### **UNECE**

# Safety Guidelines and Good Industry Practices For Oil Terminals





# SAFETY GUIDELINES AND GOOD INDUSTRY PRACTICES FOR OIL TERMINALS



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Secretariat to the United Nations Economic Commission for Europe Convention on the Transboundary Effects of Industrial Accidents

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## **FOREWORD**

Oil terminals store large amounts of hazardous substances and so can pose a serious threat to people and the environment, especially in the case of improper design, construction, management, operation or maintenance. An accident at an oil terminal may result in uncontrolled spills, fires and explosions, potentially leading to the loss of human life or to a major environmental catastrophe. The devastating effects on humans and the environment of such incidents, as well as their far-reaching and severe consequences, have been demonstrated by several major accidents in the United Nations Economic Commission for Europe (ECE) region in the past years.

Since the early 1990s ECE has committed itself to the prevention of, preparedness for and response to industrial accidents, especially those with transboundary effects. The 1992 ECE Convention on the Transboundary Effects of Industrial Accidents (Industrial Accidents Convention) helps to protect people and the environment by preventing such accidents, as far as possible, by reducing their frequency and severity and by mitigating their effects.

The effective and safe storage and distribution of oil products present technical and environmental challenges, while remaining essential for economic activity. As each facility is unique, a tailor-made and comprehensive approach is needed to ensure that oil terminals are operated in a safe, environmentally sound and economic manner. This should also be seen in the light of climate change, which may increase the probability of industrial accidents caused by natural disasters. Flooding can pose a major risk to oil terminals, in particular those located in the flood plains of major international rivers.

In response to the need to improve the safety of oil terminals, ECE member countries decided to develop safety guidelines and good practices for oil terminals within the framework of the project on hazard and crisis management in the Danube Delta, under the auspices of the Convention's Assistance Programme. The safety guidelines were developed by an international expert group and have been subject to consultations with international organizations, ECE member countries, operators of oil terminal facilities, financing institutions and non–governmental organizations. The Conference of the Parties to the Industrial Accidents Convention recommended the use of these guidelines by the ECE member countries during its last meeting in Geneva in December 2014.

I hope that these guidelines will be useful in supporting policymakers, oil terminal operators and the public in enhancing awareness and the implementation of good practices, procedures, safety standards and approaches to technical and organizational safety throughout the life cycle of oil terminals.

I look forward to the successful implementation of the guidelines across the ECE region, in particular by the Parties to the Industrial Accidents Convention and other countries in the region, so as to limit the number of incidents at oil terminals and the severity of the possible consequences for human health and the environment.

#### Christian Friis Bach

**Executive Secretary** 

United Nations Economic Commission for Europe

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