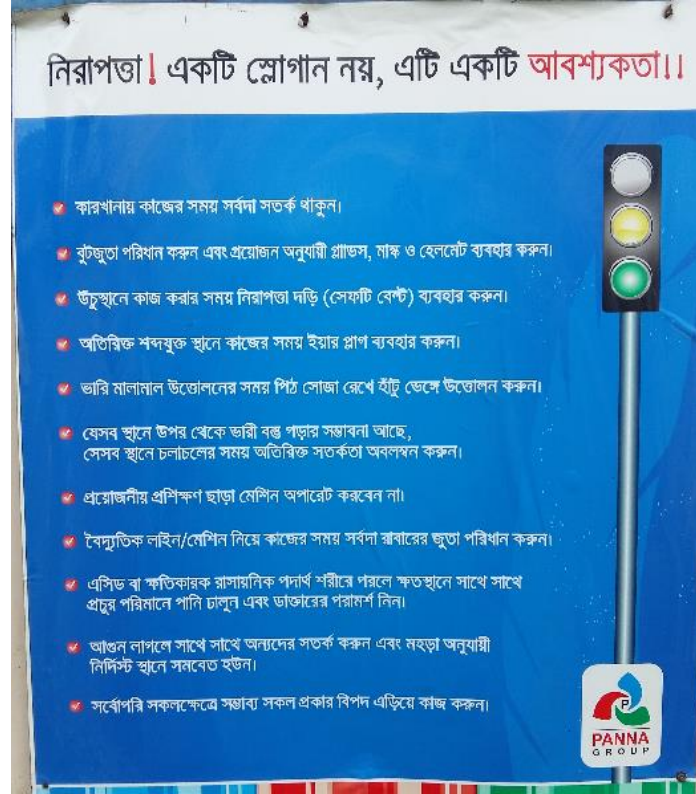


FACTORY VISIT REPORT

Panna Battery Limited



West Rasulpur, Kamrangircha, Dhaka

&

Porikhitpur, Modhukhali, Faridpur

Infrastructure Development Company Limited (IDCOL)

March 2017

BACKGROUND

Panna Battery Limited, has been awarded approval for 7 models of solar batteries-SOLLAR-20, 30,45,60,80,100 and 130 by several TSC meeting of IDCOL.

They have completed the required ISO 14001:2004 and OHSAS 18001:2007 compliances respectively. To assess the actual compliance scenario, Dr. Ahmedul Hye Chowdhury, Environmental Specialist, IDCOL visited the recycling plant according to the requirement of ESMF of IDCOL on March, 2017.

OBJECTIVE OF THE VISIT

The objective of the visit was to assess the actual progress accomplished by PANNA recycling plant to meet the requirement of ISO 14001, OHSAS 18001 and ESMF of IDCOL's EHS guideline as well.

Brief Description

PANNA is located at West Rasulpur, Kamrangirchar Dhaka. The factory comprises an area of about 135273 sq.ft of land. There are 550 workers and 55 management officials in the manufacturing plant and 15 workers & 2 management officials at recycling plant. At present it operates in two shifts with duration of 8 hours each. It produces about 1500 batteries every day. Panna Ltd. is facilitated with modern battery manufacturing machineries and skilled manpower.

Recently PANNA shifting their recycling instruments from West Rasulpur, Kamrangirchar Dhaka to the new premises (owned land) at Porikhitpur, Modhukhali, Faridpur and trying to keep their commitments to practice the requirement of IDCOL's EHS compliances.

The workers were found to be aware about the potential environmental and health safety hazards. Personnel protective equipment (PPE) has been provided to the workers but some of them found not to use the safety shoes. Housekeeping was not as satisfactory level because of the shifting premises. PANNA has started the practice of keeping records of compliances.

ESMF compliance scenario at battery recycling facility

Panna has five rotary furnaces with capacity of 4 tons and two kettles with capacity of 10 tons. The monthly capacity is 500 ton lead per month, 20 ton lead per day and 5 days per week. Breaking of batteries is done inside of the roof facilities and the liquid waste (water mixing with acid) channel to the ETP at West Rasulpur, Kamrangirchar, Dhaka. After wards all breaking materials have been shifted to Porikhitpur, Modhukhali, Faridpur unit where inside of the facilities condition is moderate and need some improvement.

Annex: Photographs of PANNA manufacturing & recycling facilities



Photograph: Aisles & Safety Sign



Photograph : A view of Formation unit



Photograph : A view of charging unit



Photograph : First Aid Box



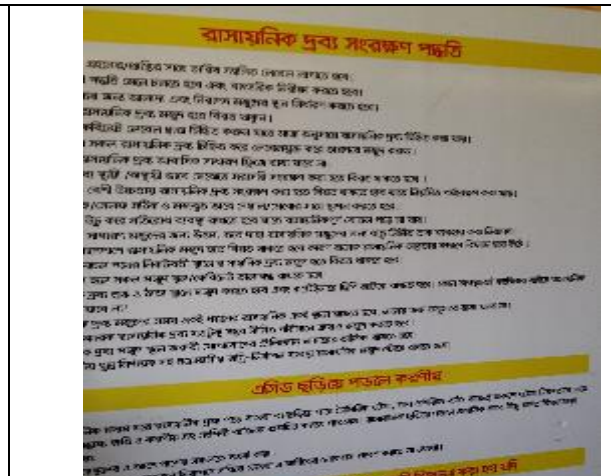
Photograph : Application of PPE



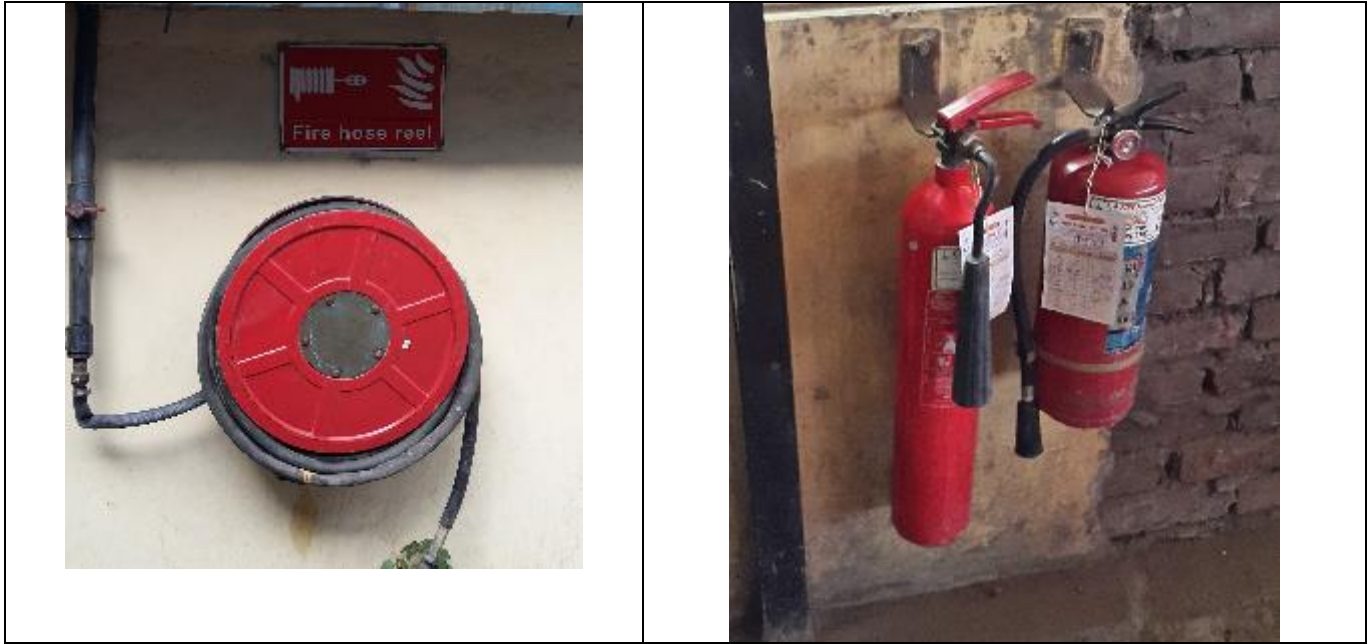
Photograph :
Eye & Shower



Photograph : ETP



Photograph : Acid Storage area with MSDS



Photograph : Firefighting arrangement

Recycling Plants at Faridpur



Photograph : Firefighting arrangement



Photograph : Firefighting arrangement

FACTORY HEALTH & SAFETY CHECK LIST

Name: PANNA Battery Limited

Date: March 2017

Inspected by Dr. Ahmedul Hye Chowdhury

Question	yes	No	Remarks
<i>Mandatory Questions</i>			
<i>Total Employees: 565 Workers and 57 Officials</i>			
<i>Name of the MR: Md. Rafiqul Islam</i>			
<i>His/her qualification: B.Sc & M.Sc in Chemistry</i>			
<i>Management review report / minutes: Need improvement</i>			
<i>Budget Allocation: Not found</i>			
<i>Training report: Need improvement</i>			
<i>DOE Clearance Certificate: Updated</i>			
<i>Acid License: Up dated till 31 July 2017</i>			
<i>EMS & OHASAS Certificate: Up to date</i>			
<i>Civil Defense: Up dated till 31 July 2017</i>			
<i>ETP design and discharge water QC report: OK</i>			

<i>Exits / Evacuation routes</i>			
Are exit signs, evacuation routes illuminated, visible, marked and maintained clear from work areas?	X		Need more improvement
Is evacuation plans posted in local language in a prominent place where they can be easily read, with 'You are here' clearly marked?	X		
Do evacuation plans match the floor layout? Also, areas in front of Exits marked with "KEEP CLEAR" markings and maintained clear.	X		
Aisles			
Are aisles clearly marked and spacious and maintained clear of any obstruction?	X		Need more improvement
Emergency lights maintained properly to provide adequate illumination?	X		
Are all Emergency lights tested monthly and records of test maintained?	X		

Fire Extinguishers/ Hose Reel / Hydrant			
Is there adequate number of fire extinguishers available and the location are clearly marked? Does it maintained clear of obstruction?	X		
Are extinguishers visually checked monthly and control tags maintained?	X		Log book need to be maintained
Are fire extinguishers inspected annually by an outside professional agency;	X		All up-to-date

Emergency Preparedness			
Does the facility have a documented emergency preparedness program?	X		
Does the facility conduct evacuation drills and maintain records?	X		
Does the facility maintain test records of fire alarms and Phone numbers of local fire dept(s)/ factory management and Hospitals Ambulance & Police easily available / posted?	X		
Are Assembly areas easily accessible and maintained clear?	X		

Question	yes	No	Remarks
Medical care / First Aid			
Does the First Aid kits provided in all work areas with locations highlighted and easily accessible? Are medicines being checked to ensure that expired medicines are not being administered?	X		Need more medicine and medical accessories and accessible to all employees.
Does the First Aid kits kept unlocked or if the kits locked, are the keys available within close proximity?			
Is there adequate number of employees been trained in First Aid by a recognized organization and the certificates checked to ensure the validity?	X		
Does factory conduct checks to ensure that if any first-aid trained employee has left the organization he/she is replaced with another such trained person?			

Lead alloy and Chemical Storage Area			
Is there any appropriate warning signs displayed?	X		
Is there an effective ventilation system to discharge fumes?	X		

Is there any effective secondary containment system for liquid chemicals to avoid spillage on floor? Does the floor maintained clean and free of chemical spillage?	X		
Is MSDS (Material Safety Data Sheet) posted in areas where chemicals are stored / being used?	X		
Is there any appropriate PPE (Personal Protective Equipment) are available and being used in the chemical storage and usage areas?			More Environmental Health and Safety awareness training required
Is entry restricted in the chemical storage area?	X		
Does hazardous sign or label being used in all drums, containers, and dispensers clearly labeled?	X		
Eye Wash/shower			
Is there any functional eye wash station available near the chemical storage/usage area/working area?	X		Need another system in the new formation area

Question	yes	No	Remarks
Electrical Safety			
Are all electrical switches labeled in English & local language?		X	
Are power-generators suitably earthed?			
Is all electrical maintenance carried out, logged?			Not found (Take necessary action immediately)
Question	yes	No	Remarks
Personal Protective Equipment			
Are appropriate gloves / masks / eye protection provided for workers in charging area and other areas where needed? Are they being used?	X		Need appropriate training and awareness program
Accident Register are updated			Not found
Machinery			
Are exhaust fans installed at safe heights to avoid injury?	X		
Are safety devices in working condition?	X		
Are noise levels in work areas within the desired norms?	X		
Waste water treatment and Air treatment plant			
Are all discharges within the parameters defined by the country's Environment laws?	X		Lead test need to check from waste water regularly.

Does the ATP perform well? Does all parameters been tested regularly as guided?	X		ATP connection found in the formation area but not found in the lead melting and processing area. Which is a very important are need to cover.
Dining and Kitchen Facilities			
Are Kitchen & Dining area floors maintained clean?	X		
Is adequate seating arrangement provided?	X		
Are hand wash and utensils washing areas well maintained?	X		
Bathrooms / Toilets			
Are the number of toilets adequate, marked and segregated for both men and women?	√		
Are wash rooms/ toilets well maintained and ventilated?	√		
Is running water available?	√		
House-Keeping			
Are waste chemical removed regularly?	√		Need to improve
Are floors cleaned regularly to remove dust and garbage?			
Are floors cleaned and check ventilation system periodically?			
Is garbage appropriately disposed off?			

Storage			
Is all materials appropriately stored on racks or pallets with well-defined aisles between rows, maintained free of obstruction?	X		Room to improve
Are the general and trims stores well-kept with passages maintained clear?	X		
Are fuels like diesel, petrol, cooking gas appropriately stored away from rain and sunlight in well ventilated areas with entry restricted to authorized personnel only?	X		
Are 'No Smoking' signs and appropriate Firefighting equipment installed in storage areas?	X		