# LIST OF CONTENTS

## CHAPTER 1: INTRODUCTION

1.1: Environmental Pollution by Industrial Production Process  
1.2: Waste and its Sources  
1.3: Global Scenario in Wastes Generation  
1.4: Waste Generation in India

## CHAPTER 2: LITERATURE REVIEW

### 2.1: Solid Waste
- 2.1.1: Characterisation of Solid Waste
- 2.1.2: Impact on Soil
- 2.1.3: Impact on Vegetation
- 2.1.4: Fractionation of Metals
- 2.1.5: Impact of Leachate Generation
- 2.1.6: Waste Management
- 2.1.7: Solid Wastes Disposal

### 2.2: Wastewater
- 2.2.1: Characterisation of Wastewater
- 2.2.2: Impact on Vegetation
- 2.2.3: Impact on Soil
- 2.2.4: Toxicity to Animals
- 2.2.5: Impact on Water System
- 2.2.6: VOC from Wastewater
- 2.2.7: Management of Wastewater

### 2.3: INDUSTRIAL POLLUTION IN DELHI

## CHAPTER 3: AIMS AND OBJECTIVES

## CHAPTER 4: STUDY AREA

## CHAPTER 5: MATERIAL AND METHODS

## CHAPTER 6: RESULTS

### 6.1 Wastewater
- 6.1.1: pH and EC
- 6.1.2: Total Suspended Solids
- 6.1.3: Anions
- 6.1.4: Major Elements
- 6.1.5: Toxic and Heavy Metals

### 6.2: Solid Waste
- 6.2.1: pH and EC
- 6.2.2: Major Elements
- 6.2.3: Toxic and Heavy Metals

### 6.3: Fractionation of Toxic and Heavy Metals in Solid Waste
CHAPTER 7: DISCUSSION

7.1: Chemical Characterisation of Wastewater
   7.1.1: pH and EC
   7.1.2: Total Suspended Solids
   7.1.3: Anions Analysed
   7.1.4: Major Elements Analysed
   7.1.5: Toxic and Heavy Metals Analysed

7.2: Toxic and Heavy Metals in Suspended Solid

7.3: Chemical Characterisation of Solid Waste
   7.3.1: pH and EC
   7.3.2: Major Elements Analysed
   7.3.3: Toxic and Heavy Metals Analysed

7.4: Fractionation of Toxic and Heavy Metals in Solid Waste
   7.4.1: Iron
   7.4.2: Manganese
   7.4.3: Copper
   7.4.4: Zinc
   7.4.5: Chromium
   7.4.6: Nickel
   7.4.7: Lead
   7.4.8: Cadmium and Cobalt

CHAPTER 8: GENERAL DISCUSSION

8.1: Correlation Matrix in Wastewater and Solid Waste
   8.1.1: Wastewater
   8.1.2: Solid Waste

8.2: Factor Analysis for Wastewater and Solid Waste
   8.2.1: Wastewater
   8.2.2: Solid Waste

8.3: Enrichment Factor for Metals Studied in Wastewater and Solid Waste
   8.3.1: Wastewater
   8.3.2: Solid Waste

8.4: Pollution Budget or Metal flux from Study Areas
   8.4.1: Wastewater
   8.4.2: Solid Waste
   8.4.3: Major Drains
   8.4.4: Yamuna River

CHAPTER 9: WASTES MANAGEMENT PRACTICES OBSERVED BY SMALL SCALE INDUSTRIES

CONCLUSION

REFERENCES

APPENDIX