

Review of: "Regulatory Compliance of PCDD/F Emissions by a Municipal Solid Waste Incinerator: A Case Study in Sant Adrià de Besòs, Catalonia, Spain"

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Potential competing interests: No potential competing interests to declare.

The paper presents a case study on the environmental assessment of a municipal solid waste incinerator (MSWI) in Catalonia with respect to its PCDD/F emissions. It provides a historical background on PCDD/F monitoring studies (emissions and environmental levels) conducted both in the MSWI stack and in the vicinity of the MSWI.

I think it may be developed with some corrections and additional assessments to make the readers' understanding deeper.

- 1- It would be better to reorganize Figure 1 by giving the levels in pure number forms, not in scientific (X)E-05 form. More incinerator studies should be added to compare, maybe from other countries, not only Spanish MSWIs.
- 2- It was stated that there is a possibility of the presence of another PCDD/F source other than the MSWI, affecting the PCDD/F levels in the vicinity of the MSWI under consideration. Any assessment or guess for this or these sources would be good. A review of the congener distribution may give an idea.
- 3- It was stated that metals were also measured besides PCDD/Fs, but no assessment was given on the metal levels, pollution, or risk assessment related to heavy metals. In addition to the carcinogenic risk of PCDD/Fs, health risks (both carcinogenic or non-carcinogenic) related to heavy metals would be discussed briefly to give more detailed health risks of emissions.
- 4- It was stated that PCBs (dioxin-like and non-dioxin) were measured first in 2014. No information was given on the relative contribution of dl-PCBs to total dioxin-like toxicity. Such an assessment may give a more consistent evaluation of dioxin measurements before that date, as these chemicals were not included in the assessments.

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