



# PFAS FACT SHEET TARRO INVESTIGATION PFAS Investigation and Management Activity Update

## **About the Investigation**

In September 2019, Fire and Rescue NSW (FRNSW) commenced a detailed environmental investigation into the nature and extent of per- and poly-fluoroalkyl substances (PFAS) at Our Lady of Lourdes (OLOL) Primary School, Tarro, as a result of the historical use of legacy firefighting foams for training.

The environmental investigation has been conducted following the process below:



The 3 stages of the investigation are complete. The reports have been provided to relevant NSW Government agencies and regulatory bodies and are available on the FRNSW website.

https://www.fire.nsw.gov.au/page.php?id=9322

## Human Health and Ecological Risk Assessment

The Detailed Site Investigation completed in December 2019 did not identify any elevated risk of exposure to PFAS to children, staff, and other people using OLOL Primary School from surface and near surface soils, surface water, tank water, produce, and groundwater in the Investigation Area.



Figure 1: Investigation Area.

FRNSW commenced a Human Health and Ecological Risk Assessment (HHERA) in March 2020 to understand offsite risks to human health and the environment, and to inform possible future uses at OLOL Primary School.

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The HHERA included the following:

- Additional sampling of soil, water and sediment.
- A survey of residents surrounding the Investigation Area to assess land and water use.
- A desktop ecological survey to evaluate key aquatic environments, in particular Tarro Reserve.
- Further evaluation of potential PFAS exposure to children and adults using the Investigation Area.
- Evaluation of potential PFAS exposure to children and adults that live on properties adjacent to the Investigation Area through direct contact with soils.
- Evaluation of potential PFAS exposure to children and adults using Tarro Reserve for recreational activities through direct contact with surface water.
- Assessment of ecological exposure within the Investigation Area, and Tarro Reserve.

How are PFAS exposure risks to people assessed? Food Standards Australia and New Zealand (FSANZ) have determined how much PFAS a person can be exposed to every day of their lifetime without long-term risk to their health. This is known as the Tolerable Daily Intake (TDI).

Risks to human health are assessed by calculating how much PFAS people are exposed to each day from different scenarios, based on the concentrations of PFAS detected in soil, water, or produce. This figure is then compared to the TDI to identify a specific risk rating.

- Where exposures are lower than the TDI, the level of exposure risk is considered to be "low and acceptable".
- Where exposures are higher than the TDI, the level of exposure risk is considered to be "elevated".

An exposure risk can only exist if there is a source of PFAS and a pathway that enables a person, plant or animal to interact with the PFAS.

The table below summarises the level of potential exposure risks identified in the HHERA.

Assessed Exposure Risks		
Low and		Adults and children that attend
Acceptable		OLOL Primary School, and who
Exposure Risk		may consume home grown
		produce grown on the site
		(assumed to consist of up to
		10% of their diet of fruits and
		vegetables)
		Adults and children that inhabit
		the properties adjacent to the
		Investigation Area, and who
		consume home grown produce
		(fruits and vegetables) from their
		gardens
		Adults and children that use
		Tarro Reserve for swimming and
		other recreational purposes
Potentially		Ecological receptors that may
Elevated		forage at the Investigation Area
Exposure Risk		and in surrounding areas,
		including within Tarro Reserve

The potential for elevated exposure risks does not necessarily indicate that there will be adverse effects, but instead that management of exposure and/or further assessment may be warranted.

### **Future uses**

Given the potential for PFAS uptake to occur into chicken eggs, it is recommended that chickens are not housed within the Investigation Area. If chickens are housed at OLOL Primary School in the future, it is recommended that soils in the proposed location be tested to confirm that consumption of chicken eggs would not increase the potential for PFAS exposures.

As a precautionary approach, it is recommended that wherever possible, vegetable gardens should be within raised garden beds. It is noted that this is consistent with the current approach to produce garden configurations at OLOL Primary School.

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### **Next Steps**

The finalisation of the HHERA marks the end of FRNSW's detailed environmental investigation into the nature and extent of PFAS at OLOL Primary School.

An ongoing monitoring program has been implemented to measure on-site and off-site surface water and groundwater concentrations over time. The purpose of the ongoing monitoring is to assess changes in PFAS concentrations over time. This information will be used to inform whether further management activities are required to manage potential off-site risk. Further information on management activities can be found in Factsheet 04 available on the FRNSW website.

An update, including the results of the ongoing monitoring program undertaken over the 2020 calendar year, is expected to be provided in Quarter 1 2021.

### **PFAS Further Information**

Further information about the FRNSW PFAS Investigation is available at <a href="https://www.fire.nsw.gov.au/pfas">www.fire.nsw.gov.au/pfas</a>

Information on the PFAS Investigation Program being undertaken by the NSW EPA is available at <a href="https://www.epa.nsw.gov.au/Mediainformation/pfasinvestigation.htm">www.epa.nsw.gov.au/Mediainformation/pfasinvestigation.htm</a>

Information on PFAS health effects and exposure pathways can be found on the Department of Health's website at

https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas.htm

## Contact the Project Team



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