BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI.

APPEAL No. 37 of 2014 (SZ).

IN THE MATTER OF:

Kayalpatnam Environmental Protection Association (KEPA)
Regd. No. 11/2013, Represented by its Secretary
51/H1 Azad Street, Kayalpatnam,
Thoothukudi District – 628 204. ... Appellant

Versus

1. Union of India
Represented by its Secretary
Ministry of Environment, Forests & Climate Change
Paryavaran Bhawan, CGO Complex,
Lodhi Road, New Delhi – 110 003.

2. Dharangadhara Chemical Works Limited (DCW Ltd.)
Represented by its Managing Director
Sahupuram
Thoothukudi District – 628 229.

3. Tamil Nadu Pollution Control Board
Through its Member Secretary
76, Mount Salai, Guindy,
Chennai – 600 032.

4. State of Tamil Nadu
Represented by its Secretary, Environment and Forests
Dept. of Environment and Forests,
Fort St. George,
Chennai -600 008.

5. Pure Enviro Engineering Pvt. Ltd.
8, 2nd Main Road, Shenoy Nagar West,
Chennai – 600 030.

6. Cholamandalam MS Risk Services
Dare House, NSC Bose Rd,
Parrys, George Town,
Chennai –600 001. ... Respondents

Counsel Appearing for the Appellant: M/s. D. Nagasaila, Mr. V. Suresh, K. Muthunayaki and Mr. Priestly Moses.

Counsel Appearing for the Respondents: Mr. G.M. Syed Nurullah Sheriff for Respondent No.1; Mr. K.G. Raghavan, Senior Advocate for M/s. R. Venkatavaradhan and Nivedhitha for Respondent No. 2; Smt. Rita Chandrashekar for Respondent No. 3; M/s. M.K. Subramanian for Respondent No.4; Mr. V. Srinivasa Babu for Respondent No.5; and Mr. P. Premkumar for Respondent No.6.

JUDGMENT

PRESENT:

1**. Hon'ble Justice M. Chockalingam**
Judicial Member

2. **Hon'ble Shri P.S.Rao**
Expert Member

Dated, 15th February, 2016.

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1. Whether the judgment is allowed to be published on the internet. Yes / ~~No~~
2. Whether the judgment is to be published in the All India NGT Reporter. Yes / ~~No~~

1. The Appellant, *Kayalpatnam Environmental Protection Association* (KEPA), is a Society registered under the Tamil Nadu Societies Registration Act, 1975 bearing Registration No.11/2013. Its members are all residents of *Kayalpatnam* working with an objective of a pollution free environment. The Appellants, being aggrieved by the severe pollution caused by *Dharangadhara Chemical Works Limited* (DCW Ltd.), the 2nd Respondent herein, filed this Appeal challenging the grant of Environmental Clearance (EC) dated 24.02.2014 by the Ministry of Environment, Forests & Climate Change (MoEF&CC), the 1st Respondent herein, for the construction of a new plant and expansion of the production capacity of existing units of the 2nd Respondent. It is stated in the Appeal that though the public notification of the EC was given on 05.03.2014 it was uploaded on the 1st Respondent's website only on 10.03.2014. Moreover, the

URL address given in the public notice was inaccurate which prevented anybody from accessing the documents.

2. The Appellant submits that DCW Ltd. had setup a factory in *Kayalpatnam,* Thoothukudi District, Tamil Nadu for the manufacture of Caustic Soda in 1958. DCW Ltd. has acquired about 1381 acres of land through an Assignment Deed from the then Madras State for its Caustic Soda Factory; of this, 1064 acres, 175 acres 66 cents and 142 acres 89 cents of land was acquired from *Kayalpatnam*, *Punnakayal* and *Sernthamangalam* respectively. Subsequently, DCW Ltd. was granted lease for 30 years (01.04.1963 to 31.03.1993) for an additional land to an extent of 739 acres in 1963; of this, 144 acres, 448 acres and 200 acres of land was acquired from *Kayalpatnam*, *Punnnakayal* and *Sernthamangalam* respectively. The Caustic Soda plant was the first unit of DCW Ltd. from its *Kayalpatnam* unit and from its inception; it has been a major source of pollution. For years DCW Ltd. had let out Chlorine gas, a by-product of Caustic Soda factory into the air. Consequently, the entire town of *Kayalpatnam* where the factory is located used to be engulfed by the vapour or smog of this gas. The earliest available written representation is from *Sathakkathullah Appa Welfare Association* dated 19.02.1986 addressed to Tamil Nadu Pollution Control Board (Board), the 3rd Respondent herein, bringing to its attention this issue of emission of chlorine gas as well as discharge of effluents into the sea by the 2nd Respondent unit but nothing was in order since then. A careful analysis of environmental data relating to the presence of Chlorine, NO_X, PMs (Particulate Matters), SO_2 and VCM (Vinyl Chloride Monomer) in the 2nd Respondent unit uploaded in the Care Air Centre of 3rd Respondent during the period from 01.01.2013 to 15.07.2014 reveals several short comings. Further, despite the request that the incidents be investigated and a complete heath survey of the people of *Kayalpatnam,*

Arumuganeri and *Athur* be undertaken, the 1st Respondent, MoEF& CC, and the 3rd Respondent, Board ignored the pleas and protests made by the residents and it all were in vain.

3. The Appellant further states that beginning with the installation of Caustic Soda unit in 1958, the unit has grown to manufacture Liquid Chlorine (1965), Trichloroethylene (TCE) (1968), Hydrochloric Acid (HCL), Upgraded Ilmenite (1970), Poly Vinyl Chlorine(PVC) Resin (1970), Utox (1978), Yellow Iron Oxide (1993) and Ferric Chloride (2001). It is stated that the effluents let out by these various industries is a virtual toxic cocktail of chemicals and has resulted in making *Kayalpatnam* a cancer hub. Now adding to the existing load of pollution, 1st Respondent has granted EC dated 24.02.2014 permitting the 2nd Respondent to construct a new Chlorinated PVC Plant of 14,400 Million Tonnes Per Annum (MTPA) and for expanding the capacity of –

(i) Trichloro ethylene from 7200 MTPA to 15,480 MTPA;

(ii) PVC from 90,000 MTPA to 1, 50,000 MTPA; and

(iii) Captive Power Plant from 58.27 MW to 108.27 MW.

4. It is submitted by the Appellant that the impugned clearance granted by the 1st Respondent is illegal, arbitrary and in complete violation of the substantive provisions and the procedural safeguards provided under the Environment (Protection) Act, 1986 and the Environment Impact Assessment (EIA) Notification, 2006. The EC was granted on the basis of EIA Study prepared by Consultants who are not accredited for the Sector concerned and the report does not disclose the name of the NABL accredited laboratory/ laboratories involved in the collection of baseline environmental data. Non disclosure of accreditation certificate or that of its expertise by the 6th Respondent in the additional information sought for by the 1st Respondent in the EIA Report making it liable to

be set aside on this ground alone as the very foundation for the clearance is illegal and without jurisdiction. There exist a critical conflict of interest between 2nd Respondent and the 5th Respondent. The Form-I submitted by the 2nd Respondent had deliberately suppressed crucial information as 1st Respondent has not taken into consideration the history of repeated breach of environmental standards, existing pollution of Mercury and the health issues while granting the EC.

5. It is stated that the EC granted by the 1st Respondent is for industries of the nature 'synthetic organic chemicals sector' (Sector 21) which is listed as item 5 (f) in the Schedule to the EIA Notification, 2006. Taking into account the capacity of the industry, admittedly 2nd Respondent unit is listed as Category 'A' project and the 5th Respondent who has conducted the EIA Study in the instant case is accredited only in respect of category 'B' projects. Further, none of the Sectors for which the 5th Respondent has been accredited is even remotely connected to the industries for which the impugned clearance has been accorded. As per the Official Memorandum (OM) issued by the 1st Respondent dated 18.03.2010, the Final EIA report or Environment Management Plan (EMP) that will be considered for granting EC must be prepared only by consultants accredited by National Accreditation Board of Education and Training (NABET) or Quality Council of India (QCI) and no final EIA / EMP prepared by a non-accredited consultant will be entertained after 01.07.2010. NABET/QCI had passed strictures against the 5th Respondent for preparing EIA report for the 2nd Respondent for Sector 21 for which they had no accreditation. Further, at its 59th AC meeting for re-accreditation held on 05.08.2015, NABET/QCI has withdrawn the provisional accreditation granted to the 5th Respondent, for *'non-submission of requisite information with reference to Re-accreditation in spite of repeated reminders'*. It is also pertinent to point out that the entire EIA report has no material value having

been prepared by the persons without the expertise and the competence as the list of experts approved and engaged by the 5th Respondent have no expertise in the concerned Sector. Further, the 5th Respondent despite being aware of the fact that they lacked the requisite accreditation and expertise, proceeded to prepare the EIA and the EIA report thus prepared by non-accredited 5th Respondent based on which the public hearing was conducted is invalid in law and is liable to be set aside.

6. It is submitted that as per the OM issued by the 1st Respondent dated 04.08.2009, the EIA report should mandatorily disclose the list of names of Consultants, accreditation certificate of the Consultants as well as the accreditation status of organisations and laboratories from whom the Consultant could have obtained baseline environmental data. In the instant case, the above mandatorily required credentials are not disclosed. The 5th Respondent through its communication to NABET/QCI dated 28.12.2011 had stated that it was in the process of getting accreditation for its internal laboratory and had applied for National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation only on 09.04.2012. During the period, 5th Respondent had engaged the services of *Ekdant Enviro Services Pvt. Ltd*. to use its laboratory services. It is pertinent here to note that the EIA contains data relating to air quality, water, soil etc. which has been compiled during May-July 2011, the period during which it did not have an accredited internal laboratory of its own. Thus, it is evident that the EIA report of the 2nd Respondent unit was not prepared by any NABL accredited laboratory and hence the data in the EIA report cannot be taken as acceptable, credible and reliable. In the declaration form listing the names of Consultants alleged to have been involved in the preparation of EIA report submitted by the 5th Respondent, Mr. K Ram Subramanian as EIA Co-ordinator is mentioned even though he was not approved by the NABET/QCI for Sector 21. It is further

submitted that the NABET/QCI had granted approval to 6 of the 9 consultants for whom the 5th Respondent had sought approval as EIA Co-ordinators and Functional Area Experts (FAE).

7. It is further stated that after the submission of draft EIA report and the public hearing process, the 35th meeting of EAC held on 11th-12th May, 2012 called for additional information and communicated the same to the 2nd Respondent on 28.06.2012. The 2nd Respondent had engaged the services of 6th Respondent, *M/s. Cholamandalam MS Risk Services* to prepare the additional information. Though, NABET/QCI had granted accreditation to the 6th Respondent in several sectors including Sector 21 on 13.07.2010 but the accreditation in Sector 21 was withdrawn on 30.04.2012 since the EIA coordinator, Mr. Jayaram Babu in Sector 21 left the organisation. The 6th Respondent applied for accreditation of Mr.N.V. Subbarao in Sector 21 on 30.04.2012 but the said application was rejected on 16.07.2013 stating inadequate EIA related experience. Thus, it is very clear that from 30.04.2012 to 16.07.2013, the 6th Respondent had no accreditation in Sector 21 to undertake any EIA work. Further, the 6th Respondent has not enclosed its accreditation certificate or that of its expertise in the additional information given to the 1st Respondent on 07.07.2012. It is submitted by the Appellant that the impugned clearance has to be set aside on this ground alone as the very foundation for the clearance is illegal and without jurisdiction.

8. The Appellant pleads that it is also pertinent to note the fact that the 2nd Respondent and the 5th Respondent had critical conflict of interest. The fact that the experts engaged to prepare the EIA Report are in the pay roll of the 5th Respondent since October, 2010 clearly indicates the existence of conflict of interest. Thus, it is evident that the action of the 5th Respondent amounts to total deception and has resulted in the subversion of law. An EC given on the basis of

such a report is fatally flawed and on this ground alone the impugned clearance ought to be set aside.

9. It is stated that Form-I, which every Project Proponent is expected to submit, forms the basis on which Terms of References (ToRs) are decided and EIA report is prepared. The Form-I submitted by the 2nd Respondent had deliberately suppressed crucial information - including presence of Reserved Forests (RF), Schools, Water Bodies, and Hospitals etc. which are essential for the preparation of EIA Report. It is submitted that there are two RFs (*Kottamadaikadu* RF- adjacent and *Kudrimozhi Theri* RF- 6km) within 15 km radius of the 2nd Respondent unit. The *Kottamadaikadu* RF forms boundary to the 2nd Respondent unit in the North Western direction as clearly indicated in the Village Revenue Map relating to *Kayalpatnam North* Village prepared by the Land Survey Department, Government of Tamil Nadu (TN Government) and can also be seen in the Assignment Deed by which the 2nd Respondent was granted hundreds of acres of land. It is further submitted that there exist several Coastal Regulation Zones (CRZ) / Ecologically Sensitive Areas abutting the 2nd Respondent unit as shown by the CRZ Map prepared by the Department of Environment, TN Government. It is submitted that Form-I of the 2nd Respondent includes Sy. Nos 142 & 143 (*Kayalpatnam North* Village) as project sites and these Sy.No. fall under CRZ-I as per the CRZ Notification, 2011.

10. It is submitted that the existence of water body which is crucial information to be disclosed in EIA report, has been wilfully omitted by the 2nd Respondent. The water body at the Southern end of the 2nd Respondent unit is not just a creek or lagoon, but it is an estuary of *Thamirabarani* River as per integrated CRZ Management Plan Map of TN Government which is located less than 1 km from the 2nd Respondent unit. This is the water body through which the 2nd

Respondent had let out its effluents into the sea for decades. Contrary to the claims of 2nd Respondent that *Thamirabarani* River is located at about 5.1 Kms away from the 2nd Respondent unit, the River is situated at about 4 Kms to the North of 2nd Respondent unit. Further, the 3rd Respondent wrote a letter dated 03.10.2013 directing the 2nd Respondent to measure the shortest distance from the unit's boundary to the River *Thamirabarani* using GPS by engaging reputed institutions like IIT. But, the 2nd Respondent in its reply letter dated 20.12.2013 expressed its refusal to take measurement using GPS claiming that the 2nd Respondent unit is exempted from the provisions of the G.O. Ms. No. 213 dated 30.03.1989 and G.O. Ms. No. 127 dated 08.05.1998. It is to be noted that by expressly refusing to take measurement using GPS and by claiming exemption from the provisions of the G.O.s, the 2nd Respondent unit has admitted that it falls within 5 Kms of the *Thamirabarani* River. Even though, several representations were sent to the 1st Respondent that the 2nd Respondent unit is located within 5 Kms of *Thamirabarani* River, it accepted the claim of the 2nd Respondent unit that its units are 5.1 Kms away from the River, without calling for scientific and acceptable proof of the same from the 2nd Respondent. Thus, it is submitted that Expert Appraisal Committee (EAC) finalised comprehensive ToRs based on the EIA report that suppressed such vital information has vitiated the whole process of EIA. It is submitted by the Appellant that while granting the EC, the 1st Respondent had not taken into consideration the history of repeated breach of environmental standards / conditions by the 2nd Respondent and its callous attitude damaging the environment, marine ecology and the consequent health risks caused to the residents of that area. It is stated that consequent to the repeated complaints made to the District Collector and the Board, the 2nd Respondent unit was closed for 5 months in 1997 for environmental violations and had again been recommended for closure in August, 2012 by the Board. In 2013, strangely, the Board renewed the

consent to the 2nd Respondent units and reported to the 1st Respondent that the 2nd Respondent had complied with all the pollution control measures. It is stated that the studies conducted by Central Marine Fisheries Research Institute (CMFRI) documented the effluent discharge into the sea by the 2nd Respondent in the years 1988, 1991, and 1995 and has confirmed the presence of Mercury. Though, the 2nd Respondent announced switching over to the Membrane Cell Process in the manufacture of Caustic Soda in the year 2007, it was after 50 years of using mercury and, nothing was done to clean up the existing pollution caused by dumping of Mercury in soil and ground water. The sample water collected during one of the discharge times in January, 2011 and tested at the lab approved by the 1st Respondent indicated the presence of Mercury. But, the EIA report is silent about the existing pollution and the baseline data does not reflect any of these facts.

11. The Appellant submits that the 2nd Respondent manufactures Tri-Chloro-Ethylene (TCE) at an installed capacity of 7200 MTPA which is a known human carcinogen. The unit also manufactures upgraded Ilmenite ore (Synthetic Rutile) at an installed capacity of 48000 MTPA which is a Radio-active product and the effluent from the manufacture of this unit is let out into the sea turning it into red thus consequently affecting the nearby salt pans. Further, the 2nd Respondent used VCM to manufacture PVC which is a well known carcinogen and it is imported from Qatar through Thoothukudi Port facility and is transported through heavily populated areas to the factory in tanker lorries and no adequate precautions have been adopted to mitigate the risk in case of occurrence of accidents. Further, though the 2nd Respondent initially said that they would use imported coal wherein the fly ash content would have been 11% but at present they are using local coal with fly ash content of 39.9%. The 2nd Respondent has

promised to dispose the fly ash by selling it to cement companies but the presence of fly ash was detected in the discharge let out in the creek as per the report filed by the 3rd Respondent Board and a direction was issued under Section 33 A of the Water (Prevention and Control of Pollution) Act, 1974 (Water Act, 1974) against the 2nd Respondent.

12. It is submitted by the Appellant that the impugned EC was given without taking into account of the health issues of the residents of *Kayalpatnam* due to the rampant pollution caused by the 2nd Respondent unit. A door-to-door survey of 9,000 families amounting to 90% of the population in 2011 by a group of volunteers, reveals the prevalence of high rate of cancer among the residents of *Kayalpatnam.* But the 2nd Respondent had presented a health survey report prepared by itself to the 1st Respondent, giving itself a clean chit in 2012 but the report was purportedly of people living within 5 Kms radius surrounding the unit. Unfortunately, the EAC found the submitted information satisfactory. Further, alleged medical camps conducted by the 2nd Respondent and the report prepared thereafter is not credible since it unequivocally shows signs of 'cut and paste' work. A careful examination of names of people who allegedly took part in the medical camps clearly show the same names getting repeated in all the years i.e., 2008, 2009 and 2010. Thus, it is evident that the 2nd Respondent has conducted no health survey at all in the vicinity of the project and EC granted on the basis of the health survey is liable to be set aside. Finally, the Appellant pleaded for dismissing the impugned EC.

13. The 1st Respondent in its reply stated that the EC was granted to the 2nd Respondent by following due procedure. The 2nd Respondent has submitted the application along with Form-I and pre-feasibility report for award of ToRs for preparation of EIA/EMP report on 27.10.2010 and the EAC discussed the

expansion proposal of 2nd Respondent unit in its 18th meeting held on 21.01.2011 and 22.01.2011 and then prescribed the ToRs for preparation of EIA/EMP report. Based on the EAC Sub-Committee visit of the 2nd Respondent's site on 09.07.2011 for assessing the existing environmental scenario, the EAC had prescribed 17 additional ToRs for preparation of EIA/EMP report. Subsequently, the said unit submitted EIA/EMP report along with public hearing report on 30.12.2011 prepared by the 5th Respondent whose name was listed as an accredited Consultant for Category 'A' projects at Sl.No.74 in the List 'A' in the OM No. J - 11013/77/2004 - IA II (I) issued by the 1st Respondent dated 30.09.2011. Further, the proposal was again considered by the EAC in its 35th meeting held on 11.05.2012 and 12.05.2012 and deferred it for want of additional information. The 2nd Respondent unit submitted the additional information report prepared by the 6th Respondent, a NABET/QCI accredited consultant on 07.07.2012. Upon receipt of requisite information from the Project Proponent, the proposal was reconsidered by the EAC in its 1st Reconstituted meeting held on 24.09.2012 and 25.09.2012 and recommended the grant of EC subject to specific conditions. During appraisal of EIA-EMP report, EAC also examined the issues raised during Public Hearing and the compliance status report dated 08.08.2012 filed by Regional Office of MoEF&CC. Thus after detailed deliberations, EAC recommended the project proposal for EC for expansion of the existing unit in the said meeting by stipulating various safeguards for protection of environment. Even after recommendation by the EAC, the 1st Respondent sought status report from the Board in respect of the complaints received against the existing unit of the 2nd Respondent and the status report submitted by the Board *vide* letter dated 06.03.2013 stated that a committee comprising of Board members and District Collector had carried out inspection in and around the 2nd Respondent unit premises. The Board *vide* letter No. T12/TNPCB/F.35984/RL/DCW/2013 dated

26.06.2013 had informed the 1st Respondent that the 2nd Respondent unit has complied with the directions issued by them and the Regional Office of the 1st Respondent *vide* letter No.F.No.EP/12.1/935/Tamil Nadu/3794 dated 09.07.2013 had also confirmed the satisfactory compliance by the 2nd Respondent unit.

14. It is further stated by the 1st Respondent that prior to the grant of EC to the 2nd Respondent unit, the proposal was again referred by the 1st Respondent to the EAC and the EAC while reconsidering the proposal in its 11th reconstituted EAC (Industry) meeting held on 26.08.2013 and 27.08.2013 found the compliance report satisfactory and recommended the proposal for the grant of EC. Accordingly, 1st Respondent has issued EC on 24.02. 2014.

15. The 2nd Respondent in its reply challenges the very objective of filing the Appeal by the Appellant KEPA it being with *malafide* intention and is formulated only to create obstacles in the working/expansion and developmental activities of the 2nd Respondent. Although there are other local self governing bodies much closer to the 2nd Respondents' manufacturing complex (1-3kms away) to that of *Kayalpatnam* Municipal area which is 5 Kms away, there are no complaints received from them till date. The 2nd Respondent counters the allegation of delay in uploading the EC in the 1st Respondent website stating it was duly notified and made available to the public on 05.03.2014 itself and the alleged inaccuracy of the URL in the notification does not find place in the English newspaper.

16. The 2nd Respondent denies the allegation of grant of EC by the 1st Respondent *vide* Letter No.F.No.J-11011/523/2010-IA ii (I) dated 24.02.2014 based on EIA prepared by non-accredited consultants as put forth by the Appellant. The Pre-feasibility report was made by the 5th Respondent, whose name was listed as approved consultant by the 1st Respondent at Sl. No. 74 in the List 'A' of OM

No. J-11013/77/2004-IA II (I) dated 31.12.2010 to deal with 'Category A' and 'Category B' Projects till 30th June, 2011. The 2nd Respondent has submitted Form-1 Application, Pre-feasibility Report and ToR *vide* letter No.DCW/MoEF/10/8074 dated 20.10.2010 to the 1st Respondent. The 1st Respondent immediately responded to the said application *vide* its letter dated 16.11.2010, through which certain additional information was sought to be incorporated in respect of 17 items. *Vide* its letter dated 20.11.2010, the 2nd Respondent intimated to the 1st Respondent that the requisite information was ready. The 1st Respondent after considering all the relevant information intimated the 2nd Respondent to submit copies of the same to all the Members of the EAC, so that the project proposal could be considered in the 18th EAC Meeting to be held on 20.01.2011 and 21.01.2011.

17. The 2nd Respondent further submits that the proposed project/ expansion is a combination of co-generation plant and synthetic organic facility. Further, the proposed minor expansion of PVC and TCE units do not involve addition of any major modifications and only a minor marginal increase in product is envisaged with improved environmental performance. It is evident from Pre-feasibility report that the overall pollution load and net discharges from PVC and TCE units will remain unchanged from the baseline scenario due to adoption of Zero Liquid Discharge facilities as directed by Board for the existing units. Out of the four items for which clearance had been given, the proposed co-generation plant is the main component of the EIA study and as per the accreditation granted, 5th Respondent is the approved consultant for EIA Study on Co-generation plant. Further, the proposed plant is actually in B category as it is a combination of mixed sectors.

18. It is further stated that Public hearing was conducted by the Board on 29.11.2011 and the EIA Report and copy of the minutes of the meeting of the

public hearing along with responses were submitted to the 1st Respondent on 26.12.2011. The 35th EAC (Industry 2) in its meeting held on 11.03.2012 and 12.03.2012 directed the 2nd Respondent to incorporate information/data as set out in the minutes of the meeting by stating that "*the proposal is deferred till the desired information is incorporated in the revised EIA/EMP reports".* The 2nd Respondent engaged the 6th Respondent, an ISO 9001-2008 certified company duly accredited by the 1st Respondent to make revised EIA Report in Category 'A'. With respect to the allegation of non- inclusion of accreditation certificate in the Report, it is to be noted that the said report clearly mentions the 6th Respondent as "Accredited EIA Consultant Organization" and quoted its Certificate No. NABET/EIA/1011/01. The reports provided by *M/s. Sai Laboratories,* agency engaged by the 6th Respondent also contain the certificate details i.e. Certificate No.T-2107, for its accreditation by NABL, Department of Science & Technology, Government of India. The study undertaken by the 5th Respondent relying on the *M/s. Sai Laboratories* reports for the preparation of EIA is in accordance with the specified norms as admittedly it being an accredited laboratory. The accreditation of the laboratory and the agreement with *Ekdant Enviro Service Pvt. Ltd*. are all matters within the knowledge of the 5th Respondent. The baseline data collected and used by the 5th Respondent had been the basis on which the 6th Respondent had submitted its report on the additional information. The 2nd Respondent further stated that the 6th Respondent, after being engaged, undertook independent one month baseline studies covering air quality monitoring, meteorological monitoring, soil and water sampling, primary ecological studies, primary socio-economic studies, marine sample studies as per additional ToR issued by the 1st Respondent. Some additional risk control measures were also incorporated. Thus, the initial EIA report filed by the 5th Respondent was revised as per the directions of the 1st Respondent and the final EIA report was filed by the 6th Respondent on the basis of

which the 1st Respondent has granted EC strictly in line with the OMs issued by the 1st Respondent from time to time.

19. The 2nd Respondent, Project Proponent, further stated in its reply that the Appellant has made a sweeping statement that the EIA report has been prepared by a person who has critical conflict of interest with the 2nd Respondent. It is a fact that the 2nd Respondent has engaged the services of the 5th Respondent time and again for various purposes such as maintenance of its Effluent Treatment Plant (ETP), contract labour and so on. However, other than commenting on the alleged conflict of interest, the Appellant has failed to show that the EIA report prepared by the 5th respondent is incorrect or invalid. Therefore, the mere fact that the 5th Respondent was running the ETP does not disqualify it from preparing a comprehensive EIA report. The allegations that the NABET/QCI had passed strictures against the 5th Respondent is false and misleading. This was done only after Mr. Mohammed Salihu, a member of the Appellant Society has sent a notice to NABET/QCI regarding the same. The reference to non-renewal of accreditation of the 5th Respondent for Sector 21 is a misleading submission only to prejudice the EIA report prepared by the 5th Respondent. The fact that 5th Respondent had in fact applied for any further criteria for being granted the said accreditation, shows that 5th respondent was always competent to deal with projects under Sector-21. As mentioned above, the EIA reports of the 5th Respondent had been prepared based on the ToRs issued and the 6th Respondent, while submitting its report on the additional information, had relied on the earlier reports of the 5th Respondent.

20. The 2nd Respondent denies the allegation that there has been any repeated breach of environmental standards/conditions by it damaging the environment, marine ecology or that it had caused health risks for the residents of the area. The allegation of the Appellant that the 2nd Respondent unit was letting

out chlorine gas in the air is baseless as the chlorine, a by-product from the manufacture of caustic soda, is used for the manufacture of hydrochloric acid. The 2nd Respondent also set up a Liquid Chlorine plant for which a portion of the by-product chlorine was used for the manufacture of Liquid Chlorine.

21. With respect to the allegation of presence of Mercury in the soil and ground water raised by the Appellant, the 2nd Respondent countered it by saying that when the Caustic Soda manufacturing unit was set up in 1958, the best available technology was Mercury based technology and 2nd Respondent adopted KREBS-ZURICH technology. While the 1st Respondent directed all the Caustic Soda manufacturers to switch over from Mercury Cell Technology to Membrane Cell Technology before 2012, the 2nd Respondent had replaced its technology with Membrane Cell Technology in the year, 2007 which is well ahead of the deadline fixed by the 1st Respondent. The 2nd Respondent also established Secure Land Fills (SLF) facilities designed as per CPCB/MoEF&CC guidelines within their complex and all the sludge generated during the Mercury cell plant operations were properly capped. They have also provided piezometric wells for periodic monitoring and the water samples from these test wells are monitored by the Board once in 6 months. It is also pertinent to note that a study on 'Mercury Emission and its impact' was carried out by Mr R. Swaminathan in association with an internationally recognised expert from Germany, Dr. Gunter Straten, which stated that there was no adverse impact on the soil, water and vegetation. Test report of the water samples dated 07.07.2012 indicates that the level of Mercury is below the detection limit. On the analysis of water samples and sediments collected around the 2nd Respondent unit, *M/s. Chennai Mettex Lab Pvt. Ltd*, an accredited lab, in 2013 could find the level of Mercury below the detection level.

22. With respect to the allegation that the manufacture of TCE being a primary reason for high number of cancer patients in *Kayalpatnam*, the 2nd Respondent states that it is baseless as the chances of health effect of TCE are pronounced only in case of oral exposure (physical contact), which is not possible outside the factory limits in this case. Even inside the plant, in all these years there has been not even a single instance of people working in the plant getting affected with Cancer. It is stated that in spite of the authentic documents being available with the statutory authorities on the reasons/illness causing death in the area, the findings of the so-called survey conducted by a group of volunteers are a self-serving document whose authenticity is highly doubtful. The entire TCE manufacturing process generates two types of wastes viz., one being Calcium Chloride from de-hydro-chlorination process which is tested for its toxicity and presented in the 6th Respondent Report and second being column bodies and heavy ends which are sent back to the lime boiling reactor, where it is completely recycled. The Calcium Chloride which comes out of this process is a saleable product which is not hazardous and does not contain the traces of TCE. Thus, the hazardous waste generated out of manufacturing TCE is fully recycled and no waste is let out. Thus, the entire TCE manufacturing process is a closed loop system and thereby, there is no possibility of spills of such inventory into the environment. It is further stated that TCE is slightly soluble in water and robust spill control programmes are being implemented in the existing TCS facility. The entire process including reaction areas will not be in contact with water and hence, the possibility of dissolution of TCE in external water is not envisaged. Zero liquid discharge programmes has been implemented in TCE facility and no effluents are discharged outside the facility. Further, TCE being a liquid, the possible risk of handling will be limited only to accidental spillage within the plant. Hence, the societal risks due to handling of TCE at the facility will be

insignificant. Hence, there was no need for the EIA to deal with the same. It is further submitted that TCE falls under the Manufacture, Storage & Import of Hazardous Chemicals Rules, 1989 and accordingly necessary permits were already obtained, adequately designed and approved safety systems were implemented in the existing facility.

23. As regards the allegation concerning Ilmenite ore being a Radio-active product, it is submitted by the 2nd Respondent that it receives Ilmenite ore after Radio-active elements *viz,* Uranium, Thorium, etc removed from the beach mined ore by purification process. Hence, the radio-activity of the Ilmenite ore received is negligible and is well within the human tolerance level. Further, the 2nd Respondent does not manufacture VCM and only polymerises VCM to make it PVC. The 2nd Respondent adopts suspension polymerisation in deionised water medium for manufacture of PVC and this manufacturing process does not result in the generation of any orgono chlorines. Further, the 2nd Respondent avers that it transports VCM through specially built tankers, which are periodically checked and certified by all the required statutory authorities and all the adequate safety measures have been followed for the same.

24. Regarding allegations of local coal being used, the 2nd Respondent states that they are using only imported coal. With regard to the allegation regarding fly ash, it is submitted that they utilise fly ash for their own purpose and also sell it to Cement and Brick manufacturers. The 2nd Respondent further denies that they discharge fly ash in the creek. After inspection and directions by the Board officials, the fly ash that accumulated near the creek, was duly removed and used for bund formation along the creek so as to prevent discharge of creek water into salt pans and for pavement of roads inside the 2nd Respondent factory premises.

25. It is further stated by the 2nd Respondent that the waste water generated from the Caustic Soda, PVC & Co-generation power plants are treated in a dedicated waste water treatment plant provided in the individual plants. The treated water is recycled in the process. The residual waste water from these three plants is further reused in the Ilmenite plant for product washing. The final waste water from the Ilmenite plant is segregated into three streams, viz., Leach Liquor waste water, high TDS and low TDS waste water. The Leach Liquor is passed through a lime stone treatment plant and treated Leach Liquor is stored in a specially designed solar evaporation ponds provided within the units area. The other two streams are treated separately. The high TDS stream containing higher chloride is treated to meet the standard prescribed by the Board and is also stored along with treated Leach Liquor waste water in specially constructed solar evaporation ponds provided in the Respondent unit area. The low TDS stream is treated in a Nano/RO treatment plant. The recovered permeates is reused in the process and the rejects from the RO is used in the salt pans of salt works division. The waste water generated from the whole manufacturing process carried out in different plants is not let out to any river or creek but treated and reused. 37 acres of land had been earmarked for the solar evaporation pond which was subsequently increased to 42 acres. These evaporation ponds are lined with 750 microns HDPE (High Density Polyethylene) Geo-membrane imported liners. All these years, there was no seepage from the evaporation ponds. The 2nd Respondent further submits that a project which not only addresses pollution abatement but also converts waste water into very useful value added products has been set up at a cost of Rs.500 crores.

26. The 2nd respondent denies the allegation that the Ambient Air Quality monitor was broken. The Particulate Matter (PM) $_{10-2.5}$ values are well within the National Ambient Air Quality Standards as stipulated by the 1st Respondent for

$PM_{10\text{-}100\&60}$ Mg/M^3 for 24 hours/ annual average respectively; $PM_{2.5\text{-}60\&40}$ Mg/M^3 for 24 hours/ annual average respectively. It is stated that the Ambient Air Quality monitor was functioning properly and the data uploaded were based on readings given by the monitor. The 2nd Respondent states that as per the Central Pollution Control Board (CPCB) Notification dated 05.02.2014, 17 categories of Industries have to take up self-monitoring of their emissions/effluents through online system. Subsequently, the same has to be connected to the Board /CPCB Server for continuous emission monitoring. The 2nd Respondent Unit was directed to adhere to the said Directions formally vide letter dated 22.02.2015, but the 2nd Respondent Unit had already pro-actively carried out self –monitoring through Online System, followed by getting the data/uploading the data well ahead of the Notification issued by CPCB as early as in January, 2013. The 2nd Respondent Unit, on its own volition as a responsible Unit, first connected Chlorine of Caustic Soda division, NO_X, PM and SO_2 Co-generation Power Plant Emission and VCM of PVC division during January, 2013 by the Board approved Software Supplier Environment- *SA India Private Ltd*. This shows the due compliance of this requirement by the 2nd Respondent well ahead of time before the same had been made mandatory.

27. The 2nd Respondent further submits that the Health Survey Report prepared by the 2nd Respondent was done properly and there was no attempt to present any distorted facts as is sought to be suggested by the Appellant. The Health Survey Reports for the years 2007 -2009 which are sought to be assailed by the Appellant were not the ones which were placed before the EAC while considering the grant of EC.

28. The 2nd Respondent denies the allegations made by the Appellant that EIA report has been prepared without reference to the ToR given by 1st Respondent. The 2nd Respondent has submitted all relevant information to the 1st

Respondent which are essential to finalize a unit specific comprehensive ToR by EAC and communicated all the necessary information regarding RF, Water Bodies, etc. and thus the averment of the Appellant that the 2nd Respondent has deliberately suppressed information is perverse and baseless. The Appellant in its Appeal has sought to rely on a CRZ Management Plan Map of Tamil Nadu which is yet to be approved and notified. Public Hearing Consultation process in respect of this Map and proposed Notification of CRZ-I area was carried out and various objections had been raised by the 2nd Respondent Unit and also by several other members of the Industry in the surrounding areas. Further, the 2nd Respondent submits that only a very small part of Sy. Nos.142 & 143 falls under the CZR-III area. The Field Map Sketch of Sy.Nos. 142 & 143 clearly indicates that the proposed plant does not fall within "No Construction Zone". The proposed expansion is being done only on the vacant land in the Sy.Nos.142 & 143 which is not categorised as CRZ.

29. The 2nd Respondent further submits that it is pertinent to note the communication dated 16.11.2010 wherein the MoEF&CC had sought information regarding location of National Park/Wildlife Sanctuary/RF within 10 kms at Sl. No.8 out of the 17 items in respect of which they had sought additional information. The 2nd Respondent *vide* its letter dated 20.11.2010 had informed the 1st Respondent regarding the location of *Kudrimozhi Theri* Forest at SI. No. 8 and it is mentioned as follows: "*Kudrimozhi Theri RF is located at a distance of 6 Km from the project site".* Further, the 2nd Respondent, while submitting the additional particulars and while clarifying the additional information sought for by the 1st Respondent clearly mentioned that "*permission from State Forest Department regarding the impact of the proposed plant on the surrounding reserve forests will*

be obtained". Ultimately this was given vide letter dated 30.03.2012 by the District Forest Officer, who observed that:

> "*XXX Based on the details submitted and field inspection, it is noted that the area specified for the proposed expansion is already under industrial use and is devoid of any natural vegetation. Moreover the area is private land. Since there is no damage to natural vegetation, we do not have any objection for the proposed expansion provided no existing Acts/Rules are violated in future XXX*."

Further, the Minutes of the 18th Meeting of EAC held on 20.01.2011 and 21.01.2011 clearly states that "*Kudrimozhi Theri Reserved Forest is located at 6 kms*." Therefore, the 1st Respondent and the EAC were always aware of the presence of *Kudrimozhi Theri* Forest and the EC has been granted on the basis of all relevant information produced. As regards *Kottamadaikadu* Forest, it is stated that it no longer enjoys any of the characteristics of a RF. Even the thematic map as regards coastal land use clearly show that the area shown in the village map is merely a dune with vegetation, and it is not marked as a RF. The Village Map of *Kayalpatnam North* Village which the Appellant refers to is a 1958 Map of Tiruchendur Taluk and several significant changes and developments have taken place after this and the Revenue Department has in fact sub-classified the said Survey number which was shown as a forest in Map of the year, 1958. The said land is not in the possession and care of the Forest Department.

30. The 2nd Respondent submits that the allegation of the Appellant that the *Thamirabarani* River is situated about 4 Kms to the north of Respondent unit is without any merits and the lands in Sy. No. 142 & 143 of *Kayalpatnam North* Village in the northern most boundary of the Unit is situated at a distance of 5.1

kms from *Thamirabarani* River as certified by the Tahsildar. Therefore, it is clear that G.O.Ms.No.213 (30.3.1989) and G.O.Ms.No.127 (08.05.1998) are not applicable in the present case. Therefore, it is stated that the 2nd Respondent unit is situated at a distance of more than 5 Kms from the *Thamirabarani* River. The above mentioned G.Os are applicable only for Green Field Projects which have come up after 1989 and is not applicable for the expansion of the existing facilities set-up prior to 1989. In fact, the Board issued the 2nd Respondent a fresh Air & Water Consent for their earlier Plant expansion in 2007. Therefore, the need for GPS measurement requirement did not arise. The 2nd Respondent completely denies allegation that the 2nd Respondent unit lets out its effluent in the estuary, which is located at the Southern end of the unit since the water body is not an estuary. It is only a creek/lagoon which receives water from the agricultural lands belonging to private salt pans and 2nd Respondent's salt Pans. As per the Institute of Remote Sensing, Anna University CRZ Map, it can be very well seen that at the southern end of the 2nd Respondent Unit, there is no river or any other water body such as creek/lagoon and is merely an *'Odai'* containing agricultural run-off to the creek.

31. Further, the 2nd Respondent submits that the industry is a Zero Discharge Unit, as has been observed by the Sub-Committee of the EAC during their site visit in July, 2011 and the same was recorded in its minutes. It was further affirmed by the Director, Regional office, MoEF&CC Bangalore that the 2nd Respondent Unit is a Zero Discharge Unit and that they do not let out any effluents into the lagoon except for the discharge from its salt pans. Finally the 2nd Respondent prayed for dismissal of Appeal by imposing costs.

32. The 3rd Respondent Board, whose reply has been concurred by the 4th Respondent, stated that there were no health related complaints received from

Kayalpatnam town which is located about 5 Kms from the 2nd Respondent unit and also from the residents of nearby *Arumuganeri, Authoor* and *Kurumbur* Town panchayats. However, the Appellant complained to the Board that the 2nd Respondent unit has caused great harm to the environment and created a health hazard and became a reason for death of *Kayalpatnam* residents and thereafter challenged the EC for setting up a new chlorinated PVC plant of 14,400 MTPA. The 3rd Respondent EC is accorded by the 1st Respondent only after careful consideration of the EIA report and after the EAC site visit made by the Sub-Committee constituted by the EAC.

33. The 3rd Respondent further stated that the 2nd Respondent unit has been granted Consent to Establish (CTE) for their Caustic Soda division under Section 25 and Section 21 of the Water Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 (Air Act, 1981) respectively *vide* proceedings No.T10/TNPCB/F.35984/TTK/W/07 and T10/TNPCB/F.35984/TTK/A/07 both dated 03.07.2009. The renewal for Consent to Operate (CTO) was issued under Section 25 and Section 21 of the Water Act, 1974 and Air Act, 1981 respectively *vide* proceedings No. T10/TNPCB/F.35984/TTK/W/2014 and T10/TNPCB/F.35984/TTK/A/2014 both dated 30.01.2014 valid up to 31.03.2014. Thus, the 3rd Respondent Board has given consent to the 2nd Respondent to produce the main products: Caustic Soda with a capacity of 8490 Tonnes/Month(TM), TCE with a capacity of 600 TM, Beneficiated Ilmenite (UGI) with a capacity of 6000 TM, Liquid Chlorine with a capacity of 3000 TM, Hydrochloric Acid with a capacity of 7500 TM and bye products: Calcium Hydroxide with a capacity of 450 TM, Sodium Hypo chlorine with a capacity of 450 TM, Ferric Chloride (Recovered from Effluent)with a capacity of 1000 TM.

34. The 3rd Respondent Board has also granted Consent for Expansion of discharge of sewage and trade effluent to the 2nd Respondent unit under Section 25 and 21 of the Water Act, 1974 and Air Act, 1981 respectively *vide* Proceedings No. T10/TNPCB/F.35984/TTK/W/09 and T10/TNPCB/F.35984/TTK/A/09 both dated 05.05.2009. Thus 2nd respondent unit is permitted to discharge 47 Kilo Litres per Day (KLD) Sewage and 1840 KLD Trade effluent. The three sources of trade effluents are one: Stream I-(Low TDS) of 1172 KLD generated from Ilmenite product washings, Filter Cake washings, Reverse Osmosis (RO) rejects from Membrane Cell Caustic plant treatment and floor washings. R.O permeate of 586 KLD is reused in process and R.O permeate of 586 KLD is rejected to salt pans creek at a distance of 2.5 Kms thus being the mode of discharge of stream 1 effluents of low TDS with 1172 KLD. Second: Stream II-(High TDS) of 310 KLD generated from Ilmenite digester wash water and product fines wash water and third: Stream III- Leach liquor of 300 KLD from Ilmenite plant. Both Stream-II and Stream- III effluents are discharged into solar evaporation ponds. Leach liquor, a trade effluent generated during the production of beneficiated Ilmenite (Synthetic Rutile) after neutralising free acid up to 4% Ferrous and Ferric chloride, is taken to the solar evaporation ponds located in 49 acres of land for natural evaporation and disposal. To prevent the seepage of this trade effluent into underground strata, the 2nd Respondent unit has provided HDPE lining in the solar evaporation ponds with sand cushions at the bottom. Piezometric bore wells of 18 feet depth are provided around the ponds and are monitored regularly by the 3rd Respondent Board. These solar evaporation ponds are provided inside the units salt pan area and private salt pans also exist in the surroundings. Then the effluent after treatment in Sewage Treatment Plant is further passed through R.O plant where the R.O plant rejects are disposed through their salt pans. Thus, no trade effluent is discharged outside the unit.

35. It is further submitted by the Board that complaints were received from the Appellant against the 2nd Respondent unit and the Board had taken timely action on all occasions and even formed a Committee comprising of Additional Chief Environmental Engineer-II and Joint Chief Environmental Engineer to inspect the unit and the surrounding *Kayalpatnam* area and to furnish a report. Based on the report furnished by the said Committee pursuant to the visit made on 22.12.2012, certain directions were issued to the 2nd Respondent for compliance and all the conditions were complied by the 2nd Respondent unit. A personal hearing was conducted on 22.01.2013 by the Chairman of the Board at Corporate Office, Chennai with respondent unit's representative and the following directions were issued by the Board under Section 33A of the Water Act, 1974 for compliance and to submit the report within two months:

a) *The unit has to upgrade the performance of the existing effluent treatment plant to ensure that the acidic effluent/leach liquor generated from the Ilmenite plant is neutralised and disposed into adequate solar evaporation pond, until commissioning of the iron oxide plant.*
b) *There shall be no discharge of sludge from the effluent treatment plant into adjoining odai*
c) *All the solar evaporation ponds provided shall be lined properly to ensure that no leachate occurs.*
d) *The unit shall take immediate steps to remove the sludge deposited in the adjoining odai and channel leading to the creek*
e) *The unit shall expedite the installation of iron oxide plant prior to August 2013, so as to handle the leach liquor. A revised time schedule may be submitted for early completion.*
f) *The fly ash stored along the creek shall be removed immediately and utilised for further beneficial use.*

36. The 3rd Respondent further submits that the unit is closely monitored and timely action is taken in case any violations are noticed. The unit has complied all the directions and then applied for CTO for the synthetic Iron Oxide plant. The Board has instructed the unit to clear all the sludge deposited earlier along the creek and accordingly it was cleared. The fly ash is being sold to Brick and Cement manufacturing industries whereas the bottom ash is dumped in the low-lying areas for filling. Water samples were collected regularly once in 6 months from the creek and sea mouth bar and after analysis it was found out that the concentration of Mercury is below the detection limit. Moreover, the unit has switched over to Membrane Cell technology during October, 2007. In the existing production unit Perchloro ethylene is not produced. It is further submitted by the Board that there is no process omission in the manufacture of TCE and therefore no hazardous waste is generated in TCE production unit. Only Calcium Chloride is generated as sludge and it is non-hazardous in nature and is completely recycled for further processing. Further, the level of radiation in Ilmenite ore is very minimal. The 2nd Respondent unit has engaged AERB to study the level of radiation once in a year and the 2nd Respondent unit has no mines and therefore Ilmenite ore is purchased from outside agencies. It is further submitted by the 3rd Respondent that the Iron Oxide plant is under construction and at present the leach liquor from Ilmenite plant is disposed through solar evaporation ponds. This leach liquor is used to produce Ferric Chloride and as a raw material for Oxide pigment. All required statutory and safety precautions are followed in the transportation of chemicals from Thoothukudi Port and the PM emission level of Thermal power plant is below discharge limit of 100 mg/m^3.

37. The 5th Respondent in its reply stated that it is a qualified consultant and recognised by the 1st Respondent to appear before the EAC for Category ‘A’

Project and to certify various documents such as EIA/EMP Reports *vide* OM No. J-11013/77/2004-IA II (I) issued by the 1st respondent dated 31.12.2010 at Sl.No.78 and the same is valid up to 30.06.2011. Against the contention made by the Appellant that the OM issued by the 1st Respondent dated 18.03.2010 contains prohibitory clause for the 5th Respondent to prepare EIA report and the report thus prepared by 5th Respondent is not valid in law, 5th Respondent states that the said OM says that *"no final EIA/EMP from any project proponent prepared by the non-accredited consultant will be entertained after 01.07.2010"* and thus it doesn't prohibit the 5th Respondent consultant to prepare draft EIA report. Therefore, the EIA draft report prepared by the 5th Respondent is legally valid. Moreover, the application made by the 5th Respondent for accreditation in Sector 21 was still pending for consideration at the relevant point of time and it was never rejected. The accreditation for Sector 21 was granted to the 5th Respondent by the NABET/QCI on 01.05.2014. It was only on 13.07.2011, NABET/QCI intimated the 5th Respondent with regard to restriction of accreditation only to Category 'B' Projects in Sectors 4, 26, 31 and 38 and that does not prohibit the 5th Respondent from preparing draft EIA report.

38. It is further submitted by the 5th Respondent that 2nd Respondent had engaged its services for conducting pre-feasibility study of their proposed project and to prepare draft EIA Report. The 2nd Respondent submitted the EIA report prepared by the 5th Respondent to the 1st Respondent on 26.12.2011 but EAC in its 35th Meeting held on 11.05.2012 and 12.05.2012 directed the 2nd Respondent to incorporate the additional information in the revised EIA/EMP report and thus the final EIA/EMP was prepared by 6th Respondent, Consultant of approved Sector engaged by the 2nd Respondent to provide additional information and based on which the 1st Respondent granted EC to the 2nd Respondent.

39. Regarding the allegation made by the Appellant that 5th Respondent had critical conflict of interest with 2nd Respondent unit, it is stated by the 5th Respondent that the allegation is baseless as 5th Respondent is a professional Consultant, engaged by the 2nd Respondent unit in the year 2005-2006 for their conversion and expansion of Caustic Soda plant, abatement of Synthetic Iron Oxide, Thermal Power plant and PVC plants. The 5th Respondent prepared the EIA report in 2007 and conducted public hearing for the said project based on which the Board had granted EC for the project. The 2nd Respondent had engaged the services of the 5th Respondent for the preparation of EIA report for its proposed expansion project and Green field CPVC plant in 2010. The 5th Respondent was also engaged for the maintenance of the ETP and there is no impediment on the part of 5th Respondent to prepare an EIA report merely because it was maintaining the ETP of the 2nd Respondent unit.

40. The allegation of the Appellant that the 5th Respondent did not have an accredited internal laboratory of its own till December, 2010 is denied by the 5th Respondent. The OM issued by the 1st Respondent dated 04.08.2009 only requires the Consultant to state whether the laboratories are approved or not and does not specifically require the laboratory itself to be approved. It was further substantiated in the letter sent by the NABET/QCI Director to the 5th Respondent dated 13.07.2011 affirming that in case of in-house laboratory, NABL accreditation is not necessary. MoEF&CC by its OM dated 04.08.2009 insisted on accreditation of the laboratories with NABL so as to have a common standard by which all consultants laboratories could be compared. Thus, during the months of October to December 2011, as a stop gap arrangement, the services of *Ekdant Enviro Services Pvt. Ltd.* were used on outsourcing basis, while NABET/QCI was informed that the internal laboratory was in the process of accreditation *vide* email dated 28.12.2011.

Application for accreditation of the internal Chemical Testing Laboratory of 5th Respondent was made to NABET/QCI *vide* letter dated 09.04.2012 and the accreditation was granted *vide* letter dated 08.05.2013. It is submitted that the approval of such application would stand testimony to the fact that the internal laboratory of the 5th respondent was always equipped and competent to carry out all the tests even in May-July 2011.Therefore, the data furnished in the EIA report has always been authentic and credible and it has been reviewed and incorporated by the 6th Respondent and its accredited laboratory.

41. The 5th Respondent denies the allegations levelled against it by the Appellant that strictures were passed by NABET/QCI against them and further states that NABET/QCI withdrew the accreditation of 5th Respondent only because the additional information sought for in the letter dated.01.05.2014 was not submitted and the requisite fee was not paid. It is further submitted that the 5th Respondent is not engaged any more in the preparation of EIA reports and is only involved in the services of environmental consulting &Installation/Maintenance of Sewage Treatment Plant and ETPs. Therefore, the withdrawal of provisional accreditation to the 5th Respondent does not in any manner affect the credentials of the 5th Respondent.

42. The 6th Respondent in its reply states that it is not a necessary party to the proceeding and is only a service provider in Risk Management and Engineering Solutions in safety domain. The case of the Appellant is that 6th Respondent is not accredited for Sector 21 to prepare the EIA/EMP to be submitted before EAC and hence the grant of EC by the 1st Respondent based on the EIA study submitted by 6th Respondent is invalid. The 6th Respondent counters it by saying that it has been accredited with NABET/QCI for various sectors including Sector 21 on its letter dated 08.09.2010 valid for a period of three years and Mr. J.Ramesh Babu was

approved as EIA coordinator. Mr. V.S. Bhasker, Mr. D. Ravishankar, and Mr. R. Subramanian and others who are all experts in the field of Environmental Health and Safety (EHS) were in the team. Since Mr. J. Ramesh Babu has left the 6th Respondent Company, 6th Respondent by its letter dated 20.04.2011 applied to NABET/QCI to approve the name of Mr. N.V. Subba Rao, who is an EHS expert. NABET/QCI in its proceedings dated 30.04.2012 communicated the withdrawal of accreditation on account of EIA coordinator leaving the company and sought additional clarification about Mr. N.V. Subba Rao. The 6th Respondent had furnished the required information *vide* letter dated 23.07.2012, and thereafter no further communication from NABET/QCI was received in response to the request made on 20.04.2011. Since three year period was over on 06.03.2013, 6th Respondent has applied for reaccreditation as per the NABET/QCI guidelines and also proposed the name of Mr. V.S. Bhaskar as EIA coordinator for Sector 21 and the same was approved by the NABET/QCI in its meeting dated 16.07.2013 and the accreditation was extended for further term of three years and since then Mr. V.S. Bhaskar has been functioning as EIA coordinator in Sector 21. The 1st Respondent after scrutinizing the draft EIA report prepared by the 5th Respondent to obtain EC, raised 14 points in its letter dated 28.06.2012 and asked the 2nd Respondent to give additional information. Accordingly the required additional information was prepared by Mr. V.S. Bhaskar, an approved EIA coordinator and other FAE. It was submitted by the 6th Respondent, an accredited Consultant to the 1st Respondent on 07.07.2012 and hence 6th Respondent is fully competent in preparing additional information. 6th Respondent had participated in the EAC meeting held in New Delhi on 24.09.2012 and 25.09.2012 and on 26.08.2013 and 27.08.2013 for presenting the additional information thus completing the work assigned to them by the 2nd Respondent.

A Miscellaneous Application No.05 of 2016 (SZ) in Appeal No.37 of 2014 was filed by the Appellant on 12.01.2016 for amending the Appeal by adding certain paragraphs (Paras 48 to 73) in between the affidavit and the grounds. After hearing the averments of the parties, the Miscellaneous Application No.05 of 2016 (SZ) was allowed.

DISCUSSION & CONCLUSION

43) As seen above, the Appellant KEPA, a Society registered under the Tamil Nadu Societies Registration Act, 1975 has challenged the EC dated 24.02.2014 issued to the 2nd Respondent, DCW Ltd., *Sahupuram* by the 1st Respondent, MoEF&CC and consequentially for a direction to close the Ilmenite plant of Caustic Soda division till the Iron Oxide plant is installed and for other reliefs.

44) On 24.02.2014, an EC was issued by the MoEF&CC for the expansion of the Projects and a Public Notification of the Clearance was given on 05.03.2014 but a copy of the approval / clearance order was uploaded in the Ministry's Website only on 10.03.2014. The EC granted was for the Construction of a new Chlorinated Poly Vinyl Chloride Plant of 14,400 MTPA and expansion of –

(i) Trichloroethylene from 7200 MTPA to 15480 MTPA;

(ii) Poly Vinyl Chloride from 90000 MTPA to 150000 MTPA;

(iii) Captive Power Plant from 58.27 M.W. to 108.27 M.W.; and

and which is the subject matter of challenge in this Appeal.

45) The following would emerge as facts admitted: The 2nd Respondent, DCW Ltd., established a factory in *Sahupuram, Kayalpatnam North*, Thoothukudi

District, Tamil Nadu to manufacture Caustic Soda in the year 1958. Out of the 2400 acres of land assigned, 1800 acres abutting the sea has been used as salt pan and 400 acres was set apart for construction of residential quarters for the officers and staff employed in the factory, school etc. The remaining 200 acres was set apart for the establishment of the factory for the construction of original plant and later, subsequent units were constructed. Since 1958, the unit has grown to manufacture Liquid Chlorine (1965), Trichloroethylene (1968), Hydrochloric Acid, Upgraded Ilmenite (1970), PVC Resin (1970), Utox (1978), Yellow Iron Oxide (1993) and Ferric Chloride (2001).

46) While so, the 2nd Respondent made an application in Form-I to the 1st Respondent, MoEF&CC, New Delhi with the draft ToR and a pre- feasibility report on 27.10.2010 *vide* their letter No.DCW/MoEF/10/8074 dated 27.10.2010. The 1st Respondent sent a communication on 16.11.2010 asking for further information to clarify certain points (17) with the above proposal. The 2nd Respondent sent a letter to the MoEF&CC as reply along with clarification on 20.11.2010 in respect of the expansion. The 1st Respondent issued an OM on 24.12.2010 regarding integrated and interlinked projects and following the same, the 1st Respondent by a letter dated 29.12.2010 required the 2nd Respondent to submit copies of the proposal to all the EAC members for the purpose of consideration in the 18th EAC Meeting scheduled to take place on 20th -21st January,2011. Accordingly, the 2nd Respondent sent the pre-feasibility report with Form-I to all the members of the EAC on 03.01.2011. The proposal of the modified project was presented before the EAC on 20th -21st January, 2011. The Minutes of the 18th EAC Meeting contains the initial ToR's. Pursuant to a communication of the ToR's by the 1st Respondent, a Sub-Committee of the EAC visited the unit on 09.07.2011 to study the current environmental settings to decide

public consultation requirements. The Committee submitted their reports on 11.07.2011 proposing additional ToR's. The Minutes of the 25th EAC Meeting held on 28th-30th July, 2011 would reflect the additional ToR's (17 in number, referred to as above) and the Minutes of the EAC was made available in the website on 26.08.2011. An application was filed on 30.08.2011 before the DEE, Board Thoothukudi along with the public hearing fees. On September, 2011, the 1st Respondent sent a formal communication recommending the additional ToR's to the 2nd Respondent. The 5th Respondent, *Pure Enviro Pvt. Engineering Ltd.*, prepared an EIA based on the original ToR of March, 2011 and additional ToR's prescribed by the 25th EAC Meeting and submitted before the 1st Respondent, MoEF&CC on 26.08.2011. Following the procedural formalities as envisaged under the EIA Notification, 2006, a public hearing was conducted on 29.11.2011 at the Thoothukudi Collectorate. A Rapid EIA Report dated November, 2011 by the 5th Respondent along with the minutes of the public hearing was placed before the 1st Respondent.

47) The 1st Respondent, MoEF&CC on receipt of a representation received from the natives of *Kayalpatnam* living in Hong Kong called for a reply on 02.02.2012 from the 2nd Respondent. The 2nd Respondent sent a reply on 16.02.2012 along with the health reports for 2010, 2011 and other Annexures. The 35th EAC Meeting (Industry 2) called upon the 2nd Respondent, DCW to provide additional information on 11th and 12th May, 2012 and on receipt of a communication dated 28.06.2012 that the additional information (14 points) called for in the EAC Meeting dated 11th and 12th May, 2012 and upon issuing the formal work order to the 6th respondent for various studies on 13.06.2012, the 2nd Respondent sent a reply on 07.07.2012 stating that the additional information was ready. Pursuant to the instructions of the 1st Respondent, MoEF&CC the Director

of Regional Office, MoEF&CC, Bangalore inspected the 2nd Respondent's plant on 08.08.2012 to physically verify the compliance of the earlier conditions prescribed in the EC and its current environmental status. Accordingly, after conducting inspection, a report dated 30.08.2012, was submitted by the Regional Office to the MoEF&CC regarding the compliance of the EC conditions. The additional information submitted by the 2nd Respondent on 07.07.2012 was considered and the 2nd Respondent was required to send the same to the members of the EAC. Accordingly, complete information regarding the additional information sought by the EAC was submitted to all the members of the EAC by 13.09.2012. On 24.09.2012, in the 1st reconstituted EAC meeting (I) held from 24th -25th September, 2012, the representatives of the project proponent with the FAE of the 6th Respondent, agency made a detailed presentation.

48) The Deputy Director, MoEF&CC addressed a communication in December, 2012 to the Chairman of the Board to send a detailed report on the representations received from the natives of *Kayalpatnam* living in Hong Kong on the environmental pollution alleged to have been caused by the 2nd Respondent. A Committee constituted by the Board after inspecting the 2nd Respondent, DCW Ltd., submitted a Report dated 22.12.2012 along with 6 recommendations made therein. A personal hearing was given by the Chairman of the Board to the 2nd Respondent on 22.01.2013 regarding the complaints received from the natives of *Kayalpatnam* on the prevalence of cancer in the area and sea water turning red. Following the same, certain directions were issued on 06.02.2013, by the Board under the Water Act, 1974 for compliance of conditions by the 2nd Respondent. The 2nd Respondent on compliance of those directions sent 3 letters dated 25.02.2013, 14.03.2013 and 18.04.2013. The Member Secretary, Board placed the report dated 25.02.2013 before the Director (S), IA Division, MoEF&CC, Delhi

that the 2nd Respondent has complied with the directions and consent of the unit was also renewed. On the directions issued, the Director, MoEF&CC Dr.U.Sridharan, Scientist attached to the Regional Office, MoEF&CC, Bangalore inspected the unit of the 2nd Respondent on the compliance status of the directions issued by the Board and to ascertain whether environmental safeguards were taken by the 2nd Respondent and made an inspection on 30.06.2013 and sent a report with satisfactory findings. The 11th reconstituted EAC (Industry) meeting was held at New Delhi from 26th- 27th August, 2013, the EAC minutes were uploaded on the website and recommended the project for the grant of EC.

49) Having gone through the aforesaid pleadings and record placed before us, the following questions are formulated for consideration by the Tribunal:

I. Whether the EC is liable to be set aside on the grounds that the EIA report is prepared by an unqualified agency?

II. Whether the EC granted to the 2nd Respondent, by the 1st Respondent, MoEF&CC is liable to be set aside for non-application of mind by the EAC while recommending the grant of EC?

III. Whether the Form- I submitted by the 2nd Respondent/Project proponent suffers due to inadequacy and false statements?

IV. Whether the EAC has failed to take into account the existing enormous pollution caused by the project proponent, as alleged by the Appellant before granting the EC?

V. Whether the site for the proposed expansion of the plant would fall within the prohibited areas as notified under the CRZ Notification, 2011?

VI. Whether the EC granted to the 2nd Respondent, by the 1st Respondent, MoEF&CC is liable to be set aside since the proposed plant is in close proximity to water bodies and Reserved Forests?

VII. Whether the appeal is liable to be dismissed on the mis-joinder of causes of action?

Heard the elaborate deliberations made by both the parties and they were considered. The entire documents placed and relied on by the parties were scrutinized.

I) Whether the EC is liable to be set aside on the grounds that the EIA report is prepared by an unqualified agency?

50) Advancing the arguments on behalf of the Appellant, Ms.D.Nagasaila, the Learned Senior Counsel, would submit that all the plants of the 2nd Respondent, DCW are located in a cluster in the premises of the 2nd Respondent and the effluents let out by these various industries has been a virtual toxic cocktail of chemicals and has resulted in making *Kayalpatnam*, a hub of health hazards. Assailing the EC granted by the 1st Respondent in favour of the 2nd Respondent dated 24.02.2014, the Learned Counsel pointed out that the EAC should have rejected the EIA report prepared by the 5th and 6th Respondents who were neither accredited for the sector concerned nor were competent to do so. The EC is for industries which fall in Synthetic Organic Chemicals Sector listed as Item 5 (f) to the Schedule to the EIA Notification, 2006. According to the OM of the MoEF dated 18.03.2010, the final EIA/EMP can be entertained in the Ministry for the consideration of EC only if, prepared by Consultants accredited by the NABET/QCI and it is a mandatory requirement. No final EIA/EMP from any project proponent prepared by a non-

accredited Consultant would be entertained after 01.07.2010. In every EIA report, the Certificate of the Consultants should be included pointing out the accreditation status of the organization and the laboratories from whom the Consultant had obtained data. It remains to be stated that the 5th Respondent, *Pure Enviro Pvt. Engineering Ltd.*, who prepared the EIA report for the 2nd Respondent was accredited only for Thermal Power Plants; Induction / arc furnaces / cupola furnaces / submerged arc furnaces / crucible furnace / reheating furnace of capacity more than 5t per heat; Industrial estates / parks / complexes / areas, export processing zones, special economic zones, biotech parks, leather complexes; and buildings and large construction projects including shopping malls, multiplexes, commercial complexes, housing estates, hospitals, institutions falling under the Category 'B'. While the impugned clearance was given for a project which is admittedly under Category 'A', the 5th Respondent who is accredited only in respect of the Category 'B' projects should not have prepared the EIA report and the EAC on this very ground should have rejected the report but without application of mind and without caring for the mandatory provision, the EAC has accepted and recommended the report. It is pertinent to point out that the Sector for which the 5th Respondent was accredited was not even remotely connected to the industries for which the impugned clearance has been accorded. The EC granted in favour of the 2nd Respondent deals with industries which would fall under Synthetic Organic Chemicals Sector which is in Item 5 (f) to the Schedule to the EIA Notification, 2006 and thus, the 5th Respondent was not qualified to carry out the EIA study. Admittedly, the list of experts approved and engaged by the 5th Respondent had no expertise in the Synthetic Organic Chemicals Sector and therefore, the entire EIA reports prepared by persons with no expertise and competence have no material value. The 5th Respondent who was conscious of

the fact that they did not have necessary or requisite accreditation and expertise has not only prepared the EIA report, but on the basis of the said report the public hearing was conducted. The 2nd Respondent has also proceeded with the expansion plans on the strength of the above illegal EIA Report.

51) Countering the above contentions, Mr.K.G.Raghavan, the Learned Senior Counsel for the 2nd Respondent, Project Proponent, pointing to the OM dated 31.12.2010 of the 1st respondent, would contend that the contentions put forth by the Appellant side questioning the competence and accreditation of both the 5th and 6th Respondents and also seeking to set aside the impugned EC, are all unfounded. The 5th Respondent whose name was found at the Sl.No.78 to the annexure attached to the OM wherein 265 consultants were approved, was entitled to prepare and submit EIA reports in respect of Category 'A' projects till 30.06.2011. It is an admitted fact that the proposal submitted by the 2nd Respondent for the grant of EC included Category "A" Projects and by virtue of the OM which was not superseded by any other OM, the 5th Respondent was obviously entitled to deal with Category 'A' projects until 30.06.2011. The Appellant had relied on minutes of the NABET/QCI in its 25th AC meeting held on 22.02.2011 and a formal communication dated 13.07.2011 to contend that the 5th Respondent has been granted accreditation only for Category 'B' projects covering 4 sectors and thus the 5th Respondent was disqualified from submitting EIA report for Category 'A' projects. The Appellant had thoroughly failed to bring to the notice of the Tribunal that the 5th Respondent has submitted an application for grant of approval to deal with projects under Sector 21 by his application dated 11.05.2011 and the said application was kept pending for nearly 3 years and finally approved on 01.05.2014 by the NABET/QCI. It is important to note that this grant of approval for Sector 21 had been given with no further particulars or clarification regarding

competence of the Expert Mr.Ramasubramaniam. In other words, but for the delay there was no other factor which weighed with the NABET/QCI to refuse to grant accreditation to the 5th Respondent for Sector 21. In fact, at the 75th AC Meeting for Surveillance Assessment Meeting of NABET/QCI held on 30.01.2014, some adverse observations were made against the 5th Respondent. Despite the same, the accreditation for Sector 21 was granted to the 5th Respondent on 01.05.2014. Mr.K.Ramasubramaniam who is an FAE along with the other experts was also involved in the preparation of the study. In fact, a declaration dated 20.12.2011 was duly signed by Mr.K.Ramasubramaniam regarding his involvement in the preparation of the EIA report. Therefore, the approval which was granted on 01.05.2014 would necessarily relate back to the date of application on 11.05.2011. It has to be emphasized that the delay caused on the part of NABET/QAC in the grant of approval, cannot be a reason to hold that during the period when the application was under consideration, the said consultant was disqualified in dealing with the Sector 21 projects and if the application had been rejected it is obvious that the Consultant could not have been invited to do a project. However, in the present case the application of the 5th Respondent was approved without any further clarification or condition. The 5th Respondent was always entitled to deal with Sector 21 projects even during the pendency of the application since the approval would date back to the submission of the application. In any case, by virtue of the OM dated 31.12.2010, the 5th Respondent was permitted to deal with Category 'A' projects in Sector 21 until 30.06.2011. Hence, the allegation that the 5th Respondent was not accredited is wholly unsustainable and is liable to be rejected. The Appellant relied on a communication dated 05.08.2015 of the NABET/QCI's 59th AC Meeting for Re-accreditation, by which the said approval for Sector 21 was withdrawn. The 5th Respondent has filed an affidavit in reply stating that the accreditation was withdrawn only because the additional

information sought for in Letter dated 01.05.2011 by the NABET was not submitted by the 5th Respondent and also requisite fee was not paid to the NABET. Therefore, the said withdrawal did not in any manner affect the approval granted on qualifying the FAE to deal with the Sector 21 Project. The 5th Respondent was permitted to submit the report until 30.06.2011 on Category 'A' projects by virtue of the OM dated 31.12.2010 and further the fact that the application submitted on 11.05.2011 for Sector 21 project was appraised though belatedly in the month of May 2014, the 5th Respondent was entitled to deal with the projects under Sector 21. This would categorically establish that there was substantial compliance of the procedural requisite of the report submitted by the 5th Respondent.

In support of the above contentions, the Learned Counsel for the 2nd Respondent relied on the following judgments of the Hon'ble Supreme Court:

a) *Commissioner of Central Excise, New Delhi* v. *Hari Chand Sri Gopal and others* (2011) 1 SCC 236.

> *" 24. The doctrine of substantial compliance is a judicial invention, equitable in nature, designed to avoid hardship in cases where a party does all that can reasonably expected of it, but failed or faulted in some minor or inconsequent aspects which cannot be described as the "essence" or the "substance" of the requirements. Like the concept of "reasonableness", the acceptance or otherwise of a plea of "substantial compliance" depends upon the facts and circumstances of each case and the purpose and object to be achieved and the context of the prerequisites which are essential to achieve the object and purpose of the rule or the regulation. Such a defence cannot be pleaded if a clear statutory prerequisite which effectuates the object and the purpose of the statute has not been met. Certainly, it means that the Court should determine whether the statute has been followed sufficiently so as to carry out the intent for which the statute was enacted and not a mirror image type of strict compliance".*

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The test for determining the applicability of the substantial compliance doctrine has been the subject of a myriad of cases and quite often, the critical question to be examined is whether the requirements relate to the "substance" or "essence" of the statute, if so, strict adherence to those requirements is a precondition to give effect to that doctrine. On the other hand, if the requirements are procedural or directory in that they are not of the "essence" of the thing to be done but are given with a view to the orderly conduct of business, they may be fulfilled by substantial, if not strict compliance. In other words, a mere attempted compliance may not be sufficient, but actual compliance of those factors which are considered as essential."

b) *T.M.Jacob* v. *C.Poulose and others* (1999) 4 SCC 274

" 43. In our opinion it is not every minor variation in form but only a vital defect in substance which can lead to a finding of non-compliance with the provisions of Section 81(3) of the Act with the consequences under Section 86(1) to follow. The weight of authority clearly indicates that a certain amount of flexibility is envisaged. While an impermissible deviation from the original may entail the dismissal of an election petition under Section 86(1) of the Act, an insignificant variation in the true copy cannot be construed as a fatal defect. It is, however, neither desirable nor possible to catalogue the defects which may be classified as of a vital nature or those which are not so. It would depend upon the facts and circumstances of each case and no hard and fast formula can be prescribed."

52) Much relevance was placed by the Learned Counsel for the Appellant for a decision of this Bench in Appeal Nos. 172, 173, 174 of 2013 (SZ) and Appeal Nos. 1 and 19 of 2014 (SZ) in the matter of *K.P.Sreeranganathan* v. *Union of*

India and others, 2014 ALL (1) NGT Reporter 92) SZ (1). As rightly pointed out by the Learned Counsel for the 2nd Respondent, the consultant in the abovementioned case had not even applied for the Category 'A' projects but in the instant case pursuant to permission granted under OM dated 31.12.2010, the 5th Respondent Consultant had conducted the study and prepared a part of the report till 30.06.2011 and even before that period came to an end they made an application to the authority which is kept pending for 3 years and approval was granted to the 5th Respondent in May,2014 for Sector 21 on the original conditions and qualifications as it existed at the time of application made in May,2011. Hence, in the considered opinion of the Tribunal, the Judgment of *K.P.Sreeranganathan* v. *Union of India and others, (Supra)* would not lend any support to the cause of the Appellant.

53) In the line of the pleaded case, the Learned Counsel for the Appellant has challenged the grant of EC in favour of the 2nd Respondent *inter alia* on the ground of conflict of interest in submitting the report of the 2nd Respondent and apart from that the 5th Respondent had not done the analysis from an accredited laboratory as per requirements of the OM dated 04.08.2009. In order to substantiate the same, the Appellant relied on: 1) OM dated 04.08.2009 issued by the MoEF&CC 2) OM dated 31.12.2010 issued by the MoEF&CC; 3) Minutes of the 25th AC Meeting of the NABET/QCI regarding the 5th Respondent held on 22.02.2011; 4) OM dated 30.06.2011 issued by the MoEF&CC; 5) 13.07.2011 letter of the NABET/QCI to the 5th Respondent and 6) November, 2011 EIA report by the 5th Respondent.

54) A contention is put forth by the Appellant that there was a serious conflict of interest by the 5th Respondent since they were involved in the maintenance of the ETP of the 2nd Respondent and certain temporary workers have

been engaged by the 5th Respondent for the maintenance of the ETP. The Appellant had relied on a newspaper report and the invoice raised by the 5th Respondent to justify the allegation. In this regard, the 5th Respondent has filed a detailed affidavit as to how he had been involved in preparation of the EIA report of the 2nd Respondent for the EC which was granted in 2007 and also as to how they had been retained on account of the professional manner in which the earlier studies were done. Merely because the 5th Respondent is maintaining the ETP of the 2nd Respondent, it cannot be a bar for the 5th Respondent to prepare the EIA report. The Appellants were unable to highlight any aspect to show how the EIA report of the 5th Respondent was untenable or unsustainable on merits. Thus, there had been no fault or defects in the EIA report *per se* and the Appellant had attempted to create a prejudice on extraneous factors to challenge the same.

55) In so far as the allegation made against the 5th Respondent, Consultant that the analysis of samples were not made through accredited laboratory accorded in the OM dated 04.08.2009, the answer given by the 5th Respondent in that regard has to be accepted. When the accreditation was granted to the 5th Respondent, he was permitted to do the analysis in its internal laboratory by following the guidelines of QCI. A letter dated 13.07.2011 sent by the Director, NABET/QCI to the 5th Respondent wherein it was stated in Point 13 of Annexure II which reads as follows:

i. *To ensure generation of baseline data, AAQ, stock emission, water analysis and waste water, soil and noise (through NABL accredited/MoEF registered lab)*

ii. *In case in house laboratory not NABL accredited/ MoEF registered is used to strictly follow the relevant clause of broad guidelines mentioned in QCI website.*

The very reading of a communication by the Director, NABET to the 5th Respondent as seen above, would clearly indicate that the analysis can be done in the in-house laboratory and while doing so, the relevant clause of broad guidelines mentioned in QCI website should be strictly followed.

56) In so far as the 6th Respondent Consultant, *Cholamandalam MS Risk Services*, is concerned, it is the case of the Appellant that they were also not competent to prepare EIA Report since they lost their accreditation as per minutes of the NABET/QCI's 2nd Accreditation Committee meeting for Surveillance Assessment held on 30.04.2012.The said allegation is totally unfounded. From the documentary evidence, it could be seen that when the EIA report dated 26.12.2011 was taken up for consideration in the meeting held on 11th -12th May, 2012, the 35th EAC (Industry-2) directed the 2nd Respondent to provide additional information on 14 points and on that ground deferred the proposal. When the 2nd Respondent was informed that the additional information was to be submitted by an accredited consultant, they engaged the services of the 6th Respondent. It is not in controversy that during that time, the 6th Respondent was an accredited consultant approved for dealing with industries falling under Sector 21.The 6th Respondent proceeded to conduct a study of the 2nd Respondent's plant as directed by the 35th EAC. The formal communication dealing with additional information on 14 points was set by the 1st Respondent on 28.06.2012. The Learned Counsel for the Appellant stated that the 6th Respondent has conducted the study even before the communication dated 28.06.2012 was made available as could be seen from the records. It is answered by the 6th Respondent that the minutes of the EAC meeting were already available earlier online and therefore by getting the 14 points in respect of the study which had to be made, the 6th Respondent proceeded to make the study and collected additional information as required. It is pertinent to point

out that while conducting the study on the 14 points in which the additional information was required, the earlier report filed by the 5th Respondent in December,2011 has formed the basis for the study for the additional information in that regard. Relying on the minutes of the NABET meeting dated 30.04.2012, the Learned Counsel for the Appellant would submit that the accreditation of the 6th Respondent for the projects in Sector 21 was rejected on account of the Consultant, Mr.N.V.Subbarao leaving the organisation but a perusal of the minutes would indicate that Mr.N.V.Subbarao's recommendation was kept pending on account of furnishing incomplete information. Thereafter, name of Mr.V.S.Bhaskar as EIA coordinator for Sector 21 projects, has been applied for the by the 6th Respondent and it was approved by the NABET in a meeting held on 16.07.2013. It is submitted by the 6th Respondent that Mr.V.S.Bhaskar actually participated in the preparation of the EIA report submitted to the MoEF&CC and appeared along with the project proponent in the EAC meeting dated 24.09.2012 and has also given a detailed presentation regarding the project. His name was subsequently approved by the NABET and in view of the same, it cannot be said that the 6th Respondent was lacking accreditation and on that ground, the EIA study has to be quashed. It was made clear that the 6th Respondent has competent functional expertise including that of Mr.V.S.Bhaskar who had 20 years of experience in the field of environmental compliance study and EIA studies involving Sector 21 projects. Hence, the allegation of the Appellant in this regard is without any merits and is liable to be rejected.

57) The contentions put forth by the Learned Counsel for the Appellant and also for the 5th and 6th Respondents are considered. Admittedly, the EC granted by the 1st Respondent in favour of the 2nd Respondent is for a project in Category "A" since the industries would fall in the Synthetic Organic Chemicals sector which is

listed as 5 (f) to the Schedule to the EIA Notifiaction,2006. As per OM dated 18.03.2010 of the MoEF&CC, final EIA/EMP would be entertained by the Ministry for consideration for EC only if it is prepared by an agency accredited by NABET/QCI. According to the Appellant, the Consultant namely the 5th and the 6th Respondents, who prepared the EIA report, were not accredited and thus in view of their incompetence and disqualification in the preparation of the EIA Report, the EC has got to be quashed. The 5th and 6th Respondents would contend that they were accredited during the relevant period and thus they were competent and the ground put forth by the Appellant is thus unfounded. On scrutiny of the documentary evidence it is quite clear that, the 2nd Respondent has submitted Form-I to the 1st Respondent on 27.10.2010 along with the ToR and pre-feasibility report and when certain clarifications were required by the 2nd Respondent by a letter dated 20.11.2010, the 2nd Respondent put forth their clarifications. As directed by the 1st Respondent, the 2nd Respondent sent copies of the proposal to all the members of the EAC. The draft proposal put forth by the 2nd Respondent was considered by the EAC in its 18th meeting held on 20th - 21st January, 2011 and the Minutes were released only in March, 2011 wherein the EAC recommended ToR's consisting of 50 points for conducting EIA Study. The 2nd Respondent engaged services of the 5th Respondent with a request to proceed with the EIA study based on the said ToR's. The 5th Respondent has actually proceeded to conduct the EIA study as per the ToR between the period of May-June, 2011 as could be seen from the OM dated 31.12.2010 issued by the MoEF&CC. Thus, all the allegations as against the accreditation of the 5th and 6th Respondents and questioning the EIA report on those grounds are liable to be rejected.

II) Whether the EC granted to the 2nd Respondent, by the 1st Respondent, MoEF&CC is liable to be set aside for non-application of mind of the EAC while recommending the grant of EC?

58) It is vehemently contended by the Appellant that the 1st Respondent has thoroughly failed to apply its mind to the basic fact whether the EIA report was in consonance with the OM dated 18.03.2010, though the 1st Respondent should have rejected the application on the said ground and hence the entire process was thoroughly vitiated. On the contrary, both the 1st Respondent and the EAC who are entrusted with the statutory process, have proceeded in such a casual manner even without verifying the basic credentials of the Consultants which is the first step in the consideration of any proposal. On the above ground of the incompetency of the 5th Respondent, the EIA Consultant herein, the impugned clearance should be set aside. It is pertinent to point out that after the public hearing process, while additional information were called from the 2nd Respondent; the same was provided by the 6th Respondent, *Cholamandalam MS Risk Services,* who did not enclose its accreditation certificate nor of its experts. The accreditation certificate of *M/s. Sai Laboratories Ltd.,* who provided the data for water and air quality was also not filed in the report and thus on the above grounds, the EC has got to be declared as illegal and has got to be set aside.

59) Countering the above contentions, the Learned Senior Counsel for the 2nd Respondent would contend that the 2nd Respondent approached the 1st Respondent for the grant of EC in respect of 4 items. The Request in Form- I was submitted to the 1st Respondent on 27.10.2010 along with the draft ToR's and pre-feasibility report. The 1st Respondent by a communication dated 16.11.2010 called for certain clarifications which were submitted by the 2nd Respondent on

20.11.2010. Following the request made by the 1st Respondent, the 2nd Respondent sent the proposal to all the members of the EAC to be considered at the 18th EAC Meeting on 20th and 21st Jan, 2011. Accordingly, along with a letter dated 03.01.2011, the 2nd Respondent sent copies of the Form-I, pre-feasibility report and draft ToR's to all members of the EAC. In the meeting held on 20th- 21st January, 2011 of the 18th EAC, the draft proposal put forth by the 2nd Respondent was considered and Minutes of the EAC was released on March, 2011. The said Minutes reveal that EAC has recommended 50 ToR's for conducting the EIA study and also recommended formation of a Sub-Committee to assess the existing pollution control measures and to visit the site, if for suggesting any additional pollution control measures. Thereafter, the 2nd Respondent engaged the services of the 5th Respondent with a request to proceed with the EIA study based on the ToR's which was already issued. The 5th Respondent proceeded to do the study between May-July, 2011 as per the ToR. The Sub-Committee which was formed pursuant to the recommendation of the EAC, visited the plant on 09.07.2011 after which the additional ToR's were recommended to be incorporated in the report which were considered and recorded by the 25th EAC at its meeting held between 28th -30th July, 2011.The 25th EAC had recommended 17 additional ToR's for doing the EIA study and also recommended for a public hearing. The Minutes of the 25th EAC meeting which made the recommendations, were available on the website on 26.08.2011 though the same was communicated to the 2nd Respondent on 01.09.2011. The Public hearing in respect of the project was conducted on 29.11.2011 at the Collectorate Thoothukudi. Thereafter, the 2nd Respondent submitted a report covering the first 50 and 17 additional ToR's including the minutes of the public hearing and the EMP on 26.12.2011. The EIA report filed by the 2nd Respondent was taken up for consideration by the 35th EAC in its meeting held on 11th -12th May, 2012 during which it deferred the project for want of 14

additional points and which to be thereinafter incorporated in the revised EIA/EMP Report.

60) All the above is clearly indicative of the fact that right from the commencement of the proposal, the process was strictly adopted according to the procedure by the 2nd Respondent. It was in the 35th EAC meeting held on 11th -12th May, 2012 that the 2nd Respondent was informed that the report considering the additional information has to be submitted by an accredited consultant. Therefore, the 2nd Respondent engaged the services of the 6th Respondent which was an accredited consultant approved for dealing with industries falling under Sector 21. Following the display of the minutes of the EAC meeting on the website, the 6th Respondent proceeded to conduct the study on 14 additional ToR's as per the directions of the 35th EAC. A formal communication in that regard was sent by the 1st Respondent on 28.06.2012. Since the minutes of the EAC meeting were already made available online, the 6th Respondent proceeded to continue the study. It is pertinent to point out that the study conducted by the 6th Respondent has taken into account the earlier study/report by the 5th Respondent while submitting its report in December, 2011. The report of the 6th Respondent on the additional information was circulated to all the members of the 35th EAC on 13.09.2012. In the meanwhile, the Director of the 1st Respondent in Regional Office, Bangalore inspected the plant of the 2nd Respondent and made a physical verification of compliance of the earlier EC originally granted in 2007 and also the current environmental status in the plant. Report of the Regional Office was forwarded to the 1st Respondent, in respect of the satisfactory compliance of the EC and current environmental status and all the points were taken into consideration in the 1st reconstituted EAC meeting held on 24th- 25th September, 2012 during which the 2nd

Respondent and the 6th Respondent made a detailed presentation before the EAC. Only thereafter, the EAC made a recommendation to grant EC to the project.

61) The fact remains that at the time of consideration of the proposal of the 2nd Respondent for the project in question, the 18th EAC held on 20th-21st January, 2011 had not only recommended ToR's for conducting the study but also recommended the formation of a Sub-Committee to assess the availability of existing pollution control measures by making an inspection of the plant and also for suggesting additional pollution control measures if any required for the proposed expansion. Accordingly, the Sub-Committee visited the plant on 09.07.2011 and recommended additional ToR's to be incorporated in the report. It would be apt and appropriate to reproduce the following part of the Sub Committee Report:

> *"During site visit, the Sub-committee visited existing Membrane Cell based Caustic Soda plant including Compressor house, Hydro Unit, HCL Unit, Nitrogen Plant, Chilled Water Unit, Cl_2 cylinder yard, Cl_2 cylinder filled yard, TCE plant including synthesis chilled and dryer section, HCL plant, Fluid bed dryer, PVC Resin storage area, VCM plant including transportation area and fire fighting area. Co-generation power plant and area for proposed expansion including area for expansion for TCE plant, PVC plant, chlorinated PVC plant and Co-generation power plant.*
>
> *During site visit, it is observed that no Mercury based soda plant is existing Membrane Cell based Caustic Soda plant includes electrolysers having 103 units. Cl_2 sensors are provided in the Mercury Cell based soda plant near exit gate and Cl_2 Absorber Unit. Facilities for online continuous stack monitoring of Cl_2 are provided and observed to be 0.652ppm and trend also indicated the same. Cl_2 in chlorine cell was found to be 0.254 ppm which is well within the permissible limit. No smell of Cl_2 was felt while moving around the plant. PAs informed that 75-80% Cl_2 is used in HCL. 96% of H_2 generated is used in power generation. Risks due to mixing of H_2 and Cl_2 were discussed and informed that mixing of H_2 and Cl_2 is risk free due to use of advanced technology. Release of N_2 is controlled automatically during shut days and start up".*

62) It is pertinent to point out that the Sub-Committee was constituted by the MoEF&CC to assess the existing pollution control measures and after making a visit the Committee has reported that pollution control measures were maintained effectively. The Committee reported that apart from zero discharge, the unit adopted membrane cell technology, and the Iron Oxide Ilmenite plant and existing Co-generation plant functioning are properly and has examined in detail various other safety pollution control measures adopted by the 2nd Respondent.

In the case of *Lafarge Umiam Mining Private Ltd., v. Union of India and Others* (2011) 7 SCC 338, the Hon'ble Supreme Court held that:

> *"119. The time has come for us to apply the constitutional 'doctrine of proportionality' to the matters concerning environment as a part of the process of judicial review in contradistinction to merit review. It cannot be gainsaid that utilization of the environment and its natural resources has to be in a way that it is inconsistent with principles of sustainable development and intergenerational equity, but balancing of these equities may entail policy choices. In the circumstances, barring exceptions, decisions relating to utilization of natural resources have to be tested on the anvil of the well-recognized principles of judicial review. Have all the relevant factors been taken into account? Have any extraneous factors influenced the decision? Is the decision strictly in accordance with the legislative policy underlying the law (if any) that governs the field? Is the decision consistent with the principles of sustainable development in the sense that has the decision-maker taken into account the said principle and, on the basis of relevant considerations, arrived at a balanced decision? Thus, the Court should review the decision making process to ensure that the decision of MoEF is fair and fully informed, based on the correct principles, and free from any bias or restraint. Once this is ensured, then the doctrine of 'margin of appreciation' in favour of the decision-maker would come into play. Our above is further strengthened by the decision of the Court of Appeal in R. v. Chester City Council reported in paras 14 to 16 (2011)1 AII E 476)."*

Therefore, in our opinion the averments made by the Counsel for the Appellant that there is no application of mind in recommending the case for grant of EC, cannot be sustained.

III) Whether the Form- I submitted by the 2nd Respondent/Project Proponent suffers due to inadequacy and false statements?

63) Assailing the Form-I application, made by the 2nd Respondent for the impugned EC, the Learned Counsel for the Appellant levelled a number of criticisms that while Form-I formed the basis and foundation for ToR and EIA Report which in turn forms the basis for decision making process, information provided by the 2nd Respondent in the Form-I is false and inadequate. As per the EIA Notification, 2006, Para 6, application seeking for prior EC shall be made in the prescribed Form-I. The Notification provides in Para 7, Stage II, the process of scoping. Scoping requires the EAC or State Level EAC concerned to determine the ToR on the basis of the information furnished in the prescribed application Form-I/Form-I A including the ToR proposed by the applicant and a site visit by a sub group of EAC or State Level EAC concerned only if it is considered necessary by the EAC or State Level EAC concerned. Thus, the application in Form-I is the foundation/base on which rests the edifice of the ToR, EIA Appraisal and EC. Hence, Para 8 of the Notification makes it clear if there is any deliberate concealment and/or submissions of false or misleading information or data which is material to the screening or scoping or appraisal or decision on the application that would make the application liable for rejection. Both the 2nd Respondent and also the 5th Respondent agency provided false and misleading data on so many vital facts in Form-I.

64) The Counsel further alleges that in Form-I, the location of the project is shown as *Kayalpatnam* (North). However, in the EIA report dated November, 2011 the 5th Respondent described the location of the project as *Sahupuram* and had shown *Kayalpatnam* as one of the surrounding villages. This is a very mischievous and deliberate act on the part of the 2nd respondent. *Kayalpatnam* is a

Grade II Municipality as per the 2001 Census. By doing so, both the 2nd and 5th Respondents have attempted to down play the extent of population likely to be affected by the pollution. The project is located at *Kayalpatnam* (North) of Ward No.18 of *Kayalpatnam* Municipality. In reply, the Learned Counsel for the 2nd Respondent would submit that the location where the factory is situated is *Sahupuram* and it is also true that it is situated in the Northern most part of *Kayalpatnam*. It remains to be stated that the Appellant has addressed the 2nd Respondent as DCW, represented by its Managing Director, *Sahupuram*, Thoothukudi District and having pleaded so the information made available regarding the location of the industry at *Sahupuram*, it cannot be termed as false information.

65) Advancing the arguments further, the Learned Counsel for the Appellant would submit that the EIA Notification, 2006 was amended in the year, 2009 to include in Form-I a section on interlinked projects and there is a specific clause whether any separate application has been made. The Respondent in Form-I in that regard, has stated that they were submitting the application for interlinked projects. The issue of interlinked projects was further clarified in O.M dated 24.12.2010 of the MoEF&CC wherein it is stipulated that the intra-linked and interlinked projects shall prepare a common EIA report covering impact of each of the components in a comprehensive manner after obtaining ToRs from each of the respective Sectoral EACs. For the purpose, the project proponent shall submit applications to each of the sectors simultaneously giving full details of the projects in the prescribed format and also in the prefeasibility report .The respective Sectoral EACs would consider the project with specific emphasis on their respective Sectors and prescribe ToRs which would encompass the entire project. After the preparation of the common EIA report, public hearing for each component as per the EIA

Notification, has to be done. Thereafter, the proposal for ECs in respect of all sectoral components of the project should be submitted simultaneously. The respective EAC's would consider the sector specific proposals based on recommendation relating to that particular component. After receiving the recommendations from each of the Sectoral EACs, the proposals would be processed on individual files for obtaining simultaneous approvals of the competent authority. In the instant case, the 2nd Respondent has obtained the clearance in violation of the OM. Though, the proposed project involved two Sectors- Sectors 4 and 21, the ToR as well as the recommendations have been obtained from the Industries Sector alone and the EAC for Thermal Power Projects had not evaluated the project at all and thus there is a violation of the OM dated 24.12.2010 which goes to the root of the matter. The said contention of the Appellant was suitably replied by the Counsel for the 2nd Respondent stating that the said OM dated 24.12.2010 had prescribed the procedure for being followed in respect of applications filed after the said OM has been issued. It is clearly stated that the procedure set out there in shall be adopted "hence forth" and therefore it had only a prospective application. In view of the answer given by the Counsel for the 2nd Respondent the Tribunal is unable to notice any force in the contention put forth by the Counsel for the Appellant and hence it stands rejected.

IV) Whether the EAC has failed to take into account the existing enormous pollution caused by the project proponent and consequent health hazards as alleged by the Appellant before granting the EC?

66) The Learned Counsel for the Appellant in her sincere attempt of assailing the recommendations and approval of the report by the EAC and also consequent granting of the EC without the application of mind before the authorities, would

submit that the authorities have thoroughly failed to take into account the cumulative effect of pollution on the residents of *Kayalpatnam*. The severe health hazard caused to the residents in the locality was a serious factor to decide whether the area was capable to bear the additional pollution load. The Learned Counsel for the Appellant with vigour and vehemence submitted that the 2nd Respondent has set up its factory for Caustic Soda in 1958 and thereafter the industry of the 2nd Respondent has grown to a large extent by adding so many new plants. The effluent let out by all these units has thoroughly damaged the surrounding environment and has caused degradation apart from resulting in serious health hazards particularly Cancer. So many complaints and representations were given to the Board, the District Collector and even to the 1st Respondent, MoEF&CC but they all fell on deaf ears while enormous pollution was being experienced by the total populace residing in the area and they were much affected. The 2nd Respondent, Project Proponent applied for the EC and also obtained it which would be indicative of the fact that no attention or care was paid on the compliance and enormous pollution was caused in the past which continues even at present. If this fact was taken into consideration by the EAC and the MoEF&CC, the impugned EC would not have been granted.

67) Pointing to Form-I where it is found to the query that if there are any changes in occurrence of the diseases, the Learned Counsel for the Appellant stated that the 2nd and 3rd Respondents have answered in the negative which is nothing but a falsehood. Report of door to door survey conducted by a group of independent medical practitioners reveals the prevalence of high rate of cancer among the residents. The study conducted in January, 2011 reveals that 426 persons were victims of cancer. Out of them, 332 died, 49 recovered and 45 were undergoing treatment on the date of the survey. The list of the names of the cancer

patients along with their addresses, age, sex, and the types of cancer was furnished. The Datasheets containing the names and addresses of the cancer patients collected during the survey is available with the Appellant and were produced before the Tribunal. Any meaningful health survey in *Kayalpatnam* and in the surrounding areas would have identified the abnormally high rate of cancer. In fact, the Board in its Letter dated 20.12.2012 and 25.03.2013 had requested *Sri Ramachandra Medical University and Cancer Institute,* Adyar to put up proposals for cancer survey but the same was not followed up. The Appellant pleads that they have provided sufficient details which establish a *prima facie* case of high cancer rate. A 2002 news report published in *Kathiravan*, a Tamil Newspaper shows the existence of cancer in the neighbouring villages as well.

68) The fact remains that the 2nd Respondent uses many carcinogenic chemicals in the manufacturing process. There is a well documented evidence of Mercury deposits in soil, water and sea in that area on account of decades of letting out Mercury laden effluents into the open. Analyses conducted by the Board in December, 2012 show the presence of Mercury in soil samples from the sea and creek. A 2011 report of the Marine Biological Association also records the presence of Mercury. Hence, the reliance placed by the 2nd Respondent on an in-house report of, Dr.Swaminathan in the year, 2002 is self serving and has to be rejected. Later reports by other independent agencies have also found the presence of Mercury. Merely because the 2nd Respondent has converted from Mercury cell technology to Membrane cell technology in respect of Caustic Soda production in the year 2007, it does not absolve them from the contamination that they have already caused. The long term build up of Mercury in the environment cannot be brushed aside on the ground that they have changed their process. Mercury persists in environment for years, unless active steps are taken to clean it. Further, the 2nd

Respondent has set up coal based Thermal Power Plant and is seeking to expand the same. It is now known that both coal and fly ash contain Mercury and also cause radiation and its impacts are very dangerous to the local populations. The water source of the Tamil Nadu Water and Drainage Board (TWAD) is located within 3.9 km from the project site. Further, *Kayalpatnam* being coastal village residents consume fish as a part of their staple diet. Presence of Mercury in soil and water samples in the sea and creek was recorded by the Board even in 2012. Mercury has probably entered the food cycle through fish, meat, poultry and water thereby affecting the health of the residents who are exposed to Mercury and other heavy metals on account of this. Thus, there is more than a probable nexus to the activities of the 2nd Respondent and the high rate of cancer in *Kayalpatnam* and surrounding areas. At a minimum, the MoEF&CC ought to have insisted on a complete health survey and cancer screening before considering the grant of EC. The health survey reports of the 2nd Respondent conducted by their in-house Medical Officer is obviously a very superficial job and their repetitive reports which on the face of it appear to be a 'copy paste work' instils no confidence. In respect of the risk of contamination to land, surface and ground and coastal waters etc., the 2nd and 5th Respondents have given a false answer. The past experience of pollution as recorded by the studies of the CMFRI as well as the various enquiries made by the Board pursuant to public outcry and media coverage of the reddening of the sea, fish kill, irritation of skin experienced by fishermen when they venture into the sea, would all reveal that there is a high risk of contamination. An independent study by the Government Officials would have revealed the pollution caused by the 2nd Respondent and all the above facts were not taken into account either by the EAC at its meeting or by the MoEF&CC at the time of considering the application for grant of EC. Hence, on that ground the EC has got to be quashed.

69) Countering all the above contentions, the Learned Counsel for the 2nd Respondent, Project Proponent put forth his elaborate submissions refuting all the contentions that they were thoroughly unfounded and the Appellant was relying on the decades past reports but the evidence adduced by the project proponent would clearly indicate that it is a pollution free industry and the 2nd Respondent has taken all the necessary measures to control pollution in all possible ways and hence, the above contention has got to be rejected.

70) After considering the contentions put forth by both side and the documentary evidences, the Tribunal is of the view that it has to necessarily disagree with the case of the Appellant. Admittedly, the 2nd Respondent commissioned its Caustic Soda Unit in the year 1958 with the Mercury cell technology which was the available technology adopted at that time by all the industries manufacturing the Caustic Soda. In order to substantiate the high concentration of Mercury in the effluents of the 2nd respondent and its consequences, the Appellant has relied on a paper published on "Mercury Effluents on Marine Bivalves issued in December, 1988 (CMFRI Bulletin, 42) which recorded high concentration of Mercury and the acidity noticed in the effluents. The bar mouth of the polluted lagoon was opened during November-June and the effluents were found to be contaminated with heavy metal toxics discharged into sea. The study also indicated that while heavy concentrations of Mercury resulted in immediate death, Mercury at lesser concentrations accumulated in the bodies of the species and resulted in their death. Another research paper of CMFRI issued in September, 1991, was relied to show the fish mortality due to pollution by the industrial effluents in shore waters of *Kayalpatnam*. A research paper on the survival of certain species of fish and prawn to industrial effluents with special reference to Mercury, published by the CMFRI during 1995 found that sedentary

organisms were totally absent. Equally, the Appellant also relied on a paper published in the Journal of Marine Biological Association of India (2011) on the studies made in 2007-2008 on the "Environmental degradation by chemical effluents along the *Kayalpatnam* coast of Gulf of Mannar with special reference to Mercury" which pointed out the presence of Mercury, acidity and low oxygen on account of discharge of effluents into the sea by the 2nd Respondent.

71) A perusal of all the above would no doubt indicate the presence of Mercury, its concentration and its consequences that it would have brought forth including the health hazards on account of the discharge of the effluents. But, it remains to be stated that all the documents relied on as noted above, were released in 1988, 1991, 1995, 2007 and 2008 and none can be taken as evidence representing the present factual position. The Tribunal is able to see force in the defence put forth by the Project Proponent that a direction was issued by the MoEF&CC to the entire Caustic Soda manufacturers in 2003 to switch over from Mercury cell technology to Membrane cell technology before 2012.The Technical EIA Guideline Manual on Chlor-Alkali Industry prepared by the MoEF&CC dated August,2010 has a Charter on 'Corporate Responsibility for Environmental Protection' (CERP) with 13 point guidelines including 9 directions to Caustic Soda manufacturers to switch over to Membrane cell technology before 2012. The membrane cell process adopted by the 2nd Respondent in its Caustic Soda Plant is the most modern technology and has environmental, economical advantages. The implementation of cleaner production processes and preventive pollution control measures can provide both economical and environmental advantage. Moreover, this process is more energy efficient and does not use any raw material which is a hazardous chemical in the process. The fact remains that the 2nd Respondent had replaced Mercury cell technology with Membrane cell

technology in 2007 itself which would mean 5 years ahead of the deadline fixed by the MoEF&CC. It has to be pointed out that being conscious of the impacts of the Mercury concentration; the 2nd Respondent has taken that step in the interest of the environmental protection and the above fact is not disputed by the Appellant. It is not the case of the Appellant that there was any other advanced technology which has come into being beyond the Membrane cell technology. It should not be forgotten that the 2nd Respondent industry was originally commissioned and expanded thereafter as a chemical industry to manufacture chemical related products. In such a situation one cannot reasonably expect elimination or complete stopping of the consequential pollution from the industry but must look into whether the industry has taken sufficient preventive/precautionary measures as expected by law in a given situation. As pointed above, the 2nd Respondent industry as per the directions of the MoEF&CC has switched over to Membrane cell technology which is an advanced technology in order to eliminate the impact and effect of the Mercury concentration. In the year 2001, the CPCB has issued guidelines for landfill sites i.e. the criteria for hazardous wastes/landfills and the 2nd Respondent has been following them. Equally, the Board has been taking water samples from test wells and it is being continuously monitored by them. In so far as the contention put forth by the Appellant pointing to the prevalence of cancer, the documents relied on by them are self serving and no authority could be quoted. On the contrary, the 2nd Respondent has filed a Certificates issued by the *Kaylpatnam* Municipality regarding the deaths occurred within *Kayalpatnam* Municipality in the year 2012-2013 wherein it is shown that out of 232 deaths in *Kayalpatnam*, only 10 persons died due to cancer which constitutes 4.3 % and equally in the year 2013-2014 out of 206 deaths, 17 died due to cancer, which constitute 8.25%. A study on Mercury emission and its impact was conducted in September 2002 by Dr. R.Swaminathan in association with an internationally

recognised expert, Dr.Gunter Straten, Germany and their report in its conclusion reads as follows:

> *"There is no impact on ground and sea creek water in and around the area"*
>
> *"Vegetation inside plant premises did not show any degradation indicating there was no impact due to Mercury".*

72) Periodical analysis of sea water and creek water by the Board made in the year 2006, 2007, 2008, 2009, 2010, and 2011 would go to show that at the creek confluence point, Mercury concentration was found to be less than 0.005 mg/l which is lesser than the detection limit. In the absence of any authenticated evidence that the deaths due to cancer was because of the high rate of Mercury concentration caused by the Respondent industry and in the face of the above documents relied on by the 2nd Respondent contrary to the case of the Appellant, the Tribunal is afraid whether it can accept the case of the Appellant that deaths due to cancer that occurred in *Kayalpatnam* were due to the adverse impact of the Mercury concentration. It is pertinent to point out that there are number of villages in and around the Respondent factories and no other village has come forward with any such complaint. It is relevant to note that more than 1000 employees' of the factory and their families out of those who are occupying the staff and official quarters has ever come forward complaining of any cancer/illness as a result of impact by the pollution caused by the industry.

73) In pursuance of a representation received from the natives of *Kayalpatnam* living in Hong Kong complaining of serious pollution caused by the 2nd Respondent industry, they were called upon to furnish a reply by the MoEF&CC. The 2nd Respondent along with the health reports for 2010-2011 and other Annexures gave the reply on 16.02.2012. The Director of Regional Office, MoEF&CC, Bangalore inspected the 2nd Respondent's factory on 08.08.2012 as

per the directions of the MoEF&CC, New Delhi to physically verify the compliance of the earlier EC of 2007 and find out the current environmental status. Accordingly, after making the inspection, a report was submitted regarding the compliance of the EC conditions on 30.08.2012 which reads as follows:

"1. <u>All the conditions of TNPCB should be strictly implemented</u>.

The CTE/CFO have been issued and renewed regular by TNPCB. This implies that the project authorities are adhering to the stipulations made by SPCB.

2. <u>The fuel at the rate of 32.35 T/day/machine would be used as fuel, Sulphur content in fuel shall not exceed 2%</u>

LSFO having 1.8 to 1.9% sulphur content is now being used in the prescribed rate.

3. <u>Zero discharge of waste water shall be practiced</u>.

The RO plant has been provided for the treatment. All the treated water is recycled back in the process and the reject used for product washing in Ilmenite plant.

A. Specific Conditions

1	*The unit will implement all pollution control measures as provided in the EIA/EMP report.*	*All the pollution control measures as per EIA/EMP have been provided. During the visit it was seen that all of them were in operation.*
2	*The gaseous emissions (SO_2, NO_x, Cl_2 and HCl) and particulate matter from various process units shall conform to the prescribed norms by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. The stack height shall be as per the CPCB guidelines. In the event of failure, of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the*	*Unit has provided air pollution control systems. Project authorities are regularly monitoring the environmental parameters. TNPCB is also periodically monitoring. The unit has provided on-line measurement for PM, SO2, NO_2 for the Co-Gen Plant stack and connected the values in the PLC. Monitoring reports submitted by the project authorities and of TNPCB shows that the emissions and particulate matter are well within the limits prescribed. Stack height is in line with the CPCB guideline. Interlocking provision for the chlorine in the Hypo-vent has been made. The inter-lock will give alarm at 3 ppm level and trips the plant at 5 ppm.*

	desired efficiency. Further, the company shall interlock the production system with the pollution control devices.	
3	*The unit will achieve zero effluent discharge by segregating it into low TDS and High TDS streams. High TDS effluent of 310m^3/d will be treated in a separate treatment plant having collection Tank, Flash Mixer, Primary Clarifier and Treated effluent collection tank.* *The treated effluent meeting the norms will be sent to solar evaporation ponds. The Low TDS effluent of about 1172 m^3 /day will be treated separately by passing through Flash Mixer,Primary Clarifier, Post Aeration tank, Secondary clarifier, Sludge Thickener, Multimedia Filter, Activated Carbon Filter and Finally through Nano system and R.O Plant. The R.O permeate of about 586 m^3/day will be 100% recycled in the process and rejected from Nano/RO systems will be sent to salt pans for recovery of salts.* *The treated effluent shall conform to the standards stipulated by the State Pollution Control Board or the MoEF whichever is stringent.*	*The unit has achieved zero effluent discharge. Low and high TDS effluents are segregated. It has installed low TDS and High TDS treatment plants separately to handle volume of 1172 m3/day and 310m^3/day respectively with a provision of collection tank, flash mixer clarifiers, Nano and RO membranes and operating it effectively. Permeate is found to be used in the process and the rejects are being sent to the Salt Pans. The report of analysis from the RO rejects carried out by TNPCB periodically reveals that the unit is maintaining the prescribed standards and also meeting the Zero Liquid Discharge. Unit is operating the ETP within the quantity declared and about 500m^3 of recovered water is being reused in the process. Monitoring reports of project authorities and TNPCB shows that the quality of the treated effluent is within the stipulated norms.*
4	*The Ammonia used for precipitation of Iron Oxide will be recovered completely and will be recycled.*	*Compliance is agreed upon. Iron Oxide plant is scheduled to be commissioned by November, 2013.*
5	*The sludge generated*	*The brine sludge generated earlier*

	from the expansion project will not exceed 450 TPM of Brine Sludge which will be disposed off in the secured landfill within the premises. *150 TPM of Grit Sludge will also be disposed off in landfill.* *2500 TPM of Ash generated from CPP will be sold to cement manufacturers.*	*from Mercury Cell plant has been dumped in secured landfill site and capped. The brine sludge presently generated from the membrane cell plant which is non hazardous and of less than 450 TPM quantity is being used for bund strengthening works in the company's salt fields. The entire fly ash generated from the CPP is being sold to the cement units and brick manufacturing units as submitted by project authorities. However, during the visit some stock of ash was seen in the ash pond. Ferrous and Ferric chloride in the liquid form is allowed in the solar evaporation pond and the residue is stored in the ponds. The grit sludge will be generated from Iron Oxide plant which is scheduled to be commissioned by November, 2013.*
6	*Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*	*Occupational health surveillance of the workers is carried out regularly and records maintained. Company ah sits own medical centre with qualified doctors.*

B. General Conditions

1	*The project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board.*	*CTE/CFO have been issued and renewed regularly by TNPCB. This implies that the project authorities are adhering to the stipulations made by SPCB.*
2	*The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000 and Hazardous Waste (Management and Handling) Rules, 1989 as amended in 2003. Authorization from the SPCB shall be obtained for collection, treatment, storage and disposal of hazardous wastes.*	*Authorization has been obtained from SPCB. Necessary arrangements have been made to comply the various provisions of hazardous chemical and waste management rules.*

Compliance Amendment for Indigenous Coal to the original EC, 2007 vide 21st October, 2010.

1	*Imported coal will be blended with indigenous coal procured only through e-auction from the open market.*	*Usage of Indian Coal is not yet taken up.*
2	*Proper utilization of fly ash shall be ensured as per fly Ash Notification, 1999 and subsequent amendment in 2003. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding (MoU) shall be submitted to the Ministry's Regional Office at Bhopal within 3 months.*	*The entire fly ash generated from the CPP is being sold to the cement units and brick manufacturing units. A copy of the Memorandum of Understanding (MoU) signed with dalmia cements for ash utilization is submitted.*

74) The Deputy Director, MoEF&CC, New Delhi sent a communication to the Chairman of the Board to furnish a detailed report on the allegations and complaints made on the environmental pollution caused by the 2nd Respondent in the representation given by the natives of *Kayalpatnam* living in Hong Kong in December, 2012. After making the inspection, a Committee constituted by the Board sent an inspection report on 22.12.2012 along with 6 recommendations. A personal hearing was also given to the 2nd Respondent by the Chairman of the Board on 22.01.2013 on the complaints received from the KEPA regarding the prevalence of cancer and sea water turning red. After doing so, certain directions were issued by the Board to the 2nd Respondent under Water Act, 1974 by a communication dated 06.02.2013 and on compliance of the directions, 3 letters were addressed to the Board on 25.02.2013, 14.03.2013 and 18.04.2013. At this juncture, it is pertinent to point out that the Member Secretary of the Board sent a communication to Director(s), I.A.Division,MoEF&CC, New Delhi on 26.06.2013 as to whether the 2nd Respondent complied with the directions of the Board and

whether the consent was also renewed. Relevant portion of the report is as follows:

75) The fact remains that the Scientist, Dr. U. Sridharan attached to Regional Office, MoEF&CC, Bangalore, inspected the unit as per the directions of the Director, MoEF&CC on the compliance status of the directions issued by the Board and environmental safeguards undertaken by the 2nd Respondent. It would be more apt and appropriate to reproduce the following part of the report dated 30.06.2013:

"The coal based cogeneration power plant established during the year 2008. The power generating capacity is 58.27 MW. This plant generates electricity by steam turbine generator. Steam is produced by Atmospheric Fluidized Combustion Boilers having 2×125 TPH @ 89 ata. The unit has provided Electro Static Precipitators and the fly ash generated is given to the nearby cement units and brick manufacturers. The unit has provided an exclusive RO plant for treating the waste water. The treated permeate is reused for boilers and the treated reject is used for dust suppression and Ilmenite plant product washing. The unit has obtained EC for the above power generation vide MoEF EC No. J-11011/426/2006-1A, II (1) dated 07.07.2007 and subsequently an amendment for additional 8.27 MW totalling to 58.27 MW during 31.05.2010.

The unit has converted to environment friendly Membrane Cell Process for the manufacture of Caustic Soda during the year 2007 by totally eliminating Mercury Cell Process. All the residual effluent from the individual treatment systems are treated in a centralised effluent treatment plant by segregating the streams into low TDS and high TDS. The unit has installed Zero Liquid Discharge plant having Nano and RO systems for treating the effluent. The treated permeate is reused in the process and the treated rejects rich in salt recycled in their salt plants for recovery of salt. The high TDS stream treated separately and the treated water evaporated in the solar evaporation ponds. The unit has updated valid consent under Air and Water Acts for all its divisions. The unit has developed green belt in and around the complex to cover 30% of the plant area. The unit has

developed land fill facility for storing the solid waste generated in the treatment process. The unit has installed various air pollution control systems viz. cyclone separators, Electro static precipitator and scrubbers and provided on-line sensors for measuring chlorine, vinyl chloride monomer sulphur di-oxide, oxides of nitrogen and suspended particulate matters. The unit has implemented Integrated Management System and acquired ISO: 9001, ISO: 14001, ISO: 18001, ISO: 28001 for Security Management System and ISO: 50001for Energy management System.

In view of the above, the project authorities have taken necessary actions to implement the EC conditions satisfactorily. Detailed point wise compliance status for their project on the expansion of 283 TPP Membrane Cell Conversion from Mercury Cell. Caustic soda plant with 125 TPD Iron Oxide plant and installation of 2×25MW CPP is given in this report."

76) As could be seen from the above report, the aforementioned Scientist, who made the inspection, had given a report to the effect that the environmental safeguards of the unit were satisfactory. All the above would be clearly indicative of the fact that on a complaint made by the Appellant association from *Kayalpatnam* and also the residents of *Kayalpatnam* in Hong Kong, directions have been issued by the MoeF&CC, pursuant to which inspections were made both by the Regional Office, MoEF&CC Bangalore and also the Committee constituted by the Board. While the Board has sent a report to the MoEF&CC that all the directions were complied with, the report of the Regional Office forwarded to the MoEF&CC, New Delhi was to the effect that the environmental safeguards of the Respondent industry unit were found to be satisfactory.

77) The 3rd Respondent, Board, the law enforcing authority, under the enactments to control pollution has submitted a specific reply with regard to the above allegations. The consent under Water and Air Acts which were originally issued, were renewed up to 31.03.2014.The authorities of the 3rd Respondent then and there made the inspection of the industry. When public complaints were made

against the 2nd Respondent, the 3rd Respondent, Board has taken timely action then and there. The 3rd and 4th Respondents formed Committee consisting of Additional Environmental Engineer and Joint Chief Environmental Engineer to inspect the unit and the *Kayalpatnam* area to inquire into the complaints and furnish a report. Accordingly, the Committee inspected the industry and also the *Kayalpatnam* area in the month of December, 2012 submitted two reports to the Board and it was noticed that directions issued during 2012, were complied with by the Respondent unit. A personal hearing was also conducted on 22.01.2013 by the Chairman of the Board. When the representatives appeared after doing so, a number of conditions were issued for compliance. The unit after complying with all the conditions, applied for CTO for Synthetic Iron Oxide Plant. While it stood so, the Appellant complained that enormous pollution is being caused by the 2nd Respondent unit harming the environment and also brought death to the residents of *Kayalpatnam* who are exposed to Cancer. At that juncture, pursuant to the application made for EC for expansion of the existing units and also for setting up a new chlorinated PVC Plant, inspection was made by the Officials of the 1st Respondent MoEF&CC from the Regional Office, Bangalore and reports were also called for from the Board by MoEF&CC. Being satisfied with the preventive and protective measures taken by the industry recommendations were made by the EAC. According to 3rd Respondent, Board there is no process omission in the manufacture of TCE and the level of radiation in Ilmenite ore is very minimal. Also, the 2nd Respondent unit has engaged AERB to study the level of radiation. The unit does not have mines and therefore, Ilmenite ore is procured from outside agencies. The Plant continues to dispose the leach liquor through solar evaporation ponds. The leach liquor is used to produce Ferric Chloride and it is a raw material for Iron Oxide pigment. It is also brought to the notice by the Board that all safety precautions are being followed then and there and timely actions are being taken continuously by the

Board when violations are noticed. Consent has also been renewed based only on the compliance of the earlier conditions. Water samples are collected regularly once in 6 months. The level of Mercury is below the detection limits. Sea water samples were collected and on analysis it was found that the concentration of Mercury is below the detection limits. No hazardous wastes are generated in TCE production unit. Only Calcium Chloride sludge is generated in existing production of TCE and it is non hazardous. It is completely recycled for further processing. In the face of all, and more importantly, the response from the Board, the law enforcing authority to control pollution, the Tribunal is afraid whether the contention of continuing pollution by the 2nd Respondent unit can be accepted.

78) The Hon'ble Bench of the Tribunal in the case of *M/s. Sterlite Industries Ltd.* v. *Tamil Nadu Pollution Control Board* (2013 Vol.I ALL (I) NGT Reporter Page 368) upon detailed consideration, held as under:

> *" 113. Risk of harm to the environment or to human health is to be decided in public interest, according to a "reasonable person's" test.XXX If without degrading the environment or by minimising the adverse effects thereupon by applying stringent safeguards, it is possible to carry on developmental activities applying the principle of sustainable development, in that eventuality, development has to go on because one cannot lose sight of the need for development of industry, irrigation resources, power projects, etc. including the need to improve employment opportunities and the generation of revenue. A balance has to be struck. [Refer: Research Foundation for Science and Technology and Natural Resource Policy v. Union of India (2007) 9 SCR 906; Narmada Bachao Andolan v. Union of India (2000) 10 SCC 664; Chairman Barton: The Status of the Precautionary Principle in Australia (Vol.22) (1998) (Harv. Envtt. Law Review, p. 509 at p.549-A) as in A.P. Pollution Control Board v. Prof. M.V. Nayudu(1999) 2 SCC 718]"*

"140. Shutting down an industry amounts to 'civil death' of the company. A direction of closure in relation to a running unit not only results in stoppage of production but has far reaching economic, social, and labour consequences. Before directing the civil death of a company, the decision making authority is expected to have before it some reliable and cogent evidence. An inquiry into the incident or accident of breach by the industrial company should be relatable to some reasonable scientific data."

79) In the face of all the above, it would be futile on the part of the Appellant to contend that despite representations and complaints made in respect of causing of pollution by the 2nd Respondent industry they were not taken care of and without any application of mind, the EAC recommended the report for approval and the MoEF&CC has granted the EC. In the absence of any contrary evidence and merely on the representation of the Appellant's complaints regarding pollution caused by the 2nd Respondent, by no stretch of imagination it can be held that the industry is continuously polluting. As stated above, the Appellant was able to show that the 2nd Respondent has caused pollution in the past but during the relevant period when the Form-I along with the application was made for expansion of the existing plants and establishment of a new plant, the 2nd Respondent is able to show by the above narrated documentary evidence that it had complied with the directions and conditions imposed by the authorities and thus it qualified itself for applying and for obtaining the expansion of the existing industry and also for establishment of a new plant.

V) Whether the site for the proposed expansion of the plant would fall within the prohibited areas as notified under the CRZ Notification, 2011?

80) The Learned Counsel for the Appellant would submit that the land in Sy.No.142 where the construction of new structures in respect of expansion of the

project is proposed, is admittedly notified as CRZ-III under the CRZ Notification, 1991 and included in the CZMP of 1996 approved under the CRZ Notification, 1991. In the light of the ecological sensitivity of the area, there is a proposal to alter the zonation and bring it under CRZ-I. As per Para 3 of the CRZ Notification, 2011, setting up/expansion of existing industries is a prohibited activity in the CRZ area. The project of the 2nd Respondent is a ' Category A' project under the EIA Notification, 2006 and thus it is a prohibited activity under the CRZ Notification and it does not fall under any of the exceptions stated in Para 3 of the Notification. In Form-I, the Survey numbers in which the project is located i.e Sy.Nos.142 and 143 are also part of this list. A specific query is available in Form-I whether there are any coastal zones within 15 Km of the proposed project location boundary and the 2nd Respondent has replied it in the negative. In the EIA report it is claimed that the project site falls under unclassified zone and away from the coastal regulation zone while Sy.Nos.142 and 143 are admittedly within the CRZ area and the 2nd Respondent has suppressed the same. Both these Sy.Nos. are notified as CRZ-III areas and are under active consideration for being listed as CRZ-I, ecologically sensitive areas in the proposed revised CZMP.

81) *Per Contra*, the 2nd Respondent has submitted that the said Sy.Nos. have been classified as CRZ-III and the reclassification as CRZ-I is still at the proposal stage under the CRZ Notification,2011. The Appellant contends that even assuming that the reclassification is till at the proposal stage, the fact remains that it is a notified CRZ-III area and that means the CRZ notification would apply and expansion of existing industries or setting up of new industries is a prohibited activity. Though, the 2nd Respondent has contended that the part of Sy.Nos 142 and 143 falls under CRZ-III but the actual plan for construction of new industries is only on the vacant land in Sy.Nos.142 and 143 which does not fall in the CRZ area

and in support of the claim, a Field Map dated 11.11.2015 of Sy.No.142 showing HTL and CRZ-III areas was superimposed in the map consisting structures of proposed expansion. The layout sketch is different from the site layout map as enclosed in the EIA report. In the sketch filed in the EIA report, the plant layout is clearly within the CRZ area and thus the proposed project is in violation of the CRZ Notification. Hence, the impugned EC is liable to be set aside on the ground of providing false and misleading information. Even if, one has to accept that the new constructions would be put up in the vacant land falling outside the CRZ area, the fact that a 'Red industry' which is highly polluting, is coming up in such a close proximity to the CRZ-III area which in fact is under active consideration to be declared as CRZ-I, would have influenced the decision making process by the authorities had it been disclosed.

82) In answer to the above, the Learned Counsel for the 2nd Respondent, Project Proponent would contend that the allegation that the Sy.Nos.142 and 143 would fall within the CRZ area are misleading and they do not fall within the CRZ-I area. Documents relied by the Appellant to justify the allegation would clearly show that it is only a proposal by the Government of Tamil Nadu inviting objections for classification. Hence, it would be clear that the CZMP for CRZ-I area has not yet been approved. In fact, the 2nd Respondent had submitted its representation to the said draft proposal *vide* a letter dated 11.12.2013 to the District Collector, Thoothukudi and had also submitted a map issued by the Institute of Remote Sensing (IRS), Anna University which would clearly show that presently only a portion of Sy.Nos 142 and 143 falls under the CRZ-III area. The proposed plan does not fall within the "No Construction Zone" and the proposed expansion is being done only in that portion of the vacant land in Sy.Nos.142 and 143 which does not fall under the CRZ-III area. From the submissions made, it is

quite evident that the CZMP is under proposal stage and on the strength of which it cannot be held that the proposed expansion of the plant of the 2nd Respondent would fall under CRZ-I, a prohibited area. It is admitted by the 2nd Respondent that the structures for the expansion and for the new plant are to be constructed in a part of Sy.Nos.142 and 143 in a vacant area which do not fall under CRZ-III. Therefore, so long as the construction activities for the expansion and for the new plant are located in a part of Sy.Nos.142 and 143 falling outside the CRZ-III, the objection raised by the Appellant cannot be sustained. However, it is true that it is a Red Category industry and hence, stringent pollution control measures are required to be taken and the activities have to be monitored regularly for which conditions have been prescribed while granting the EC.

VI) Whether the EC granted to the 2nd Respondent, by the 1st Respondent, MoEF&CC is liable to be set aside since the proposed plant is in close proximity to water bodies and Reserved Forests?

83) The Form- I and the report were assailed by the Learned Counsel for the Appellant on the ground that two RFs, *Kottamadaikkadu* and *Kudirimozhi Theri* situated at 3 km and 6 km respectively, are in close proximity to the project site as evident from the maps filed by the Appellant (Village map of *Kayalpatnam* North and Assignment Deed with Boundaries). In Form-I, the existence of both these forests were suppressed. Subsequently only when a clarification was sought for the existence of *Kudirimozhi Theri* forest, it was disclosed but the existence of *Kottamadaikkadu* RF is not disclosed. The declaration of forest as RF was done under Section 3 of the Indian Forest Act, 1927. Section 27 provides for the manner of de-reserving the forest but no such order de-reserving *Kottamadaikkadu* RF was provided. Photographs showing degraded forests were also filed by the Appellant.

The Forest (Conservation) Act, 1980 imposes restriction on the power of the State Government to de-reserve forest. Hence, the statement by the 2nd Respondent that *Kottamadaikkadu* RF is no longer a RF cannot be accepted in the absence of any order of the State Government and Central Government permitting such de-reservation. An evasive RTI reply by the District Forest Officer (DFO) to an application by one of the residents of *Kayalpatnam* that no information in respect of *Kottamadaikkadu* RF was available in their office, cannot be a deciding factor to presume that it is de-reserved. Hence, from the angle of the existence of the RF within close proximity to the project site, both the approval of the report and the EC granted on that basis should fail.

84) Countering the above contentions, the Learned Counsel for the 2nd Respondent, Project Proponent contended that after Form-I was submitted on 27.10.2010, the 1st Respondent sought for certain clarification from the 2nd Respondent on 16.11.2010. In that letter, a query was made as to whether any RF was located within 10 km from the project site. In response, the Project Proponent submitted a reply informing that *Kudirimozhi Theri* RF was located at a distance of 6 km and in so far as *Kottamadaikkadu* RF was concerned the same was not a RF. The map relied on by the Appellant would clearly show that the area shown as *Kottamadaikkadu* is merely a sand dune filled with vegetation and was not marked as RF. Apart from that, the Village Map of *Kayalpatnam* North Village relied on by the Appellant was of the year 1958 of Thiruchendoor Taluk and it had undergone several changes thereafter. The DFO in his reply dated 17.12.2014 has mentioned that there was no information as regard to *Kottamadaikkadu* RF in his office. It is pertinent to note that the DFO by a letter dated 30.05.2012 had observed that the area specified for proposed expansion by the 2nd Respondent is

already under industrial use and is devoid of any natural vegetation and the DFO had given NOC for the proposed expansion.

85) From all the above, it will be quite clear that the map relied on by the Appellant to substantiate that the site is in close proximity of RF was that of the year 1958. Naturally the same would have undergone several changes. Not only the DFO has given a reply dated 17.12.2014 to the RTI query of the Appellant that there was no information as regard to *Kottamadaikkadu* RF but there is no also objection for the proposed expansion as the area under the control of the 2nd Respondent was already under industrial use and is devoid of any natural vegetation. In the absence of any valid, acceptable materials it would be very difficult to hold that both *Kottamadaikkadu* and *Kudirimozhi Theri* are RFs which are in close proximity to the site for the proposed expansion. Moreover, no records are placed before us to show that there are any notified Ecologically Sensitive Areas or Protected Areas located near the project site. In so far as the contention put forth by the Counsel for Appellant in respect of above RFs, the Project Proponent has stated about 1 RF along with the explanation how this would not attract and hence no suppression or false information in that regard is noticed. In so far as the 2nd RF is concerned, he has stated that no information is available with the concerned DFO.

86) The Counsel for the Appellant would further add that, from the 2nd and 5th Respondents' information regarding the areas which are of ecological sensitivity such as wetlands, water courses or other water bodies, coastal zones, forests etc within 15 km distance was sought. Both the Respondents have suppressed the fact that the *Thamirabarani* River is situated within 4 Km, *Thamirabarani* estuary is within 1 Km and *Punnakayal* backwater is within 5 km and thus all are located within the 5 Km range. In the EIA Report wherein, on the

topographical map showing the project site, two concentric circles were drawn demarcating the 5 Km and 10 Km radius from the project site. In this topographical map, the distance of the *Thamirabharani* River from the project site is shown as 5.2 Km but in the same report other maps showing the drainage and water bodies the distance of *Thamirabharani* River and *Punnakayal* backwaters is shown within the 5 Km radius. Similarly, the map is showing the land use pattern indicates that the *Thamirabarani* River is within 5 Km radius. One, Mr. Joel, had also submitted a representation dated 18.07.2012 pointing out that the proposed project is in violation of G.O. Ms. No. 213 dated 30.03.2009 and G.O Ms.No.127 dated 08.05.1998 issued by the Government of Tamil Nadu which prohibited the setting up of new industries within 5 Km of the *Thamirabarani* River among other rivers. Google Earth Maps measuring the aerial distance of the project site to the *Thamirabarani* River was also annexed. The maps would show that the shortest distance is 3.9 km and farthest is 4.9 Km between the *Thamirabarani* River and the project site. The Board by a letter dated 03.10.2013 requested the 2nd Respondent to provide GPS study for calculating the distance of the *Thamirabarani* River and creek using the service of reputed institutes like IIT or Anna University and also the CRZ Clearance for the Sy.No.137. Despite, overwhelming scientific data that established without doubt that the *Thamirabarani* River is within 5 Km, the 2nd Respondent relied on Certificate issued by the Local Tahsildar that *Thamirabarani* River is located at a distance of 5.2 Km. The Certificate given by Tahsildar is not supported by any material, maps, surveys and he also does not know as to what is the basis on which such a Certificate is issued by him and hence, it would be quite clear that the 2nd and 5th Respondents have not only given false information but also the project proposed is in violation of the aforesaid G.O's. Therefore, from that point of view also, the EC has got to be set aside.

87) Answering the above contentions as to the distance criteria between the project site and the *Thamirabarani* River, the Counsel for the 2nd Respondent would submit that the Appellant in order to substantiate the said contention had relied on the topographical map submitted by the 5th Respondent and also satellite imagery for land use and alleged that there is discrepancy between the maps but those contentions are unfounded and misleading. The topographical map was actually submitted as part of the report placed by the 5th Respondent and the said map was released by the Geographical Survey of India (GSI). The topographical map would reflect the exact distance between the *Thamirabarani* River and the project site since the same is static. As per the requirements of the MoEF&CC for the purpose of measuring distance from the water bodies, the official topographical maps prepared by GSI are used for the purpose of measuring the distance. In the case of Satellite imagery and Google maps, it was only for the purpose of showing the land use and the same would vary since it is dynamic. The topographical map by GSI produced by the 5th Respondent is for the purpose of showing distance between the project site and the *Thamirabarani* River which measures 5.2 Km. The said actual distance has been taken into account in the report. It is pertinent to point out that the Tahsildar, who has got the Revenue jurisdiction over that area, has issued a Certificate to the effect that Sy.Nos. in which the project site is located is at a distance of 5.2 km from the *Thamirabarani* River. Hence, it is also pertinent to point out here that in the EC issued in 2007; *Thamirabarani* River is shown to be at a distance of 5.2 Km.

88) In so far as the reliance placed on G.O. Ms. No.213 dated 30.03.2009 and G.O.Ms.No. 127 dated 08.05.1998, it remains to be stated that those G.O's are to the effect of prohibiting and setting up of new projects within a distance of 5 Kms from the notified rivers mentioned in the said G.O's. It cannot be contested

that the G.O's would apply only to industries that came into existence after the date of issue of the said G.O's and those G.O's can apply to new projects and not to existing projects/expansion of projects. It is not in controversy that the land to an extent of 2400 acres was assigned to the 2nd Respondent in 1958 and the oldest project of the 2nd Respondent was commissioned in 1959. Thus, it would be quite clear that the 2nd Respondent was seeking the expansion of existing facility and for putting up a new plant with the existing facility and thus the G.O's relied on by the Appellant cannot have application to the present factual position and hence the contention of the Appellant in that regard cannot be countenanced.

VII) Whether the Appeal is liable to be dismissed on the mis-joinder of causes of action?

89) Apart from all the above it is noticed that the appeal is technically defective. In the relief clause the Appellant has sought for the first relief to set aside the impugned EC and further, the Appellant has also asked for the direction for closure of Ilmenite Plant of Caustic Soda division and other relief as consequential relief to the main relief namely, setting aside the EC. The cause for the setting aside the EC is independent and separate, that too on different grounds. The other reliefs added to the main relief, at no stretch of imagination, can be consequential to the main relief. They are separate and independent which have to be sought for on a different and separate cause of action.

90) Rule 14 of the NGT (Practise and Procedure) Rules, 2011 reads as follows:

> *"Rule 14, Plural remedies "An application/appeal as the case may be shall be based upon a single cause of action and may seek one or more relief provided that they are consequential to one another".*

A reading of the above Rule will make it amply explicit that any application or appeals, as the opening words imply are distinct remedies under which a particular relief may be sought on a single cause of action. Thus, Rule 14 provides that the appeal/application must be filed on single cause of action. In other words, it cannot be filed on several causes of action and also an appeal cannot be filed with combined causes of action. Thus, the Appellant cannot club all causes of action applicable to appeal and application together and file a single proceeding as in the instant case.

91) It becomes necessary to look into the Doctrine of Sustainable Development, in view of the factual circumstances of the case as herein; the Hon'ble Bench of the Tribunal in the case of *M/s. Sterlite Industries Ltd.* v. *Tamil Nadu Pollution Control Board* (*Supra*), upon detailed consideration, held as under:

"136. XXX heavy onus lies upon the industrial unit or the developer to show by cogent and reliable evidence that it is non-polluting and non-hazardous or is not likely to have caused the accident complained of.

137. The view we are taking finds strength from the observations stated by the Supreme Court in its judgment in the case of Narmada Bachao Andolan v. Union of India (supra) where the Court, while referring to the case of Vellore Citizens' Welfare Forum v. Union of India (AIR 1996 SC 2715) and the report of the International Law Commission, held as under:

120. It appears to us that the 'precautionary principle' and the corresponding burden of proof on the person who wants to change the status quo will ordinarily apply in a case of polluting or other project or industry where the extent of damage likely to be inflicted is not known. When there is a state of uncertainty due to lack of data or material about the extent of damage or pollution likely to be caused then, in order to maintain the ecology balance, the burden of proof that the said balance will be maintained must necessarily be on the industry

or the unit which is likely to cause pollution. On the other hand where the effect on ecology or environment of setting up of an industry is known, what has to be seen is that if the environment is likely to suffer, then what imitative steps can be taken to offset the same. Merely because there will be a change is no reason to presume that there will be ecological disaster. It is when the effect of the project is known then the principle of sustainable development would come into play which will ensure that imitative steps are and can be taken to preserve the ecological balance. Sustainable development means what type or extent of development can take place which can be sustained by nature/ ecology with or without mitigation."

This Bench of the Tribunal has held in the case of *Leo F. Saldhana, Bangalore* v. *The Union of India and Others* 2014 ALL (I) NGT Reporter (3) (SZ) 48 has propounded the doctrine of sustainable Development as hereunder:

238.5 T.N.Godavarman Thirumulpad vs. *Union of India and others* reported in (2002) 10 SCC 606:

"25. Progress and pollution go together. As this Court observed in M.C. Mehta v. Union of India (1986) 2 SCC 176, when science and technology are increasingly employed in producing goods and services calculated to improve the quality of life, there is a certain element of hazard or risk inherent in the very use of science and technology and it is not possible to totally eliminate such hazard or risk altogether. We can only hope to reduce the element of hazard or risk to the community by taking all necessary steps for locating such industries in a manner which would pose least risk of danger to the community and maximizing safety requirements".

92) At the time of advancing the arguments the Learned Counsel for the 2nd Respondent proponent submitted that though, the EC was applied for by the 2nd Respondent and granted by the 1st Respondent in respect of:

i. Expansion of Trichloroethylene from 7200 MTPA to 15480 MPTA;

ii. Expansion of Poly Vinyl Chloride from 90,000 to 1, 50,000;

iii. Expansion of Captive Power Plant from 58.27 M.W to 108.27 M.W; and

iv) Construction of a new chlorinated Poly Vinyl Chloride Plant of 14,400 MTPA.

The 2nd Respondent intends to commence commercial activities of abovementioned Items (i) and (iv) only after obtaining CTO from the Board and in so far as Items (ii) and (iii) are concerned the commercial activities have to be commenced after some time and not at present. The Counsel for the Appellant would submit that the reason for the 2nd Respondent not intending to commence the commercial activities of Items (ii) and (iii) for which EC was also granted is not known. The Tribunal is of the considered view that after hearing the submission by both sides and scrutiny of all the materials available, EC dated 22.04.2014 is upheld as valid and hence the commencement of the commissioned activities by the 2nd Respondent at a later stage would not affect the validity of the EC in favour of the 2nd Respondent.

94) Considering the fact that the industrial unit of the 2nd Respondent, Project Proponent was established almost 6 decades ago in an era when virtually no environmental / pollution laws and regulations were under existence in this country, and bringing in new enactments and enforcement of Environmental / Pollution laws only in the past 4 decades beginning with Water Act,1974 and also considering the nature of the industry, that the Mercury cell technology was the only choice left which subsequently became obsolete because of the advancement in technology, the whole issue requires a holistic approach and to be looked in a

broader prospective. Further, after an elaborate exercise undertaken by the Project Proponent and after a thorough scrutiny and site inspections, the proposal was recommended by the EAC for granting the EC. Moreover, as there is a substantial compliance of the conditions imposed in the EC granted earlier for the existing units of the Project Proponent and suitable steps were taken to mitigate the pollution, we arrive at a conclusion and do not agree with the contentions of the Appellant that there are strong grounds of non–compliance of the safeguards provided under the Environment (Protection) Act, 1986 and procedure prescribed under the EIA Notification, 2006 and therefore, the entire process of granting the impugned EC is vitiated, warranting it to be set aside.

95) In view of the discussions made, the Tribunal is unable to notice any ground/reason to set aside the EC dated 24.02.2014 granted in favour of the 2nd Respondent by the 1st Respondent. Hence, the appeal stands as dismissed. It is also made clear that the Appellant association is at liberty to initiate necessary proceedings for appropriate reliefs whenever there is any violation of conditions attached to the EC by the 2nd Respondent.

(Justice M. Chockalingam)
Judicial Member

(Shri. P. S. Rao)
Expert Member

Chennai.
15th February, 2016.