Pollution Control Board FAQ for STP Owners

1. What is a Sewage Treatment Plant (STP)?

A Sewage Treatment Plant (STP) is a facility designed to treat domestic sewage and wastewater, removing contaminants and harmful substances before discharging the treated water back into the environment or recycling it for reuse.

2. What are the regulatory requirements for STPs?

STPs must comply with standards set by the Pollution Control Board (PCB) under the Environment (Protection) Act, 1986. This includes adhering to specific effluent discharge standards related to pH, Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), and Fecal Coliform (FC) levels.

3. How often should I monitor the effluent quality?

Monitoring frequency depends on regulations set by your local PCB and the type of STP you operate. Typically, effluent quality should be tested at regular intervals (e.g., monthly or quarterly).

4. What should I do if my STP fails to meet discharge standards?

If your STP fails to meet the required discharge standards, take immediate corrective actions, such as adjusting operational parameters or conducting maintenance. Notify the PCB about the non-compliance and your action plan.

5. Can I reuse treated effluent from my STP?

Treated effluent from STPs can be reused for non-potable applications, such as landscaping, irrigation, or industrial processes, provided it meets the necessary quality standards.

6. What types of technologies are used in STPs?

Common technologies include activated sludge processes, trickling filters, and membrane bioreactors. The choice of technology depends on factors like the volume of wastewater, desired treatment level, and available space.

7. How can I improve the efficiency of my STP?

Regular maintenance, staff training, and implementing automation for monitoring can enhance efficiency. Conducting periodic audits and assessments can help identify areas for improvement.

8. What are the penalties for non-compliance with PCB regulations?

Penalties for non-compliance can include fines, mandatory improvements, or, in severe cases, legal action. Persistent violations may lead to shutdowns or revocation of operational permits.

9. How do I handle sludge generated from the STP?

Sludge must be properly managed through processes like anaerobic digestion, composting, or incineration. Disposal methods should comply with local regulations to minimize environmental impact.

10. What should I include in my STP operation manual?

The operation manual should include standard operating procedures, emergency response plans, maintenance schedules, monitoring protocols, and contact information for regulatory bodies.