Regulating Air Pollution to Improve Water Quality: An Overview of IMO's Emission Control Area Program

William B. Jones and Lou Corio

Zephyr Environmental Corporation, Columbia, MD, USA

Air emissions from marine vessels are significant contributors to pollution in many coastal regions around the world. Marine vessel exhaust emissions are potentially hazardous to human health and the environment, and can lead to nutrient overload in aquatic ecosystems. These emissions are especially problematic in ports and enclosed waterways, where marine vessels as well as associated onshore equipment operate nearly continuously in close proximity to each other.

One of the biggest challenges facing policymakers responsible for regulating air pollution from large marine vessels is balancing valuable maritime shipping interests with environmental concerns. Achieving consistent regulation of shipping is difficult because of the global movement of people and goods through many sovereign jurisdictions. One of the ways through which the International Maritime Organization (IMO) addresses this challenge is to provide for the establishment of Emission Control Areas (ECAs) which reduce air emissions from marine vessels.

This paper will present an overview of the IMO's ECA program. The history of this program will be given, from the first ECAs more than ten years ago to the recently-approved United States/Canada ECA. In addition, the specific demonstrations required to obtain an ECA designation from the IMO will be outlined. Ultimately this paper will illustrate how a coastal sea region can improve the health of its marine environment by obtaining an ECA designation from the IMO.

Contact Information: William B. Jones, Senior Project Manager, Zephyr Environmental Corporation, 10420 Little Patuxent Parkway, Suite 320, Columbia, Maryland, 21044, USA; Phone: 410-312-7910, Fax: 410-312-7901, Email: bjones@zephyrenv.com