Record Nr. UNINA9910786763303321 **Titolo** Responding to oil spills in the U.S. Arctic Marine environment // National Research Council Pubbl/distr/stampa Washington, District of Columbia:,: The National Academies Press,, 2014 ©2014 **ISBN** 0-309-29889-X 0-309-29887-3 Descrizione fisica 1 online resource (211 p.) 363.7382 Disciplina Soggetti Oil spills - United States Oil spills - United States - Prevention Oil spills - Research - Alaska Arctic Regions Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. ""Front Matter""; ""Preface""; ""Acknowledgments""; ""Contents""; Nota di contenuto ""Scenarios, Boxes, Figures, and Tables"", ""Summary""; ""1 Introduction""; ""2 Environmental Conditions and Natural Resources in the U.S. Arctic": ""3 Arctic Oil Spill Response Research": ""4 Operations, Logistics, and Coordination in an Arctic Oil Spill""; ""5 Strategies for Response and Mitigation""; ""References""; ""Appendix A: Committee and Staff Biographies""; ""Appendix B: National Research Council Board Rosters""; ""Appendix C: Acronyms Used in the Report"" Sommario/riassunto "U.S. Arctic waters north of the Bering Strait and west of the Canadian border encompass a vast area that is usually ice covered for much of the year, but is increasingly experiencing longer periods and larger areas of open water due to climate change. Sparsely inhabited with a wide variety of ecosystems found nowhere else, this region is vulnerable to damage from human activities. As oil and gas, shipping, and tourism activities increase, the possibilities of an oil spill also increase. How can we best prepare to respond to such an event in this

challenging environment? Responding to Oil Spills in the U.S. Arctic

Marine Environment reviews the current state of the science regarding oil spill response and environmental assessment in the Arctic region north of the Bering Strait, with emphasis on the potential impacts in U. S. waters. This report describes the unique ecosystems and environment of the Arctic and makes recommendations to provide an effective response effort in these challenging conditions. According to Responding to Oil Spills in the U.S. Arctic Marine Environment, a full range of proven oil spill response technologies is needed in order to minimize the impacts on people and sensitive ecosystems. This report identifies key oil spill research priorities, critical data and monitoring needs, mitigation strategies, and important operational and logistical issues. The Arctic acts as an integrating, regulating, and mediating component of the physical, atmospheric and cryospheric systems that govern life on Earth. Not only does the Arctic serve as regulator of many of the Earth's large-scale systems and processes, but it is also an area where choices made have substantial impact on life and choices everywhere on planet Earth. This report's recommendations will assist environmentalists, industry, state and local policymakers, and anyone interested in the future of this special region to preserve and protect it from damaging oil spills."--Publisher's description.