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**Title:** *Studies of the state of the environment in the area of Svalbard archipelago - the source of the information about changes on a global scale*

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The Svalbard archipelago differs from other polar regions due to its specific environmental conditions and geographic location which make the area a reservoir of pollution. This paper collates and discusses the information from the literature about: pollutants present in various components of the ecosystem, the number and kind of research centers conducting analytical studies, and remediation programs and projects realized in the area of the Svalbard archipelago. Monitoring the state of the environment of the Arctic region is extremely important because of the unique opportunity of observing the direct influence of pollutants on processes in the studied area. Active participation of many states in research, international actions aimed at protecting the polar region, and highlighting the scale of the problem have helped decrease the concentration of some toxic compounds in the Arctic environment. The data obtained in that way do not only constitute a source of information about the changes in the polar environment but also enable an evaluation of the influence of particular pollutants on the global ecosystem.

The activity of many countries in the research and international actions on behalf of the protection of polar areas, as well as highlighting the range of the problem, have contributed to a decrease in the concentration of some toxic chemicals (e.g.: PCBs, DDTs) in the Arctic environment. However, the regulations concerning the use of toxic substances in that area are still insufficient. The concentration of many specific contaminants (from the groups: PBDEs, PFOAs, PFOSs) has not been evaluated yet. It is therefore necessary to conduct detailed studies concerning:

- the determination of the sources of emissions;
- the ways of transportation of pollutants in the environment;
- the ability of the pollutants to accumulate in various elements of an ecosystem.