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UNEP GLOBAL MERCURY PARTNERSHIP

Mercury releases from the cement industry Area*

Partnership Area Lead:
Claude Lorea, Global Cement and Concrete Association (GCCA)

ISSUE

The production of cement accounts for about 11% of the global anthropogenic mercury emissions estimated at approximately 2220 tonnes per year[1].

Mercury is present in the raw materials (e.g., limestone) and/or in the fuel (e.g. coal) used in the cement manufacturing process. The major pathway for mercury releases from the cement industry is via emissions to the atmosphere.

The expected acceleration of construction activities in emerging markets and the related increase in local cement supplies will contribute to the global mercury emissions.

[1] United Nations Environment Programme 2019. Global Mercury Assessment 2018.

OBJECTIVE

The objective of the Partnership Area is to minimize mercury releases to the environment from cement manufacture. The Partnership Area aims to supplement existing programmes in key, strategically selected ways to ensure that reductions are globally significant.

STRATEGY

The Partnership Area aims to support its objective principally by:

- Establishing sectoral mercury inventories and baseline scenarios for the industry;
- Encouraging the use of most appropriate techniques to reduce or minimize mercury releases into the environment; and
- Increasing the awareness of the cement industry to mercury as a pollutant through increased outreach efforts.

The Partnership Area also seeks to update mercury inventory information by providing guidance on methods for cement plants to assess their emissions more accurately.

CONTRIBUTION TO THE IMPLEMENTATION OF THE MINAMATA CONVENTION

Members of the Partnership Area contributed to the development of the Guidance on best available techniques and best environmental practices in relation to emissions of mercury from cement clinker production facilities, which was adopted by the Conference of the Parties to the Minamata Convention at its first meeting to support Parties in the implementation of their obligations under the Convention.

Members of the Partnership Area also developed an information document meant to serve as a "how to" guide to assist cement plant operators in the implementation of mercury emission assessment and reduction strategies[2].

[2] web.unep.org/globalmercurypartnership/guidance-document-bat-bep-mercury-cement-industry.

* web.unep.org/globalmercurypartnership/our-work/mercury-releases-cement-industry

FUTURE PLANNED ACTIVITIES

The Partnership Area intends to support the development of database for emissions inventory. Because of the wide variation in mercury emissions worldwide, this work would:

- Help disseminate information on monitoring techniques;
- Support evaluation of emissions and the effectiveness of emission reduction approaches;
- Establish an accurate plant information database; and
- Encourage inclusion of cement manufacturing in country mercury inventories.

The Partnership Area also intends to develop outreach materials and collaborate with complementary programmes to disseminate information about mercury emissions by the sector. Information will be shared to promote understanding of techniques for mercury management and control.

Other aspects would be the support of the development of Partnership Area-related policies and regulatory frameworks and the facilitation of exchange of knowledge on new and emerging technologies.

COLLABORATION WITH OTHER PARTNERSHIP AREAS AND RELEVANT STAKEHOLDERS

The Partnership Area will explore opportunities for collaboration with other relevant stakeholders and Partnership Areas.

The activities of the World Business Council for Sustainable Development (WBCSD) Cement Sustainability Initiative (CSI), previous lead of the Partnership Area, ceased to exist in 2018 and were integrated into the recently established Global Cement and Concrete Association (GCCA)[3] which has taken the lead of the Partnership Area.

[3] gccassociation.org.

RELEVANT PROVISIONS OF THE MINAMATA CONVENTION ON MERCURY:

Article 8 (Emissions) concerns controlling and, where feasible, reducing emissions of mercury and mercury compounds to the atmosphere from point sources, amongst which cement clinker production facilities, listed in the corresponding **Annex D**.

For new sources, Parties shall require the use of best available techniques and best environmental practices (BAT/BEP) to control and, where feasible, reduce emissions, as soon as practicable but no later than five years after the date of entry into force of the Convention for them.

For existing sources, Parties shall implement, as soon as practicable but no more than ten years after the date of entry into force of the Convention for them, either a quantified goal, emission limit values, BAT/BEP, a multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions, and/or alternative measures to reduce emissions.

Amongst others, Article 8 also requires Parties to establish and maintain an inventory of emissions from relevant sources.

Read more about the UNEP Global Mercury Partnership and how to become a Partner:
web.unep.org/globalmercurypartnership
Contact the Partnership Area lead: claude.lorea@gccassociation.org

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