SURVEY FOR SITE SELECTION

Now days, there is constant addition of industrial, domestic and agricultural wastes into open environment which imposes adverse effect on. The development of industries is the key point to adjudge the economic growth of the country. During last few decades Indian industries have registered a quantum jump.

The haphazard and uncontrolled growth of industries is major environmental crisis. These industries contribute lot in deteriorating and create discomforts to the inhabitants. The industries are continuous to be one of the most significant causes of aquatic pollution and responsible for the mortalities in aquatic animals.

In the present study, different sampling site are chosen to collect distillery, dairy effluent, bore well and well water samples for the analysis.

Aurangabad city is one of the important destinations of Marathwada region not only due to history, but also due to rapid industrialization. Now days, there are four major industrial areas, i.e. Chikalthana, Waluj, Paithan MIDC and Shendra, a five star industrial area have emerged surrounding Aurangabad city. The partially treated or untreated effluents are being discharged directly or indirectly into the river.

In the present work, survey has been carried out in MIDC area of Aurangabad city, situated at outskirt of the city, 16 Km. away from the university campus. The area is reserved for the industrial development; situated to southeast from the university campus. Three sites covering total MIDC area selected for the present work. First site is distillery industry (S1) second sampling site is well (S3) situated nearby where the distillery effluent was dump and bank of Sukhna River which is contaminated by sewage and industrial discharge. Third, is bore well, (S4) situated at Masnnapur Chikalthana MIDC. And fourth site is dairy (S2) industry located in city area. The sampling sites are given names as S1, S2, S3 and S4.
Monthly physico-chemical analyses have been carried out from respective sampling sites for two year to know the pollution load. A seasonal and annual fluctuation has been recorded throughout study.

**Sampling sites**

1. **Distillery effluent (S1):** It is located in MIDC Chikalthana and 13 km away from the university campus. It generates huge quantity of effluents, which adversely affect quality of surface and ground water body. It is located bank of Sukhana River.

2. **Dairy effluent (S2):** It is located nearby in city area. It is about 5 km away from the university campus. Dairy wash is highly decomposable.

3. **Well water sample (S3):** The site is located on the bank of the Sukhana River at nearby Masnatpur. It is 13 km away from the university campus. The well water may be contaminated due to seepage of distillery and other industrial effluents.

4. **Borewell water sample (S4):** It is located at Masnatpur is 13 km away from the university campus. It is located 30 feet away from the Sukhana River found contaminated due to seepage of chemical and dye industry effluent. The depth of well and borewell are found in the range of 30 to 50 feet.