STUDY AREA AND SITES
STUDY AREA AND SITES

Sampling sites for industrial effluents were selected in Raipur and Durg district. Raipur district is a part of Chhattisgarh Region. The later is commonly known as 'rice bowl' of M.P., which forms southeastern part of Madhya Pradesh. The district lies between $19^0 5' \text{ to } 21^0 53'$ north latitude and $81^0 25' \text{ to } 83^0 38'$ east longitude. In this region, many industries have come up due to the availabilities of raw-materials and minerals. Industries like Bhilai Steel Plant, Bhilai; Century Cement, Baikunth; Mandhar Cement Factory, Mandhar etc. acted like polar industries facilitating the growth of other industries.

Within the Planning Area of Raipur, and outside it, few industrial areas have been demarcated like, Urla, Achholi, Bhanpuri, Birgaon, Rawabhanta, Gondwara, Gogaon, Sondongri, Sarora and Amaseoni areas. Industrial areas have also come up in other small towns near Raipur, like, Bhatapara, Dhamtari, Baloda Bazar, Mahasamund and Mandir Hasaud. A new industrial area at Siltara is also being developed since 1989.

Information gathered from District Industrial Centre, Raipur, show that till 1994, there were 58 large and medium scale industries, 476 small-scale industries and 13 proposed large-scale industries in Raipur district. Urla and Siltara areas mostly accommodate the small-scale industries. Urla Industrial Area is situated 11 Kms. from Raipur, which started developing since 1984. According to latest information there are 25 large and medium scale industries in Urla Industrial Estate occupying 60.42 hectares and 298 small and medium scale industries over 139.59 hectares.
MAP SHOWING THE PLACES OF INDUSTRIES.
The following industries were selected for collecting there effluents, making physico-chemical analysis and isolation of bacteria there from.

1. Woolworth Industries, a wool processing industry manufacturing woollen yarn and clothes, is situated in the Urla Industrial Estate, approximately 11 Kms. from Raipur.

2. Monnet Ispat, a steel processing industry manufacturing rails, is situated in the industrial area of Mandir Hasaud, approximately 15 Kms. North-East of Raipur.

3. Heera Ferro Alloys, an industry manufacturing low and medium carbon ferro manganese and ferro alloys powder for electrodes, is at Urla Industrial Estate.

4. M.P. Oils, an edible oil processing industry, is located 10 Kms. from Raipur city.

5. Raghuveer Ferro Alloys an industry manufacturing carbon ferro alloys is at Bhampuri.

6. Bhilai Steel Plant, is one of the largest steel manufacturing industry of our country, situated at a distance of 30 Kms. North-West of Raipur. Samples from two wastewater channels from this industry were taken, namely, Somni Nalla and Samodha Nalla. Somni Nalla runs 15 Kms. eastwards and joins river Kharun, which is a tributary to river Seonath. Samodha Nalla, on the other hand, runs westward and joins river Seonath, which is a tributary to river Mahanadi.

7. Vandana Ferro Alloys, an industry producing carbon ferro manganese and ferro alloys is situated at Urla Industrial Estate.