**About the Investigation**

The Department of Defence has completed a detailed environmental investigation into the nature and extent of per- and poly-fluoroalkyl substances (PFAS), resulting from historical use of firefighting foams at Army Aviation Centre Oakey (AACO).

The investigation found that PFAS concentrations are highest on-base, near source areas, with PFAS moving from Base to the surrounding area through groundwater and surface water.

**Monitoring Details**

In late 2018 and early 2019, Defence undertook seasonal sampling at selected locations within the Oakey Management Area, including on-base and off-base. The aim of this round of sampling was to collect information about the distribution of PFAS in groundwater after the dry season (April to October) and wet season (November to March).

**Findings**

Further details about the sampling results and key findings are provided in separate Groundwater and Surface Water Monitoring Reports available on the project website. Results from the most recent sampling round are shown on the map over the page.

Key findings included:

- Overall the monitoring results are consistent with previous sampling.
- PFAS concentrations in groundwater vary between seasons, which is consistent with the findings from the 2017 Environmental Site Assessment (ESA) and seasonal groundwater sampling results from April 2018.
- Surface water sampling results were consistent with results reported in the 2017 ESA and the seasonal sampling undertaken in April 2018. The highest PFAS concentrations in surface water were reported in Oakey Creek, downstream of where the drainage channels discharge into Oakey Creek. The concentrations decrease as you move further downstream along Oakey Creek from the Base.
- Results are consistent with the conceptual site model and risk profile presented in the 2017 ESA and Human Health Risk Assessment (HHRA) reports.
- There are no changes to the precautionary advice presented in the 2017 HHRA report for the Management Area.

**Future Monitoring**

Defence will continue to monitor PFAS contamination in groundwater and surface water over the coming years as part of the Ongoing Monitoring Plan.

Data collected will assist Defence to evaluate the progress of management activities. Visit the project website for further information (website address on next page).

<table>
<thead>
<tr>
<th>Round</th>
<th>Sample type</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>October – November 2018</td>
<td>On-base groundwater samples, from the AACO</td>
<td>32</td>
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<tr>
<td></td>
<td>Off-base groundwater samples, from selected monitoring wells and residential bores.</td>
<td>23</td>
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<tr>
<td>April – May 2019</td>
<td>On-base groundwater samples, from the AACO</td>
<td>34</td>
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<td></td>
<td>On-base groundwater samples, from monitoring wells at the Brymaroo satellite site</td>
<td>13</td>
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<tr>
<td></td>
<td>Off-base groundwater samples, from selected monitoring wells and residential bores.</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>On and off-base sediment and surface water samples from drainage channels</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>On and off-base sediment and surface water samples from creeks.</td>
<td>9</td>
</tr>
</tbody>
</table>
Explanation of Figure 1

Figure 1 shows the groundwater results of the most recent seasonal sampling round, in April – May 2019. It compares the groundwater results to the national Health Based Guidance Values.

Results shown in green indicate the sample was below the laboratory's limit of reporting (<LOR), meaning that PFAS could not be reliably detected by the laboratory.

Yellow results indicate PFAS was detected but the concentration is below the health based guidance value for drinking water.

Orange results exceed the guidance value for drinking water, but are below that for recreational water.

Maroon and purple results exceed the guidance values for drinking water and recreational water.