

Rapid opinion 02-2020 of the Scientific Committee established at the Federal Agency for Safety of the Food Chain on the sampling and analysis plans of food and feed around a site of a scrap processing plant located in Courcelles

Background and Terms of reference

Following alarming analytical results of air and dust around a scrap processing plant in Courcelles, the Federal Agency for Food Chain Safety (FASFC) was contacted by the Walloon Air and Climate Agency (AwAC) to investigate a possible problem of contamination of the food chain. The Scientific Committee (SciCom) has been asked by the FASFC to give a rapid opinion on two urgent questions regarding the sampling and analysis plan:

- Is it necessary to perform other analyses than the ones carried out so far by the FASFC around the site of the scrap processing plant located in Courcelles?
- Is the sampling area (sampling within a 2 km radius around the scrap processing plant) appropriate for the situation in Courcelles?

Other questions have also been asked, but these will be dealt with later in a formal opinion.

Method

This opinion is based on expert opinion and on the analytical results from the AwAC and the FASFC.

Results

The SciCom made general remarks on the available analytical results of dust, food and feed.

In response to the first question, the SciCom considers that additional analyses of food and feed from operators are necessary over a period of ± 6 months (from the beginning of spring 2020 until harvest):

- Analysis of PCDD/Fs, DL-PCBs, NDL-PCBs and heavy metals (Cd, Pb, Ni, Zn and Hg) in leafy and root vegetables;
- Analysis of PBDEs, PCDD/Fs, DL-PCBs and NDL-PCBs in food of animal origin (milk and derived products, eggs, etc). As far as dairy products are concerned, it is difficult to detect a point contribution to the PCDD/Fs and PCBs load because only a few grasslands are really close to the scrap processing plant and therefore a dilution effect will occur in the tank milk of the farm. It is therefore proposed to target grasslands within the 2 km zone and also sample and analyze fresh grass in spring when growth resumes (just before the start of the grazing season) as grass is a good sensor for PCDD/Fs, DL-PCBs and NDL-PCBs contamination.

In response to the 2nd question SciCom is of the opinion that the choice of a 2 km radius around the scrap processing plant at Courcelles is relevant and appropriate to the plant situation. However, outside this area (for example, within a radius of 2 to 5 km around the plant) it is also appropriate to take and analyze samples, during the same period (from early spring 2020 to harvest), in order to obtain an indication of the "background" pollution of this geographical area (historical pollution and pollution caused by other human activities).

Conclusions

The SciCom has taken note of the dossier concerning the scrap processing plant located in Courcelles and has formulated general comments. With regard to the questions raised by the FASFC, the SciCom recommends to carry out additional analyses of samples taken primarily within a radius of 2 km around the plant and spread over a period of several months (from the beginning of spring 2020 until harvest).

Recommendations

The SciCom recommends to:

- record the exact GPS coordinates of the samples taken;
- carry out analyses of dioxins, furans, DL-PCBs and NDL-PCBs using mass spectrometry instead of bioassays;
- also take samples in an area with a radius between 2 km and 5 km around the plant in order to assess the background contamination and to provide the analysis results and compare them with samples taken within a 2 km radius of the plant;
- compare the analysis results with those available in the database of the FASFC (to compare with the generally observed situation in Belgium);
- perform analyses on PBDEs in animal feed (especially on fresh grass in early spring) although there are no limits available;
- sample and analyze drinking water of animals if it originates from a watercourse near the plant (PCDD/Fs, DL-PCBs, NDL-PCBs, PBDEs and heavy metals);
- apply a similar approach, but adapted to the geographical specificity of the sites, around all scrap processing plants in Belgium.

The full text is available on this website in dutch and in french.