

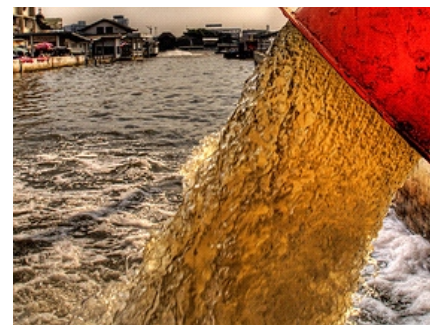
Remote measurement of Industrial Wastewater

Complete solutions to measure analytical parameters such as pH, COD, BOD, Ammonia, TSS, Cr, Temp

The government has taken initiative to curb Effluent discharges by giving out directive - Installation of Effluent Quality Monitoring Stations at manufacturing locations/factories wherein the real time data to be sent by the Probes or Analyzers to SPCB, CPCB and also Locally available, (which is challenge subject for all vendors and CPCB officials too)

Benefits

- GPRS based solution, no need of laying communication cables
- Cloud based solution
- Monitor PH, Flow, TSS (Total Suspended Solid), BOD (Biological Oxygen Demand), COD (Chemical Oxygen Demand), Chromium
- Keeps automatic record of above parameters
- Alarm history and generate customize reports
- Monitor all your effluent treatment plants on a single platform from anywhere
- Offered solutions would be as per CPCB guidelines
- TUV approved



Industries discharge millions of gallons of effluent as hazardous toxic waste, full of color and organic chemicals from dyeing and finishing salts. Presence of sulphur, naphthol, vat dyes, nitrates, acetic acid, soaps, chromium com- pounds and heavy metals like copper, arsenic, lead, cadmium, mercury, nickel, and cobalt and certain auxiliary chemicals all collectively make the effluent highly toxic. Other harmful chemicals present in the water may be formaldehyde based dye fixing agents, hydro carbon based softeners and non bio degradable dyeing chemicals. The Industrial effluent is also often of a high temperature and pH, both of which are extremely damaging.

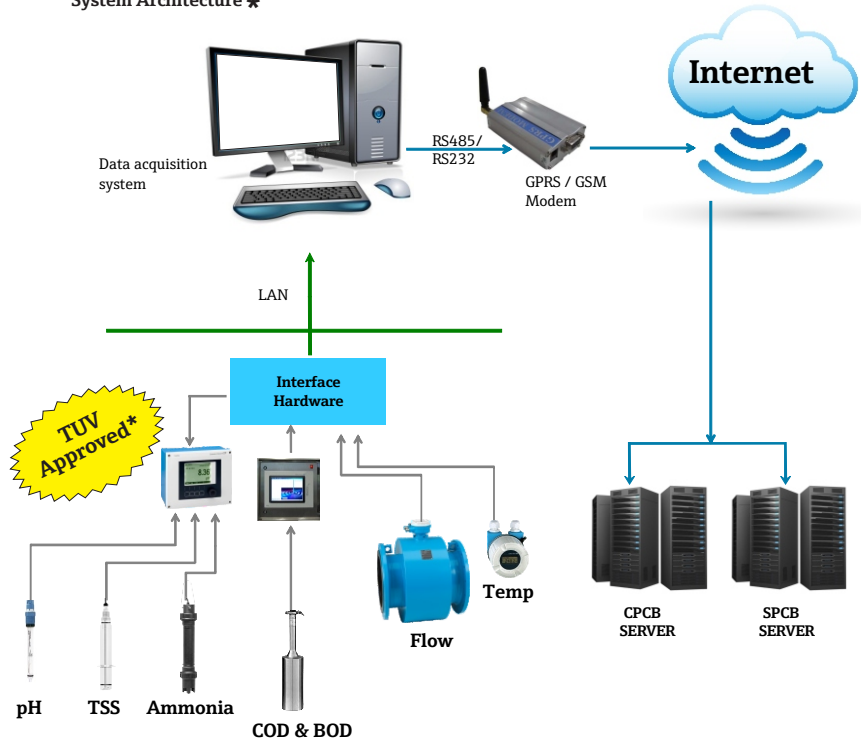
After effect of effluent discharge in environment

- The colloidal matter present in the Industrial Waste Water along with colors and oily scum increases the turbidity and gives the water a bad appearance and foul smell.

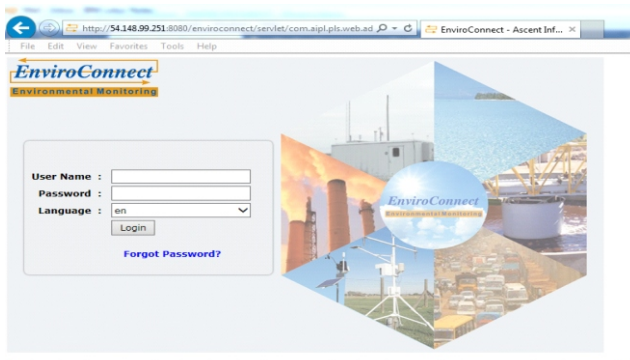
- Highly Polluted and contaminated Industrial Waste water prevents the penetration of sunlight necessary for the process of photosynthesis.
- Industrial Waste Water interferes with the Oxygen transfer mechanism at air water interface. Depletion of dissolved Oxygen in water is the most serious effect of Industrial Waste as dissolved oxygen is very essential for marine life.
- In addition when this effluent is allowed to flow in the fields it clogs the pores of the soil resulting in loss of soil productivity. The texture of soil gets hardened and penetration of roots is prevented.
- If allowed to flow in drains and rivers it effects the quality of drinking water in hand pumps making it unfit for human consumption.

The pollution control board previously employed field technicians. These technicians manually monitored effluent water quality by visiting the remote site, collecting the data, and reporting their findings. With the switch to a GPRS solution, the company has realized an immediate and significant improvement in operational efficiency and time savings. Remotely monitor effluents in water from anywhere online and in real time. Endress+Hauser help you implement online monitoring of effluents level in waste water. Online monitoring enables you to identify unacceptable conditions that may occur immediately. Continuous effluent monitoring ensures that effluent levels in discharged water is within regulatory levels & any problems identified immediately.

System Architecture *



* the above system architecture may change as per the industry requirement



EQMS Software -

The screenshot shows a 'Station Report' table in the EnviroConnect web application. The table has columns for 'Plant', 'Analyzer', 'Parameter', 'ETP', 'ETP', 'ETP', 'ETP', 'ETP', and 'ETP'. The data includes various parameters like TSS, pH, COD, and BOD, with values for different plants and analyzers.

Plant	Analyzer	Parameter	ETP	ETP	ETP	ETP	ETP	ETP
Plant1	Analyzer1	TSS	98	98	98	98	98	98
Plant2	Analyzer2	pH	7.2	7.2	7.2	7.2	7.2	7.2
Plant3	Analyzer3	COD	200	200	200	200	200	200
Plant4	Analyzer4	BOD	150	150	150	150	150	150

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