



# **MANAGEMENT OF USED LEAD ACID BATTERIES (ULAB) IN LIBERIA**

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# Environmental Protection Agency- LIBERIA

- Established by an act of legislation, the Environmental Protection Agency (EPA) is charged with the principal responsibility of promoting sustainable development and conserving the environment through local and international best practices.
- The Agency carries out its task in partnership with line ministries and agencies.

# LICENSING OF ULAB RECYCLERS

- Before operating a ULAB recycling plant, the proponent applies for a permit to the EPA
- The EPA (through a certified Evaluator) conducts a full Environmental and Social Impact Assessment (ESIA) of the proposed project site as well as the proponent's potential to mitigated risks associated with project implementation.
- If a proponent is deemed to certify all conditions in line with best practices, the license or permit is issued.

# ULAB RECYCLING

- EDGAIL INC is the only registered company involved in the collection and export of ULAB in Liberia.
- In the past, EDGAIL had been involved in the smelting and recycling of ULAB but due to poor technology, the company opted to halt the process in 2015.
- Since then EDGAIL simply collects, package and export the lead component of the ULAB.

# RECYCLING PROCESS

- ULAB is purchased from industries, homes and garages by EDGAIL agents, usually at a cost of 10-15% the price of an equivalent new battery.
- ULAB is then transported to the EDGAIL processing plant.
- The battery is drained to remove the acid, then crushed open and the plastic and lead components are separated.

# RECYCLING PROCESS and EXPORT

- The lead component is gathered, placed into containers and weighed.
- When weighed, the containers are stock piled pending export to India or South Korea.
- The export and sale of the lead strips is facilitated by a British Company called Jacob Metal Ltd (JML).

# ULAB EXPORT

- JML strongly adheres to the provisions of the Basel Convention in all of her dealings.
- On the average, EDGAIL exports about 360 tons of lead strips per annum

# WASTE MANAGEMENT and WORKER'S PROTECTION

- The plastics collected during the sorting process are discarded as plastic wastes.
- The acid is neutralized with sodium hydroxide pellets and the resulting solution is used for sewage treatment.
- All workers at the plant are fully attired in their Personal Protective Equipment (PPE) to reduce the risk of contracting diseases associated with acute or chronic exposure to lead.



# CONCLUSION

- EDGAIL INC is the sole company involved with ULAB recycling in Liberia.
- EDGAIL anticipates that with the acquisition of advance technological equipment in the coming years, she would consider smelting and recycling ULAB in Liberia.