MinEx submission on the Work Exposure Standard (WES) review for Chromium VI, March 2020. Submitted 28 August 2020.

- **Do you agree with the proposed WES-TWA value of 0.00002 mg/m3, as Cr(VI) (inhalable fraction)?**

No. The proposed WES-TWA cannot be measured using current analytical methods, meaning it is impossible for PCBUs to monitor exposure to determine compliance, and verify the adequacy of existing or new controls.

WorkSafe's proposal states: "It is acknowledged that currently there are no available analytical methods that would allow determination of airborne levels of chromium VI at the proposed WES values. Meeting the new WES would be impossible to measure and arguably imposes an obligation that goes well beyond what is "reasonably practicable" as defined in section 22 of the Health and Safety at Work Act 2015, i.e. reasonably able to be done when taking all practicable steps in relation to ensuring health and safety. If we can't measure this, it will be impossible to comply.

- Do you think exposures below the proposed WES is feasible to achieve?

No. While we acknowledge that achieving the proposed WES-TWA is likely, confirming that the WES-TWA is being met, given that the current analytical method for determination is not adequate, would be impractical.

Control and exposure verification processes will need to rely on qualitative measurement which would not be auditable and would not provide adequate evidence of compliance with the proposed WES-TWA (including WES-STEL where relevant).

- Comments on the appropriateness of the sampling and/or analytical method(s)?

The existing analytical method for determining chromium (VI) is not adequate to measure the proposed WES-TWA in the consultation documents.

NIOSH Method 7600 has not been updated or reviewed since 1994. The proposed WES-TWA is 2 orders of magnitude difference. It may be that possible advances in technology or sensitivity in detection equipment, or alternative methods of determination could make this feasible in the future and therefore we believe the WES-TWA should not be reviewed until test methods are available to verify exposure results at such low levels.