



30 August 2016

Ref: 10573/6618

Aurelia Metals Ltd
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P.O. Box 239
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RE: HERA GOLD MINE – BLASTING ANALYSIS

Thank you for forwarding the results of blast monitoring for the Hera Gold Project for assessment. This assessment has been conducted in order to provide a predictive tool for blast vibration levels from the site as a function of charge weight (MIC) for use in planning future blasts to ensure compliance with the vibration criteria is maintained at the nearest residential receiver. This assessment considers only blast vibration as the underground location of blasts greatly suppresses airborne overpressure.

The vibration levels resulting from 27 blasts recorded at the blast monitor were modelled using the standard ANZECC formulae with the coefficient adjusted until the given MIC gave the measured peak particle velocity (PPV) vibration at the monitor. Figure 1 shows the modelled 90th percentile curves for blasts weights in three groupings, with MIC of 37 kg, 100 kg and 170 kg, and the criteria of 5 mm/s (day), 2 mm/s (evening) and 1mm/s (night).

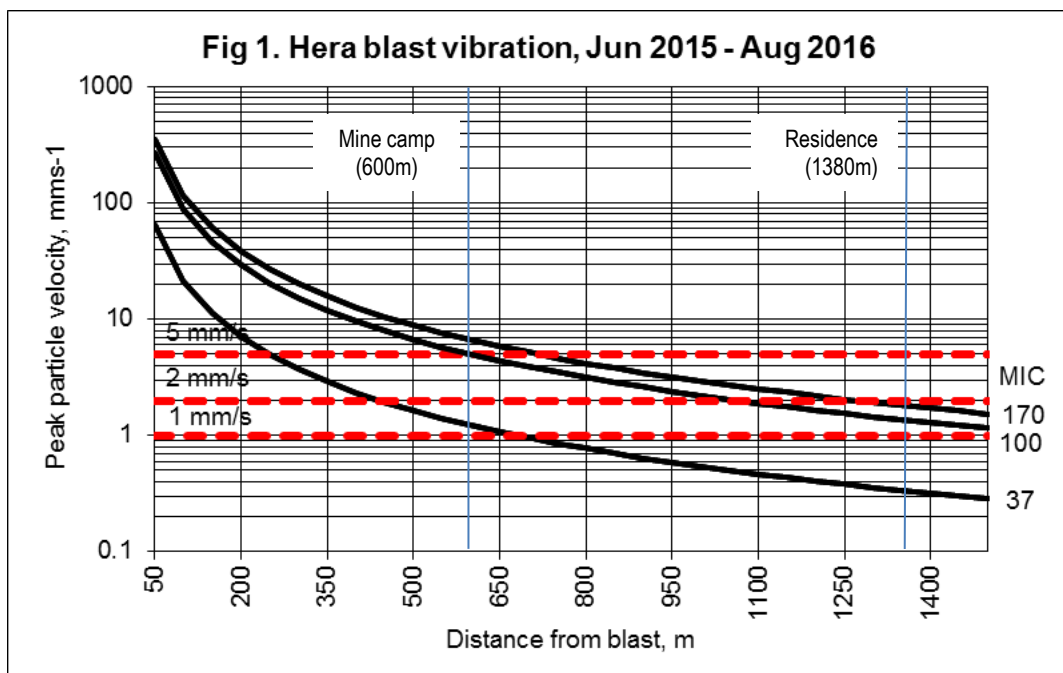
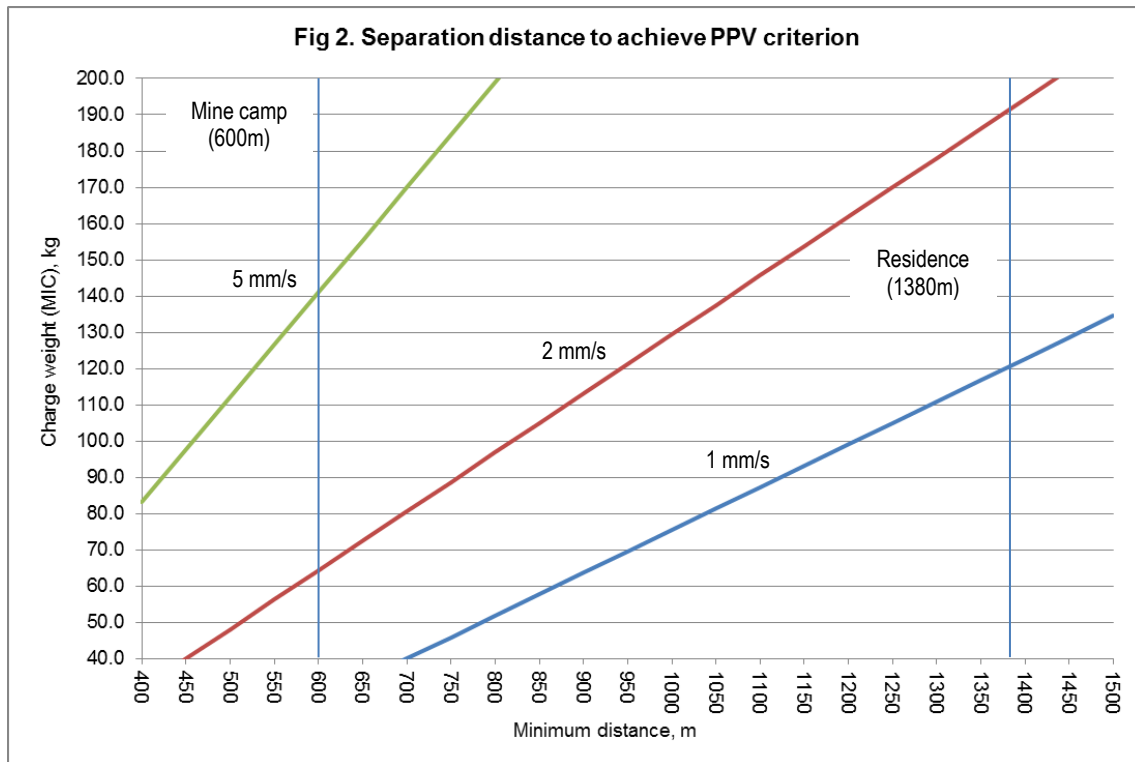


Figure 1 provides the distances at which the modelled vibration curves intercept the criteria. Using simple linear interpolation, Figure 2 shows a site specific method of determining the setback distance to achieve compliance with the blast vibration criterion at residential receivers, as a function of MIC. The setback distance is to be taken as the horizontal distance along the ground surface and is a conservatively low estimate of the actual distance from blast site to receiver. Figure 2 may be used as a general guide for blast planning.



We trust this report fulfils your requirements at this time, however, should you require additional information or assistance please do not hesitate to contact the undersigned.

Yours faithfully,

SPECTRUM ACOUSTICS PTY LIMITED

Neil Pennington

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