

# Ecological Genocide

The Impact of Used Lead Battery Smelting

Lead poisoning has not been completely phased-out from Indonesia. This time, the threat of lead (Pb) poisoning comes from used lead acid battery recycling to produce lead inglot, a raw material to produce battery, electronic part, pait, glass and other usefull goods. We understood that from a perspective, used lead acid battery smelting has high economical value that could support economic development. However, various researchs regarding lead contamination show that lead exposure could give many negative impacts to human helath that can be fatal, for instance decreasing fo IQ points in children, increasing aggressiveness and anti social behaviour, fetus abnormality, high blood pressure, female frigidity, misscariage, infertility related disease, tremor, kidney failure, permanent brain damage and death.



65 µg/dL (very high) found in a seven year old girl. Meanwhile according to WHO, the threshold for normal BLL is maximum 10 µg/dL. Furthermore, in Cinangka Village there children who are born and raised with having disabilities related to lead poisoning such as down syndrome, mental disorder, underdevelop body, accute anemia, tremor, autism, and others. Many adults are suffering from high blood pressure, tremor, stomach cram, infertility, erectile dysfunction, etc. **Evenmore, we might expect a loss of**

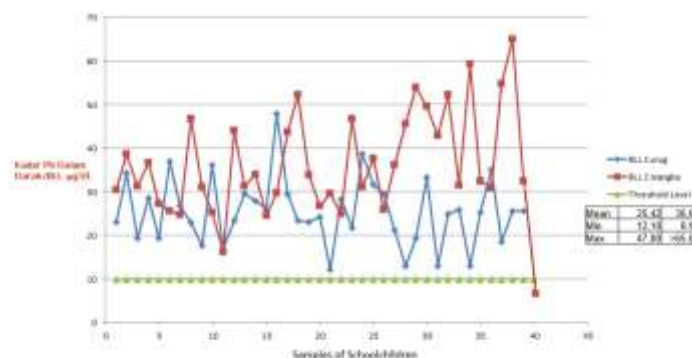
**generation in Cinangka Village, an ecological genocide, as a direct impact of lead contamination.**

Our community in Cinangka Village, Ciampea, Bogor Regency suffers from high lead contamination. Our soil is heavily contaminated by lead and we found values exceeding thousands ppm, yet the safe threshold of lead in soil according to

### Not the Only Cinangka

Lead exposure come from ULAB smelter is not just happened in Cinangka Village, but also cover another 70 hotspot in Jakarta and it surrounding areas (JABODETABEK). Also it is happened in another Province of Central Java such as Tegal, and Klaten, then Province of East Java such as Lamongan, and Pasuruan. The victims also is found in those places, where people especially children are suffered with illness and dieses that is indicated

WHO standard is maximum 400 ppm. Blood Lead Levels (BLL) of children in Cinangka Village in average is 36,62 µg/dL, with minimum level of 16,2 µg/dL found in a six year old boy and maximum level above



Kadar Pb pada Anak-anak Curug dan Cinangka

Our appeal to government officials has not been considered. There is currently no real action to save the community in Cinangka from lead contamination, especially children. There is no real effort to stop permanently the sources of lead contamination from used lead acid smelting. There is no clean up follow up or complete remediation, which is to clean entirely area affected by lead contamination, such as streets, school yard, fields, football court, river bank, etc.

Jakarta, 17 May 2013

## What is lead?



Lead, Plumbum (Pb) or black lead belongs to heavy metal family which is dangerous and toxic. It is a grey substance and one of heavy metals that is not required by human body. Lead can easily melt and be shaped, rust free, solid and could catalyze drying process. Because of those properties, lead can be found in many things, from pait, pipe, solder, fishhook ballast, and bullet. Lead is used also in the battery industry, piping installation, porcelain production, food and beverage packaging and many other things.

### Lead exposure

In the case of Cinangka Village, lead is being emitted from used lead acid battery smelting/recycling, then it spreads across the area through the air and accumulate on soil. Lead enters human body through respiration, oral (food and drink contaminated with lead) and through skin. Children absorb lead much faster than adult because of their activity.

### Health Impact

- Lead is considered as neurotoxin. Acute lead poisoning could bring gastrointestinal symptom such as stomach cramp, colic, and usually indicated by constipation and nausea. Lead intoxication can be

- very slow. Fatigue, irritability and gastrointestinal are the early indication of chronic lead intoxication. Lead exposure with low dosage can already make negative impacts to the development and function of central nerve system. Other symptoms include loss of libido, infertility, menstrual related problem, and abortus spontaneous.
  - Lead impacts on adults covers among others, reproduction related problem, premature birth, abortus, high blood pressure, heart disease, digestive disease, problem in central nervous system, kidney failure, liver failure, mental breakdown, anemia, etc. On the other hand, children with BLL of more than 10  $\mu\text{g}/\text{dL}$  could experience IQ loss of 2 – 3 points and learning disability.
- BLL of under 10  $\mu\text{g}/\text{dL}$  is proven to have negative impact for children, such as anemia and loss of IQ. Therefore there is no safe limit for lead in children's body. No matter how low it is, it could still pose danger to them.



Pb berlaku seperti "invisible killer", saat penderita sedang mengalami keracunan timbel, nyaris tidak ada gejala yang

- Pb acts like an invisible killer, when someone is experiencing lead exposure, we could barely see the symptom on that person. We could only notice the symptom when the accumulation has reached 10  $\mu\text{g}/\text{dL}$  or more.

