Impact of ship exhaust gases emission on human health

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The protection of the environment in maritime industry has always been of major concern. Nowadays emission sources from ships are a threat not only to the environment but also to human health, especially in ports and coastal areas. Diesel engine exhaust contains several pollutants that are harmful such as: nitrogen oxides, carbon dioxide, sulphur oxides and particulate matter. Exposure to diesel exhaust may have the consequences of premature lung cancer and cardiovascular diseases. It may also cause coughs, headaches, nausea and an increase in the frequency of asthma attacks. The microscopic particles from exhausts can easily penetrate deep into our lungs as we breathe and inhale. An estimate of emission gases from international marine traffic for the port of Zadar was calculated for this paper. The focus of research was on the particulate matter (PM) emission in the passenger port and cargo port of Zadar. This research includes the overall marine traffic from passenger and cargo terminals over one year. Furthermore, some recommendations for reducing emissions in ports are emphasized and explained.

Key words: exhaust gases, ship emission, human health, particulate matter