

1. PPE Management Plan

This procedure has been developed for Banga Building Materials Limited (BBML) operational activities at Habiganj Industrial Park (HIP). A copy of the procedure will be kept at the HIP with the site EHS Officer/Manager, will be used detail Personal Protective Equipment (PPE) requirements and will be monitored, reviewed and updated where a change in conditions or requirements occur.

1.1. Purpose

The purpose of the PPE Management Plan is to:

- Ensure that the employees/workers/visitors engaged in various activities at the site use appropriate PPE;
- To protect the PPE wearer from health & safety hazards present in workplace or potentially present in the work place; and
- To prevent injury to the wearer from incorrect use and/or poorly maintained PPE.

1.2. Scope

This procedure is applicable for the all operational activities conducted or commissioned by BBML at HIP.

1.3. Definition:

Personal Protective Equipment (PPE): PPE is equipment designed to protect the user against health or safety risks at work. It can include items such as safety helmets, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses and should be considered a last resort to mitigation of risk (after management and engineering control measures have been applied).

Fall Arrest Equipment: Fall arrest equipment is equipment which is used as a precaution to arrest a fall in the event of falling from height.

SCBA: Self-contained breathing apparatus.

Threshold Limit Values (TLV): Express the airborne exposure level to a chemical or physical hazard to which nearly all persons can be exposed day after day without adverse effects.

Hazard: A hazard is a condition or occurrence which has the potential to cause harm.

1.4. Responsibility:

Executive Director (ED): will be responsible for approving the PPE Management Plan.

Senior Manager Production: He will be responsible for implementing and updating this procedure along with the Production Manager/supervisor and EHS supervisor.

Production Manager/ Supervisor/line in-charge: will check and providing the PPE to respective person.

EHS Officer: Will be responsible for:

- Monitoring and reviewing the implementation of the Plan;
- Imparting training to responsible personnel/workers executing the Plan; and
- Collecting and recording information on the performance indicators identified as part of this Plan.

1.5. Management Measures

All employees, contractors and visitors are required to use appropriate PPE at the workplace. At bare minimum, every employee, contractors, visitors must use safety shoes, high visibility jackets while working at the site. Please refer to the PPE Matrix (Annexure 1) for the list of appropriate PPE to be used depending upon work activity. This PPE matrix has been developed based on the outcome of the HIRA process.

Before use of PPE, the following should be taken into account:

- PPE must be inspected prior to and as appropriate during each use for defects such as holes, tears, scratches, signs of material deterioration, cracks, poor closure or any other sign of degradation which may affect the PPE performance. PPE with defects shall be immediately removed from service and replaced or repaired;
- Potentially contaminated PPE shall not be worn in designated clean areas (for example offices, control rooms, lunch rooms and clean change rooms);
- Potentially contaminated PPE shall be cleaned, laundered, or disposed of as Deemed appropriate; and
- When limitations or precautions are indicated by the manufacturer, they shall be communicated to the user.

1.5.1. Requirements apply to the various types of PPE listed below.

The following guidance shall be taken into account in the use of specific items of PPE. In addition to the requirements listed below, workers must use, maintain and inspect any PPE listed as part of risk mitigation measures identified within health and safety risk assessments for specific activities (refer to BBML EHS Management Plans).

Head Protection: Hard hats shall be worn in areas where falling overhead objects, material, or electrical installations could present a hazard to employees' heads.

Eye And Face Protection: Eye and face protection shall be used for:

- Protection against impact, particles, chemical splash, molten materials, or flash shall be provided for face, neck, and eyes.
- Protection against materials which are liquid or powder in nature will require goggles. Protection against striking objects requires safety glasses or face shields.

Respiratory Protection: Respiratory protection is required to protect from dust, mist, toxic gasses as well as oxygen deficiency areas, specifically for the following:

- Dust masks - for working in dusty areas as such coal dust and ash.
 - Limitations - Particulate levels in the work environment should be within the acceptable limits prescribed by the manufacturer.
- Gas Masks - are to be used if the work area contains toxic gasses such as Chlorine, Ammonia and Carbon Monoxide.
 - Limitations – Gas concentrations should be within acceptable limits prescribed by the manufacturer and gas masks should not be used in oxygen deficient areas or areas containing more than 10 times of the Threshold Limit Values (TLV);
- SCBA Sets - are to be used for toxic areas as well as oxygen deficient areas. To be used for emergency situations only.
 - Limitations - To be used for emergency work of duration less than 30 minutes. Special training is required for the wearer.

Hearing Protection: Hearing protection (ear muffs & ear plugs) to be used for:

- Working within noisy areas.
 - Limitation- These should be used within the prescribed noise limits of the manufacturer.

Electrical Protection: Electrical protection should be used:

- Where there are potential electrical hazards, electrical protective equipment appropriate for the specific parts of the body shall be used.

Hand Protection: With respect to hand protection:

- In consideration of the activity to be undertaken, the proper type of glove shall be provided to protect the employee's hand from abrasion, temperature extremes, chemical hazards, physical hazards, particulates, electrical hazards, radiation or blood-borne pathogens where necessary.
- Gloves must be properly examined prior to each use for their ability to protect the employee against the identified hazard.

Foot Protection: With respect to foot protection:

- Safety Shoes with closed toes shall be worn in areas where objects could present either a chemical or physical hazard to the foot. The safety shoes should be as per relevant Standard.
- Gum boots should be used for acid alkali works, muddy areas with less prone to mechanical hazard areas, tile polishing etc.

Fall Arrest Systems:

Double line fall arresters shall comply with relevant standards. These shall be used for working at height.

1.5.2 PPE MAINTENANCE & STORAGE:

With respect to PPE maintenance and storage:

- PPE repairs may only be conducted by qualified individuals;
- PPE should be stored in such a manner that it is protected from factors which might degrade its performance. These factors include sunlight, heat, extreme cold, excessive moisture, chemicals, dust and physical distortion;
- The Site shall keep 10% (minimum) additional stock of their annual requirement of PPE;
- PPE should not be taken home, unless otherwise authorized; and
- The Site shall maintain a register of the PPE issued.

1.5.3 PPE TRAINING AND PROPER FITTING:

All employees (including visitors) who are required to use PPE shall receive adequate and documented training. This training will be a part of induction training for all employees and visitors and is intended to ensure that all are trained in proper use of PPE. This training should be refreshed periodically through various communication programs including tool box talk and street plays.

Training should include the following elements:

- When it is necessary to wear PPE?
- What PPE is necessary?
- How to properly don, doff, adjust, and wear the PPE.
- The PPE's limitations.
- Proper care, maintenance, useful life and the disposal of the contaminated PPE.

All persons successfully completing PPE training will then demonstrate to his/her Supervisor that they understand the above elements.

1.5.4 PPE Inspection Procedures- Prior To, During and After Use

The following inspection procedures should be followed in order to identify conditions which would result in PPE being considered defective and require either repair or replacement.

Safety Goggles:

- Inspect glasses for Scratches, Severe chips or cracks, haziness or impaired vision, damage, such as distortion or disfiguring or any other defects that adversely affect the vision.

Head Protection:

- Inspect the shell for: Cracks and signs of impact,
- Inspect the suspension (headgear) for: Adjustability, cracks in the headband, the existence of the sweatband and general condition.
- Any other defects that adversely affects the fit.

Foot Protection:

- Inspect safety shoes (impact, puncture resistant, compression, etc.) for: Wear, severe tears or cuts, worn eyelets and shoelaces, foreign objects embedded in the sole.

Hand Protection:

Inspect gloves for: Signs of chemical degradation, such as swelling, cracking, shrinking, or discoloration, signs of holes or punctures, conductive material and any other material embedded in the sole.

1.5.5 Evaluation of The Effectiveness of The PPE Program:

Evaluation of the effectiveness of the PPE program shall be conducted annually and findings to be communicated to the employees. Elements to be considered for evaluation and review include:

- Compliance with applicable regulations;
- Accident and illness experience;
- Levels of exposure;
- Adequacy of the equipment selection;
- Adequacy of the operational guidelines;
- Adequacy of the inspection, cleaning, storing and hygienic;
- Adequacy of training and fitting programs;
- Degree of fulfillment of the objectives;

- Recommendation of program improvement and modification;
- Adequacy of the program records; and
- Program costs.

1.6. Training

Monthly training will be imparted by the EHS officer to the line in-charge, Maintenance In-charge and any other related workers/employees on:

- PPE importance;
- The PPE Management Plan; and
- Applicable legal requirements related to PPE.

The annual training calendar will be updated to include training on the PPE Management Plan.

1.7. Monitoring and Review:

This procedure will be annually reviewed by the EHS Officer along with Senior Manager & Line in-charges. The findings will be documented and utilized in updating the procedure. In addition, he will be involved in monitoring the following performance indicators to assess the effective implementation of the procedure:

- PPE register;
- PPE matrix;
- Internal audit report; and
- Training records on PPE.

Following review of this monitoring by the EHS Officer, and in any event annually, the Senior Manager will update this procedure and will send to ED for approval.

1.8. Records & Reporting:

Sl. No.	Document Name	Responsible Person	Frequency
1	PPE Matrix	Manager - EHS	As Required
2	PPE Risk Assessment	Manager - EHS	Two Months
3	PPE Register	Production In-Charge	Daily/Weekly
4	Training Record	Manager – EHS	Monthly

1.7 Reference:

- Bangladesh Factory rules,2015;
- Bangladesh Labor act, 2006; and
- IFC General Environmental, Health and Safety (EHS) Guidelines.

1.8 Approving Authority:

Executive Director of BBML is responsible for approving this Procedure.

Annex-1: PPE Matrix

Annex 12.1 : PPE Matrix

Specific Activities (Broad level)	Safety Shoe	Safety Helmet	Dust Mask	Insulation Rubber hand Gloves	Safety Goggles	Face Shield	Welding Helmet	Gum Boot	Ear Plug	Full body safety harness	Fall arrestor with vertical life line	Safety Net	Leather Hand gloves	Cartridge Musk	Apron	Surgical hand gloves	Chemical Resistant Rubber Gloves	Cotton hand gloves	SCBA Sets	Gas Mask
PROCESS/GMP AREAS																				
Unloading of Raw materials from Truck (to receipt area)																				
Handling of Chemicals in Solid/powder form inside working area (including Dispensing, Charging)																				
Handling of Chemicals in liquid form inside working area																				
Sampling of Chemicals in powder form																				
Sampling of Chemicals in liquid form																				
Testing of Chemicals																				
Drum washing																				
Cutting Process																				
Operation and Maintenance of the Machine																				
Maintenance and Utility																				
Façade Cleaning																				
AHU Filter cleaning																				
Preventive Maintenance of Electrical Installations, Panels																				
Housekeeping																				
Working near DG Set Area (while DG in operation)																				
Activities relating to Project Phases/Construction																				
Work at Height (working at more than 2 meters from ground/floor level)																				
Welding Activity																				
Gas Cutting																				
Live Electrical Works																				
Hot works at Height																				
Painting activity																				
Wood and tiles cutting activity																				
Working on confined space																				
Polishing of tiles																				
Working on fragile roofs																				
Breaking and demolition (use of equipment such concrete breaker)																				
Other Activities																				
Firefighting																				
Working in Toxic Environment																				

Note: This PPE Matrix is an indicative list of PPE that needs to be used for undertaking various activities. However for any additional activities (not listed here) please consider doing an H&S Risk Assessment to decide the PPEs to be used.