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### **Marine Pollution from Land-based Sources: development of the regime**

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### **OVERVIEW OF KEY SCHOLARSHIPS**

#### **Pre- UNCED, 1992**

1. Kwiatkowska, B., 'Marine Pollution from Land-Based Sources: Current Problems and Prospects' *Ocean Development & International Law* 14(3) (1984) 315-335
2. Boyle, A.E. 'Land-based Sources of Marine Pollution: Current legal regime', *Marine Policy* 16(1) (1992) 20-35
3. Nollkaemper, A. 'Law of the Sea: Marine Pollution from Land-based sources: Towards a global approach', *Marine Pollution Bulletin* 24(1) (1992) 8-12

#### **Post- UNCED, 1992**

4. Dahl, A.L. 'Land-based Pollution and Integrated Coastal Management', *Marine Policy* 17(6) 1993 561-572
5. Williams C. and B. Bavis, 'Land-based activities: what remains to be done' *Ocean & Coastal Management* 29(1) (1995) 207-222

6. Mensah, T.A. ,‘The International Legal Regime for the Protection and Preservation of the Marine Environment from Land-based Sources of Pollution’, in A. Boyle and D. Freestone, eds., *International Law and Sustainable Development* (OUP, 1999)
7. Hassan, D., *Protecting the Marine Environment from Land-based Sources of Pollution: Toward Effective International Cooperation* (Ashgate: 2006)
8. Vinogradov S. and E.A. Kirk, ‘UNEP Implementation of the GPA at Regional Level: The role of regional sea conventions and their protocols (2006)  
Available at:  
[http://www.unep.org/pdf/GPA/The\\_Role\\_of\\_Regional\\_Seas\\_Conventions\\_and\\_their\\_Protocols.pdf](http://www.unep.org/pdf/GPA/The_Role_of_Regional_Seas_Conventions_and_their_Protocols.pdf)
9. VanderZwaag D. and A. Powers, ‘The Protection of the Marine Environment from Land-based Pollution and Activities: Gauging the tides of global and regional governance’, *International Journal of Marine and Coastal Law* 23 (2008) 423-452
10. Kirk, E.A., ‘Noncompliance and the Development of Regimes Addressing Marine Pollution from Land-Based Activities’ *Ocean Development & International Law* 39(3) 2008 235-256

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### **General introduction to and development of the regime on the protection of the marine environment from land-based sources and activities**

The following texts provide helpful guidance on how the law relating to the prevention, reduction, and control of marine pollution from land-based sources and activities has been developed. They address both the historical and substantive development of this regime at the international level as well as challenges currently facing the international community.

1. **B. Kwiatkowska’s** article, *Marine Pollution from Land-Based Sources: Current Problems and Prospects*, pre-dates any global agreements on land-based sources. As such it is not surprising that her article focuses on regional cooperation. Besides discussing the level of cooperation found at regional level, Kwiatkowska discusses: nuances in the definition of land-based pollution adopted by different regional treaties; environmental techniques, e.g. substance-listing procedures; as well as other programmes and measures adopted to combat this type of pollution. The author specifically discusses certain duties in relation to pollution prevention such as the then emerging duties to provide prior information, to consult and to conduct Environmental Impact Assessments

relating to potentially polluting projects. Kwaitkowska draws out the debates regarding the content of these duties as they were in 1984. The piece may therefore be of interest to those interested in the history of the development of these concepts. Kwaitkowska also discusses State responsibility and liability as a result of damage from pollution. Somewhat unusually, for an article on land-based marine pollution, she also discusses pollution from international watercourses, a theme which is not returned to until **Vinogradov**'s article on the Black Sea Region.

2. **A. E. Boyle**'s article, *Land-based Sources of Marine Pollution: Current legal regime*, was written after the adoption in 1985 of the *Montreal Guidelines for the Protection of the Marine Environment Against Pollution From Land-Based Sources*. Despite this his focus is on more traditional sources of law. The article starts by outlining the rules of customary international law and general principles of international law that relate to land-based pollution, e.g. the no-harm principle and the precautionary principle. He then discusses ambiguities and weaknesses in article 207 of *UNCLOS*. One of the weaknesses is that the article fails to address the reluctance of States to deal with this pollution because of a fear of losing comparative advantage and economic competitiveness if they do. Boyle goes on to discuss regional cooperation and agreements dealing with land-based pollution and highlights different degrees of cooperation between States as well as pointing out obstacles for reaching an effective regime for combatting land-based pollution. Such obstacles includes, *inter alia*, a lack of common emission and quality standards in the region, insufficient political will, and social and economic costs.
  
3. **A. Nollkaemper**'s article, *Law of the Sea: Marine Pollution from Land-based sources: Towards a global approach*, argues that regional cooperation to tackle marine pollution from land-based sources and activities can only be accomplished if it is backed up by strong and sufficient global cooperation and strategy. He takes examples from the Mediterranean, Wider Caribbean, and South-Pacific regions and argues that they all face the same problems: tackling this source of marine pollution is not economically feasible for them and implementation is inadequate. In this article he argues that *Agenda 21 of the 1992 United Nations Conference on Human Development* (Rio Conference) provides a global strategy in dealing with land-based pollution. The possible content of the strategy includes (i) the improvement of the normative structure - *UNCLOS*, recommended practices and standards adopted by UNEP, and the need to further develop links with international watercourses regimes; and (ii) enhanced funding and technological transfer. The article also points to the way in which the new global strategy should be developed by the international community.

4. **A.L. Dahl's** article, *Land-based Pollution and Integrated Coastal Management*, is focused on the difference that adoption of integrated coastal area management can make to tackling land-based pollution. The article briefly outlines efforts of States prior to the *1992 United Nations Conference on Human Development*. It also discusses a number of other issues. These include, the fact that the persistent nature of land-based pollution combined with recognition of the fact that it is a major contributor to problems in the marine environment led to recognition of this source of pollution as a problem to be tackled by the international community during the conference; the disagreement during the conference as to whether global or regional approaches should be given priority in tackling land-based pollution; and the reluctance of States to commit to obligations that will interfere with their sovereignty or economic competitiveness. Then, it specifically discusses one key technique set out in *Agenda 21* that States should adopt in order to prevent pollution from land-based sources: integrated coastal area management. The argument that is presented is that only an integrated approach to manage coastal activities and entire coastal area can resolve the ongoing problem.
  
5. The article by **C. Williams** and **B. Bavis**, *Land-based activities: what remains to be done*, is one of the few articles focusing on the very important soft law addressing marine pollution from land-based activities. The main discussion focuses on how the *Global Programme of Action* (GPA) responds to criticisms of and the failure to implement the *Montreal Guidelines for the Protection of the Marine Environment Against Pollution from Land-based Sources* (Montreal Guidelines). It lists, *inter alia*, five main problems of the *Montreal Guidelines*: financial problems (lack of contributions from member States); the lack of strong institutional arrangements; the lack of capacity building mechanisms; scope of the problem – how to address and give guidance to States where the land-based pollution problem is complex and where there are close ties with other regimes such as watercourses; and vagueness of commitments. It then discusses how the GPA responds to these problems and also how relevant international actors (such as intergovernmental and/or non-governmental organisations) support the implementation of the GPA. It also notes the obstacles and challenges that faced the implementation of the GPA as of 1995. As such the article provides very useful background on the introduction of the GPA.
  
6. The chapter by **T.A. Mensah**, *The International Legal Regime for the Protection and Preservation of the Marine Environment from Land-based Sources of Pollution*, starts with a historical review of how international law has been developed to cover land-based pollution. It then discusses the attempts of the international community to adopt a global agreement to deal with land-based pollution through the discussions initiated by the United Nations Environmental Programme, for example, the adoption of the *Montreal Guidelines for the Protection of the Marine Environment against Pollution from Land-based Sources* by the UNEP Governing Council (Decision 13/18 (II) of 24 May 1985). It also illustrates cooperation at the international level after the *1992 United Nations*

*Conference on Human Development*, e.g. how land-based pollution is dealt with in *Agenda 21* and the adoption of the *Global Programme of Action* in 1995. The highlight of the chapter is the discussion on the characteristics and features of the global regime and how regional regimes should be developed to supplement the former. The chapter also briefly discusses the potential use of a civil liability regime, as enshrined in Article 235 of *UNCLOS*, in which other environmental principles such as the polluter-pay principle can be incorporated to tackle land-based pollution.

7. **D. Hassan**, in his book titled *Protecting the Marine Environment from Land-based Sources of Pollution: Toward Effective International Cooperation*, provides a comprehensive monograph dealing specifically with pollution from land-based sources. The book starts by discussing the sources and effects of land-based pollution. Where previous writers on this issue generally highlight and give an overview of the sources of pollution, in this book, Hassan provides an in depth discussion of the origin of land-based pollution. He also identifies certain harmful substances which are found in marine pollution from land-based sources. Then, Hassan further discusses problems and challenges in regulating land-based pollution. International principles, global and regional legal frameworks for land-based pollution are addressed in this monograph with a specific case study of the Bay of Bengal region. He is finally of the view that the establishment of a global regime for the protection of the marine environment from land-based sources and activities is needed for the better protection of the marine environment.
8. If one looks for the state of the art in relation to land-based pollution, the report by **S. Vinogradov** and **E.A. Kirk** titled '*UNEP Implementation of the GPA at Regional Level: The role of regional sea conventions and their protocols*' will arguably be the answer. The report reviews implementation of the *Global Programme of Action* through regional sea programmes. It compares and contrast different degrees of cooperation, key features, and environmental techniques adopted by different regional sea programmes. It draws out the relative use of treaties and soft law instruments. The report reflects the state of the art in 2006 on how States address and tackle marine pollution from land-based pollution and activities.
9. **D. VanderZwaag** and **A. Powers**, '*The Protection of the Marine Environment from Land-based Pollution and Activities: Gauging the tides of global and regional governance*', also provides a good state of the art discussion in relation to land-based pollution. The focus of this article is global and regional efforts to address land-based pollution and activities. It discusses global cooperation through the adoption of the *Global Programme of Action* (GPA). It then proceeds to discuss the effectiveness of the implementation of the GPA and the obstacles to its implementation. The article also reviews and assesses the progress of the implementation of the GPA that has been reflected in the Intergovernmental Review Meeting on the Implementation of the GPA. For example, the Review Meeting itself is used as a platform for facilitating the

assessment of implementation. In the second Intergovernmental Review Meeting on the Implementation of the GPA, it was suggested that there has been good progress on implementation of measures to address certain sources such as POPs, radioactive substances and hydrocarbons. By contrast the situation with regard to some other sources of pollution shows signs of deterioration: *inter alia*, sewage, nutrients, and marine litter. These latter were highlighted as priorities for future action. **VanderZwaag** and **Powers** identify the remaining challenges that need to be tackled under the GPA. These include, *inter alia*, limited national participation and implementation, limited national reporting, limited coverage of pollutant source categories, limited funds, lack of legally binding cooperation, and challenges in international environmental governance. The article also deals with the relationships between regional sea programmes and the way in which they implement the GPA at the regional level as well as challenges at the regional level.

10. In '*Noncompliance and the Development of Regimes Addressing Marine Pollution from Land-Based Activities*' E.A. Kirk argues that the strength of Land-based pollution regimes is reinforced, in part, by the manner in which they respond to non-compliance. She does so by taking the requirements under the GPA as a framework for her analysis. She describes non-compliance as part of an iterative process of developing knowledge, understanding, capacity, and standards to prevent, reduce, and control land-based pollution. Three case studies are assessed: the Baltic Sea Regional Programme, the Global Programme of Action Coalition for the Gulf of Maine, and the Canadian National Programme of Action. In so doing, the article addresses and defines the meaning of compliance and the character of non-compliance. It then further points to the causes of non-compliance such as the lack of clarity inherent in the action-oriented obligations associated with the regulation of land-based pollution, lack of understanding of the nature and character of the problems of controlling this source, and threats or impacts to the marine environment. The article also points to the causes of a lack of legitimacy in the GPA before discussing how non-compliance can be embraced and help develop the land-based pollution regime.