Comments on “Draft guidance on cement clinker production facilities” from Japan Cement Association

Firstly, we, Japan Cement Association [JCA], would like to appreciate your work to develop “the draft guidance on cement clinker production facilities” since useful and practical technologies which would reduce mercury emissions from cement plants are comprehensively described in this draft. However, we think the following descriptions would be inappropriate in chapter “5 Best available techniques and best environmental practices”, and therefore, should be completely deleted.

Quote

Paragraph 2 and 3 in “5 Best available techniques and best environmental practices”

“*The performance level associated with best available techniques and best environmental practices in new and existing installations for control of mercury emission to air is below 0.03mg Hg/Nm^3 as a daily average, or average over the sampling period, at reference conditions 273K, 101,3kPa, 10percent oxygen and dry gas.*

Reported mercury emissions shows that the majority of cement plants worldwide have mercury emissions below 0.03 mg/Nm3. In the report Mercury in the Cement Industry (Renzoni et al., 2010) it was found that many values are under 0.001mg mercury/Nm3 (under the detection limit) and very few values are higher than 0.05mg mercury/Nm^3.”

Unquote

Reasons are as follows;

A limited actual example on relations between achieved reduction rates and emission concentrations is described only in Chapter 3.2.2 “Dust shuttling with sorbent injection” in the draft.

And furthermore, we have to keep in mind and consider various local, geological mercury conditions of raw materials and fuels as well as regional feasibility of treatment/disposal of captured mercury.

So, we do not think that the 0.03 mg/Nm3 emissions level would be justified as an achievable level for all the cement plants in the world.

Furthermore, the report of Mercury in the Cement Industry (Renzoni et al., 2010) does not describe any performance level associated with BAT/BEP but just an objective emission report based on global survey from cement plants at that time.

When reviewing other draft documents of BAT/BEP guidance, “performance level” including emission concentration describes as follow;,

- ✓ Coal-fired Power plants and Coal-fired Industrial Boilers ---> There is no description about the performance level.

- ✓ Non-ferrous metal smelting sub-group (Copper, Gold, Lead and Zinc) ---> Although the efficiency of each equipment is shown in this draft as well as cement, the performance level is not discussed in the draft.
- ✓ Waste incineration facilities ---> Although there is only one report regarding to emission level, the performance level is not discussed in the draft.

To conclude, we certainly believe that BAT/BEP described in this draft can obviously reduce mercury emission from cement plant but an introduction of the BAT/BEP never guarantees emission level less than 0.03 mg Hg/Nm3. Therefore, JCA would definitely like to propose complete deletions of the above paragraphs.