

PETITIONER:  
A.P. POLLUTION CONTROL BOARD

Vs.

RESPONDENT:  
PROF.M.V.NAYUDU (RETD.) & OTHERS

DATE OF JUDGMENT: 27/01/1999

BENCH:  
S.B. Majmudar. & M. Jagannadha.,

JUDGMENT:

M.JAGANNADHA RAO,J.

Leave granted in all the special leave petitions.  
It is said:

"The basic insight of ecology is that all living things exist in interrelated systems; nothing exists in isolation. The world system is weblike; to pluck one strand is to cause all to vibrate; whatever happens to one part has ramifications for all the rest. Our actions are not individual but social; they reverberate throughout the whole ecosystem". [Science Action Coalition by A.Fritsch, Environmental Ethics: Choices for Concerned Citizens 3-4 (1980)]. (1988) Vol.12 Harv.Env.L.Rev. at 313]."

Four of these appeals which arise out of SLP(C) No.10317-10320 of 1998 were filed against the judgment of the Andhra Pradesh High Court dated 1.5.1998 in four writ petitions, namely, W.P. No. 17832 of 1997 and three other connected writ petitions. All the appeals were filed by the A.P. Pollution Control Board. Three of the above writ petitions were filed as public interest cases by certain persons and the fourth writ petition was filed by the Gram Panchayat, Peddaspur.

The fifth Civil Appeal which arises out of SLP(C) No.13380 of 1998 was filed against the judgment in W.P. No.16969 of 1997 by the Society for Preservation of Environment & Quality of Life, (for short 'SPEQL') represented by Sri P.Janardan Reddi, the petitioner in the said writ petition. The High Court dismissed all these writ petitions.

The sixth Civil appeal which arises out of SLP(C) No.10330 of 1998 was filed by A.P.Pollution Control Board against the order dated 1.5.1998 in Writ Petition No.11803 of 1998. The said writ petition was filed by M/s Surana Oils and Derivatives (India) Ltd. (hereinafter called the 'respondent company', for implementation of the directions given by the appellate authority under the Water (Prevention of Pollution) Act, 1974

(hereinafter called the 'Water Act, 1974') in favour of the company.

In other words, the A.P. Pollution Board is the appellant in five appeals and the SPEQL is appellant in one of the appeals.

According to the Pollution Control Board, under the notification No. J.20011/15/88-iA, Ministry of Environment & Forests, Government of India dated 27.9.1988, 'vegetable oils including solved extracted oils' (Item No.37) was listed in the 'RED' hazardous category. The Pollution Board contends that Notification No. J.120012/38/86 1A, Ministry of Environment & Forests of Government of India dated 1.2.1989, prohibits the location of the industry of the type proposed to be established by the respondent company, which will fall under categorisation at No.11 same category of industry in Doon Valley.

On 31.3.1994, based on an Interim Report of the Expert Committee constituted by the Hyderabad Metropolitan Water Supply and Sewerage Board, the Municipal Administration and Urban Development, Government of Andhra Pradesh issued GOMs 192 dated 31.3.1994 prohibited various types of development within 10 k.m. radius of the two lakes, Himayat Sagar & Osman Sagar, in order to monitor the quality of water in these reservoirs which supply water to the twin cities of Hyderabad and Secunderabad.

In January 1995, the respondent company was incorporated as a public limited company with the object of setting up an industry for production of B.S.S. Castor oil derivatives such as Hydrogenated Castor Oil, 12-Hydroxy Stearic Acid, Dehydrated Castor Oil, Methylated 12-HSA, D.Co., Fatty Acids with by products - like Glycerine, Spent Bleaching Earth and Carbon and Spent Nickel Catalyst. Thereafter the industry applied to the Ministry of Industries, Government of India for letter of intent under the Industries (Development Regulation) Act, 1951.

The respondent Company purchased 12 acres of land on 26.9.1995 in Peddashpur village, Shamshabad Mandal. The Company also applied for consent for establishment of the industry through the single window clearance committee of the Commissionerate of Industries, Government of Andhra Pradesh, in November, 1995. On 28.11.1995, the Government of Andhra Pradesh, wrote to the Ministry of Industry, Government of India as follows:

"The State Government recommends the application of the unit for grant of letter of intent for the manufacture of B.S.S. Grade Castor Oil in relaxation of locational restriction subject to NOC from A.P.Pollution Control Board, prior to taking implementation steps."

On 9.1.1996, the Government of India issued letter of intent for manufacture of B.S.S. grade Castor

Oil (15,000 tons per annum) and Glycerine (600 tons per annum). The issuance of licence was subject to various conditions, inter-alia, as follows:

"(a) you shall obtain a confirmation from the State Director of Industries that the site of the project has been approved from the environmental angle by the competent State authority.

(b) you shall obtain a certificate from the concerned State Pollution Control Board to the effect that the measures envisaged for pollution control and the equipment proposed to be installed meet their requirements."

Therefore, the respondent company had to obtain NOC from the A.P. Pollution Control Board.

According to the A.P. Pollution Control Board (the appellant), the respondent company could not have commenced civil works and construction of its factory, without obtaining the clearance of the A.P. Pollution Control Board - as the relaxation by government from location restriction as stated in their letter dated 28.11.1995, was subject to such clearance. On 8.3.1996, on receipt of the 2nd Interim Report of the Expert Committee of the Hyderabad Metropolitan Water Supply and Sewerage Board, the Municipal Administration and Urban Development Department issued GO No.111 on 8.3.1996 reiterating the 10 k.m. prohibition as contained in the GO 192 dated 31.3.1994 but making some concessions in favour of residential development.

In the pre-scrutiny stage on 24.5.1996 by the Single Window Clearance Committee, which the company's representative attended, the application of the industry was rejected by the A.P. Pollution Control Board since the proposed site fell within 10 k.m. and such a location was not permissible as per GOMs 111 dated 8.3.96. On 31.5.1994, the Gram Panchayat approved plans for establishing factory.

On 31.3.1996, the Commissionerate of Industries, rejected the location and directed alternative site to be selected. On 7.9.1996, the Dt. Collector granted permission for conversion of the site (i.e. within 10 k.m.) to be used for non- agricultural purposes.

On 7.4.1997, the company applied to the A.P. Pollution Control Board, seeking clearance to set-up the unit under section 25 of the Water Act. It may be noted that in the said application, the Company listed the following as by-products of its processes:

"Glycerine, spent bleaching earth and carbon and spent nickel catalysts."

According to the AP Pollution Board the products

manufactured by this industry would lead to the following sources of pollution:

"(a) Nickel (solid waste) which is heavy-metal and also a hazardous waste under Hazardous Waste (Management and Handling) Rules, 1989.

(b) There is a potential of discharge or run off from the factory combined joining oil and other waste products.

(c) Emission of Sulphur Dioxide and oxide of nitrogen.

It was at that juncture that the company secured from the Government of A.P. by GOMs 153 dated 3.7.1997 exemption from the operation of GOMs 111 of 8.3.1996 which prescribed the 10 k.m. rule from the Osman Sagar and Himayat Sagar Lakes.

In regard to grant of NOC by the A.P. Pollution Board, the said Board by letter dated 30.7.1997 rejected the application dated 7.4.1997 for consent, stating

"(1) The unit is a polluting industry and falls under the red category of polluting industry under section S.No.11 of the classification of industries adopted by MOEF, GOI and opined that it would not be desirable to locate such industry in the catchment area of Himayatsagar in view of the GOMs No.111 dated 8.3.1996.

(2) The proposal to set up this unit was rejected at the pre-scrutiny level during the meeting of CDCC/DIPC held on 24.5.1996 in view of the State Government Order No.111 dated 8.3.1996."

Aggrieved by the above letter of rejection, the respondent company appealed under section 28 of the Water Act. Before the appellate authority, the industry, filed an affidavit of Prof. M.Santappa Scientific Officer to the Tamil Nadu Pollution Control Board in support of its contentions. The appellate authority under section 28 of the Water Act, 1974 (Justice M.Ranga Reddy, (retd.)) by order dated 5.1.1998 allowed the appeal of the Company. Before the appellate authority, as already stated, an affidavit was filed by Prof. M.Shantappa, a retired scientist and technologist (at that time, Scientific Advisor for T.N. Pollution Control Board) stating that the respondent had adopted the latest eco-friendly technology using all the safeguards regarding pollution. The appellate authority stated that Dr.Siddhu, formerly Scientific to the Government of India and who acted as Director General, Council of Scientific and Industrial Research (CSIR) and who was the Chairman of the Board of Directors of this Company also filed an affidavit. The Managing Director of the respondent company filed an affidavit explaining the details of the

technology employed in the erection of the plant. Prof. M. Shantappa in his report stated that the company has used the technology obtained from the Indian Institute of Chemical Technology of (IICT), Hyderabad which is a premier institute and that he would not think of a better institute in the country for transfer of technology. The said Institute has issued a certificate that this industry will not discharge any acidic effluents and the solid wastes which are the by-products are saleable and they will be collected in M.S. drums by mechanical process and sold. The report of Dr. Shantappa also showed that none of the by-products would fall on the ground of the factory premises. He also stated that all the conditions which were proposed to be imposed by the Technical Committee on the company at its meeting held on 16.7.97 have been complied with. On the basis of these reports, the appellate authority stated that this industry "is not a polluting industry". It further held that the notification dated 1.2.1989 of the Ministry of Environment & Forests, Government of India, whereby industries manufacturing Hydrogenated Vegetable oils were categorised as "red category" industries, did not apply to the catchment areas of Himayat Sagar and Osman Sagar lakes and that notification was applicable only to the Doon Valley of UP and Dahanu in Maharashtra. The appellate authority accordingly directed the AP Pollution control Board to give its consent for establishment of the factory on such conditions the Board may deem fit as per GOMs 153 dated 3.7.1997 (as amended by GO 181 dated 7.8.1997). Before the above order dated 5.1.98 was passed by the appellate authority, some of these public interest cases had already been filed. After the 5.1.98 order of the appellate authority, a direction was sought in the public interest case W.P.No.2215 of 1996 that the order dated 5.1.1998 passed by the appellate authority was arbitrary and contrary to interim orders passed by the High Court in W.P. 17832, 16969 and 16881 of 1997. The respondent company, in its turn filed WP No.11803 of 1998 for directing the A.P. Pollution Control Board to give its consent, as a consequence to the order of the appellate authority dated 5.1.1998. As stated earlier, the A.P. Pollution Control Board contends that the categorisation of industries into red, green and orange had already been made prior to the notification of 1.2.1989 by Office Memorandum of the Ministry of Environment & Forests, Government of India dated 27.9.1988 and that in that notification also "Vegetable oils including solvent extracted oils" (Item No.7) and 'Vanaspati Hydrogenated Vegetable oils for industrial purposes (Item 37)" were also included in the red category. It also contends that the company could not have started civil works unless NOC was given by the Board. The Division Bench of the High Court in its judgment dated 1.5.1998, held that the writ petitioners who filed the public interest cases could not be said to be having no locus standi to file the writ petitions. The High Court

observed that while the Technical Committee of the A.P. Pollution Control Board had, some time before its refusal, suggested certain safeguards to be followed by the company, the Board could not have suddenly refused the consent and that this showed double standards. The High Court referred to the order of the Appellate authority under Section 28 of the Water Act dated 5.1.98 and the report of Dr.Sidhu, to the effect that even if hazardous waste was a by-product, the same could be controlled if the safeguards mentioned in the Hazardous Wastes (Management and Handling) Rules, 1989 were followed and in particular those in Rules 5,6 and 11, were taken. The Rules made under Manufacture, Storage and Import of Hazardous Chemical (MSIHC) Rules 1989 also permit industrial actively provided the safeguards mentioned therein are taken. The Chemical Accidents (Emergency Planning, Preparedness and Response) Rules 1991 supplement the MSIHC Rules, 1989 on accident preparedness and envisage a 4-tier crisis management system in the country. Therefore, merely because an industry produced hazardous substances, the consent could not be refused. It was stated that as the matter was highly technical, interference was not called for, as "rightly" contended by the learned counsel for the respondent company. The High Court could not sit in appeal over the order of the appellate authority. For the above reasons, the High Court dismissed the three public interest cases, and the writ petitions filed by the Gram Panchayat. The High Court allowed the writ petition filed by the respondent industry and directed grant of consent by the A.P. Pollution Control Board subject to such conditions as might be imposed by the Board. It is against the said judgment that the A.P. Pollution Control Board has filed the five appeals. One appeal is filed by SPEQL. In these appeals, we have heard the preliminary submission of Shri R.N.Trivedi, learned Additional Solicitor General for the A.P. Pollution Control Board, Shri M.N.Rao, learned senior counsel for the respondent company, and Sri P.S.Narasimha for the appellant in the appeal arising out of SLP (C) No.13380 of 1998 and others. It will be noticed that various issues arise in these appeals concerning the validity of the orders passed by the A.P. Pollution Control Board dated 30.7.97, the correctness of the order dated 5.1.98 of the Appellate Authority under Section 28 of the Water Act, the validity of GOMs No.153 dated 3.7.97 by which Government of A.P. granted exemption for the operation of the 10 k.m. rule in GOMs 111 dated 8.3.1996. Questions also arise regarding the alleged breach of the provisions of the Act, Rules or notification issued by the Central Government and the standards prescribed under the Water Act or rules or notifications. Question also arises whether the "appellate" authority could have said that as it was a highly technical matter, no interference was called for. We are just now not going into all these aspects but are confining ourselves to the issues on the technological side. In matters regarding

industrial pollution and in particular, in relation to the alleged breach of the provisions of the Water (Prevention and Control of Pollution) Act, 1974, its rules or notifications issued thereunder, serious issues involving pollution and related technology have been arising in appeals under Article 136 and in writ petitions under Article 32 of the Constitution of India filed in this Court and also in writ petitions before High Courts under Article 226. The cases involve the correctness of opinions on technological aspects expressed by the Pollution Control Boards or other bodies whose opinions are placed before the Courts. In such a situation, considerable difficulty is experienced by this Court or the High Courts in adjudicating upon the correctness of the technological and scientific opinions presented to the Courts or in regard to the efficacy of the technology proposed to be adopted by the industry or in regard to the need for alternative technology or modifications as suggested by the Pollution Control Board or other bodies. The present case illustrates such problems. It has become, therefore, necessary to refer to certain aspects of environmental law already decided by this Court and also to go into the above scientific problems, at some length and find solutions for the same. Environment Courts/Tribunals - problems of complex technology:

The difficulty faced by environmental courts in dealing with highly technological or scientific data appears to be a global phenomenon.

Lord Woolf, in his Garner lecture to UKELA, on the theme "Are the Judiciary Environmentally Myopic?" (See 1992 J.Envtl. Law Vol.4, No.1, P1) commented upon the problem of increasing specialisation in environmental law and on the difficulty of the Courts, in their present form, moving beyond their traditional role of detached "Wednesbury" review. He pointed out the need for a Court or Tribunal

"having a general responsibility for overseeing and enforcing the safeguards provided for the protection of the environment ..... The Tribunal could be granted a wider discretion to determine its procedure so that it was able to bring to bear its specialist experience of environmental issues in the most effective way"

Lord Woolf pointed out the need for

"a multi-faceted, multi-skilled body which would combine the services provided by existing Courts, Tribunals and Inspectors in the environmental field. It would be a 'one stop shop', which should lead to faster, cheaper and the more effective resolution of disputes in the environmental area. It would avoid increasing the load on already overburdened lay institutions by trying to compel them to resolve issues with which they are not designed to deal. It could be a

forum in which the Judges could play a different role. A role which enabled them not to examine environmental problems with limited vision. It could however be based on our existing experience, combining the skills of the existing inspectorate, the Land Tribunal and other administrative bodies. It could be an exciting project"

According to Lord Woolf, "while environmental law is now clearly a permanent feature of the legal scene, it still lacks clear boundaries." It might be 'preferable that the boundaries are left to be established by Judicial decision as the law developed. After all, the great strength of the English Law has been its pragmatic approach". Further, where urgent decisions are required, there are often no easy options for preserving the status quo pending the resolution of the dispute. If the project is allowed to go ahead, there may be irreparable damage to the environment; if it is stopped, there may be irreparable damage to an important economic interest. (See Environment Enforcement: The need for a specialised court - by Robert Cranworth QC (Jour of Planning & Environment, 1992 p.798 at 806). Robert Cranworth advocates the constitution of a unified tribunal with a simple procedure which looks to the need of customers, which takes the form of a Court or an expert panel, the allocation of a procedure adopted to the needs of each case - which would operate at two levels - first tier by a single Judge or technical person and a review by a panel of experts presided over by a High Court Judge - and not limited to 'Wednesbury' grounds. In the USA the position is not different. It is accepted that when the adversary process yields conflicting testimony on complicated and unfamiliar issues and the participants cannot fully understand the nature of the dispute, Courts may not be competent to make reasoned and principled decisions. Concern over this problem led the Carnegie Commission of Science & Technology (1993) and the Government to undertake a study of the problems of science and technology in Judicial decision making. In the introduction to its final report, the Commission concluded:

"The Courts' ability to handle complex science-rich cases has recently been called into question, with widespread allegations that the Judicial system is increasingly unable to manage and adjudicate science and technology (S&T) issues. Critics have objected that Judges cannot make appropriate decisions because they lack technical training, that the Jurors do not comprehend the complexity of the evidence they are supposed to analyze, and that the expert witnesses on whom the system relies are mercenaries whose biased testimony frequently produces erroneous and inconsistent determinations. If these claims go unanswered, or are not dealt with, confidence in the Judiciary will be undermined as the public becomes convinced that the Courts as now constituted are incapable of correctly resolving some of the more pressing legal issues of our



day."

The uncertain nature of scientific opinions:

In the environment field, the uncertainty of scientific opinions has created serious problems for the Courts. In regard to the different goals of Science and the law in the ascertainment of truth, the U.S. Supreme Court observed in *Daubert vs. Merrel Dow Pharmaceuticals Inc.* (1993) 113 S.Ct 2786, as follows:

".....there are important differences between the quest for truth in the Court- room and the quest for truth in the laboratory. Scientific conclusions are subject to perpetual revision. Law, on the other hand, must resolve disputes finally and quickly." It has also been stated by Brian Wynne in 'Uncertainty and Environmental Learning, (2. Global Env'tl.Change 111) (1992):

"Uncertainty, resulting from inadequate data, ignorance and indeterminacy, is an inherent part of science."

Uncertainty becomes a problem when scientific knowledge is institutionalised in policy making or used as a basis for decision-making by agencies and courts. Scientists may refine, modify or discard variables or models when more information is available; however, agencies and Courts must make choices based on existing scientific knowledge. In addition, agency decision making evidence is generally presented in a scientific form that cannot be easily tested. Therefore, inadequacies in the record due to uncertainty or insufficient knowledge may not be properly considered. (The Status of the Precautionary Principle in Australia : by Charmian Barton (Vol.22) (1998) (Harv. Env'tt. Law Review p.509 at pp510-511).

The inadequacies of science result from identification of adverse effects of a hazard and then working backwards to find the causes. Secondly, clinical tests are performed, particularly where toxins are involved, on animals and not on humans, that is to say, are based on animals studies or short-term cell testing. Thirdly conclusions based on epidemiological studies are flawed by the scientist's inability to control or even accurately assess past exposure of the subjects. Moreover, these studies do not permit the scientist to isolate the effects of the substance of concern. The latency period of many carcinogens and other toxins exacerbates problems of later interpretation. The timing between exposure and observable effect creates intolerable delays before regulation occurs. (See *Scientific Uncertainty in Protective Environmental Decision making - by Alyson C. Flourney* (Vol.15) 1991 Harv. Env'tt. Law Review p.327 at 333-335).

It is the above uncertainty of science in the environmental context, that has led International

Conferences to formulate new legal theories and rules of evidence. We shall presently refer to them.

The Precautionary Principle and the new Burden of Proof - The Vellore Case:

The 'uncertainty' of scientific proof and its changing frontiers from time to time has led to great changes in environmental concepts during the period between the Stockholm Conference of 1972 and the Rio Conference of 1992. In Vellore Citizens' Welfare Forum vs. Union of India and Others [1996 (5) SCC 647], a three Judge Bench of this Court referred to these changes, to the 'precautionary principle' and the new concept of 'burden of proof' in environmental matters. Kuldeep Singh, J. after referring to the principles evolved in various international Conferences and to the concept of 'Sustainable Development', stated that the Precautionary Principle, the Polluter-Pays Principle and the special concept of Onus of Proof have now emerged and govern the law in our country too, as is clear from Articles 47, 48-A and 51-A(g) of our Constitution and that, in fact, in the various environmental statutes, such as the Water Act, 1974 and other statutes, including the Environment (Protection) Act, 1986, these concepts are already implied. The learned Judge declared that these principles have now become part of our law. The relevant observations in the Vellore Case in this behalf read as follows:

"In view of the above-mentioned constitutional and statutory provisions we have no hesitation in holding that the Precautionary Principle and the Polluter Pays Principle are part of the environmental law of the country."

The Court observed that even otherwise the above-said principles are accepted as part of the Customary International Law and hence there should be no difficulty in accepting them as part of our domestic law. In fact on the facts of the case before this Court, it was directed that the authority to be appointed under section 3(3) of the Environment (Protection) Act, 1986

"shall implement the 'Precautionary Principle' and the 'Polluter Pays Principle'."

The learned Judges also observed that the new concept which places the Burden of Proof on the Developer or Industrialist who is proposing to alter the status quo, has also become part of our environmental law.

The Vellore judgment has referred to these principles briefly but, in our view, it is necessary to explain their meaning in more detail, so that Courts and tribunals or environmental authorities can properly apply the said principles in the matters which come before them.

The Precautionary Principle replaces the Assimilative Capacity Principle:

A basic shift in the approach to environmental protection occurred initially between 1972 and 1982. Earlier the Concept was based on the 'assimilative capacity' rule as revealed from Principle 6 of the Stockholm Declaration of the U.N. Conference on Human Environment, 1972. The said principle assumed that science could provide policy-makers with the information and means necessary to avoid encroaching upon the capacity of the environment to assimilate impacts and it presumed that relevant technical expertise would be available when environmental harm was predicted and there would be sufficient time to act in order to avoid such harm. But in the 11th Principle of the U.N. General Assembly Resolution on World Charter for Nature, 1982, the emphasis shifted to the 'Precautionary Principle', and this was reiterated in the Rio Conference of 1992 in its Principle 15 which reads as follows:

"Principle 15: In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage; lack of full scientific certainty shall not be used as a reason for proposing cost-effective measures to prevent environmental degradation."

In regard to the cause for the emergence of this principle, Charmian Barton, in the article earlier referred to in Vol.22, Harv. Envtt. L.Rev. (1998) p.509 at (p.547) says:

"There is nothing to prevent decision makers from assessing the record and concluding there is inadequate information on which to reach a determination. If it is not possible to make a decision with "some" confidence, then it makes sense to err on the side of caution and prevent activities that may cause serious or irreparable harm. An informed decision can be made at a later stage when additional data is available or resources permit further research. To ensure that greater caution is taken in environmental management, implementation of the principle through Judicial and legislative means is necessary."

In other words, inadequacies of science is the real basis that has led to the Precautionary Principle of 1982. It is based on the theory that it is better to err on the side of caution and prevent environmental harm which may indeed become irreversible. The principle of precaution involves the anticipation of environmental harm and taking measures to avoid it or to choose the least environmentally harmful activity. It is

based on Scientific uncertainty. Environmental protection should not only aim at protecting health, property and economic interest but also protect the environment for its own sake. Precautionary duties must not only be triggered by the suspicion of concrete danger but also by (justified) concern or risk potential. The precautionary principle was recommended by the UNEP Governing Council (1989). The Bomako Convention also lowered the threshold at which scientific evidence might require action by not referring to "serious" or "irreversible" as adjectives qualifying harm. However, summing up the legal status of the precautionary principle, one commentator characterised the principle as still "evolving" for though it is accepted as part of the international customary law, "the consequences of its application in any potential situation will be influenced by the circumstances of each case". (See \* First Report of Dr.Sreenivasa Rao Pemmaraju, Special -Rapporteur, International Law Commission dated 3.4.1998 paras 61 to 72). The Special Burden of Proof in Environmental cases: We shall next elaborate the new concept of burden of proof referred to in the Vellore case at p.658 (1996 (5) SCC 647). In that case, Kuldip Singh, J. stated as follows:

"The 'onus of proof' is on the actor or the developer/industrialist to show that his action is environmentally benign."

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\* Joint Secretary and Legal Adviser, Ministry of External Affairs, New Delhi. It is to be noticed that while the inadequacies of science have led to the 'precautionary principle', the said 'precautionary principle' in its turn, has led to the special principle of burden of proof in environmental cases where burden as to the absence of injurious effect of the actions proposed, - is placed on those who want to change the status quo (Wynne, Uncertainty and Environmental Learning, 2 Global Env'tl. Change 111 (1992) at p.123). This is often termed as a reversal of the burden of proof, because otherwise in environmental cases, those opposing the change would be compelled to shoulder the evidentiary burden, a procedure which is not fair. Therefore, it is necessary that the party attempting to preserve the status quo by maintaining a less-polluted state should not carry the burden of proof and the party who wants to alter it, must bear this burden. (See James M.Olson, Shifting the Burden of Proof, 20 Env'tl. Law p.891 at 898 (1990)). (Quoted in Vol.22 (1998) Harv. Env.Law Review p.509 at 519, 550). The precautionary principle suggests that where there is an identifiable risk of serious or irreversible harm, including, for example, extinction of species, widespread toxic pollution in major threats to essential ecological processes, it may be appropriate to place the burden of proof on the person or entity proposing the activity that is potentially harmful to the environment. (See Report of Dr.Sreenivasa Rao

Pemmaraju, Special Rapporteur, International Law Commission, dated 3.4.1998, para 61). It is also explained that if the environmental risks being run by regulatory inaction are in some way "uncertain but non-negligible", then regulatory action is justified. This will lead to the question as to what is the 'non-negligible risk'. In such a situation, the burden of proof is to be placed on those attempting to alter the status quo. They are to discharge this burden by showing the absence of a 'reasonable ecological or medical concern'. That is the required standard of proof. The result would be that if insufficient evidence is presented by them to alleviate concern about the level of uncertainty, then the presumption should operate in favour of environmental protection. Such a presumption has been applied in *Ashburton Acclimatisation Society vs. Federated Farmers of New Zealand* [1988 (1) NZLR 78]. The required standard now is that the risk of harm to the environment or to human health is to be decided in public interest, according to a 'reasonable persons' test. (See *Precautionary Principle in Australia* by Charmian Barton (Vol.22) (1998) Harv. Env. L.Rev. 509 at 549).

Brief Survey of Judicial and technical inputs in environmental appellate authorities/tribunals:

We propose to briefly examine the deficiencies in the Judicial and technical inputs in the appellate system under some of our existing environmental laws. Different statutes in our country relating to environment provide appeals to appellate authorities. But most of them still fall short of a combination of judicial and scientific needs. For example, the qualifications of the persons to be appointed as appellate authorities under section 28 of the Water (Prevention and Control of Pollution) Act, 1974, section 31 of the Air (Prevention and Control of Pollution) Act, 1981, under Rule 12 of the Hazardous Wastes (Management and Handling) Rules, 1989 are not clearly spelled out. While the appellate authority under section 28 in Andhra Pradesh as per the notification of the Andhra Pradesh Government is a retired High Court Judge and there is nobody on his panel to help him in technical matters, the same authority as per the notification in Delhi is the Financial Commissioner (see notification dated 18.2.1992) resulting in there being in NCT neither a regular judicial member nor a technical one. Again, under the National Environmental Tribunal Act, 1995, which has power to award compensation for death or injury to any person (other than workmen), the said Tribunal under section 10 no doubt consists of a Chairman who could be a Judge or retired Judge of the Supreme or High Court and a Technical Member. But section 10(1)(b) read with section 10(2)(b) or (c) permits a Secretary to Government or Additional Secretary who has been a Vice-Chairman for 2 years to be appointed as Chairman. We are citing the above as instances of

the grave inadequacies.

Principle of Good Governance : Need for modification of our statutes, rules and notifications by including adequate Judicial & Scientific inputs:

Good Governance is an accepted principle of international and domestic law. It comprises of the rule of law, effective State institutions, transparency and accountability in public affairs, respect for human rights and the meaningful participation of citizens - (including scientists) - in the political processes of their countries and in decisions affecting their lives. (Report of the Secretary General on the work of the Organization, Official records of the UN General Assembly, 52 session, Suppl. I (A/52/1) (para 22)). It includes the need for the State to take the necessary 'legislative, administrative and other actions' to implement the duty of prevention of environmental harm, as noted in Article 7 of the draft approved by the Working Group of the International Law Commission in 1996. (See Report of Dr. Sreenivasa Rao Pemmaraju, Special Rapporteur of the International Law Commission dated 3.4.1998 on 'Prevention of transboundary damage from hazardous activities') (paras 103, 104). Of paramount importance, in the establishment of environmental Courts, Authorities and Tribunals is the need for providing adequate Judicial and scientific inputs rather than leave complicated disputes regarding environmental pollution to officers drawn only from the Executive.

It appears to us from what has been stated earlier that things are not quite satisfactory and there is an urgent need to make appropriate amendments so as to ensure that at all times, the appellate authorities or tribunals consist of Judicial and also Technical personnel well versed in environmental laws. Such defects in the constitution of these bodies can certainly undermine the very purpose of those legislations. We have already referred to the extreme complexity of the scientific or technology issues that arise in environmental matters. Nor, as pointed out by Lord Woolf and Robert Cranworth should the appellate bodies be restricted to Wednesbury limitations.

The Land and Environment Court of New South Wales in Australia, established in 1980, could be the ideal. It is a superior Court of record and is composed of four Judges and nine technical and conciliation assessors. Its jurisdiction combines appeal, judicial review and enforcement functions. Such a composition in our opinion is necessary and ideal in environmental matters.

In fact, such an environmental Court was envisaged by this Court atleast in two judgments. As long back as 1986, Bhagwati, CJ in M.C.Mehta vs. Union of India and Shriram Foods & Fertilizers Case [

1986 (2) SCC 176 (at page 202)] observed:

"We would also suggest to the Government of India that since cases involving issues of environmental pollution, ecological destructions and conflicts over national resources are increasingly coming up for adjudication and these cases involve assessment and evolution of scientific and technical data, it might be desirable to set up Environmental Courts on the regional basis with one professional Judge and two experts drawn from the Ecological Sciences Research Group keeping in view the nature of the case and the expertise required for its adjudication. There would of course be a right of appeal to this Court from the decision of the Environmental Court."

In other words, this Court not only contemplated a combination of a Judge and Technical Experts but also an appeal to the Supreme Court from the Environmental Court.

Similarly, in the Vellore Case [1996 (5) SCC 647], while criticising the inaction on the part of Government of India in the appointment of an authority under section 3(3) of the Environment(Protection) Act, 1986. Kuldip Singh, J. observed that the Central Government should constitute an authority under section 3(3):

"headed by a retired Judge of the High court and it may have other members - preferably with expertise in the field of pollution control and environmental protection - to be appointed by the Central Government."

We have tried to find out the result of the said directions. We have noticed that pursuant to the observations of this Court in Vellore Case, certain notifications have been issued by including a High Court Judge in the said authority. In the notification So.671(E) dated 30.9.1996 issued by the Government of India for the State of Tamil Nadu under section 3(3) of the 1986 Act, appointing a 'Loss of Ecology (Prevention and Payment of Compensation) authority, it is stated that it shall be manned by a retired High Court Judge and other technical members who would frame a scheme or schemes in consultation with NEERI etc. It could deal with all industries including tanning industries. A similar notification So. 704 E dated 9.10.1996 was issued for the 'Environmental Impact Assessment Authority' for the NCT including a High Court Judge. Notification dated 6.2.1997 (No.88E) under section 3(3) of the 1986 Act dealing with shrimp industry, of course, includes a retired High Court Judge and technical persons. As stated earlier, the Government of India should, in our opinion, bring about appropriate amendments in the environmental statutes, Rules and notification to ensure that in all environmental Courts, Tribunals and appellate authorities there is always a Judge of the rank of a High Court Judge or a Supreme

Court Judge, - sitting or retired - and Scientist or group of Scientists of high ranking and experience so as to help a proper and fair adjudication of disputes relating to environment and pollution. There is also an immediate need that in all the States and Union Territories, the appellate authorities under section 28 of the Water (Prevention of Pollution) Act, 1974 and section 31 of the Air (Prevention of Pollution) Act, 1981 or other rules there is always a Judge of the High Court, sitting or retired and a Scientist or group of Scientists of high ranking and experience, to help in the adjudication of disputes relating to environment and pollution. An amendment to existing notifications under these Acts can be made for the present. There is also need for amending the notifications issued under Rule 12 of the Hazardous Wastes (Management & Handling) Rules, 1989. What we have said applies to all other such Rules or notifications issued either by the Central Government or the State Governments. We request the Central and State Governments to take notice of these recommendations and take appropriate action urgently. We finally come to the appellate authority under the National Environment Appellate Authority Act, 1997. In our view it comes very near to the ideals set by this Court. Under that statute, the appellate authority is to consist of a sitting or retired Supreme Court Judge or a sitting or retired Chief Justice of a High Court and a Vice-Chairman who has been an administrator of high rank with expertise in technical aspects of problems relating to environment; and .pl65 Technical Members, not exceeding three, who have professional knowledge or practical experience in the areas pertaining to conservation, environmental management, land or planning and development. Appeals to this appellate authority are to be preferred by persons aggrieved by an order granting environmental clearance in the areas in which any industries, operations or processes etc. are to be carried or carried subject to safeguards. As stated above and we reiterate that there is need to see that in the appellate authority under the Water (Prevention of Pollution) Act, 1974, the Air (Prevention of Pollution) Act, and the appellate authority under Rule 12 of the Hazardous Wastes (Management & Handling) Rules, 1989, under the notification issued under section 3(3) of the Environment (Protection) Act, 1986 for National Capital Territory and under section 10 of the National Environment Tribunal Act, 1995 and other appellate bodies, there are invariably Judicial and Technical Members included. This Court has also observed in M.C.Mehta vs. Union of India and Shriram Foods & Fertilizers Case [ 1986 (2) SCC 176] (at 262) that there should be a right of regular appeal to the Supreme Court, i.e. an appeal incorporated in the relevant statutes. This is a matter for the Governments concerned to consider urgently, by appropriate legislation whether plenary or subordinate or by amending the



notifications.

The duty of the present generation towards posterity : Principle of Inter-generational Equity: Rights of the Future against the Present:

The principle of Inter-generational equity is of recent origin. The 1972 Stockholm Declaration refers to it in principles 1 and 2. In this context, the environment is viewed more as a resource basis for the survival of the present and future generations. .lm10 .rm55

Principle 1 states:

"Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations....."

Principle 2:

"The natural resources of the earth, including the air, water, lands, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate."

Several international conventions and treaties have recognised the above principles and in fact several imaginative proposals have been submitted including -the locus standi of individuals or groups to take out actions as representatives of future generations, or appointing Ombudsman to take care of the rights of the future against the present (proposals of Sands & Brown Weiss referred to by Dr.Sreenivasa Rao Pemmaraju, Special Rapporteur, paras 97, 98 of his report).

Whether the Supreme Court while dealing with environmental matters under Article 32 or Article 136 or High Courts under Article 226 can make reference to the National Environmental Appellate Authority under the 1997 Act for investigation and opinion:

In a large number of matters coming up before this Court either under Article 32 or under Article 136 and also before the High Courts under Article 226, complex issues relating to environment and pollution, science and technology have been arising and in some cases, this Court has been finding sufficient difficulty in providing adequate solutions to meet the requirements of public interest, environmental protection,

elimination of pollution and sustained development. In some cases this Court has been referring matters to professional or technical bodies. The monitoring of a case as it progresses before the professional body and the consideration of objections raised by affected parties to the opinion given by these professional technical bodies have again been creating complex problems. Further these matters sometime require day to day hearing which, having regard to other workload of this Court, (- a factor mentioned by Lord Woolf) it is not always possible to give urgent decisions. In such a situation, this Court has been feeling the need for an alternative procedure which can be expeditious and scientifically adequate. Question is whether, in such a situation, involving grave public interest, this Court could seek the help of other statutory bodies which have an adequate combination of both Judicial and technical expertise in environmental matters, like the Appellate Authority under the National Environmental Appellate Authority Act, 1997? A similar question arose in *Paramjit Kaur vs. State of Punjab* [1998 (5) SCALE 219 = 1998 (6) J.T.338], decided by this Court on 10.9.1998. In that case, initially, W.Petitions (Crl.) No.447 and 497 of 1995 were filed under Article 32 of the Constitution of India alleging flagrant violations of human rights in the State of Punjab as disclosed by a CBI report submitted to this Court. This Court felt the need to have these allegations investigated by an independent body. This Court then passed an order on 12.12.1996 requesting the National Human Rights Commission to examine the matter. The said Commission is headed by a retired Chief Justice of India and other expert Members. After the matter went before the said Commission, various objections were raised as to its jurisdiction. It was also contended that if these issues were to be otherwise inquired into by the Commission upon a complaint, they would have stood time barred. These objections were rejected by the Commission by an elaborate order on 4.8.1997 holding that once the Supreme Court referred the matters to the Commission, it was acting sui Juris, that its services could be utilised by the Supreme Court treating the Commission as an instrumentality or agency of the Supreme Court, that the period of limitation under the Protection of Human Rights Act, 1993 would not apply, that in spite of the reference to the Commission, the Supreme Court would continue to have seisin of the case and any determination by the Commission, wherever necessary or appropriate, would be subject to the approval of the Supreme Court. Not satisfied with the above order of the Commission, the Union of India filed clarification application Crl.M.P. No.6674 of 1997 etc. This Court then passed the order aforementioned in *Paramjit Kaur vs. State of Punjab* [1998 (5) SCALE 219 = 1998 (6) J.T. 332 (SC)] on 12.12.1998 accepting the reasons given by the Commission in rejecting the objections. In that context, this Court held that (i) the Commission was an expert body consisting of experts in the field (ii) if

this Court could exercise certain powers under Article 32, it could also request the expert body to investigate or look into the allegations, unfettered by any limitations in the Protection of Human Rights Act, 1993, (iii) that by so referring the matters to the Commission, this Court was not conferring any new jurisdiction on the Commission, and (iv) that the Commission would be acting only in aid of this Court. In our view, the above procedure in *Paramjit Kaur vs. State of Punjab* is equally applicable in the case before us for the following reasons. Environmental concerns arising in this Court under Article 32 or under Article 136 or under Article 226 in the High Courts are, in our view, of equal importance as Human Rights concerns. In fact both are to be traced to Article 21 which deals with fundamental right to life and liberty. While environmental aspects concern 'life', human rights aspects concern 'liberty'. In our view, in the context of emerging jurisprudence relating to environmental matters, - as it is the case in matters relating to human rights, - it is the duty of this Court to render Justice by taking all aspects into consideration. With a view to ensure that there is neither danger to environment nor to ecology and at the same time ensuring sustainable development, this Court in our view, can refer scientific and technical aspects for investigation and opinion to expert bodies such as the Appellate Authority under the National Environmental Appellate Authority Act, 1997. The said authority comprises of a retired Judge of the Supreme Court and Members having technical expertise in environmental matters whose investigation, analysis of facts and opinion on objections raised by parties, could give adequate help to this Court or the High Courts and also the needed reassurance. Any opinions rendered by the said authority would of course be subject to the approval of this Court. On the analogy of *Paramjit Kaur's Case*, such a procedure, in our opinion, is perfectly within the bounds of the law. Such a procedure, in our view, can be adopted in matters arising in this Court under Article 32 or under Article 136 or arising before the High Courts under Article 226 of the Constitution of India.

The order of reference:

After the above view was expressed to counsel on both sides, certain draft issues were prepared for reference. There was some argument that some of the draft issues could not be referred to the Commission while some others required modification. After hearing arguments, parties on both sides agreed for reference of the following issues to the Appellate Authority under the National Environmental Appellate Authority Act, 1997.

We shall now set out these issues. They are: (a) Is the respondent industry a hazardous one and what is its pollution potentiality, taking into

account, the nature of the product, the effluents and its location?

(b) Whether the operation of the industry is likely to affect the sensitive catchment area resulting in pollution of the Himayat Sagar and Osman Sagar lakes supplying drinking water to the twin cities of Hyderabad and Secunderabad?

We may add that it shall be open to the authority to inspect the premises of the factory, call for documents from the parties or any other body or authority or from the Government of Andhra Pradesh or Union Government and to examine witnesses, if need be. The Authority shall also have all powers for obtaining data or technical advice as it may deem necessary from any source. It shall give an opportunity to the parties or their counsel to file objections and lead such oral evidence or produce such documentary evidence as they may deem fit and shall also give a hearing to the appellant or its counsel to make submissions.

A question has been raised by the respondent industry that it may be permitted to make trial runs for atleast three months so that the results of pollution, could be monitored and analysed. This was opposed by the appellant and the private respondent. We have not thought it fit to go into this question and we have informed counsel that this issue could also be left to the said Authority to decide because we do not know whether any such trial runs would affect the environment or cause pollution. On this aspect also, it shall be open to the authority to take a decision after hearing the parties. Parties have requested that the authority may be required to give its opinion as early as possible. We are of the view that the Authority could be requested to give its opinion within a period of three months from the date of receipt of this order. We, therefore, refer the above issues to the above-said Appellate Authority for its opinion and request the Authority to give its opinion, as far as possible, within the period above-mentioned. If the Authority feels any further clarifications or directions are necessary from this Court, it will be open to it to seek such clarifications or directions from this Court. The Company shall make available photo copies of the paper books filed in this Court or other papers filed in the High Court or before the authority under section 28 of the Water Act, 1974, for the use of the Appellate Authority. The Registry shall communicate a copy of this order to the Appellate Authority under the National Environmental Appellate Authority Act, 1997. Matter may be listed before us after three months, as part-heard. Ordered accordingly. In the context of recommendations made for amendment of the environmental laws and rules by the Central Government and notifications issued by the Central and State Governments, we direct copies of this judgment to be communicated to the Secretary, Environment & Forests (Government of India), New Delhi, to the Secretaries of Environment & Forests

in all State Governments and Union Territories, and to the Central Pollution Control Board, New Delhi. We further direct the Central Pollution Control Board to communicate a copy of this judgment to all State Pollution Control Boards and other authorities dealing with environment, pollution, ecology and forest and wildlife. The State Governments shall also take steps to communicate this judgment to their respective State Pollution Control Boards and other authorities dealing with the above subjects - so that appropriate action can be taken expeditiously as indicated in this judgment.

JUDIS