Ventilation Air Methane Abatement Project

Project Update 2 - August 2025

GM³ a mining and metals company

Who we are

GM³ (formerly South32 Illawarra Metallurgical Coal) produces high-quality metallurgical coal – a key ingredient in the steelmaking process. Much of our coal goes to the Port Kembla steelworks, supporting local jobs and the economy.

Our Appin Mine is located in the Wollondilly region, and is currently extracting in the Menangle area. Across our operations, we employ more than 2,000 people, many of whom live in the local region.

About the Project

We have submitted a modification to our existing Appin Mine Project Approval (MP 08_0150) to construct and operate a ventilation air methane (VAM) abatement demonstration plant.

Originally established under South32, this project is now being progressed by GM³. The Project aims to reduce greenhouse gas (GHG) emissions from Appin Mine by enhancing our current abatement of ventilation air methane.

The proposed plant will trial Regenerative Thermal Oxidiser (RTO) technology. RTO's convert methane into carbon dioxide (C02) and water, without requiring additional fuel and works at low gas concentrations. It is an established, industry proven design used worldwide.

With methane having 28 times the greenhouse gas potential than CO2, VAM abatement offers GM³ a significant opportunity for emissions reduction.

Project Update

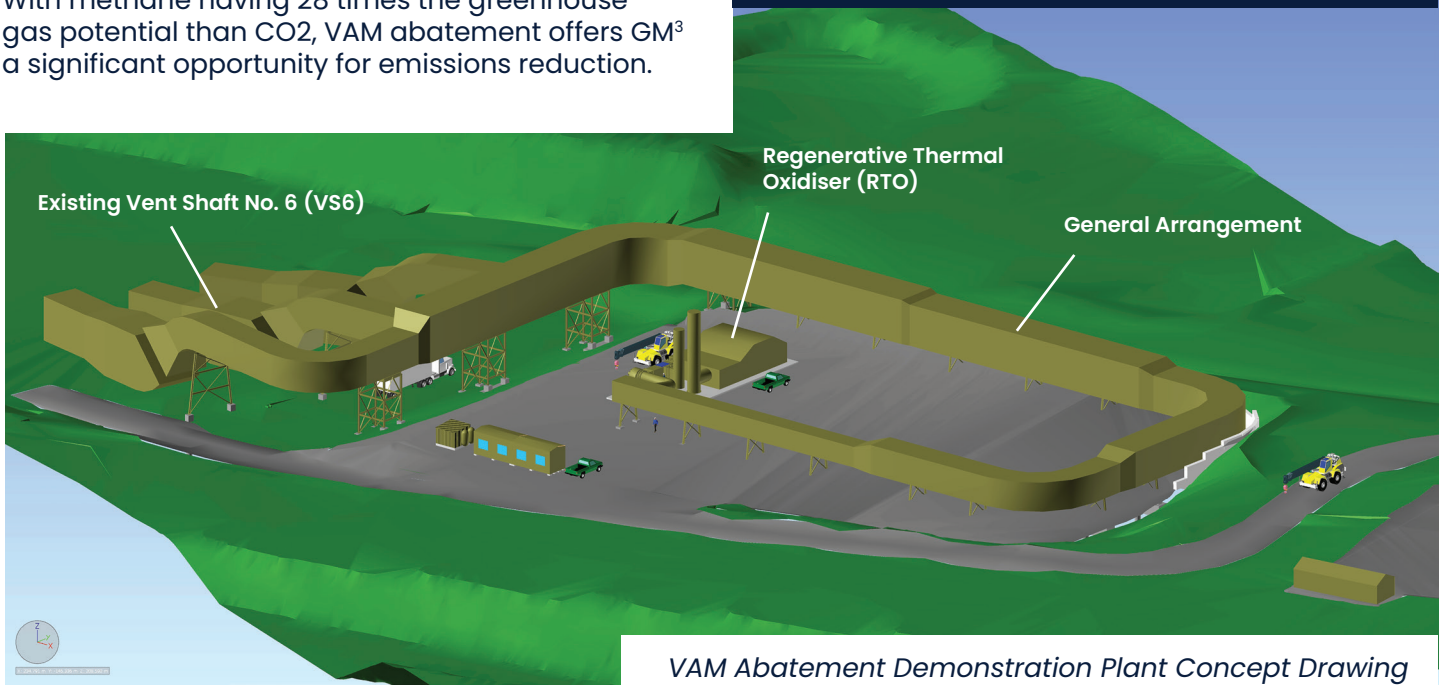
The modification application will be on public exhibition on the NSW Government Major Projects website from 13 August to 27 August 2025.

Scan the QR code below to view the application or visit:

https://www.planningportal.nsw.gov.au/major-projects/projects/mod-4-vam-abatement-project

We encourage you to review the application and share your feedback as part of this process.

Once operational, the demonstration plant aims to reduce GHG emissions by approximately 36,000 tonnes CO_2-e per year - equivalent to taking 8,500 cars off the road.



VAM Abatement Demonstration Plant Concept Drawing



Proposed Location

The proposed plant would be constructed adjacent to our existing Appin Ventilation Shaft No. 6 (VS6), located near the M31 Hume Motorway, approximately 800 metres east of Douglas Park, within the Wollondilly Local Government Area.

Assessments

Technical experts have conducted assessments to guide the design, construction, and operation of the proposed facilities. These assessments, aligned with regulatory criteria, are included in the Modification Application lodged in January 2025. For more details please visit the NSW Major Projects Website.

Noise

- Construction will generally occur within standard construction hours (Mon to Sat, 7am to 6pm).
- Noise levels are expected to comply with the NSW EPA's Interim Construction Noise Guidelines, with brief exceptions for high-intensity equipment such as rock breakers.

Air Quality

- Air quality and atmospheric dispersion worst-case scenarios for the plant have been modelled.
- The assessment focused on key pollutants including airborne particulates (PM10), nitrogen oxide (NO2), and carbon monoxide (CO).
- All air pollutants levels meet assessment criteria in both current and proposed scenarios at all sensitive receptors (i.e. nearby residences).

Traffic

- The site would be accessed via a private road off Menangle Road, north of its intersection with Camden Road.
- With a main construction period of 12 months, mostly confined to daytime hours, traffic impacts are expected to be minor.

Visual Amenity

- The demonstration plant will be screened by mature existing vegetation and terrain.

Heritage

- No aboriginal objects or areas of interest were identified.
- No non-aboriginal heritage items have been identified in the area.

Next steps

NSW Government Modification Process

- ✓ GM³ consults with the Department on proposed modifications.
- ✓ The Department issues assessment requirements
- ✓ GM³ prepares and submits Modification Report to the Department
- ➡ The Department places Modification Report on exhibition and seeks submissions
- GM³ responds to submissions
- The Department completes its assessment

Following the public exhibition, GM³ will have a chance to respond to public submissions before NSW government determines the outcome. Once the determination is complete an update will be provided to the community.

Contact us

If you would like to speak with us about the Project, call our Community Call Line **1800 102 210** or email **community@gm3.au**

Scan the QR code for more information on the Project.