OSCE Organization for Security and Co-operation in Europe Office in Yerevan

zero Hg mercury working group

AWHHE

WHERE ARE THE MERCURY RELEASES/EMISSIONS IN ARMENIA?

During summer 2012, the Armenian Women for Health and Healthy Environment (AWHHE) conducted air tests at 9 sites across Yerevan and the regions of Kotayk and Gegharkunik to gather and analyze information on potential mercury exposure. The air testing in Armenia was supported by the European Environmental Bureau/Zero Mercury Working Group as part of its worldwide effort to raise awareness about the need for a strong, legally binding global instrument on mercury. Now that the Mercury Treaty is adopted, experiences from this project should be considered, for a quick country ratification and eventual implementation of the treaty measures.

Mercury vapor concentration in ambient air and in the air of residential quarters was measured with the use of a portable mercury monitoring instrument – Lumex.

The measurement results showed that some tests exceeded the threshold of 300 ng/m^3, which the Ministry of Health considers safe.

MERCURY AIR POLLUTION
RESIDENTIAL BUILDINGS AREA AND BASEMENT FLOORS, YEREVAN
A Case Study

Given the fact that residents sometimes keep things that have come out of the use in the basements before disposal, AWHHE measured mercury air pollution in one of the residential areas of Yerevan, at 3 Alikhanyan Street.

Background mercury pollution near the building varied within 0-2 ng/m^3 level. On the top of the staircases to the basements mercury air pollution was 2 ng/m^3, down the stairs the mercury level increased to 6 ng/ m^3 reaching the maximum level of 150ng/m^3 at the cellar doors.

At opening the cellar door, the measurement reached 240ng/m^3. Inside the cellar, the level increased reaching 1470ng/m^3 at the shelves where fluorescent lamps had been kept for a number of years. The residents were surprised to find out that the fluorescent lamps were the source of air pollution. Although the level of mercury in the 2nd floor apartments was low (2-3 ng/m^3), presumably due to good isolation, the polluted air could easily enter the apartment through the open door or windows while "airing" the rooms.

Mercury is toxic in all its forms, as a potent neurotoxin it is particularly dangerous for pregnant women and children.

Once released into the environment, mercury becomes part of bio-geochemical cycle contaminating soil, air, groundwater and surface water where is accumulates and moves up the food chain.

Toxic mercury is especially dangerous to the health of young women, children and developing fetuses.

Even in low doses, mercury may affect a child's development, delaying walking and talking, shortening attention span and causing learning disabilities. Breathing the polluted air is among the most common ways for exposure to this toxic chemical.

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