

Botany Site Groundwater Remediation Program

Updated 1/12/2020

Summary

In 2017, Allnex engaged AECOM to conduct a series of environmental works targeting primarily the area beneath the active manufacturing operations of the Beckamine and Emulsion Plants (the “source area”). The purpose of these works is to remediate a groundwater contamination plume moving south from the source area. Between 2017 and 2020, various remediation, monitoring and investigation tasks were completed. The next step for this program will involve the injection of amendments into the local aquifer, which will accelerate the natural contaminant biodegradation processes already taking place in the area.

Timeframes

The remediation works were split into major phases and will be completed according to the following schedule:

	Works already completed	Phase 1: Enhanced bioremediation works	Phase 2: Bioremediation compliance monitoring period	Phase 3: Boundary Remediation System (BRS) shutdown	Phase 4: BRS compliance monitoring period
Description	<ul style="list-style-type: none"> Oxidation injection events. Periodic groundwater monitoring events. Detailed soil and groundwater studies. Product extraction and monitoring events. 	<ul style="list-style-type: none"> Injection of amendments into the local aquifer to accelerate natural biodegradation. 	<ul style="list-style-type: none"> Groundwater monitoring events to check for any signs of residual contamination. 	<ul style="list-style-type: none"> Shutdown of the existing hydraulic containment system at the southern boundary of the site. 	<ul style="list-style-type: none"> Groundwater monitoring events to check for any signs of residual contamination.
Start Date	June 2017	January 2021	January 2025	January 2026	January 2026
End Date	Product extraction and monitoring events currently underway.	January 2025	January 2026	January 2026	January 2027

Frequently Asked Questions

- Will there be any disturbances to the current operational routines of the site?
 - No. Apart from the periodic monitoring events (Phases 2 and 4), when isolated areas of the site will have to be barricaded (one at a time), there will be no disturbances to the current site operations.
- Will new injection infrastructure be installed on site?
 - No. The same equipment (tanks, pumps, agitators, instrumentation) commissioned during previous works will be used again for these next phases of works.
- Will hazardous chemicals be used?
 - No. Either magnesium sulphate heptahydrate¹ or ambient air will be used as amendments for the biodegradation processes.¹
- Are the onsite workers subjected to any kind of health risks?
 - Task-specific controls will be required for intrusive workers involved in excavation, drilling or slab repairing works. Employees working at the site are not subjected to health risks from the remediation works.
- Other questions? If you have a more specific question or would like to lodge a safety observation or complaint, please use the newly added **Botany Site Groundwater Remediation Program** link added to the Allnex website (under <https://allnex.com/en/info-hub/compliance>)².

Did you know? In 2003, the NSW Government placed an embargo on subsurface groundwater licences for the Botany Bay area under Section 113A of the Water Act 1912. This order relates to all groundwater extraction (with the exception of extraction for dewatering of construction sites), monitoring and testing or works associated with groundwater remediation. As such, direct contact (ingestion and dermal contact) with groundwater is not considered to be a risk to local human and ecological receptors.

¹ Safety Data Sheets (SDS) are available at <http://www.labchem.com/tools/msds/msds/LC16490.pdf>

² The same information is also presented in the **Botany, NSW, Australia – Environmental Reporting Information** box, which can be accessed by searching for the key word “Botany” in the Allnex.com home page search tool and then a) selecting the listed result “Compliance”; or b) selecting the listed result “Allnex Resins Australia Pty Limited”. This will open a new pop-up window with Botany contacts, including a link to the mentioned information box.