

19 November 2020

Bryan Stralow

By email: fyi-request-14095-58bb3726@requests.fyi.org.nz

Dear Mr Stralow

Official Information Act request: Airborne capabilities of methamphetamine, clandestine laboratories

On 8 November 2020, you sent a request for information under the Official Information Act 1982 to ESR as follows:

- "1) Please explain the following statement taken from the ESR website "It is thought that methamphetamine is released as an aerosol during the manufacturing process."
- 2) Please confirm whether ESR have undertaken any in-house testing in order to ascertain and verify the above statement"

Our response to your request:

- 1) This statement is evidenced from the high levels of methamphetamine detected at clandestine laboratories and is supported by the references relating to airborne/aerosolized methamphetamine produced through manufacture¹.
- 2) No, ESR staff have not carried out in-house testing to ascertain the form in which methamphetamine is deposited onto surfaces in the surrounding area of a methamphetamine manufacturing process or methamphetamine smoking process. ESR staff have carried out research relating to the level, nature and spread of methamphetamine contamination within an environment where methamphetamine manufacture and/or methamphetamine use (ie smoking) has been carried out. This has involved the collection and analysis of swabs taken from the surrounding areas to the aforementioned processes, however, it has not included airborne sampling or testing to determine the form in which the methamphetamine is carried.

¹ Martyny, J. W., Arbuckle, S. L., McCammon Jr, C. S., Esswein, E. J., Erb, N., & Van Dyke, M. (2007). Chemical concentrations and contamination associated with clandestine methamphetamine laboratories. *Journal of Chemical Health & Safety 14*(4), 40-52.

Raynor, P. C. & Carmody, T. (2006). Final Report: Meth Labs Sampling: Air and HVAC Systems. Minnesota Pollution Control Agency CFMS No. A-79651.

McKenzie, E. J., Miskelly, G. M., & Butler, P. (2013). Detection of methamphetamine in indoor air using dynamic solid phase microextraction: a supplementary method to surface wipe sampling. *Analytical Methods 5*, 5418-5424.

Nair, M., & Miskelly, G. M. (2019). Determination of airborne methamphetamine via capillary microextraction of volatiles (CMV) with on-sorbent derivatisation using o-pentafluorobenzyl chloroformate. *Forensic Chemistry*, 14.

Martyny, J. W., Arbuckle, S. L., McCammon Jr, C. S., Erb, N., & Van Dyke, M. (2008). Methamphetamine contamination on environmental surfaces caused by simulated smoking of methamphetamine. *Journal of Chemical Health & Safety, 15*(5), 25-31.



Your right to seek a review

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Thank you for your request.

Yours sincerely

John Bone

General Manager Forensic

ESR