

The Biowat – Meghalaya

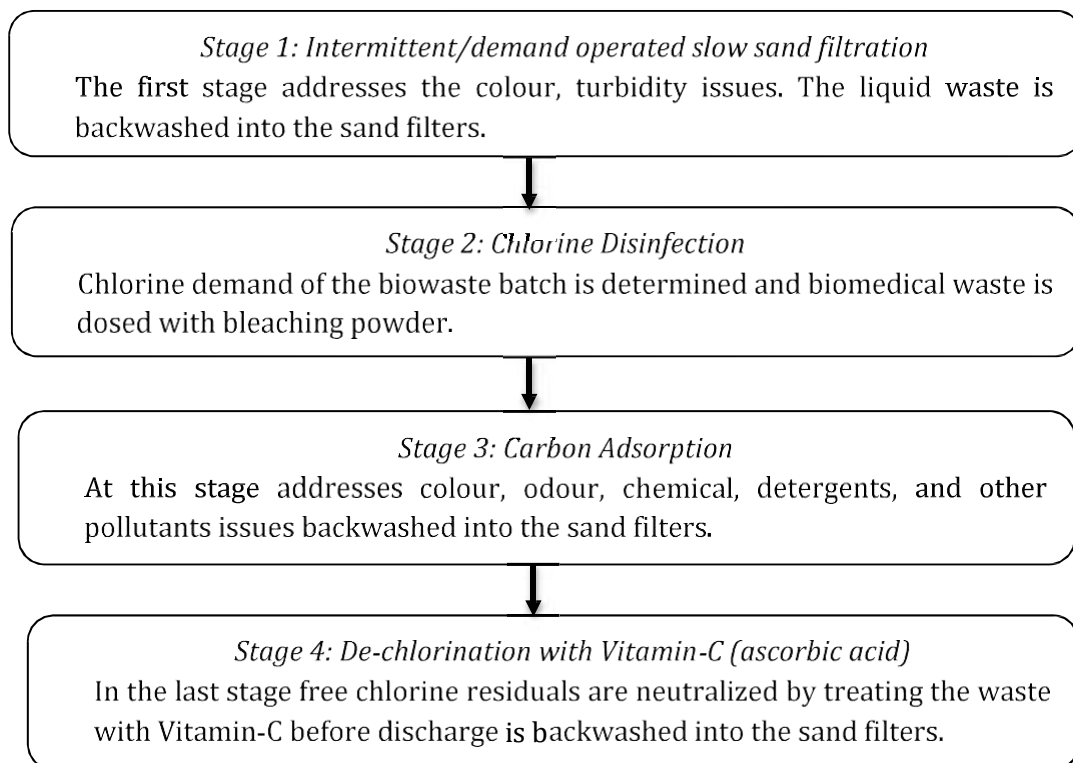
Introduction:

The Biowat (Biomedical Waste Treatment) is a low-cost waste treating plant for biomedical liquid waste generated in a PHC at Nartiang, Meghalaya. Earlier, the biomedical liquid waste of the PHC was discharged unsafely in the nearby stream, against the Bio- Medical Waste Management Rules, 2016. The low-cost Biowat plant created at the PHC helped in preventing the local environment.



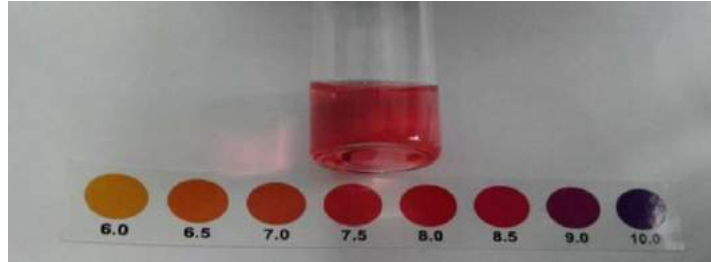
Implementation of the practice

Under this initiative biomedical liquid waste is first segregated from the other wastage and it is treated with the following four stages before disposal:



Results

- The BIOWAT has been constantly achieving discharge parameters of the effluent:



- Free Chlorine: omg/L
 - pH: 7-7.5
 - Fish survival: >96 hours: 100%
 - Turbidity: <5 NTU
- Other benefits:
 - simple operation and maintenance
 - efficient chlorine removal
 - zero consumption of energy for daily operation
 - low start-up and running cost

Lessons Learnt

The low-cost plant with a set-up expense of INR 2.5 Lakh and annual maintenance cost INR 10,000 has been effective in managing hazardous biomedical wastage with simple operation a

Conclusion

The low-cost and easy maintenance plant makes this initiative highly scalable across other PHC's and CHCs in the country.

Further Readings:

<https://cdn.s3waas.gov.in/s384f7e69969dea92a925508f7c1f9579a/uploads/2020/06/2020062434.pdf>