

Committee Secretary  
Senate Legal and Constitutional Affairs Committee  
PO Box 1600  
Parliament House  
CANBERRA ACT 2600

Friday 24 February 2017

By email and post: [legcon.sen@aph.gov.au](mailto:legcon.sen@aph.gov.au)

Dear Secretary,

### **URGENT: RISK OF CADMIUM POISONING ON NAURU**

I am writing to you as National President of the Australian Lawyers Alliance (ALA). The ALA is a national association of lawyers, academics and other professionals dedicated to protecting and promoting justice, freedom and the rights of the individual.

This letter seeks to draw your attention to a potentially serious workplace health and safety concern on Nauru, which could be having irreversible health impacts for refugees, asylum seekers and workers who have been sent there by Australia (and similar impacts for all other inhabitants on Nauru).



Cadmium, a heavy metal that is highly toxic, has been known to be present in high concentration on Nauru. The health consequences include irreversible kidney damage, lung damage, bone damage and cancer. There is also evidence of genotoxic effects in human cells exposed in utero.<sup>1</sup>

The high incidence of cadmium on Nauru is related to the phosphate mining that has taken place there for over a century. A 2012 Due Diligence report commissioned by the then-Department of Immigration and Citizenship (now the Department of Immigration and Border Protection) prior to the re-establishment of the immigration detention facility in Nauru noted that the existence of cadmium posed a threat to the groundwater in Nauru.<sup>2</sup> It also notes a report completed by the Government of Nauru in 1996 which details the existence of a 'cadmium "slime" dump near Buada Lagoon. The [1996] report notes that further studies need to be carried out regarding the extent of the threat of cadmium disposal to human health and the environment.'<sup>3</sup>

It is not known if the further studies recommended by the Government of Nauru in 1996, or any other remedial activities, have been completed or not. The ALA would appreciate clarification on this point. While it is understood that some dust reduction measures have been taken to minimise the dust from the mine, it is not clear whether these have been effective.

### **Studies suggest high risk exacerbated by prolonged exposure**

Academic sources have regularly flagged the high incidence of cadmium in the phosphate in Nauru.<sup>4</sup> A study completed in 1992 detailed the extent of the cadmium contamination throughout Nauru,

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<sup>1</sup> See Worksafe, *Cadmium – Hazardous Chemicals Requiring Monitoring*, (2013), especially [14] and [15], <http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/mr-cadmium>.

<sup>2</sup> Department of Immigration and Citizenship, *Nauru Regional Processing Centre: Environmental Due Diligence Report*, 15 November 2012,

<https://www.border.gov.au/AccessandAccountability/Documents/FOI/FA140401092.PDF>, 41.

<sup>3</sup> *Ibid*, 45.

<sup>4</sup> See, for example, SJ Gale, 'The mined-out phosphate lands of Nauru, equatorial western Pacific', (2016) 63(3) *Australian Journal of Earth Sciences* 333, 341; Sascha Feary, 'Nauru – Opportunity in loss', (2008) 14 *Pacific*



including testing local residents for evidence of cadmium poisoning.<sup>5</sup> In this study, numerous sites in Nauru were tested for cadmium contamination, as well as the residents.<sup>6</sup> This study revealed that there is a high incidence of cadmium in the environment, including in dust around the island. The incidence was often highest near dirt roads and near the mining facilities. It in turn noted that a 'high potential for human exposure to cadmium by both ingestion and inhalation on Nauru is clearly indicated by the data obtained in this study'.<sup>7</sup> Testing of residents demonstrated high readings for cadmium, particularly in those with diabetes or other kidney problems, noting that a cause and effect relationship was suggested by the data.<sup>8</sup>

The study also revealed that cadmium levels detected often increased with age.<sup>9</sup> This indicates that the impact of cadmium exposure is cumulative, meaning that the longer that people are living on Nauru, the greater the risk that they will suffer irreversible damage. It is possible that the existence of increasing cadmium levels in the human body can be asymptomatic until such time as irreversible damage occurs. This study is included with the posted version of this letter as **attachment 1** as it is too large to email.

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*Conservation Biology*, 238, 239; P Loganathan, MJ Hedley & ND Grace, 'Pasture Soils Contaminated with Fertilizer-Derived Cadmium and Fluoride: Livestock Effects', in DM Whitacre (ed), *Reviews of Environmental Contamination and Toxicology Volume 192* (2008) 29, 35-6.

<sup>5</sup> C Blake, *Environmental distribution of heavy metals on Nauru, Central Pacific, and possible relationships to human health* (November 1992).

<sup>6</sup> *Ibid*, results, 29-50.

<sup>7</sup> *Ibid*, 67.

<sup>8</sup> *Ibid*, 49.

<sup>9</sup> *Ibid*, 65-6.



### **Risk requires urgent testing and further investigation**

It is the ALA's understanding that the detention facilities in which refugees, asylum seekers and workers live and work is close to the current phosphate mine. This is demonstrated in the attached two maps: a google map depiction of the location of the centre, the mine and Buada Lagoon (where cadmium slime has been reported), and a second topographical map which suggests that the phosphate mine is uphill from the centre (**attachment 2**). The ALA also understands that symptoms consistent with cadmium poisoning have been reported among refugees and asylum seekers on Nauru.

Given the high risk of cadmium exposure that appears to exist on the island, combined with the gravity of the consequences of cadmium poisoning, the ALA believes that there is an urgent need to conduct widespread testing of all refugees, asylum seekers and workers on Nauru, with their full and informed consent, to assess whether they have been exposed to this heavy metal. This testing should be done by a lab with experience testing for exposure to cadmium, conduct testing of hair and nail samples as well as blood and urine, and have the capacity to conduct parts per billion (rather than the standard parts per million) testing. The environment must also be tested to assess whether the level of cadmium is within acceptable standards as applied in Australian workplaces.

### **Potential liability**

The ALA believes that, given the breadth of evidence regarding the high level of cadmium in the environment, combined with the evidence of the serious impacts that cadmium poisoning can have, entities operating in the Australian detention centre may be liable to prosecution under the *Work Health and Safety Act 2011* (Cth) (WHS Act).



The WHS Act establishes a primary duty of care for the ‘person conducting the business or undertaking’ (PCBU) to ensure the health and safety of workers (s19(1)) and that the health and safety of other persons (who would include refugees and asylum seekers) is not put at risk from the work carried out by the PCBU (s19(2)). This Act has extraterritorial application by virtue of s12F(3), meaning that liability could arise from failures to meet obligations under the Act in Nauru.<sup>10</sup> Given that the 2012 Due Diligence report indicated that there was a risk related to cadmium that needed further investigation, putting the Department on notice that there was a risk of injury or illness associated with locating the detention facility on that island, any failure to complete this additional investigation and adequately safeguard against cadmium poisoning could constitute a breach of this duty of care. Liability can attach to numerous actors in a workplace (s16) and duties are not transferrable (s14). As such, it is possible that the Department, IHMS and others operating in the detention facilities could potentially have separate liability under the Act.

There is also the possibility of civil liability arising, if injuries or illnesses are sustained as a result of cadmium exposure. As found in *Plaintiff S99/2016 v Minister for Immigration and Border Protection*,<sup>11</sup> Australia has a duty of care towards refugees living in the community in Nauru. While in that case the duty did not extend to requiring the woman at risk be brought to Australia, it was clear that putting her in a situation where her health could be irreversibly damaged infringed that duty.

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<sup>10</sup> For more information regarding liability under the WHS Act, see Australian Lawyers Alliance, *Untold Damage: Workplace health and safety in immigration detention under the Work Health and Safety Act 2011* (Cth), <https://www.lawyersalliance.com.au/ourwork/untold-damage/untold-damage>.

<sup>11</sup> [2016] FCA 483.



Again, if refugees, asylum seekers and workers were found to be suffering from cadmium poisoning, following the warning in the 2012 Due Diligence report that cadmium was present and further testing was required, it is possible this common law duty could have been breached.

### **Urgent action required**

Given the seriousness of this risk, we request urgent testing of all refugees, asylum seekers and workers be conducted to assess whether anyone has been exposed to unsafe levels of cadmium, in line with the standards outline above. We also request that urgent testing be done of the environment, in line with best practice environmental testing standards, to assess the risk of cadmium exposure for all people on Nauru. We ask that you update us about progress made on this testing at your earliest opportunity, and within 14 days.

If it is found that anyone tested is suffering from cadmium poisoning, the ALA believes the only viable option is to bring those individuals to Australia for urgent treatment, and to prevent further exposure. While respecting the right of the Department to manage its immigration policy in the way it sees best (so long as it meets with Australian and international law), the urgency of this risk is so serious that unless alternative countries can be found immediately, bringing any affected individuals to Australia may be essential to preventing further deterioration of health and limiting any liability.

To ensure further damage is not done, the ALA believes the most prudent course of action would be to immediately relocate all refugees, asylum seekers and workers to Australia pending the outcome of investigations.



We would also like to flag the importance of supporting Nauru to resolve this risk in relation to its own population.

Please note that this letter is being sent to IHMS, Comcare and members of the Senate Committee on Legal and Constitutional Affairs currently conducting the inquiry into Nauru and Manus Island, and possibly other relevant parliamentarians.

Thank you for your attention in this important matter. I look forward to your prompt response.

Please do let me know if I can be of further assistance, in which case please direct correspondence to Anna Talbot, Legal and Policy Adviser, Australian Lawyers Alliance, on (02) 9258 7700 or at [anna@lawyersalliance.com.au](mailto:anna@lawyersalliance.com.au).

Yours sincerely,

A handwritten signature in black ink, appearing to read "Tony Kenyon". The signature is stylized and somewhat abstract, with a large loop at the beginning and a series of smaller loops and strokes following.

Tony Kenyon  
Australian Lawyers Alliance  
National President