

Brisbane, 8/12/2015

National Research Centre for  
Environmental Toxicology (Entox)

Director  
Professor Matti Lang

## Standing Committee on Foreign Affairs, Defence and Trade

**Submission:** Committee inquiry on contamination caused by firefighting foams at RAAF Williamtown and other sites.

Dear Sir/ Madam;

Based on the documents provided with the invitation it appears that a PFOS/PFOA contamination has occurred at the RAAF Williamtown Base as traces of PFOS/A have been found at the base as well as at its boundaries. Actions have subsequently been taken to measure possible contamination in water samples as well as distribution of the contaminants in the surroundings and analysis of some biological specimen. Several meetings have been arranged to follow the progress of the work.

The documents provided do not present much actual data from the measurements. It is also unclear, whether a comprehensive strategy exists regarding sample collection and analysis, which would serve as a basis for rational (environmental) health risk assessment, and help assessing the need for remediation.

A comprehensive sample collection strategy is necessary and should cover a wide enough geographical area in order to obtain a clear idea on the extent of contaminant distribution in the environment. Moreover, the samples should be collected logically in order to help assessing the distribution in water and soil as well as in biological specimen with special attention to possible enrichment in the food chain.

Based on the documents provided, it appears that my Institute is involved in a similar exercise at and around the RAAF Oakey airbase in Queensland. The work is currently conducted in collaboration with Queensland Health and will basically progress in three phases:

- 1) Develop and execute a plan to collect and analyze a comprehensive set of samples in order to get a clear idea of the levels and distribution of contamination (see above).
- 2) Conduct a health risk analysis based on the data from phase 1 and compare the data with the literature on the known health effects of PFOS/A.
- 3) Develop a remediation plan based on phase 1 and 2 should this appear justified.

Based on our experience and the analytical tools developed in our laboratory for PFOS/A analyses of environmental samples and biological specimen, it is possible my Institute could contribute to Williamtown Base contamination case and other similar cases in Australia, by helping to develop an overall research strategy and by providing with analytical tools both for chemical analysis as well as for health risk assessments.

Yours Sincerely

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