be considered unlawful. Scholars have argued that criminal liability may occur even if administrative requirements were formally met. The major advantage with a model of absolute administrative independence is that, even if there is no administrative regulatory framework that has been violated, criminal liability can still apply, since any pollution related to ships can still be illegal. In contrast, it can be seen that, in the above circumstances, no criminal liability would occur under a traditional model, which merely aims at the enforcement of prior administrative decisions. The new model can therefore, in some ways, be seen as a reaction of legislators and judges wishing to provide more direct protection to environmental values.[52]

Perhaps the US Congress acted wisely when it so broadly defined the environmental violations that could be criminal. Because so many conducts may fall within the criminal provisions of the environmental laws, only when a ship-source pollution accident "cause[s]

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[48] The Criminal Law, Article 338: "Whoever, in violation of State provisions, discharges, dumps or disposes of radioactive waste, waste containing pathogens of infectious diseases, toxic substances or other hazardous substances, thus causing serious environmental pollution, shall be sentenced to fixed-term imprisonment of not more than three years or to criminal detention and be concurrently or separately fined. If the consequences are especially serious, he shall be sentenced to fixed-term imprisonment of not less than three years but not more than seven years and be concurrently fined." In Chinese law, the relevant provisions pertaining to ship-source pollution can mainly be found in the 1982 Marine Environmental Protection Law, as amended in 1999 and 2013, respectively, the 1997 Criminal Law, and the Regulation on the Prevention and Control of Marine Pollution from vessels (2010, 2013,2016 and 2017 versions).

[49] Weicai Wang, "Research on Subjective and Objective Elements of Environmental Pollution Crime – from the perspective of Amendment VIII to PRC Criminal Law", Vol. 4 Law Science Magazine 71-74 (2011). Page 71 (in Chinese).

[50] Directive 2005/35. The EU initially adopted the European Directive on Criminal Sanctions for Ship-Source Pollution (Directive 2005/35/EC) and the Council Framework Decision 2005/667/JHA to incorporate MARPOL 73/78 into Community law and to provide a legal basis for Member States to use criminal penalties in the event of discharges of oil and other noxious liquid substances in bulk from ships in Community waters. The Decision supplemented the Directive with details rules on criminal matters, and thus the EU has one of the world's most comprehensive and advanced regulatory frameworks for shipping. More can also be found in Nengye Liu & Frank Maes, "The European Union and the International Maritime Organization: EU's External Influence on the Prevention of Vessel-Source Pollution". 41 J. Mar. L. & Com. 581,p. 582.

[51] See for example, Chinese Criminal Law, Article 338;

[52] Michael G. Faure & Hao Zhang, "Environmental Criminal Law in China: A Critical Analysis". 41 Envtl. L. Rep. News & Analysis 10024. Page 10025. 10027.

personal injuries or deaths", "cause[s] major losses to the public or private properties" and "leads to serious consequences", will a related person be investigated for criminal liabilities.[53] If the pollution consequences are slight, they should not be investigated for criminal liabilities but should usually be dealt with by administrative punishments.[54] Congress has criminalized both substantive violations related to permits, such as discharging in excess of permit limits, and more technical permit infractions, such as failing to maintain documents for a specific period of time. Congress uses similar expansive language in the criminal provisions that apply to notification, recordkeeping, and filing requirements.[55]

4. Which, if any, of the persons may be prosecuted for ship-source pollution?

One other disturbing aspect of the criminalization move is that of incarcerating personnel involved in the shipping activities. MARPOL has not specifically limited the list of persons who could be subjected to criminal sanctions.[56] Under national law, there are, in some cases, articles stating generally that everyone who violates the provisions of the act, regulation, or the licenses issued pursuant thereto will be punished with specific sanctions; in other cases, the law specifically states that anyone who operates without a license or violates the condition of a license is criminally liable under the specific provision.

As far as the EU goes, some scholars have declared that criminal offenses under the EU Directive are seemingly sought against any individual or legal entity who is connected with the incident and shares responsibilities.[57] On the one hand, for instance, the meaning of "shipowner" under most international conventions has extended to cover parties that include the owner, registered owner, bareboat charterer, manager and operator of a ship. This expansive position of responsible parties illustrates the breadth of the Directive's likely application. On the other hand, new rulings from the *Prestige* case have opened the door to sentencing the ship's captain to jail, because the captain was convicted of recklessness resulting in catastrophic environmental damage.[58] However, even if the captain was held criminally liable for guiding the tanker improperly with full knowledge of the overloaded condition of the ship and her weakened structure, there are voices arguing that domestic and international law should not, however, seek to make scapegoats out of mariners who may themselves have already been psychological victims of marine accidents, because such a stance may motivate other key players in the disaster to throw their employees to trials when they learn that they are being investigated.[59] Also, under the EU

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[53] See, e.g., Clean Water Act 33 U.S.C. §1319(c)(3)(A) (1972); Resource Conservation and Recovery Act 42 U.S.C. § 6928(e).
[54] Uhlmann (n47), 164.
[55] Uhlmann (n47), 168.
[56] Grellet (n 36), 150.
[57] Marc A. Huybrechts, "Criminal Liability of Master and Crew in Oil Pollution Cases: A Possible Conflict between the Law of the Sea Convention (UNCLOS), MARPOL and the European Directive 2005/35/EC". In: Michael Faure, Lixin Han, and Hongjun Shan (eds.), *Marine Pollution Liability and Policy – China, Europe and The US* (Kluwer Law International, 2010), pp. 215-230, 221.
[58] See the news article Prestige Captain Convicted of Recklessness: http://maritime-executive.com/article/prestige-captain-convicted-of-recklessness?from=timeline&isappinstalled=1, accessed 24 March 2016.
[59] "Time Behind Bars: A New Barrier for Those Earning a Living at Sea": Seafarers increasingly face prison terms under new laws to criminalize acts of maritime pollution. But the haste towards punitive legislation

supra-national Directive, other parties such as classification societies are not let off the hook,[60] but China is probably not following this same pattern. For example, some scholars raised objections to accusing the China Classification Society (CCS) of having criminal liability in ship-source pollution cases, reasoning that state organs, such as the Ship Inspection Bureau or the CCS, are not qualified criminal subjects.[61] At the same time, according to Article 3 of the Chinese Criminal Law, "any act deemed by explicit stipulations of law as a crime is to be convicted and given punishment by law, and any act that no explicit stipulations of law deems a crime is not to be convicted or given punishment."[62] Article 3 of the Chinese Criminal Law reflects the "*nullapoena sine lege*" doctrine that no penalties should be attached without a law, so imposing criminal liabilities upon the China Classification Society has no legal ground under the existing Chinese Law.[63]

Meanwhile, a sizeable number of US court decisions have also revealed their expansive understanding concerning the designation of liable parties. For instance, there is a strong likelihood that the captains, chief officers and chief engineers at the top of the operational and managerial hierarchy of a vessel will become subjects of criminal investigation resulting from shipborne pollution accidents. Concretely speaking, the chief engineer, due to his primary responsibility for maintaining and verifying the accuracy of the log, cannot escape criminal charges against him for presenting a falsified Oil Record Book (ORB) as demanded by the APPS, or for having a role in a conspiracy with his subordinates to conceal the illegal discharge of wastes.[64] Likewise, the crew members' criminal violations, such as obstruction of the investigation or making false statements, may be imputed to the master or captain, whose supervisory authority extends to the entire vessel.[65] Indeed, under US law, too, the question as to whether it makes sense to continue prosecuting the crew members has already been asked. Scholars have found "that if the motivation for prosecuting MARPOL/APPS violations is to deter pollution, more and more crew members should be expected to go the way of the whistleblower. . . If this serves to solve the problem internally before a criminal case is brought, then it is best for everyone."[66] In addition, since the *Royal Caribbean* case[67], unit offenders such as corporations, institutions, groups and governmental agencies have been held accountable in connection with individual

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may see some states contravening established conventions, reports Sandra Speares, Lloyd's List, 10 August 2004. 2004 Informa UK Ltd.

[60] Huybrechts (n 57) 221. And for example, in the *Erika* case, the Court of First Instance in Paris (France) found the classification society, RINA and one of its officer, Mr. Ponasso, criminally liable. The court reasoned that it had continued to renew the *Erika*'s certificates, even though it was aware of the ship's hazardous condition and the circumstances of her ownership and operations. See Pozdnakova, (n 19), 233.

[61] Yuechuan Jiang, "Criminal Liabilities for Ship-Source Pollution Based on the Laws of China", in: Michael Faure, Lixin Han, and Hongjun Shan (eds.), *Marine Pollution Liability and Policy – China, Europe and The US* (Kluwer Law International, 2010), pp. 231-240, 239.

[62] Chinese Criminal Law, Article 3.

[63] Jiang (n 61) 243.

[64] Andrew W. Homer, "Red Sky: The Horizon for Corporations Crew Members and Corporate Officers as the United States Continues Aggressive Criminal Prosecution of Intentional Pollution from Ships". 32 Tul. Mar. L.J. 149, 167 (2007)

[65] Homer, ibid, 167-68.

[66] Homer, ibid, 173-74.

[67] 24 F. Supp. 2d 155, 160, 1998 AMC 1841, 1846 (D.P.R. 1997).

defendants' violations of anti-pollution laws.[68] With the imposition of fines on corporate entities, it might be expected that a fine set at a high enough level would substantially incentivize the polluters to abate pollution, thereby achieving meaningful deterrence.[69] The inherent weakness of corporate sentences is, however, obvious. Since a corporation can only be fined and not be jailed, Congress fears that mere monetary sanctions can imply that as long as the companies pay a price for their pollution as a "cost of doing business",[70] then they have a right to pollute.[71] Therefore, in order to cure this particular weakness in criminal sanctions, legislators offered the alternative of imputing blame up the chain of command within the polluting companies as a means to regulate corporate conducts.[72] The most effective way to combat corporate crime, however, is to prosecute both the individuals who committed the offenses and the companies involved. The prosecution of corporate officials for a company's crimes is a positive development—if corporate officials or other company directors are considering similar conduct in the future, they will know that they could go to jail for putting the marine environment and health of the public at risk. Corporate officials are more likely to refuse to engage in criminal activity and less likely to discount the risk of getting caught when the consequence is a loss of personal freedom, as opposed to financial penalties.[73]

5. What are the criteria for penalties that should be adopted for ship-source pollution?

This issue examines what form the penalty for punishment of polluters should take, other than that it should be severe enough as to be commensurate with the act of violation, and that it should discourage future occurrence. A look at the EU Directive purports that penalties have to be applied irrespective of the flag that the vessel flies,[74] and that they must be "effective, proportionate and dissuasive".[75] When the consequences of a serious negligence result in significant and widespread damage to water quality, to animals or vegetable species or to parts of them, as well as the death or serious injury of persons, the offender could face punishment of between at least 2 and a maximum of 5 years of imprisonment.[76] Additionally, under US law, unintentional acts such as negligence or inadvertence can also be sneaked in, as has been done in some cases referred to above.

Support for this approach can be found in both UNCLOS and MARPOL, and under these two conventions, even though the enforcement jurisdiction may extend to arrest and

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[68] See Homer (n 64), 163-66.
[69] R. Posner, *Economic Analysis of Law*. Page 234-36 (2d ed. Little, Brown, 1977).
[70] Judson W. Starr, "Counting Environmental Crimes", 13 B.C. ENVTL. AFF. L. REV. 379, 382 (1986).
[71] See e.g., Reynolds Metals Co. v. Lampert, 324 F.2d 465, 466 (9th Cir. 1963) (noting that "[i]t is cheaper to pay claims than it is to control fluorides."), cert. denied, 367 U.S. 910 (1964); Comment, "Increasing Community Control over that Corporate Crime—A Problem in the Law of Sanctions", 71 Yale L. J. 280, 293 (1961) (stating that the real formulators of corporate policy have little to fear from criminal corporate fines because the fines are insubstantial).
[72] Homer (n 64), 174.
[73] David M. Uhlmann, "Deferred Prosecution and Non-Prosecution Agreements and the Erosion of Corporate Criminal Liability", Maryland Law Review, V. 72, No. 4, 2013, pages 1298-99: There is no better deterrent to corporate crime than the realization that criminal activity could result in incarceration.
[74] Directive 2005/35. Article 3.2.
[75] Directive 2005/35. Article 8.
[76] Directive 2009/123. Article 8 referring to Article 4.6 of Framework Decision 2005/667/JHA.

detention of the vessel, there is nowhere therein that prescribes deprivation of individual liberty and imposition of criminal punishment, except in the case of "willful and serious act of pollution in the territorial sea."[77] Even then, the recognized rights of the accused must be observed.[78] Rather, the general nature of the sanctions prescribed by the UNCLOS is monetary.[79] Any attempt, therefore, to stretch the provision beyond that limit will amount to contravention of the UNCLOS, except as the proviso permits—that is, except in the case of "willful and serious act of pollution in the territorial sea".[80] In such an instance, there must be evidence of a willful, intentional and deliberate act on the part of the accused—a mere accident may not suffice. In such an instance, too, the seriousness and severity of the pollution must be taken into consideration.

6. Conclusion

A criminal liability scheme in ship-source pollution cases no longer plays a mere peripheral role, but is a necessary supplement to the traditional compensatory mechanisms. Nevertheless, still much is left to be desired in this respect. Once we turn to a scheme that imposes harsh criminal liabilities, such as those proposed under the EU Directive and the provisions scattered piecemeal throughout the US and Chinese laws, issues as being discussed in this paper may arise. Very importantly, issues may also arise as to the relationship between existing domestic criminal liability mechanisms and the international nature of shipping activities. If more is not done quickly to ensure practical application of the rules and principles for criminalizing ship-source pollution liability, such laws will remain paper tigers.[81]

[77] UNCLOS Article 230 (2).
[78] UNCLOS Article 230 (3).
[79] UNCLOS Article 230 (1) provides: "Monetary penalties *only* may be imposed with respect to violations of national laws and regulations or applicable international rules and standards for the prevention, reduction and control of pollution of the marine environment, committed by foreign vessels *beyond* the territorial sea."
[80] UNCLOS Article 230 (2).
[81] Case Analysis, "Environment, Crime and EC Law". Journal of Environmental Law (2006) Vol. 18 No. 2, 277-288. Page 288.