

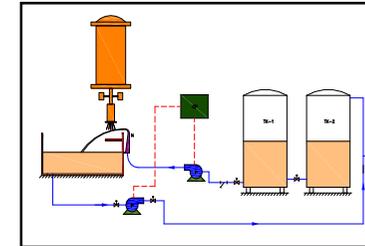
TEXTILE EFFLUENT TREATMENT USING ELECTRON BEAM ACCELERATOR

OBJECTIVE:

- DEMONSTRATION OF WASTE WATER TREATMENT USING ELECTRON BEAM

DESIGN FEATURES:

- SPECIAL NOZZLE TO DISCHARGE 4 MM THICK AND 1.0 M WIDE WATER JET
- POSSIBILITY OF FLOW RECIRCULATION



Process flow diagram



Effluent filling



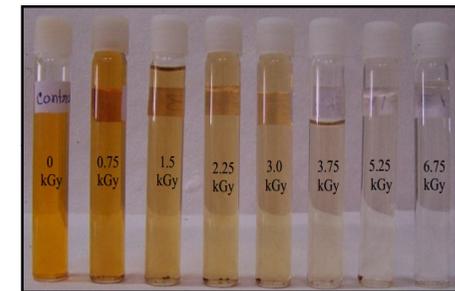
Pump and piping



Reaction tank and nozzle in beam room



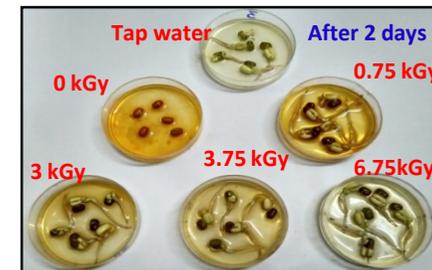
Effluent flow under electron beam



Effluent at different radiation doses

•ADVANTAGES OF EB TREATMENT

- RESULTS IN INCREASED BIODEGRADABILITY OF EFFLUENT.
- NO SECONDARY POLLUTANT GENERATION.
- NO PERMANENT SOURCE OF RADIATION.
- CAN BE DEPLOYED FOR ONLINE TREATMENT AT SOURCE.



Moong seed germination test