

CHAPTER –1

1.0 INTRODUCTION

The entire World has faced serious environmental problems over years. Developing Countries in Africa, Asia and Latin America have been the mostly affected areas with serious consequences. The human activities have been blamed in and measures have been attempted to curb the problem. Until the Earth's protective atmosphere was formed, there was no life except in the sea. Now big cities, cars and factories pollute the air so much, we may soon be better off back there!

Our planet is becoming choked with poisonous gases mostly from our daily activities like driving cars, warming our houses and running power stations. The problem is worst in Latin America and Asia. In cities like Seoul and Mexico City, the air is so bad, some people wear face masks to filter the air they breathe. In cities like Beirut and Damascus, dust storms make it even worse! And pollution doesn't need a passport. Pollution from factories and power stations in Europe, North America and Russia ends up in the Arctic region.

Air pollution is a major factor in causing humans to get ill. Tuberculosis, bronchitis, heart and chest diseases, stomach disorders, asthma and cancers can all be traced to chemicals in the air. Pesticides and fertilizers release gases and particles into the air which poison people and kill animals.

Imagine that the Earth has a sunshade around it protecting it from the heat of the sun. This is called the ozone layer but the sunshade has holes so that harmful rays get through, causing cancer. To prevent it, we wear sun glasses to protect our eyes, and sun cream to protect our skin. Ling So Low, Malaysia



For years, chlorofluorocarbons (CFCs) were used as a cooling device in freezers and air conditioners. Scientists discovered, however, that CFCs destroy the ozone layer – the layer that filters ultraviolet radiation from the sun. Ultraviolet radiation causes eye damage and skin cancer. An international agreement commonly called the Montreal Protocol, signed in 1989 has helped stop the production of CFCs. If we keep to this agreement, ozone-depleting substances will stop being produced and the ozone layer will begin to repair itself over the next 100 years.

The world is warming up because carbon dioxide (CO₂) from smoke and car exhausts collects in the atmosphere and traps some of the heat going back to space, like a greenhouse. CO₂ and other greenhouse gases are expected to raise global temperature by an average of 2°C by the year 2100 causing the polar icecaps to melt, sea levels to rise and freak weather conditions which may cause millions of deaths.

Almost all living things on Earth need water to live, yet humans pollute and waste it recklessly. More than a fifth of the world's population doesn't have enough: it is likely people will go to war over water in your lifetime.



Some areas have far too much water and suffer from floods, like Bangladesh and the flood plains of the Mississippi in the United States. Other areas, like Africa and West Asia, suffer severe droughts. The problem of water availability is most serious in Africa and West Asia. If water consumption continues at its present rate, by 2025 two out of three people will not have enough water for their basic needs.

Mining and industry pollute rivers with deadly chemicals. Farmers spray crops with pesticides and fertilizers which are washed into rivers and lakes. In many parts of the world, people use rivers as open sewers and garbage dumps. Near coasts, when too much water is taken from aquifers (big underground reservoirs of fresh water), sea water seeps in and makes the water salty and undrinkable.

Worldwide, polluted water affects the health of **1.2 billion** people and contributes to the death of **15 million** children under five every year. For example, in Asia, **one in three** people do not have access to safe drinking water and **one in two** have no access to hygienic sanitation.

Oceans are the largest ecosystems on Earth. Seventy-five per cent of all sea pollution is from land-based human activity. People abuse the coastal marine environment by destroying habitats, by over-fishing and pollution. More than 37% of the world's population lives within 100 km of a coast and this percentage is rising! Land prices are rising too, forcing change in economic activity and forcing out local fishing villagers.

Most countries use the sea as a sewer. For example, coastal cities in Africa dump hundreds of millions of litres of sewage and industrial waste into the sea a year. This will continue as they cannot afford sewage treatment plants. As sewage, fertilizers and other . nutrients. are poured into the seas, sea weeds and algae spread like a horror movie, using up all the oxygen that fish need to stay alive. In the past, the Soviets dumped nuclear waste in the shallow seas of the Arctic circle. As these began to leak, the marine life came under threat.

Good soils and growing conditions are not evenly distributed around the world and in places the problem is made worse by a greedy few abusing the land, resulting in poverty and hunger for millions. Extreme land degradation results in desertification - when land becomes desert and is unable to support any vegetation. Desertification affects over a billion people. It is particularly bad in the savannas of Africa, the Great Plains and pampas of the America and in the steppes of south-east Europe and Asia, the outback of Australia and parts of the Mediterranean region.

Towns and cities are often developed on former farmland and forests. As urban areas grow, land that once grew food disappears under concrete. This means the remaining land has to produce more food to support even more people. Poverty increases stress, especially in Asia where 75% of the people are poor. Available land per capita is already very low in Asia with 182 people per km² compared to the world average of 44 per km²

Soil degradation affects a third of the world's land and diminishes our ability to produce food for the growing population. It is caused by deforestation, poor land and water management, over-use of fertilizers and pesticides, poor waste disposal, clearance of poor land for growing food, and air pollution. Land degradation leads in

a helter-skelter downward spiral to worse poverty amongst the world's poorest peoples. Food security is all about having enough food. Food availability in sub-Saharan Africa and Southeast Asia is a huge problem now. The countries in these regions generally have the fastest growing populations. They also have the largest number of poor people, the worst land degradation, most rapid urbanization and biggest debts so they cannot afford to import food.

Forests, like oceans, recycle carbon dioxide into oxygen, and provide habitats for most of the world's biodiversity. They are also a vital source of building materials and firewood. But almost all of them are under threat. We are losing forest at a rate of 375 km² a day – an area the size of Greece each year. Causes include urban development, clearance for agriculture, fuel wood collection, timber exploitation, fires and submersion of forests in lakes created by hydro-electric dams. Deforestation contributes to desertification, global warming, poverty and loss of beauty. More than half the Central American rainforest has gone. The Amazon will not last to the end of the 21st century if the current rate of cutting it down continues.



Map: dark green areas show location of the last remaining tropical rainforests

The world has lost 80% of the original forests that covered the earth. The remaining old-growth forests are found mostly in the Amazon rainforest, Central Africa, Southeast Asia, Canada and the Russian Federation. But they are threatened with logging, mining and development.

Fires start from human action or natural causes. In Indonesia and many countries in South America, farmers start most of the forest fires to clear land of trees. Much of the cleared land is used for pasture. The fires in Indonesia in 1997 were featured in the news, but there were bigger fires in Brazil (1997) and Mongolia (1996). Forest fires add carbon dioxide (CO₂) to the atmosphere. In this way, the fires contribute to global warming and the smoke makes whole populations sick.

Many forests are sick! Air pollution is a main cause: smokestack industries cause acid rain, which attacks forests. In parts of Central and Eastern Europe, you see miles and miles of dead and dying trees. In Africa, drought, civil war, bush fires and inappropriate agricultural practices are degrading forests.

Biodiversity means the rich variety of life forms in nature. It is warned us that many of the world's different plants and animals are under severe threat of extinction. Many species are lost already. An ecosystem is a place where nature creates a unique mix of air, water, soil and a variety of living organisms to interact and support each other. Destroy these ecosystems and we are destroying ourselves. Deforestation, over-fishing, over-hunting, forest fires, pollution and modern agricultural practices all contribute to the loss of habitat. Cutting roads and railways through habitats blocks natural migration and feeding routes.



Living organisms are made up of cells. Scientists have found a way to copy, or clone, the information, or genes found in cells to make new plants and animals. But no one knows if it is totally safe to take genes from one species and add them another. Well-known examples of genetic manipulation include Dolly the sheep – the first cloned mammal, and adding the genes of a toad or a spider to vegetables.

Scientists have recorded 1.75 million species on our planet and estimate another 5 to 100 million unrecorded species! The educated guess stands at 12.5 million.

A species is said to be extinct when it has not been seen for over 50 years. Dinosaurs became extinct 65 million years ago but, in the last 50 years, more animals and plants have become extinct, because of hunting and loss of habitat. Globally, many hundreds of species will face extinction in a very few years without intensive conservation, education and environmental management and policy-making.

Though 60 to 70% of people in developing countries live in rural areas, half the total world population now lives in urban areas, drawing their food and natural resources from the surrounding rural areas.

In 1970, there were only three cities with more than 10 million people. Now there are 32 and three of these have more than 20 million. Rural people move to cities attracted by the promise of work, higher salaries and a better social life. This growth places ever greater pressure on the environment. For example, in Russia and eastern Europe, tens of thousands of people have migrated to cities since 1989, putting a huge strain on both the natural and the built environment.

Most cities suffer from noise and air pollution. Experts say that 20% of Europeans are subject to stress from noise. Air pollution also takes its toll on human health. Millions of dollars are spent on health care due to air pollution and many early deaths result from respiratory diseases such as bronchitis and asthma.

All cities are divided between rich and poor sectors. Business growth and rising numbers of tourists increase the incomes of the rich but the poor see little of the increased wealth. Vast numbers live in shanty towns in cheap, self-made sheds. There is insufficient clean water or sanitation, few schools, few amenities of any kind. Health suffers first. It is estimated that 100 million people in cities are homeless in both developed and developing countries. Some of the worst polluting industries are likely to be located in poor or racially distinct neighbourhood.

Water is the single most valuable resource for cities. Many cities are facing a serious shortage of safe drinking water as a result of leaking pipes and pollution from POPs. Most city people in developing countries end up boiling their water, or buying bottles. Where piped fresh water is available, it usually only goes to elite residential areas. The poor still have to buy their water through middle men and end up paying more for it than the rich.

“Global freshwater consumption rose six-fold between 1900 and 1995 - more than twice the rate of population growth. About one third of the world's population already lives in countries considered to be 'water stressed' - that is, where consumption exceeds 10% of total supply. If present trends continue, two out of every three people on Earth will live in that condition by 2025”.

-- Kofi Annan, in We The Peoples, 2000

In conclusion, therefore, we should all stay in the world peacefully. Peace is a cherished hope of mankind and a crying need of all ages. We all need peace whether individually or collectively and this is becoming more obvious than before. We all have a task to stop wars and terrorism first in our own countries and then the world over because small streams can become mighty rivers. By doing so, we can keep our ENVIRONMENT in better health for our coming generations.

Since its inception, PPCB was entrusted with the responsibility, only to execute and oversee the provisions of Water (Prevention & Control of Pollution) Act, 1974. But the new dimensions were added to the role of functions of the Punjab Pollution Control Board after the enactment of Air (Prevention & Control of Pollution) Act, 1981 and alter, in the aftermath of the Bhopal Gas Tragedy, enactment of Environment (Protection) Act, 1986.

The major objective of the Board is to protect and preserve, throughout the State, the environmental health and ecological balance through (a) control of pollution at the source, (b) minimization of pollution control requirement by judicious location of new industries and (c) introduction of long-term programme of pollution control. The Board is to promote cleanliness of rivers, streams, improve the quality of air and to prevent, control or abate air pollution, assess the noise level and initiate appropriate steps against those who create noise pollution. This Annual Report aims at presenting PPCB's day to day activities for the year **2004-05**.

CHAPTER -2

3.1 OBJECTIVES OF THE BOARD

The main objective of the Board is to prevent, control or abate Water and Air, pollution, maintain and restore the wholesomeness of water and the quality of air.

In conformity with the objective, the Board is vested with the authority to oversee, within the State of Punjab, the application of following laws and rules relating to pollution control:

1. Water (Prevention & Control of Pollution) Act, 1974 as amended in 1988.
2. Water (Prevention & Control of Pollution) Cess Act, 1977.
3. Air (Prevention & Control of Pollution) Act, 1981 as amended in 1987.
4. Environment [Protection] Act, 1986
5. Hazardous Wastes [Management & Handling] Rules, 1989 as amended in 2000.
6. Manufacturing, Storage and Import of Hazardous Chemicals Amendment, 2000.
7. Manufacture ,Use, Import, Export, and Storage of Hazardous Micro-organisms, Genetically Engineered Organisms or Cells Rules, 1989
8. Public Liability Insurance Act, 1991.
9. Environment Audit Notification, 1993
10. Environment Impact Assessment Notification dated 27-01-1994 and Notification dated 10-04-1997 for conducting public hearing prior to the issue of No Objection Certificate [Consent to Establish]
11. Chemical Accidents [Emergency Planning, Preparedness & Response] Rules, 1996
12. Bio-Medical Wastes [Handling & Management] Rules, 1998.
13. Recycled Plastics Manufacture, and Usage Rules, 1998 and amendment thereof
14. Notification dated 14-09-1999 on Fly-ash Utilization under EPA, 1996
15. The Noise Pollution (Regulation & Control) Rules, 2000
16. Ozone Depleting Substances (Regulation & Control) Rules, 2000
17. Municipal Solid Wastes [Management & Handling] Rules , 2000
18. Batteries [Management & Handling] Rules, 2001
19. Directives of Hon'ble Supreme Court and High Court

2.1 FUNCTIONS OF THE BOARD

1 Pollution Control- Regulatory Functions	<p>▷ To inspect industrial plants and manufacturing process, sewage or trade effluents, works and plants for the treatment of sewage and trade effluent or any control equipment, to review plans, specifications or other data relating to plants set up for effluent treatment or air pollution control devices, in connection with the issue consents for installation and operation of industrial plant and to give, such directions to such persons as it may consider necessary to take steps for the prevention and control or abatement of water or air pollution.</p> <p>▷ To ensure that hazardous wastes generated by the industry are stored and disposed off without any detrimental effect to the environment.</p>
2 Pollution Assessment	<ul style="list-style-type: none">• To assess the quality of water of rivers, streams, wells & ambient air in the State & to plan a comprehensive programme for the prevention, control & abatement of pollution.
3 Laying down standards for effluent and emissions	<p>▷ To lay down, modify or annual effluent standards for the sewage and trade effluents and for the quality of receiving waters resulting from the discharge of effluents and for the emissions of air pollutants into the atmosphere from industrial plants and automobiles.</p>

- 4 Research & Development including setting up of demonstration plants.** ▶ To Encourage, conduct and participate in investigations and research relating to problems of water & air pollution and prevention, control or abatement thereof and to evolve economical and reliable methods of treatment of sewage and trade effluents, having regard to peculiar conditions of soils, climate and water resources of different regions.
- ▶ To evolve method of utilization of sewage & trade effluents on land for agricultural purposes.
- 5 Environment Awareness Programme** ▶ To collect and disseminate information relating to water and air pollution and prevention, control or abatement thereof.
- ▶ To collaborate with Central Board in organizing the training of persons engaged or to be engaged in program relating to prevention, control or abatement of water and air pollution and to organize mass education programs relating thereto.
- 6 Advisory Role** ▶ To advise the State Government on any matter concerning the prevention control or abatement of water and air pollution.
- 7 Establishment of Laboratories** ▶ To establish or recognize laboratories for analyzing of sample of sewage or trade effluent & air emission into the atmosphere.

2.2 APPROACH OF THE BOARD

The functions listed above are directed towards the effective control of water & air pollution and to maintain & restore the quality of water for various designated uses and of air. In order to achieve the above, the general approach of the Board is:

#	Description
1	To control pollution at the source with due regard to techno-economic feasibility for liquid effluents as well as gaseous emissions.
2	To ensure that natural waters are not polluted by discharge of untreated city sewage.
3	To maximize reuse/recycling of sewage and trade effluents and to use the treated effluent on land for irrigation and for industrial purpose after appropriate treatment.
4	To minimize pollution control requirements by judicious location of new industries and relocation of existing industries wherever necessary.

2.3 STRATEGY OF THE BOARD

#	Description
1	Take up highly polluting large and medium industries, most grossly polluted areas of the State and grossly polluted river stretches to be dealt with on priority basis for control of pollution.
2	Identification of pollution sources and follow up action for treatment measures being a continuous process, is being systematically pursued and in this direction good success has been achieved. Efforts have been made for creation of awareness about environmental pollution by educating the industry and local authorities. It is felt that if the adverse effects of pollution are correctly explained by the authorities and correctly understood by polluters, no person would hesitate to take up the necessary pollution control measures irrespective of the economic cost involved.
3	Promotional measures and assistance through incentives, guidelines, development of cost effective technologies and putting up of demonstration plants.
4	Persuasion of industry / local bodies to take preventive measures for the control of pollution.
5	Strengthening of capacities for pollution control through training and laboratory development and strengthening of man power and infrastructure.

2.4 ACTIVITIES OF THE BOARD

In order to perform its functions under the above Acts, the Board carries out the following main activities:

#	Description
1	It carries out the monitoring of the Water quality of all the four rivers of the State viz. Satluj, Beas, Ravi & Ghaggar through 37 monitoring stations
2	It monitors the groundwater quality in the major industrial towns of Ludhiana, Jalandhar, Amritsar, Nangal etc.
3	It carries out the monitoring of the quality of ambient air of Ludhiana, Jalandhar, Amritsar, Patiala, Mandi Gobindgarh & Nangal through 22 permanent air monitoring stations.
4	The Board advises, guides, encourages, persuades & helps the industry in putting up effluent treatment plants and air pollution control devices to control pollution and in taking other measures to prevent or reduce pollution.
5	The Board issues NOC's to the new units on submission of a proper scheme for pollution control and issues consent under Water & Air Acts, after the unit takes adequate pollution control measures. It also issues authorizations to Hazardous Waste generating units on their making proper arrangement for storage of such wastes. The Board performs its regulatory function through consent mechanism. The Board issues consents ranging from one year to fifteen years in the case of highly polluting industries and for ever, for green category industries.
6	The Board launches prosecutions against the units which do not take steps to control pollution inspite of repeated requests & warnings. It also orders closure of units when all other methods fail under the provisions of the Water Act, 1974 and the Air Act, 1981 etc.
7	The Board makes available cost effective technologies & sets up model demonstration plants for control of pollution in small scale units such as cupola furnaces, rice shellers and induction furnaces etc. with the help of Punjab State Council for Science & Technology, Chandigarh.
8	It monitors the noise level in the cities generated due to industrial, domestic and other public activities. <u>These studies help the Board in assessing the pollution in the state.</u>
9	It monitors the effects on soil due to the discharge of liquid effluents on to land.

CHAPTER -3

3.0 STRUCTURE AND ORGANIZATION

Punjab Pollution Control Board is constituted as per the provisions of the Water (Prevention & Control of Pollution) Act, 1974.

3.1 CONSTITUTION OF THE BOARD

The Punjab State Board for the Prevention and Control of Water Pollution was constituted under section 4 of the Water (Prevention & Control of Pollution) Act, 1974. The Board consists of :

A full time Chairman.

Such number of persons, not exceeding five, to be nominated by the State Government to represent that Government.

Such number of persons, not exceeding five, amongst the members of Local Authorities functioning within the State.

Such number of non-officials, not exceeding three, to represent the interest of agriculture, fishery or industry or trade or any other interest which, in opinion of the State Government ought to be represented.

Two persons to represent the companies or corporations owned, controlled or managed by the State Government.

A full time Member Secretary.

The following were the Board of Directors of the Punjab Pollution Control Board for the year under report

#	Description	Designation
1.	Sh. Rana KP Singh, MLA Chairman From 1/4/2004 to 12/7/2004	Chairman
2.	Mrs. Romilla Dubey, IAS Principal Secretary, Department of Science, Technology and Environment as Chairman From 2/8/2004 to 10/9/04	Chairman
3.	S. Tript Rajinder Singh Bajwa, MLA Chairman From 13/9/2004 to 31/3/05	Chairman
4.	The Director of Industries & Commerce, Punjab, 17, Bays Building, Sector 17, Chandigarh.	Member
5.	The State Transport Commissioner, Punjab, Jeevan Deep Building, Sector 17, Chandigarh	Member
6.	The Director, Food & Civil Supplies, Punjab, Chandigarh	Member
7.	The Principal Chief Conservator of Forests, Punjab, 17, Bays Building, Sector 17, Chandigarh.	Member
8.	The Director, Local Government, Punjab, SCO 131-132, Sector 17-D, Chandigarh.	Member
9.	The Commissioner, Municipal Corporation, Ludhiana.	Member
10.	The Commissioner, Municipal Corporation, Jalandhar.	Member
11.	The Commissioner Municipal Corporation, Amritsar.	Member
12.	The Commissioner Municipal Corporation, Patiala.	Member
13.	The Managing Director Punjab Small Industries and Export Corporation Ltd., Chandigarh.	Member
14.	The Managing Director Punjab Health Systems Corporation, Chandigarh.	Member
15	Managing Director, PSIEC, Chandigarh	Member

#	Description	Designation
16	S. Baldish Singh Toor, Civil Lines, Qadian, District Gurdaspur	Member
17	S. Gurdip Singh Bhaini, Ex-MLA, Village Bhaini Aryian, PO. Sidhwan Bet, Tehsil Jagraon	Member
18	Sh. Ramesh Joshi, s/o Sh. Sham Lal Joshi, 677/15-B, St. No. 8, Upkar Nagar, Ludhiana	Member
19	S. Malvinder Singh, Member Secretary, PPCB	Member

3.2 SELECTION COMMITTEES OF THE BOARD

During the year 2004-05, the Board had the following Committees for the appointment to the posts of Class-A, B, C & D posts :

3.2.1 SELECTION COMMITTEE FOR SELECTING THE CANDIDATES FOR APPOINTMENT TO GRADE 'A' & 'B' POSTS :

1.	Chairman, Punjab Pollution Control Board	Chairman
2.	Special/Additional/Joint/Deputy Secretary to Government of Punjab Deptt. of Science, Technology & Environment, Chandigarh.	Member
3.	Director of Industries/ Addl. Director of Industries, Punjab, Chandigarh	Member
4.	Member Secretary, Punjab Pollution Control Board	Member
5.	Representative of Welfare of SC/BC Deptt. Punjab	Member
6.	Representative of Deptt. of Defence Services, Punjab (for selection of candidates belonging to Ex-serviceman category only).	Member
7.	Representative of Deptt. of Social Security, Punjab (For Selection of competent Handicapped persons).	Member

3.2.2 SELECTION COMMITTEE FOR SELECTING THE CANDIDATES FOR APPOINTMENT TO GRADE 'C' & 'D' POSTS :

1.	Member Secretary, Punjab Pollution Control Board Patiala.	Chairman
2.	Special/Additional/Joint/Deputy Secretary to Government of Punjab Deptt. of Science, Technology & Environment, Chandigarh.	Member
3.	One Senior Environmental Engineer Punjab Pollution Control Board	Member
4.	Administrative Officer Punjab Pollution Control Board	Member
5.	Representative of Welfare of SC/BC Deptt. Punjab	Member
6.	Representative of Deptt. of Defence Services, Punjab (for selection of candidates belonging to Ex-serviceman category only).	Member
7.	Representative of Deptt. of Social Security, Punjab (For Selection of competent Handicapped persons).	Member

3.3 MANAGEMENT AND ORGANIZATION

3.3.1 BASIC ORGANIZATION

The policies and decisions made by the Board are implemented through the following cells organized according to the functional requirements :

#	Cell	Description of functions
1	CONSENT MANAGEMENT CELL	<ul style="list-style-type: none">• To scrutinize applications for consent under the Water Act, 1974 and the Air Act, 1981 received from the industrial units and local bodies in the State and to scrutinize applications for the authorization under the Hazardous Wastes [Management & Handling] Rules, 1989 as amended in 2000.• To scrutinize applications for No Objection Certificates from pollution angle to the new industrial units.• To vet the designs of effluent treatment plants and air pollution control proposals received from the industries.• To co-ordinate with other cells within the Board for laboratory back up and monitoring of treatment plant performance.• To scrutinize the proposals received from the Regional Offices of the Board for launching prosecutions against the defaulting industrial units and the local bodies both under the Water Act, 1974 and Air Act, 1981 .• To prepare cases for initiating legal action under the Environment (Protection) Act, 1986.
2	ADMINISTRATIVE CELL	<ul style="list-style-type: none">• General administration• Personnel management• Notifications and Circulars etc.• Procurement of stationery articles etc.

#	Cell	Description of functions
3	FINANCE AND ACCOUNTS CELL	<p>⇒ Maintenance of accounts of water cess collected on behalf of the Government of India and remittance of water cess to the Government of India.</p> <p>⇒ Maintenance of accounts of share of water cess reimbursement received from the Government of India and income of the Board.</p> <p>⇒ Assessment of water cess.</p> <p>⇒ Preparation of salary and other bills of the staff and payment thereof.</p> <p>⇒ Payment of all kinds for material supply and construction and maintenance of the office and laboratory building etc.</p> <p>⇒ Preparation of the Budget of the Board.</p>
4	LEGAL CELL	<ul style="list-style-type: none"> • To maintain records of all prosecutions approved by the Board and to watch the progress of these cases and to submit progress report of the prosecution to the Ministry of Environment and Forests, Government of India and Central Pollution Control Board, New Delhi. • To assist the Regional Offices in conducting prosecution cases. • To deal with the legal notices, and legal cases in Hon'ble Supreme Court, High Court , National Human Rights Commission etc.

#	Cell	Description of functions
5	SCIENTIFIC CELL	<p>Under this cell, the Board has a modern Central Laboratory at Patiala and Regional Laboratories at Ludhiana, and Jalandhar. The main functions of this cell are to analyze the water, trade effluent, sewage, stack emissions and ambient air samples received. This cell is responsible for preparation of specifications of scientific instruments and equipments required by the Board's laboratory. This cell is also assisting the Technical Cell to evolve standards to be prescribed by the Board under the provisions of various Acts. The Board has taken up various projects for the monitoring of rivers i.e Satluj, Beas, Ravi and Ghaggar ; soils irrigated by industrial effluents ; sewage groundwater in certain towns ; and ambient air quality in industrial towns. In addition to this, staff of this cell also visit places for surprise checks and other important purposes and is also maintaining and operating a mobile laboratory for on the spot sampling and analysis.</p>
6	HAZARDOUS WASTES MANAGEMENT CELL	<ul style="list-style-type: none"> • To scrutinize applications for authorizations under the HWM Rules received from the industrial units in the State. • To co-ordinate with other cells within the Board for laboratory back up and monitoring of hazardous wastes storage facilities provided by the industries to store hazardous wastes within their premises. • To scrutinize the proposals received for the development of Hazardous Wastes Disposal Site. • To prepare and monitor the inventory of hazardous wastes generating units in the State of Punjab.

#	Cell	Description of functions
		<ul style="list-style-type: none"> ▷ To prepare and monitor the inventory of hazardous wastes dump sites in the State of Punjab. ▷ To prepare the schemes for the rehabilitation of the dump sites in the State of Punjab ▷ To prepare and monitor the Common TSDF Site for HWM. ▷ To look into the matters and issues relating to bio-diversity. ▷ To look into the matters and issues relating to Genetically Modified Micro-organisms. ▷ To look into the matters and issues relating to wastes oil. ▷ To look into the matters and issues relating to noise pollution. ▷ To look into the matters and issues relating to manufacturing and disposal of Lead Batteries.
7	CONSTRUCTION CELL	<ul style="list-style-type: none"> ▷ This cell is responsible for the maintenance of the Head office building of the Board. ▷ The Board has 12 Regional Office, in the Punjab State. Only regional office at Patiala is located in the Board's own building and other offices are in rental premises. ▷ The Board has decided to construct its own office buildings at all places and purchase land for this purpose in the Focal Points developed by Punjab Small Industries and Export Corporation, Chandigarh. Please see details as ANN-1

#	Cell	Description of functions
8	COMPUTER CELL	<ul style="list-style-type: none"> • Implementation of Management Information System in the Board which includes four modules namely Consent Information Management System (CIMS), Human Resource Management Information System (HRMIS), Laboratory Information Management System (LIMS) and Cess Assessment & Collection Information Management System (CACIS). • Maintenance and updation of the web site of the Board. • Information Technology Implementation in the Board as per Govt. policy. • Maintenance of Local Area Network (LAN) and Wide Area Network (WAN). • Maintenance of Computer hard wares peripherals as well as soft wares.
9	ENVIRONMENT PROTECTION SQUAD	<ul style="list-style-type: none"> • To monitor the status of pollution which includes industrial as well as other sources. • To collect samples and get them analyzed. • To prepare detailed inspection reports on the prescribed format. • To confirm the data/information collected during the inspection with the record files of the industrial units/local bodies. • To record definite recommendations for action required to be taken by the Board.

#	Cell	Description of functions
		<ul style="list-style-type: none"> • To look onto all complaints by it directly or through Head Office / Regional Office and take action as per the provisions of the various Acts • To recommend action to be taken of the findings of the complaints • To look after the work of R&D, Organizing Seminars / Workshops / Mass Awareness Programmes in its Zone.
10	COMPETENT STATE AUTHORITY	<p>As per the Press Note 17 (1984 series) of the Government of India, 20 categories of highly polluting industries in Large-Medium sector are required to obtain clearance of site from Environmental Angle for conversion of their letter of Intent into Industrial Licence. For this purpose, the Government of Punjab has constituted a Competent State Authority (CSA) with the Principal Secretary to Govt. of Punjab, Deptt. of Science, Technology & Environment, and Non-Conventional Energy as its Chairman and the Chairman of the Punjab Pollution Control Board as its Member Secretary. The industry is also required to obtain site clearance under the Factories Act. For considering the applications of the entrepreneurs under this Act, the State Govt. had substituted a Site Appraisal Committee (SAC). The members of CSA and SAC were almost same.</p>

#	Cell	Description of functions
		<p>As such, the State Govt., to eliminate duplicacy and provide the hassle free environment, vide its Notification No.5/16/95-STE(4)/2381 dated 17.11.1998 merged both the Committees and formed a single Committee namely CSA-cum-SAC. Now the cases of environmental clearances as per Press Note No. 17 (1984 series) and the cases of site clearance under the Factories Act are decided by this Committee.</p> <p>Meetings of this Committee are conducted at regular intervals. The comments of various member departments are obtained regarding the suitability of the proposed site and the pollution control measures proposed by the industry.</p> <p>In addition to the above, this Cell also handles the work of conducting the public hearings for the specified projects included in the EIA Notification dated 27.1.1994 of Govt. of India, Ministry of Environment & Forests. This public hearing is pre-requisite for the grant of environmental clearance by the Govt. of India, Ministry of Environment & Forests under the EIA notification.</p>
11	ZONING ATLAS CELL	<p>The Punjab Pollution Control Board has so far been involved in Punjab Control and regulatory activities since its inception under the Act of the Law.</p>

#	Cell	Description of functions
		<p>In view of the growing environmental concerns and risks due to haphazard siting of industries and poor land use compatibility, the need to introduce environmentally compatible development concept was felt. This has paved the way to introduce environmental planning, now popularly known as Zoning Atlas programme as a promotional activity that helps achieve the development targets in an environmentally sound manner. The main function of this cell is to prepare Zoning Atlases for proper siting of industries in the State.</p>
12	<p>BIO-MEDICAL WASTE & MUNICIPAL SOLID WASTE CELL</p>	<ul style="list-style-type: none"> ▷ To implement the provisions of Bio-Medical Waste (Management & Handling) Rules, 1998 and Municipal Solid Waste (Management & Handling) Rules, 2000. ▷ To implement the provisions of the Plastic Handling Rules.
13	<p>PUBLIC RELATIONS</p>	<ul style="list-style-type: none"> ▷ Preparation of advertisements and other literature for public awareness programmes
14	<p>MEGA PROJECTS CELL</p>	<ul style="list-style-type: none"> ▷ This is looked after by the Member Secretary himself to facilitate the speedy disposal of applications of mega projects being implemented in the State. ▷

#	Cell	Description of functions
15	PLANNING CELL	<ul style="list-style-type: none"> ⇒ Monitoring of planned schemes ⇒ Monitoring of 17 categories of highly polluting industries ⇒ Fixation and monitoring of Board's targets ⇒ Conducting monthly officers meetings of the Board ⇒ Chairman and Member Secretaries Conferences ⇒ Correspondence with industrial Associations etc. ⇒ Correspondence with the Government of Punjab, MoEF, Government of India, and other organizations ⇒ Meeting of Empowered Committee/High Level Co-ordinattion Committee/Udyog Sahayak / Mega Projects etc. ⇒ Monitoring of Satluj Action Plan ⇒ Replies to Lok Sabha / Rajya Sabha / Vidhan Sabha Questions / CAG paras etc. ⇒ Activities and Status Report of the Board ⇒ Annual Report of the Board ⇒ Clean Technologies ⇒ Municipal Solid Wastes [Management & Handling] Rules 2000 ⇒ Plastics and Noise Rules ⇒ Preparation of standards ⇒ Preparation of siting guidelines for various types of industries ⇒ Preparation of policy for implementation of environmental laws ⇒ Issuing notifications and Office Orders of various decisions of the Board ⇒ Library ⇒ Trainings

3.3 BOARD'S MANPOWER

The sanctioned and the working strength of the Board manpower, during the period 2004-05, is given below in **Table-1**

GROUP-A

#	Name of the post	Posts sanctioned	Posts filled	Posts vacant
1	Member Secretary	1	1	0
2	SEE	4	4	0
3	EE	20	20	0
4	AEE	45	36	9
5	Deputy Secretary	1	1	0
6	SSO	1	1	0
7	SO	1	1	0
8	ASO	5	5	0
9	Law Officer	4	4	0
10	Administrative Officer	1	1	0
11	Asstt. Personnel Officer	1	1	0
12	Deputy Admn Officer	1	1	0
13	Deputy Controller [F&A]	1	1	0
14	Assistant Controller [F&A]	1	1	0
15	PS to Chairman	1	1	0
16	Systems Analyst	1	0	1
17	Programmer	1	1	0
	Total	90	80	10

GROUP-B

#	Name of the post	Posts sanctioned	Posts filled	Posts vacant
1	Junior Scientific Officer	11	10	1
2	Superintendent	3	3	0
3	Legal Assistant	1	1	0
4	Section Officer	2	2	0
5	Personal Assistant to MS	1	1	0
	Total	18	17	1

GROUP-C

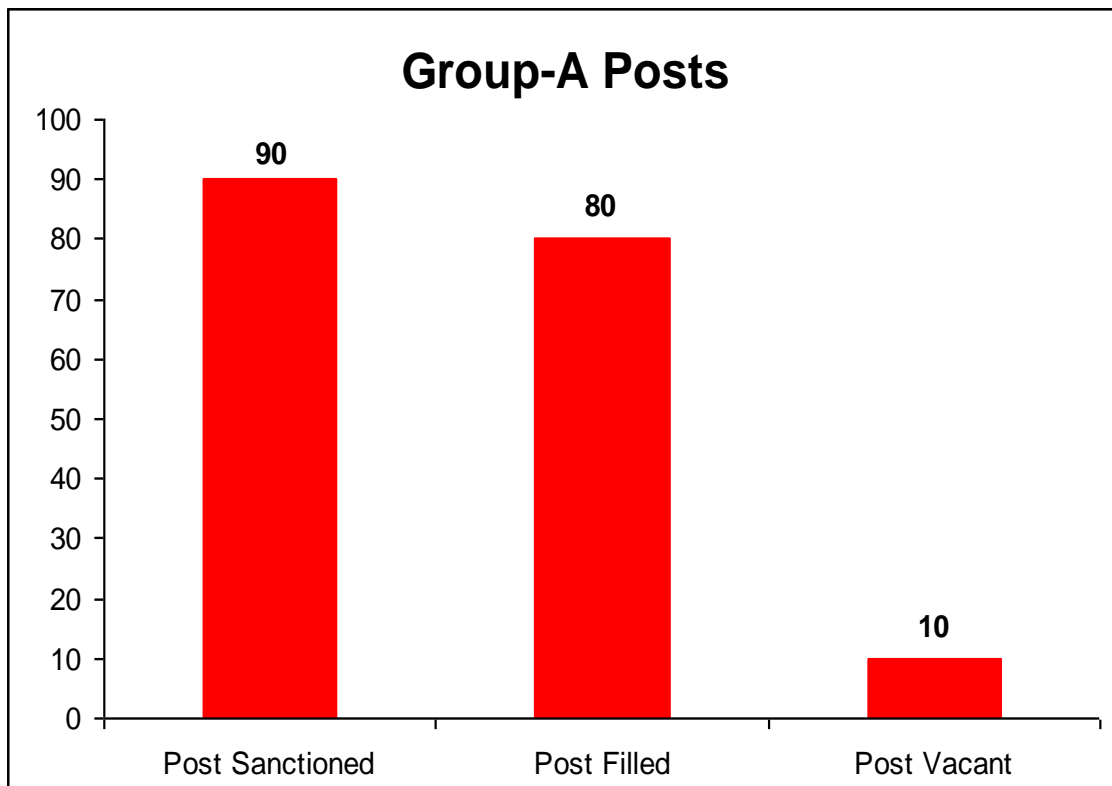
#	Name of the post	Posts sanctioned	Posts filled	Posts vacant
1	Junior Env. Engineer	10	6	4
2	Sr. Scale Stenographer	3	3	0
3	Steno-typist	23	20	3
4	Senior Assistant	31	31	0
5	Senior Assistant A/C	3	3	0
6	Clerk	58	47	11
7	Clerk-Accounts	9	9	0
8	Assistant Programmer	2	0	2
9	Data Entry Operator	4	4	0
10	Librarian	1	1	0
11	Caretaker	1	0	1
12	Glass Blower-cum-Storekeeper	1	1	0
13	Senior Technician	1	1	0
14	Restorer	1	1	0
15	Lab Attendant	5	5	0
16	Supervisor driver	1	1	0
17	Driver	40	37	3
18	Receptionist	1	1	0
19	AC Operator-cum-Mechanic	1	1	0
	Total	196	172	24

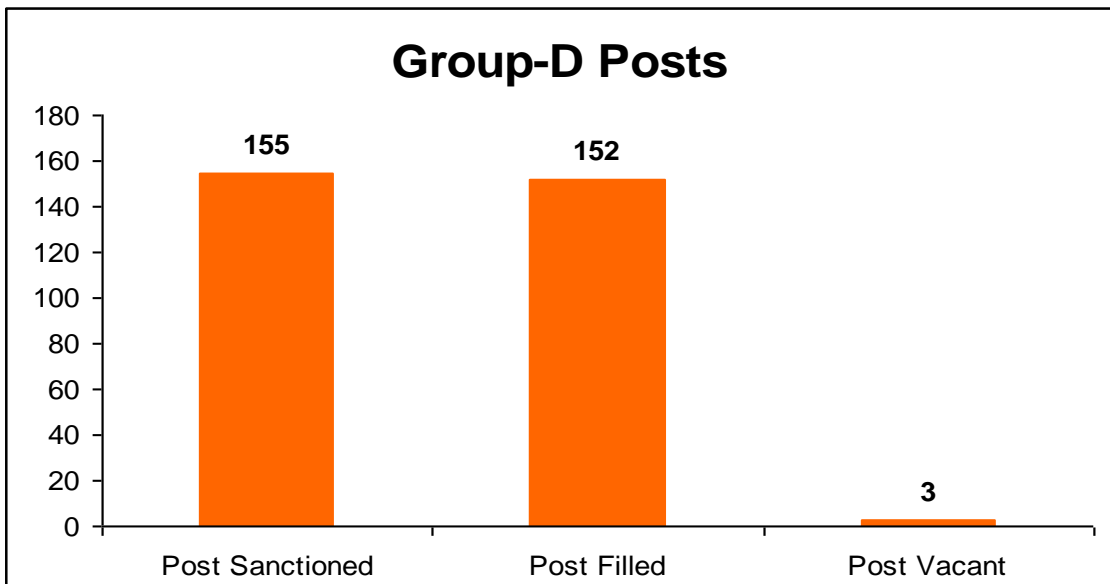
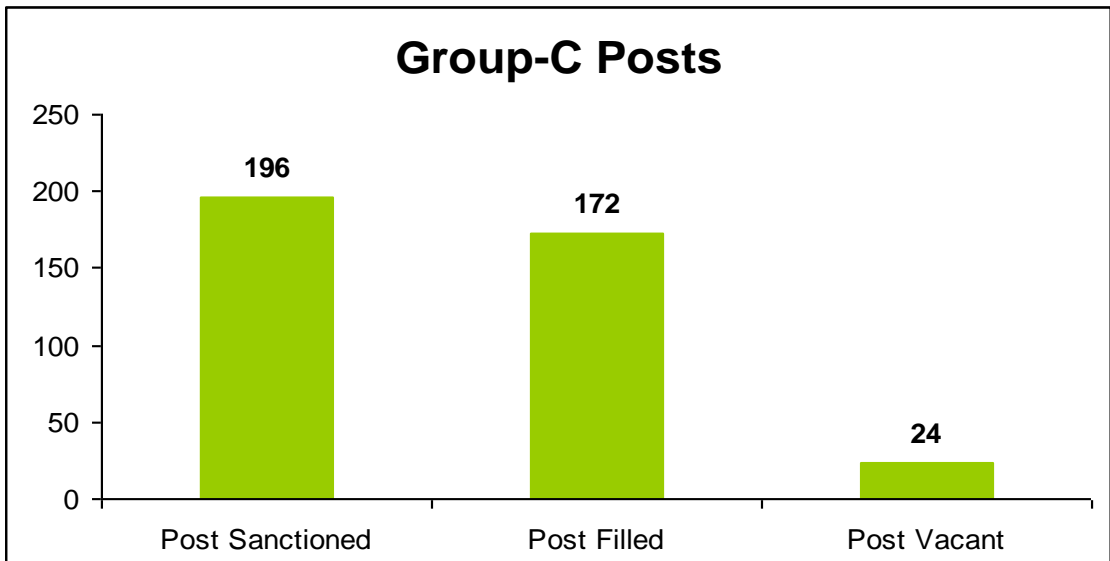
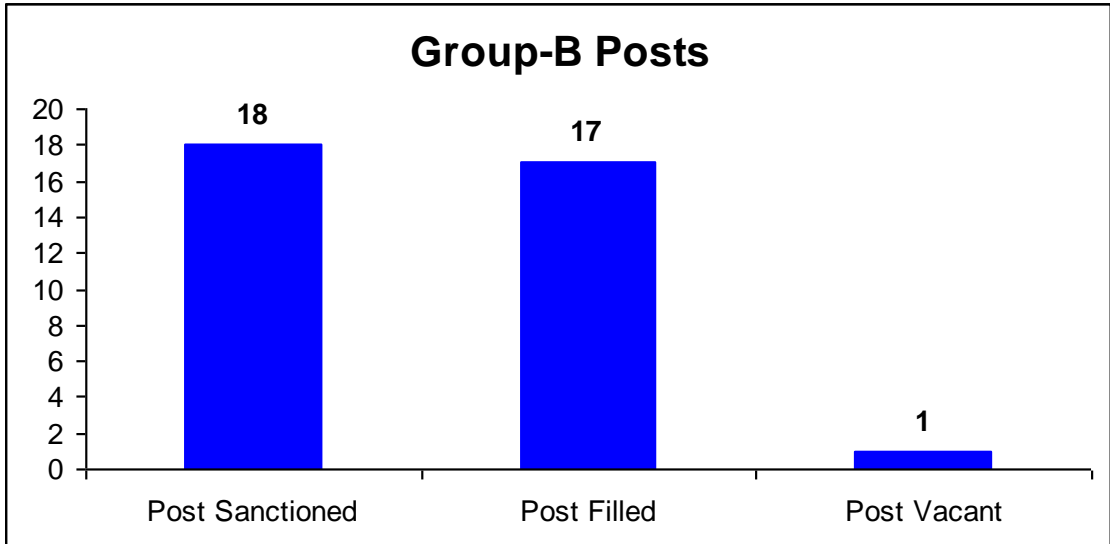
GROUP-D

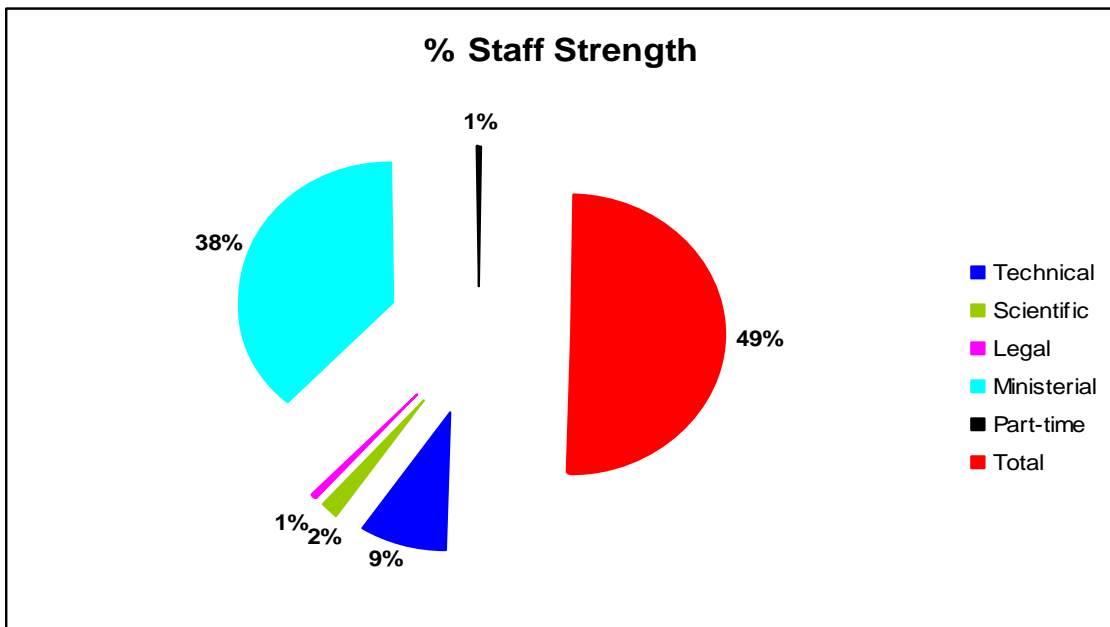
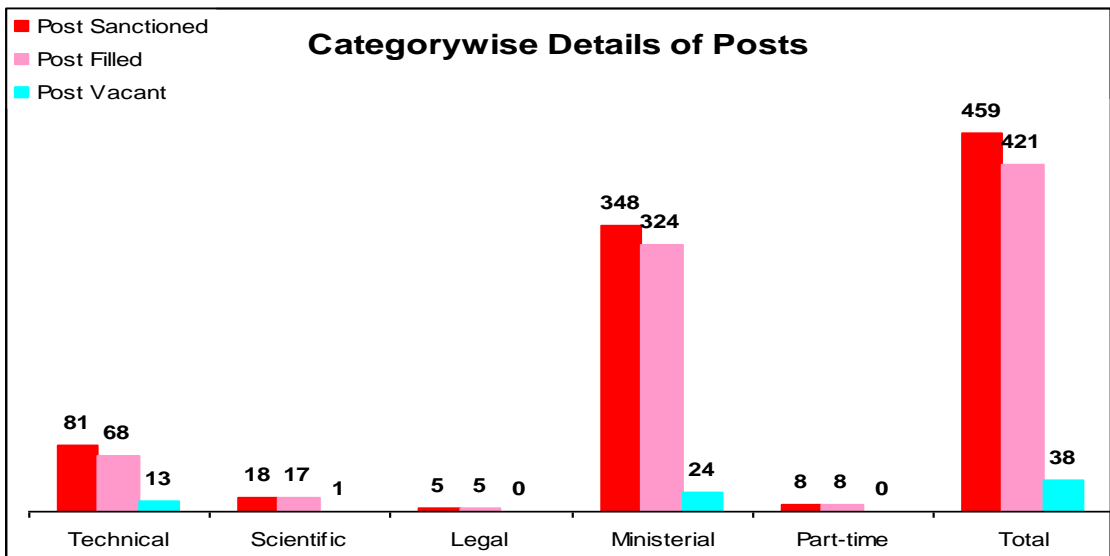
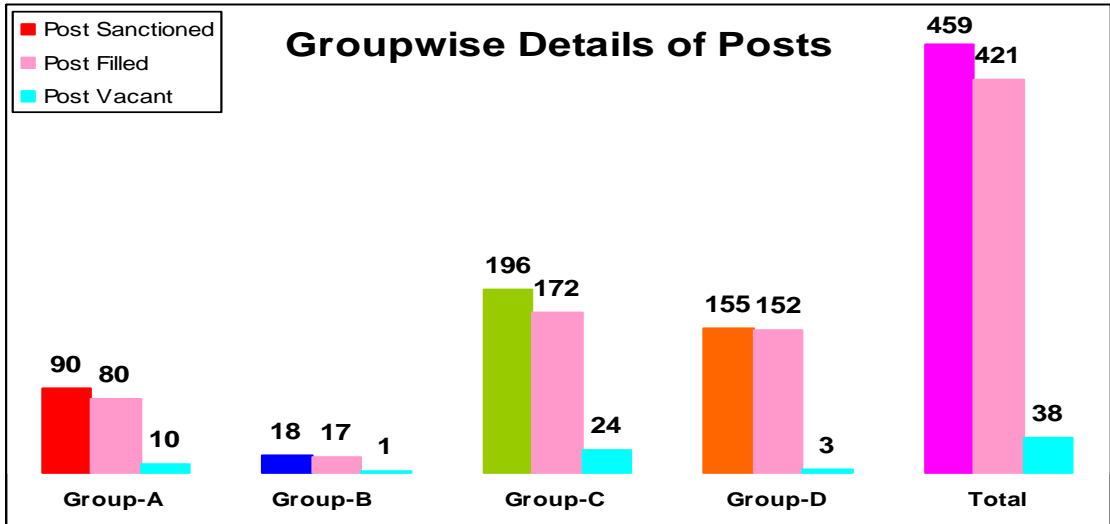
#	Name of the post	Posts sanctioned	Posts filled	Posts vacant
1	Field Attendant	98	98	0
2	Peon	27	25	2
3	Zamadar	4	4	0
4	Chowkidar and Chowkidar-cum-Cook	12	11	1
5	Mali	1	1	0
6	Cash Messenger	1	1	0
7	Daftri	3	3	0
8	Helper to AC Operator	1	1	0
9	Part-time Sweeper	8	8	0
	Total	155	152	3

#	Group	Posts sanctioned	Posts filled	Posts vacant
1	Group-A	90	80	10
2	Group-B	18	17	1
3	Group-C	196	172	24
4	Group-D	155	152	3
	Total	459	421	38

#	Category	Posts sanctioned	Posts filled	Posts vacant
1	Technical	81	68	13
2	Scientific	18	17	1
3	Legal	5	5	0
4	Ministerial	347	323	24
	Part-time	8	8	0
	Total	459	421	38







Board Meetings

During the year under report, the Board held the following meeting:

#	Meeting Number	Date of meeting	Venue
1	123 rd	06-09-2004	Camp Office, SCO-NO. 134-135-136, Sector-34-A, Chandigarh
2	124 th	18-01-2005	Camp Office, SCO-NO. 134-135-136, Sector-34-A, Chandigarh
3	125 th	25-02-2005	Camp Office, SCO-NO. 134-135-136, Sector-34-A, Chandigarh
	126 th	30-03-2005	Camp Office, SCO-NO. 134-135-136, Sector-34-A, Chandigarh

The major decisions taken in these meetings are reproduced below:

123rd Meeting

Subject
<ul style="list-style-type: none">• Considered the case of MC Phagwara for prosecuting it for the violation of the provisions of the Municipal Solid Waste (Management & Handling) Rules, 2000
<ul style="list-style-type: none">• Considered the cases for the implementation of the provisions of the Municipal Solid Waste (Management & Handling) Rules, 2000-Preparation of the DPRs for Kartarpur and Mandi Gobindgarh towns.
<ul style="list-style-type: none">• The Board approved the application for No Objection Certificate from pollution Angle of M/s The Tribune, Vill. Bulandpur, Distt. Jalandhar.
<ul style="list-style-type: none">• The Board considered and to discuss in detail the grant of NOC from Pollution Angle to industries, which are covered under the Factories Act and require site approval by the Site Appraisal Committee (SAC).
<ul style="list-style-type: none">• The Board approved the acquisition of land for treatment, storage and disposal facility (TSDf) for hazardous waste at Village Nimbuan, Tehsil Dera Bassi, Distt. Patiala.
<ul style="list-style-type: none">• The Board approved the grant of Wheat Advance to Class-IV Employees of the Board during the year 2004-05.
<ul style="list-style-type: none">• The Board approved the study report conducted by PGI, Chandigarh for it on the topic “An epidemiological study of cancer cases reported from villages Giana and Jhujjal of Talwandi Sabo Block, Distt. Bathinda” and desired that the copies of it may be sent to concerned quarters for necessary action to be taken at their end.

Subject
<ul style="list-style-type: none"> • The Board considered to discuss in detail the extensions in period of 'Consent to Operate' granted to the industries as per policy of the Board regarding grant of 'Consent to establish'/ 'Consent to operate' under Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 to the industries situated in the non-designated areas of the State.
<ul style="list-style-type: none"> • The Board reviewed the validity period of consent to operate granted by the Board under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981.
<ul style="list-style-type: none"> • The Board desired further discussion on re-constitution of the Sub-Committee constituted by the Board for considering Consent to Establish (NOC) cases of rice shellers, saila plants & brick kilns which do not qualify the siting guidelines stipulations framed by the Board for such type of industries.
<ul style="list-style-type: none"> • The Board approved the merger of 50% Dearness Allowance Relief with basic pay/ pension to Government employees/pensioners w.e.f. 01/04/2004.
<ul style="list-style-type: none"> • The Board approved the stream lining the procedure for public hearing to be conducted as per Schedule-IV of the Environment Impact Assessment Notification 1994.
<ul style="list-style-type: none"> • The Board approved the necessary amendment in the Board's circular no. 5834-84 dated 6/8/2002 issued for setting up of industrial unit within M.C. limit of Mandi Gobindgarh.
<ul style="list-style-type: none"> • The Board approved the Outsourcing of work of Punjab Pollution Control Board – Proposals / Schemes submitted by Punjab State Council for Science & Technology for funding by the Board costing Rs. 63.25 lacs.
<ul style="list-style-type: none"> • The Board decided to keep in abeyance the filing of complaint u/s 43/44 read with section 48 of the Water (Prevention & Control of Pollution) Act, 1974 for violation of provisions of section 24, 25/26 of the said Act.

124th Meeting

Subject
<ul style="list-style-type: none">• The Board considered the case regarding the violation of the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 by PSIEC, Leather Complex, Jalandhar and decided to defer owing to the surety given by PSIEC that they are making efforts to run the CETP.
<ul style="list-style-type: none">• The Board considered and decided to invite comments from the Board members regarding exemption from obtaining consent to establish/operate by certain categories of tiny/cottage/small units under Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981.
<ul style="list-style-type: none">• The Board considered to discuss the matter in detail to consider Extension in period of "Consent to Operate" granted to the industries as per policy of the Board regarding grant of "Consent to operate" under Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 to the industries situated in the non- designated areas of the State.
<ul style="list-style-type: none">• The Board considered and approved to get the study done from PGI, Chandigarh on Epidemiological study entitled "Effect of Effluent disposal on water quality and human health among peoples living in close proximity to Hudhara Nallah, East Bein & Budha Nallah".
<ul style="list-style-type: none">• The Board approved the Setting up of departmental promotion committees for considering cases of promotion to Class-I and Class-II (Now Group 'A' & Group 'B' posts).
<ul style="list-style-type: none">• The Board expressed its satisfaction on the Achievement of Target for the year (1/4/2004 to 30/9/2004).
<ul style="list-style-type: none">• The Board approved the Delegation of powers to Senior Environmental Engineers under Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981.
<ul style="list-style-type: none">• The Board agreed to the Implementation of recommendations of the Fourth Punjab Pay Commission regarding enhancement in the existing ceilings on certain reimbursable items/treatment.
<ul style="list-style-type: none">• The Board considered and approved the monetary incentive to the Field Attendants/Class-IV Employees who will work as Driver in the Board in addition to their present official duties.

<ul style="list-style-type: none"> • The Board considered and approved the Budget Estimates for the year 2005-06 and to also take note of revision of Budget Estimates for current year i.e. 2004-05.
<ul style="list-style-type: none"> • The Board approved the Annual Accounts of the Board for the year 2002-03.
<ul style="list-style-type: none"> • The Board approved the Grant of Festival Advance to Class IV and drivers of the Board for the year 2004-2005.
<ul style="list-style-type: none"> • The Board approved the Reimbursement of Medical Expenses of Sh. Satinder Mohan Singh, L.A.
<ul style="list-style-type: none"> • The Board approved the Annual Report of the Punjab Pollution Control Board for the year 2002-2003.
<ul style="list-style-type: none"> • The Board approved the Delegation of financial and administrative powers to the Chairman, Member Secretary and other officers of the Board.
<ul style="list-style-type: none"> • The Board considered the case regarding revoking of termination orders of Sh. Gurdarshan Singh Bahia, Public Relation Officer and approved it.
<ul style="list-style-type: none"> • The Board decided to write to GOP to upgrade the two posts of laboratory attendants of the Board as Scientific Assistant in the pay scale of Rs. 5000-160-5800-200-7000-220-8100.
<ul style="list-style-type: none"> • The Board approved writing off outstanding balance of House Building Advance and Conveyance Advance against Boards employees who dies while in service.
<ul style="list-style-type: none"> • The Board re-constituted the Sub-Committee constituted by the Board for considering "consent to Establish" (NOC) cases of rice shellers, saila plants & brick kilns which do not qualify the siting guidelines stipulations framed by the Board for such type of industries.
<ul style="list-style-type: none"> • The Board did not approve the up-gradation of the post of Helper to A.C. Operator-cum-Mechanic of the Board as Electrician in the pay scale of Rs. 3120-5160/-.

125th Meeting

Subject
<ul style="list-style-type: none"> • The Board considered the matter and approved issuing necessary clarifications regarding issuance of NOC for setting up Rice Shellers & Saila Plants in designated industrial areas, focal points.
<ul style="list-style-type: none"> • The Board approved the Grant of NOC from pollution angle to industries, which are covered under Factories Act and require site clearance by Site Appraisal Committee.

<ul style="list-style-type: none"> • The Board approved the Fixation of limit of P.O.L.
<ul style="list-style-type: none"> • The Board considered and approved the terms and conditions of Sh. A.R. Takkar, Advocate/ Standing Counsel of the Board and Sh. Jasdeep Singh Gill, Advocate of Punjab and Haryana High Court.
<ul style="list-style-type: none"> • The Board approved the Grant of Loan and Advances to the employees of the Board during 2005-2006.
<ul style="list-style-type: none"> • The Board approved providing Mobile Phone facilities to the officers of the Board.
<ul style="list-style-type: none"> • The Board approved the policy of granting NOC to establish the residential colonies – fixing at minimum distance from industries.
<ul style="list-style-type: none"> • The Board approved the achievement of targets by the Board for the period 1/10/2004 to 31/12/2004.
<ul style="list-style-type: none"> • The Board considered the Revision of pay scale of Scientific, Legal and Clerical Staff.
<ul style="list-style-type: none"> • The Board considered that the Environmental Awareness campaign by the Board may be launched by involving an NGO.

126th Meeting

Subject
<ul style="list-style-type: none"> • The Board approved making necessary amendments in the Board's circular no. 5834-84 dated 6/8/2002 issued for setting up of industrial units within M.C. limit of Mandi Gobindgarh.
<ul style="list-style-type: none"> • The Board decided to defer against any action for the violation of the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 by PSIEC, Leather Complex, Jalandhar.
<ul style="list-style-type: none"> • The Board considered and approved the Re-appropriation of funds Rs. 30.00 lacs during 2004-05.
<ul style="list-style-type: none"> • The Board approved providing of Mobile Phones facilities to the officers/officials of the Board.
<ul style="list-style-type: none"> • The Up-gradation of laboratory of M/s International Testing Centre, Panchkula and M/s Sophisticated Industrial Materials Analytic Laboratory Pvt. Ltd., New Delhi from "B" category to "A" category was deferred.

CHAPTER-4

4.0 MONITORING NETWORK

4.1 Surface Water Monitoring

During the Year **2004-2005**, the surface water viz. river monitoring was carried out under MINARS scheme of Central Pollution Control Board under which 313 samples were collected from **37** points fixed on the rivers Satluj, Beas, Ravi and Ghaggar and the analysis results were sent to the Central Pollution Control Board. Some samples were also collected and analysed under the River Monitoring Scheme of Punjab Pollution Control Board. The details are as under:-

4.1.1 The River Satluj

It arises near the Drama Pass near Mansrover Lake at a height of 4,570m, enters Zaskar range and flows through Tibet before entering India. It cuts the great Himalayan range and enters the plains at Ropar. It forms a boundary between India and Pakistan for nearly 120 km. It finally enters Pakistan near Sulemanki.

The quality of water at upstream of Nangal conforms to **Class 'B'** of water quality index – **[fit for drinking without conventional treatment but after disinfection]**. But as the river progresses slowly and receives effluents and sewage from National Fertilizers Ltd. And Nangal Township and the water quality gets slightly affected, conforms to **Class 'C' or 'D'** of water index. The water quality remains conforming to class 'B' till it reaches at Ropar Head Works.

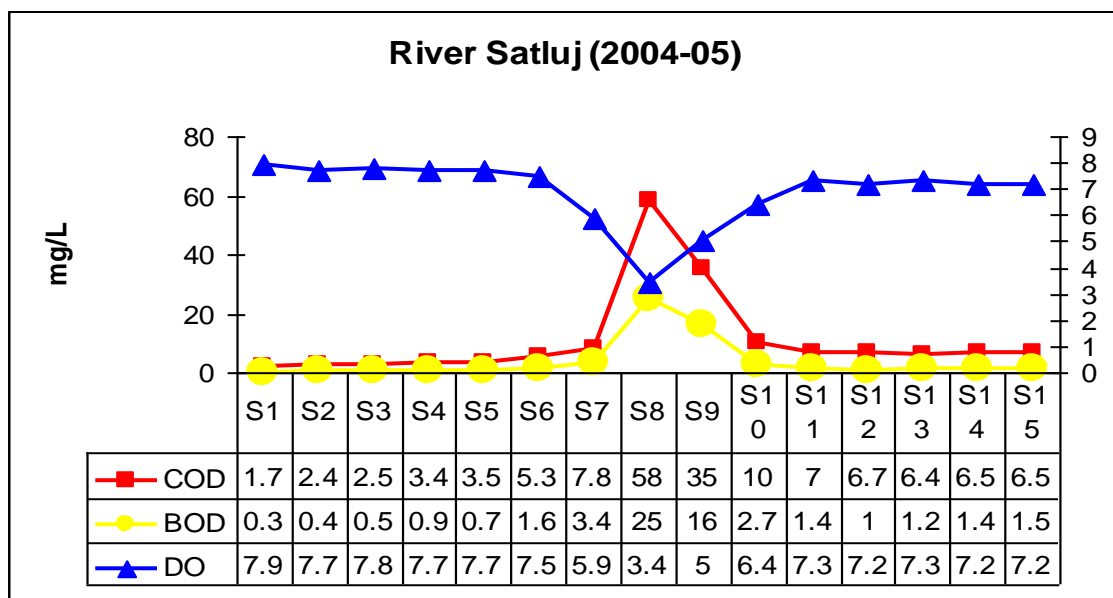
The water quality is worst at the confluence point of the river Satluj with Budha Nallah which carries the industrial effluents and the sewage of Ludhiana City. After the confluence point, the quality drops down to **Class 'D'** **[not fit for drinking with even conventional treatment or for bathing but suitable for propagation of wild life]** and sometimes to **Class 'E'** **[fit for only irrigation, industrial cooling, controlled waste disposal]**. However, by the time the river reaches Harike, the water

quality improves to some extent due to self purification, if conforms **Class 'C'**, & some times to **Class 'D'**.

The details of the sampling stations are as under :-

- 1 S1...100m Upstream Nangal Headworks.
- 2 S2...100m Downstream NFL.
- 3 S3...d/s NFL
- 4 S4...Downstream Kiratpur
- 5 S5 Satluj at u/s Ropar
- 6 S6...1 km d/s M/s Rishabh Papers
- 7 S7...Satluj u/s Budha Nallah
- 8 S8...Satluj at 100m d/s Budha Nallah Confluence
- 9 S9...At Boat Bridge, Dharamkot-Nakodar Road.
- 10 S10..Satluj at d/s East Bein
- 11 S11..Satluj at Bridge Harike
- 12 S12..Harike Lake
- 13 S13..Rajasthan Feeder canal at Harike.
- 14 S14..Hussainiwala HW
- 15 S15..d/s Hussainiwala HW

The annual average concentration of dissolved oxygen, Bio-Chemical Oxygen demand, Chemical Oxygen Demand for **2004-2005** in river Satluj is graphically shown as under:



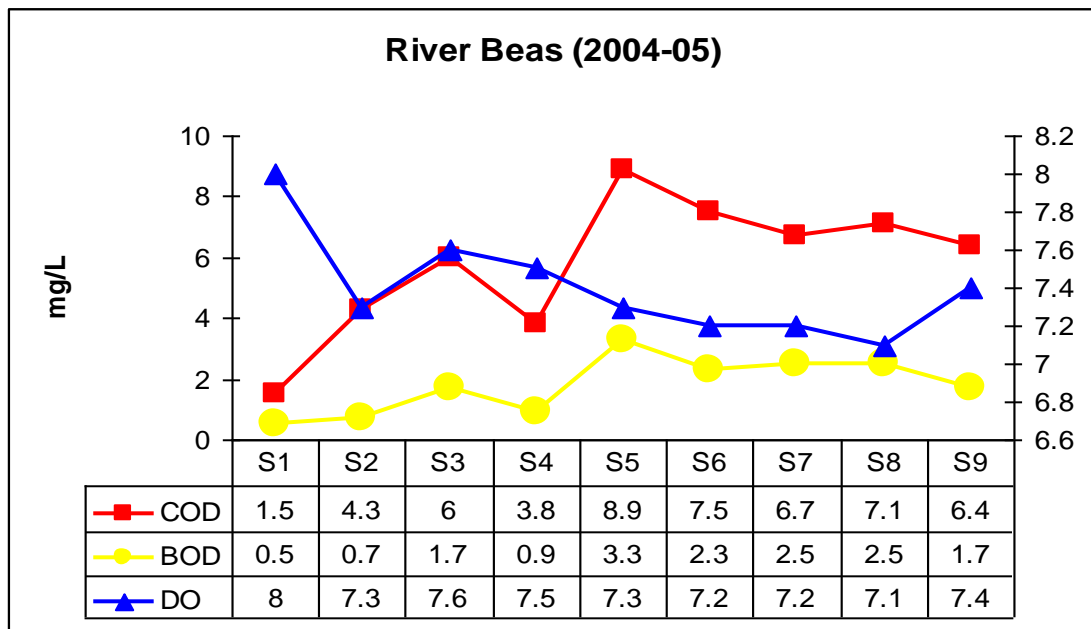
4.1.2 The Beas

The Beas enters near the Rohtnag Pass in Kulu at a height of 3,960 m and flows through a gorge from Larlji to Talwara and then enters the Punjab plains to meet the Sutlej at Harike. Its total length is 460 km and catchment area is 20,303 sq km.

The water quality in this river after it left Pong Dam in Talwara township was very good conforming to **Class 'B'** remained so till it receive the sewage from Mukerian town, Beas city and Goindwal and remained down to **Class "C" or "D"** of water quality index (**Propagation of wild life**). It reaches Harike with Class D water quality. There are **9** sampling stations at river Beas for monitoring purposes. The details are as under :-

1. B1...Talwara Head Works
2. B2...u/s Pathankot.
3. B3...d/s Pathankot
4. B4...At Mirthal bridge.
5. B5...1km d/s of industrial discharge point at Mukerian.
6. B6...Bridge near Kapurtahla.
7. B7...u/s Goindwal.
8. B8...At 100m d/s industrial discharge point, Goindwal.
9. B9...At Harike.

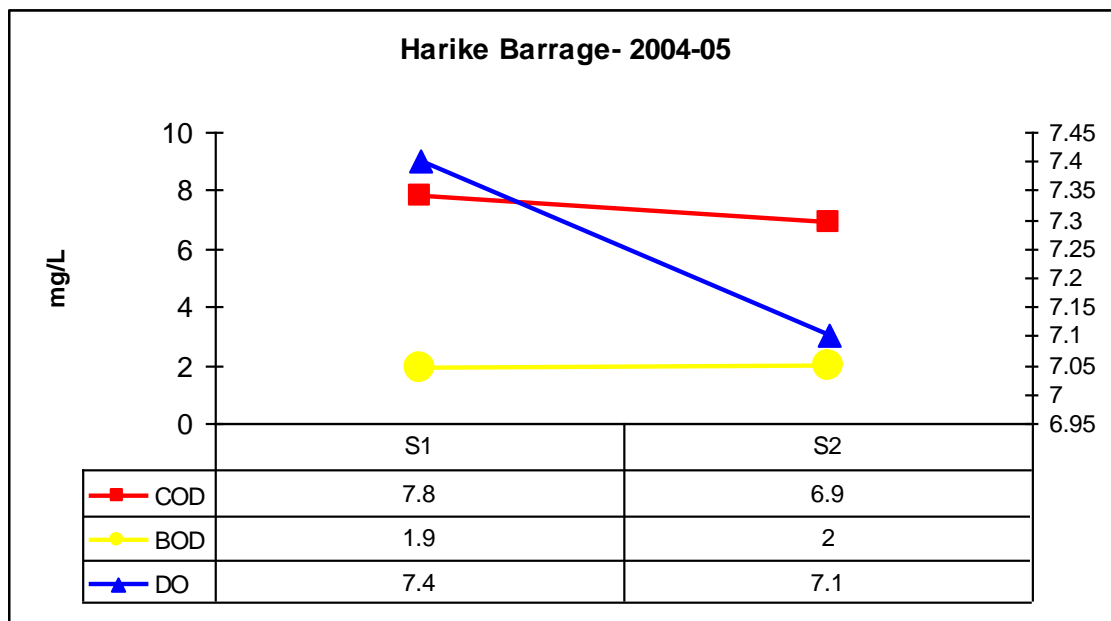
The annual average concentration of Dissolved oxygen, BOD and COD in river Beas is graphically represented as **under:**



Harike Lake

Harike Lake was formed after the construction of Harike Head Works. Here, Rivers Beas and Satluj merge to form a lake. There are two sampling stations at Harike Lake. The water quality at Harike Lake and at Harike Lake d/s from Canal is 'C' as per water quality index. The annual average concentration of Dissolved Oxygen, Bio-Chemical Oxygen Demand and Chemical Oxygen Demand for 2004-05 is graphically shown by taking samples from the following stations:

1. H1 d/s Harike Lake
2. H2 Harike Lake d/s from Canal

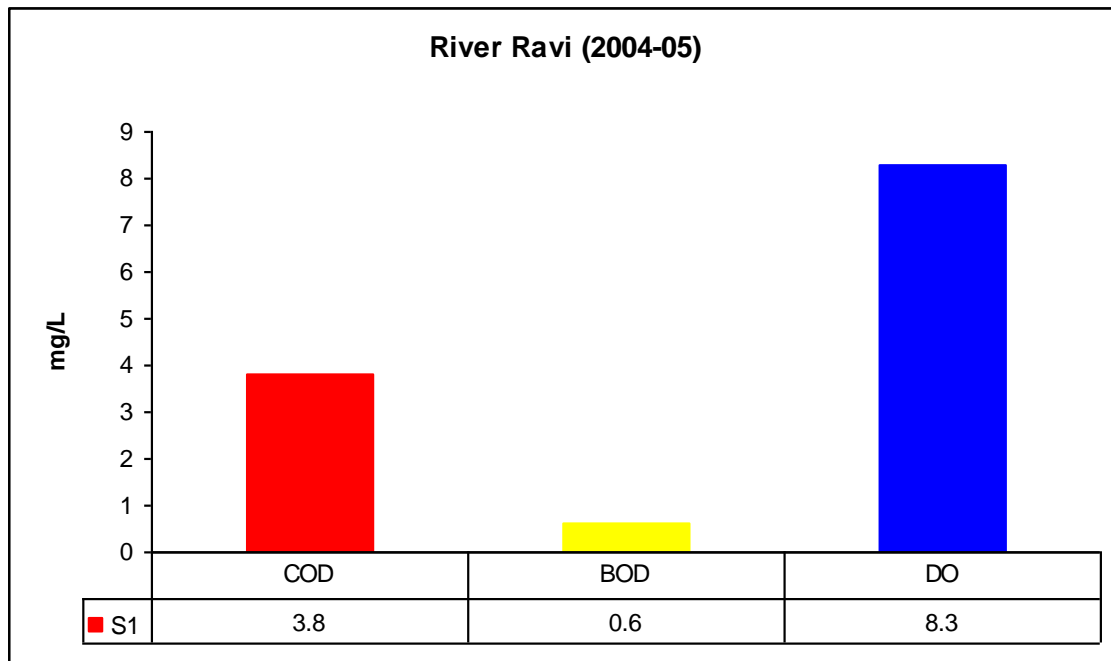


4.1.3 The Ravi

The Ravi rises in Kulu, flows westward through a triangle formed by the junction of the Pirpanjal and Dhaola Dhar ranges. It enters Punjab plains near Madhopur and later enters Pakistan 26 kms below Amritsar. Catchment area is only 14,442 sq km. The water quality in the river is comparatively clean along its entire length since there is little human activity around it and it remains 'B' throughout the year. There is only one sampling station on this river.

1. R-1—Madhopur Headworks

The annual average concentration of DO, BOD and COD in river Ravi is graphically shown as **under:**



4.1.4 The Ghaggar

The Ghaggar originates from the feet of Shivalik hills and runs towards North-East of Kalka. It enters Punjab in Dera Bassi block near village Kakrali and passes through Patiala, Sangrur and Bathinda districts of Punjab. It leaves Punjab near village Moonak after covering a distance of about 180 km in the Punjab territory.

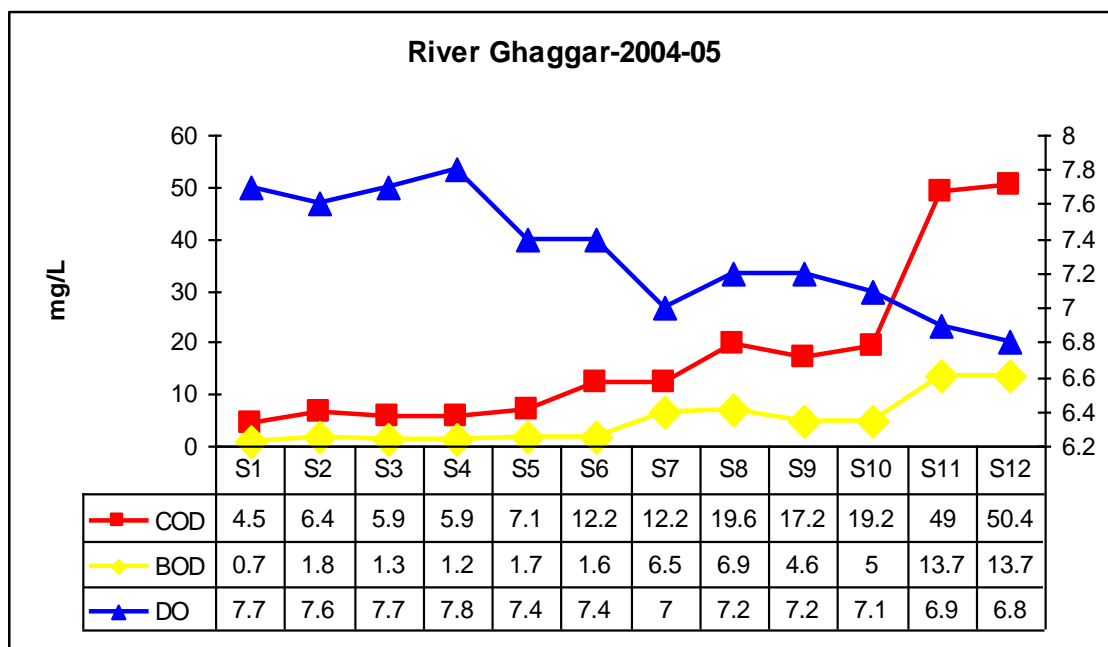
The river has bad quality of water due to meager flow in it, in addition to the discharge of industrial effluents and sewage at various points. The quality here is **Class-‘C’ or ‘D’**. The municipal councils discharging their untreated sewage through various

drains in this river include Rajpura, Patiala, SAS Nagar and Chandigarh. There are 12 sampling stations on this river and the details are shown as:

1. G1...Ghaggar at Guest House, Mubarakpur.
2. G2...Near Bhankarpur.
3. G3...Upstream Jharmil Nadi.
4. G4...Downstream Jharmil Nadi.
5. G5...Downstream Chattbir.
6. G6...Upstream Dhakansu Nallah..
7. G7...Downstream Dhakansu Nallah.

8. G8...At Rattanheri d/s Patiala Nadi after confluence.
9. G9...At Khanauri.
10. G10..At Moonak
11. G11..u/s Sardulgarh
12. G12..d/s Sardulgarh

The annual average concentration of BOD, COD and DO in River Ghaggar is graphically shown as **under**:



4.2 Soil and Sludge Monitoring

Analysis results of sludge samples collected from (Ludhiana Beverages Pvt. Ltd., Ludhiana, Dhillon Kool Drinks & Beverages Ltd., And Pepsi Foods Pvt. Ltd., Distt. Sangrur) have been found containing heavy metals (Ni, Cr, Cu, Pb, Cd, Zn and Mn) and pesticides (Lindane, Melathion, DDT and Chlorophos). Higher conc. Of heavy metals are observed in the sludge of Ludhiana Beverages, in which the highest conc. Is of lead 400 mg/kg. Highest conc. Of DDT 563 ug/kg observed is also observed in sludge samples of Ludhiana Beverages.

Twelve no. of soil samples were collected from Hudhara Nalah and nearby villages pH of samples has been found in the range of 6.9 to 7.6 Heavy metal i.e. Ni, Cr and Zinc has been detected in all the samples and the highest conc. Of Zinc 90.5 ug/Kg, Nickel 48.5 mg/kg and Chrome 28.7 mg/kg is detected in the soil samples collected from D/S Mahowa Village.

Analysis results of soil samples collected from M/s Leatherline Tannery, Hoshiarpur contains chrome with maximum conc. 123 mg/gm in the sample collected from near chrome treatment tank.

Analysis results of soil samples collected from M/s Escort India Ltd., Patiala is containing heavy metals i.e. Ni, Cr, Pb, Cu, Cd etc.with highest value of Chrome 1053 mg/kg.

4.3 AMBIENT AIR QUALITY MONITORING

The main sources of air pollution in the State are emissions from vehicles, industrial stacks, power plants, burning of fuel in domestic sector and burning of agricultural residues in the harvesting season in the fields by farmers.

The National Standards for ambient air quality have been notified under the Air Act, 1981 and in the EPA, 1986. The standards specify the maximum limit to which major air pollutants such as sulfur dioxide, oxides of nitrogen, suspended particulate matter etc. are permitted in various zones which could be industrial, residential and sensitive zones.

The Government of Punjab has declared the whole of the State as an Air Pollution Control Area and it is the responsibility of Punjab Pollution Control Board to ensure that the ambient air quality in the State is not deteriorated on account of air pollution caused by the various sources. **NATIONAL AMBIENT AIR QUALITY STANDARDS**

Pollutant	Time weighted average $\mu\text{g}/\text{m}^3$	Conc. in ambient air $\mu\text{g}/\text{m}^3$		
		Industrial	Residential	Sensitive
Sulfur Dioxide	Annual	80	60	15
	Av. 24 hrs.	120	80	30
Oxides of Nitrogen	Annual	80	60	15
	Av. 24 hrs.	120	80	30
SPM	Annual	360	140	70
	Av. 24 hrs.	500	200	100
Respirable Particulate matter, < 10 μm	Annual	120	60	50
Lead	Annual	1.00	0.75	0.50
	Av. 24 hrs.	1.50	1.00	0.75

Carbon Monoxide $\mu\text{g}/\text{m}^3$	8 hrs 1 hrly.	5 10	2 4	1 2
--	--------------------------------	---------	--------	--------

The ambient air of the State is also being regularly monitored under **NAAQM (8)** (Table 1) and **AAQM (10)** (Table 2) Schemes at **19** monitoring stations set up in 6 towns for suspended particulate matter, Sulfur dioxide and Oxides of Nitrogen. And in 3 towns for Respirable SPM, Sulfur dioxide and Oxides of Nitrogen The **9** cities include highly polluting cities like Amritsar, Jalandhar, Ludhiana, Mandi Gobindgarh which have large number of air polluting units. In each city, one station represents the background level and the others are located in industrial and/or commercial areas and residential areas. In all, during the year 2004-2005, the Board monitored the Ambient Air Quality by collecting **26,747** samples

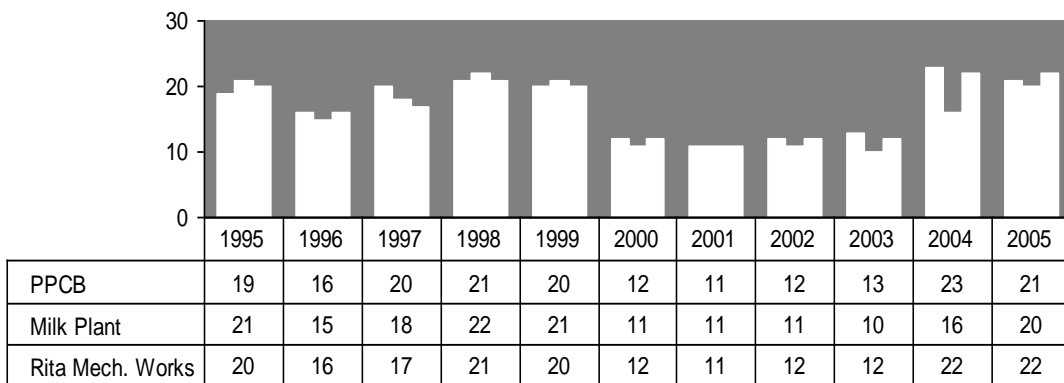
TABLE –1

NAAQM STATIONS

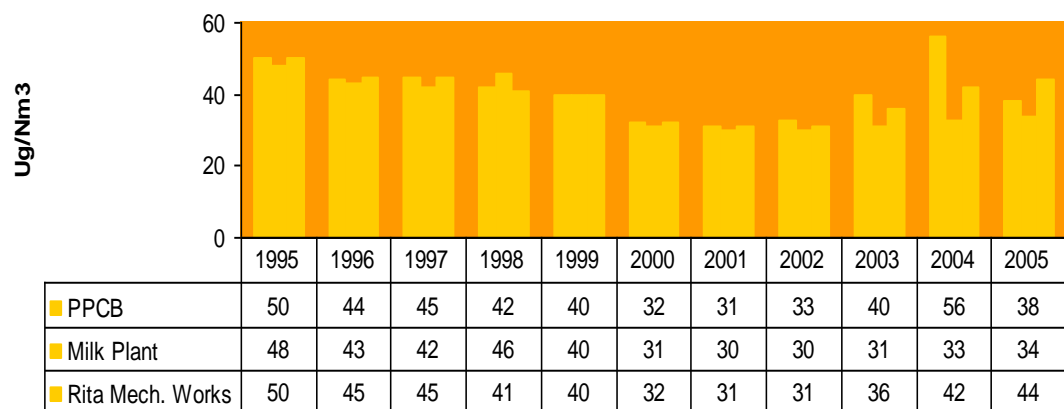
NAME OF REGIONAL OFFICE	STATION	CATEGORY
Patiala	1. Malhotra Steels Industrial Corporation, Mandi Gobindgarh	Industrial
	2. Chaudhary Steel Rolling Mills, Mandi Gobindgarh	Industrial, Residential
Ludhiana	1. Punjab Pollution Control Board office building	Commercial
	2. Rita Sewing Machine, Industrial Area-A	Industrial
	3. Milk Plant, Ferozpur Road	Residential
Jalandhar	1. Punjab Pollution Control Board office building	Residential
	2. Punjab Maltex Pvt. Ltd., Kapurthala Road	Industrial
	3. M.C. Building	Commercial

The annual average concentration of SPM, Sulfur dioxide and Oxides of Nitrogen are graphically shown in **FIGURES**.

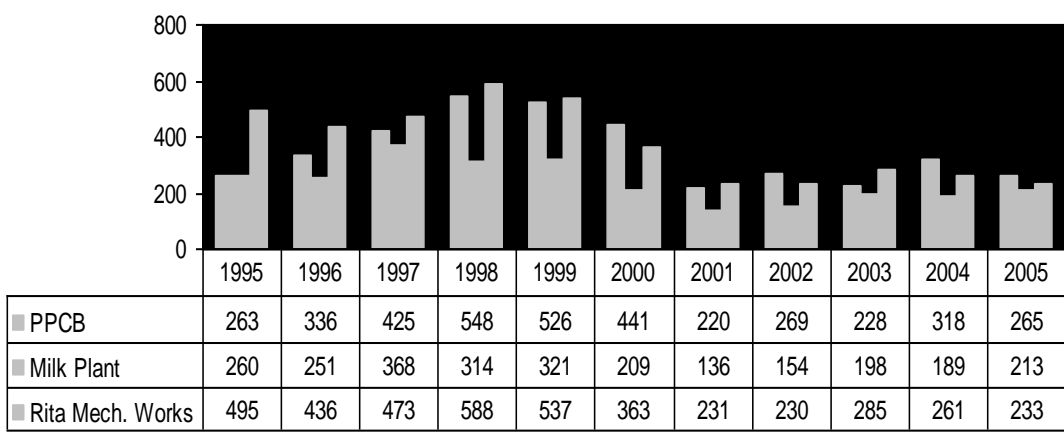
Sulfur Dioxide-Ludhiana-Annual Average-2004-05

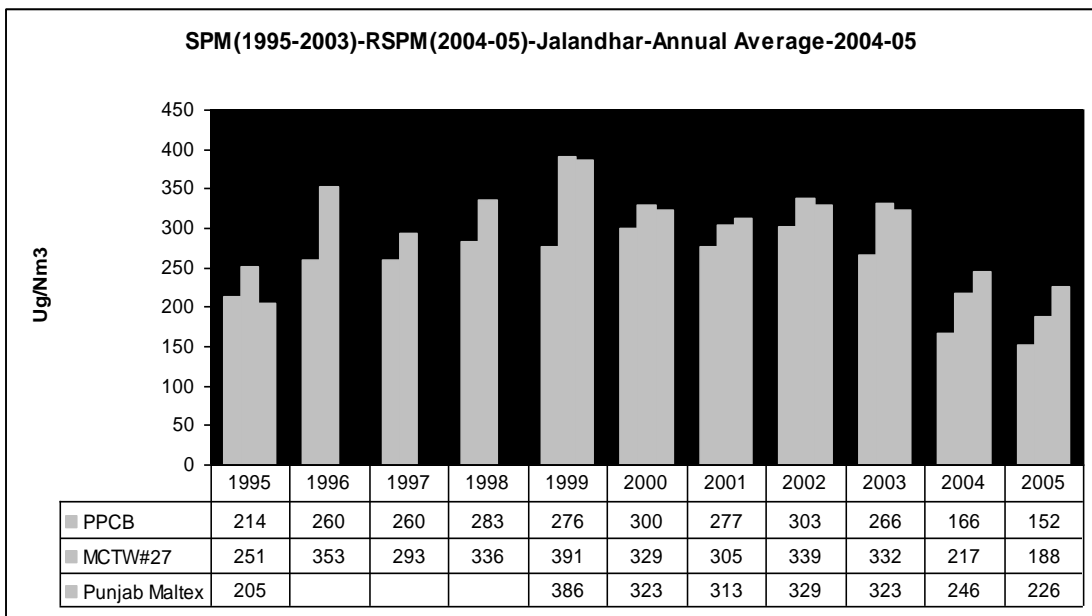
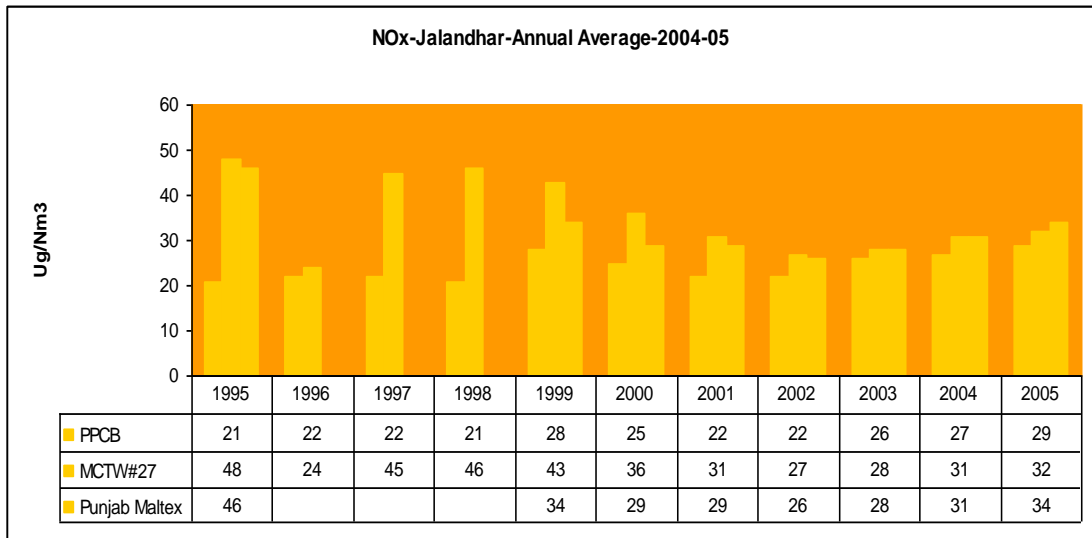
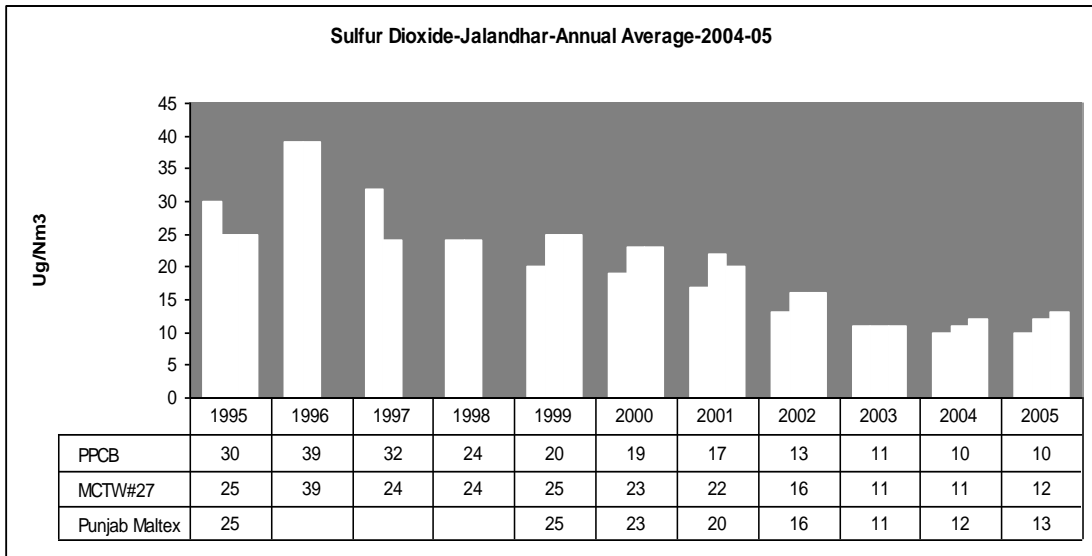


NOx-Ludhiana-Annual Average-2004-05



SPM(1995-2000)-RSPM(2001-2005)-Ludhiana-Ann. Ave.-2004-05





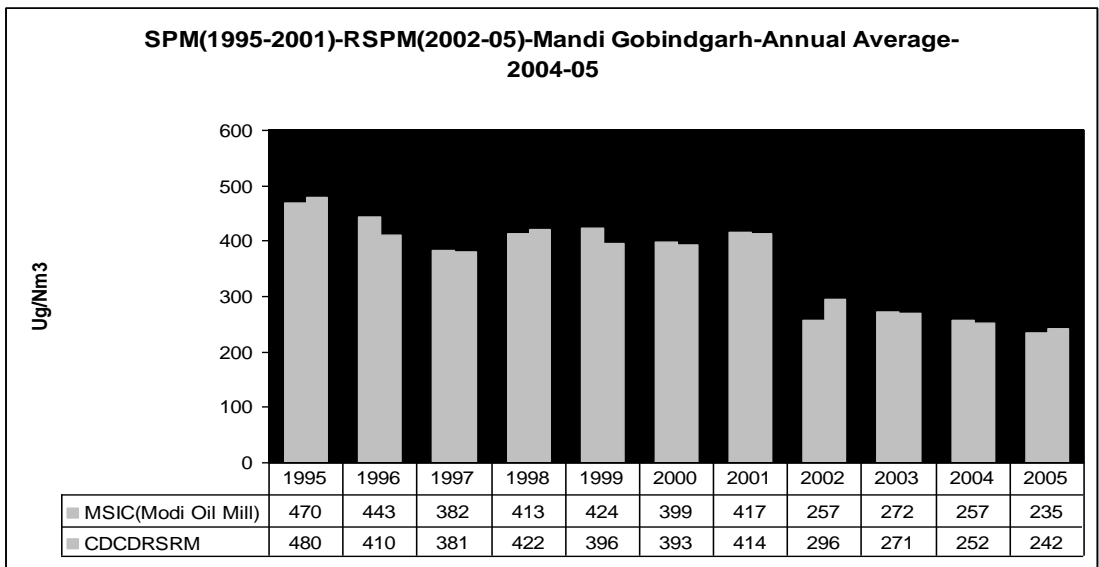
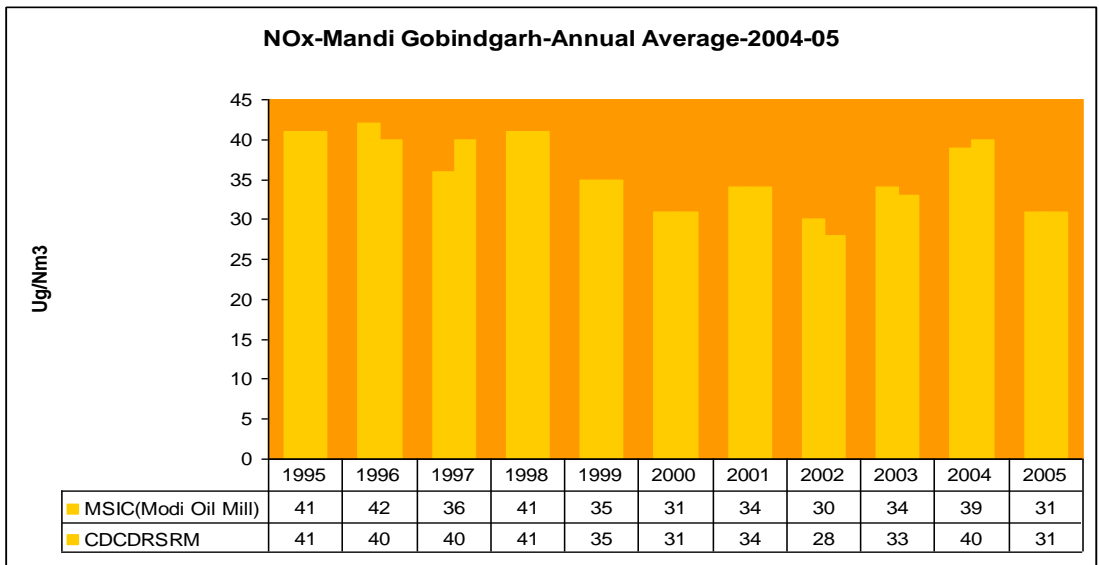
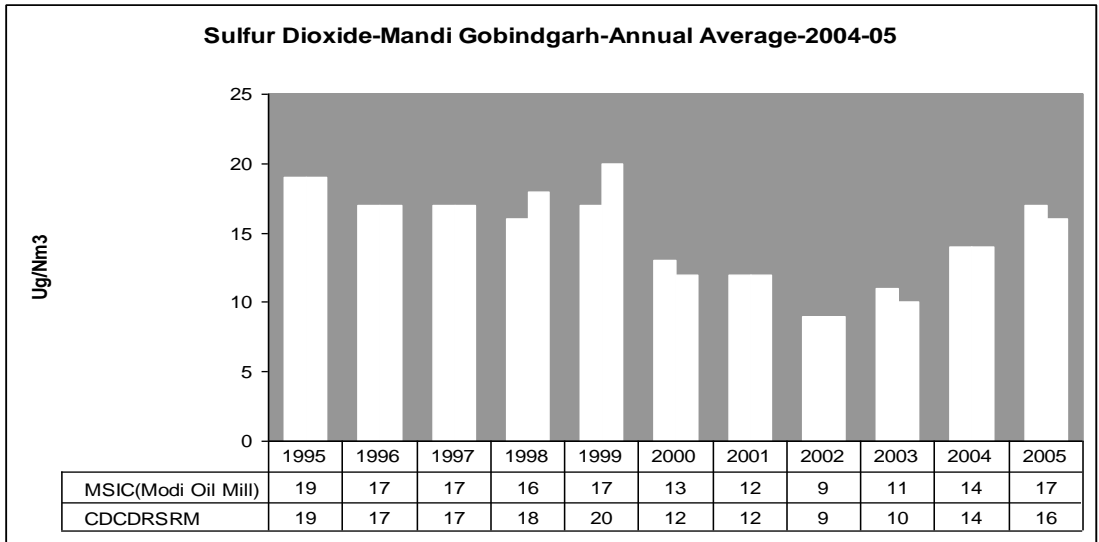
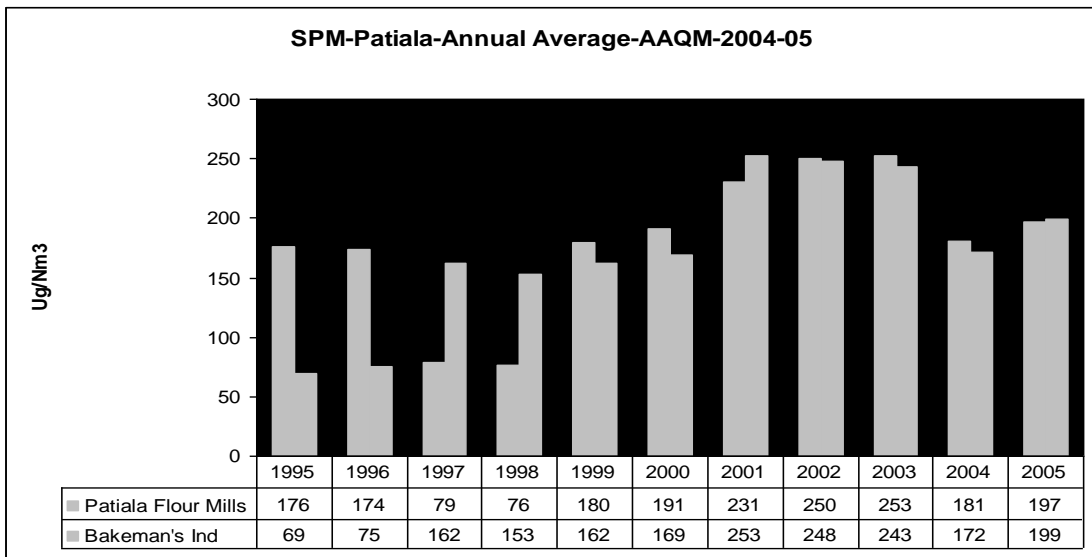
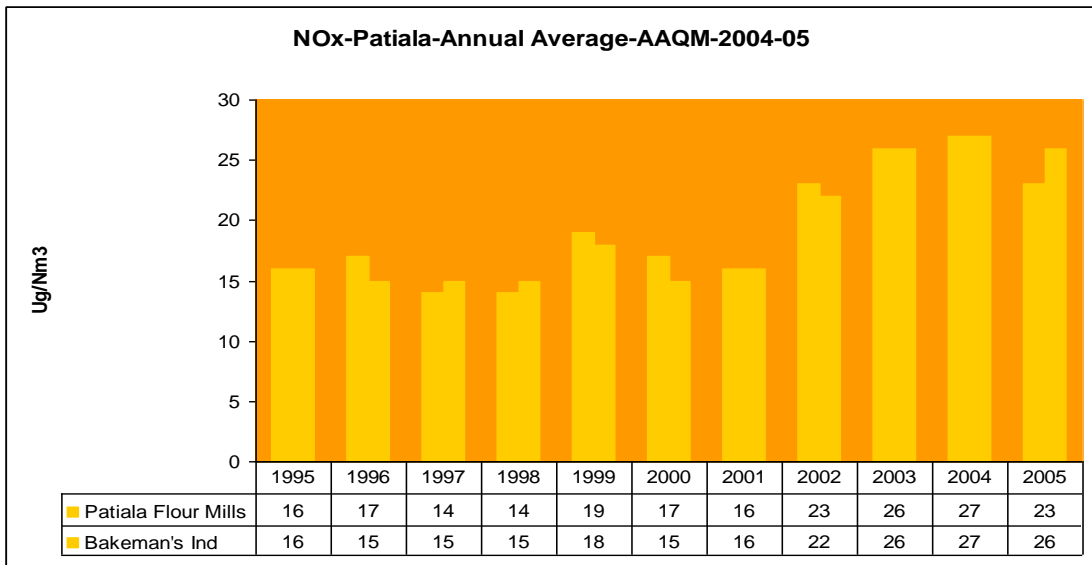
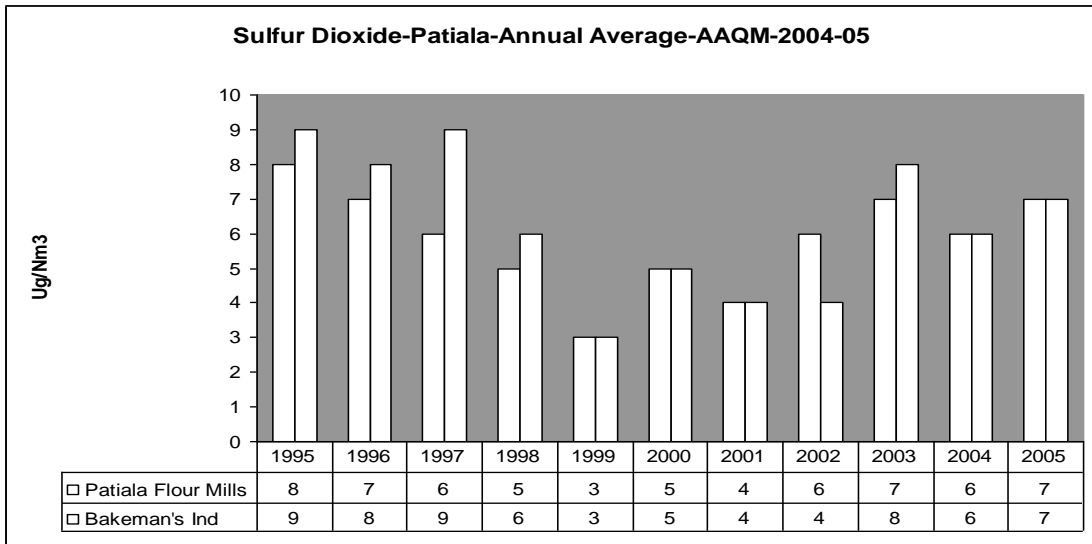
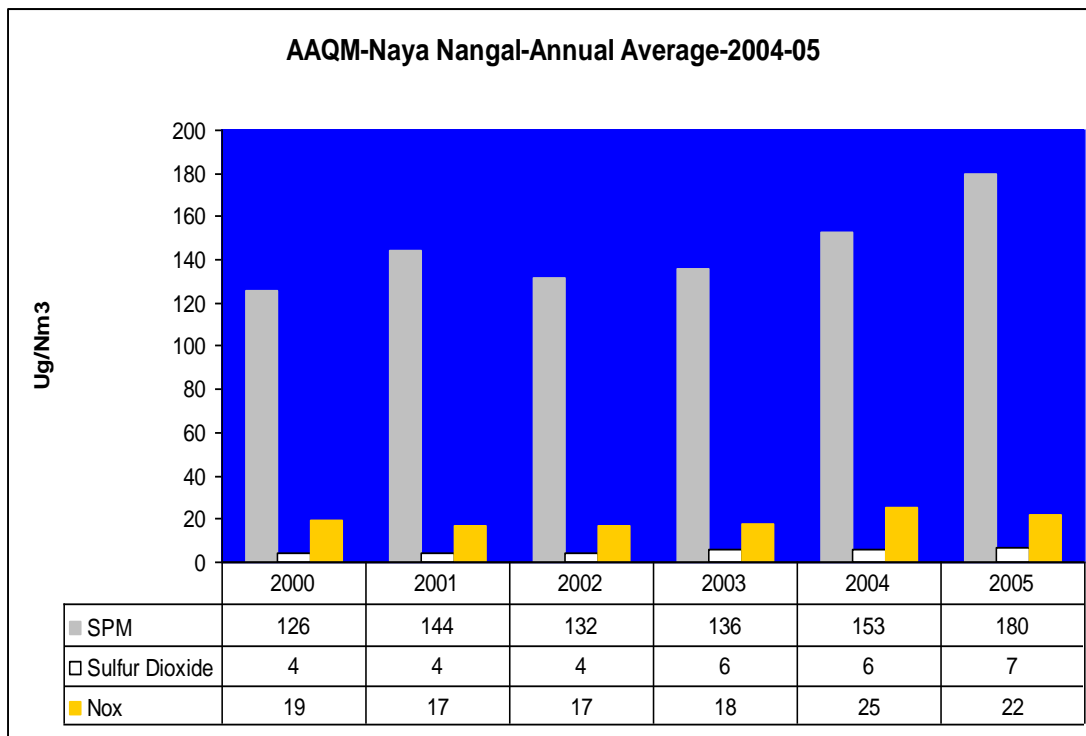
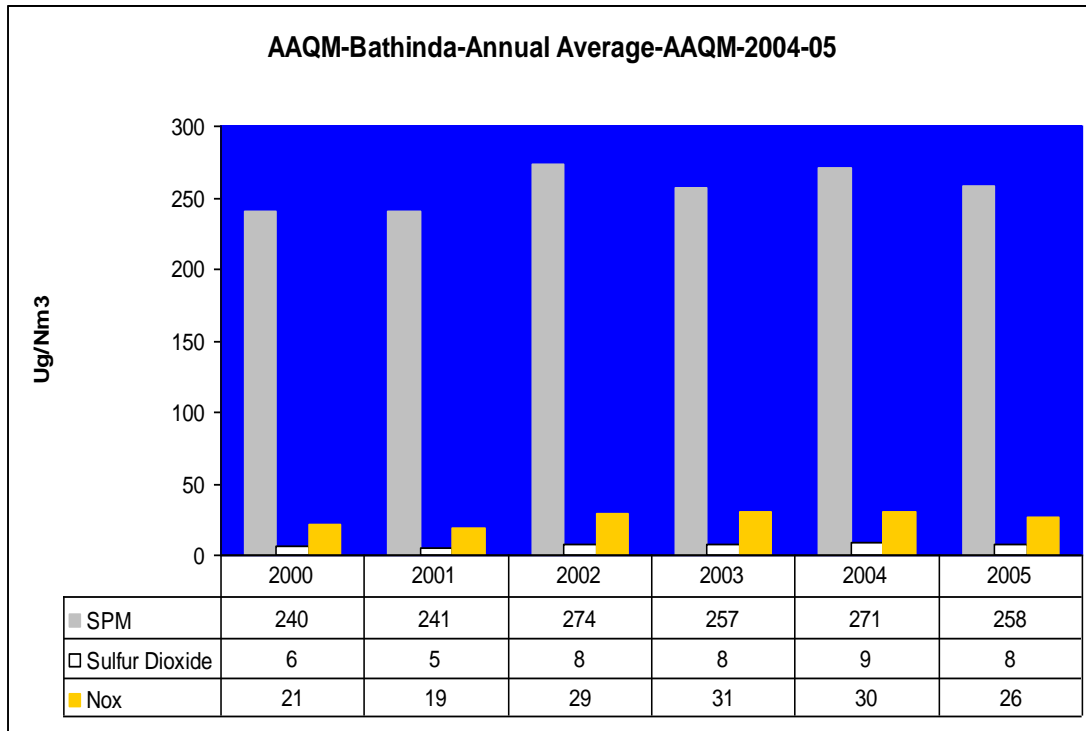


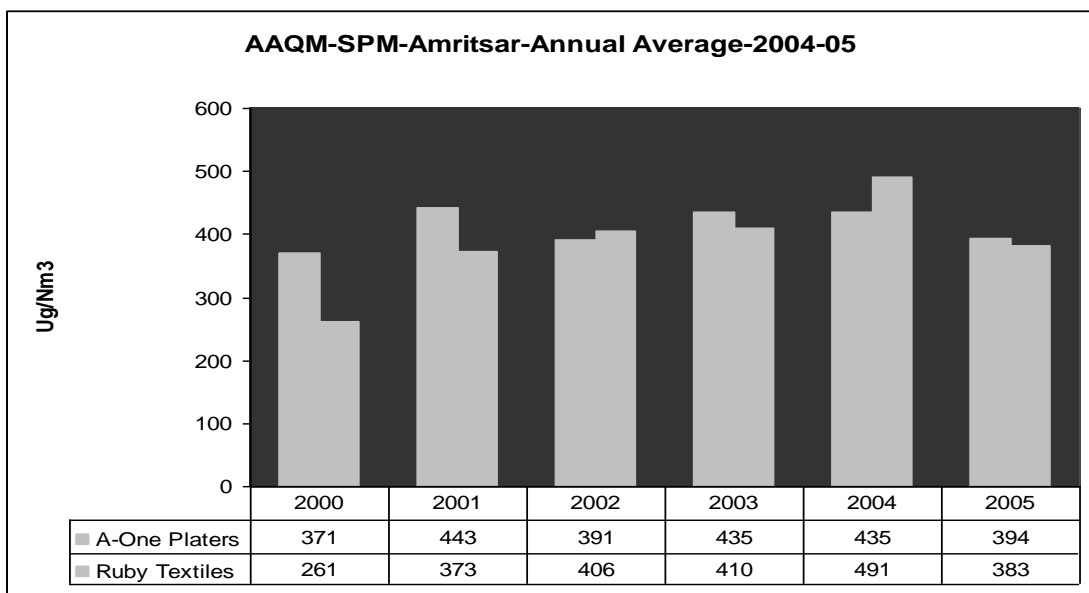
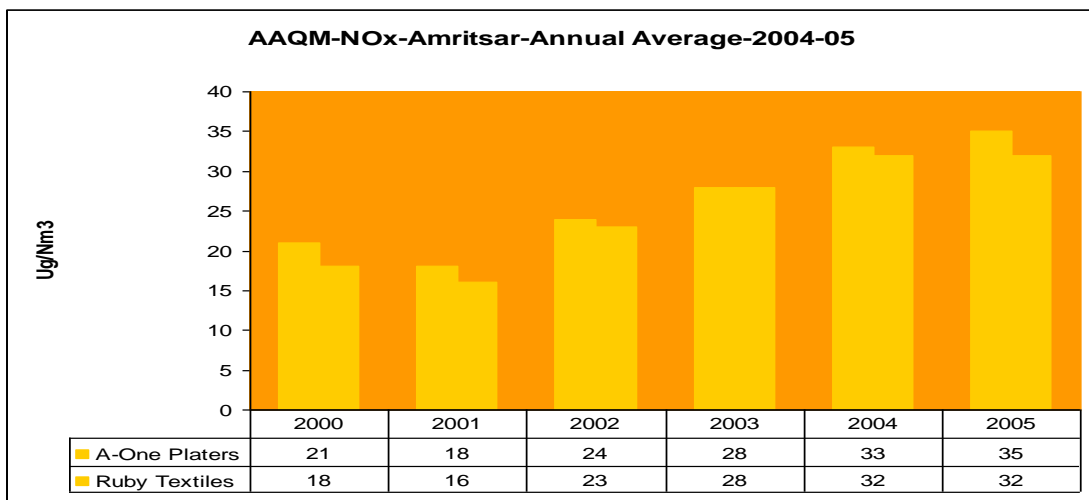
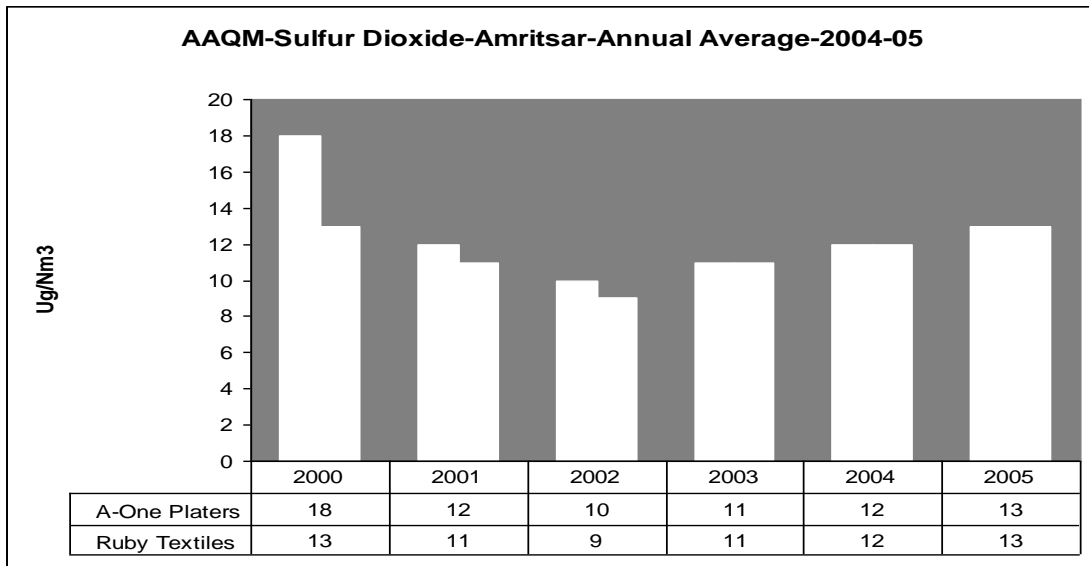
TABLE –2
AAQM STATIONS

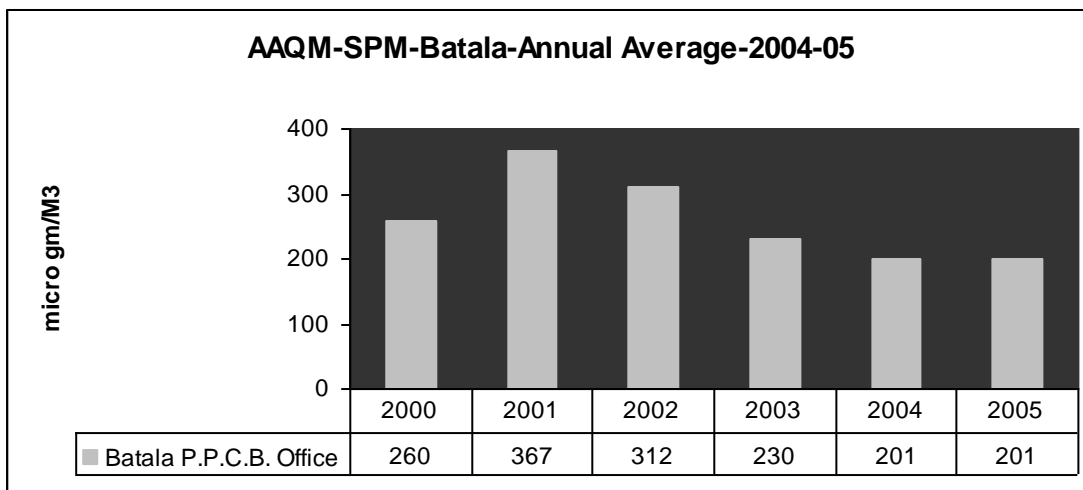
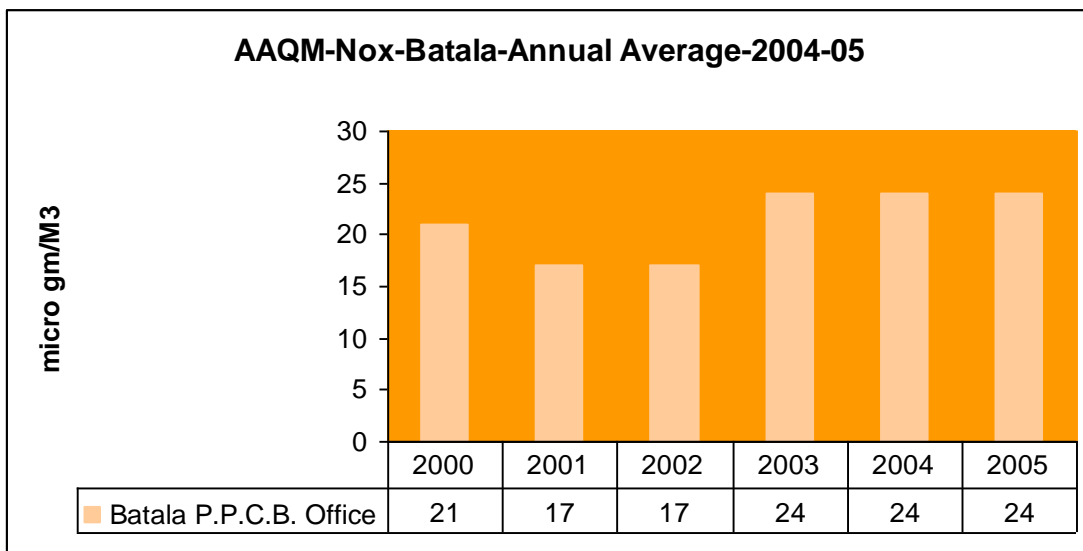
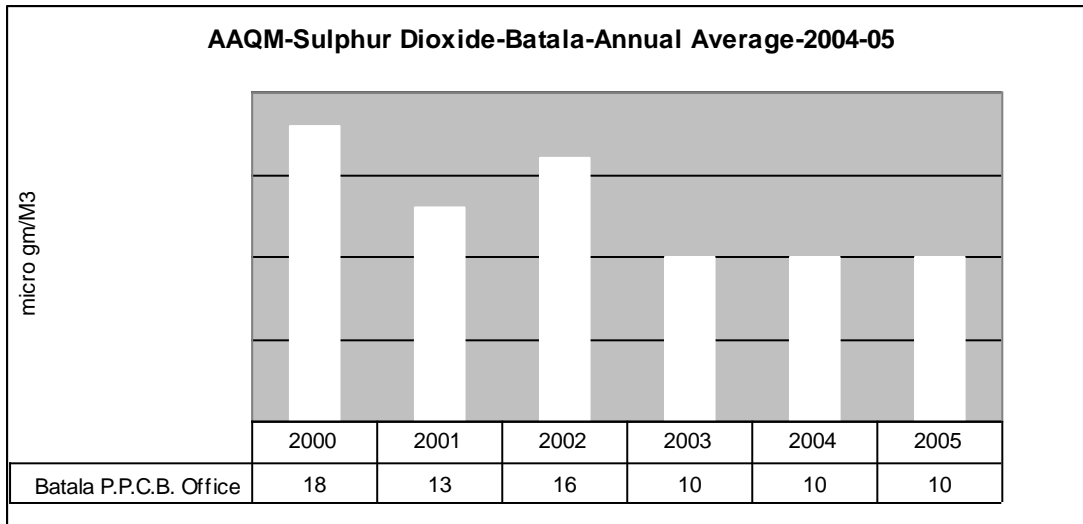
NAME OF REGIONAL OFFICE	STATION	CATEGORY
Patiala	1. Bakeman’s Industries Ltd., Patiala	Industrial
	2. Patiala Flour Mills Co. Ltd., Patiala	Commercial
Ludhiana	1. Jolly Hosiery, Near Bharat Nagar Chowk	Commercial
Amritsar	1. A-one Platers, Ram Bagh	Commercial
	2. Mehta Pharmaceuticals Chheharta	Industrial
Bathinda	1. Milk Plant, Dabwali Road	Industrial
Batala	1. Punjab Pollution Control Board office Building	Industrial
Nodal Office, Chandigarh	1. PACL, Nangal	Industrial
Dera Bassi	1. PCPL, Dera Bassi	Industrial
	2. Rallis India Ltd., Dera Bassi	Industrial

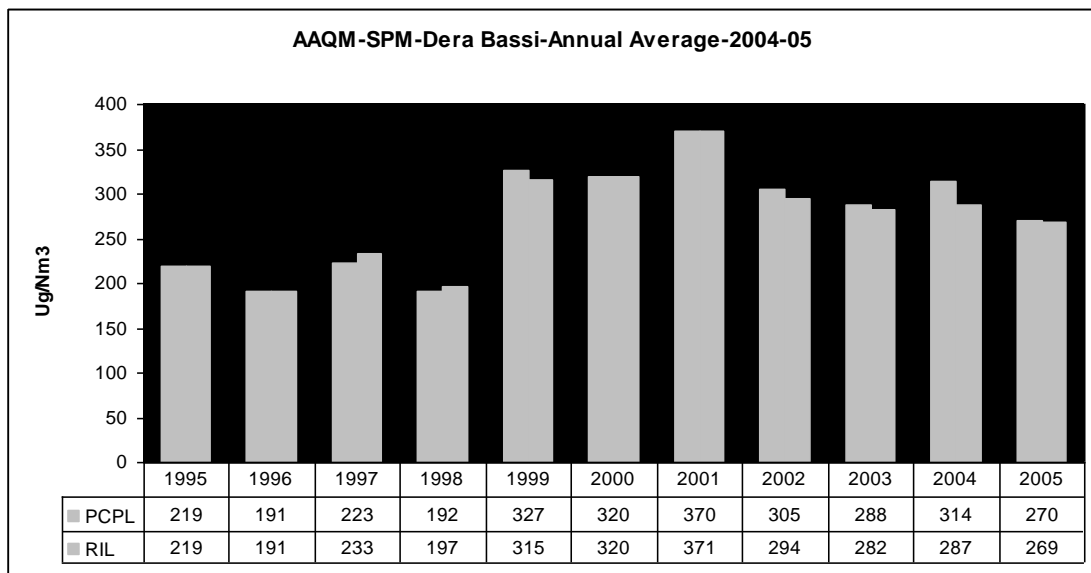
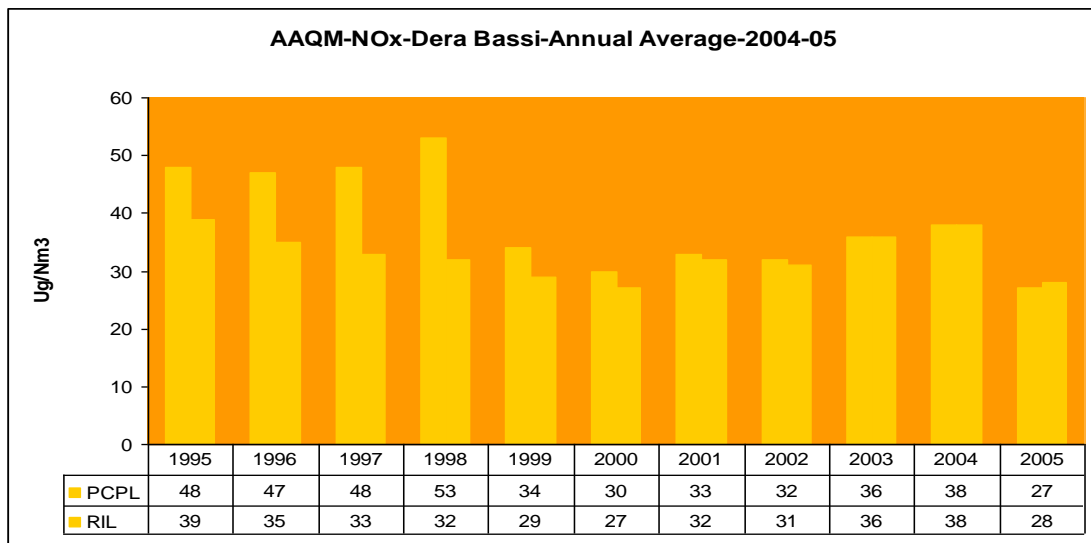
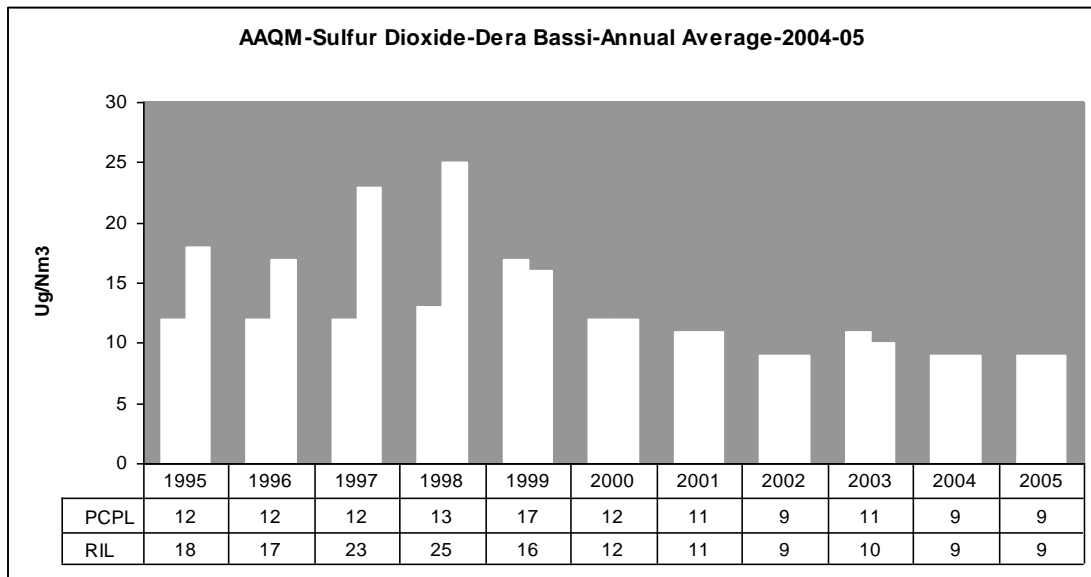
The annual average concentration of SPM, Sulfur dioxide and Oxides of Nitrogen are graphically shown in **FIGURES**.











4.4 CONTROL OF NOISE DURING FESTIVAL DAYS

Noise has been widely recognised as a major environmental menace in the urban and industrial centres of the world specially in the densely populated third world countries. The annoyance and the consequent adverse health impact of noise pollution is well publicised. Noise generated from industrial operations, transport sector, indiscriminate use of loud speakers during festival days and in public meetings and bursting of high intensity crackers are of serious environmental concern in the country both from the point of view of public annoyance and public health.

During the period under report, the Board conducted a study about the impact of Diwali day celebrations on the environment particularly on the quality of air w.r.t. suspended particulate matter, obnoxious gases like nitrogen oxides, sulfur dioxide and noise.

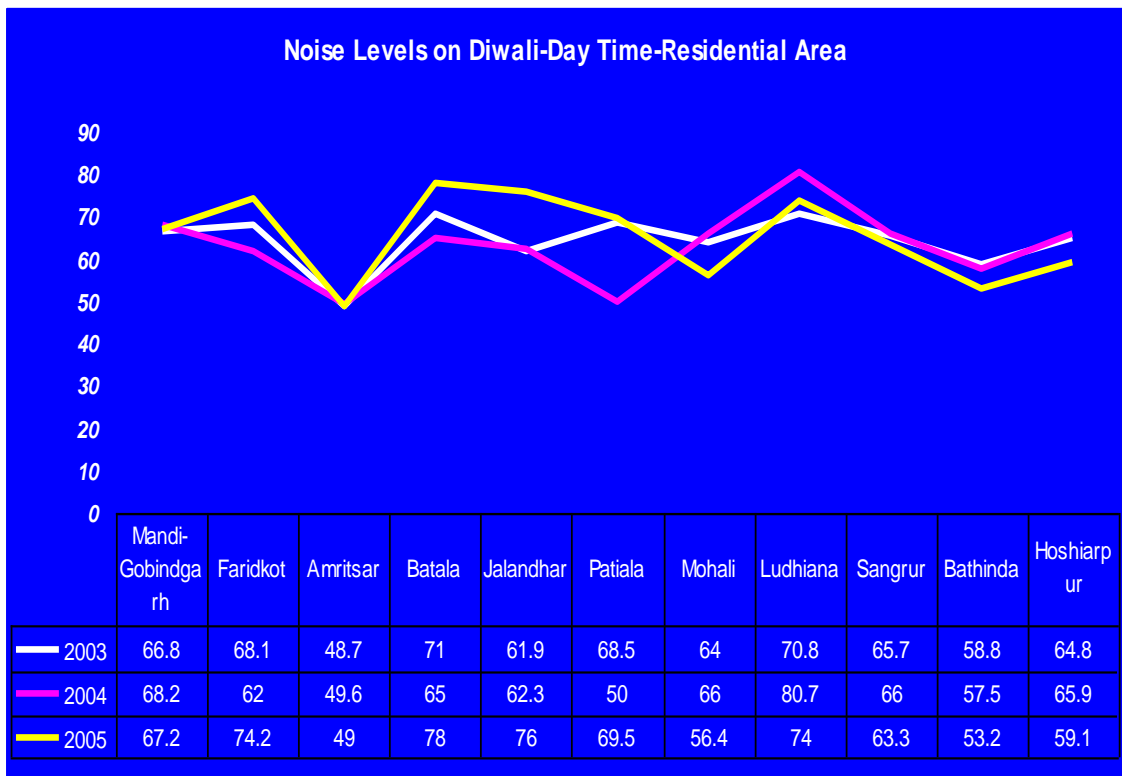
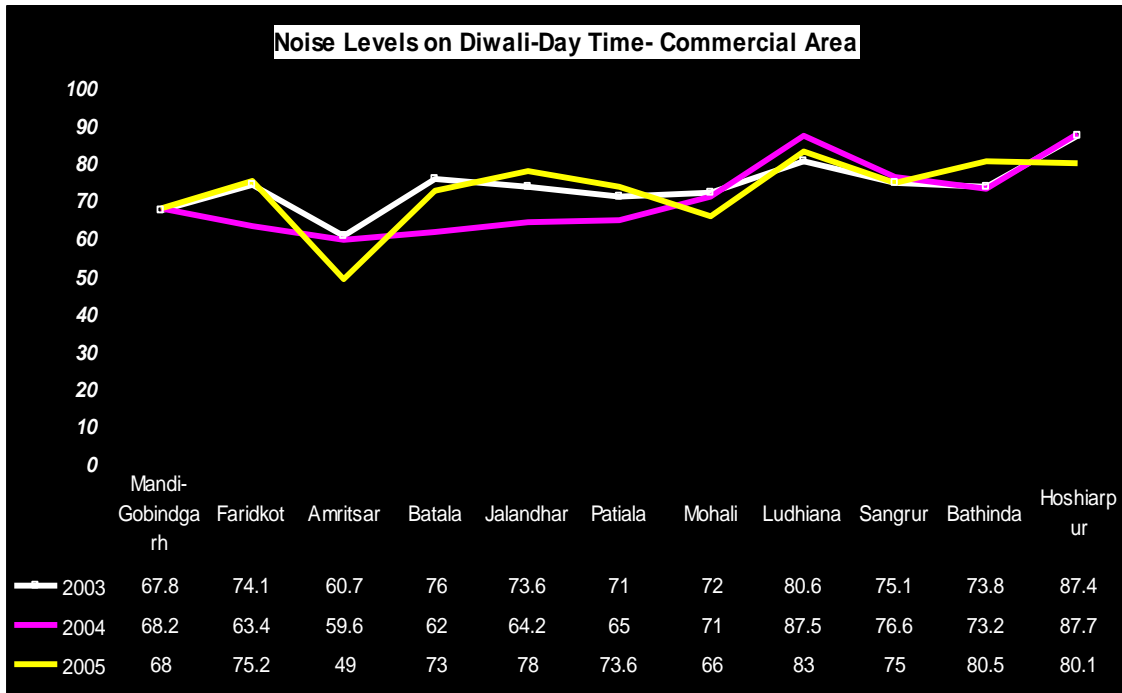
Sulfur dioxide and nitrogen oxide samples were collected in each day for 24 hrs. on a 4 hourly basis as per Punjab Pollution Control Board timings for the NAAQM stations in residential, commercial and sensitive areas in Ludhiana, Jalandhar, Amritsar, Patiala and Mandi Gobindgarh. Noise were monitored three times in a day i.e. morning, afternoon and the peak hours at night when the bursting of crackers is expected to be maximum. Table – 3 gives the Ambient Air Quality Standards in respect of Noise.

TABLE-3

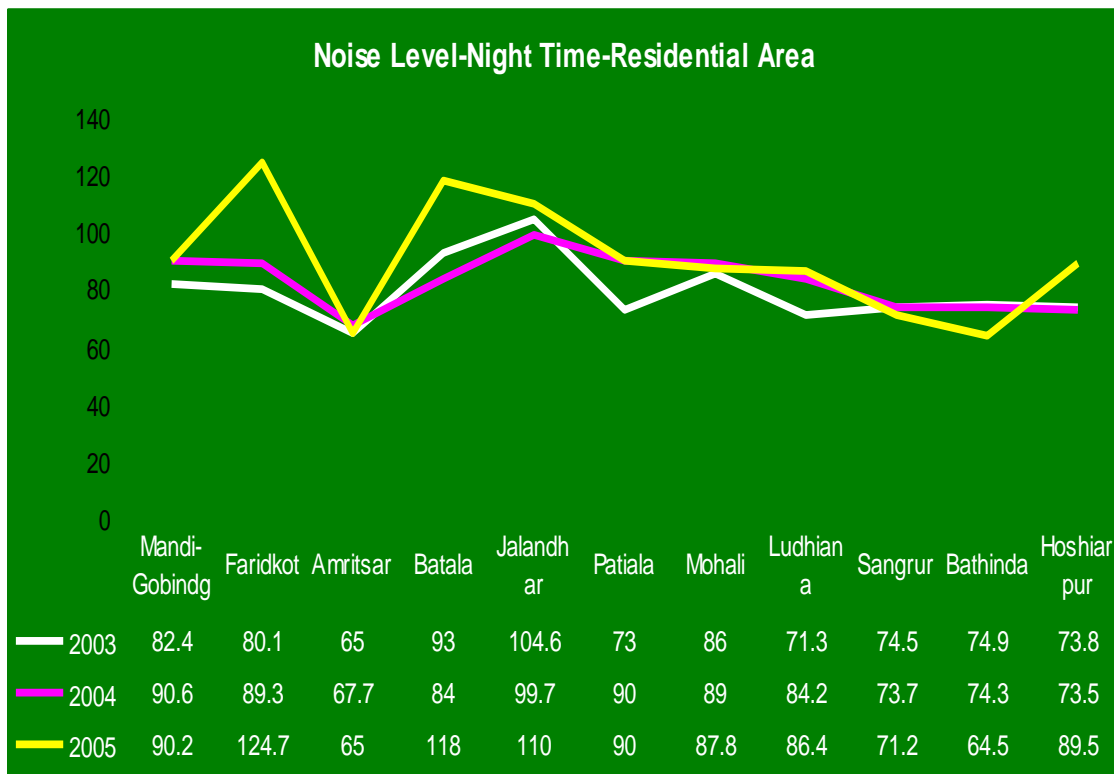
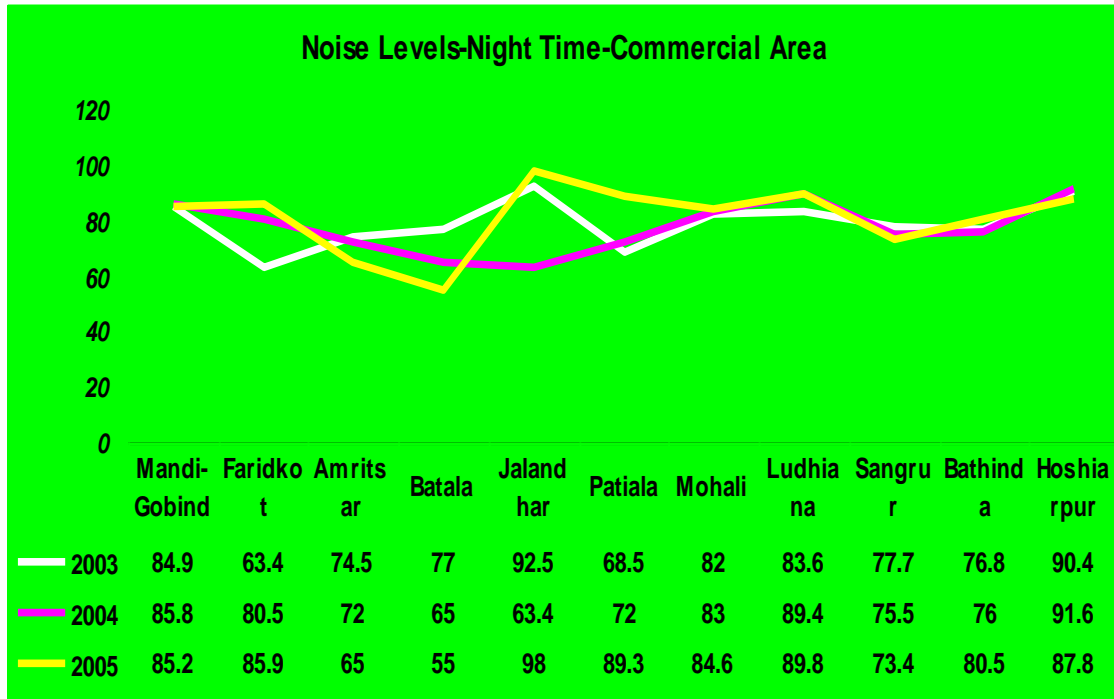
Area Code	Category Code	Limits of dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

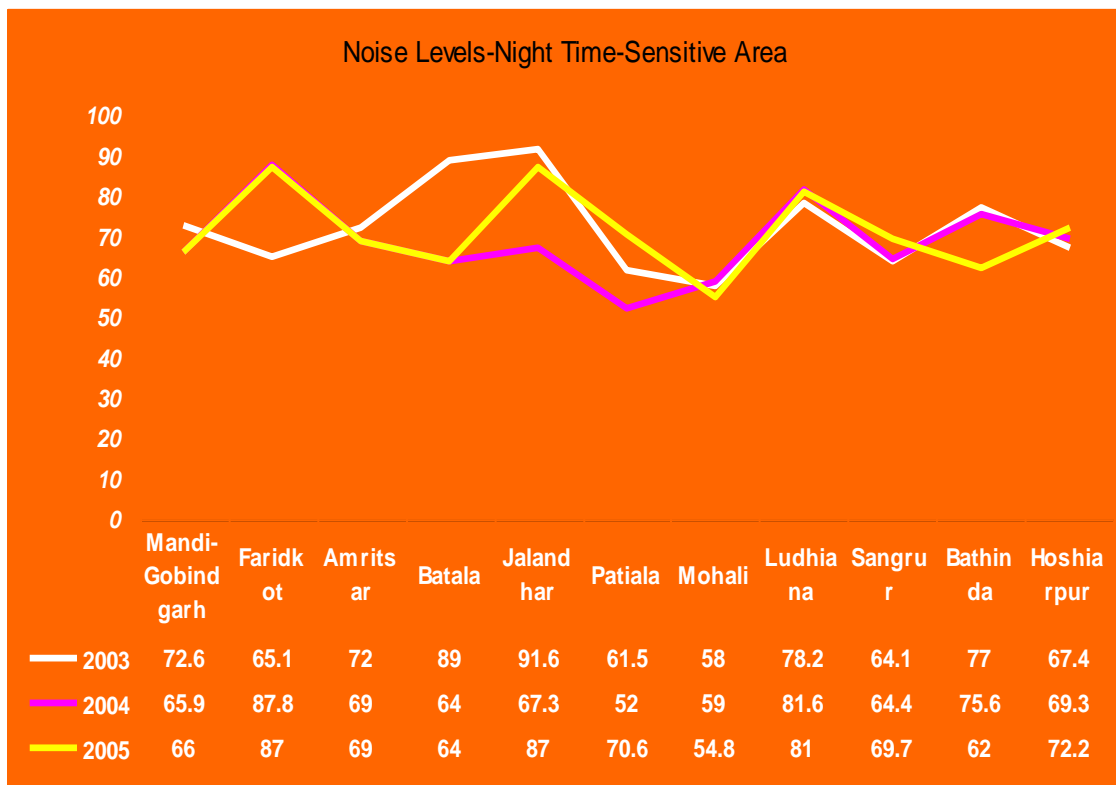
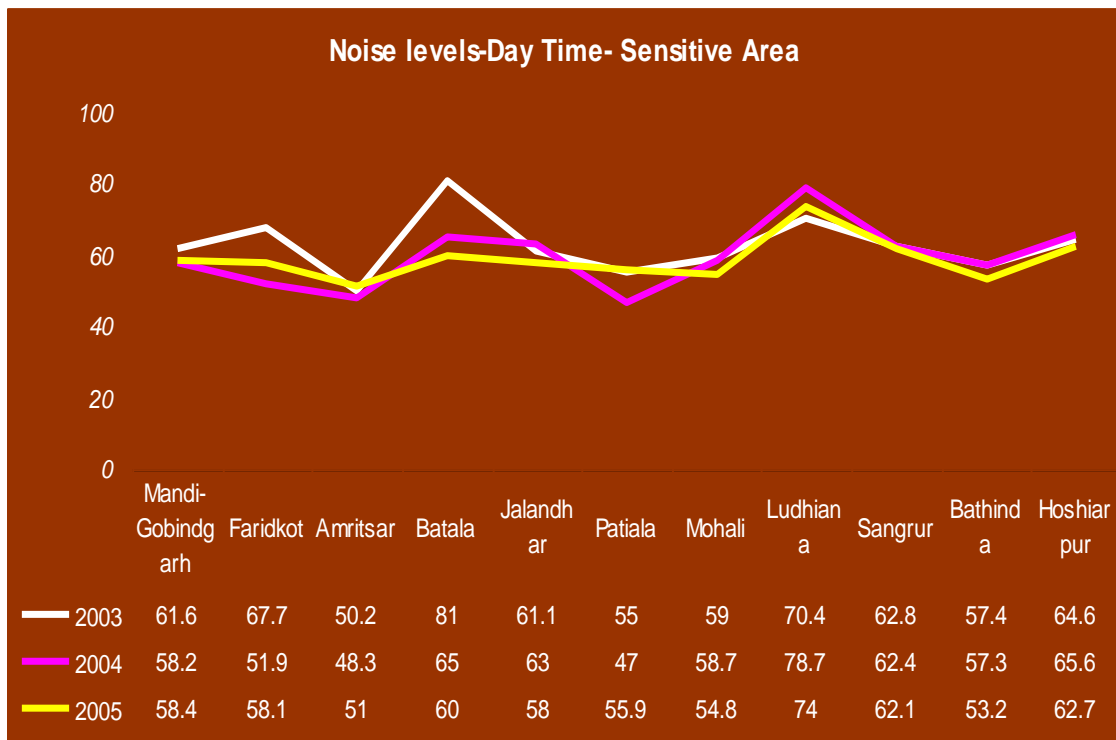
- Note : 1. Day time is reckoned in between 6 a.m. to 9 p.m.
2. Night time is reckoned in between 9 p.m. to 6 a.m.

FIGURES below gives the Noise Levels on Diwali Day in commercial, residential, and sensitive areas on day time:



FIGURES below gives the Noise Levels on Diwali Day in commercial, residential and sensitive areas on night time:





CHAPTER-5

5.0 INDUSTRIAL POLLUTION CONTROL

Industrial development in the industrial belts of the State has taken place in an unplanned manner without consideration on environmental issues. As a result of the measures taken by the Board, a large number of large and medium scale industries have already installed pollution control devices under Water and Air Acts and a number of industries are in the process of completing the construction of the same.

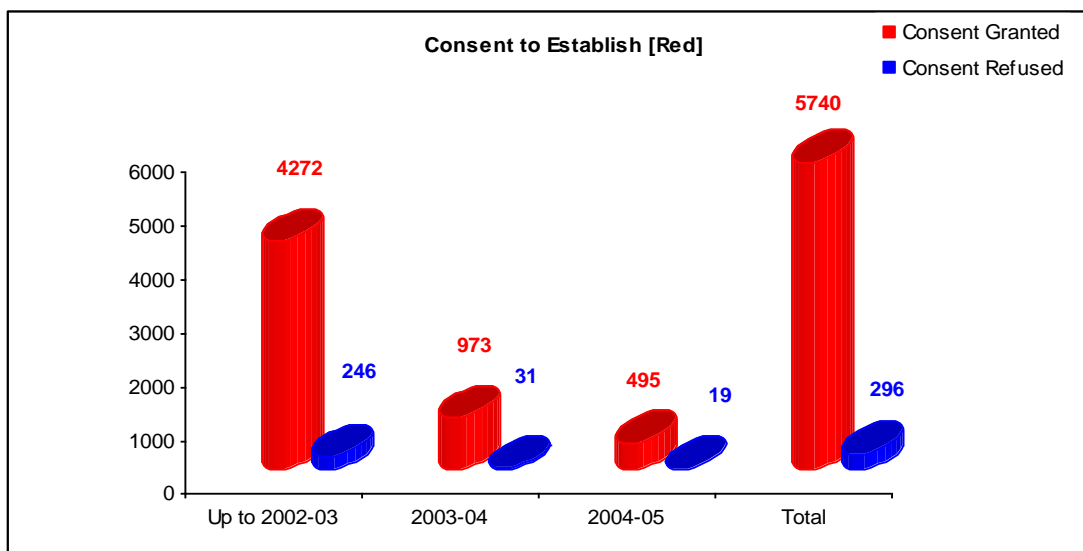
Punjab is fast coming up as an industrial State in the country with its industrial conglomerations at Ludhiana, Amritsar, Jalandhar, Batala, Phagwara, Khanna, Mandi Gobindgarh, Nangal and Dera Bassi etc. These industrial towns contain a variety of industries from Breweries to Steel rolling Mills.

5.1 CONSENT TO ESTABLISH THE INDUSTRY UNDER RED CATEGORY

In order to streamline the establishment of new industrial units in designated industrial areas with proper land use, the Board grants “Consent to Establish” the industrial plant. No industrial plant is allowed to establish in undesignated areas.

During the year under report, the Board granted **495** “Consent to Establish” to the industrial plants under RED category of industries and **19** “Consent to Establish” were refused to the industries whose sites were not as per the norms of the Board under RED category of industries.

On **31.3.2005**, the figure for “Consent to Establish” the industrial plants in RED category of industries stood at **5740** Regarding refusal of “Consent to Establish” the industrial Plant, the figure for RED category of industries stood at **296**.

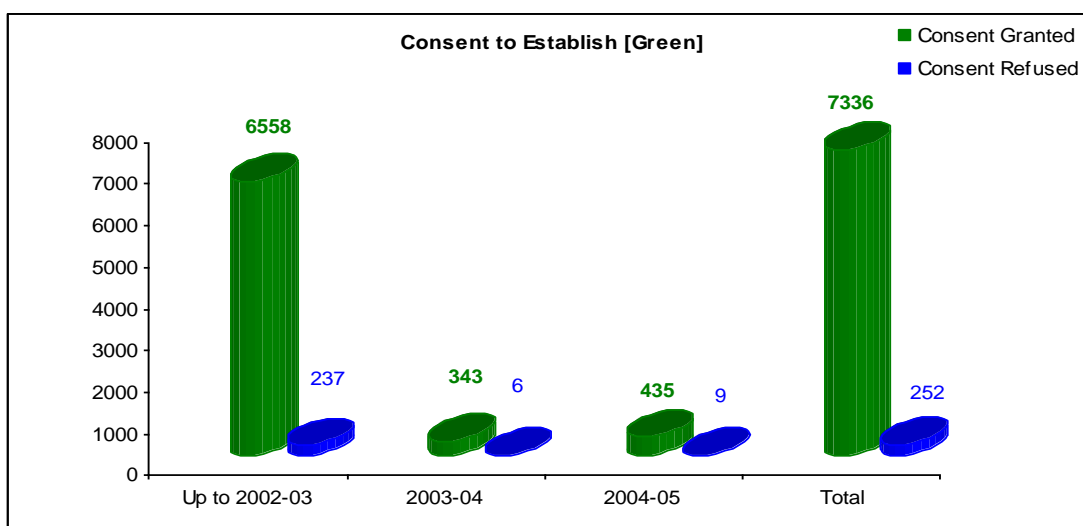


5.2 CONSENT TO ESTABLISH THE INDUSTRY UNDER GREEN CATEGORY

In order to streamline the establishment of new industrial units in designated industrial areas with proper land use, the Board grants “Consent to Establish” the industrial plant. No industrial plant is allowed to establish in undesignated areas.

During the year under report, the Board granted **435** “Consent to Establish” to the industrial plant under GREEN category of industries and **9** “Consent to Establish” were refused to the industries whose sites were not as per the norms of the Board under GREEM category of industries.

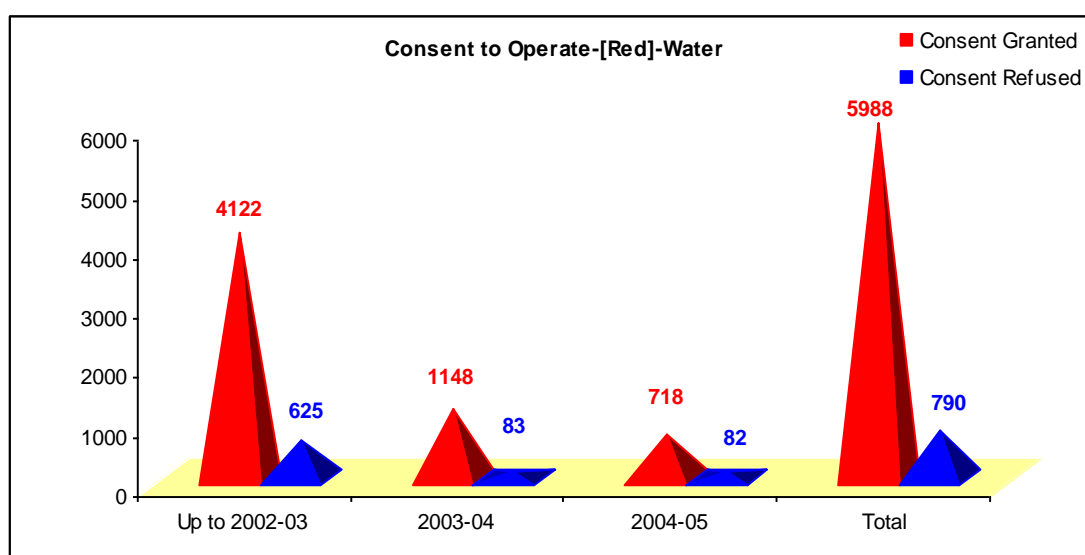
On **31.3.2005**, the figure for “Consent to Establish” to the industrial plants in GREEN category of industries stood at **7336**. Regarding refusal of “Consent to Establish” the industrial plant, the figure for GREEN category of industries stood at **252**.



5.3 CONSENT TO OPERATE THE INDUSTRY [RED CATEGORY] UNDER WATER ACT, 1974.

During the year under report, the Board granted **718** “Consent to operate “ to the industrial plants under RED category of industries under the Water Act, 1974 and **82** “Consent to Operate” were refused to the industries who were not satisfying the norms of the Board.

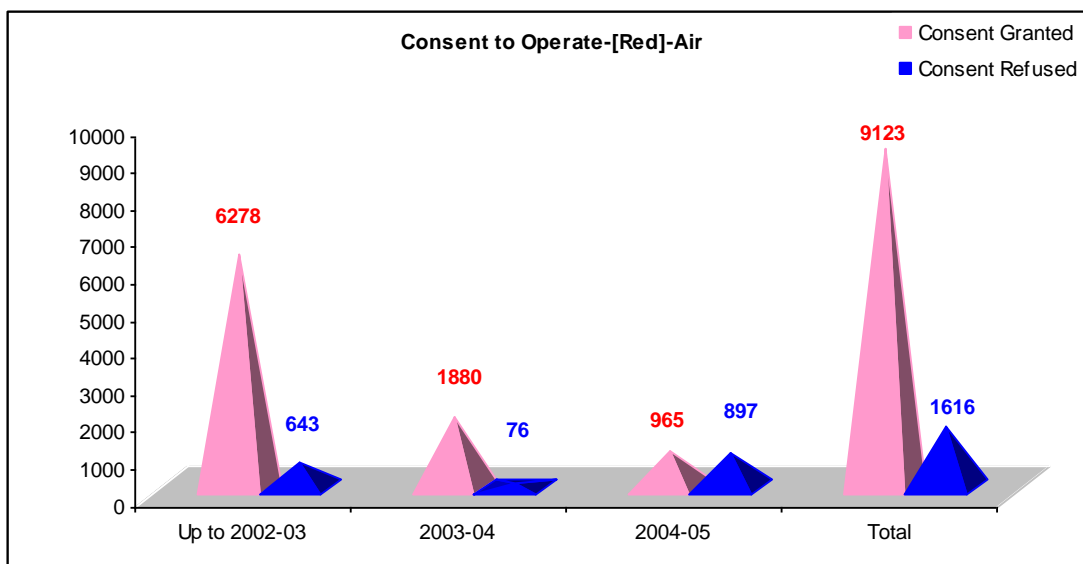
On **31.3.2005** the figure for “Consent to Operate” the industrial plants in RED category of industries stood at **5988**. Regarding refusal of “Consent to Operate” the industrial plant the figure for RED category of industries stood at **790**.



5.4 CONSENT TO OPERATE THE INDUSTRY [RED CATEGORY] UNDER THE AIR ACT, 1981

During the year under report, the Board granted **965** “Consent to Operate” to the industrial plants under RED category of industries under the Air Act, 1981 and **897** “Consent to Operate” were refused to the industries who were not satisfying the norms of the Board.

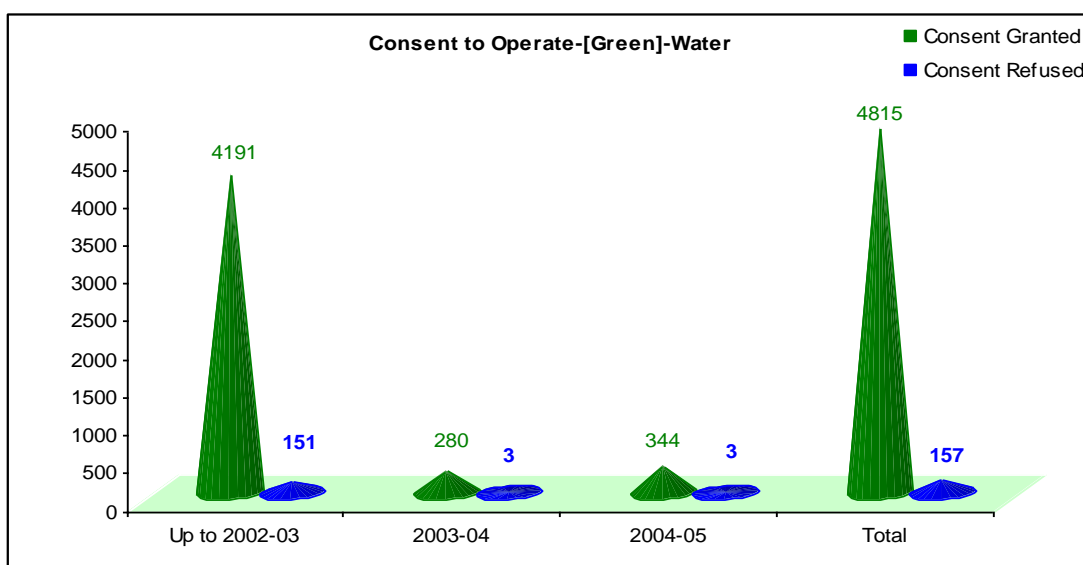
On **31.3.2005**, the figure for “Consent to Operate” to the industrial plants in RED category of industries stood at **9123**. Regarding refusal of “Consent to Operate” the industrial plant. The figure for RED category of industries stood at **1616**.



5.5 CONSENT TO OPERATE THE INDUSTRY [GREEN CATEGORY] UNDER THE WATER ACT, 1974.

During the year under report, the Board granted **344** “Consent to Operate” to the industrial plants under GREEN category of industries under the Air Act, 1981 and **3** “Consent to Operate” were refused to the industries who were not satisfying the norms of the Board.

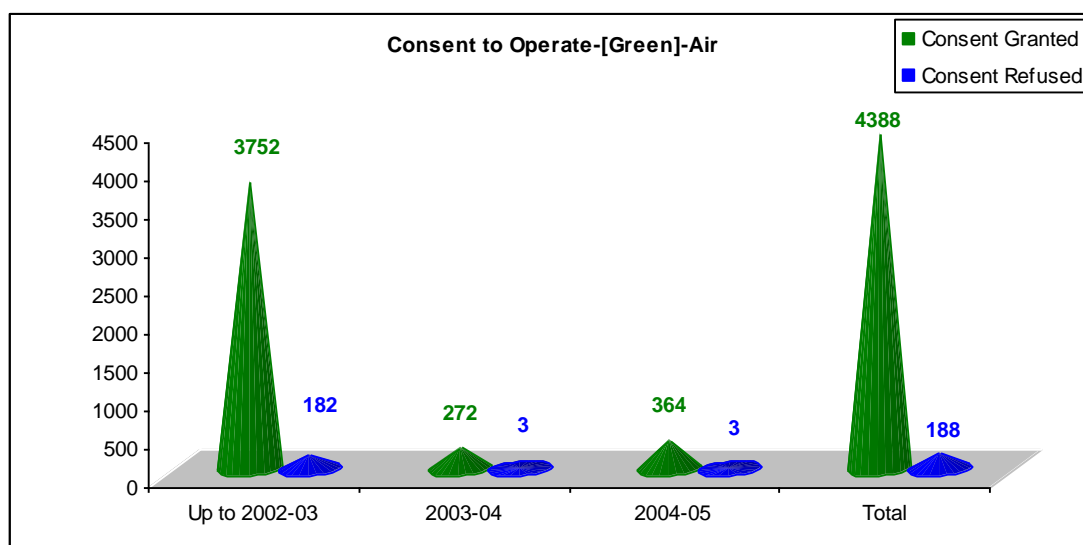
On **31.3.2005**, the figure for “Consent to Operate” to the industrial plants in GREEN category of industries stood at **4815**. Regarding refusal of “Consent to Operate” the industrial plant, the figure for GREEN category of industries stood at **157**.



5.6 CONSENT TO OPERATE THE INDUSTRY [GREEN CATEGORY] UNDER THE AIR ACT, 1981.

During the year under report, the Board granted **364** “Consent to Operate” to the industrial plants under GREEN category of industries under the Water Act, 1974 and **3** “Consent to Operate” were refused to the industries who were not satisfying the norms of the Board.

On **31.3.2005**, the figure for “Consent to Operate” to the industrial plants in GREEN category of industries stood at **4388**. Regarding refusal of “Consent to Operate” the industrial plant. The figure for GREEN category of industries stood at **188**.



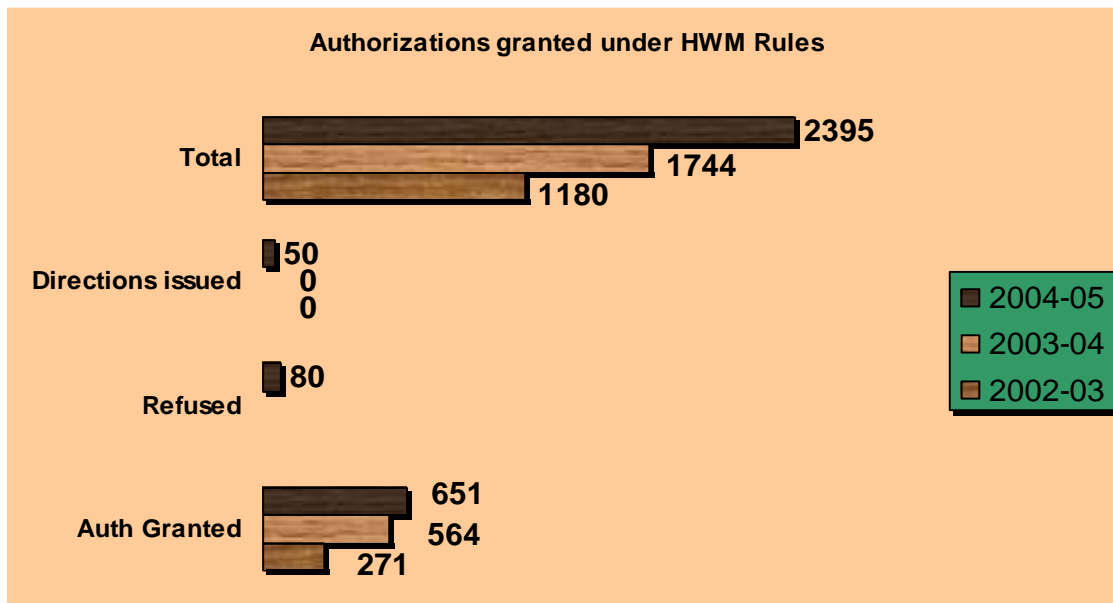
5.7 HAZARDOUS WASTES MANAGEMENT

The Ministry of Environment & Forests, Government of India exercise of Powers conferred upon it under the provisions of the Environment (Protection) Act, 1986 made “Hazardous Waste (Management & Handling) Rules, 1989” in order to regulate handling, storage, transportation, import and disposal of hazardous wastes. These Rules have been amended in 2000.

The State Board after the enactment of the said rules has taken up the task for proper disposal of the hazardous wastes so as to save the environment from being contaminated.

During the period under report, the Board granted authorization to handle hazardous wastes to industrial plants whose status is given as under:

#	Description	Auth. Granted
1	Authorizations granted	651
2	Directions issued under EPA, 1996	50
3	Refused authorizations	80



The other actions taken by the State Board under the HWM Rules are depicted as under:

<p>Directing hazardous waste processing units to display the relevant information within a specified time period with regard to hazardous waste as indicated in the Court order. Action to be taken against defaulting</p>	<ul style="list-style-type: none"> • The industries have been asked to display the relevant information on hazardous waste outside the main gate of the industry on 6' X 4' display board. The same has also been incorporated as a condition of authorization . • All the large & medium industries have provided the same. • Most of the small scale industries have also installed display board. • The Board has appealed to the general public through local newspapers to bring to the notice of the Board, if illegal dumping of hazardous waste is noticed by any
--	---

units in this regard.	person.
-----------------------	---------

<p>Action taken by SPCBs/PPCs to ensure that the relevant information on hazardous waste is displayed on notice boards/ news papers and communicated through radio/television and also on internet.</p>	<p>The Board has continued displaying hoardings in this regard on the buses in the State of Punjab.</p>
<p>Inventory with regard to hazardous waste dump sites and preparation of rehabilitation plan.</p>	<p>The Board has identified 32 sites in the state where hazardous waste could have been dumped in the past along with municipal solid waste. Being a new area of work, technical and financial assistance has been sought from MOEF & CPCB in this regard.</p> <p>Now, the officers of the Board have carried out preliminary assessment of the type of hazardous / municipal waste disposed of in these cities. In many cases, it is clear that many of these sites are not illegal hazardous waste dumpsites as there is no hazardous waste generation in the area. After preliminary assessment, it has been found that only 14 of these sites are such where hazardous waste could not be disposed of during the past and 18 of the sites are not hazardous waste illegal dumpsites.</p> <p>A Committee has been constituted for selecting a consultant / agency for detailed study and rehabilitation plan of the hazardous waste dumpsites. The Committee has visited two sites at Ludhiana on 12-2-2005 and finalized the tender document for selecting the agency for assessment and rehabilitation of these sites.</p>

Provision of infrastructure facilities such as secured hazardous waste landfill sites and incinerators for treatment and disposal of hazardous waste.	<p>The Board has already selected a site in Village Nimbuan in Dera Bassi Block in District Patiala for the construction of TSDF.</p> <p>To expedite and facilitate the construction of TSDF, the major generators of hazardous waste in the State, at the instance of PPCB, have taken initiative for creating the facility and have formed a company named M/s Nimbuan Greenfield Punjab Ltd., with headquarters at Ludhiana.</p> <p>The Board and the GOP, on their part, have undertaken the responsibility to acquire the land for this company. The Board has paid more than Rs. 75 lacs towards the cost of land. The GOP has issued the notification under section 4 & 6 of Land Acquisition Act, 1894 for the acquisition of land.</p>
---	---

5.8 BIO-MEDICAL WASTES [MANAGEMENT & HANDLING] RULES

The Board has assessed **2219** hospitals requiring authorization under the Bio-Medical Waste (Management & Handling) Rules, 1998. Out of these **1790** hospitals have applied for the authorization of the Board under the said rules. The Board has granted authorization to **1449** hospitals upto **31.03.2005**. **1919** hospitals have made the agreement with the common facilities for treatment & disposal of Bio-Medical Waste. The hospital wise status of bio-medical waste as on **31.03.2005** is as under :

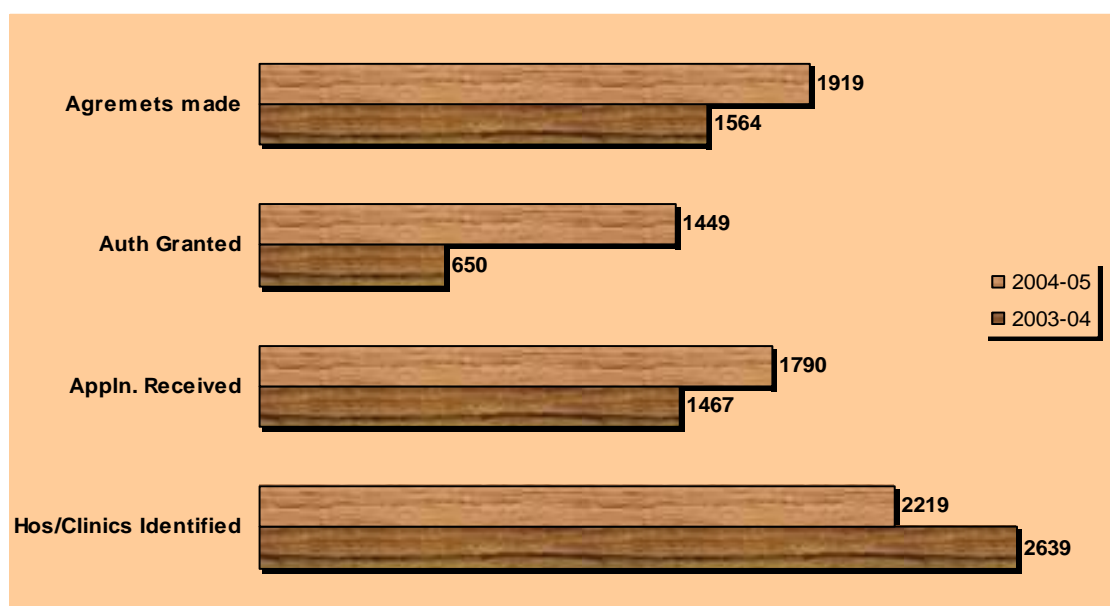
Category of Health Care Establishments (HCE)	Total No. of HCEs	Total No. of Beds	No. of HCEs which are utilizing CBWTF/ private agencies	No. of HCEs applied for authorization	No. of HCEs granted authorization
With 500 beds and above.	5	4059	2	5	3
With 200 bed and above but less than 500 beds	11	3184	9	10	6

Category of Health Care Establishments (HCE)	Total No. of HCEs	Total No. of Beds	No. of HCEs which are utilizing CBWTF/ private agencies	No. of HCEs applied for authorization	No. of HCEs granted authorization
With 50 beds and above but less than 200 beds.	94	7025	86	90	81
With less than 50 beds	1884	19430	1756	1614	1307
All other institutions generating Bio Medical Waste not included above	225	0	66	71	52
Total	2219	33698	1919	1790	1449

During the year **2004-2005**, the Board has granted authorization under Bio-Medical Waste (Management & Handling) Rules, 1998 to two more Common Bio-Medical Waste Treatment Facilities, one at Pathankot and other at Amritsar. Now, total four Common Bio-Medical Waste Treatment Facilities are functioning in the State for collection, transportation, treatment and disposal of bio-medical waste generated from various Health Care Establishments. The Status of each Common Bio-Medical Waste Treatment Facility as on **31.03.2005** is as under:

Sr. No	Name & Address of CBWTF	Total no. of HCE's being served	Quantity of BMW treated/day
1.	M/s SembRamky Environmental Management Pvt. Ltd., (Formerly Medicare Incin. Pvt. Ltd.),Tajpur Road, Ludhiana.	1375	1.66 MT/day

Sr. No	Name & Address of CBWTF	Total no. of HCE's being served	Quantity of BMW treated/day
2.	M/s Rainbow Environments (a unit of M/s Radical Builders (I) Pvt. Ltd., Village Balayali, Teh. Kharar, Mohali	352	890 Kg/day
3.	M/s Amritsar Health Care System, Village Ibban Kalan, Chabbal Road, Amritsar	133	160 Kg/day
4.	M/s B. M. W. T. Trust, Village Pangoli, Defence Road, Pathankot, Distt. Gurdaspur	59	60 Kg/day



5.9 MUNICIPAL WASTES [MANAGEMENT & HANDLING] RULES

The Ministry of Environment and Forests, New Delhi notified the Municipal Solid Waste (Management & Handling) Rules, 2000 vide its notification No. S.O.980(E) dated 25.09.2000 for the management and handling of municipal solid waste.

The Board has given hearings/taken meetings with the Municipal Corporations, Municipal Council's and Nagar Panchayats of the State and have directed them to apply for the Authorization of the Board for the management of municipal solid waste and to provide waste management facility including landfill site and necessary facilities at the site of disposal as per the provisions of the Municipal Solid Waste (Management and Handling) Rules, 2000.

The Hon'ble Supreme Court of India is also monitoring the implementation of Municipal Solid Waste (Management & Handling) Rules, 2000 in CWP No. 888 of 1996.

A meeting was taken by Principal Secretary, Department of Science, Technology & Environment, Chandigarh on 15.7.2004 and decided that all the Municipal Authorities should apply for Authorization in one month's time and awareness meetings for local bodies be organized. It was also decided that the Board shall engage Punjab State Council for Science & Technology, Chandigarh for preparation of Detail Project Report for installation of pilot project for solid waste management at Kartarpur and Mandi Gobindgarh. Accordingly, the Board has engaged Punjab State Council for Science & Technology, Chandigarh for preparation of DPR for installation of pilot project for solid waste management at Kartarpur and Mandi Gobindgarh with financial assistance to the extent of 50% of the project cost from Central Pollution Control Board/Ministry of Environment and Forests, New Delhi.

Orientation Programmes were conducted during 31.8.2004 to 9.9.2004 region-wise in the State to make aware the Municipal Authorities about the provisions of Municipal Solid Waste (Management and Handling) Rules, 2000 including development and maintenance of landfill sites and directions of the Hon'ble Supreme Court of India.

The State Government has also constituted a committee under rule 6(2) of the Municipal Solid Waste (Management & Handling) Rules, 2000 for deciding Authorization to the Municipal Authorities or the operator of the facility for setting up of waste processing and disposal facility on 11.08.2004.

All the Municipal Authorities have applied for the Authorization of the Board and have submitted Annual Reports. All the applications were placed before the committee constituted by the Government for considering such applications in the meetings held on 17.8.2004 and 13.9.2004. Municipal Authorities have been given 15 days time to comply with the Municipal Solid Waste (Management and Handling) Rules, 2000 as the Municipal Authorities failed to comply the provisions of Schedule-I, II and III of the said Rules.

The Chief Secretary, Government of Punjab also took a meeting on 12.10.2004 with Principal Secretary, Local Government, Director, Local Government, Punjab and Principal Secretary, Department of Science, Technology & Environment

to discuss the implementation of orders of Hon'ble Supreme Court of India & for compliance of Municipal Solid Waste (Management and Handling) Rules, 2000. Further, a follow up meeting was taken by the Principal Secretary to Government of Punjab, Deptt. of Science, Technology and Environment on 9.3.2005 to implement the directions of the Hon'ble Supreme Court of India.

There are **137** local bodies in the State of Punjab, out of which, **30** Municipal Authorities have land adequate to handle municipal solid waste for more than 20 years, **51** Municipal Authorities have land adequate to handle municipal solid waste for 5 years to 20 years, **42** Municipal Authorities have land adequate to handle municipal solid waste for less than 5 years and **14** Municipal Authorities do not have land for disposal of their municipal solid waste.

5.10 RECYCLED PLASTICS MANUFACTURE & USAGE RULES, 1999

The Ministry of Environment & Forests, New Delhi notified the Recycled Plastic Manufacture & Usage (Amendment) Rules, 2003 vide notification No. SO. 698 (E) dated 17th June 2003. The Board issued public notice regarding salient features of Recycled Plastics Manufacture & Usage (Amendment) Rules, 2003 in leading newspapers of the State.

33 manufacturing industries have applied for registration of the Board under the Recycled Plastic Manufacture & Usage Rules, 1999 as amended in 2003. Out of which, **16** registrations have been granted and remaining are under observation with the Board. Units which have not applied for the registration of the Board under the said Rules, have been given notices by the Board to persuade them to obtain the registration of the Board under the said Rules. All the Regional Offices have been reminded demi officially to expedite the implementation of the provisions of Recycled Plastic Manufacture & Usage Rules, 1999 as amended in 2003.

5.11 BATTERIES (MANAGEMENT & HANDLING) RULES, 2001

The Ministry of Environment & Forests, Govt. of India, New Delhi vide no. S.O.432(E) dated 16.05.2001 has notified Batteries (Management & Handling) Rules, 2001.

In the State of Punjab, the Board has identified **53** battery manufacturers / assemblers. **25** are the battery recyclers, **247** are battery dealers and **33** are the bulk consumers. Some of them have filed returns.

The Board published in the leading newspapers of the State the salient features of the Batteries (Management & Handling) Rules, 2001 and for compliance of

- Rule 4 for the manufacturer, importers, assemblers and re-conditioners of batteries, Rule 7 for compliance by the dealers of batteries,
- Rule 8 for compliance by the recyclers of batteries,
- Rule 10 for compliance by the consumer/bulk consumer of batteries, and
- Rule 11 for compliance by the auctioneer of batteries

The Board officers held meetings and camps with related industries/bulk consumers to persuade them to comply with the provisions of the Batteries (Management & Handling) Rules, 2001. All the Govt. Institutions/Roadways etc. have been requested to sell the scrap batteries to the registered agencies having valid registration of MoEF and file returns as per the Rules.

5.12 CONSENT TO LOCAL BODIES UNDER WATER ACT, 1974

The Local Bodies and Other Bodies are required to be regulated under consent administration {**section 25/26 of the Water Act, 1974**} for disposal of sewage effluent. Stress has been given by way of issuance of letters. Reminders and show-cause notices to apply for consent to operate under Water Act and take action for disposal of domestic sewage after required treatment.

There are **137** local bodies including 5 municipal corporations and only **4** local bodies have provided the sewage treatment plant, but, have not yet obtained the consent under the Water Act, 1974. The four local bodies who have provided the effluent treatment facility are:

#	Municipal Committee / Other Body	Complete / Partial
1	Naya Nangal	Partial
2	Anandpur Sahib	Complete

#	Municipal Committee / Other Body	Complete / Partial
3	Sultanpur Lodhi	Complete
4	Phillaur	Partial

Ludhiana, Phillaur, Phagwara and Jalandhar are covered under the Satluj Action Plan. Worth Rs. 270 Crores and the sewage treatment facilities are coming up under this plan.

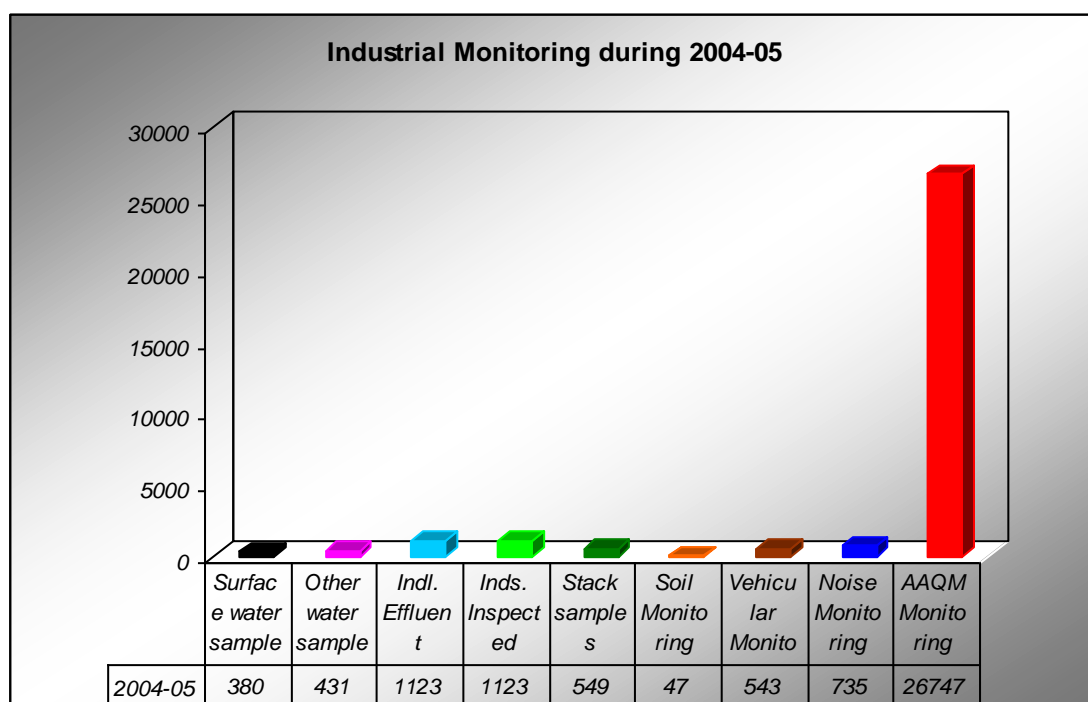
5.13 INDUSTRIAL INSPECTIONS, MONITORING OF WATER AND AIR

The status with respect to inspection of industries and monitoring of water and air during the year **2004-05** is as under:

HO/RO	Inds. inspected	Indl. effluent analysis	Other water samples	Surface Water samples	Stack samples
Total	1123	1123	431	380	549

Other samplings status is as under:

HO/RO	AAQM monitoring	Soil monitoring	Vehicular emissions monitoring	Noise monitoring
Total	26747	47	543	735



5.14 PUBLIC GRIEVANCES

The status of various complaints received and redressed by the Board during the period under report is as under:

#	Description	Status
A	Total number of complaints received up to 2003-04	441
1	Complaints received from Grievances Committees	40
2	Complaints received from CM/ other Ministers Office	00
3	Complaints received directly in PPCB	401

#	Description	Status
B	Total number of complaints received up to 2004-05	569
1	Complaints received from Grievances Committees	28
2	Complaints received from CM/ other Ministers Office	00
3	Complaints received directly in PPCB	541

#	Description	Status
C	Total number of complaints redressed up to 2004-05	527
1	Complaints received from Grievances Committees and redressed	28
2	Complaints received from CM/ other Ministers Office and redressed	00
3	Complaints received directly in PPCB and redressed	499

#	Description	Status
D	Total number of complaints pending up to 31-03-2005	483
	includes	
	Complaints pending which were received from Grievances Committees	40
	Complaints received from CM/ other Ministers Office and are pending	443

5.15 PROVIDING INFRASTRUCTURE TO BOARD'S STAFF

The Board is in the process of creating and providing its own infrastructure by way of constructing its own office buildings in first phase and, then, going in for housing infrastructure for its employees. In the year 2004-05, the Board took the following steps for the same:

#	Station	Plot Size	Amount	Status
1	Jalandhar	1538.72 Yd ² @ 600/- per Yd ²	9,17,400/-	<ul style="list-style-type: none"> Allotment of plot in Focal Point by PSIEC. Full payment made and possession of land taken. Construction of office

				complex given to PSIEC as deposit work.
2	Hoshiarpur	1000 Yd ² @ 100/- per Yd ²	4,00,000/-	<ul style="list-style-type: none"> Allotment of plot in Focal Point by PSIEC. Full payment made and possession of land taken.

#	Station	Plot Size	Amount	Status
				Construction of office complex given to PSIEC as deposit work.
3	Batala	1000 Yd ² @ 200/- per Yd ²	2,00,000/-	<ul style="list-style-type: none"> Allotment of plot in Focal Point by PSIEC. Full payment made and possession of land taken.
4	Mohali	570 Yd ² @ 10,800/- per Yd ²	61,56,000/-	<ul style="list-style-type: none"> Estimate amounts to Rs. 61.69 lacs sanctioned by PHSC
5	Amritsar	1050 Yd ² @ 660/- per Yd ²	6,93,000/-	<ul style="list-style-type: none"> Allotment of plot in Focal Point by PSIEC. Full payment made and possession of land taken. Construction of office complex given to PSIEC as deposit work.
6	Sangrur	1000 Yd ² @ 275/- per Yd ²	2,75,000/-	<ul style="list-style-type: none"> Allotment of plot in Focal Point by PSIEC. Full payment made and possession of land taken. Construction of office complex given to PHSC as deposit work.
7	Ludhiana	1400 Yd ² @ 1000/- per	14,00,000/-	<ul style="list-style-type: none"> Allotment of plot in Focal

		Yd ²		Point by PSIEC. <ul style="list-style-type: none"> • Full payment made and possession of land taken. • Construction of office complex given to PHSC as deposit work.
--	--	-----------------	--	--

5.16 COMPETENT STATE AUTHORITY -CUM- SITE APPRAISAL COMMITTEE

As per the Press Note 17 (1984 series) of the Government of India, 20 categories of highly polluting industries in Large-Medium sector are required to obtain clearance of site from Environmental Angle for conversion of their letter of Intent into Industrial Licence. For this purpose, the Government of Punjab has constituted a Competent State Authority (CSA) with the Principal Secretary to Govt. of Punjab, Deptt. of Science, Technology & Environment, and Non-Conventional Energy as its Chairman and the Chairman of the Punjab Pollution Control Board as its Member Secretary. The industry is also required to obtain site clearance under the Factories Act. For considering the applications of the entrepreneurs under this Act, the State Govt. had substituted a Site Appraisal Committee (SAC). The members of CSA and SAC were almost same.

During the period under report, the Committee has performed well and the progress is as under:

CSA CASES CLEARED = 26

#	NAME OF THE CASE	MEETING/ DATE
1	M/S MODI METAL UDYOG (P) LTD., VILL. AJNALI, NEAR FOCAL POINT, MANDI GOBINDGARH	24 TH /25.05.2004
2	M/S PIONEER INDUSTRIES LTD., PLOT NO. A-3, A-4, INDUSTRIAL GROWTH CENTRE, DEFENCE ROAD, PATHANKOT	25 TH /06.07.2004
3	M/S KHANNA PAPER MILLS (P) LTD., VILLAGE NANGALI, FATEHGARH ROAD, AMRITSAR	25 TH /06.07.2004

4	M/S MANDI ALLOYS (P) LTD., VILL. AMBEMAJRA, CHHATARPUR LINK ROAD, MANDI GOBINDGARH	25 th /06.07.2004
5	M/S OASIS ENTERPRISES (P) LTD., VILLAGE TALWARA, TALWARA ROAD, MANDI GOBINDGARH	25 TH /06.07.2004

#	NAME OF THE CASE	MEETING/ DATE
6	M/S SAURAV CHEMICALS LTD., (UNIT-III), VILLAGE BHAGWANPUR, DERA BASSI-BARWALA ROAD, DERA BASSI, DISTT. PATIALA	25 TH /06.07.2004
7	M/S CHANDIGARH DISTILLERS & BOTTLERS LTD., VILL. BANUR, TEHSIL RAJPURA, DISTT. PATIALA	25 TH /06.07.2004
8	M/s Ranbaxy Laboratories Ltd., Vill. Toansa, P.O. Railmajra, Distt. Nawanshahar	27 TH /29.09.2004
9	M/s Varun Steel Castings (P) Ltd., Vill. Mugal Majra, Mandi Gobindgarh	27 TH /29.09.2004
10	M/s Bhawani Industries Private Limited, Ajnali, G.T. Road, Mandi Gobindgarh	27 TH /29.09.2004
11	M/s R.P. Multimetals, Village Salani, Amloh Road, Mandi Gobindgarh	27 TH /29.09.2004
12	M/s Abhishek Industries Ltd. (Paper & Chemical Division), Mansa Road, VPO Dhaula, Tehsil Barnala, Distt. Sangrur	27 TH /29.09.2004
13	M/s Madhav Udyog (P) Ltd., Talwara Road, Sirhind Side, Mandi Gobindgarh	28 TH /23.11.2004
14	M/s Rico Casting Ltd., B-26, Focal Point, Phase-IV, Ludhiana	28 TH /23.11.2004
15	M/s K.L. Alloys (P) Ltd., G.T. Road, Mandi Gobindgarh	28 TH /23.11.2004
16	M/s Rana Sugars Ltd., (Distillery Division), Vill. Louhka, Tehsil Patti, Distt. Amritsar	28 TH /23.11.2004
17	M/s Vishal Paper Industries, Vil. Khusropur, District Patiala	28 TH /23.11.2004
18	M/s Mohan Fibre Products Ltd., Vill. Mubarkpur, Tehsil Dera Bassi, Distt. Patiala	29 TH /24.01.2005
19	M/s Leatherline Tanneries (P) Ltd., Adda Cholang, Vill. Khokhar, Teh. Dasuya, Distt. Hoshiarpur	29 TH /24.01.2005
20	M/s Allied Recycling Ltd., Vill. Budhewal, Budhewal Samrala Link Road, Ludhiana	29 TH /24.01.2005

21	M/s Sahil Industries, Village Ajnali, End of Focal Point, Mandi Gobindgarh	29 TH /24.01.2005
22	M/s Bassi Steel Ltd., Chandigarh–Ambala Road, Vill. Gholumajra (Dera Bassi), Patiala	30 TH /21.03.2005
23	M/s Amrit Engg. & Foundry Works, Mill Road, Goraya, Distt. Jalandhar	30 TH /21.03.2005
24	M/s Vardhman Chemtech (P) Ltd., Vill. Nimbuan, Dera Bassi, Distt. Patiala	30 TH /21.03.2005

#	NAME OF THE CASE	MEETING/ DATE
25	M/s Industrial Organics Ltd., Mansa Road, Dhaula Complex, Barnala, Distt.	30 TH /21.03.2005
26	M/s DSM Anti-Infectives India Ltd., (Previously known as M/s Max GB Limited, Bhai Mohan Singh Nagar, Village Toansa, Teh. Balachaur, Distt. Nawanshahar)	30 TH /21.03.2005

SAC CASES CLEARED = 88

#	NAME OF THE CASE	MEETING/ DATE
1	M/S NAND MANGAL STEELS LIMITED, V.P.O., KANGANWAL, INDUSTRIAL AREA-C, DISTT. LUDHIANA	24 TH /25.05.2004
2	M/S VIKAS CHEM DRUGS LIMITED, VILLAGE FATEHGARH CHHANNA, TEHSIL BARNALA, DISTT. SANGRUR	24 TH /25.05.2004
3	M/S BEDI STEELS (P) LTD., (UNIT NO.1), DORAHA, DISTT. LUDHIANA	24 TH /25.05.2004
4	M/S SHIVA PROTEIN PRODUCTS (P) LTD., VILL. GEHLE, TALWANDI ROAD, MANSA	24 TH /25.05.2004
5	M/S DRUGOCHEM PVT. LTD., D-49, INDUSTRIAL AREA, PHASE-V, MOHALI, DISTT. ROPAR	24 TH /25.05.2004
6	M/S ROSHA ALLOYS (P) LTD., VILL. TOORAN, AMLOH ROAD, MANDI GOBINDGARH	24 TH /25.05.2004
7	M/S BABA FARID SOLVEX (P) LTD., SADIQ ROAD, FARIDKOT	24 TH /25.05.2004
8	M/S INDO CANADIAN INDUSTRIES LTD., FATEHGARH CHHANNA ROAD, HANDIAYA, BARNALA, DISTT. SANGRUR	24 TH /25.05.2004
9	M/S KRISHNA SOLVEX (P) LTD., GUJRAN ROAD, SULAR GHARAT, DISTT. SANGRUR	24 TH /25.05.2004
10	M/S KISSAN FATS LTD., VILL. GHUBAYA, FAZILKA	24 TH /25.05.2004

	ROAD, TEHSIL JALALABAD (W) DISTT. FEROZEPUR	
11	M/S SUKHBIR AGRO'S (P) LTD., FARIDKOT ROAD, GURUHARSHAHAI DISTT. FEROZEPUR	24 TH /25.05.2004
12	M/S DASMESH CASTINGS (P) LTD., AMLOH ROAD, VILL. JALLALPUR (OUTSIDE OCTROI POST), MANDI GOBINDGARH	24 TH /25.05.2004

#	NAME OF THE CASE	MEETING/ DATE
13	M/S SARDAR SOLVEX (P) LTD., MALERKOTLA ROAD, VILL. DULLADI, NABHA, DISTT. PATIALA	24 TH /25.05.2004
14	M/S P.K. ALLOYS (P) LTD., VILL. JALALPUR, AMLOH ROAD, MANDI GOBINDGARH	24 TH /25.05.2004
15	M/S RANBAXY LABORATORIES LTD., A-41, INDUSTRIAL AREA, PHASE-VIII, SAS NAGAR, MOHALI	24 TH /25.05.2004
16	M/S S.S. SOLVEX (P) LTD., TIWANA ROAD, JALALABAD (W), DISTT. FEROZEPUR	24 TH /25.05.2004
17	M/S JATIN ISPAT (P) LTD., VILL. AMBEY MAJRA ROAD, VILL. WAZIR NAGAR, MANDI GOBINDGARH	24 TH /25.05.2004
18	M/S HIND ALLOYS, VILL. KUMBH, AMLOH ROAD, MANDI GOBINDGARH	24 TH /25.05.2004
19	M/S AASTHA ALLOYS, D-18, FOCAL POINT, INDUSTRIAL AREA, DABWALI ROAD, BATHINDA	24 TH /25.05.2004
20	M/S APOLLO INTERNATIONAL, G.T. ROAD, VILL. HARBANSPURA, MANDI GOBINDGARH	25 TH /06.07.2004
21	M/S G.G. CHEMICALS & PHARMACEUTICALS (P) LTD., VILLAGE BHAGWANPURA, BARWALA ROAD, DERA BASSI, DISTT. PATIALA	25 TH /06.07.2004
22	M/S INDIAN OIL CORPORATION LTD., (MARKETING DIVISION) AVIATION FUEL STATION (AIR FORCE STATION) HALWARA, DISTT. LUDHIANA	25 TH /06.07.2004
23	M/S GURU HARGOBIND THERMAL PLANT, LEHRA MOHABAT (STAGE-I),	25 TH /06.07.2004
24	M/S DEV RAJ HI-TECH MACHINES LTD., PLOT NO. 2 & 3, INDUSTRIAL DEVELOPMENT COLONY, FEROZEPUR	25 TH /06.07.2004
25	M/S RAJDHANI IRON PRODUCTS PRIVATE LTD., VILLAGE KUMBH, 66 KV GRID ROAD, AMLOH ROAD, MANDI GOBINDGARH	25 TH /06.07.2004
26	M/S S.S. INDUSTRIES LTD., VILLAGE THUTHEWALI	25 TH /06.07.2004

	KANCHAN ROAD, MANSA	
27	M/s A.G. Fats Ltd., Nakodar Road, Kapurthala,	26 TH /20.08.2004
28	M/s Surya Steel Industries, Vill. Ambeymajra, Chattarpur Road, Mandi Gobindgarh	26 TH /20.08.2004
29	M/s Mahadeva Alloys, Vill. Mugal Majra, Mandi Gobindgarh	26 TH /20.08.2004
30	M/s Subham Power Pack Products, Village Focal Point, V.P.O. Khosa Pando, Moga	26 TH /20.08.2004

#	NAME OF THE CASE	MEETING/ DATE
31	M/s Gobind Castings (P) Ltd., Vill. Kanganwal, G.T. Road, Ludhiana	26 TH /20.08.2004
32	M/s Deva Solvent Industries, Vill. Chappar, Distt. Ludhiana	26 TH /20.08.2004
33	M/s Kapoor Industries, D-98, Focal Point Extension, Jalandhar City	26 TH /20.08.2004
34	M/s Gouri Shankar Solvex, Nathoke-Kalke Road, Village Gholia Kalan, Baghapurana, Distt. Moga	27 TH /29.09.2004
35	M/s Dashmesh Solvex Private Ltd., Vill. Gharuan, District Ropar	27 TH /29.09.2004
36	M/s Northern Chemoils Ltd., Vill. Bhagwas, Barwala Road, Dera Bassi, Distt. Patiala	27 TH /29.09.2004
37	M/s Allied Recycling Limited, Vill. Budhewal, Budhewal Samrala Link Road, Ludhiana	27 TH /29.09.2004
38	M/s Morion Chemicals Ltd., B-4 & 5, Industrial Focal Point, Dera Bassi, Distt. Patiala	27 TH /29.09.2004
39	M/s Saurav Chemicals Ltd., Vill. Saidpura, Dera Bassi-Barwala Road, Dera Bassi, Distt. Patiala	27 TH /29.09.2004
40	M/s Super Refractories, B-8, Mandi Gobindgarh	27 TH /29.09.2004
41	M/s Speed Auto Industries, B-XXIX-536/12-C/2, Opp. Dhandari Railway Station, Industrial Area-C, Dhandari Kalan, Ludhiana	27 TH /29.09.2004
42	M/s Aggarwal Auto Industries, C-83, Focal Point Extension, Jalandhar City	27 TH /29.09.2004
43	M/s K.L. Ispat, Industrial Area-C, Near ACC Cement Dump, Village Kanganwal, Ludhiana	27 TH /29.09.2004
44	M/s S.M. Alloys & Metals, Village Kumbh, Amloh Road, Mandi Gobindgarh	27 TH /29.09.2004
45	M/s Unipearl Alloys, Village Tooran, Amloh Road, Mandi Gobindgarh	27 TH /29.09.2004
46	M/s Talasri Steels (P) Ltd., Amloh Road, Behind Prem Kanda, Vill. Jallapur, Mandi Gobindgarh	27 TH /29.09.2004

47	M/s Partap Bikes, UCO Bank Road, V.P.O. Jugiana	27 TH /29.09.2004
48	M/s K.R.P. Manufacturing Co., 12, Saini Colony, Industrial Area, Jalandhar	27 TH /29.09.2004
49	M/s Goyal International, C-66, Focal Point Extension, Jalandhar	27 TH /29.09.2004
50	M/s Vishwakarma Ispat Ltd., V.P.O. Kanganwal, Ludhiana	27 TH /29.09.2004
51	M/s Global Alloys, Vill. Talwara, Mandi Gobindgarh	27 TH /29.09.2004
52	M/s Arihant Alloys (Furnace Division), G.T. Road, Sirhind Side, Mandi Gobindgarh	27 TH /29.09.2004

#	NAME OF THE CASE	MEETING/ DATE
53	M/s Chopra Alloys, Bhadla Road, Vill. Alour, Khanna	28 TH /23.11.2004
54	M/s P.K. Alloys (P) Ltd. (Unit-2), Vill. Jalapur, Mandi Gobindgarh	28 TH /23.11.2004
55	M/s Piyush Ispat Udyog Pvt. Ltd., Vill. Ajnali, Near Focal Point, Mandi Gobindgarh.	28 th /23.11.2004
56	M/s Gurdeep Cycle Inds. Station Road, Dhandari Kalan, G.T. Road, Industrial Area-C, Ludhiana.	28 TH /23.11.2004
57	M/s KRBL Limited, V.P.O. Bhasur, Dhuri, Distt. Sangrur	28 TH /23.11.2004
58	M/s Bhupinder Alloys (P) Ltd., Vill. Mehlon. P.O. Kohara, Distt. Ludhiana	28 TH /23.11.2004
59	Sherpur Forgings, Sherpur, Focal Point, Ludhiana	28 TH /23.11.2004
60	M/s Shubham Alloys & Rolls Pvt. Ltd., A-9, Focal Point, Patiala	28 TH /23.11.2004
61	M/s Dashmesh Batteries & Metal Industries, D-96, Focal Point, Khanna, Ludhiana	28 TH /23.11.2004
62	M/s Saraswati Ceramics, Jarout Road, Jarout, Tehsil Dera Bassi, Distt. Patiala	29 TH /24.01.2005
63	M/s Asha Castings, Vill. Hussainpura, Opp. Motel Amaltas, Jalandhar Bye-Pass, Ludhiana	29 TH /24.01.2005
64	M/s Indo Swift Ltd., Village Jawaharpur, Dera Bassi, District Patiala	29 TH /24.01.2005
65	M/s K.S. Mechanical Works Regd, B-XXX 937, Sherpur Bye-Pass, Ludhiana	29 TH /24.01.2005
66	M/s Goyal Air Products, G.T. Road, (Khanna Side), Mandi Gobindgarh	29 TH /24.01.2005
67	M/s MGS Industries, B-9, Focal Point, Dabwali Road, Bathinda	29 TH /24.01.2005
68	M/s Shree Ganesh Alloys, Vill. Tooran, Amloh Road, Mandi Gobindgarh	29 TH /24.01.2005
69	M/s P.D. Alloys (P) Ltd., Village Kumbh, Amloh Road, Mandi Gobindgarh	29 TH /24.01.2005

70	M/s Drugochem Pvt. Ltd., D-49, Industrial Area, Phase-V, Mohali, Distt. Ropar	29 TH /24.01.2005
71	M/s SKL Glass, E-174, Phase-VII, Industrial Area, Mohali (Distt. Ropar),	29 TH /24.01.2005
72	M/s S.G. Metal Castings, Adampal Road, Malerkotla	30 TH /21.03.2005
73	M/s Bhambri Metals, Amloh Road, Village Tooran, Mandi Gobindgarh	30 TH /21.03.2005
74	M/s Nandish Alloys Ltd., Phase-VII, Focal Point, Dhandari Khurd, Ludhiana	30 TH /21.03.2005
75	M/s Garg Concast Limited, Vill. Garhi Tarkhana, Machhiwara, Tehsil Samrala, Ludhiana	30 TH /21.03.2005

#	NAME OF THE CASE	MEETING/ DATE
76	M/s Fertile Agrotech Ltd., K-2, Textile Colony, Industrial Area-A, Ludhiana	30 TH /21.03.2005
77	M/s Adhunik Alloys Pvt. Ltd., Vill. Garhi Tarkhana, Machhiwara, Samrala, Ludhiana	30 TH /21.03.2005
78	M/s AMT Alloys Private Ltd., Village Dugri, Khanna Road, Tehsil Malerkotla, Sangrur	30 TH /21.03.2005
79	M/s R.S. Industries, Unit-II, Back Side, Focal Point, Extn. Near Transport Nagar, Jalandhar	30 TH /21.03.2005
80	M/s Sigma Enterprises, Udyog Nagar, VPO, Randhwa Mansndha, Jalandhar City	30 TH /21.03.2005
81	M/s Naturals Castings, Vill. Mullanpur, Mandi Gobindgarh	30 TH /21.03.2005
82	M/s Ludhiana Alloys Pvt. Ltd., Village Rajgarh, Tehsil Payal, Distt. Ludhiana	30 TH /21.03.2005
83	M/s Krishna Auto Industries, C-31, Focal Point, Jalandhar	30 TH /21.03.2005
84	M/s Sigma Chemtech, C-56, Focal Point, Chanalon (Kurali) District Ropar	30 TH /21.03.2005
85	M/s Geminy Industrial Corp. 270, G.T. Road, Dhandari Kalan, Distt. Ludhiana	30 TH /21.03.2005
86	M/s Monga Brothers Ltd. (Previously, K.C. Alloys & Steels Castings, B-16, Focal Point, Dhandari Kalan, Ludhiana	30 TH /21.03.2005
87	M/s Mahaluxmi Steels, Budhewal Road, Ludhiana	30 TH /21.03.2005
88	M/s Narindra Castings (P) Ltd., B-5-6, Focal Point, Mandi Gobindgarh	30 TH /21.03.2005

(A) CASES OF ENVIRONMENTAL CLEARANCE

#	DESCRIPTION	NUMBER
1.	NUMBER OF MEETINGS HELD DURING THE YEAR	05

2.	NUMBER OF CASES PUT UP BEFORE THE COMMITTEE	46
3.	NUMBER OF CASES CLEARED	13
4.	NUMBER OF CASES REJECTED	06
5.	NUMBER OF CASES DROPPED	02
6.	NUMBER OF CASES DEFERRED	18

(B) CASES OF SITE CLEARANCE UNDER FACTORIES ACT.

#	DESCRIPTION	NUMBER
1.	NO. OF MEETING HELD DURING THE YEAR	08
2.	NUMBER OF CASES PUT UP BEFORE THE COMMITTEE	97
3.	NUMBER OF CASES CLEARED	42
4.	NUMBER OF CASES REJECTED	10
5.	NUMBER OF CASES DROPPED	-
6.	NUMBER OF CASES DEFERRED	45

5.18 ZONING ATLAS

The Zoning Atlas Programme was conceptualised for ensuring protection of environment and its resources through planned and sustainable development. The programme commenced in 1995 in 14 volunteering states with district wise environmental assessments for siting of industries. The programme although initially catered to siting of industries. It was expanded subsequently to cater to siting of industrial estate compilation of environmental information and improvement of urban areas/tourism areas etc. The project was funded by the World Bank .The Programme was co-ordinated by Central Pollution Control board New Delhi. The programme activities were executed by various state Pollution Control Boards and other executing agencies. The programme received technical support from the German Technical Cooperation under Indo German Bilateral programme. Having streamlined

methodologies/concepts completed a number of studies built the basic technical competencies and the needed infrastructure to undertake spatial environmental planning tasks with the state pollution control board and other executing agencies, the Central pollution Control Board now proposes to extend the programme until the end of the X Plan period with the grants-in-aid from the ministry of Environments and Forests Govt. Of India. Punjab Pollution Control Board is one of the volunteered state opted for the Spatial Environmental Programme with Er. Sandeep Bahl Environment Engineer, PPCB as coordinator of the project.

The following activities catered to Punjab were so far completed under the Zoning Atlas programme.

#	Activity	Coverage	Status
1	Zoning Atlas for siting of Industries	Ludhiana District	Completed
		Amritsar Jalandhar and Kapurthala Districts	In Progress
2	Industrial Estate Planning	Site near Kohara – Machhiwara Punjab	Completed
3	Environmental Mapping of Sensitive Zones and Industrial Sites		Completed
4	Human Resource Development		Two Officers from PPCB were provided Overseas training .On job training has also been provided to the staff from Punjab for performing various tasks of Environmental Planning including development of methodologies GIS etc. Awareness Programmes have been conducted at Ludhiana.
5	Infrastructure strengthening		Arc view and Arc- Info softwares (GIS softwares); 2 computers – 1 high end PC with

			21 inches monitor and 1 PC Colour copier cum printer; digitizer; plotter cum printer; plotter; modem; internet connection and light tracing table and miscellaneous cartographic equipments were provided to PPCB
--	--	--	---

5.19 ENVIRONMENT PROTECTION SQUAD

In compliance of the decision taken in the 85th meeting of the Board held on 18.1.1994, two Environmental Protection Squads (EPSs) have been constituted in the Board w.e.f. 7.2.1994 with a view to ensure the proper operation and maintenance of the pollution control devices by the industry. Each EPS is headed by a Senior Environmental Engineer of the Board and is assisted by Environmental Engineers and Assistant Environmental Engineers, Assistant Scientific Officers and necessary supporting staff.

During the year 1997-98, the two squads were merged into one with head quarters at Patiala.

FUNCTIONS OF ENVIRONMENT PROTECTION SQUAD

- To monitor the status of pollution which includes industrial as well as other sources.
- To collect samples and get them analyzed.
- To prepare detailed inspection reports on the prescribed performa.
- To confirm the data/information collected during the inspection with the record files of the industrial units/local bodies.
- To record definite recommendations for action required to be taken by the Board.

The Environmental Protection Squad, during the year 2004-05, visited **15** industries for detailed and comprehensive studies. The details are given as under:

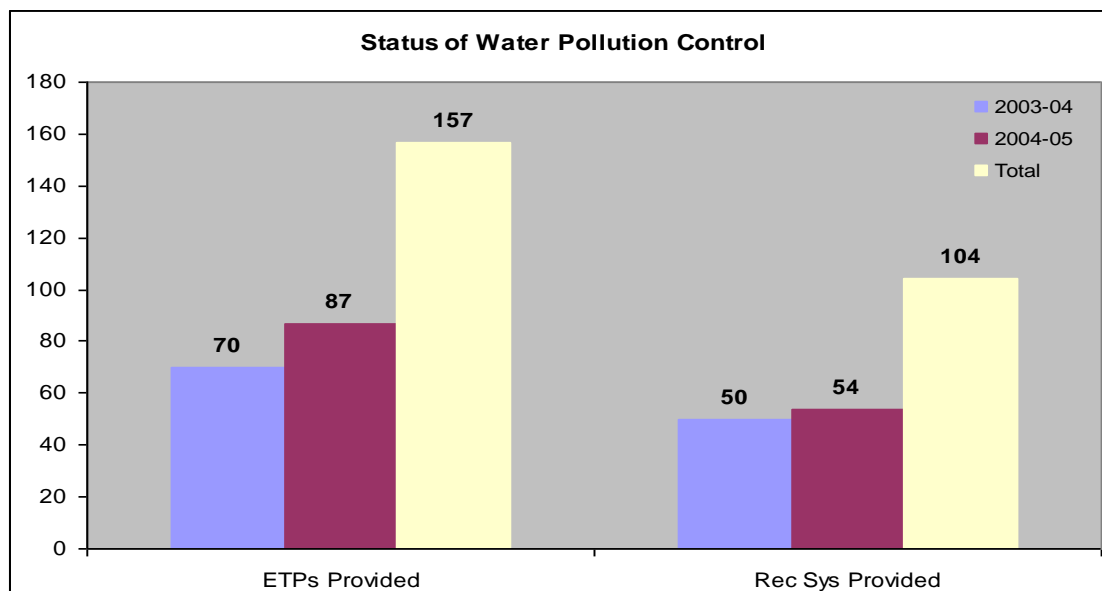
#	Name & address of the industry	Date of visit
1	M/s Namdhari Rice & General Mills, Hodhiarpur	6-4-2004
2	M/s Ritesh Inds. Ltd., Focal Point, Ph-8, Ludhiana	25-6-2004
3	M/s Glaxo Smith Kline Consumer Health Care Ltd., Nabha	29-6-2004
4	M/s Roshan Lal Paper Mills P Ltd., Bhatinda	13-7-2004

5	M/s Satia Paper Mills, Muktsar	14-7-2004
6	M/s Indian Yarns Ltd., Lalru, The. Dera Bassi	27-7-2004
7	M/s Mahavir Spinning Mills Ltd., Unit # 4, FP, Ludhiana	10-8-2004
8	M/s The Patiala Co-operative Sugar Mills Ltd., Rahkra	26-8-2004
9	M/s Hindustan Levers Ltd., Rajpura	27-8-2004
10	M/s Shreyans Inds. Ltd., -Paper Mill- Ahmedgarh	19-10-2004
11	M/s Narindra Paper Mills Ltd., Tran taran Rd., Amritsar	8-11-2004
12	M/s AB Sugars, Vill. Randhawa, Dasuya- Complaint Case	10-12-2004
13	Complaint against Stone-Crusher at Pathankot	16-12-2004
14	M/s Sputnik Switchgears P Ltd., GT Road, Goraya	20-12-2004
15	Four Common Bio-Medical waste Treatment Facilities in the State at Ludhiana, Mohali, Amritsar and Pathankot	31-1-2005
		to
		1-2-2005

5.20 INDUSTRIAL POLLUTION CONTROL

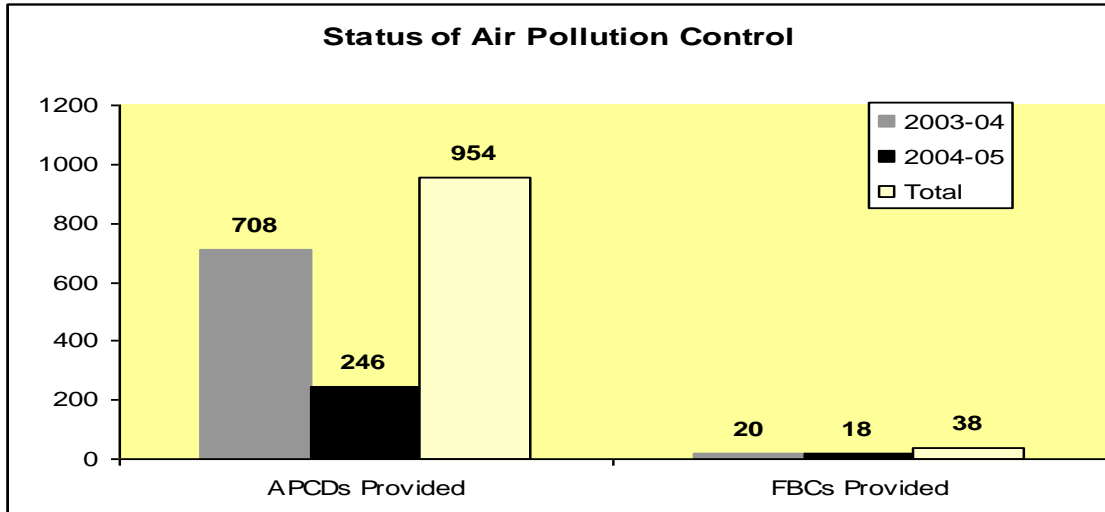
Under Water Act, 1974

During the period under report, the Board has been able to get installed **87** effluent treatment plants to treat the waste water arising from the industrial plants. **54** units have provided recirculation systems in order to conserve water.



Under Air Act, 1981

During the period under report, the Board has been able to get installed **246** air pollution control devices to contain the emissions arising from the industrial plants. **18** units have provided fluidized bed combustion systems in the boilers so as to gain maximum burning efficiency during the fuel burning in the boilers..



CHAPTER-6

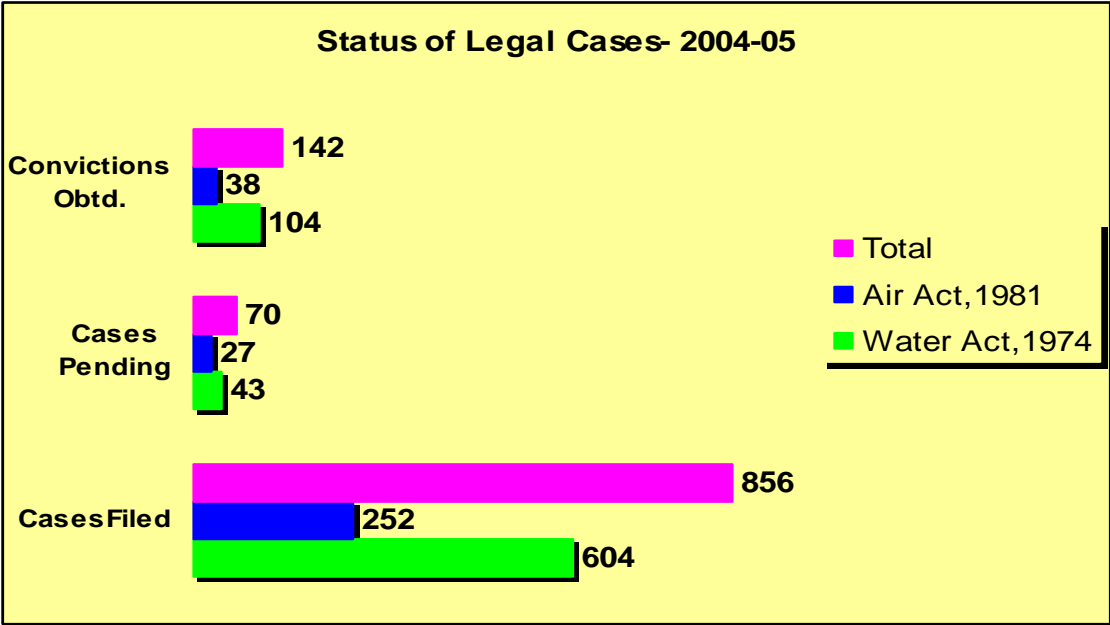
6.0 LEGAL ACTION

6.1 COMPLAINTS FILED BY THE BOARD UNDER THE WATER ACT, 1974 AND THE AIR ACT, 1981 IN THE COURTS OF COMPETENT JURISDICTION

The main objective of the Board, under Water Act, 1974 and the Air Act, 1981 amended up to date, is to control water and air pollution in order to restore the wholesomeness of water and air. The policy of the Board has been to persuade the industries to install the pollution control devices. But, the Board has to initiate legal proceedings against such recalcitrant units where persuasion fails and the industries failed to provide the pollution control devices.

The overall status of the legal cases launched by the Board as on **31.03.2005** is as under and is shown in **FIGURE** given below:

#	Description	Water Act 1974	Air Act 1981	Total
1.	Number of prosecutions launched	604	252	856
2.	Number of cases in which final orders have been passed out of Sr. No.1	561	225	786
	DECISIONS : (Out of Sr. no. 2)			
	(i) In favour of the Board	104	38	142
	(ii) Against the Board	192	104	296
	(iii) Dismissed in default	33	16	49
	(iv) Consigned to record	38	27	65
	(v) Number of cases withdrawn by the Board where the industry has complied with the provisions of the Act.	185	37	222
	(vi) Number of cases where the Court has given time for making pollution control arrangements	12	03	15
	(vii) Number of cases pending in the Court	43	27	70



CHAPTER -7

7.0 ENVIRONMENTAL AWARENESS

The Punjab Pollution Control Board has been consistently endeavoring to generate mass awareness about the danger of pollution and to secure public involvement in controlling industrial and other types of pollution and preserving environmental balance. Although environmental consciousness amongst the people is growing, it is still in a nascent state. The people are not properly informed what pollution is, how important is environment in their daily life, what happens in the ecological system if pollution of water, air and sound goes unabated and that environment pollution is a dangerous enemy to their progress and more so to their posterity. Legal actions against those who create pollution through their economic and other activities and actions taken by the Administration, and other Government agencies to Control Pollution are not enough to fight against the menace of different types of pollution. Unless the values of a pollution free environment and consciousness about the rights and duties towards making the environment free from pollution can be inculcated in the minds of the people, no tangible success can be achieved.

7.1 MASS AWARENESS

The Board put in great efforts to create awareness amongst the masses during the year 2004-05. The details are as under :

World Environment Day-5 June, 2004

The main function of World Environment Day celebrations was organized at Maharaja Palace, Sutehri Road, Near Govt. College Chowk, Hoshiarpur. Sh. Er. R.C. Dogra Hon'ble Health Minister, Govt. of Punjab, the Chief Guest and Guests of Honour. Sh. Kirandeep Singh Bhullar, I.A.S Deputy Commissioner, Hoshiarpur, Dr. UmenderDutt of Kheti Virast Mission, Dr. Kuldeep Singh, President, I.M.A and Col. Bishan Dass, Environmentalist spoke of the occasion.. A Light & Sound Show on "Environment Conservation" was presented. The focus of all the programmes was on " Wanted! Seas and Oceans-Dead or Alive?" the theme of the World Environment Day.

RO Sangrur

Tree Plantation was done at M/s Indian Acrylics Ltd., Vill. Harkishanpura, Bhawanigarh, Distt Sangrur as the celebration of World Environment Day on 5th June, 2004. Banners were also displayed on 5th June, 2004 at various prominent places in the jurisdiction of Distt. Sangrur. Pamphlets were distributed among the public to create awareness as a part of World Environment day.

RO-I Ludhiana

World Environment Day was held on 4/6/04 at Rajindera Modern Sr. Secondary School, Ludhiana to create the awareness among the school children regarding control of pollution. Sh. Ramesh Joshi, Member of PPCB, was the Chief Guest.

RO Bathinda

Banners were displayed at important public places.

RO Faridkot

The pamphlets were distributed of the World Environment Day at Moga, Faridkot and Ferozepur and display of banners..

RO Gurdaspur

A programme to create awareness for controlling the use of Polythene bags was held.

RO-Jalandhar

World Environment Day was celebrated at APJ School, Jalandhar.

National Environment Awareness Campaign Month

An Awareness Month from 19 November to 18 December was celebrated and every Regional Office of the Board carried out various programmes like Tree Plantations, Slogan Writing & organizing Seminars, Painting Competitions and Street Plays in their respective areas. The main thrust of these programmes was on “Municipal Solid Waste Management” the theme of the month.

The main function regarding this month was held at HO, Patiala in which a street play “Kaun Panian Di Bat Kare” was staged. Mr. TRS Bajwa, Chairman, presided over this function..

RO Sangrur

A free vehicle pollution check camp was organized at Sangrur on 17/12/2004 in which, 102 pollution checking certificates were issued to the various vehicle owners. This camp was organized as a part of National Environment Awareness Month during 2004-05.

RO-I Ludhiana

An awareness rally was organized on 11/12/04 at Guru Nanak Stadium Ludhiana in which about 5000 students participated and Member Secretary of the Board was the Chief Guest on this occasion.

The National Awareness Month from Nov. 19th to 18th 2004 under the theme “SAY NO TO PLASTIC” was celebrated for creating Environmental Awareness among the general public for keeping the environment clean and green.

World environment month was celebrated on 6/12/05 at Ryan International Public School, Chandigarh Road, Ludhiana in which Sh. Ramesh Joshi, Member of the Board was Chief Guest.

A Jhanki, regarding Air Pollution Control Device, Water scrubber, was prepared and sent on Independence Day i.e. 15th Aug’05 parade.

RO-II Ludhiana

A school students rally was held on 16/12/04 regarding environment awareness month at Khanna.

RO-III Ludhiana

Awareness Month from 19 November to 18 December was celebrated and 4000 posters were distributed through different newspapers. The banners were displayed at 24 different industries centers, chowks, Railway Station and Bus Stand etc. A school student’s rally was held on 08/11/2004.

A rally was organized for the celebration of National Environment Awareness Month at Ludhiana in Dec., 2004 (Circuit House to Desh Bhagat Yadgar Hall in which large number of school students participated.

R.O. Bathinda

The following activities were held at in Awareness Month.

- a) Painting Competition on 15/12/04
- b) Display of banners at important public places.
- c) Distributed of pamphlets.

RO Amritsar

Banners, giving environmental awareness to the general public, were displayed at various places on Diwali festival.

Pamphlets/hand bills were distributed through news papers and the banners were also displayed at prominent places during the environment aware month from 19 Nov to 18 Dec. 2004.

All the posters/reading materials sent by the Head Office were displayed at the Schools and Govt. Offices.

RO Faridkot

The pamphlets were distributed of the World Environment Day at Moga, Faridkot and Ferozepur and the banners were displayed at prominent places..

A rally was organized for the celebration of National Environment Awareness Month at Faridkot on 13/12/2004.

RO-I, Ludhiana

A seminar was held on 16/05/04 under the Chairmanship of Hon'ble Chairman of the Board with Cupola Furnace Association.

RO-II Ludhiana

A workshop regarding Bio-Medical Waste Management was organized at Khanna and Jagraon.

RO-Jalandhar

A workshop regarding Bio-Medical Waste Management was organized at Jalandhar and Kapurthala.

RO-Bathinda

A *Jhanki* regarding Air Pollution Control Device, Water scrubber, on the occasion of Independence Day i.e. 15th Aug'04

A *Jhanki* regarding Effluent Treatment Plant on the occasion of Republic Day i.e. 26th Jan '05

RO Amritsar

An Exhibition Cart (*Jhanki*) was prepared on environment theme and was sent into republic day celebration on behalf on PPCB on 26.1.2005.

A Lecture on environment awareness was delivered by Environmental Engineer, RO, Amritsar on 22.7.2004 and CAL-C Computer Education Centre, Amritsar.

RO Gurdaspur

6 number Seminars/Workshops were organized regarding Awareness for Environment.

RO Hoshiarpur

A inspection meeting of industrialists was held on 24.03.2005 for Activate Carbons.

Publications

TRAININGS

During the year under report, **26** officers / officials of the Board attended various training courses/seminars/workshops etc. in India in order to cope up with the latest knowledge in the field of environment and its pollution control.

Sr. No	Name & Designation	Subject of Training	Venue	Date & Duration	Attended or not
1	Sh. Malvinder Singh	Interaction meeting on Environmental Compliance and Enforcement with USEPA	New Delhi	27.4.04 to 28.4.04	Attended
		Map India 2005-8 th Annual International Conference	New Delhi	07-09 March, 2005	Attended
2	Dr. Babu Ram	"Advances in Industrial Wastewater Treatment"	At Chennai	9-11 Feb., 05	Attended
3	Sh.V.B.Handa	"Industrial Wastewater Treatment Technology	Hyderabad	27.4.04 to 29.4.04	Attended
4	Sh. Pardeep Gupta	ISO-14001 (Environment Management System) Lead Auditor	Chandigarh	21.6.04 to 25.6.04	Attended
5	Sh. Nazar Singh	"Bioterrorism Preparedness"	Nagpur	28.7.04 to 30.7.04	Attended
6	Sh. Rajiv Garg, EE (III) 8 th National Seminar on "Hospital Chemical Waste, HWM and Infection Control. (attended)	Training of engineers on integrated solid waste management and designing sanitary landfills for the disposal of municipal solid waste	Goa	24.5.04 to 28.5.04	Attended

7	Sh. Tejinder Kumar	"Environment Management"	Mumbai	26.7.04 to 30.7.04	Attended
8	Sh. Raj Kumar Ratra	"Hospital Clinical Waste, Hazards Management & Infection Control"	Bangalore	17-19, Feb., 2005	Attended
9	Sh. Rajiv Kumar Goyal	"Seminar on Waste incineration"	New Delhi	22.12.04	attended
10	Sh. G.S.Gill	"Managing Stress at Workplace"	Hyderabad	21.6.04 to 23.6.04	Attended
11	Sh. Kuldeep Singh	"Design, Operation & Maintenance of STP"	Hyderabad	19.7.04 to 22.7.04	Attended
12	Sh. Om Parkash	MSW	Hardwar	11.1.05 to 14.1.05	Attended
13	Sh. Rakesh Nayyar	"Management Information System"	Mumbai	26.7.04 to 30.7.04	Attended
		"MSW"	Hardwar	11.1.05 to 14.1.05	Attended
14	Sh.D.K.Singla, Asstt. Environmental Engineer-II (GPC)	Training Programme on Indl. Hazardous Waste Management	New Delhi	20-22 Dec., 04	Attended
15	Sh. Jaswant Singh	"Design, Operation & Maintenance of STP"	Hyderabad	19.7.04 to 22.7.04	Attended
16	Sh. Tejwant Gill	"Certificate Course on Effluent Treatment Plant"	Hyderabad	25.6.04 to 28.6.04	Attended
17	Dr. H.K. Parwana (SSO)	Interaction meeting on Environmental Compliance and Encorcement with USEPA	New Delhi	27.4.04 to 28.4.04	Attended
18	Sh. Avtar Singh (JSO)	"Application of Hyphenated Techniques in Analysis"	Mumbai	23.7.04 to 24.7.04	Attended
19	Sh. H.C Jindal (DCFA)	"Financial Management in Government"	Chandigarh	26.4.04 to 30.4.04	Attended

Sr .N o.	Name & Designation	Subject of Training	Venue	Date & Duration	Attended or not
20	Sh. Rajiv Sharma	One week Training Programme in "Law relating to hazardous waste and its management:	National School Law of India University , Nagar Bhavi, Post Bag No. 7201, Bangalore	28.03.2005	Attended
21	Sh. Manohar Lal	"Bio-Medical Waste management- Handling and safe Disposal Options"	Hyderabad	2 nd to 4 th February 2005	Attended
22	Sh. Rajiv Kumar Goyal	Nomination for training course on Industrial Waste Treatment- Design, Operation and Maintenance with Reuse and Recycle option	At ESCI, Camp, Hyderabad.	19 th to 22 nd April, 2005	Attended
23	Sh. Om Parkash	Nomination for training course on Industrial Waste Treatment- Design, Operation and Maintenance with Reuse and Recycle option	At ESCI, Camp, Hyderabad.	19 th to 22 nd April, 2005	Attended
24	Sh. Shiv Kumar	One-day Awareness Programme on Design and implementaion of Environment Management Systems(EMS) as per ISO-14001	Chandigarh	25.02.2005	Attended

25	Dr. H.K. Parwana (SSO)	One day training programme on Wetlands under UNDP/GEF project on 2.2.2005	PSCST, Chandigarh.	2.2.2005	Attended
26	Sh. Rajesh Kumar(SO)	"Water Quality Monitoring Network Design, Sampling, Analysis and Quality Assurance"	BHEL, Pollution Control Research Institute< Ranipur, Haridwar	7 th to 11 th February 2005	Attended
27	Sh. Pardeep Thakur (ASO)	Training Programme on "Sampling, Analysis and Characterization of Hazardous Waste and its management"	Nagpur	21 st to 25 th February 2005	Attended
28	Sh. Onkar Singh (JSO)	Comprehensive Courses on "Ambient Air Quality Monitoring:"	21 st to 25 th February, 2005	R&D Centre, A-271, Okhla Industrial Area, Phase-1, New Delhi.	Attended
29	Sh. Baljit Singh, ADO	Residential Programme on "Motive Self to Enhance Organizational Productivity"	at Hotel The Monarch, Havelock Road, Ooty (Tamilnadu)	13 th to 17 th May 2005	Attended
30	Sh. Rakesh Goyal, Asstt.	Residential Programme on "Motive Self to Enhance Organizational Productivity"	at Hotel The Monarch, Havelock Road, Ooty (Tamil Nadu)	13 th to 17 th May 2005	Attended

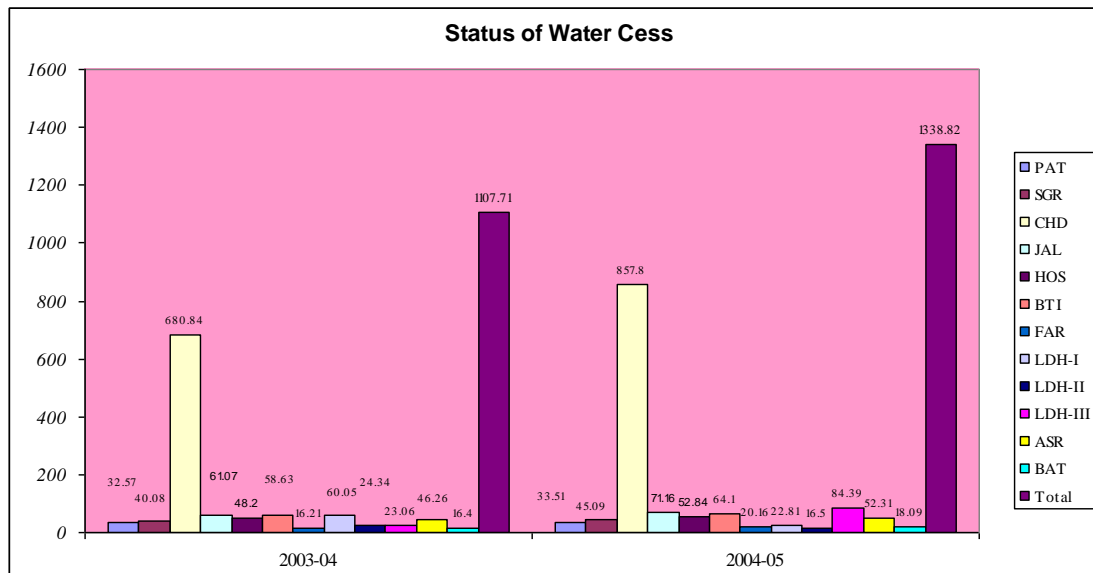
CHAPTER -8

8.0 WATER CESS COLLECTION

The Punjab Pollution Control Board charges fees from industries for the analytical exercises carried out in the Board's laboratories for assessing the quality of their emission and effluent level. It also collects the Water Cess on water consumed by persons carrying on certain industries, local authorities and other bodies on behalf of Government of India.

During the year **2004-05**, the Punjab Pollution Control Board collected water Cess of **Rs. 1338.82 lacs**. The Region wise details of water cess collected is given below:

S.No.	Name of Regional Office	Water Cess collection during 2003-04	Water Cess collection during 2004-05
1.	Patiala	32,57953.00	33,51,104.00
2.	Sangrur	40,08643.00	45,09,035.00
3.	Chandigarh	6,80,84319.00	8,57,82,120.00
4.	Jalandhar	51,07245.00	71,16,586.00
5.	Hoshiarpur	48,19028.00	52,84,549.00
6.	Bathinda	58,63338.00	64,10,916.00
7.	Faridkot	16,21097.00	20,15,675.00
8.	Ludhiana-I	60,05703.00	22,81,532.00
9.	Ludhiana-II	24,34670.00	16,50,371.00
10.	Ludhiana-III	23,06755.00	84,39,885.00
11.	Amritsar	46,26646.00	52,31,082.00
12.	Batala	16,40861.00	18,09,396.00
	Total	10,97,76258.00	13,38,82,251.00



Statement of Water Cess

Period	Assessment		Collection		Remittance to Ministry of Environment and Forest.	Remittance by the Ministry of Environment and Forest.
	Industries	Other	Industries	Other		
2003-04	82552477	26069203	90890962	18885296	90842906	23440000
2004-05	101065574	30684718	113467550	2041470	123476258	86194325

CHAPTER-9

9.0 FINANCE & ACCOUNTS

The details of the accounts showing receipts and expenditure incurred by the Board during the year **2004-05** are exhibited as **Annexure-1**.