

## INQUIRY INTO PERFORMANCE OF THE NSW ENVIRONMENT PROTECTION AUTHORITY

**Organisation:** Hg Recoveries Pty Ltd

**Date received:** 28/08/2014

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Partially Confidential

# Hg Recoveries Pty Ltd

A Member of the UNEP Global Mercury Partnership

Partnership Areas: Mercury in Gold Mining, Mercury Supply and Storage,  
Mercury Air Transport and Fate, Mercury in Products.

Heavy Metal Specialists

(ABN 87 144 752 885) (ACN 144 752 885)

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## SUBMISSION NSW LEGISLATIVE COUNCIL Inquiry into the performance of NSW EPA

**Submission Author:** Andrew Helps  
Managing Director  
Hg Recoveries Pty Ltd

**Submission subject:** Section 1 (b) (i) Land contamination issues at Botany and Hillsdale NSW.

I wish to make the following submission in relation to the land contamination issues at Botany and Hillsdale.

### Request for subpoena.

*I request that the committee formally subpoena from the 1991 Davies and Prince report on mercury pollution at the ICI ChlorAlkali plant site. Both NSW EPA and Orica have consistently refused to produce this document that demonstrates the extent of mercury pollution at the old ICI ChlorAlkali plant site.*

### 1. Background Information.

Hg Recoveries is a member of the UNEP Global Mercury Partnership and provides skills and technical assistance in the areas of Mercury in gold Mining, Mercury Supply and storage, Mercury air transport and fate, Mercury in products. Hg Recoveries is currently partnering with the UNEP to develop a field investigation handbook for the identification of feral mercury in the environment.

Andrew Helps the Managing Director of Hg Recoveries has been an environmental disaster manager since 1966 and has project managed many large scale heavy metal pollution incidents across Asia Pacific.

Ian Brown, the Technical Director of Hg Recoveries is an Analytical Chemist who holds additional qualifications in geology and geochemistry together with extensive experience in mercury and heavy metal pollution dating back to the late 1960's including practical experience in running a mercury cell Chlor-Alkali plant.

### 2. Botany Issues.

Hg Recoveries became involved in the ICI/Orica Botany mercury issues back in June 2012 when we first raised an issue with NSW EPA via a visit the Orica proposal for remediation of the Chloralkali plant site at Botany. At this time, EPA (Lamberton) encouraged Hg Recoveries to continue contributing to the discussions via the community engagement process (Attachment #1).

3. In late November 2012 Hg Recoveries was contacted by a resident of Botany who had been given our contact details by the UN Toxics network.
4. On November 22<sup>nd</sup> 2012 I traveled to Sydney to attend a community meeting at Hillsdale that night. Prior to the meeting, I met with [redacted] from NSW EPA at the EPA. I detected a strong undercurrent of nervousness at this meeting in relation to my attendance at the Hillsdale meeting that night. I formed the opinion during the meeting that the three regulators present at the meeting did not understand the enormity of the issues that surround the decommissioning of mercury based ChlorAlkali plants and associated pollution stemming from operating these plants as confirmed by copious overseas experience reported in the literature.
5. When I left this meeting I went with a resident and collected a number of soil samples in Anderson st Botany, at a site that was being 'remediated'.

6. At the meeting in Hillsdale on the night of November 22nd 2012, where the subject of offsite testing was raised by the residents, from the EPA pointed out that there was about \$500,000 in a suspense account that the residents could use to get such work carried out and if the residents felt that this offsite testing was required then they should obtain a quote for this work and to then seek access to the funds to pay for it. Subsequently, the residents asked Hg Recoveries to provide an indicative scope of work for this testing and indicative costing.
7. Myself and our researcher expended a significant amount of time collating a data base on Orica Botany and by late January 2013 we had developed a scope of work to conduct a widespread testing regime for toxic metals and chemicals across the Botany - Hillsdale area.
8. This scope of work was provided by the residents to the EPA who then passed it on to Orica. Orica advised the EPA that the proposal lacked scientific rigor and EPA then adopted the Orica line and advised the Minister accordingly. It is difficult to imagine what sort of mind set in the EPA allows the largest toxic metal polluter in NSW to control a process that would identify the extent of offsite pollution from their commercial activities since 1941.
9. This recommendation to the Minister by EPA triggered a community backlash and a huge petition with over 9000 signatures was raised.
10. Following extensive press activity, the Minister agreed to set up a so called Independent Mercury Review. This process was flawed from day one as it was chaired by the Chief Environmental Regulator who then proceeded to nominate three technical experts of his choice. The results of this process were totally predictable from the outset, which has subsequently been confirmed in practice over the ensuing time.
11. Following numerous requests from the Botany community, I flew to Sydney on the 25<sup>th</sup> of March 2013 and together with long term local residents, I collected additional soil samples across the Botany area in accordance with the NEPM Guidelines.
12. Nine of our 16 surface samples contained mercury and there was a very high probability that this mercury was elemental mercury and was thus very likely to have been recently deposited from gaseous mercury emissions which had clearly emanated from the Orica site over time.
13. One location's samples in Denison street contained mercury, arsenic, chromium and lead in its soil both in the front and back yards but, of more concern, was a high reading of chlorine in the back yard and a lower reading in the front yard.
14. Also of particular concern was the discovery of a high chlorine content on a sample collected from the Denison Street footpath opposite number . This chlorine reading was 2,384 mg/kg. Subsequent work at one of the universities identified it as an Organochlorine (a substance derived from man made chlorine compounds; i.e., it was not due to naturally occurring chlorine from sea or terrestrial salt).
15. On discovering these very high chlorine levels, I conveyed this information to the EPA and it was treated with much scepticism and disdain, despite the fact there was only one possible source of mercury and organochlorine in this area!
16. However, our discovery triggered additional sampling in the area by the EPA and their testing was carried out by their own analytical laboratory (which is, in itself, a conflict of interest). EPA's testing revealed even higher readings of mercury and when the EPA lab finally sorted out its flawed procedures, (which subsequently resulted in the EPA's lab undergoing an urgent NATA Certification check and investigation), also identified highly toxic PCB's, pesticides and high levels of lead and chromium. This revelation then triggered further testing of the whole easement by Sydney Water which subsequently discovered significant levels of PAH's (poly aromatic hydrocarbons - which constitutes another group of classified toxic substances), also existed in this area's soils.
17. I then wrote to the Minister on the 9<sup>th</sup> of April 2013 (Attachment #2).
18. On the 16<sup>th</sup> of August 2013, in the NSW Parliament General Purpose Standing Committee No.5, the subject of Botany toxic metals was raised (page 30 of Hansard). EPA Chairman made a significant number of defamatory comments about myself and my company in relation our pro bono work at Botany. I responded to these comments with a "Statement in response". On the 21<sup>st</sup> of August. The committee executive was unwilling to post this response on the Parliamentary website and instead

only posted a 1 page 'cut and past' from my 8 page document. My full response, which is self explanatory, is appended as Attachment #3.

19. Late in 2013, the Minister appointed \_\_\_\_\_ as an independent reviewer of the process. \_\_\_\_\_ had an undisclosed conflict of interest and should not have been appointed to this position because he had previously worked at the Orica Chloralkali plant in the 1960's. Located at Attachment #4 is the Minister's letter to me and our response to the Minister's letter, dated 19<sup>th</sup> of December 2013 which is appended as Attachment #5.
20. The Fell Report is a water mark of regulatory capture - the bulk of "his" document had clearly been assembled by another undisclosed party and therefore as a consequence of this apparent lack of transparency, it would be appropriate for the Inquiry to call \_\_\_\_\_ as a witness and for him to give his version of how "his" document had been created. What is known is that the EPA provided a document pack to \_\_\_\_\_. Attachment #6 provides a list of all of the relevant documents. Of particular interest to this Inquiry are the items marked in red, as these documents were not supplied to \_\_\_\_\_.
21. Amongst the documents that were not supplied to \_\_\_\_\_ was the Orica Botany Potential Conflict of Interest flow chart I had developed to better understand the complex commercial relationships of the EPA Board, EPA Staff, Orica consultants and Orica staff. This flow chart is appended as Attachment #7.

I do not wish to further burden the committee with the almost 4,000 pages of additional pertinent data which we have assembled on the Orica mercury pollution issue. However, I will do so should the Inquiry determines this to be necessary.

It is my express opinion, however, that this 'additional data' is extremely important for the Inquiry to review so it can obtain a complete understanding of the entire toxic substances issues and their associated analytical concentrations, at Botany.

I would welcome the opportunity for both myself and Hg Recoveries PL's Technical Director, Ian Brown, to talk to the Inquiry regarding any details in this entire matter.

Yours sincerely,

Andrew G. Helps  
Managing Director.