QPS TREATMENTS WITH METHYL BROMIDE WITH MINIMAL EMISSIONS: IS IT POSSIBLE?

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Introduction

In the early 1960s it was not unusual to fumigate a range of commodities with ethylene oxide under gas proof sheets – the technique that is still used today, some forty years later, with methyl bromide.

However, when the 'real' hazards associated with the use of ethylene oxide became better known, and understood, its use was restricted to vacuum chambers fiited with scrubbing systems – to minimise emissions of this poisonous and carcinogenic gas. Nowadays such equipment is required to meet a 99% efficiency requirement (USEPA 1997).

In 2000 the Australian Quarantine & Inspection Service (AQIS) announced that it proposed to implement an accreditation scheme that would restrict AQIS acceptance of treatment certificates to fumigators with a demonstrated competency to perform effective treatments. The reason for this requirement resulted from an investigation that revealed that a significant cause of quarantine breaches resulted from failed fumigation treatments, that required re-treatment on-shore in Australia (Downey et al. 2000, van S. Graver & Meadows).

In 2004 the process of competency based training used to train fumigators

Stability of formulation

"The *Eighteenth Meeting of the Parties* decided

> to approve, for the purposes of paragraph 5 of Article 1 of the Montreal Protocol, the destruction processes involving destruction of methyl bromide that is recaptured from dilute sources on to carbon either by incineration or reaction with aqueous thiosulphate solution, provided that: the Destruction and Recovery Efficiency of the process exceeds 95%

Acknowledgments

References

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