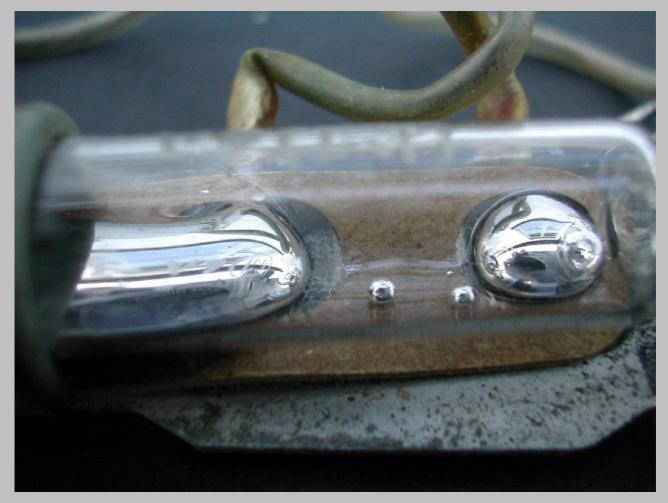


Assessment of Mercury Releases from the Russian Federation



Reduction of Atmospheric Mercury Releases from Arctic States

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

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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

μg	10 ⁻⁶ 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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