

CAR BATTERY RECYCLING- A HOTSPOT FOR LEAD POISONING IN MOMBASA, KENYA

Although IFCS VI and ICCM2 prioritized lead in products as an issue of concern, human exposure to actual lead is still at worrying threshold especially in the developing countries and countries with economies in transition. In Kenya for example, the government has taken appropriate policy measures to phase out leaded gasoline. However, many people including children are exposed to actual lead from the battery recycling and lead refining plants in the country. Majority of these companies proliferate in the country through the Foreign Direct Investments (FDIs). In Kenya they are called Export Processing Zones (EPZ). This arrangement makes it possible for the foreign companies to exploit the weaker environmental regulations and low literacy in most of the developing countries, Kenya being an example. Their focus is on the enormous profits they are able to make from the Kenya people, their exposure to lead at work and from emissions to the environment notwithstanding.



Metal Refinery EPZ Ltd. Offices



Lead filters of the factory

Metal Refinery EPZ Ltd. is one of the many companies that refine lead from car battery in Mombasa Municipality in Kenya. The company was incorporated in Kenya from India nearly three years ago. Its proximity to a nearby slum dwelling- Owino Ouru slums- is less than 50 meters. The National Environmental Management Authority (NEMA), Kenya's equivalence of US Environment Protection Agency (EPA) cleared it to operate in this area. It curbs release of lead particles through the chimneys through a crude cool-down process. The solid waste from the factory is taken to the municipal dumpsite which has not been partitioned and labeled.

Although it can be argued that this factory has offered between 20-30 job opportunities to the locals, where they earn about Ksh. 250 (USD 3.5) per day, the damaging effects of lead poisoning has been evidenced in the area. Although it has not been ascertained, it can be argued that workers in this factory have higher blood lead levels. This is because there is very poor occupational health and safety measures put in place by the company to protect the workers from exposure to lead. Much worse is

the fact that residents of the nearby slum have experienced cases of lead poisoning. It has been ascertained through medical diagnosis that three children from the slum have their blood lead levels measuring as high as 23 µg/dl, 17 µg/dl and 12 µg/dl. These levels are very high compared to the WHO standards. They have since developed strange diseases suspected to be neurological damage.

Pressure due to public outcry led to the closure of the company in early 2009 by the Public Health Department. But residents of the slum have raised alarm that the factory operates in the night. The company commissioned an environment audit as required by law. Although the audit report was approved by National Environment Management Authority (NEMA), it failed to address anything on lead concentration in the nearby stream, soils, blood of residents and workers etc. The report did not refer even to the medical reports of the diagnosed children. Unexpectedly, the Public Health Department has given a clean bill of health to the factory to reopen. This means that more people shall continue to be exposed to the hazardous chemical and more children shall continue to develop neurological problems. The municipal council of Mombasa has also given a license to the company to deposit its solid waste at the poorly managed municipal dumpsite at only about Ksh. 7,000 (USD 100). This gives another route for the continued exposure to the poisonous lead debris.



Batteries before extraction of lead



Powdered lead packed by people into sacks

The sad story of Owino Ouru slums is just but an example of many unreported cases of how exposure to actual lead is rooted in Kenya and the rest of other developing countries and countries with economies in transition through uncontrolled and unregulated recycling of lead from car batteries. Although the use of lead in products has reached worrying levels globally, it cannot be more dreadful than exposure to actual lead like in the case of Owino Ouru slums and other sites in Kenya. Eco-Ethics International- Kenya Chapter being one of the Civil Society Organizations (CSOs)

advocating for sound management of chemicals and chemicals waste in Kenya is concerned with this issue. After diagnosing the situation, we can propose four possible actions:

1. Commissioning an independent and highly professionally run environmental and social audit of the factory and its environs:- this will include assessing the effectiveness of the factory's environmental management strategies, occupational health and safety measures, determining lead concentration in the soils, air, and the nearby stream which is used by the slum dwellers for domestic purposes, blood lead levels of former workers etc.
2. Seeking compensation for the children who have developed neurological problems:- this means filing the case in court through competent lawyers. Presently, the families use their desperate income in treating the children yet the company has been cleared by the government authorities to operate
3. Seek a court order to stop further operations of the factory in its present location:- the slum existed before the factory and therefore the factory should be relocated to another area where severe harm will not be caused to humans and observe adequate environmental management systems
4. Sensitize the community to know the dangers of exposure to lead and their rights to a clean, safe and healthy environment. This should also culminate into the development of a strong civil society network to campaign against such factories whose effects are of great harm to human health.

To realize these dreams we are opening up for strong partnerships with like minded individuals and organizations. This will help us in terms of sharing information and experiences, sharing resources, technical advices and adding many voices to the advocacy.