CHAPTER 2

THE NATIONAL CAPITAL TERRITORY
2.0 THE NATIONAL CAPITAL TERRITORY OF DELHI

The National Capital Territory (NCT) of Delhi lies 160 Km south of the Himalayas at a latitude of 28° 25'N and a longitude of 76° 50' E, with an altitude of approximately 213 to 305m above sea level. The city with a population of about 11 million people extends over an area of approximately 1483 Km², and experiences sub-tropical climate, with hot summers, and moderately cold winters.

Delhi, unlike the other large metropolitan cities in India (e.g. Mumbai, Calcutta and Chennai) which trace their origins to the outposts of the British East India Company, is an ancient city which dates back to the middle of the eleventh century (United Nations, 1997). It was designated the capital of British India in 1912, which not only put it into political focus, but also fostered its growth. The partition of the Indian subcontinent brought refugee movement on a massive scale, and special rehabilitation measures were taken, such as construction of housing and other facilities, which stimulated the economy and provided employment for a large section of the residents.

Traditionally, Delhi is a commercial and bureaucratic city, which has gradually industrialized in the last few decades. Indeed, in 1951, only about 15% of the labour force in Delhi were employed in the industrial manufacturing sector. However, by 1981, about 29% (approx. 569000) of the labour force was engaged mainly in small-scale industrial units (United Nations, 1997).

The NCT of Delhi has one of the largest clusters of small-scale industries in India, and experienced spectacular growth during the 1968 to 1996 period (Office of the Commissioner of Industries, 1996). The comparative growth of the industrial sector in Delhi is summarized in Figures 3 and 4 below. They compare the growth trends with respect to the number of industrial units and employment (Figure 3), and also, with industrial investment and production (Figure 4) during the period 1951 to 1996. It is clearly shown that there is a sharp increase in the establishment of new industrial units over the period, thus, corresponding to a subsequent rise in employment opportunities, and hence production. It should however be noted, that while these industrial units are located in well planned
Figure 3: Growth Trends in the Industrial Units and Employment in Delhi, 1951-1996.

Figure 4: Growth Trends in the Industrial Investment and Production in Delhi, 1951-1996
designated areas, many other units are often found in densely populated residential zones, thereby posing a serious threat to the residents.

In general, the Industrial establishments in the NCT of Delhi are situated in 28 industrial zones spread across the city (Figure 5). The nature of the industrial activities, vary from fabrication of garments, electrical appliances, consumer electronics, electroplating and steel processes, printing and publishing, etc, to food processing (Commissioner of Industries, 1996). These industries generate waste of varying characteristics and quantities, depending upon the nature of their industrial process. It is estimated that the total municipal solidwaste generated in NCT of Delhi is of the order of 6500 metric tonnes per day. In addition, Delhi generates 2270 million litres per day of liquid waste (CPCB 1997).

The supply of water in Delhi does not meet the city’s demand and about 70% of the population does not have access to water-borne sewerage. The wastewater generated from the domestic and industrial establishments in Delhi is required by the municipal authorities to be discharged directly into the municipal sewerage system. However, these sewers often suffer from blockages, thus, resulting in the wastewater being discharged directly into open storm drains, which link-up with others, before eventually emptying their contents into the Yamuna river which traverses the city from the north to the south-east direction. It is estimated that over 1900 million of litres of treated and untreated sewage and industrial effluents are discharged into the Yamuna river daily (Banerji and Martin 1997), resulting in the deterioration of its water quality.

The solid waste is on the other hand often dumped on the road-sides within the industrial zones, from where it is collected by the municipal authorities and tipped-off at low lying areas which act as dump sites. It should be noted that the waste might also be swept into the open storm drains, especially, during the heavy monsoon rains, when it is also susceptible to leaching.
Figure 5: Map showing the Study Sites and the Major Industrial Areas in the NCT of Delhi