



GOVE HOUSES DEMOLITION – PILOT STUDY

JAN 2025 - MAR 2025
RIO TINTO AUSTRALIA
\$1.1 M

DEMEX was engaged by Rio Tinto Gove (RTA) to undertake demolition of five houses in Nhulunbuy, Northern Territory as part of the town transition and broader Gove Refinery closure program.

The purpose of the pilot study was to complete asbestos removal and safe dismantling, deconstruction, demolition, and property restoration of the houses and associated infrastructure related to five houses in two designs.

The pilot study was delivered over a three month period, commencing in January with onboarding and preliminaries then followed by demolition of houses over the ensuing eight weeks.

CHALLENGES AND SOLUTIONS

Seasonal weather - The tropical location and associated seasonal wet weather characteristic of hotter months made it difficult to maintain a consistent flow of work in line with project planning. This resulted in a stop/start work sequence on four of the five properties. Wet weather also impacted site conditions, which become boggy and unworkable. The team adapted to these conditions and moved between sites, undertaking the internal asbestos removal works at multiple properties until conditions improved and dismantling and demolition could commence.



- **House design** – All houses were cyclone rated and built out of asbestos containing materials and configured in two designs: CEMAC and HJ J3. The two CEMAC houses were constructed with cyclone rated, steel framed panels secured in such a way that meant dismantling could only be achieved through removal of the roof first. With this understanding, the CEMAC house demolition methodology was revised, reflected in streamlined works on the second house.

- **Community impacts** – Given the houses were located in the Nhulunbuy township and works would be observed by local residents, there was potential for escalation of concerns about asbestos contamination. Sensitive to residents and potential concerns, DEMEX implemented air monitoring at each site while works were conducted. Air quality data was captured daily proving the selected asbestos removal and demolition method was both effective and safe. This also provided RTA with confidence if required to address any concerns raised by community members.

- **Supply** – Mobilising over 3,750 kilometres to Gove from DEMEX headquarters required detailed planning and execution. Equipment and vehicles were transported by road to Darwin, then barged from Darwin to Port of Gove for unloading. Timing proved critical due to the frequency and availability of barge services.

The scope required preparation of a detailed pilot study report, which DEMEX presented to RTA outlining all costs and lessons learned. DEMEX submitted the report, which was received positively by RTA and will ultimately inform phase 1 of the broader program of 160 houses to be demolished.

One key highlight of this project was the community contribution made by DEMEX to Yirrkala School, Australia's only bilingual school where classes are taught in local Yolgnu Matha and English. In conjunction with one hundred percent owned Indigenous Road Safety Academy (IRSA), DEMEX provided the school with a year long licence to DriveAbout in Yolgnu Matha. This program supports senior students to understand road rules and road safety in their own language, empowering them to obtain their learner driver's licence and gain access to employment opportunities.