

The history of an industrial estate is closely linked with the current environmental condition of the land and the health of its affected community. And this is no different for the industrial estates in Medak district of Andhra Pradesh. It was after the formation of the Andhra Pradesh Industrial Infrastructure Corporation (APIIC) in 1973 that Patancheru grew into a mega industrial estate.¹ In 1991 there were 276 industries in Patancheru, 31 industries have also come up outside the APIIC designated area. In a 2 decade period (1975-1995) APIIC created 6 industrial estates in 'backward regions' around a thirty-mile radius of Hyderabad. The largest was the 440-hectare estate in Patancheru. Some of the states biggest bulk drug and pharmaceutical industries are located in these industrial estates.²

Bolaram has an Industrial Development Area. This is a private industrial area developed by entrepreneurs and has many small and medium scale industries. Most of these industries are pharmaceutical units that manufacture bulk drugs like sulphamethoxazole, ibuprofen, trimethoprim and paracetamol. There are around 40 industries in this area³.

There has been no proper waste disposal facilities built in these areas, combined with this is the fact that industries have been wantonly disposing off their waste in nearby land or into water bodies. The combined industrial estates in Bollaram and Patancheru generate a cumulative 8×10^6 l/day of effluents which are directly discharged into surrounding land, irrigation fields and surface water bodies.⁴

The Nakkavagu stream that flows through the industrial estate in Patancheru bears the brunt of waste disposal of over 100 industries. This, once clean, stream was used by surrounding villages for irrigation and drinking purposes. The estate, which consists of paint, plastic, chemical and bulk drug industries routinely dump their waste into the stream. Pollution to this stream has destroyed approximately 2000 acres of farmland besides contaminating well water to the level of 140 feet⁵. In 1990 the then Union Minister of State for Planning Mr. Bhage Govardhan told press persons that the people around Patancheru were suffering from a variety of mysterious diseases caused by water and air pollution.⁶

A study reported in the journal Environmental Monitoring and Assessment states 'A conservative estimate indicates that the effect of pollutants on the agricultural lands and water bodies extends 0.25 to 0.5 km to either side of the Nakkavagu river over a length of 25 km. In addition to this the movement of

pollutants with the ground water in the down stream direction worsened the hydrological system and increased the possibility of geo-accumulation of pollutants in the biota. Open wells, dug wells and tanks have become useless and redundant as the concentrations of Cu, Se, As, B, Cr and Fe have increased 5 to 20 times the permissible limits. Several villages have been affected by toxic pollutants in the area. The groundwater system is polluted ----- and is not potable."⁷

In an article in the Sunday Chronicle the extent of the affect of pollution to agriculture land has been put at 1,500 acres. The article 'The land of pollution' states that over 13 villages have been affected by pollution. The article quotes villagers as saying 'decolourisation of the skin of buffaloes and even peeling of the skin of buffaloes is a common feature". Another villager is quoted as saying " Trees like tamarind, neem and banyan are wilting and there is no greenery for the past five years"

In a written submission to the High Court of Andhra Pradesh in the matter of "Patancheru Pollution Case" a list of industries are given that are affecting water bodies. Companies like Sai Baba Cellulose and Bollaram Industrial Estate have been pointed out as contributing to the pollution of Saki Cheruvu and Kistareddyppet Cherruvu. Pharmaceutical industries have been said to be contributing to the destruction of Digwal Cheruvu⁸.

A draft report by the Mission Support Unit, Water Conservation Mission (Govt. of Andhra Pradesh) – Andhra Pradesh Water Vision states "During the development of these (industrial) estates, no effort was made to internalize environment management measures to prevent adverse impacts of industrial effluent discharges." This report further adds, " By the late 1980s, surface and groundwater, as well as the soil had got polluted in the two sub-basins (as per APPCB). This was mainly due to the presence of persistent organic pollutants, hazardous waste dumping, and organic and inorganic chemicals in industrial discharges along with sewage entering the Nakkavagu and Musi feeder lakes. Besides direct contamination, surface water, ground water and irrigation water were also affected through overflows from the lakes. As a result of the contamination of the water bodies, the villages in the Musi sub-basin have lost recourse to clean water".

The former Supreme Court Judge Justice Kuldeep Singh was quoted as saying that Medak district is becoming the most polluted in the country⁹.

Though these industrial estates were set up to develop the

¹ *Environmental pollution caused by Patancheru and Bollaram industrial estate in nearby villages of Medak district. Andhra Pradesh. National Environmental Engineering Research Institute. October 1991.*

² *Andhra Pradesh Water Mission. Position papers and District reports (Draft). Mission Support Unit; Water Conservation Mission. Government of Andhra Pradesh.*

³ *Environmental pollution caused by Patancheru and Bollaram industrial estate in nearby villages of Medak district. Andhra Pradesh. National Environmental Engineering Research Institute. October 1991.*

⁴ *Shivkumar K et al. Toxic trace element pollution in ground waters around Patancheru and Bollaram Industrial areas, Andhra Pradesh, India: A graphical approach. Environmental Monitoring and Assessment 00: 1-24. 1996*

⁵ *Dirty Nakkavagu destroying farms, causing ill-health. Deccan Herald. 19 August 96;* ⁶ *Medak villages hit by pollution. The Hindu. July 30 1990.*

⁷ *Shivkumar K et al. Toxic trace element pollution in ground waters around Patancheru and Bollaram Industrial areas, Andhra Pradesh, India: A graphical approach. Environmental Monitoring and Assessment 00: 1-24. 1996*

⁸ *Written Submissions in the matter of Patancheru pollution case. Before the High Court Judicature of Andhra Pradesh, Hyderabad. . Writ Petition Nos 19961/2002, 3158-61/1996, 15668/1997, 18074/2002, 18088/2002, 18808/2002, 18163/2002 and 23534/2002.*

⁹ *Medak, India's most polluted district. Deccan Chronicle. Hyderabad*

surrounding regions and create jobs the opposite has happened. An article in the Indian Express states ‘ While the 250 odd industries set up in Patancheru created about 25,000 jobs, it resulted in the displacement of more than 30,000 people due to ground water pollution. Hundreds of farmers have become improvised and are forced to work as casual laborers in the industries.¹⁰

Environmental destruction has a direct impact on human health. A study brought out by the Indian Institute of Chemical Technology states that people residing in the contaminated areas (Patancheru) are exposed to high levels of Arsenic pollution. The study concluded that there were elevated levels of arsenic in the blood, urine, hair and nail of the sample population. This was as a result of consumption of industrially contaminated waters and vegetables grown in the soil¹¹. Exposure to such pollutants has resulted in various ailments that have been reported in a cross section of journals and newspapers. Dr Ravinder Reddy states “ Ailments like asthma, drowsiness, gastroenteritis, bronchitis and other pulmonary disorders and burning sensations in the eyes are common and are on the rise and the patients are not responding to the normal course of medication”.¹²

The Health officer of Patancheru conducted a health survey; the findings of which were handed over to the District Medical Officer of Medak district. The accompanying letter said “ --- I am to inform you that due to industrial effluents in the Patancheru Industrial area 14 villages are affected with chemical pollution ---”¹³ The report finds –

1. “Morbidity rate in the area showing an increasing trend which is evident from past rate of 10.18% in 1991 October and present rate of 25.49%.”
2. “---- Orthopedic problems are more followed by skin health problems.”
3. “In all types of diseases the female population is experiencing higher morbidity.”
4. “There is clear circumstantial evidence that the Nakkavagu water is continuously getting polluted with partially treated industrial effluents.”
5. “Inadequate and irregular water supply of drinking water to the 14 villages predispose them to the hazards of water pollution as the bore well is the only alternative source.”

Due to the destruction of their habitat, livelihood and health of the people have been protesting against the polluting industries for over two decades. The Andhra Pradesh Pollution Control Board (APPCB) in their notification dated 28th April 1999, as per a Supreme Court ruling, banned the “ establishment and expansion of certain polluting industrial units w.e.f

1.1.1997 onwards for a period of two years in certain areas of Medak, Rangareddy, Nalgonda and Mahaboobnagar districts indicated in the notification.” The industries included bulk drug manufacturing units except formulations. All types of pesticides (tech) manufacturing except formulations, all types of dyes and dye intermediate manufacturing units and all types of highly water polluting industries.

The High Court in 1987 had ordered 20 industries from releasing their effluents into the Nakkavagu River, while directing the Pollution Control Board to report to the court as to the nature and degree of pollution in the Patancheru area.¹⁴

A PIL was filed in the Supreme Court in 1997. The petition filed by Dr A Kishen Rao, Dr Purroshottam Reddy and two others complained that highly toxic effluents discharged by hazardous industries in and around Patancheru and Bollaram industrial estates were creating destroying lives of people, cattle crops and water sources besides flora and fauna. The petitioners further complained that most of the industries did not have pretreatment plants and were sending their effluents to a CETP by tankers.¹⁵ However prior to this PIL the High Court in 1990 had ordered the closure of 10 units in Bollaram Industrial estate as they had not constructed a treatment plant inspite of an earlier court direction.¹⁶

There is a long history of legal battle in Patancheru. In an earlier order by the Supreme Court, in the case of Indian Council For EnviroLegal Action and others Vs Union of India and others in 1995 the court had ordered the state to recover compensation from industries, this was to be distributed amongst the affected people. The total amount was Rs. 1,39,09,737/-. The Court ordered the APPCB representative to determine other “industries responsible for discharge of effluents causing environmental degradation.”

The Supreme Court over a 3-year period (May 1998 – Feb 2001) passed out many orders, following which the case was transferred to the High Court for further proceedings. The Court stated, “The High Court will ensure the implementation of the orders passed by this Court and will deal with the writ petition as well as in applications filed therein in accordance with the law. It will be open to the High Court to pass orders directing the closure or opening of an industry depending upon the facts of each case.”¹⁷

The cases in the Supreme Court and High Court also highlighted the inadequacy of the Common Effluent Treatment Plant sent up in Patancheru. The Supreme Court points out to a report that indicts the Plant to be a major cause of pollution.¹⁸

The Common Effluent Treatment Plant at Patancheru received

¹⁰ Vasu G.S. Fear of MIC-based plant at Patancheru. Indian Express. 20 March 1985.

¹¹ K Shekar Chandra et al. Assessment of environmental health risk due to inorganic arsenic in the industrially contaminated areas of Hyderabad. Analytical Chemistry and Environmental Sciences Division, Indian Institute of Chemical Technology Hyderabad & Yashodara Hospital, Patancheru.

¹² The Land of pollution. Sunday Chronicle.

¹³ Health Officer Patancheru, Subject – Pollution effects on the health of people submission of report. 11 January 2002.

¹⁴ Pollution: HC notice to Patancheru industries. Deccan Chronicle. 9 October 1987

¹⁵ Writ admitted on pollution in Patancheru, Bollaram. Deccan Chronicle. 17 July 1997

¹⁶ HC direct 10 units to cease operations. Indian Express 12 April 1990

¹⁷ Indian Council for Envirolegal Action Vs union of India and others. Supreme Court of India. Writ Petition C No. 1056/1990.

¹⁸ Record of proceedings. Indian Council for Envirolegal Action Vs union of India and others. Supreme Court of India. Writ Petition C.No. 1056/1990. 16 July 1996



around 5000 tankers of industrial pollutants. From this total around 3500 trucks come from seven industries that include Aurobindo Pharma, Neuland Laboratories, Dr Reddy's Labs and others.¹⁹

The concept of a Common Effluent Treatment Plant is flawed. The assumption that all industries will generate wastes that have the same chemical composition is inherently wrong. Further, the processes used in such plants only convert the liquid waste into a solid form. Even at its inception there were problems – Mr. Siva Chander the plant manager stated 'We are only treating 1300-1500 cubic meters of effluents per day against our capacity of 7500 cubic meters.'²⁰

Ninety industries send their effluents to the Common Effluent Treatment Plant in Patancheru.²¹

In a written submission to the High Court of Judicature of Andhra Pradesh at Hyderabad by Andhra Pradesh Pollution Control Board in April 2003, the board states the CETP is functioning as per norms, however this goes against the report mentioned in the Supreme Court Proceedings and other records.

It is evident that the people living around these industrial estates have not received justice even after all these years.

Keeping the above facts in mind, Greenpeace demands:

- 1. Government to Declare a State of Chemical Crisis in the Area.**
- 2. Zero Discharge of toxic effluents into water bodies with**

immediate effect.

- 3. Shift to Clean Production starting with companies sharing their information on products, processes and wastes generated.**
- 4. Remediation of lakes and water bodies.**
- 5. A clear policy on a communities Right to Know about the industrial processes occurring in their surrounding.**



¹⁹Written Submissions. High Court of Judicature of Andhra Pradesh, Hyderabad. Writ Petition Nos 19961/2002, 3158-61/1996, 15668/1997, 18074/2002, 18088/2002, 18808/2002, 18163/2002 and 23534/2002.

²⁰Dirty Nakkavagu destroying farms, causing ill-health. Deccan Chronicle. Hyderabad. 19 October 1996

²¹Patancheru Enviro Tech Ltd. Affidavit. 2 June 2003.