

25 February 2016

Ms Joanna Lamb
NSW Environment Protection Authority
Level 13, 10 Valentine Avenue
Parramatta NSW 2124

Dear Joanna,

Re: Brief Overview of Results for Orica Mercury Independent Review: Stage 3 Environmental Health Risk Assessment

Senversa Pty Ltd was engaged by the NSW Environment Protection Authority (EPA) to conduct Stage 3 of the Orica Mercury Independent Review. The Stage 3 works comprised an Environmental Health Risk Assessment (EHRA) of potential community exposure to mercury originating from Orica's former Chlor Alkali Plant (FCAP) at Matraville during its operation from 1945 until 2002.

The EHRA¹ reviewed the information and data collected during Stages 1 and 2 of the Review, and considered potential health risks to receptors within approximately 1.5 km of the FCAP, including nearby residents and users of the Penrhyn Estuary. The EHRA was undertaken as a Tier 1, or screening level, risk assessment. This involved comparison of measured mercury concentrations in environmental media (soil, sediment, air and fish) to appropriate risk-based screening criteria published by Australian and international regulatory agencies.

Key findings and conclusions of the EHRA were the following:

- The quantity and quality of data collected during Stages 1 and 2 of the independent review were considered adequate to characterise levels of mercury in the environment to which the community may be exposed, and therefore adequate to undertake the EHRA.
- Mercury was detected in all environmental media investigated, however at concentrations below adopted risk-based screening criteria.
- Measured concentrations in environmental media were consistent with those reported due to background urban sources (e.g. fossil fuel combustion, waste incineration and industrial emissions) in cities within Australia and internationally.
- Health risks to the community due to mercury contamination from the FCAP and/or from other background sources of mercury were classified as acceptable in accordance with Australian and international regulatory guidance, and are not discernibly higher than expected for the general public in urban areas of NSW.

The full EHRA report should be referenced for further details, assumptions and limitations.

Yours sincerely,

Victoria Lazenby
Senior Associate Environmental Health Scientist

Kristi Hanson
Principal Risk Assessor

KH/VL/JC

¹ Senversa, 2016. *Tier 1 Environmental Health Risk Assessment, Orica Botany Independent Review – Stage 3*. 24 February 2016.