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# Lead Contamination in Stormwater

## SOME of the SOURCES of LEAD in STORMWATER / ROAD RUN-OFF

- Leaded paint debris from uncontained dispersive paint removal or from flaking, chalking or peeling exterior pre-1970 residential paint and paint of any age that is industrial, marine, automotive, or from farm machinery
- Leaded slag waste when smelter slag is used as the abrasive blast material for removal of surface coatings - this slag is also likely to contain arsenic, mercury, cadmium, zinc and copper in hazardous quantities<sup>1</sup>
- Lead contaminated soil washed into drains during rain, remediation or landscaping<sup>2</sup>
- Wheel weights which fall off vehicles and end up in stormwater at an alarming rate<sup>3,4</sup>
- Vehicles - for a comprehensive list of vehicular sources of lead in stormwater, see article overleaf by Floyd & O'Brien<sup>5</sup>
- Leaded waste from the burning of vehicles, fireworks and other items in gutters etc
- Spillage of lead-contaminated wastes / leaded products (eg pigment) being transported
- Yellow and white road marking paints used in Council car-parks, streets, buildings, etc
- Sewage overflows. Sewage is contaminated with lead from people cleaning their properties and from industrial sources.
- Building cavity dust and other demolition waste from buildings and structures

## CASE STUDY

In October 2000, despite complaints from the owner of the neighbouring commercial premises, a contractor was permitted to proceed with the use of Pasmenco Cockle Creek lead smelter slag during abrasive blasting to remove pebble coating from a 66 m long by 6 m tall supermarket wall, situated less than 200 m from the edge of Lake Macquarie. The Council decided on 4<sup>th</sup> June 2001 to prosecute the contractor for contamination of stormwater [though the neighbour has provided photographic evidence to show that the air was also contaminated and a consultant's report has found that the land still is contaminated by the event and inadequate clean-up, thus enabling ongoing stormwater contamination]. A consultant estimated that 222,000 tonnes of contaminated solid waste were created during the pollution incident (soil + pulverised slag + paint dust) - most has not been accounted for - and measured up to 28 times the NEPC (National Environment Protection Council) guideline level for arsenic in the soil.<sup>1</sup>

## REFERENCES

1. MJM Environmental Pty Ltd *Analytical Report to Council* 08.11.2000
2. Inner Western Suburbs Courier, The - Ianssen, Kai, *Glebe Lead In A Jam*, 14.11.1994
3. Dale, Malcolm and Ford, Patricia, *Case Study: The Accumulation Of Lead In Soils And Road Gutters: A Comparison Between Rozelle And Kings Langley* in Leichhardt Municipal Council, State of the Environment Report 1996
4. Root, Robert A, *Lead Loading Of Urban Streets By Motor Vehicle Wheel Weights*, in Environmental Health Perspectives Vol 108 No 10, October 2000
5. Floyd, Ted & O'Brien, Elizabeth, *Good News on Stormwater - Lead Acid Batteries: The New Stormwater Issue?* in LEAD Action News Vol 6 no 3 p 11 1998

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