



Walka Water Works Contamination Summary

Contamination Assessment

In 2008, GHD were engaged by Maitland City Council to undertake a high level assessment of the Walka Water Works site. Chemical contamination of soil, sediments and water was reported to be below the acceptable health levels for chemical contaminants. Asbestos was found in the Pumphouse, Power Station, Sand Filter Beds and at other areas of the site and at this time any high risk items identified were actioned to ensure the site was suitable for use.

In 2021 GHD were again engaged by Maitland City Council to provide a detailed assessment of the contamination status of historic infrastructure locations at Walka Water Works as part of the Crown Reserves Improvement Fund (CRIF) funded Walka Condition Assessment Project. The objective of this reassessment was to identify any contamination issues that would prevent safe public use of the property and infrastructure.

The contamination assessment identified:

- Chemical contamination in soils, sediments and water was present, but is generally below human health levels and will not affect the suitability of the site for its current use as a recreational facility.
- Chemical contamination was investigated and identified the presence of 8 heavy metals; total recoverable hydrocarbons; benzene; toluene; ethylbenzenes; xylenes; naphthalene; polycyclic aromatic hydrocarbons; organochlorine pesticides and polychlorinated biphenyls.
- Concentrations of some heavy metals in groundwater and surface water sampled from the cooling water channel exceeded adopted freshwater trigger values for 95% species protection level and the Australian Drinking Water Guidelines (ADWG). Based on the sites current and intended future land use, the exceedances do not impact the sites suitability for recreational use.

- Asbestos containing material (ACM) present in construction materials within the Pumphouse building. These materials pose a low risk if maintained and managed accordingly. These materials are periodically reinspected, and their condition is recorded in the sites asbestos register.
- Asbestos contamination (ACM fragments) was present in the following areas:
 - On the floor of Sand Filter Bed 2.
 - On the driveway surface near the Caretaker's Residence
 - On the ground surface near the miniature railway station
 - On the ground surface near the old workers cottages site (remnant asbestos fencing).
- Significant asbestos contamination in soil is present in the following areas:
 - The level lawn area to the East of the Pump House (ACM Fragments, Friable Asbestos)
 - The site of the previous Power Station (ACM Fragments, Friable Asbestos)
 - The Southern perimeter of the children's playground area (ACM Fragments, Asbestos Fines, Friable Asbestos)
 - The embankment to the reservoir beach (ACM Fragments, Friable Asbestos)
 - The Northeast of the amenities building (ACM Fragments, Friable Asbestos).

The asbestos contamination at Walka Water Works has been identified as requiring significant remediation in the interests of public health. Generally, ACM Fragments present low risk to human health, whilst Asbestos Fines (AF) and Friable Asbestos (FA) present much higher risks to human health.

It was determined that there is a potential risk of inhalation of asbestos fibres from disturbance of asbestos contaminated soil or surface ACM for recreational users and maintenance workers. There is a lower risk of exposure and contact with asbestos building materials for maintenance workers if managed appropriately.

Therefore, on 9 February 2022, the Walka Water Works property was closed to public access pending further investigations and remediation plans, and an EPA accredited contaminated site auditor was engaged to review all documentation and works conducted to date, including reviewing previous works and previous remedial actions, and also to oversee and approve future works.

During this period of closure additional detailed contamination assessments have been completed, including various remediation and asbestos control installations:

- The entryway to the amenities building and the entry to the reservoir wall road have been capped and certified to allow public access to these areas.
- Bonded asbestos has been removed from the filter beds, caretaker's driveway and old workers cottage site.
- All remaining areas that contain asbestos contamination have been fenced off to prevent public access.
- Air monitoring has been completed within the site to confirm that all accessible areas are safe for public access.



A remediation action plan (RAP) has been completed for the site outlining the proposed staged method of remediation. Currently Council is working with State Government stakeholders to secure approvals and funding to complete all stages of these works.

At the completion of re-opening works, asbestos air monitoring was undertaken by GHD at the site prior to its reopening to ensure the site was fit for use. The asbestos air monitoring demonstrated the asbestos controls in place were effective. Subsequently, selected areas of the site were re-opened to the public on 5 December 2022 under asbestos controls in accordance with the NSW EPA Accredited Site Auditors requirements and the Asbestos Management Plan for the site.

Asbestos Management Plan

As part of their engagement, GHD have prepared an Asbestos Management Plan (AMP) to outline the procedures for identifying, assessing and managing the asbestos containing material (ACM) at Walka Water Works. The aim of the AMP is to protect human health during routine occupation, construction, or maintenance work at the site. This AMP is currently in practice and enforced across the Walka site.

The Long Term Environmental Management Plan and the Asbestos Register are available on the Walka page on Council's website.



Site location layout and indicative areas of asbestos in soil contamination