

# **FACTORY VISIT REPORT**

***“GASTON”***

**Confidence Electric Limited**

**Brahamonbagha, Mohjompur, Sonargaon**

**Narayangonj**



**Infrastructure Development Company Limited**

**October 2018**

## **1. BACKGROUND**

Confidence Electric Limited (GASTON), has been awarded approval for seven different models of solar batteries by several TSC (technical Standard Committee) meeting of IDCOL.

They have completed the required ISO 14001:2004 and OHSAS 18001:2007 compliances. To assess the actual compliance scenario, Dr. Ahmedul Hye Chowdhury, Environmental Specialist, IDCOL visited the battery manufacturing plant and its recycling plant according to the requirement of ESMF of IDCOL on 27 October, 2018.

## **2. OBJECTIVE OF THE VISIT**

Already been mentioned that the objective of the visit was to assess the actual progress accomplished by GASTON to meet the requirement of ISO 14001, OHSAS 18001 and ESMF of IDCOL as well.

## **3. Brief Description**

GASTON is located at Brahamonbagha, Mohjompur, Sonargaon, Narayangonj. The factory comprises an area of about 544.5 Decimal of purchased land. There are 500 workers and 48 management officials employed in the plant. At present it operates in two shifts but the Jar and plate formation section works in three shift with duration of 8 hours each. It produces about 1000 batteries (different types) every day. GASTON is facilitated with modern battery manufacturing machineries and skilled manpower.

## **4. ESMF compliance scenario at battery manufacturing facility**

GASTON was found to practice the requirement of ISO 14001 and OHSAS 18001 standards at a satisfactory level. Personnel protective equipment (PPE) has been provided to the workers and found to use in proper manner but need continuous monitoring & training. There are some room for improvement in some areas like; maintenance, Eye wash, floor matting in formation area. Over all housekeeping was found satisfactory (Please see the attach annexure). GASTON has started to practice of keeping records of compliances.

ETP is one of the most important concern for battery manufacturing industries to mitigate effluent pollution. GASTON has established a well-designed ETP with capacity of 120 m<sup>3</sup>/day. GASTON has also set up air treatment plant (ATP) to protect the health hazards. GASTON have five different types of air treatment plants in their premises. The capacity of ATP are 30000 ft<sup>3</sup>/min, 22000 m<sup>3</sup>/hr, 21000 m<sup>3</sup>/hr, 22000 ft<sup>3</sup>/min and 22000 ft<sup>3</sup>/min run 25 days in a month.

## **4.1 Observation**

- MSDS should be visible in the QC laboratory.
- Because of health issues, workers washroom need to be clean all time
- Indoor air quality need to monitor
- Eye wash section need to be clean and well maintained.

## Annex 1- Photographs of GASTON battery facilities





**Photograph:** PPE using

### ETP and ATP Unit



**Photograph :** View of 120 m<sup>3</sup>/day ETP



**Photograph :** View of ATP

## First Aid



Photograph : First Aid Box & Signage

## Firefighting Arrangement



Photograph : Fire hydrant & Firefighting arrangement

**FACTORY ENVIRONMENTAL HEALTH & SAFETY CHECK LIST**

Name: CONFIDENCE ELECTRIC LIMITED (GASTON)

Date: 27-10-2018

Question	Yes	No	Remarks
<b><i>Mandatory Questions</i></b>			
<b><i>Name of the MR:</i></b> Md. Arshad Ali			
<b><i>His/her qualification:</i></b> BSc (Electrical Engineering)			
<b><i>Management review report / minutes:</i></b>			
<b><i>Budget Allocation:</i></b> Not specified			
<b><i>Training report:</i></b> Maintained			
<b><i>DOE Clearance Certificate:</i></b> Up to date			
<b><i>Acid License:</i></b> Up to date			
<b><i>EMS &amp; OHASAS Certificate:</i></b> January 2020- Expire			
<b><i>Civil Defense:</i></b> Up to date			
<b><i>ETP design and discharge water QC report:</i></b> Maintained			
<b><i>Exits / Evacuation routes</i></b>			
Are exit signs, evacuation routes illuminated, visible, marked and maintained clear from work areas?	√		Recommend to keep the exits & Evacuation routes should marked and clear all time
Is evacuation plans posted in local language in a prominent place where they can be easily read, with 'You are here' clearly marked?	√		
Do evacuation plans match the floor layout? Also, areas in front of Exits marked with "KEEP CLEAR" markings and maintained clear.	√		
<b>Aisles</b>			
Are aisles clearly marked and spacious and maintained clear of any obstruction?	√		Recommend to keep the aisles marked and clear all time
Emergency lights maintained properly to provide adequate illumination?	√		
Are all Emergency lights tested monthly and records of test maintained?	√		

<b>Fire Extinguishers/ Hose Reel / Hydrant</b>			
Is there adequate number of fire extinguishers available and the location are clearly marked? Does it maintained clear of obstruction?	√		Maintained properly
Are extinguishers visually checked monthly and control tags maintained?	√		
Are fire extinguishers inspected annually by an outside professional agency;	√		

<b>Emergency Preparedness</b>			
Does the facility have a documented emergency preparedness program?	√		Room for improvement
Does the facility conduct evacuation drills and maintain records?	√		
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?	√		
Are Assembly areas easily accessible and maintained clear?	√		

<b>Question</b>	<b>yes</b>	<b>No</b>	<b>Remarks</b>
<b>Medical care / First Aid</b>			
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?	√		Well maintained.
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?	√		
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?	√		



<b>Lead alloy and Chemical Storage Area</b>			
Is there any appropriate warning signs displayed?	√		Need to improve
Is there an effective ventilation system to discharge fumes?	√		
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?	√		
Is MSDS (Material Safety Data Sheet) posted in areas where chemicals are stored / being used?		√	Should be hanged in front of the store door
Is there any appropriate PPE (Personal Protective Equipment) are available and being used in the chemical storage and usage areas?	√		All personnel maintained the PPE during the working time.
Is entry restricted in the chemical storage area?	√		Chemical storage area are secured.
Does hazardous sign or label being used in all drums, containers, and dispensers clearly labeled?		√	Not in proper manner.
<b>Eye Wash/shower</b>			
Is there any functional eye wash station available near the chemical storage/usage area/working area?	√		
<b>Question</b>	<b>yes</b>	<b>No</b>	<b>Remarks</b>
<b>Electrical Safety</b>			
Are all electrical switches labeled in English & local language?	√		
Are power-generators suitably earthed?	√		
Is all electrical maintenance carried out, logged?	√		
Are there any loose wires / damaged switch-gear / unplugged connections/ open junction boxes / taped joints etc?			Nothing observed during the visiting time
Are appropriate fire extinguishers installed near panel boards?	√		
Are Exhaust pipes of Power generators insulated?			
Are rubber mats provided in front of all Electric Panel Boards?	√		
Is the Power Generator room maintained free of waste items?	√		

Question	yes	No	Remarks
<b>Personal Protective Equipment</b>			
Are mesh gloves provided to Cutting machine operators? Are they being used?	√		Room for improvement
Are appropriate gloves / masks / eye protection provided for workers in stain removing operations? Are they being used?	√		
Are ear plugs provided to thread sucking machine operator's power generator operators? Are they being used?	√		
Are Appropriate PPEs provided to workers in the washing section? Are they being used?	√		
Is eye protection provided to button machine operators? Are they being used?	√		
<b>Accident Register are updated</b>			
Are respiratory masks provided to sewing machine / over lock machine operators where fabric dust is generated? Are they being used?	√		
<b>Machinery</b>			
Are finger guards installed on snap button machines? Are they being used?	√		
Are exhaust fans installed at safe heights to avoid injury?	√		
Are safety devices in working condition?	√		
Are noise levels in work areas within the desired norms?	√		
<b>Waste Water Treatment</b>			
Are all discharges within the parameters defined by the country's Environment laws?	√		
<b>Dining and Kitchen Facilities</b>			
Are Kitchen & Dining area floors maintained clean?	√		
Is adequate seating arrangement provided?	√		30 persons can seat together at a time
Is cooked food kept covered?	√		
Are those serving food using appropriate gloves?	√		
Are fire extinguisher's installed near cooking areas?	√		

Is potable drinking water provided?	√		
Are hand wash and utensils washing areas well maintained?	√		
<b>Bathrooms / Toilets</b>			
Are the number of toilets adequate, marked and segregated for both men and women?	√		
Are wash rooms/ toilets well maintained and ventilated?	√		Workers wash room need to be clean all time
Is running water available?	√		
<b>House-Keeping</b>			
Are waste chemical removed regularly?	√		
Are floors cleaned regularly to remove dust and garbage?			
Are ventilation system check periodically?	√		
Is garbage appropriately disposed off?	√		
<b>Storage</b>			
Are Chemicals, flammable liquids appropriately stored away from rain and sunlight in well ventilated areas with entry restricted to authorized personnel only?	√		Room for improvement
Are 'No Smoking' signs and appropriate Firefighting equipment installed in storage areas?	√		