NSW Health

Water fluoridation sampling, monitoring and reporting requirements

The NSW Health Water Unit and local Public Health Units support water utilities in meeting the requirements of the NSW Fluoridation Code of Practice. The table below outlines the monitoring, sampling, testing and reporting required by all utilities that supply fluoridated water. Some results are entered and stored in the NSW Drinking Water Database. The names of characteristics used in the Database are shown in italics.

Regular monitoring, sampling and testing – Forms 2, 3 and 4

ACTION	TESTING	REPORTING	RESULTS
Once daily record total volume of water treated in past day and quantity of fluoride chemical used.	Water utility calculates the average dose of fluoride over past day.	Water utility records results on **Form 2** (solution feed), **Form 3** (dry feed). Water utility keeps copies of forms.	Calculated final concentration (background fluoride + added fluoride) should be 1 mg/L, ± 5%.
Once daily sample of water entering the retic, downstream of fluoride dosing point, upstream of clear water tank or reservoir.	Water utility tests fluoride concentration.	Water utility records daily results (*Fluoride daily WU*) on **Form 4** for each month. Water utility enters results in NSW Drinking Water Database in first week of the next month.	Daily results should be as close as possible to 1 mg/L, and always between 0.9 mg/L and 1.5 mg/L.
Weekly samples from two sites in the reticulation. Sites should rotate.	Water utility tests fluoride concentration.	Water utility records weekly results (*Fluoride weekly WU*) on **Form 4** for each month. Water utility enters results in NSW Drinking Water Database in first week of the next month.	Weekly results should be as close as possible to 1.0 mg/L, and always between 0.9 mg/L and 1.5 mg/L.
Once monthly sample of water in the retic, taken in first week of each month. Sample will use either an allocated Chemistry label or Fluoride label.	Water Utility tests fluoride concentration and **records result on label**. Sample sent to FASS for analysis. FASS calculates Fluoride Ratio (Water Utility result ÷ by FASS result).	The Water utility result (*Fluoride WU result*), FASS result (*Fluoride*) and *Fluoride Ratio* are entered into the Drinking Water Database by FASS.	Monthly results should be as close as possible to 1.0 mg/L, and always between 0.9 mg/L and 1.5 mg/L. Fluoride Ratio should be as close as possible to 1.0, and always between 0.8 and 1.2.

***Note*: No fluoride monitoring and reporting is required from utilities if the dosing plant is offline.**

Exception reporting to NSW Health – Form 5

A water utility should complete and submit a Form 5 to NSW Health when:

- Any fluoride monitoring (calculated or tested) returns a result of greater than 1.5 mg/L
- Three consecutive daily monitoring results are less than 0.9 mg/L
- Fluoride dosing has been offline for over 24 hours
- Plant is out of operation for repairs or maintenance
- Plant has returned to normal operation after any of the above.