**Work instruction for valve overhauling**

Objective Overhaul used valves and re use them

Scope power plant Accessories

Responsibility Engineer In charge & Fitter on job

PPE’s to be used Helmet, Safety shoes, Hand gloves and complete sealed goggle

Aspect - Impact

Grease/oil spillage Land contamination

Scrap generation Resource Depletion

Oil/Grease traced waste generation Land contamination & Resource Depletion

Hazards identified

Mechanical hazard Slip, fall and trap

Human behavior Improper housekeeping, Non use of PPEs, Alcoholism

Physical hazard Electric shock, Noise, Temperature

Procedure

Shift the valve from the site areas to the workshop if possible else start overhauling at site areas.

Stack the valve properly in the overhauling area before starting the job.

First step is to dismantle the valve.

Check whether bolts of the bonnet can be removed by spanner. If the bolts are rusted then use chisel for removing the bolts. If not possible with chisel then use gas cutting set for the same. Gas cutting should be done as per WI/MAINT/07.

After dismantling the bonnet, separate all the parts such as gate, spindle, yoke, nut etc and clean all the parts thoroughly.

Inspect for any damage/scratch/wear on disc, valve seat, and valve stem. Replace any damaged part.

Use Lapping Paste/compound for removing scratch on internals of valve (e.g disc, seat surface, stem).

Replace gland packing of gate and globe valve during overhauling.

Use of safety goggles (completely sealed) while cleaning.

Grinding can also be done if required. Grinding should be done as per WI/MAINT/06

After all the parts are fully cleaned prepare for assembly of the valve.

Clean the entire equipment and remove all tool, waste from equipment surrounding areas.

Hot Tightening of gland after long shutdown of more than 3 days based on CAPA of BFP MOV gland leakage, Notification No. 20184704.