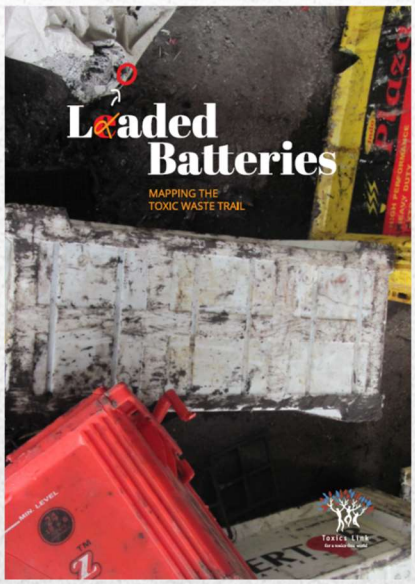
Toxics Link
for a toxics-free world

End of Life Lead Acid Battery Waste Management

Roundtable Meeting Report



Organized By

Toxics Link

The Hans, Delhi, March 28, 2019

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Minutes of the Meeting: "End of life Lead Acid Battery Waste Roundtable"

Introduction

Toxics Link, as part of its work on hazardous waste, organised a roundtable on Used Lead Acid Battery Waste on March 28th, 2019 at The Hans, Delhi, India. The roundtable aimed to evaluate the status of implementation of Batteries (Handling and Management) Rules and discuss the road ahead with various stakeholders in attendance. The roundtable was attended by various stakeholders concerned to lead acid batteries and hazardous waste management, such as international and national regulatory bodies and advisors, organizations and think tanks, automobile organisation, etc. The findings from Toxics Link report on "**Lead Acid Batteries: Mapping the Toxic Waste Trail"** were discussed with the participants of the roundtable.

Image 1: Participants in the LAB roundtable

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Leaded Batteries: Mapping the toxic waste trail

Toxics Link in its recent report '**Loaded Batteries: Mapping the Toxic Waste Trail'** has tried to evaluate the current status of Used lead acid battery management in the country, including looking at value chain and recycling practices in four states-Delhi, Rajasthan, Andhra Pradesh and Jharkhand. **Ms. Priti Mahesh**, Toxics Link shared the findings by highlighting that 'Leaded' batteries are infact 'Loaded' with toxicity and have huge growth potential. The positive is that lead is one of the most recycled metals and can be indefinitely recycled without downgrading the quality and is currently regulated under Batteries (Management & Handling) Rules 2001 and the subsequent 2010 amendment. The study threw up interesting facts like though consumers

Image 2: Ms. Priti Mahesh sharing the findings of LAB study report by Toxics Link

mostly returned the ULAB in the clean channel; it was from dealers that the batteries leaked out to informal chain.

Informal lead acid battery recycling units were found to be spread in and around all the studied cities and were found to be dealing with both dismantling of batteries and recovery of lead, resulting in major environmental and occupational hazards. Smelting of lead is being carried out in open/closed chambers without any pollution control measures and would mean lead emissions. Workers mostly work without any Personal Protection Equipment and reported lead spill accidents, nausea, respiratory problems, and skin diseases. Abnormally high lead blood levels have also been reported among the workers from lead acid battery units as shared by a treatment centre.

She has also pointed out that the consumer awareness in general is poor regarding disposal and processing concerns of used lead acid batteries as well as about the Rules. The government data also is incoherent with many states not even being reporting. The concerns, raised by Ms. Mahesh, were a clear failure of Battery Rules, unavailability of collection or recycling information from manufacturers, dealers playing the deciding roles for the waste to flow to formal or informal , informal recycling of LAB in inferior condition out in open, etc. Increased EPR accountability, improved monitoring, closing down of informal operations, ensuring worker safety, training of workers and ensuring a robust collection network were some of the recommendations.

Sharing of on-ground experiences

Mr. Mahesh Sharma, Gramin Vikas Evam Paryavaran Sanstha (GVEPS), the Rajasthan study partner, recounted his experience acknowledging the fact that it was this study which made him and his organisation aware of the lead acid battery management issue. As part of the study, he observed that consumer awareness was almost nil and dealers were unwilling to divulge information on collection or recycling amounts. Formal and informal units were found to follow almost similar recovery processes and practices. Access was almost always denied in the formal units. No information on records was received from SPCB even after filing RTIs. **Mr. Kunal** from **Lok Swar**, the Jharkhand partner, shared similar observations for the state. In absence of any data in SPCB, primary survey was the only way out. During the primary survey, the smelting units never allowed them to visit inside. Poor awareness among the consumers, dealers and workshops, lack of occupational safety and environmental protection measures were concerns, mentioned Kunal.

Image 3: Sharing of observations from Rajasthan

Mr. Vinod Kumar from **Toxics Link** shared the experience from Delhi. Lead acid battery recycling units, he mentioned, largely operate informally in the bordering areas of Delhi. Raw materials are so easily available that one can even buy every part from open market and manufacture a LAB by their own. The units operate like a mafia society where outsiders are not allowed.

Image 4: Sharing of situations from Jharkhand

Major points of Discussion

Mr. Ravi Agarwal, Director, Toxics Link, mentioned that Battery Rules were the first in India to introduce EPR. It is the manufacturers' responsibility to take in account the collection including those from dealers, he stressed. Manufacturers shall take the prime responsibility to counter the situation along with generating awareness as is stipulated by the law and the government can only regulate and monitor the same. The existing informal collection network can be roped in also for ensuring proper collection but we have to careful that processing happens only in formal spaces. He pointed out that the parallel economy of dealers working hand in hand with informal sector in the business as usual model is alarming.

Mr. Satish Sinha, Associate Director, Toxics Link, cited how lead has been a focused area of work for Toxics Link through its research and advisory works on lead in paints, jewelry, toys and now with the end-of-use lead acid batteries. He expressed his concerns regarding the implementation of Battery rules and pointed out that open smelting of lead is evident in many cities and is often being carried out at night in densely populated areas. He has also mentioned about some 400 documented lead poisoning cases by Dr. Chaddha in his Samaypur Badli (Delhi) nursing home which he said can anyone access to as proofs. Requesting for suggestions on what can be done to improve the situation and to bring in the attention of policy makers using this report, he opened the house for discussion.

Image 5: Mr. Ravi Agarwal sharing his thoughts on the issue

Mr. L. Pugazhenthy, Executive Director, India Lead Zinc Development Association (ILZDA), began referring to the fact that lead scraps have high recycling value and being easy to smelt, lead recycling in India are literally fly by night operations as there is no regulatory monitoring. He cited examples of state of the art recycling facilities in developed

countries where the metal recovery is almost 98%, unlike in the Indian informal sector where recovery is less and comes at the cost of compromising health and environment. Even in battery manufacturing, there are units locally producing batteries from refurbished old batteries and selling them at a cheaper price with free repair guarantees. These units do not pay taxes and hardly follow any environmental norms. He emphasised on the journey of Battery Rules from 2001 and how the successes and failures happened. After the rule came in 2001, authorisation was mandatory for recyclers with CPCB and manufacturers could only auction to registered recyclers and the rules saw positive results. About 98% of the used LABs started reaching to the dealers but from where it started diverting to the informal recyclers. Dealers were then asked by MoEF to file returns to the manufacturers which in turn were coming to CPCB. With the 2010 amendment, the power of registration and monitoring were transferred to the State Pollution Control Boards, which is when the registration numbers went down. The SPCBs were never trained on the matter and always come with the excuse of lack of manpower and resources. Accountability of the SPCBs in implementation and data credibility must be monitored by CPCB, he suggested.

Image 6: Mr. Pugazhenthy sharing his views

Mr. Harinder Singh from **Volta Redox,** highlighted the data inconsistency provided by various SPCB and CPCB, thereby reinforcing the fact that there was no accountability for the management of used lead acid battery waste. He recommended that the grey areas of legal implementation be taken up with the concerned authorities. Raising awareness at consumer level was also important, he felt, particularly on areas like, increasing the life span of battery usage thereby leading to reduction on of waste.

Ms. Ruchika Drall from **Indian Renewable Energy Development Agency Limited** mentioned that though most of the projects funded by them promote grid system thereby not requiring batteries, but in the solar home system scheme (by IREDA) for access to energy in ensuring end-of-use battery management and their take-back is a major concern which they are trying to address. She asked for suggestion so that policies could be designed to improve takeback from this usage sector.

Ms. Shyamala Mani from **NIUA** raised her concerns on the business as usual situation in the informal sector. She has also suggested whether the intervention of intermediate technologies (like e-waste eco-park) can improve the situation in informal battery sector. She suggested that probably the solution is in bringing in affordable technologies rather than just closing down the informal sector.

During the discussion, **Dr. Jayapriya D** from **Pure Earth** referred to a Pure Earth initiative which is trying to mainstream informal lead acid battery sector. **Mr. Sujit** from **CSE** also cited examples of initiatives by governments in many South Asian and African countries to transform informal sector to formal ones. **Dr. Gargi Biswas** from **CPCB** pointed out the need for better awareness and better utilisation of proper administrative channels as well as inclusion of local administrative bodies to control the situation.

Priya Ghose from **US Embassy** emphasized that it is important to involve the healthcare sector too into the issue as had happened for air pollution, wherein doctors appeared on national television outlining the health impacts and could create a huge influence on mass. She suggested for a similar campaign to bring in the issue of lead acid battery mismanagement into public limelight.

Image 7: Discussions during the rountable

Dr. Shilpi Karmakar from **UNDP** raised the concern of cost to quality of a product life cycle and who bears that cost. Once this concern is addressed, she opined, the benefit will go down to even the lowest part of the pyramid which is the informal sector in this case. She has also

suggested consumers awareness campaigns like Swachh Bharat for mainstreaming the issue and bring in changes in day to day management.

Mr. Satish Sinha welcomed the suggestions and also pointed out the need to be a bit cautious about training of informal lead acid battery recyclers. Recycling and smelting operations require a minimum technology intervention which may be difficult. He stressed on the need to understand the initiatives better.

Recommendations suggested

Findings of the report, 'Loaded Batteries: Mapping the toxic waste trail' was well received in the meeting and the workshop was concluded by Mr. Satish Sinha with a revisit to the recommendations to take the issue forward using the report. Some of the important recommendations came out during the meeting were as follows:

Image 8: Concluding Remark by Mr. Satish Sinha

- To initiate a campaign around the issue while utilising the report. The report shall be submitted to the concerned Parliamentary Chair post the national election.
- A group with allied organisations/institutions, concerned industrial bodies shall be formed to make noise about the issue together. Mr. Pugazhenthy also suggested to call for a meeting with the allied groups and to engage press for taking up a media campaign
- Further state level assessments of lead acid battery management and state level campaigns engaging and networking with state actors and concerned stakeholders.
- Further research on the economics of informal to formal transformation cost, affordable and clean technological interventions,
- Inclusion of MSMEs in the campaign to clean the system eradicating the diversion to informal from local companies.
- Engaging the healthcare sectors, particularly the doctors in public debates and forums to talk the about the issue and its health impacts.
- National level awareness campaign for consumers including a social media campaign around the issue

Annexure

Attendees List

Name	Designation	Organization
Alok Sinha	Consultant	United Nations Development Programme (UNDP)
Chandan Singh	Research Associate	Central Pollution Control Board (CPCB), Delhi
Dr. Gargi Biswas	Research Associate	Central Pollution Control Board (CPCB), Delhi
Dr. Jayapriya D.	Project Associate	Pure Earth
Dr. Shilpi Karmakar	Consultant	United Nations Development Programme (UNDP)
Harinder Mohan Singh		Volta Redox
Ipshita Baishya	Communications Coordinator	Toxics Link
Kopal Dixit	Program Officer	Toxics Link
L.Pugazhenthy	Executive Director	India Lead Zinc Development Association (ILZDA)
Mahesh Sharma		Gramin Vikas Evam Pariyavaran Sanstha (GVEPS)
Manjusha Mukherjee	Program Coordinator	Toxics Link
Prince Kunal	Coordinator	Lokswar

Priti Mahesh	Chief Program Officer	Toxics Link
Priya Ghose	Environment Specialist	US EMBASSY
Ravi Agarwal	Director	Toxics Link
Ruchika Drall	Environment Officer	Indian Renewable Energy Development Agency Limited
Satish Sinha	Associate Director	Toxics Link
Sherry Pande	Program Officer	Toxics Link
Shyamala Mani	Professor (Retd.) and Team Leader SBM SWM Exposure Workshops project 2018-19	National Institute of Urban Affairs (NIUA)
Srimanta Ghatak	Dissertation Trainee	Sycom Projects Consultants Pvt. Ltd.
Sujit Kumar Singh	Senior Programme Manager	Center for Science and Environment (CSE)
Vinod Kumar	Program Officer	Toxics Link