



Independent Peer Review Human Health Risk Assessment (HHRA) Report No. 54291



**Strathmore Quarry
51 Gowrie Road, Warral NSW**

ENVIROSCIENCE SOLUTIONS PTY LTD

ACN 157 918 262

Ph 1300 372 436

info@enviroscience.com.au

www.enviroscience.com.au

LABORATORY LOCATED AT 2/3 DOUGLAS MAWSON ROAD, DUBBO NSW 2830



Independent Peer Review

Human Health Risk Assessment

Strathmore Quarry

Prepared For: Tamworth Regional Council
474 Peel Street
Tamworth NSW 2340

Prepared By: April Dickinson
EnviroScience Solutions Pty Ltd
99 Fitzmaurice Street,
Wagga Wagga NSW, 2650

Reviewed By: David Gabriel, GCert WHS
EnviroScience Solutions Pty Ltd
2/3 Douglas Mawson Drive,
Dubbo NSW, 2830

Approved By: Juliet Duffy MSM Syd Uni, IntCert OHTA
Director AICD
Occupational Hygienist MAIOH
Licensed Asbestos Assessor LAA000102
EnviroScience Solutions Pty Ltd
2/3 Douglas Mawson Drive,
Dubbo NSW, 2830

Status	Date	Prepared	Reviewed	Approved
DRAFT	12/05/26	A. Dickinson	D. Gabriel	J. Duffy
DRAFT V1	30/06/26	D. Gabriel	G. Murphy	J. Duffy
FINAL	23/07/26	D. Gabriel	G. Murphy	J. Duffy



Introduction

EnviroScience Solutions was requested by Tamworth Regional Council to undertake an independent peer review of a Human Health Risk Assessment (HHRA) report prepared by EnRiskS in relation to potential exposures to respirable crystalline silica from the proposed Strathmore Quarry.

This peer review will consider the adequacy of the HHRA and identify any gaps in the documentation, analysis and recommendations.

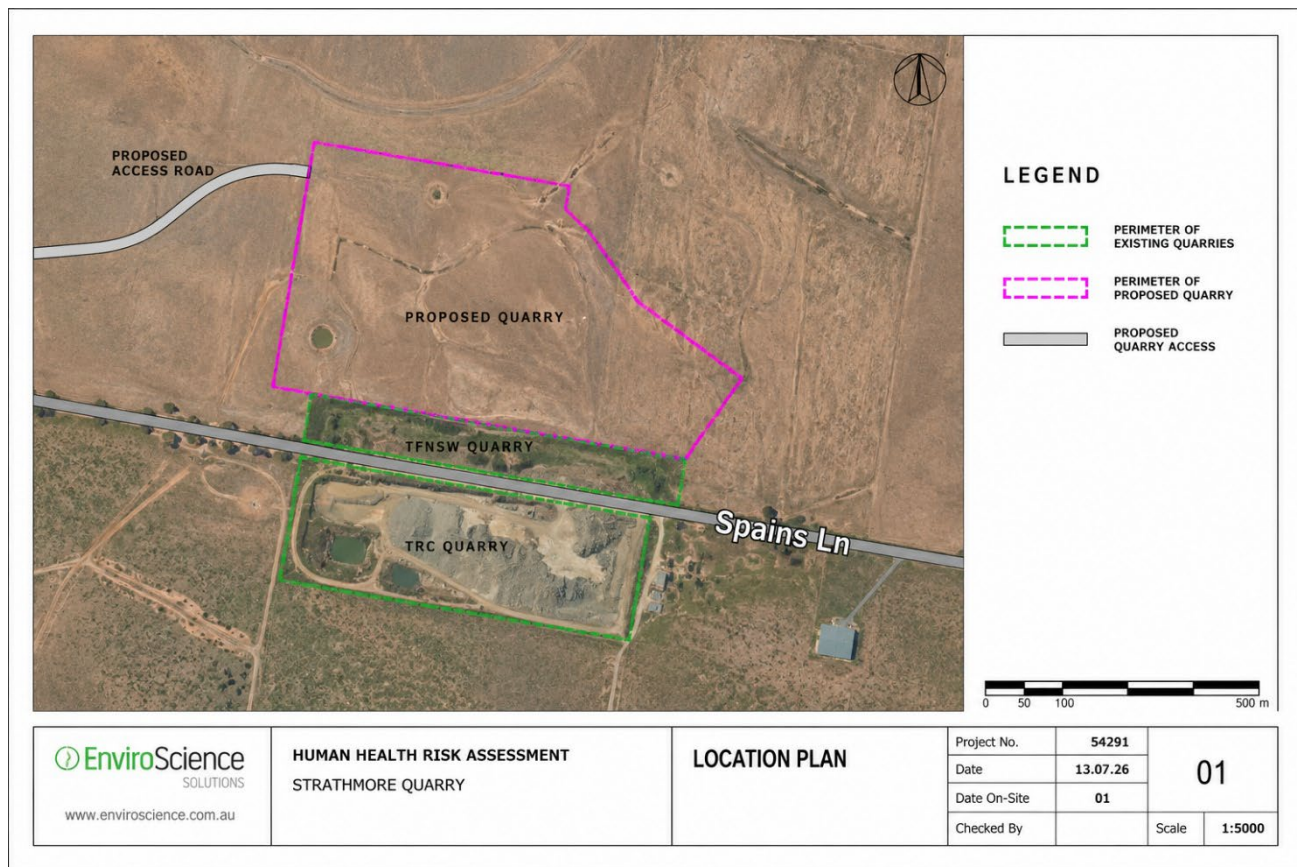


Figure 1. Adapted from Figure 3.3 of the EnRiskS Human Health Risk Assessment, showing the proposed Strathmore Quarry in relation to the adjacent quarry operations (Oats Block 2025 EIS)

Discussion

Meteorology Data

The Human Health Risk Assessment (HHRA) prepared by EnRiskS utilised meteorology data from the Tamworth Airport Bureau of Meteorology station, located approximately 10.8km from the proposed Strathmore Quarry. The HHRA identifies this as the representative meteorological dataset for the air dispersion modelling and documents the selection of the 2020 dataset following a review of meteorological conditions between 2018 and 2022.

Based on the information presented within the HHRA, the use of the Tamworth Airport meteorological station appears appropriate for the regional-scale dispersion modelling undertaken. No deficiencies were identified in the selection or application of the meteorological dataset within the scope of this peer review.

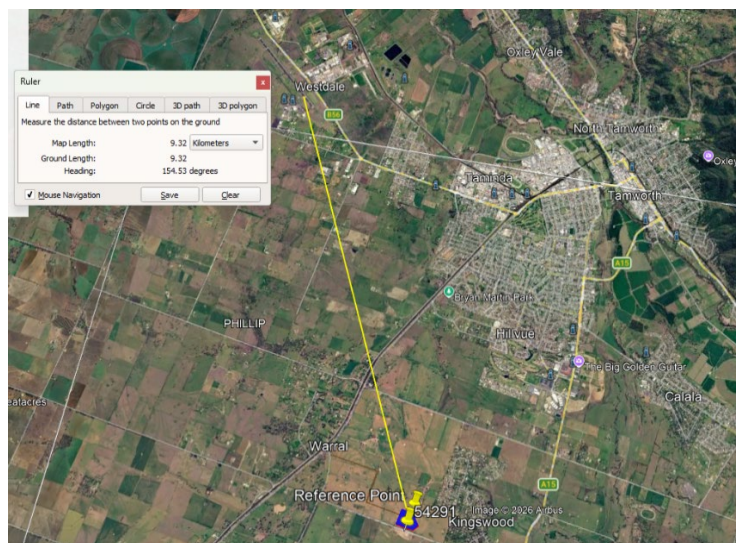


Figure 2. Satellite view showing the distance between Tamworth Airport and the proposed site at Strathmore Quarry.



Geology

The Human Health Risk Assessment (HHRA) prepared by EnRiskS references a petrographic assessment indicating a free silica (quartz) content of 43%, based on a single rock sample collected from the proposed quarry area.

While the HHRA adopts a conservative approach to assessing respirable crystalline silica exposure, consideration could be given to obtaining additional geological and petrographic samples across the proposed extraction area to provide greater confidence that the reported silica content is representative of the broader geological resource.

Recommendations

EnviroScience Solutions makes the following recommendation for consideration:

- **Geology of proposed site**

Consideration could be given to obtaining additional geological and petrographic samples across the proposed extraction area to provide greater confidence that the reported silica content is representative of the broader geological resource.

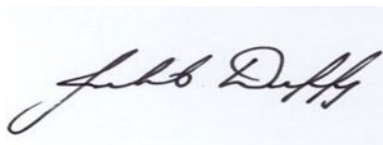
Conclusions

Upon review of the Human Health Risk Assessment (HHRA) prepared by EnRiskS, EnviroScience Solutions considers the assessment to be technically adequate within the scope of this independent peer review.

The applicant's responses have satisfactorily addressed or clarified a number of the matters originally identified during the peer review process. As a result, the remaining recommendation is provided as a best-practice measure to further strengthen confidence in the geological characterisation of the proposed quarry and is not considered to materially affect the overall conclusions of the HHRA.

Subject to the recommendation outlined in this review, EnviroScience Solutions supports the conclusions of the HHRA for the proposed Strathmore Quarry.

Reported by:

A handwritten signature in black ink, appearing to read "Juliet Duffy".

Juliet Duffy MSM Syd Uni, IntCert OHTA
Director AICD
Occupational Hygienist MAIOH
Licensed Asbestos Assessor LAA000102
EnviroScience Solutions Pty Ltd 2/3 Douglas
Mawson Drive, Dubbo NSW, 2830

ENVIROSCIENCE SOLUTIONS PTY LTD

ACN 157 918 262
Ph 1300 372 436
info@enviroscience.com.au
www.enviroscience.com.au
LABORATORY LOCATED AT 2/3 DOUGLAS MAWSON ROAD, DUBBO NSW 2830

