

BEFORE THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI

Appeal Nos.66 & 67 of 2015 & 44 & 45 of 2016 (SZ)

In the matter of

**Appeal Nos.66 & 67 of 2015**

The Corporation of Coimbatore

Rep. by its Commissioner

Coimbatore -1



.. Appellant

Vs

1.The Appellate Authority

Tamil Nadu Pollution Control Board

Purasaiwalkkam, Chennai – 84

2. Parsn Senior Citizen's Group

Rep. by R.N Sesha

Coimbatore

3. The Tamil Nadu Pollution Control Board

Rep. by its Chairman, Chennai – 32

4. The District Environmental Engineer

Tamil Nadu Pollution Control Board

Coimbatore

5. Mayflower Shakthi Garden Owners' Association

Coimbatore, rep. by its President

.. Respondents

**Appeal Nos.44 & 45 of 2016**

Parson Senior Citizen's Group

Rep. by M. R. Narayanamoorthy

Coimbatore

.. Appellant

Vs.

1. The Tamil Nadu Pollution Control Board

Rep. by its Chairman, Chennai – 32

2. The District Environmental Engineer

Tamil Nadu Pollution Control Board

Coimbatore

3. The Corporation of Coimbatore

Rep. by its Commissioner

Coimbatore

4. Mayflower Shakthi Garden Owners Association

Coimbatore, rep. by its President

5. The Appellate Authority

Tamil Nadu Pollution Control Board

Purasaiwalkkam, Chennai – 84

.. Respondents

Mr. Yashod Varadhan, Senior Counsel for

M/s. R. Sivakumar, S. Suresh .. For appellant in Appeal Nos.

Vinoth Raja &amp; J. Kishore .. 66 &amp; 67 of 2015 and R3 in

N. Janani

Appeal Nos.44 &amp; 45 of 2016

Mr. T. Mohan for

M/s. A. Yogeshwaran, Neha Miriam Kurian

Masitreya Candasamy Sharma .. For R2 in Appeal Nos.66 &amp; 67/2015

for appellant in Appeal. Nos.44 & 45  
of 2016

Mrs. Yasmeeen Ali

.. For R3 & R4 in Appeal Nos.66 & 67  
2015 for R1 & R2 in Appeal Nos.44 & 45  
of 2016

M/s. Satish Parasaran,

Rahul Balaji, R. Parthasarathy

Madhan Babu & Vishnu Mohan .. For R5 in Appeal Nos.66 & 67/2015

For R4 in Appeal Nos.44 & 45/2016

ORDER

Present

Hon'ble Shri Justice Dr.P.Jyothimani, Judicial Member

Hon'ble Shri P.S.Rao, Expert Member

Delivered by Justice Dr. P. Jyothimani 24<sup>th</sup> April, 2017

Whether judgment is allowed to be published on the Internet .. Yes/No

Whether judgment is to be published in the All India NGT Reporter .. Yes/No

These appeals are directed against the order of the learned Appellate Authority passed under the Air (Prevention & Control of Pollution) Act, 1981 (Air Act) and Water (Prevention & Control of Pollution) Act, 1974 (Water Act) setting aside the order of the Tamil Nadu Pollution Control Board (TNPCB/Board) dated 25.10.2012. The learned Appellate Authority, apart from setting aside the order of the Board, has also directed that it would be safer for the Coimbatore Corporation to obtain Environmental Clearance (EC) to establish Sewage Treatment Plant (STP). While the Corporation of Coimbatore has filed Appeal No.66 and 67 of 2015 against the order of the learned Appellate Authority, the appellant before the learned Appellate Authority viz., Parsn Senior Citizens Group has filed Appeal Nos.44 and 45 of 2016 challenging the observation made by the

learned Appellate Authority that the Corporation should obtain EC for establishing STP.

2. For the purpose of creating an underground drainage system under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) funded by the Ministry of Urban Development, Government of India, the Coimbatore Corporation submitted a Detailed Project Report (DPR) which was approved by the Central Sanctioning and Monitoring Committee in the year 2007 and as per the said scheme the underground drainage system in the City of Coimbatore is to be executed in six packages and the construction of STP at Ukkadam, Nanjundapuram and Ondipudur are concerning the said scheme.

3. As per the DPR, the STP at Ukkadam is to treat 169 MLD of sewage as per the population projection done for City Development Plan (CDP) and it was a combined STP at Ukkadam and other conventional STPs at Vellalore. The said project in Ukkadam has been commissioned from 7.2.2011 and the other STP proposed in Ondipudur is in progress. In these appeals, the issue is relating to the proposed establishment of STP at Nanjundapuram site comprised in Survey No.655, Uppilipalayam Village governed in Zone III and VII and a total 39.78 MLD of sewage is expected to be treated for the prospective design year and 45.2 MLD for ultimate. The process of treatment proposed is Cyclic Activated Sludge Process (CASP) in 6.2 acres of Corporation land. As per the DPR the existing sump and pump house are of the size 7.5 m and 8 m dia respectively, whereas the proposed wet well for STP is 15 m dia. At present the sewage is being collected at the existing sump and pump house and any hindrance during construction may disturb process of collecting and pumping sewage

to Vellalore and therefore the existing unit is proposed to be converted in to new STP and after commissioning of the new STP the existing structures are proposed to be abandoned. The Corporation of Coimbatore has started work in 2008 without obtaining 'consent' to establish' from the Board.

4. The residents of Mayflower Sakthi Garden Owners' Association, the 5<sup>th</sup> respondent in Appeal Nos.66 & 67 of 2015 whose houses are situated adjacent to the proposed STP, have approached the High Court of Madras by filing W.P.No.6800 of 2009 against the proposed STP construction. The said writ petition was for a direction against the Municipal Corporation of Coimbatore not to proceed with the proposed sewage treatment plant at Survey No.655, Uppilipalayam Village, Nanjundapuram, Coimbatore stated to be situated in the immediate vicinity of the said residential colony and for a direction not to proceed with any construction activity. The said writ petition was filed in March, 2009. The grounds raised were that by virtue of the proposed STP infectious diseases are likely to be spread and there will be bad odour affecting the residents of the said colony etc. As the proposal was attempted to be proceeded without obtaining 'consent', the Board through its District Environmental Engineer has issued show-cause notice dated 18.4.2009 after which the Corporation has submitted an application for 'consent to establish' on 22.4.2009 to the Board. On inspection, the Board found that the STP was not meeting the guidelines issued by the Board and therefore directed the Corporation to find out an alternate site.

5. During the pendency of the above said writ petition, the Board has constituted a committee consisting of the Director of Centre for

Environmental Studies, Anna University, Chennai, the Joint Chief Environmental Engineer, TNPCB, Chennai, the District Environmental Engineer, TNPCB, Sriperumbudur, the District Environmental Engineer, TNPCB, Coimbatore and the Superintending Engineer, Chennai Metro Water Supply and Sewerage Board (CMWSSB), Chennai and the committee has submitted a report to the High court in the above writ petition. The High Court, having not satisfied with the report of the committee, directed the said committee to make a spot inspection of the proposed STP at Nanjundapuram and submit a report with regard to the following:

- i. Whether the construction of the proposed STP at Nanjundapuram, Coimbatore will affect the existing structures put up by the petitioners and other buildings situated near the proposed site. If a minimum distance is required to be made for construction of the proposed STP from the existing buildings/ structures, taking into consideration the scientific requirement, it may propose the minimum distance.*
- ii. Whether the proposed STP at Nanjundapuram, Coimbatore District will cause ground water pollution in the neighbouring area, particularly, the area in which the existing buildings are situated.*
- iii. Whether the proposed STP will cause noise pollution affecting the residents of the nearby area.*
- iv. Whether any hazardous waste will be treated in the proposed STP and if so, whether that will cause health hazard to the residents of the neighbouring area; and*
- v. Whether the non-construction of the proposed STP at Nanjundapuram, Coimbatore District will cause more pollution in the area in question particularly with regard to ground water level, air pollution and sound pollution.*

6. The High Court, in the said order dated 6.10.2009, having referred the matter to the committee, as stated above, has directed the committee to submit a copy of the report before the High Court with an option to the Board to go through the report and may accept the Report in totality or with variation and pass appropriate orders on the application filed for 'consent to establish' by the Coimbatore Municipality. By a subsequent final order passed on 8.2.2010 after receiving the report of the committee, as stated above the High Court has disposed the writ petition with a direction to the Board to hear the parties and pass appropriate orders in accordance with law relating to the application filed by the Board for 'consent'.

7. The Board, in its proceedings dated 13.11.2010 has returned the application filed by the Corporation for 'consent' dated 22.4.2010 pointing out certain defects directing the Corporation to conduct study from the stand point of the existing site being used for the STP and submit a revised DPR, layout, design, estimates etc relevant to the project site. The Board has also directed the Corporation to take care while revising the design to achieve greater buffer zone and economy in the use of land by revised design duly considering the circular format suggested by it. It also directed a reclassification order for the land in question to be annexed with the new application. The Board also found that the Corporation is yet to file its application under Air Act and Water Act and directed to file fresh application in Form – I and Form – II clearly specifying an integrated plan for dealing with the treated effluent consistent with the latest DPR with the changes in layout and special conditions suggested by it. Accordingly, the Corporation has submitted its revised application on 27.3.2011.

8. In the meantime, the Mayflower Sakthi Garden Owners' Association, the 5<sup>th</sup> respondent in Appeal Nos.66 and 67 of 2015 has again approached the High Court of Madras by filing W.P.No.3561 2011 challenging the above said order of the Board dated 13.11.2010, in so far as it relates to the direction given by the Board to the Corporation of Coimbatore to resubmit the application for 'consent' under Water and Air Act as stated above. The said writ petition was transferred to this Tribunal and numbered as Application No.34 of 2013. The said application came to be dismissed by this Tribunal in the order dated 12.2.2014 with liberty to the applicant viz., Mayflower Sakthi Garden Owners' Association to approach the Appellate Authority to implead as party in Appeal Nos.32 and 33 of 2013 pending before the learned Appellate Authority. The said appeals were filed by Parsn Senior Citizen Group before the learned Appellate Authority, the 2<sup>nd</sup> respondent in Appeal Nos.66 and 67 of 2015 and the appellant in Appeal Nos.44 and 45 of 2016. Accordingly, on the application filed by the Mayflower Sakthi Garden Owners Association for impleading, the said Association got impleaded in Appeal Nos.32 and 33 of 2013.

9. In the mean while, the Corporation of Coimbatore has submitted a revised application dated 27.3.2011 as per the proceedings of the Board dated 13.11.2010 opting for the third option as per the proceeding of the Board dated 13.11.2010. In the said proceeding dated 13.11.2010 the Board has referred to the suggestion made by the IIT, Madras for three options viz.,

- Option No.1 Circular layout C-Tech basin located central in the site
- Option No.2. Relocating two of the C-Tech basins while retaining the other two in their current location
- Option No.3. Retaining of the four basins as already constructed

and for creation of green belt

10. The said application was again returned by the Board with liberty to the Corporation to reconstitute revised layout as per Option No.2 suggested by IIT, Madras, as stated above. Accordingly, it is seen that the Corporation has resubmitted a revised application on 21.4.2012 and the Board after placing the application before the Technical Sub Committee has granted 'consent to establish' on 25.10.2012 both under Water Act and Air Act with various conditions. That order was challenged by the appellant in Appeal Nos.32 and 33 of 2013 viz., Parsn Senior Citizens Group before the learned Appellate Authority. It is also relevant to note at this juncture that another writ petition filed by Mayflower Shakthi Garden Owners' Association before the High Court in W.P.No.6695 of 2010 challenging the construction activities of the proposed STP at Nanjundapuram came to be dismissed by the High Court as infructuous in the order dated 15.11.2010 by recording the submission made by the learned counsel appearing for the Board that the Board has already passed order on 13.11.2010 as stated above. It is also relevant to note that the said Mayflower Shakthi Garden Owners' Association filed another writ petition in W.P.No.12176 of 2014 challenging the proceedings before this Tribunal which was pending in Application No.34 of 2013 and the said writ petition came to be dismissed on 5.8.2014 granting liberty to the petitioner to move the Appellate Authority in Appeal Nos.32 and 33 of 2013.

11. It was the contention of the appellant as well as the 4<sup>th</sup> respondent in Appeal Nos.32 and 33 of 2013 viz., Mayflower Shakthi Garden Owners Association that the 'consent' order to establish STP at Nanjundapuram dated 25.10.2012, has been granted by the Board without considering the welfare of the residents in the area especially when the area is a mixed

residential zone and STP is a 'red' category industry. Further, it was contended that the guidelines of the Board that there shall be minimum 500 m distance between STP and notified inhabitation area and that 100 m shall be No Development Zone (NDZ) around STP, have been violated by the Board, while the siting criteria have been followed in respect of STP at Ondipudur. It was also the case of the appellant that the aeration tank situated at a distance of 35 m from the residential houses would emanate foul smell as there is no space to develop buffer zone or greenbelt. It was also pointed out that in respect of STP at Ukkadam similar condition was imposed by the Board against the same Corporation. It was the further case of the Residents' Association that the Corporation of Coimbatore has not obtained EC under the EIA Notification, 2006. The order of this Tribunal in its Principal Bench passed in KEHAR SINGH VS. STATE OF HARYANA (Application No.124 of 2013 dated 12.9.2013) was relied upon.

12. This was countered by the Corporation before the learned Appellate Authority stating that the STP site was functioning from the year 1982 wherein ponds were created for storing raw sewage by the Corporation which was the then Municipality and subsequently pumping station was established by the Corporation to remove the sewage from the land by pumping to Vellalore sewage farm and therefore the STP at Nanjundapuram is only a conversion of already existing lagoons. The Corporation had chosen to utilise the Scheme under JNNURUM by framing City Development Plan and submitted a DPR and enormous amount has been spent in respect of the said preparation. It was also the case of the Corporation before the learned Appellate Authority that the distance criteria 500 m need not be enforced since the STP modulated at Nanjundapuram is based on the latest scientific method of C – Tech process which is an

improved version of sequential batch reactor. A similar process at Navi Mumbai was introduced and the project site is situated within 2 m distance from the residential complex. It was further contended by the Corporation that as per the Board, domestic sewage is not hazardous substance and the proposed STP is dealing with the treatment of domestic sewage and the IIT, Chennai has given an opinion stating that the STP does not affect the proposed development of the nearby existing structures. It was also referred that IIT has made a thorough study and given three options and by providing greenbelt there will be a minimum impact on the residential area situated adjacent. It was also the case of the Corporation before the learned Appellate Authority that steps for minimising of noise due to the proposed project has been taken care by installing acoustic measures. It was also the specific case of the Corporation that the STP does not require EC since it does not fall either under 'A' or 'B' category in the schedule to EIA Notification, 2006 and it is excluded from the classification of hazardous waste. It was the case of the Board before the learned Appellate Authority that the 'consent' was given on 25.10.2012 with various conditions which are intended to minimise pollution from all angles.

13. After considering the case of the parties before it, the learned Appellate Authority framed the following points for consideration:

1. *"The residential area and the buildings of the local residents being very close to the proposed STP whether the TNPCB is justified in granting consent violating its own guideline of atleast 500 metres distance from a notified habituated area.*
2. *Whether the TNPCB is really satisfied that the new developed technology would prevent air and noise pollution while inhabitants are close to the proposed STP at a distance of 5 mts to 100 mts and the conditions imposed in the consent order are suffice to have a check on that aspect.*

3. *Whether the TNPCB is justified in granting consent to establish STP being red category in an area which is not classified as industrial area especially a condition being imposed for resubmitting the application so as to annexe the reclassification of land use.*
4. *Whether Environmental Clearance certificate is necessary for establishing STP at Nanjundapuram*
5. *Whether the order of TNPCB granting consent could be sustained on considering the welfare of the inhabitants in the locality.”*

14. In respect of the 1<sup>st</sup> point regarding siting criteria that the Board should have followed 500 m distance prescribed by it, the learned Appellate Authority has considered that the proposed STP at Nanjundapuram is situated very near to the residential colony and in any event within 500 m of distance and there are parks, schools and temples stated to be not denied by the Board. It was also found as stated in the impugned order of the learned Appellate Authority, that compound wall of one of the residential colony is at a distance of less than 10 m from the site of STP and the location of aeration tank even after relocation will be at a distance of 35 m. The learned Appellate Authority has placed reliance on the report of the Sub-Committee of Coimbatore Zone dated 19.5.2009 to the effect that even though advanced technology of treatment like Sequential Batch Reactor (Aerobic System) is proposed, any upset condition can lead STP to septic conditions with emanation of Hydrogen Sulphide, Methane etc., and it will affect the residences in the immediate vicinity. The learned Appellate Authority having noted that another Committee constituted by the Board has visited STP functioning at Navi Mumbai and recommended the STP at Nanjundapuram with additional safeguards and that the Board is convinced of the C – Tech Technology which can be situated very close to residential colony and having held that the guidelines of the Board can be relaxed in cases of compelling

necessity, has arrived at a conclusion that it is not possible to accept that the C – Tech Technology would not cause any air pollution to the residents who are living very adjacent to the site. The learned Appellate Authority opined that the Board has passed the order of 'consent' being influenced by the fact that the corporation has spent enormous amount of money towards civil works and on procuring machinery for setting up of STP. It was also the view of the learned Appellate Authority that a minimum of 33 m of the open space, green cover is not possible by considering the open space available as it is seen in the 'consent' order. That apart, there is no guarantee of controlling noise pollution since the extent of noise level may be high to the residents who are residing very nearer to the site. Accordingly, Point Nos.1, 2 and 3 were answered in favour of the residents.

15. Regarding the next aspect of the category of STP it was found that the Board has made STP a 'red' category industry in B.P.Ms.No.34 dated 5.10.2012 and the Corporation has not yet submitted the reclassification certificate. The absence of such reclassification from the mixed residential area itself is sufficient to set aside the order of the Board in granting 'consent to establish'. The learned Appellate Authority has rejected the contention of the Corporation that as per the Town and Country Planning Act, 1974 and the Rules made thereunder the group developments and multi storied buildings must have Sewage Treatment Plant within the premises stating that such STP of the multi storied building cannot be compared to the present STP which is a large scale unit to be installed in the open area and therefore holding that this being 'red' category activity, 'consent' cannot be granted in a mixed residential zone.

16. While dealing with the next point of requirement of EC for STP, the learned Appellate Authority has extensively reproduced various paragraphs of the judgment of the NGT, Principal Bench in *Kehar Singh's* case and having opined that unless it is made sure that STP is to treat only domestic sewage, as per the decision of NGT, Principal Bench, EC is necessary. It was also held that it cannot be reaffirmed that the proposed STP will treat only domestic sewage and therefore it is left open to the Corporation to be on the safer side to obtain EC for the establishment of STP. By arriving at such a conclusion, the learned Appellate Authority has allowed the appeals and set aside the 'consent' order granted by the Board to establish STP by the Corporation at Nanjundapuram in the order dated 25.10.2012

16. It is as against the said decision of the learned Appellate Authority, the Corporation of Coimbatore has filed appeal Nos.66 and 67 of 2015 and in so far as it relates to the observations made by the learned Appellate Authority that it is safer for the Corporation to obtain EC for STP at Nanjundapuram, the appellant in Appeal Nos.32 and 33 of 2013 viz., Parsn Senior Citizens Group have filed Appeal Nos.44 and 45 of 2016, as stated above.

17. Mr. Yashod Varadhan, learned Senior Counsel appearing for the Corporation of Coimbatore has made his elaborate submission on various issues dealt with by the learned Appellate Authority in the order impugned before this Tribunal, with particular reference to the siting criteria. It is his submission that the domestic wastes are not hazardous in nature, in fact the committee constituted by the High Court has specifically recommended that the Board may review the distance criteria guideline adopted for the construction of STP based on the emerging advancement in treatment

technology on case to case basis. Therefore, according to the learned Senior Counsel, the Appellate Authority ought to have considered the revised DPR in its proper perspective before arriving at the conclusion in the impugned order. According to the learned Senior Counsel, the Appellate Authority has committed grave error in making adhoc decision and finding without any basis especially when the reports clearly indicate about the availability of the latest scientific method for STP. He also pointed out that in fact the Board has granted 'consent' only after considering thoroughly the Expert Opinion given by various agencies including the IIT, Madras. It is his contention that the STP as per the classification of the Board was originally 'orange' category and it became 'red' category only few days before the 'consent' order came to be passed. He also would submit that the judgment of the Principal Bench in *Kehar Singh's* case relates to the factual situation wherein there was a categorical finding that it was a open sewage system and industrial effluents have been mixed in the said system and it was in those circumstances the open sewage system was considered by the Principal Bench as Effluent Treatment Plant (ETP) rather than STP which requires EC as per the EIA Notification, 2006.

18. However, on the factual matrix of this case, it is clear that the proposed project is a closed pipeline and not open sewage treatment plant and the Corporation has made a categoric statement that the sewage pipe system will deal with only domestic and no industrial effluent will be permitted to join at any point of time and therefore it is not proper for the learned Appellate Authority to arrive at a conclusion that the STP requires EC. There is no reason for any one to conclude that what is proposed is ETP. When the facts are very clear that the Corporation has been dealing

with the domestic sewage throughout from 1983 and the present plant is only in continuation of the same as Sewage Treatment Plant and therefore according to him, the project does not require EC and the conclusion arrived at by the learned Appellate Authority that it is safe for the Corporation to go for EC is absolutely unwarranted and liable to be set aside.

19. It is the contention of Mr. T. Mohan, learned counsel appearing for the appellant in Appeal Nos.44 and 45 of 2016 that when admittedly the area is a mixed residential zone with noise pollution the STP which is a 'red' category industry, is not permissible and the Board by granting 'consent to establish' has failed to consider the same and according to the learned counsel this has been correctly taken note of by the learned Appellate Authority. He has also referred to the finding of some of the committees appointed by the Board where the Board has taken a clear stand that the Corporation should consider an alternate area, since the present proposed area at Nanjundapuram is not suitable. His submission is that such 'red' category unit may be permissible in industrial area and not in the residential area as such. It is also his submission that the learned Appellate Authority has correctly concluded that there is no relaxation of guidelines and there is no justification for the same as provided by the Board. According to him, the guidelines regarding siting viz., 500 m away from the public utility area has to be applied and for giving up the said requirement there is no proper reasoning at all and this aspect has been correctly assessed by the learned Appellate Authority. The Inspection Report filed by the Board clearly shows that the Mayflower Apartment is located 0.013 KM while Parsn Senior Citizens Group is located in 0.045 KM and this is not denied by the Corporation. The 'consent' granted by the

Board has not addressed the issue of noise pollution and that has been clearly discussed by the learned Appellate Authority. In the mixed residential zone the cottage industrial units using 5 HP motor alone can be permitted while the proposed STP is having connected load of 2230 HP with a standby power of 710 HP as per the RTI information disclosed and therefore it is beyond the maximum permissible quantum. Even as per the Government Order dated 24.7.1974 STP should not be permitted to be located in the mixed residential zone and in the absence of any reclassification of land and till date when it remains a mixed residential zone, there is no question of installation of STP in the said place and there is no infirmity and the Corporation has also not shown any infirmity in the order of the learned Appellate Authority. The term 'environment' includes hygiene and it has linkage with Article 21 of the Constitution of India and there is a constitutional imperative on the part of Corporation to take adequate measures and protect and improve both man made and natural environment and prevent environmental disaster.

20. In so far as it relates to the requirement of EC for the STP, Mr. T. Mohan would heavily rely upon the judgment of the Principal Bench in *Kehar Singh's* case. According to him, the observations made by the Principal Bench is squarely applicable to the facts and circumstances of this case. Mere undertaking given by the Corporation that it will not allow any trade effluent does not mean that there is no possibility of trade effluent being mixed with the domestic sewage and therefore on the factual matrix one cannot lightly differentiate between them and the issue has already been dealt with by the Principal Bench in *Kehar Singh's* case. However, Mr.T. Mohan would submit that the observations of the Appellate Authority in stating that on the safer side the Corporation can obtain EC is

misconceived and totally unwarranted and that is the reason why the Residents' Association has filed the appeal. He has also relied upon another order of the NGT passed by Southern Zone Bench in A. GOTHANDARAMAN V. THE COMMISSIONER, NAGERCOIL MUNICIPALITY & OTHERS (Application Nos.173 & 175 of 2013) and according to the learned counsel, the Bench has clearly found that to prevent environmental degradation and improvement to its quality, it is necessary to get EC for the projects at the beginning stage itself and not to wait till the conditions deteriorate.

21. Mr. Madhan Babu, learned counsel appearing for the 5<sup>th</sup> respondent in Appeal Nos.66 & 67 of 2015 viz., Mayflower Shakthi Garden Owners' Association relied upon list of events submitted by him and stated that even historically when referring to DPR, one can understand that domestic sewage proposed by the Corporation has a tendency of being mixed with industrial effluents. In any event, according to the learned counsel, there was no Environmental Impact Assessment (EIA) done and in the writ petition filed by the Association, an Expert Committee was constituted wherein the committee has clearly held that proposed STP cannot be permitted in the area. According to the learned counsel, the area proposed by the Corporation for STP is situated adjacent to residences in existence which is 10 feet away from the proposed site and therefore as per the guidelines issued by the Board the site is not qualified for setting up of the STP. The learned counsel also submits that in respect of two other viz., Ukkadam and Ondipudur when siting criteria have been followed there is no reason to give up the same for the Nanjundapuram STP also and that discrimination is not only arbitrary but it affects the residents living in the area. The DPR submitted is contrary to City

Development Plan. The learned counsel also would dispute the distance shown in respect of the residential apartment in Navi Mumbai and according to him in that case wherein the inspection was made by the Board, the distance was far away. He would also submit that in the absence of public hearing before granting such consent it affects the principles of natural justice and to substantiate his contention he would rely upon the judgment of the Supreme Court reported in CHAIRMAN, INDORE VIKAS PRADHIKARAN VS PUNE INDUSTRIAL COKE & CHEMICALS LTD (2007) 8 SCC 705. He submits that EIA clearance is mandatory as per the EIA Notification, 2006. That apart, it is his submission that there is no scope of creating green belt area as required mandatorily in the statute.

DISCUSSION & CONCLUSION:

22. We have heard the learned counsel appearing for the parties, referred to all the documents filed apart from referring to the impugned order of the learned Appellate Authority and given our anxious thought to the points involved in this case. The point to be decided is as to whether the order of the Appellate Authority which is questioned, is sustainable in law in respect of various points raised by the learned Appellate Authority in the impugned order dated 25.8.2015.

23. Before advertng to the issue relating to citing criteria of the present disputed place at Nanjundapuram, it is relevant to extract some of the historical backgrounds as elicited in the DPR submitted by the Coimbatore City Municipal Corporation for Comprehensive Underground Sewage Scheme under JNNURM in May, 2007. The Coimbatore Municipal Corporation is spread over an area of 105.60 Sq.Km and is one of the industrial cities in South India with prominently attached to industry, textiles

and educational growth. The Coimbatore Municipal Town was constituted in 1866 with an area of 10.88 sq.km and after upgradation as Corporation from the erstwhile Special Grade Municipality status in the year 1981, the present extent has become 105.60 sq.km. The population of Coimbatore as per 2001 Census stood as 9.13 Lakhs. The proposed population projection in the Coimbatore City for 2010 was 10,75,000 and in 2025 it is anticipated as 13,40,000 and in 2040 it would be 16,55,000 which will be the ultimate year for the purpose of infrastructure design criteria. The existing underground sewage system in Coimbatore City covers three zones.

Zone – I which is in the heart of the City covering five blocks and the sewage from the said blocks flows through five main sewers and ends up in the treatment works at Ukkadam which was commissioned in 1954. For treating 4,454 MGD sewage the area required is worked out at 178 acres. Since 114 acres is available only part of the sewage can be used for sewage farm and the balance is sent to Vellalore along with sewage from Zone – II.

Zone – II are the Corporation limits in North and West and the total quantity of sewage generated in the zone is about 8.31 MLD at the intermediate stage and 13.62 MLD at the ultimate stage. The sewage collected in this zone is conveyed to Ukkadam Sewage Farm and rest of the sewage after treatment is diverted to Vellalore along with sewage from zone – I for treatment and disposal.

Zone – III: This is an underground sewage system recently commissioned designed for 10,000 MLD for intermediate stage and 23,835 MLD at the ultimate stage. At a length of 70 KM of sewer network of size

varying from 150 mm dia to 1050 mm dia have been laid and 16,791 houses in the zone are connected for service. The entire domestic sewage from this zone is collected through branch and main sewers and conveyed to Nanjundapuram pumping station for pre-treatment and from there the pre-treated sewage will be pumped to Vellalore Treatment Plant.

24. Due to rapid urban development, the sewage system in Coimbatore has become overloaded and the existing system is not adequate to carry out the entire quantity of sewage especially due to the problem associated with carrying capacity of sewer, expiry of life of pipeline collection system and inadequate provisions for treating the sewage at Ukkadam and this has resulted in making suitable rectification in the existing sewage system, particularly relating to the replacing of collection network and modernisation of treatment system. Under the DPR prepared in 2007, in order to achieve the above said object, a comprehensive sewage scheme is provided including the area which is already covered with the sewerage. Under the said scheme, the entire Coimbatore Municipal Corporation is divided into eight sewerage zones depending upon the ground slopes and natural barriers. The City is having a gentle slope from North West end to the South East end and the Noyyal river forms the southern boundary of the land. Therefore the sewage treatment plants are proposed on the southern part of the City since the disposal of effluents after treatment can be made into the Noyyal river.

25. The overall view of the above said proposals show that the present sewage collection is through a network where sewerage system already exists (Zones 1, 2 and 3) and through open drainage system in uncovered areas. The present system of disposal is by way of sewage farms after

treatment where sewerage exists (Zone 1, 2 and 3) and directly into the natural lake in uncovered area. Further, the treatment of industrial waste must be dealt with, with a direction to the industries to have their own treatment facility. The STP land available in Ukkadam is 115 acres, in Nanjundapuram 6.2 acres and at Ondipudur 21 acres being acquired and the total cost of the project is Rs.377.13 Crores.

26. The City Development Plan (CDP) for Coimbatore has provided for refurbishing the existing Underground Drainage (UGD) system in covered area and providing new network for the uncovered area. Since the STP proposed in Ukkadam was not in conformity with the advanced process of treatment, the DPR under JNNURM proposed to provide for another STP at the Eastern boundary of the City on Trichy Road which may involve land acquisition and compared to high pumping involved in alternate proposal, the second STP at Trichy Road was found to be beneficial and eco-friendly. Apart from the land available in Ukkadam and to be acquired in Ondipudur, the land available at Nanjundapuram which is the subject matter of the issue in these appeals, measures about 6.20 acres which is presently being used for the sewage pumping station to pump the sewage collected from Zone – III to the point at Vellalore. The said site is now proposed to locate STP for treating 39.78 MLD sewage from Zone III and VII. Therefore, it is clear that at Nanjundapuram site sewage pumping station dealing with the sewage collected from Zone III is already functioning. The advantages of the scheme in the proposed DPR as stated are:

*“Since the entire 105.60 square kilometres area has been divided into 8 zones, the scheme can be implemented piecemeal in accordance with the available budgets. Functionality of one zone does not affect any other zone.*

- *Provision is made in the design to take care to integrate the entire net work into one comprehensive scheme.*
- *The scheme does not envisage disposal of the treated effluent on the downstream side, thereby eliminating interference with the downstream designs and O/M procedures.*
- *It is proposed to utilize the treated effluent for recreational purposes and for maintenance of green belts in the municipal area.*
- *The provision of three treatment plants, will minimize the cost of pumping and supports the natural gradient of the terrain.*
- *Ground Water contamination due to leaking pipelines will be minimized as the conveyance distance of sewage is reduced due to decentralized collection and treatment facilities.*
- *The treated effluent can be used for usage for Horticultural purposes and the balance only will be let into Noyyal River in a safe condition so that the downstream portions of the river does not get affected.*
- *Quality control will be easier.*
- *Problems encountered at a particular plant will not hamper the performance of the other plants. Problems arising due to non-functional STPs will be localized.*

27. Regarding the design methodology and design constants, the basic consideration for drawing conceptual plan, formulation of norms as per DPR are:

- *“A design period of 30 years from 2010 to 2040 for the sewerage system is adopted for implementation during the design period.*
- *As per capita sewage generated in the sewerage system is adopted as 124 lpcd (80% of 155 lpcd).*
- *The sewerage system is essentially a separate sewer system for DWF. Ground water infiltration is also inclusive in the sewage generation calculations*
- *The proposed system is easy and efficiently functional.*

- *The trunk sewers of the network would pass through minimum number of physical barriers like railway track, high embankment, streams etc., if any.*
- *The most economic and feasible layout of sewerage system is developed out of several alternatives.*
- *Total project is divided into 8 contributory sewerage zones delineated primarily on the basis of physical and topographical features.*
- *The proposed layout is designed to involve minimum depth of excavation, optimum diameter of sewers adequate number of appurtenances, minimum number of sewage pumping stations and rising mains, and STPs located at suitable site with appropriate process and mode of treated effluent and sludge disposal.*
- *Treated effluent would be reused for irrigation, horticulture or for other recycling purposes in general. Excess sludge would be sold as manure or lands fill.*
- *No allowance in sewerage system design is provided for illicit connections and entrance of DWF into sewerage system as the same quantity can be accommodated within the extra capacity available in system.*
- *Capacities of proposed STPs are fixed to suit phased development.”*

28. The project as per the DPR is a complete treatment plant of 50 MLD capacity based on Cyclic Activated Sludge Process (CASP) including pre-treatment units, aeration basins, chlorination basin and sludge handling and dewatering system which require an area of 9 acres, which is less than 50% of the area for a STP based on UASB or any other treatment process of a similar capacity. The DPR has also comparative list of cyclic activated sludge technology vis-a-vis the other conventional sewage treatment technologies like aerated lagoons, conventional activated sludge process which shows that Cyclic Activated Technology is environmental friendly which can be implemented with a very low power consumption and it is a worldwide recognised technology since 1970 and the largest single plant of 400 MLD in the world is located in Malaysia.

29. As stated above, the DPR, while dealing with the proposal regarding 40 MLD – CASP - STP at Nanjundauram states that STP governs Zone Nos.III and VII with a capacity of 39.78 MLD of sewage for the prospective design year and 45.2 MLD for the ultimate and the process of treatment proposed at this location is CASP in 6.2 acres of Corporation area. Apart from the project cost, the DPR analyses various aspects of Project Institution Framework, Project Financial Structuring, Project Financial Viability and Sustainability, Project Benefit Assessment etc.

30. Admittedly the Board has framed siting criteria guidelines for STP. The approved guidelines of the Board are as follows:

*“Sewage Treatment Plant siting criteria –Guidelines*

1. *The STP site should be at least 250 meters away from any lake or pond preferably in the down stream side of lake or pond so that the sewage shall not reach the water bodies.*
2. *The STP site should be located more than at least 250 meters away from river or stream and shall ensure that the treated / untreated sewage should not reach the above water sources.*
3. *The STP site should be located at least 500 meters away from a notified habituated area and zone of 100 meters around STP site boundary should be declared as no-development zone so that green belt can be developed in that area.*
4. *The STP site should be at least 500 meters away from a public utility area such as park, temple, educational institution etc.*
5. *The site of STP should be selected on dry lands and the treated sewage shall be utilised on land for irrigation*
6. *The local body shall also ensure that the land availability and consent from the land owners for the disposal of treated sewage, which should be mentioned at the time of application for NOC itself.*
7. *In case of disposal of treated sewage into marine water bodies, the local body shall obtain CRZ clearance and this should be submitted along with NOC application.*

8. *The local body shall obtain appropriate land use certificate from DTCP for STP site.*
9. *The local body shall consider the treatment technology while selecting the site in respect of extent of land. Advanced treatment technology will require less footprint area in order to meet the inland surface water standards prescribed by the TNPCB.*
10. *A preliminary assessment of public /nearby residents opinion neighbouring the location of STP site is essential.*

31. It is the claim of the Parsn Senior Citizens Group that it has 300 residential houses and 10,000 people are residing within 500 m distance and the compound wall of the STP plant and Mayflower Shakthi Garden Owners' Association is stated to be less than 10 m from the site of STP and the open aeration tank of the proposed STP even after relocation will be only at a distance of 35 m. Therefore, the case of the residents is that the STP is within 100 m which is against the guidelines framed by the Board and therefore the Board ought not to have granted 'consent' for the project of the Corporation at Nanjundapuram. It appears that after filing of the writ petition in W.P.6800 of 2009 in the High Court, the District Environmental Engineer of the Board at Coimbatore has issued a show cause notice to the Corporation on 18.4.2009 and thereafter the Corporation has submitted an application for 'cosent to establish' on 22.4.2009. It is also not in dispute that the District Environmental Engineer, after inspection based on the proposal given by the Corporation has found that the site was not meeting the criteria/guidelines framed by the Board regarding installation of STP and therefore directed the Corporation to find out an alternate site. However, the Board appears to have constituted a Zonal Sub Committee to inspect the site for STP at Nanjundapuram in Uppilipalayam Village

consisting of the District Environmental Engineers of Coimbatore, Tiruppur and Erode to inspect the site and its surroundings along with the officials of the Corporation. During the visit, the Zonal Sub Committee has observed the following:

#### FIELD OBSERVATIONS

1. *“The STP area with an extent of 6.24 acres is bound by habitations in the North (Mayflower Apartments), a habitations in the West (Parsn Apartments) and in the Eastern Direction there are agricultural lands and in the South there is a graveyard and coconut grove.*
2. *The STP site is located in a notified residential area on the Ramanathapuram – Pothanur Main Road.*
3. *The site is presently utilised for pumping raw sewage of 13 mld from the collection well to Vellalore Village for treatment.*
4. *The STP site is located in a low lying area at about 700 meters from River Noyyal and 300 meters from Rajavaikkal (A tributary of River Noyyal).*
5. *40% of the Civil works have been completed in the STP and some mechanical equipments have arrived at site.*
6. *There is a defunct lagoon within the SP site previously utilised for storage and treatment of raw sewage.*
7. *The Lagoon is partly filled with excavated soil.*
8. *During inspection construction activities were stopped in order to comply with court direction.”*

32. After meeting the grievances of the residents of the apartments, the Sub Committee has given its view and recommendations which are as follows:

1. *“The existing STP site with mere pumping facility of raw sewage has already received lots of objection from the nearby public in the past. In spite of the above, Coimbatore Corporation has not obtained prior permission from TNPCB and also not conducted any public hearing for the installation of STP.*

2. *The Sequential Batch Reactors of STP are just less than 10 meters from the dwellings. (Mayflower Apartments), indicating poor lay out planning of STP Components.*
3. *Post disinfection of treated sewage is intended with Liquid Chlorine. The handling and safety of chlorine nearer to the residences is not properly addressed.*
4. *Even though advanced technology of treatment like Sequential Batch Reactors (Aerobic System) is proposed; any upset condition can lead in STP to septic conditions with the emanation of Hydrogen Sulphide, Methane, etc. and affect residences in the immediate vicinity.*

*At present the raw sewage collected at this site is pumped to Vellalore site. Also the Coimbatore Corporation has a proposal to pump the treated sewage from this site to Vellalore site. Instead of pumping the treated sewage, raw sewage can itself be pumped and treated as well at the Vellalore site, where the availability of land is sufficient to an extent of 400 acres in which the STP site can be ideally located with adequate buffer away from residential area.*

*In view of the above facts, the Committee recommends for the shifting of the proposed STP to Vellalore site owned by Coimbatore Corporation as the favourable option.”*

33. However, the Sub Committee felt that inspite of it if the Corporation is unable to find an alternate site for the installation of STP in the same area, the following measures for safe operation of STP and for lesser impact of surrounding environment to be recommended:

- a) *“Revised Layout planning and relocation of STP components with a minimum buffer zone of 30 meters in the Northern Side and 20 meters in the western side and plantation of tall growing trees in the Buffer Zone.*

- b) *Provision of Bio-Filters all along the boundary in the Northern and Western direction, for the control of odour (A Bio-barrier like Coir Pith with proper structural support in which suitable micro Organism as inoculum to be introduced to consume the odour causing organics as food in order to control odour nuisance).*
- c) *Post disinfection of treated sewage to be undertaken with UV Treatment /Ozonation and avoid Chlorination, in view of the proximity to residential area.*
- d) *To additionally install the Electromagnetic Flow meter at the Bye-pass arrangement for raw sewage.*
- e) *To obtain suitable Land use reclassification and permissibility Certificate from the DTCP for establishing sewage treatment plant.*
- f) *Notification of STP site and banning future residential development within 100 meter radius from the STP site.*
- g) *STP sludge to be removed on daily basis without any accumulation at site and the Corporation should enter into an agreement in consultation with Agricultural Department, Forest Department etc., for the beneficial use.*
- h) *All components of STP should have standby motors and pumps for operation during break down and the entire STP shall have an exclusive DG set of adequate Capacity for ensuring continuous operation of STP.*
- i) *To install Hydrogen Sulphide monitors with alarm at appropriate places in consultation with experts.*
- j) *To establish a Laboratory and monitor the treated sewage parameters on daily basis including heavy metals.*
- k) *To install Oil-Skimmer in the proposed STP so as to reduce the Oil and grease content in the treated sewage.*

34. In the mean time, it is seen that the Coimbatore Corporation has appointed another committee, consisting of Dr. A. Navaneetha Gopalakrishnan, Director, Centre for Environmental Studies, Anna University, Chennai, Er. N. Sundara Gopal, Joint Chief Environmental Engineer, TNPCB, Chennai, Dr.P. Rajasekar, District Environmental Engineer, TNPCB, Sriperumbudur, Er. K. Kamaraj, District Environmental Engineer, TNPCB, Coimbatore and V. Balraj, Superintending Engineer, CMWSSB, Chennai to inspect the site. The said committee was constituted as per the order of the High Court dated 23.4.2009 passed in W.P.No.6800 of 2009. The said committee, after site visit, has filed a report on 4.7.2009 with the following observations:

Yj S. No	<b>STP siting criteria guidelines given By TNPCB</b>	<b>Actual Site condition</b>
1.	<i>The STP site should be at least 250 meters away from any lake or pond preferably in the down stream side of lake or pond so that the sewage shall not reach the water bodies.</i>	<i>There is no lake /pond within a radius of 250 meters from the proposed site.</i>
2.	<i>The STP site should be located more than at least 250 meters away from river or stream and shall ensure that the treated/ untreated sewage should not reach the above water sources.</i>	<i>There is no river or stream within 250 meters from the proposed site. However, Noyyal river is running at a distance of 700 meters and Raja vaikkal (tributary of Noyyal) is running at a distance of 300 meters from the proposed site. This STP site is used as earthen collection tank and pumping station since 1980.</i>
3.	<i>The STP site should be located at least 500 meters away from a notified habituated area and zone of 100 meters around the STP site boundary should be declared as no development zone so that green belt can be developed in that area.</i>	<i>Mayflower Apartment has come up recently adjacent to the compound wall of the proposed site. Parsn Apartment has come up recently adjacent to the proposed site which is divided by Ramanathapuram-Pothanur road. Shortest distance between the SBR basin of the</i>

		<i>proposed STP and May flower Apartment compound wall is 4 meters.</i>
4.	<i>The STP site should be atleast 500 meters away from public utility area such as park, temple, educational institution etc.,</i>	<i>One temple and one elementary school are located within 500 meters from the STP site.</i>
5.	<i>The site of STP should be selected on dry lands and the treated sewage shall be utilised on land for irrigation.</i>	<i>The Corporation has proposed to pump the treated sewage to their Vellalore site which is at a distance of 4 to 5 kms for final utilisation. IIT Roorkee which conducted performance evaluation of the 100 MLD, Nerul STP at Navi Mumbai working upon the C-Tech Technology has reported that the plant is efficient to produce excellent effluent quality that not only completely fulfils the Indian effluent discharge standards, but almost fulfils US EPA &amp; California Water Recycling requirement for non-potable reuse standards.</i>
6.	<i>The local body shall also ensure that the land availability and consent from the land owners for the disposal of treated sewage, which should be mentioned at the time of application for NOC itself.</i>	<i>The Corporation has their own land at Vellalore for disposal of treated sewage Area</i>
7.	<i>In case of disposal of treated sewage into marine water bodies, the local body shall obtain CRZ clearance and this should be submitted along with NOC application.</i>	<i>Not applicable.</i>
8.	<i>The local body shall obtain appropriate land use certificate from DTCP for STP site.</i>	<i>As per the Coimbatore Local Planning Authority, the STP site area is classified as residential area. This site is used for collection of sewage in earthen lagoon and pumping to Vellalore site since 1980</i>
9.	<i>The local body shall consider the treatment technology while selecting the site in respect of extent of land, Advanced Treatment technology will require less footprint area in order to meet the inland surface water standards prescribed of the TNPCB.</i>	<i>C-Tech Technology is proposed. It is the advanced waste water treatment technology. The technology is based on activated sludge process which requires less foot print area and is a next generation of</i>

		<i>sequential batch reactor technology. The treated effluent out of C-Tech is likely to be better than any conventional treatment and can be reused for agriculture, industrial, commercial or domestic recycle Application. C-Tech uses 50% less power to get much better outlet characteristics and 50% less land area compared to other conventional technologies.</i>
10.	<i>A preliminary assessment of public/ nearby residents opinion neighbouring the location of STP site is essential.</i>	<i>This site is already utilised for collection of sewage in earthen lagoon and pumping it to Vellalore site for the past 18 years. The residential apartments came into existence thereafter.</i>

35. The said Inspection Report which was placed before the Hon'ble High Court was found to be not satisfactory and therefore the Hon'ble High Court in W.P.6800 of 2009 in a subsequent order dated 6.10.2009 has directed the same committee to make spot inspection of the proposed sewage treatment plant at Nanjundapuram and submit a report with regard to the following aspects:

*“Taking into consideration the nature of the case, we direct the aforesaid Committee to make a spot inspection of the proposed Sewage Treatment Plant (STP) at Nanjundapuram, Coimbatore District and submit a report. It will give its specific opinion with regard to the following aspects:*

- i. “Whether the construction of the proposed STP at Nanjundapuram, Coimbatore will affect the existing structures put up by the petitioners and other buildings situated near the proposed site. If a minimum distance is required to be made for construction of the proposed STP from the existing buildings/ structures, taking into consideration the scientific requirement, it may propose the minimum distance.*

- ii. *Whether the proposed STP at Nanjundapuram, Coimbatore District will cause ground water pollution in the neighbouring area, particularly, the area in which the existing buildings are situated.*
- iii. *Whether the proposed STP will cause noise pollution affecting the residents of the nearby area.*
- iv. *Whether any hazardous waste will be treated in the proposed STP and if so, whether that will cause health hazard to the residents of the neighbouring area; and*
- v. *Whether the non-construction of the proposed STP at Nanjundapuram, Coimbatore District will cause more pollution in the area in question particularly with regard to ground water level, air pollution and sound pollution.*

36. Accordingly, the Committee during the visit has set out the proposed technology by the Corporation viz., Sequential Batch Reactor (SBR) or Cyclic Activated Sludge Process (C-Tech) and taking note of the advantages of the said technology over the conventional system apart from considering the representations of the flat owners and the Corporation, has given the opinion and arrived at the following conclusion:

*Opinion of the Committee:*

*“At present, there is no proper sewerage collection and sewage treatment system for treating the sewage to the permissible discharge standard. The raw sewage from sewerage area is collected in earthen pond of 3 m depth at Nanjundapuram for past 25 years. Stagnating the raw sewage in earthen pond pollute the ground water and causes odour and mosquito nuisance and other health related problems.*

*Presently there is no sewerage system in the Nanjundapuram area. Most of the houses are provided with septic tank and soak pit arrangements only. In this system, there is every possibility of ground water pollution due to leaching from the soak pit over a period of time. Also lot of new residential buildings are likely to come up in near future. If this proposed STP is implemented, individual house connection can be given and the sewage can be collected and treated in a centralized treatment plant in a more*

scientific way by adopting modern treatment technologies. Thereby the groundwater pollution can be avoided. Hence the non construction of sewage treatment plant will definitely cause ground water pollution in the sewage treatment plant area and the adjoining residential complexes.

It may be noted that domestic sewage which is resulted from the various activities in the residential area is not classified as hazardous waste according to PCB norms as the same is not from an industry wherein the nature of activities will be different. However, the emissions which are likely to come out of handling of sewage could be minimized by adopting appropriate technology. Hence the committee is of the opinion that though separation distance have not been provided in this project as per the guidelines of Tamilnadu Pollution Control Board the emission of the H<sub>2</sub>S gas can be collected and scrubbed so that no health hazard is caused to the residents nearby by providing covers for collection sump, screens and selector zone (anoxic) of aeration basin and sucking and scrub the emissions in order to control the gas. Hence, though nuisance due to H<sub>2</sub>S emission may be an issue, the same can be handled with adequate collection and controlling mechanism which shall be ensured by the Corporation by providing adequate measures.

The positional hazard for aerosol is related primarily to waste water treatment by the activated sludge process, trickling filter and spray irrigation process only. The chances of aerosols containing pathogenic organisms and toxins from etc., is not expected as there is no surface agitation for aeration being adopted in the technology (SBR) proposed for the STP at Nanjundapuram

Since the location of aeration tanks (SBR basis) which is located is very near to the residential colony, the committee is of the opinion that the layout design shall be modified suitably to keep the tanks at least 25 mtrs. away from the habitat colony. Besides the Corporation shall ensure adequate monitoring of air quality so that the residential populations safety is ensured so that no air born present pollutants beyond the permissible level at any point of time in the ambient air due to STP operation. Though application of separation distance as per the guidelines formulated in developed countries like Australia may not be applicable fully to a developing country like ours, it is recommended that at least 25 m of separation distance should have been adopted.

Taking into consideration of the apprehension of the petitioners, the committee recommends that the Corporation shall ensure that adequate safety measures applicable to Chlorine handling for such application. Alternatively, disinfection using bleaching powder or hypo solution may be adopted so that usage of Chlorine is avoided.”

### Conclusion

1. *“The proposed STP site at Nanjundapuram village is not meeting the siting criteria guidelines dated 23.10.2008 prescribed by the TNPB.*
2. *By taking into consideration of the performance of the existing sewage treatment plants working on the C – Tech process (improved version of the sequential batch reactor technology) at Mumbai and Pune the Hon’ble High Court may consider the setting up of the STP at Nanjundapuram with the following additional safeguards.*
  - a. *Out of 4 compartments of the SBR basin, two compartments located at the extreme north east corner of the site (near to the residential apartments) may be shifted to the western direction of the remaining two compartments.*
  - b. *Noise generating sources such as blowers, DG sets and pumps must be installed in a closed room with suitable acoustic measures to minimize the noise level.*
  - c. *The disinfection facility using Chlorine may not be required as the treated sewage confirm to the bacterial quality in other similar sewage treatment plants as per the disposal standards even without chlorination as reported by the IIT Roorkee. However, it is suggested that hypo may be used for disinfection purpose instead of Chlorine if it requires.*
  - d. *Scrubbing of odourous gas (i.e) H<sub>2</sub>S which is not very significant from the treatment units such as collection sump and screens shall be suitably scrubbed and disposed in order to avoid the odour nuisance to the nearby community.*
  - e. *Regular ambient air quality monitoring for H<sub>2</sub>S shall be conducted as per Tamil Nadu Pollution Control Board norms during operation of the sewage treatment plant so that appropriate mitigation measures required if any, can be planned, though the same is quite unlikely.*
  - f. *For aesthetic purpose, light roofing arrangement shall be made to lower the SBR basins.*
  - g. *Adequate green belt shall be developed around the periphery of the STP site as well as in open spaces available in side the site.*
  - h. *Periodical monitoring of ground water, ambient air quality and ambient noise level shall be carried out in consultation with TNPCB.*

- i. The sludge generated from the treatment process shall be removed from the site then and there without accumulation.*
- j. The height of the compound wall around the sewage treatment plant shall be raised above the level of the nearby building atleast by 1 metre using suitable construction materials to avoid sighting of units and odour nuisance if any to the neighbouring community.*
- k. The Corporation shall ensure the continuous and efficient working of STP with proper maintenance and without causing any nuisance to the surrounding residences.*

*(l) Alternate power supply shall be ensured for the entire sewage treatment plant units so as to operate the treatment systems continuously without any interruption.*

- 3. TNPCB may impose any such additional conditions if it considers necessary.*
- 4. TNPCB may review the distance criteria guidelines adopted for the construction of sewage treatment plant based on the emerging advancements in treatment technologies on case to case basis.”*

37. As stated above, the High Court in W.P.No.6800 of 2009 in the order dated 6.10.2009 after setting out the aspects to be considered by the committee, has directed the committee to submit its report within 3 weeks and also stated that it is open to the Board to go through the report, may accept in totality or with variation and pass appropriate orders on the consent application filed by the Coimbatore Corporation and directed the matter to be posted on 2.11.2009 for further orders. On 8.2.2010 when the writ petition was posted, the High Court disposed the writ petition by directing the Board to consider the matter as per the report submitted by the committee after hearing the parties and pass orders on merit and in accordance with law. A clarification application filed was also dismissed by the High court on 15.11.2010.

38. Accordingly, the Chairman of the Board considered the report of the committee elicited above, in fact conducted an elaborate enquiry by hearing the residents' associations and their members and passed a detailed and well considered order dated 13.11.2010. The Chairman of the Board has ultimately passed the operative order including various safeguards dealing with the core issues involved in the case which is as follows:

1. *Domestic sewage is not a hazardous waste as per the reading of the relevant notification S.O.No.1533 published in the Gazette of India, Part II and Section 3, Sub-Section (ii) dated 14.09.2006 and Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. The definition of hazardous waste and the annexures excludes domestic raw sewage to be treated in STP from being classified as hazardous waste. The size of the proposed STP is less than 20000 sq.m. Hence, it does not require clearance of SEIAA or Public Hearing under B-1 category. The sub-committee of ZLCCC, Coimbatore erred in stipulating public hearing as a requirement.*
2. *The overwhelming adoption of SBR technology cannot be technically or scientifically assailed in terms of technical objections raised by the parties.*
3. *The Board is also of the opinion that the SBR technology if adopted at the present site would not endanger the local environment such as Air, Water, Ground & Noise etc., if the following safe guards are followed and enforced.*
  - a) *The Corporation shall ensure that no industrial effluent shall mix with the raw sewage which would be treated in the proposed STP.*
  - b) *Noise generating sources such as blowers, DG sets and pumps must be installed in a closed room with suitable acoustic measures to minimise the noise level.*
  - c) *The Corporation shall not use on site chlorine to the treated sewage. The use of chlorine offsite or use of hypo chlorite onsite shall be done.*
  - d) *The Corporation shall provide scrubbing system for H<sub>2</sub>S odour from the treatment units such as collection sumps and screens, in order to avoid odour nuisance to the nearby community.*
  - e) *Regular ambient air quality monitoring for H<sub>2</sub>S shall be conducted as per TNPCB norms and a Continuous Ambient Air Quality Monitoring Station set up by the Coimbatore Corporation,*

CAAQM shall be connected to the Care Air Centre of TNPCB, Chennai. Raw effluent flow and end of pipe treated effluent flow of TDS, pH and H<sub>2</sub>S, Ammonia, if any shall be connected to the Care Air Centre of the TNPCB, Chennai.

- f) Adequate green belt shall be developed around the periphery of the STP site as well as in open spaces inside the site.
- g) The Corporation shall provide wind net arrangements to cover the SBR basins.
- h) Periodical monitoring of ground water by peizometric wells, ambient air quality and ambient noise level shall be carried out in consultation with TNPCB.
- i) The sludge generated from the treatment process shall be removed from the site then and there without accumulation.
- j) The height of the compound wall around the STP shall be raised above the level of the nearby building at least by 1 m. Using suitable construction materials to avoid sitting of units and odour nuisance, if any, to the neighbouring community.
- k) The Corporation shall ensure the continuous and efficient and working of STP with proper maintenance and without causing any nuisance to the surrounding residences.
- l) Alternate power supply shall be ensured for the entire STP units so as to operate the treatment system continuously without any interruptions.
- m) The Corporation shall connect the STP operations under SCADA system which monitors in flow, out flow and other unit operations with on-line recording system.
- n) The Corporation shall appoint qualified operators and set up a laboratory at the site. The Corporation shall appoint M.Sc. Chemistry with 5 years experienced person to look after the laboratory or have the entire O & M handed over to a competent technically qualified Agency.

In view of the reference to the GCT for its report on the structural stability, the Coimbatore Corporation shall have the same study done by the Department of Civil Engineering, IIT, Madras and file it along with the fresh application to be filed by them. After going through the lay-out approved by the Coimbatore Corporation, it is found that the four rectangular SBR basins are arranged in series. Rectangular shapes lead to insufficient usage and coverage of land. In view of the size of the site, it is considered that the four SBR basins in circular format be located at the centre of

*the site by which there would be considerable less area coverage and make for more buffer zone on all four sides particularly towards sides of the residences.*

*Therefore, it is concluded that the SBR technology can be adopted at the present site with the special conditions specified above”.*

39. The committee, as elicited above, has also suggested the Board to review the distance criteria guidelines based on the emerging advancements in treatment technologies on case to case basis. On considering the issue “whether the distance between the Aeration tank and the residential complex is such that it rules out the present site for the location of STP”, the Chairman of Board in the above order dated 13.11.2010 has passed the following operative order:

- i. “In the original application in Form 14 of the Water (P & CP) Act, 1974 dated 22.04.2009, the method of disposal of treated sewage continues to be shown as land discharge for which the detailed calculation of the volume of treated sewage to be applied to the extent of land in hectares as well as the site of discharge has not been described making it impossible to take a decision on the application. The original DPR accompanying the original application is at variance to the application in that it indicates disposal partly on land by irrigation and the balance to be discharged into river Noyyal as the method without supporting details.*
- ii. During the proceedings of the case, Coimbatore Corporation had submitted a revised DPR bringing in other forms of disposing treated sewage such as sale to industry, horticulture uses, etc. Here also, a clear balance as to the volume of post treatment sewage and detailed disaggregated plans has not been submitted. It is therefore, clear that no comprehensive plan for disposal of post treatment sewage have been formulated by the Coimbatore Corporation and incorporated in Form 14 application.*
- iii. Any application for construction of STP also requires clearance under the Air (P & CP) Act, 1981. The Corporation has yet to submit this application. In order to examine Consent to Establish under both Acts, the Coimbatore Corporation shall now file a separate application in Form I under the Air (P & CP)*

*Act, 1981 and in Form II under Water (P & CP) Act, 1974. This must clearly specify an integrated plan for dealing with the treated effluent and consistent with the latest DPR with the changes in layout and special conditions suggested above.*

- iv. The pending application filed by the Coimbatore Corporation on 22.04.2009 is returned herewith for submission after rectifying the defects therein and conducting the required studies from the stand point of the existing site being used for the STP. The Coimbatore Corporation may submit the revised DPR, layout, design, estimates, et. As relevant to this project site. Care must be exercised to revise the design suitably so as to achieve greater buffer zone and economy in the use of land by revised design, duly considering the circular format suggested by TNPCB.*
- v. As already indicated structural stability studies may be got done by the Department of Civil Engineering, IIT , Madras.*
- vi. The reclassification orders for the lands in question shall be annexed to the new application.”*

40. For arriving at such conclusion on a direction from the Hon'ble High Court to consider setting up of STP at Nanjundapuram with various safeguards, the committee had in fact visited STP in Maharashtra which was installed on SBR Technology in order to know its performance. The committee has taken note of the fact that such technology is in operation at 43 STPs in various places in India which includes STP at Ukkadam apart from Navi Mumbai. The report of the committee on finding that on visit to STP at Nerul, Navi Mumbai which is of 100 MLD C-Tech Technology and operating since February, 2008, observed that the treated effluent was found to be clear and odour free and there was no odour from the STP area except in the proximity of the collection sump and screen and no significant odour has been reported by the public living nearby. The committee also found that multi storied residential apartments and schools are located nearby. The committee also had the advantage of referring to

the performance evaluation of IIT, Roorkee and found that SBR technology is efficient to produce excellent effluent quality that not only completely fulfils the Indian effluent discharge standards, but almost fulfils US, EPA and California Water Recycling requirement for non-potable reuse standards. A similar STP at Airoli, Navi Mumbai was also visited by the committee which is a 80 MLD capacity unit based on SBR technology functioning from March, 2008 and found that the trade effluent was colourless and odourless and there was no odour from the STP area considering that residential buildings and schools are located nearby the STP with treated analysis. This was thoroughly considered by the Chairman of the Board while passing order on 13.11.2010.

41. While considering the specific question posed by the High Court as to whether the construction of the proposed STP at Nanjundapuram, Coimbatore will affect the existing structures put up by the residential colonies and other buildings situated in the proposed site, the committee after considering the baseline study report submitted by the Department of Civil Engineering, Government College of Technology, Coimbatore which has included the construction of 40 MLD STP and the C-Tech basin at the present position at Nanjundapuram, has arrived at a conclusion that it may not have any adverse effect on the adjacent existing residential buildings both on North East and North West sides and the minimum distance required between two structures comes to 2.473 m as per calculations. Whereas at Nanjundapuram site the minimum distance available between the structure of the C-Tech basin and the compound wall of the nearest residential building was 4 m. The committee has clearly stated that in respect of Pimpri Chinchwad Municipal Corporation STP based on C-Tech process at Pimpri Chinchwad Link Road, Bhat Nagar, Pune it is located

very close (2 m) to a residential complex and it was observed that there was no odour, noise and nuisance by flies. The committee has also observed that the distance guideline of 500 m prescribed by the Board is a general guideline and after study of functioning of STPs in various places based on C- Tech process, the distance criteria of the Board may not be strictly enforced. However, the Committee made the suggestion as follows:

*“However, the committee suggest that out of 4 compartments of the SBR basin, two compartments located at the extreme north east corner of the site (nearer to the residential apartments) may be shifted to the western direction of the remaining two compartments.”*

42. Considering the next reference as to whether the STP will cause ground water pollution in the nearby area, the committee specifically observed:

*“Therefore the construction of STP will not cause ground water pollution and improve the existing environmental conditions including ground water quality.”*

43. Again, while considering another reference as to whether the proposed STP will cause noise pollution affecting the residents, the committee observed that the proposed activity of the Coimbatore Municipal Corporation takes care that the diesel generator sets will be installed within the building with acoustic enclosures that the air blowers will be kept inside the building with acoustic hood arrangement so as to suppress the noise and that normally one or two truck loads of sludge in a day will be transported for disposal. It was found that there will not be much noise pollution affecting the residents of the nearby area.

44. Further while considering the next important reference as to whether any hazardous waste will be treated in the proposed STP and if so

whether that will cause health hazard to the residents of the neighbouring area, the committee found that the raw sewage does not contain any hazardous chemical or heavy metals. The proposed STP will treat sewage only and not any hazardous waste and hence there is no chance for health hazard. It was also found that the sewage treatment plant using C – Tech process which is the improved version of the SBR technology, will not result in substantial formation of aerosols in the atmosphere and hence the apprehension of the residents about the aerosols and its effect is unwarranted.

45. While considering the last reference as to whether non construction of the proposed STP at Nanjundauram will cause more pollution in the area, the committee of experts found categorically,

*“Hence the non construction of sewage treatment plant will definitely cause ground water pollution in the sewage treatment plant area and the adjoining residential complexes. It is also found that the positional hazard for aerosol is related primarily to wastewater treatment by the activated sludge process, trickling filter and spray irrigation process only. The chances of aerosols containing pathogenic organisms and toxins is not expected as there is no surface agitation for aeration being adopted in the SBR technology proposed for the STP at Nanjundapuram.”*

46. Therefore, it is based on a thorough scientific study and analysis of the existing system available in other places in correlation with the residential areas situated nearby, the committee has arrived at a detailed conclusion which was directed to be considered by the Hon’ble High Court of Madras by the Board and pass appropriate orders in accordance with law. Accordingly, the Chairman of the Board in his proceedings dated 13.11.2010 passed a detailed order considering each and every aspect of the issue involved after considering every one of the aspects dealt with by

the committee constituted by the court and the representations by the residents. In fact, the Chairman of the Board himself has formulated various issues for consideration which is very rare in any such administrative orders passed by an authority.

47. Regarding change of land use on Master Plan, while it is true that the area proposed is indicated as a mixed residential zone, the Director of Town and Country Planning in his proceedings dated 22.3.2011 has categorically stated that for nearly 25 years the site has been used for sewage treatment and in 1999 by the TWAD Board and then transferred to Coimbatore Corporation and therefore the change of use from residential into agriculture is not necessitated. The letter of the Director of Town and Country Planning dated 22.3.2011 is as follows:

*“Office of the Director of Town and Country Planning  
807, Anna Salai, Chennai 600002*

*Roc No.28830/2010/ MP2*

*Dated 22.03.2011*

*Sub: Change of land use in Master Plan – Coimbatore Local Planning Authority/Corporation – South Region- Nanjundapuram Salai, Upplipalayam Village S.No.655, 656/2, 657, 658, Ward No. 3-,Block 4 T.S.No.19 and 163 Mixed Residential Use Zone into Agricultural use Zone – Intimation – Regarding.*

*Ref: 1) Your Letter No.4229/2010/LPA1 dated 10.03.2010*

*2) Commissioner, Coimbatore Corporation Lr.No. 7921/2009/MH5 dated 14.10.2009,30.07.2010*

*With reference to letter 2<sup>nd</sup> cited, the Commissioner stated that, in the proposed site sewage treatment plant is proposed and land acquisition by TWAD Board made before 25 years. Sewage Treatment Plant was maintained till 1999 by TWAD Board and then handed over to Coimbatore Corporation and was in existence before formulation of Coimbatore Master Plan and as per Survey Number it is as Sewage Treatment Plant only. Further the Tamil Nadu Pollution Control Board has requested for change of land use from Residential to Agricultural Use Zone.*

*As per the Town and Country Planning Act, 1971 and Rules, the foremost requirement for Special Buildings, Group Developments and Multistoried Buildings proposal, is Sewage Treatment Plant and the same is to be developed within the premises and the treatment is as per Tamil Nadu Pollution Control Board norms.*

*Hence, the Corporation proposal may be permitted in the Mixed Residential Use Zone.*

*Therefore, the change of land use from Mixed Residential Use Zone into Agricultural Use Zone is not necessitated if the Coimbatore Corporation has proposed Sewage Treatment Plant as per Tamil Nadu Pollution Control Board norms and does not pollute the environment as per Tamil Nadu Pollution Control Board Norms.”*

The above said order has become final and is not under challenge in any proceedings.

48. Again, while considering the issue as to whether the domestic sewage is to be considered as hazardous waste requiring EIA study and EC from the MoEF after stating that the proposed STP shall treat only domestic sewage and when once it is reflected clearly in the ‘consent’ application from the Coimbatore Corporation and an undertaking is furnished to that effect it was found that the domestic sewage as per the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 is not hazardous. However, a continuous analysis for the raw sewage at the in-let point is normally insisted upon to detect the presence of any other substance or hazardous substances if any as per the normal monitoring done by the Board.

49. The Chairman of the Board has considered the next issue as to whether the SBR Technology proposed by the Coimbatore Corporation is technically or scientifically assailable in terms of objections raised by the

parties. It was decided that the technical feasibility and superiority and advantages of SBR Technology over the conventional system both in terms of the overall area required as well as shorter aeration time (180 minutes) as compared to 9 hours in other process along with heavy reduction in production of sludge and a SCADA operated system co-ordinated with all the equipments in the plant, shows that the technology is practiced all over the world and practiced in a big way in India in the States of Gujarat and Maharashtra is technically suitable and preferable.

50. The Chairman has also dealt with the other issue as to whether the SBR Technology will endanger the local environment such as Air, Water, Ground Noise etc. The Chairman of the Board who has taken note of the objections raised by the flat owners against the Expert Committee's Report and questioning of the alleged partiality of the committee and that the Expert Committee's report is against the order of the High Court made a detailed discussion and found that the sub committee earlier constituted had no occasion to consider the merits and demerits of SBR Technology and has taken note of the technical reasoning given by IIT, Roorkee which cannot be brushed aside. The Chairman has applied his mind stating that the Corporation has completed 30% of civil works while the necessary reclassification proposal of the land is pending with the authority concerned and the work has been commenced without obtaining 'consent to establish' from the Board has also noted that the corporation cannot plead equity and in any event as per the direction of the High Court the project has been stayed. Ultimately after considering the objections raised by the flat owners, the Chairman has arrived at a conclusion that the overwhelming adoption of SBR technology cannot be technically or scientifically assailable in terms of technical objections raised by the parties and that the Board is of opinion

that SBR technology adopted at the present site would not endanger the local environment such as air, water and ground and noise etc., if certain safeguards are enforced which are as follows:

- a) *"The Corporation shall ensure that no industrial effluent shall mix with the raw sewage which would be treated in the proposed STP.*
- b) *Noise generating sources such as blowers, DG sets and pumps must be installed in a closed room with suitable acoustic measures to minimise the noise level.*
- c) *The Corporation shall not use on site chlorine to the treated sewage. The use of chlorine offsite or use of hypo chlorite onsite shall be done*
- d) *The Corporation shall provide scrubbing system for H<sub>2</sub>S odour from the treatment units such as collection sumps and screens, in order to avoid odour nuisance to the nearby community.*
- e) *Regular ambient air quality monitoring for H<sub>2</sub>S shall be conducted as per TNPCB norms and a Continuous Ambient Air Quality Monitoring Station set up by the Coimbatore Corporation, CAAQM shall be connected to the Care Air Centre of TNPCB, Chennai. Raw effluent flow and end of pipe treated effluent flow of TDS, pH and H<sub>2</sub>S, Ammonia, if any shall be connected to the Care Air Centre of the TNPCB, Chennai.*
- f) *Adequate green belt shall be developed around the periphery of the STP site as well as in open spaces inside the site.*
- g) *The Corporation shall provide wind net arrangements to cover the SBR basins.*
- h) *Periodical monitoring of ground water by peizometric wells, ambient air quality and ambient noise level shall be carried out in consultation with TNPCB.*
- i) *The sludge generated from the treatment process shall be removed from the site then and there without accumulation.*
- j) *The height of the compound wall around the STP shall be raised above the level of the nearby*

*building at least by 1 m. Using suitable construction materials to avoid sitting of units and odour nuisance, if any, to the neighbouring community.*

- k) The Corporation shall ensure the continuous and efficient and working of STP with proper maintenance and without causing any nuisance to the surrounding residences.*
- l) Alternate power supply shall be ensured for the entire STP units so as to operate the treatment system continuously without any interruptions.*
- m) The Corporation shall connect the STP operations under SCADA system which monitors in flow, out flow and other unit operations with on-line recording system.*
- n) The Corporation shall appoint qualified operators and set up a laboratory at the site. The Corporation shall appoint M.Sc. Chemistry with 5 years experienced person to look after the laboratory or have the entire O & M handed over to a competent technically qualified Agency.”*

51. While considering the next issue as to whether the distance between the aeration tank and the residential complex is such that it rules out the site for the present location of the STP, the Board has passed the following orders:

- i. “In the original application in Form 14 of the Water (P & CP) Act, 1974 dated 22.04.2009, the method of disposal of treated sewage continues to be shown as land discharge for which the detailed calculation of the volume of treated sewage to be applied to the extent of land in hectares as well as the site of discharge has not been described making it impossible to take a decision on the application. The original DPR accompanying the original application is at variance to the application in that it indicates disposal partly on land by irrigation and the balance to be discharged into river Noyyal as the method without supporting details.*
- ii. During the proceedings of the case, Coimbatore Corporation had submitted a revised DPR bringing in other forms of disposing treated sewage such as sale to industry, horticulture uses, etc. Here also, a clear balance as to the*

*volume of post treatment sewage and detailed disaggregated plans has not been submitted. It is therefore, clear that no comprehensive plan for disposal of post treatment sewage have been formulated by the Coimbatore Corporation and incorporated in Form 14 application.*

- iii. Any application for construction of STP also requires clearance under the Air (P & CP) Act, 1981. The Corporation has yet to submit this application. In order to examine Consent to Establish under both Acts, the Coimbatore Corporation shall now file a separate application in Form I under the Air (P & CP) Act, 1981 and in Form II under Water (P & CP) Act, 1974. This must clearly specify an integrated plan for dealing with the treated effluent and consistent with the latest DPR with the changes in layout and special conditions suggested above.*
- iv. The pending application filed by the Coimbatore Corporation on 22.04.2009 is returned herewith for submission after rectifying the defects therein and conducting the required studies from the stand point of the existing site being used for the STP. The Coimbatore Corporation may submit the revised DPR, layout, design, estimates, et. As relevant to this project site. Care must be exercised to revise the design suitably so as to achieve greater buffer zone and economy in the use of land by revised design, duly considering the circular format suggested by TNPCB.*
- v. As already indicated structural stability studies may be got done by the Department of Civil Engineering, IIT, Madras.*
- vi. The reclassification orders for the lands in question shall be annexed to the new application.”*

52. It is relevant to note that the said order of the Chairman of the Board dated 13.11.2010 was also challenged by the Mayflower Sakthi Garden Owners Association in W.P.No.3561 of 2011 which was subsequently transferred by the Hon'ble High Court to the NGT and numbered as Application No.34 of 2013 and came to be dismissed on 12.2.2014 with liberty to the said party to implead itself in the Appeal Nos.32 and 33 of 2013 which was pending before the learned Appellate

Authority. The 5<sup>th</sup> respondent has also accordingly impleaded and the learned Appellate Authority has also passed order which is under challenge.

53. In the 'consent' order passed by the Board dated 25.10.2012 under both the Water and Air Act based on the application of the Coimbatore Corporation dated 22.3.2012, the Board has granted 'consent' with various general and special conditions which on perusal, are found to be stringent.

54. Before the learned Appellate Authority the Board has filed a detailed report wherein it has enumerated the entire factual aspects narrated as above. In spite of the availability of those records and particularly the detailed report of the Expert Committee appointed by the Hon'ble High court which in fact has been extracted by the learned Appellate Authority, we are unable to understand as to how the learned Appellate Authority has concluded that in spite of all these technical particulars and precautions the STP would cause air pollution to the residents who are situated adjacent, that too when there is a specific undisputed finding finding that the site was already used for collection and pumping of sewage right from the year 1980 well before the residences were built in it's surroundings. The observation of the learned Appellate Authority that the Board cannot take the risk of public health, in our considered view is not only vague but totally opposed to the scientific view given by the Experts who have not merely relied on the studies made by them but on the experimental basis after visiting the said STPs in various places in Maharashtra functioning with same technology. When the Experts have given opinion, a judicial body to decide against the same must have a proper sound and acceptable reasoning. We have no

hesitation to hold that there is no reasoning given for just brushing aside the entire report and recommendations and the findings given by the learned Appellate Authority in this regard are not only vague and tentative which cannot be acceptable.

55. In so far as it relates to the relaxation of guidelines regarding the siting criteria of 500 m, the scientific report given by the Experts is necessarily to be treated as justifiable. In the light of the proceedings of the Director of Town and Country Planning stated above that the change of land use is not necessary which remains unchallenged, one cannot come to a conclusion that because of that reason alone the case of the Coimbatore Corporation is to be rejected. In so far as it relates to the guidelines framed by the Board regarding the siting criteria for setting up of STP such guidelines no doubt are executive in nature and cannot be said to have effect of law to be enforced or having authority of law as has been pointed out by the Hon'ble Supreme Court in GULF GOANS HOTELS CO. LTD. VS. UNION OF INDIA (2014) 10 SCC 673. In that case, while dealing with the environmental guidelines issued for development of beaches in July, 1983, apart from the direction issued to the State Government by the then Prime Minister in the letter dated 27.11.1981, notification issued by the Governor dated 22.7.1982 setting up of the Ecological Development Council for Goa *inter alia* for scrutiny of beach constitution within 500 m of HTL and the order of the Under Secretary, Ministry of Tourism dated 11.6.1986 addressed to the Chief Secretary, Government of Goa, constituting an Inter-Ministerial Committee for considering tourist projects within 500 m, the Hon'ble Supreme Court has rejected the contention that in respect of ecology and environment strict view of environmental degradation should be adopted in the light of Article 21 of the Constitution

of India and held that if the guidelines are not statutorily enacted the same cannot be enforced. The guidelines were at the most held to be expression of opinion and observed as follows:

*“19. Article 77 of the Constitution provides the form in which the Executive must make and authenticate its orders and decisions. Clause (1) of Article 77 provides that all executive action of the Government must be expressed to be taken in the name of the President. The celebrated author H.M. Seervai in Constitutional Law of India, 4<sup>th</sup> Edn. Vol. 2, 1999 describes the consequences of government orders or instructions not being in accordance with clauses (1) or (2) of Article 77 by opining that the same would deprive the orders of the immunity conferred by the aforesaid clauses and they may be open to challenge on the ground that they have not been made by or under the authority of the President in which case the burden would be on the Government to show that they were, in fact, so made. In the present case, the said burden has not been discharged in any manner whatsoever. The decision in Air India Cabin Crew Assn. V. Yeshaswinee Merchant (2003) 6 SCC 277, taking a somewhat different view can, perhaps, be explained by the fact that in the said case the impugned directions contained in the government letter (not expressed in the name of the President) was in exercise of the statutory power under Section 34 of the Air Corporations Act, 1953. In the present case, the impugned guidelines have not been issued under any existing statute.*

*20. Clause (2) of Article 77 also provides for the authentication of orders and instructions in a manner as may be prescribed by the Rules. In this regard, vide S.O.No.2297 dated 3.11.1958 published in the Gazettee of India, the President has issued the Authentication (Orders and Other Instruments) Rules, 1958. The said Rules have been superseded subsequently in 2002. Admittedly, the provisions of the said 1958 Rues had not been followed in the present case insofar as the promulgation of the guidelines is concerned.*

*21. In the absence of due authentication and promulgation of the guidelines, the contents thereof cannot be treated as an order of the Government and would really represent as expression of opinion. In law, the said guidelines and then binding effect would be no more than what was expressed by this Court in State of Uttaranchal v. Sunil Kumar Vaish (2011) 8 SCC 670 in the following paragraph of the report : (CC P.678, paras 23, 24)*

*“23. It is settled law that all executive actions of the Government of India and the Government of a State are required to be taken in the name of the President or the Governor of the State concerned, as the case may be (Articles 77(1) and 166(1)). Orders and other instruments made and executed in the name of the President or the Governor of a State, as the case may be, are required to be authenticated in the manner specified in the rules made by the President or the Governor, as the case may be (Articles 77(2) and*

*166(2). In other words, unless an order is expressed in the name of the President or the Governor and is authenticated in the manner prescribed by the rules, the same cannot be treated as an order on behalf of the Government.*

*24. A noting recorded in the file is merely a noting simpliciter and nothing more. It merely represents expression of opinion by the particular individual. By no stretch of imagination, can such noting be treated as a decision of the Government. Even if the competent authority records its opinion in the file on the merits of the matter under consideration, the same cannot be termed as a decision of the Government unless it is sanctified and acted upon by issuing an order in accordance with Articles 77(1) and (2) or Articles 166 (1) and (2). The noting in the file alone is a decision gets culminated into an order affecting right of the parties only when it is expressed in the name of the President or the Governor, as the case may be, and authenticated in the manner provided in Article 77(2) or Article 166(2). A noting or even a decision recorded in the file can always be reviewed/reversed/overruled or overturned and the court cannot take cognizance of the earlier noting or decision for exercise of the power of judicial review.”*

56. In any event, on the factual matrix of this case, it is admitted that the guidelines are not rigid and are to be relaxed based on the continuous scientific improvement and technological advancements as suggested in the Experts' Opinion. As and when new scientific and technological processes are evolved, the siting criteria given in the form of guidelines are to be changed to suit the scientific advancements. In fact it is based on such view of the matter, the STP with C-Tech process has been approved in various parts of the country inspite of the fact that those projects are situated very close to the residential apartments in more densely populated cities like Mumbai, Pune etc., Considering the fact that rapid strides are made in Science and Technology and new methods are propounded for better ecological and environment protection, it is high time that these guidelines issued by the Board in 2008 may be revised from time to time based on the revised standards for STPs and CETPs notified under the Environment (Protection) Act, 1986 and the rules made thereunder.

57. In view of our above said finding, we are of the considered view that relaxation of the guidelines regarding distance criteria is definitely permissible and has to be decided on case to case basis. As far as the finding of the learned Appellate Authority that the STP is classified as 'red' category industry, in the light of the proceeding of the Director of Town and Country Planning, as stated above, that for the past 25 years this land has been used for waste management, one cannot say at this point of time that it is categorised as 'red' category in 2012 and therefore the project cannot be permitted. Therefore, the finding of the learned Appellate Authority in this regard is also not acceptable in law.

58. In so far as the last and most important finding of the learned Appellate Authority as to whether the STP requires EC one has to go as per the provisions of the EIA Notification, 2006. The EIA Notification, 2006 has been framed by the Central Government in accordance with the powers conferred under Section 3(2)(v) and sub section (1) of Section 3 of the Environment (Protection) Act, 1986 read with Rule 5(3)(d) of the Environment (Protection) Rules, 1986 for protecting and improving the quality of the environment and preventing, controlling and abating environmental pollution. Section 3(2) (v) enables the Central Government to notify measures regarding restriction of area in which any industrial operation or process or class of industries or operation or process shall not be carried out or shall be carried out subject to certain safeguards. In the EIA Notification which is a statutory measure notified by the Central Government, it is made clear that prior to EC is required for the project or activity from the MoEF & CC in respect of A – Category project and the State Level Environmental Impact Assessment Authority (SEIAA) in respect of B- Category projects as per the schedule to the EIA Notification. A

reference to the schedule to the EIA Notification makes it clear that STP is not included either in A or B category. Under clause 7(h) of the schedule it is the Common Effluent Treatment Plant (CETP) which has been categorised as B category project for which general conditions apply.

59. The Board prescribes different norms for STP and ETP, the reason being that STP relates to the domestic sewage treatment while ETP deals with trade and industrial effluents which certainly require different standard and kind of treatment and when that is the sole reason for the Board to prescribe different standards for STP and ETP, certainly STP cannot be compared to ETP by any stretch of imagination. There are cases viz., treatment facility under the control of the Municipalities or Corporations for treating the swage from households and other residential buildings. In so far as it relates to the trade effluents, the Board normally prescribes strict standards which impose that the manner of treatment of such trade effluents shall be by a rigorous process by installing separate treatment plants. In cases where number of industrial units join together for the purpose of creating common treatment plant for the treatment of the effluents discharged in the industrial activity in such event that CETP itself is a unit and therefore under clause 7(h) of the Schedule such activity requires EC from the SEIAA.

60. There may be cases where the sewage treatment system of a Corporation or a Municipality may be in the form of open drainage where there is a possibility of trade and industrial effluents getting mixed up and in such event the STP is not an answer for treatment. In those cases, the mixture has to be certainly treated at an ETP/CETP, as the case may be and it can never be treated as a STP. It is seen in those cases where there

is a possibility of the mixing of the trade and industrial effluent with the sewage collected from the households, such treatment requires EC from SEIAA. In fact, that was exactly the factual circumstance which was dealt with by the Principal Bench of NGT in *Kehar Singh's* case in which one of us (Expert Member) is a party to the judgment. In the above said case, the site chosen for STP was on natural flow/slope gradient and the sewage water was flowing through open drains. The Tribunal in that case in paragraph 35 has made it very clear that in cases of open drain large amount of industrial waste and domestic wastes are discharged directly or indirectly into the drain. Therefore, in such cases it cannot be stated as mere sewage treatment. The paragraph 35 is reproduced below:

*“35. It is an acknowledged fact that the sewage in any town travels through open drains where large amounts of industrial waste, domestic discharge and trade effluents are directly or indirectly discharged into such drains. Before these drains reach the STPs, they undoubtedly contain sewage and other trade effluents, including chemical effluents. In other words, it is mixed effluent and not a sewage waste simplicitor.”*

61. Paragraph 44 of the said judgment which is as follows:

*“44. Effluent means discharge of any liquid gaseous or other substances into water bodies etc., and would take within its ambit even discharge of sewage coupled with other industrial and trade effluents. Such effluent would be required to be treated at a CETP of which STP itself may be an integral part. As we have already noticed and even anticipated, the drains which carry the sewage also contain other domestic discharge. Industrial and Trade effluents get discharged directly into the drains by the industries or other activities which generate polluted effluents. Thus STP would have to treat effluents which contain even other pollutants than sewage simplicitor”.*

which makes it abundantly clear that discharge of any liquid or any other substance into the water body etc through open drainage system would

take within its ambit discharge of sewage mixed with other industrial and trade effluents.

62. Therefore, what was decided by the Principal Bench was in respect of a case where the sewage mixed up with trade and industrial effluents which is possible in open drainage system and in which event it requires effluent treatment at ETP and in that case STP will be treated as an integral part of CETP which will treat both sewage and trade and industrial effluents. Para 46 of the judgment reads as follows:

*46. "The bare reading of the above shows that establishment, expansion and even modernisation of CETPs require EC, being a category B project. Any treatment plant that deals with such effluents having more than 10% of industrial contributions by volume has to be treated as a combined treatment plant. On the strength of this guide, it becomes clear that the material consideration for determining the nature of the project or activity is the kind of effluent that it receives for the purpose of treatment. There is nothing on record before us to show that the STP in question is so established as to treat exclusively sewage and nothing else. On the contrary, the sketch filed by the respondent (Annexure R.3) shows that the sewage is carried by an open drain and would be so carried to the site of STP (for treatment). It is just by the side of a metal road and travels through the abadi and the sludge is carried through an open drain from the entire city. This is demonstrable of the fact that it is not sewage per se that is taken by the open drain to the site but is a mixture of various distinct effluents. Thus, such an STP would even fall under the entry 7 (h) because this plant would be treating the effluents in the semi-solid form and even sludge and would contain more than 10% of industrial or other contaminated chemical effluents."*

*(Emphasis is ours)*

Therefore, it is made clear that if the sewerage system is open in nature, it is susceptible to have the mixture of other effluents which may include trade and industrial effluents and treatment of such effluent should be taken

to CETP as provided under clause 7(h) of the schedule which requires EC from SEIAA.

63. On the factual matrix of this case, it is not in dispute that the proposed STP deals with the domestic sewage collected from door to door from residential areas and taken in a closed underground pipeline and there is absolutely no possibility of any other effluents being mixed with the same. In fact, to ensure the above said compliance, the Chairman of the Board in the order dated 13.11.2010 has made it very clear that the Corporation shall maintain separate line from households and must give an undertaking in the form of an affidavit and declare that no trade effluent or other effluents or effluents which are toxic in nature will be allowed to be mixed with domestic sewage at any point of time. This in addition to periodic observation and monitoring by the Board to ensure that it is only the domestic sewage which is taken into these closed underground pipes for treatment at the STP in Nanjundapuram. Such restrictions have to be made explicit by the Board in continuation of the 'consent' order already given and the Board shall strictly ensure the periodical monitoring of the same and if at any point of time it is found either damage of the pipeline or by any other means the STP line is likely to join with any other effluents, appropriate action should be taken by the Board including the cancellation of 'consent' so as to compel the Corporation to continue to follow the undertaking that only domestic effluents will be taken into the STP line. This, in our considered view will be a sufficient safeguard for environmental protection. We are of the considered view that the learned Appellate Authority has not distinguished the factual aspect of the present case with that of the case decided by the Hon'ble Principal Bench in Kehar Singh's case and we have no hesitation to hold that on factual matrix of the case

this case is distinguishable from Kehar Singh's case and the decision given in the said judgment has no application to the fact of the present case.

64. A. GOTHANDARAMAN's case is no doubt a case of establishing an underground Sewage Pumping Station (SPS) in Vadiveeswaram, Nagercoil in Survey No.420/51 and construction of STP at Sy.No.M7/9-2, Nagercoil Village but the ground of challenge was that for the said SPS the first respondent Commissioner, Nagercoil Municipality has granted permission without alienating the land which is stated to belong to Kottar Bazaar Government Primary School established by the erstwhile Raja of Travancore. It is stated in paragraph 4 of the said order as follows:

*"It is estimated more than 10 MLD of sewage will be flowing into the sewage pumping pits and there will be incompatible pumping to compensate the inflow of sewage".*

It is further stated in paragraph 6 of the judgement as follows:

*"6. The STP will store Chlorine gas and in the event of any accident the consequences will be disastrous. There is not enough area around the STP for creation of buffer zone or green belt and the gases and bio aerosols released from the site will harm the children, pregnant women and aged citizens in the area besides causing sufferings to the inpatients in the hospitals."*

In para 39 the Tribunal observed the following:

*"39. From the reading of the above decision, it would be quite clear that obtaining EC under EIA Notification, 2006 is necessary in the instant case. No doubt, the project in question would bring through conveyance of sewage in the closed pipe network the entire sewage for treatment to the plant along with trade, industrial and other discharges containing high level of pollutants generated from the non domestic establishments. If so, the end product namely, the treated wastewater discharged from the plant may remain contaminated, acidic or unusable for any purpose."*

65. It is clear from the aforesaid observations that the Tribunal having gone through the issue in detail, came to the conclusion that not only the domestic sewage but trade and industrial effluents, containing high level of pollutants, from the non domestic establishments are also allowed to mix up with domestic sewage and therefore the STP proposed by the respondent No.1 is not enough to handle the treatment and ultimately it is not a simple STP for handling domestic sewage but it requires EIA study similar to CETP which requires EC. Further, in para 40 of the judgment it is clearly stated that mixing of trade effluent and other wastewaters from non-domestic sources would compound the problem implying that the Tribunal is not satisfied with the contention of respondents that the project involves treatment of only domestic sewage.

66. Further, the Tribunal in the para 41 of the judgment made it clear that there is no need to change the sites selected for the purpose of establishment of SPS and STP and only directed to seek EC from SEIAA on similar lines of seeking EC for establishment of CETP. Therefore, it is clear that once it is concluded that the treatment involves not just domestic sewage but also industrial and trade effluents, it no longer involves setting up of a STP simplicitor but it is more or less a CETP which requires EC. There are different parameters and inlet and outlet standards for STPs and CETPs and there is a change in design, type of machinery and equipment also taking into account the toxicity and obnoxious nature of the effluent to be treated. Considering the nature of effluents to be treated, the EIA Notification, 2006 prescribes EIA study and obtaining EC for setting up of CETP for treating industrial and trade effluents since such effluents which are highly toxic require careful handling lest there will be environmental and health hazards. But there is no provision of EC for STPs predominantly

handling domestic sewage and this goes to show that the framers of law have consciously excluded STPs from EIA Notification, 2006.

67. Therefore, on the factual matrix of the said case, we are of the view that the decision of the Tribunal in A. GOTHANDARAMAN's case cannot be compared to the facts of the present case for various reasons. The case referred to above is not relating to the installation of STP with most modern and advanced technology and there was no scientific study about the STP and there is mixing up of trade and industrial effluents. It was in those circumstances and also anticipating that there is a possibility of bursting of pipeline at any point of time which may result in leakage of gas and that will affect people living in the No Development Zone the NGT (SZ) was of the view that a comprehensive study of the project should be made and ultimately having found that the Municipality has obtained 'consent to establish', the Tribunal has observed and directed that an application be made to SEIAA for grant of EC. The facts enumerated in the above said judgment do not relate to any study and at the risk of repetition we have to reiterate that the factual matrix of the present case cannot be comparable to the facts of that case at all and we are of the considered view that the observations made in that judgment are not applicable to the facts of the present case and decision quoted in the above judgment is of no use for this case.

68. Looking at any angle, we are of the considered view that the reasons assigned by the learned Appellate Authority to set aside the order of "consent to establish" granted by the Board are not tenable in law and most of the findings are vague and tentative and it is not possible for this Tribunal to accept any of the findings given by the learned Appellate

Authority in the impugned order. Accordingly, the order of the learned Appellate Authority in all these cases stand set aside and the original order of 'consent' granted by the Board dated 13.11.2010 stands restored. However, relating to the observation made by the learned Appellate Authority that as a matter of abundant caution it is always open to the Corporation to approach the authority under the EIA Notification, 2006 for EC cannot be said to be an observation out of context. Even in cases where a project may not be covered under any of the items of the schedule as in this case. if the project proponent desires to have an impact study as a genuine person, it is open to the project proponent to do the said act in accordance with law and therefore the observation made by the learned Appellate Authority in that regard cannot be said to be either out of context or unwarranted.

69. While parting with, we are compelled to make certain observations which are relevant in the social aspect of the life of people that Sewage Treatment Plant is of absolute necessity to be established and managed by any Corporation/Municipality and it is generally seen in our country that wherever civic authorities decide to establish such plant, such decisions are opposed by the people residing nearby. The reasons are that such plants if they are situated near a residential area, will affect their living. These objections are being raised invariably in all cases without even referring to the advanced scientific and technological studies and merely apprehending that something may happen based on certain assumptions. In our considered view, because some people in the area are afraid of the project which is otherwise viable in the larger public interest, the project cannot be stalled by employing various tactics. The public interest is paramount than the individual interest. But unfortunately without even

realising that even individual interest will also be taken care of by adopting advanced technology, the apprehensions of the people has gone to such an extent that even genuine projects which are in fact environment friendly, are being stalled as it is seen in the facts of the present case. Admittedly the site at Nanjundapuram has been used for the past 25 years for the waste disposal purposes and a sewage pumping station is already existing at the site and nobody residing in the nearby area have raised any objection. But when the Corporation decides to implement a technologically advanced Sewage Treatment System to treat domestic sewage with foolproof underground sewerage pipelines to prevent environmental degradation, such objections are raised. This attitude, in our considered view, should not be allowed and it is not as if application of technological advancements should be totally ignored.

70. There is rapid urbanisation and industrialisation in the country leading to shrinkage of available space for establishing such environment friendly STPs or Solid Waste Management Facilities particularly in urban areas and people oppose such projects because they are proposed to be located in their vicinity without understanding the scientific and technological advancements made in the field and based on unfounded apprehensions. Therefore, their concerns deserve no consideration if the projects take care of the environmental norms. In this case, we have no reason to disbelieve the project proposed by the Corporation of Coimbatore. However, the Corporation should ensure that the unit is maintained perfectly and should not give any scope for complaints. In case of any leakage of closed pipeline carrying domestic sewage to the treatment plant and in that event as stated above, it is the primary responsibility of the Corporation to immediately rectify the same to avoid

causing any public inconvenience. In those circumstances, it is always open to any person/s who are affected to approach the appropriate authority for redressal of their grievance.

71. The judicial dictum in our country by the Highest Court in India has been repeatedly stressing the point that in cases of larger social interest and especially social justice, even a private interest can be compromised. It was in CHAIRMAN, INDORE VIKAS PRADHIKARAN VS. PURE INDUSTRIAL COKE 7 CHEMICALS LTD 7 OTHERS (2007) 8 SCC 705, the Hon'ble Supreme Court while considering the right to privacy of individual as a constitutional right guaranteed under Article 21 of the Constitution of India, has held that in cases where the hardship is caused to the individual owner from making use of the land for most profitable purpose while contrasted with the larger hardship to the society, it is the larger interest which is to be given utmost importance. It was held by the Hon'ble Supreme Court while dealing with land use pattern regarding the permission to carry on development project by which individual will be benefited as follows:

*“46. Where, however, a scheme comes into force, although it may cause hardship to the individual owners as they may be prevented from making the most profitable use of their rights over property, having regard to the drastic consequences envisaged thereunder, the statute should be considered in such a manner as a result whereof greater hardship is not caused to the citizens than actually contemplated thereby. Whereas an attempt should be made to prevent unplanned and haphazard development but the same would not mean that the court would close its eyes to the blatant illegalities committed by the State and/or the statutory authorities in implementation thereof. Implementation of such land development as also building laws should be in consonance with public welfare and convenience. In United States of America zoning ordinances are enacted pursuant to the police power delegated by the*

*State. Although in India the source of such power is not police power but if a zoning classification imposes unreasonable restriction, it cannot be sustained. The public authority may have general considerations, safety or general welfare in mind, but the same would become irrelevant, as thereby statutory rights of a party cannot be taken away. The courts must make an endeavour to strike a balance between public interest on the one hand and protection of a constitutional right to hold property, on the other.”*

72. Accordingly, Appeal Nos.66 and 67 of 2015 are allowed. The impugned order of the Appellate Authority is set aside and the “Consent” order of the Board dated 25.10.2012 is restored and Appeal Nos.44 and 45 of 2016 are ordered accordingly with no order as to cost.

73. However, in addition to the safeguards made in the order of the Chairman of the Board dated 13.11.2010 we make it clear that

(i) Operational parameters shall be regularly analyzed and taken into account for performance optimization of the plant. Such analysis report shall be continuously made available and accessible to all the residents of Parsn Senior Citizen’s Group as well as Mayflower Shakthi Garden Owners Association and shall be displayed on the notice board in the said complexes.

(ii) Uninterrupted power supply shall be maintained and Hours Run Meters shall be provided for all the machineries and equipments and the readings shall be recorded in a log book which shall be again made available to the above said residents associations as well as the inspecting Board officials.

(iii) The sludge produced during the course of the activity shall be periodically removed and the premises shall be kept in a tidy state.

(iv) Periodical maintenance shall be carried out which shall be closely monitored by the Board apart from strictly maintaining the standards in order to avoid any air and noise pollution and foul smell.

(v) In the event of any discomfort experienced by the residents in the area and when the same is complained, the Corporation as well as the Board shall take steps for rectification on warfooting.

Justice Dr.P.Jyothimani

Judicial Member

Shri P.S.Rao

Expert Member

NGT