The fate of calcium cyanamide in surface water was analysed based on the FOCUS surface water models by SCHER (SCHER 2016). The FOCUS models produce state of the art results for PECs (predicted environmental concentrations) of active compounds (pesticides, biocides, veterinary compounds). Especially, at higher assessment tiers these models are required for exposure calculations by EFSA (pesticides), ECHA (biocides) and EMA (veterinary substances).

However, SCHER (2016) assumed an instant formation of the metabolite cyanamide in soil. Because to this unrealistic worst case assumption the calculated maximum concentrations of these simulations in surface water were extremely high. In order to analyse the fate in soil of Calcium cyanamide under realistic conditions the degradation rate was analysed considering different soils, temperature and soil moisture.

It is the intention to improve the quality of the FOCUS simulations by using the results of this study for refined FOCUS SW simulations and to predict the fate of Calcium cyanamide and cyanamide in surface water under more realistic assumptions.