BLUEFUME™ REGISTRATION UPDATE & APPLICATION METHODOLOGY

Jarmila Málková, Adam Jonáš, Jiří Filous, Martin Beníšek, Adam Trocha* et. al.

Lučební závody Draslovka a.s. Kolín, Havlíčkova 605, 280 02 Kolín IV, Czech Republic

Fumigants with the active substance hydrogen cyanide have been known and used since the 19th century. They were used specifically for treatment of empty structures as mills or silos, eradication of rodents and bed bugs and treatment of dry products such as grain up until the middle of the 20th century.

Although products based on hydrogen cyanide had exceptionally good fumigant attributes – i.e. high efficacy and short exposure times - they were replaced during the second half of the 20th century by other products such as Methyl Bromide for many reasons, but mainly around safety and notoriety of the product.

After this transition to alternative fumigants, hydrogen cyanaide was merely used in Czech Republic and Germany for fumigation of empty structures, South Korea and New Zealand for treatment of bananas, France for treatment of aircraft, and commercial and navy ships in Singapore.

With the imminent phase out of Methyl Bromide, a resurgance in the interest to develop hydrogen cyanide into a modern day, safe alternative fumigant to Methyl Bromide meant that Draslovka initiated the daunting task of EU biocide registration of a product with active substance hydrogen cyanide, with the tradename BLUEFUME™.

Earlier this year, BLUEFUME™ received biocide registration as a fumigant in 12 countries of the EU as mutual recognition. Based on this success, Draslovka has also started the registration process of BLUEFUME™ in other countries such as Australia, New Zealand, Malaysia, and South Africa.

Given the undue but turmultuous history of hydrogen cyanide, in support of the registration process worldwide, Draslovka developed new safe application methods of BLUEFUME™. These methods are based on application from gas cylinders placed outside of the treated volume using reticulation system

Draslovka was inspired by the application method of hydrogen cyanide developed and used in USA in the first half of the 20th century for fumigation of Mills – subsequently the whole application method was modernised, improved and tested between 2015-2017 and has been accepted by the EU authorities as a safe and effective method of application. The new application method includes an innovative system for monitoring concentration during the whole treatment period, new safety features, safe and modern filling method and also improved transportation methodology.

Draslovka has also expanded usage of BLUEFUME^{TM} to poultry farms, historical buildings, and churches - and in parallel is also working on plant protection usage as is treatment of garlic, papayas, pineapples, etc.

With this in mind, BLUEFUME^{TM} is one of the only biocides to have been successfully registered under the strict EU regulations, and will once again form an integral part of quarantine and biosecurity practices globally.