



11 November 2021

Rose-Anne Hawkeswood
Department of Planning, Industry & Environment
GPO Box 39
SYDNEY NSW 2000

Originally sent by email to:
rose-anne.hawkeswood@planning.nsw.gov.au

Dear Rose-Anne

**Re: Bowdens Silver Project SSD-5765 – Response to Request for Information
Lead Sampling at Lue Public School**

We are writing in relation to the Department's request for a response to community member concerns "*that there are discrepancies between the existing lead levels at the school identified in [the] WSP report and the existing lead levels identified in the baseline studies undertaken for the mine*". In preparing this response we have reviewed relevant aspects of the Lue Public School Lead Risk Assessment prepared by WSP and dated 29 July 2020. This document was provided to Bowdens Silver Pty Ltd (Bowdens Silver) by the Department. At the outset it is important to note that the historic use of lead based paint, its condition on school properties and the contamination discussed in the WSP report have no association with the ore material that is present within the proposed Bowdens Silver Mine. The potential exposure risks relating to the use of lead based paint at the school is the responsibility of the Department of Education to further assess and manage, as determined by the Department. Importantly, communication from the Department of Education to Lue Public School staff and parents dated 4 August 2020 advises that, following an independent hygienist's investigations, "*the hygienist has once again confirmed the school continues to be safe for students and staff*".

It is also important to note that the assessed incremental risk of lead exposure due to the Project is not affected by the baseline levels of lead at Lue Public School. That is to say, the Project's contribution is independent of how much exposure comes from other existing sources including lead based paint on any property.

As presented within the Environmental Impact Statement (EIS) and supporting Human Health Risk Assessment (HHRA), the Project is predicted to result in a negligible incremental exposure to lead for the community, including the Lue Public School. This conclusion has been supported by the independent peer review commissioned by the Department and undertaken by Drew Toxicology Consulting. To be clear, the conclusion of the HHRA prepared by EnRiskS is as follows.

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Based on the available information, and with consideration of the uncertainties identified, no health risk issues of concern have been identified for the off-site community.

Further to that, the peer review undertaken by Drew Toxicology provides the following conclusion.

Overall, the HHRA follows the standard process for conducting such assessments in Australia. The HHRA concentrates on incremental health risks that the mine proposal may present. The revised HHRA adequately documents the methodology and important assumptions are supported. The calculations indicate health risks due to the proposed mine are very low. I agree with these conclusions.

In relation to adopted baseline levels within the HHRA, a soil lead baseline level of 50mg/kg was adopted based on a total of 388 samples collected within and surrounding the Mine. Additional data is also presented within the EIS and HHRA for soil samples and dust wipes taken from Lue Public School. These samples confirm the presence of lead paint and elevated levels of lead within the dust of the ceiling cavity and the soil adjacent to the building. However, as can be seen in the data presented in Table 4.49 of the EIS, the lead concentrations within the soil steadily decrease within a short distance from the building. As such, the data from the Lue Public School dust wipe and soil samples are not representative of the surrounding environment / baseline lead levels.

Notwithstanding, the data for the Lue Public School samples as presented within the EIS and HHRA is generally consistent with the results reported by WSP. However, notably, WSP undertook broader sampling of soil across the school grounds, predominantly in a grid pattern. The results ranged from 12mg/kg to 404mg/kg with a median of 29.5mg/kg. For comparison the results presented in Table 4.49 of the EIS ranged from 12mg/kg to 280mg/kg with a median of 39mg/kg (six samples). A baseline of 50mg/kg was adopted for assessment (higher than the median data collected on both occasions).

It is noted that the maximum result identified in the WSP report is higher than that presented in the EIS and may have caused concerns in the community regarding the adequacy of the information presented in the EIS. It should be noted that the second highest record identified by WSP is 124mg/kg and the median soil lead result was 29.5mg/kg. It should also be noted that sampling methodologies cannot account for every location and the results should be considered in light of this. This is generally known as sampling bias, which results from reliance on sample outcomes without consideration of sampling methodologies or patterns. In this case, to conclude that as the maximum sample in the WSP assessment is higher than that reported in the EIS, that the EIS is flawed, erroneously places too high a reliance on a single sample.

Given that the median soil lead result of 29.5mg/kg recorded by WSP is below the baseline adopted in the EIS of 50mg/kg, we remain confident that the adopted baseline remains appropriate and consistent with all available data. Importantly, the outcomes of the EIS and HHRA remain unchanged, i.e. the Project presents no health risk issues to the local community, including the Lue Public School. Bowdens Silver has engaged with the Lue Public School principal and staff throughout the assessment process. Bowdens Silver has also committed to repeating baseline soil sampling at the Lue Public School prior to commencement of mining operations.

It is noted that the WSP report defines an area of recommended exclusion around the area containing the elevated soil lead. This is because the sample exceeded the screening level identified in the report. The recommendations within the WSP report remain a matter for the NSW Department of Education and it is inappropriate for Bowdens Silver to provide commentary on the adequacy or otherwise of measures and actions recommended and/or taken.

We trust that this clarifies the consistency and appropriateness of the data utilised in the EIS and HHRA compared with that presented within the WSP report.

Yours sincerely



Nicholas Warren
Principal Environmental Consultant

Copy: Bowdens Silver
Environment Risk Sciences (enRiskS)

