



Information accurate as at September 2026.

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Air quality

Is the air around Macraes safe?

OceanaGold has operated at Macraes for over 36 years, and keeping the air safe for people who live and work near the mine — and for the wider environment — is something we take seriously every day. Our monitoring record reflects that commitment. Dust levels at Macraes Village have trended downward since 2022, we have received only five dust-related complaints in the past eight years, and no real dust events from mining have ever been recorded at our village monitor. Emissions from our processing plant are monitored continuously and consistently come in well below New Zealand health guidelines. Across every measure and every part of our operation, our air quality results give us confidence that the air around Macraes is safe.

As part of our Macraes Phase Four application, we commissioned an independent air quality assessment by Tonkin & Taylor to confirm that extending mining will not change that picture. It found that air quality effects on the Macraes community will remain negligible — for both dust and processing plant emissions. This fact sheet summarises what the assessment found and how we will continue to protect air quality.

What goes into the air?

Dust from mining

Heavy vehicles on unsealed roads are the main source of dust — particularly during dry weather. Blasting, excavation, and wind over exposed surfaces also generate dust.

Processing plant chimneys

The main chimney releases small amounts of sulphur dioxide, mercury, and trace metals. Smaller stacks from carbon kilns and the smelting furnace also emit tiny amounts of mercury.

Who could be affected?

15 locations were assessed, including homes, Macraes Moonlight School, Coronation Hall, and the cricket pavilion. The nearest home is around 600 m from any mining activity. Macraes Village is about 1.2 km west of the mine.

What does the monitoring show?

- Dust deposition has met consent limits at all sites beyond the mine boundary since 2015.
- Dust levels have trended downward since 2022.
- The village dust monitor has shown many spikes over the years — almost all caused by humidity affecting the instrument, not dust.
- No real dust events from mining have been recorded at the village monitor.
- Only five dust complaints since 2018, none since 2020.

The bottom line

Independent finding

Air quality effects on the Macraes community will be negligible — for both dust and chimney emissions — provided OceanaGold continues its current dust controls. This is the conclusion of the independent assessment by Tonkin & Taylor.

Three things make off-site dust impact negligible:

1. Distance — all homes are more than 600 m away. Research shows dust from mining drops to negligible levels beyond 250–350 m.
2. Wind — strong, dry winds blow toward the village less than 1–2.5% of the time.
3. Controls — water carts on haul roads during dry weather are effective and will continue.



Are the Processing Plant emissions safe?

Computer modelling using two years of local weather data was used to predict concentrations of sulphur dioxide, mercury, and metals at all sensitive locations. Every result was well within New Zealand health standards.

SUBSTANCE	RESULT vs NZ HEALTH STANDARD
Sulphur dioxide	Less than 1% of the limit.
Mercury	Less than 2% of the limit at nearest home.
Arsenic	Less than 1% of the limit.
Lead	Well below the limit.
Nickel	Well below the limit.

What about arsenic from the tailings?

Tailings contain naturally occurring arsenic. The risk is negligible because:

- Tailings are deposited wet and form a hard surface — dust only lifts in strong, dry winds.
- A wetting system keeps surfaces moist in dry, windy conditions.
- The nearest home is over 1.1 km from any tailings storage area.
- Arsenic levels in the tailings dust are three times lower than the health guideline and pose no health concern.

What about fine particles and silica?

Research on comparable quarrying sites shows that beyond 250 m, fine particle concentrations from mining are not distinguishable from normal background levels. All homes near Macraes are much further than this. No significant health risk is expected.

Upgrading the Macraes village monitor

The existing Macraes village monitor produces false high readings in humid weather. This has made the data hard to interpret.

Under MP4 it will be replaced with a more accurate instrument unaffected by humidity. A second monitor will also be installed near the closest home as an early warning system.

Dust controls in place

On the mine

- Water carts continuously operating on haul roads during dry conditions.
- Speed limits and controlled drop heights at loading points.
- Blasts timed to avoid strong winds toward the village.
- Exposed ground revegetated as soon as mining in each area is complete.
- Wetting system on tailings storage facilities.
- Seeding on tailings storage facilities.
- Monitoring conducted across site, with results well below national limits.

At the processing plant

- Wet scrubber on the main chimney removes sulphur dioxide and particles.
- Retort oven captures mercury vapour rather than releasing it to air.
- Fabric filter on the furnace stack captures fine particles.

Monitoring under MP4

WHAT

Dust deposition at 16 sites

PM₁₀ at Macraes Village

New early-warning monitor near closest home

Wind, rain, temperature at 2 stations

Main chimney (SO₂, mercury, metals)

Complaints response

HOW OFTEN

Monthly

Continuous — upgraded to accurate instrument not affected by humidity

Continuous — new for MP4

Continuous

Every 3 years — new for MP4

24/7 contact number



By the numbers

~**600 m** = nearest home to mining, which is more than double the distance from where dust levels become negligible.

~**1.2 km** = distance to Macraes village (west of the mine).

Zero dust events recorded at the village monitor to date.

5 total dust complaints since 2018. None since 2020.

Less than 1–2.5% = of total hours per year that strong winds blow towards the village.

SO₂ levels **less than 1%** of the NZ health standard at nearest home.

Mercury levels **less than 2%** of the health guideline at nearest home.

16 dust monitoring sites plus a continuous village monitor.

What is OceanaGold applying for?

MP4 requires a new resource consent for air discharges under the Otago Regional Plan: Air, because the scale of mining and ore processing exceeds the permitted activity thresholds. This is a discretionary activity, meaning the environmental effects must be fully assessed before consent can be granted.

The independent assessment concludes that the project can be carried out in a way that makes sure effects on the community remain negligible.

Want to know more?

OceanaGold is committed to a long-term partnership with the community and it is important to us that you have reliable information about what we are proposing and what it means to you.

Macraes Information Centre

Location: 117 Ronaldsay Street, Palmerston, Otago.

Open hours: 9.00 am to 3.00 pm weekdays.

This fact sheet summarises the Air Quality Impact Assessment prepared by Tonkin & Taylor for Oceana Gold (NZ) Limited (Job No. 1101342, August 2026). The full report is part of OceanaGold's MP4 application under the Fast-track Approvals Act 2024.

Disclaimer: Plain-language summary for community information only. Based on Tonkin & Taylor Ltd, Air Quality Impact Assessment (Job No. 1101342, Rev 0, August 2026). The full report should be consulted for complete detail. Information accurate as at August 2026.



Find out more about Macraes Phase Four: www.macraesphasefour.co.nz
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