

Kogarah War Memorial Pool, Carss Park

Fact Sheet 4: Contamination at Kogarah War Memorial Pool and Carss Park Flats



When did Council first become aware of the contamination at Kogarah War Memorial Pool?

Council first became aware of contamination at the site when Council commissioned Construction Sciences Pty Ltd to conduct a geotechnical investigation at the KWMP pool site in August 2019.

What type of contamination was originally identified?

Construction Services Pty Ltd identified contaminants above the threshold limits for further investigation based on National Environmental Protection Measures (NEPM) 2013 for Residential Land Health Based Investigation Levels (HIL), Ecological Investigation Levels (EIL), Environmental Management Levels (EML) for hydrocarbons and heavy metals and threshold values for Excavated Natural Material (ENM) Order (2014).

In addition, bonded and fibrous asbestos was identified, as well as microbial contamination (Ecoli and Total Coliforms) and acid sulphate soils.

What action did Council take to ensure the safety of the community?

Council resolved on 25 May 2020 to:

“Undertake the immediate demolition of the Kogarah War Memorial Pool complex, decontaminate and undertake remediation of the site to eliminate the current safety risks to the community”.

Council subsequently engaged independent planning consultants to prepare the necessary Development Application, and this has been lodged.

Additional safety, signage, surveillance and security measures have been implemented at the KWMP site to prevent unauthorised access to the complex including buildings, pools and plant room.

What was the original cost estimate to remediate the Kogarah War Memorial Pool site at this time?

Based on the initial Construction Services Pty Ltd report, the original cost estimate of \$3 million was obtained to undertake the site investigations, the demolition of the pool and remediation of the site.

When did Council undertake further detailed site investigations for contamination and remediation?

The detailed geotechnical and contamination investigations required to inform the preparation of a remediation action plan for the Development Application took place over July and August 2020. The site investigations and were undertaken by Douglas Partners Pty Ltd who were engaged by SJB Planners as part of the DA development team.

Investigations covered the Kogarah War Memorial Pool site.

What did the detailed site investigations reveal?

The Remediation Action Plan and Site Audit Report identified:

1. A significant amount of fill which includes man-made materials including bonded asbestos, consistent with the historical reclamation of the site. The asbestos appears to be widely distributed through the fill material and exceeds human health screening criteria.
2. Hydrocarbons.
3. Heavy metals concentrations were generally below the screening criteria, although a few isolated occurrences of elevated zinc, lead and copper were reported.
4. Groundwater at the site is contaminated with ammonia (above the National Environment Protection Measure (2013) criteria) and is, or will foreseeably continue to remain above the specified concentration.
5. Potential sources of hazardous ground gas exist associated with reclamation work and is expected to be generated through slow decay of the organic content within the fill and underlying estuarine muds.

Based on the levels of hazardous ground water and gas detected at the site Council has a duty to report contamination to the NSW EPA under s60 of the Contaminated Land Management Act (1997). Council has made this report and submitted a monitoring and risk mitigation proposal for the site as requested by the EPA for the next 12 months.

Does the contamination have a long term impact on the use of the Kogarah War Memorial pool and Carss Park flats?

Yes. The EPA site auditor has restricted the use of the site to open space only. This means no sub-surface structures (pools, utilities, carparks) or aboveground structures (buildings) can be constructed at the site.

What is the estimated cost of demolition and remediation of the site to make it suitable for use as landscaped open space?

Current quantity surveyor estimates are \$7.4 million (subject to any additional DA conditions that may be imposed).

What is the estimated cost of remediation of the contamination at the site to the standard necessary to enable the construction of buildings and structures (aquatic facility) at the site?

The estimated cost of remediation of the contamination at the KWMP site to the standard necessary to accommodate a regional aquatic facility including excavation, load and disposal of contaminated fill to an EPA registered landfill site is in the vicinity of \$47 million.

Additionally, due to the known issues identified in the most recent geotechnical report prepared by Douglas Partners, the KWMP site would require dewatering treatment, permanent retaining and shoring around the site at a depth of 3.5 metres and the importation of clean fill at an estimated additional cost in the vicinity of \$18.3 million.

Therefore the total cost of remediation to enable the future construction of an aquatic facility at the Kogarah War Memorial Pool site is estimated at \$65.3 million. It should be noted that no contingency has been applied to the above figures.

What is the estimated cost to rebuild a 50 metre outdoor pool, gymnasium, amenities and car parking at the existing site?

The estimated cost to build a 50 metre outdoor pool, gymnasium, amenities and car park at the existing site is \$45 million (in addition to the remediation costs above).

What is the extent, cost and timeframe for the contaminated site investigation program required to be implemented at the Kogarah War Memorial Pool site and the Carss Park Flats?

Following formal notification to the EPA by Council under Section 60 of the CLM Act 1997, the EPA has requested that Council develop a contamination investigation program to determine the extent and impact of groundwater contamination and hazardous ground gases at KWMP and Carss Park Flats.

Council subsequently engaged Douglas Partners Pty Ltd to develop a program.

The program requires gas and ground water monitoring for a period of 10-12 months to ensure several seasons are covered and a range of atmospheric conditions are captured. The data obtained from this monitoring will be provided to the EPA to determine the long term management strategy for the site.

The cost of this monitoring will be approximately \$200,000 (excl. GST). Additional costs may be incurred for further monitoring rounds requested by the EPA.

What steps have been taken to ensure community safety and reduce risks to the public at the KWMP complex and the Carss Park flats?

An inspection of the KWMP site is conducted each week by Council staff to check the perimeter fencing and general security of the site. Break-ins occur at the site on a regular basis and these incidents are reported to NSW Police. It is apparent that ongoing unauthorised access continues to occur at the site.

Additional perimeter fencing was installed around the entire pool complex and the pool structure, as well as appropriate warning signage, as a result of the additional findings contained in the geotechnical report and advice received from Council's insurers and external lawyers.

Security patrols of this site have been in place since closure of the pool, as well as CCTV and sensor lighting.

For further updates go to

www.georgesriver.nsw.gov.au/Council/About-Your-Council/Major-Projects/Kogarah-War-Memorial-Pool

What steps have been taken to ensure community safety and reduce risks to the public at the Carss Park Flats?

The Site Auditor has advised that the conditions at the KWMP site trigger the owner's (Council's) duty to report contamination under the Contaminated Land Management Act 1997 (CLM Act) due to the levels of contaminated ground water and hazardous ground gases. Accordingly, the General Manager has complied with this duty to report under Section 60 of the CLM Act 1997. Following notification by the EPA to provide an investigation, monitoring and risk mitigation program Council has provided the necessary program to the EPA to ensure community safety and reduce the associated risks relating to the KWMP site and Carss Park Flats.

Concerns associated with landfill gas (LFG) in Council owned structures on Carss Park Flats (Men's Shed and Sports Amenity Building) were identified. Council closed these buildings to the public while screening for bulk hazardous ground gases was undertaken within the buildings. This comprised of:

Screening for methane at a detection limit of 1 ppm using a Huber laser one instrument.

- Screening for carbon dioxide, hydrogen sulphide, carbon monoxide and oxygen using a GA5000 landfill gas analyser.
- Screening for volatile organic compounds using a photo-ionisation detector (PID).
- A general scan of the floor with a focus on monitoring around penetrations (e.g. drains, conduits).
- Undertaking monitoring during low and falling atmospheric pressure conditions and rising tide (where feasible, given this is weather and tidal dependent).

This gas monitoring established the risk of harm to building users was low and that the buildings could be reoccupied at the conclusion of the 3 week testing period. Indoor air quality testing is performed within the buildings every two months.

Based on the recent legal advice to Councillors, has Council complied with all legislative obligations to protect community safety and limit the exposure of Council employees and Councillors from personal and criminal liability claims that may arise if the risks related to the KWMP complex and the management of the contaminated land give rise to a serious incident?

The General Manager outlined the legislative obligations that Councillors and employees must comply with (in order to protect Councillors and employees from personal and criminal liability and third party claims in relation the KWMP complex and contamination of the Carss Park Flats) in legally privileged advice to Councillors in October and November 2020.

The General Manager has informed the Council, and fulfilled her obligations and exercised all due diligence in regard to the relevant legislation.

Councillors are exposed to potential personal and criminal liability claims if they do not manage the risks associated with the KWMP site and Carss Park flats in accordance with the expert advice received by Council's insurers and external lawyers.

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Georges River Civic Centre Corner MacMahon and Dora Streets, Hurstville
Clive James Library and Service Centre Kogarah Town Square, Belgrave Street, Kogarah
9330 6400 | mail@georgesriver.nsw.gov.au | PO Box 205, Hurstville BC NSW 1481

www.georgesriver.nsw.gov.au

GeorgesRiverCouncil

@grcouncil



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