

ORICA BOTANY MERCURY INDEPENDENT REVIEW STAGE 1 - PROGRESS UPDATE

CDM Smith was engaged as an independent consultant in September 2013 by the NSW Environment Protection Authority (EPA) in consultation with the Independent Review Steering Panel formed by members from the NSW Ministry of Health, relevant experts, local councils and community representatives.

The purpose of the engagement was to provide an independent expert review of documentation and other pertinent information relating to the historic emission and distribution of mercury, or mercury-contaminated material, from the Former Chlor Alkali Plant (FCAP) operated by ICI/Orica at the Botany Industrial Park and the potential for offsite contamination.

This newsletter is to update you on progress of the Orica Botany Mercury Independent Review – Stage 1: Data and Information Collection and Review.

What have we been doing?

- In October 2013 we distributed 4,500 questionnaires to local residents and businesses surrounding the Orica site. 155 were returned.
- We interviewed former Orica/ICI employees and organised two open house sessions for local residents to attend and provide information or ask questions;
- We reviewed more than 200 documents and files from the EPA and had on-site access to all of Orica's documentation (approximately 12,000 pages were reviewed by CDM Smith) relating to historic mercury use at the site. Some of those documents dated back to 1942;
- The information on the historical use and release of mercury to the environment, production rates for the FCAP, and historic mercury purchases by ICI/Orica enabled CDM Smith to calculate a mass balance for the mercury used at the plant and released to the environment; and
- On 21 November we issued the draft Stage 1 Independent Review report to the Steering Panel that addresses much of the concern and questions raised by the local community.

Orica Botany Mercury Independent Review Stages:

» Stage 1 - Data and information Collection and Review (currently being undertaken).

» Stage 2 - Environmental Testing Regime (likely to start around March 2014).

» Stage 3 - Health Risk Assessment for Public Health Concerns.

» Stage 4 - Health Risk Assessment for Individuals (if required).



1941 - Development of FCAP



1970 - CAP producing at full capacity



2011 - FCAP demolished and replaced by large shed

ORICA BOTANY MERCURY INDEPENDENT REVIEW STAGE 1 -
PROGRESS UPDATE**Findings and recommendations:**

- CDM Smith has calculated that ICI (now Orica) purchased and used approximately 950 tonnes of mercury during the entire life span of the FCAP (1945-2002). More than 50% of the mercury used can be accounted for with a high degree of certainty, and almost 95% of the mercury can be accounted for with a degree of certainty. The proportion of mercury which can be accounted for is comparable with other chlor-alkali plants operated internationally;
- CDM Smith did not identify any evidence of potential or actual unauthorised or illegal off-site dumping of mercury waste originating from the FCAP;
- The documents reviewed indicate a significant focus by Orica/ICI management on reducing mercury emissions since the early 1970's, when management became aware of issues surrounding mercury toxicity;
- Our review has shown that the risk of off-site soil contamination is low;
- However, to confirm this conclusively and to alleviate community concerns, we have recommended a scientifically justifiable and robust sampling program for off-site surface and subsurface soil samples to be collected at a number of residential and commercial properties in the vicinity of the Botany Industrial Park and a number and local parks. This includes sampling the properties of residents who indicated in response to the survey questionnaire that they were concerned about mercury concentrations at their property (written permission will be sought in Stage 2); and
- Whilst historical data shows risks are low, we also found that additional biota sampling of Penrhyn estuary is necessary to complete existing and available data.

If members of the community have any information regarding past industrial practices at, or around the Orica Botany Site, it can be provided to the EPA at info.botany@epa.nsw.gov.au.

We hope to see you in February at the community presentation (a separate newsletter and invitation with details will be sent out in January 2014).

Further information and the final draft Stage 1 report can be downloaded from:
<http://www.epa.nsw.gov.au/Oricabotanycttee/indrevoricabotany.htm>

Looking Forward:

- » **December** - Finalising Stage 1 report as CDM Smith has received feedback from Panel members.
- » **Late January** - Final draft Stage 1 report available on EPA website.
- » **February** - Community meeting.
- » **Late February** - Submission of Final Stage 1 report.
- » **Early 2014** - Panel will select a suitable consultant to undertake Stage 2 of the Independent Review Process.
- » **March 2014** - start of the Environmental Testing Regime.