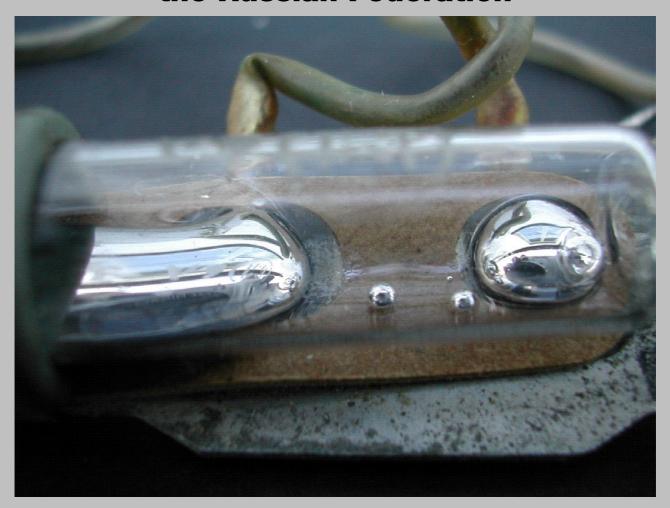


# Assessment of Mercury Releases from the Russian Federation



**Reduction of Atmospheric Mercury Releases from Arctic States** 

Russian Federal Service for Environmental, Technological and
Atomic Supervision
Danish Environmental Protection Agency

COWI

## Arctic Council Action Plan to Eliminate Pollution of the Arctic (ACAP) Reduction of Atmospheric Mercury Releases from Arctic States

# Assessment of Mercury Releases from the Russian Federation

**Prepared for the Arctic Council by:** 

Russian Federal Service for Environmental, Technological and Atomic Supervision

Danish Environmental Protection Agency

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#### **Preface**

The results of the Arctic Monitoring and Assessment Programme summarising decades of environmental research in the Arctic region stressed the fact that humans and the environment in the Arctic region currently experience alarming exposures to mercury, among a number of other toxic pollutants.

Within the framework of the Arctic Council, the eight Arctic Countries agreed on taking actions to contribute to the reduction of exposures to a number of priority pollutants, including mercury, in the Arctic region. The Arctic Council issued an action plan including 6 projects on priority pollutants. Denmark is the co-ordinator for the project on mercury.

The overall objective of the project is to contribute to a reduction of mercury releases from the Arctic countries; partly by contributing to the development of a common regional framework for an action plan or strategy for the reduction of mercury emissions, and partly by evaluating and selecting one or a few specific point sources for implementation of release reduction measures. In addition, the results of the project may be used to improve the inputs for modelling of long-range transport of mercury. A part of the project is accordingly to prepare a comprehensive list of major point sources of mercury emission to the atmosphere.

The present assessment of the releases of mercury from the Russian Federation has been prepared as part of the Arctic mercury project as a background document for the Russian reporting to a common regional mercury assessment. The regional assessment summarises information on mercury release from all eight countries in the region.

This study has been undertaken by a group of Russian Experts coordinated by COWI in cooperation with the Ministry of Natural Resources of the Russian Federation (until April 2004) and the Russian Federal Service for Environmental, Technological and Atomic Supervision (after April 2004). In the assessment official environmental data are combined with expert estimates to form a comprehensive view of the circulation of mercury through the Russian technosphere as well as releases of mercury from the territory of the Russian Federation. All estimates are the sole responsibility of the editors and authors and may be subject to change as more exact information is obtained.

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### Symbols, Units and Acronyms

ACAP Arctic Council Action Plan to Eliminate Pollution of the Arctic

AMAP Arctic Monitoring and Assessment Programme

ESP Electrostatic precipitator

GOST State standards

Hg Chemical symbol for mercury

INTAS International Association for the Promotion of Co-operation with Scientists

from the New Independent States of the Former Soviet Union

JSC Joint Stock Company

MAC Maximum allowed concentration

MAD Maximum allowed dose
MCW Mercury containing waste
MSW Municipal solid waste

OSPAR The Convention for the Protection of the Marine Environment of the North-

East Atlantic

PVC Poly vinyl chloride

RAS Russian Academy of Sciences

RF Russian Federation

USSR Union of Soviet Socialist Republics

VCM Vinyl chloride monomer

WWS Waste water sludge

Units

 $\mu g$  10<sup>-6</sup> g

ppm parts per million

Punctuation In accordance with English punctuation, dot (.) is used as decimal symbol and

comma (,) as digit grouping symbol

t 1000 kg = metric tons

Tonne(s) 1000 kg = metric tons = t

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