BEFORE THE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH NEW DELHI

ORIGINAL APPLICATION NO. 22 ($T_{\rm HC}$) OF 2013 (M.A. NO. 19 OF 2014)

IN THE MATTER OF:

- Sukhdev Vihar Residents Welfare Association
 Through its President
 Shri S.C. Sareen
 Having its office at
 108, Sukhdev Vihar
 New Delhi-25
- Jasola Residents Welfare Association (Regd)
 Pocket 1 & 2,
 Through its General Secretary
 Dr. H.B. Singh
 S/o. Sh. N.S. Aggarwal
 Having its office at
 155/1, Jasola Vihar
 New Delhi-110025
- 3. Mr. Ravinder Chanana S/o. Late Shri Gopaldas Chanana R/o. 82-C, Pocket A, DDA Flats Sukhdev Vihar New Delhi
- 4. Ishwar Nagar (East) Residents Welfare Association Through its President Mr. Anant Trivedi S/o. Late Sh. O.P. Trivedi Having its office at Ishwar Nagar Colony (East) New Delhi-110025
- 5. Welfare Society for Elderly and Destitute People Through President Mr. Mohd. Arif Khan S/o. Mr. Sharifulla Khan D1-Hazi Colony, Near Okhla, New Delhi
- 6. Ghaffar Manzil Extension,
 Phase-II, Residents Welfare Association (Rgd.)
 Through its President
 Sh. Haji Raisuddin
 S/o. Late Sh. Nizamuddin
 Having its office at
 L11/12, Gaffar Manzil Extension Phase-II

.....Applicants

Versus

- The State of NCT of Delhi
 Through Chief Secretary
 Delhi Secretariat
 I.P. Estate, New Delhi-110002
- 2. Municipal Corporation of Delhi (MCD)
 Through Chairman
 Town Hall, Chandni Chow,
 Delhi-110006
- 3. New Delhi Municipal Corporation (NDMC)
 Through Chairman
 Palika Kendra Building, Opp. Jantar Mantar
 Parliament Street,
 New Delhi-110001
- 4. Department of Urban Development Through Secretary Government of NCT of Delhi 9th Level, C-Wing Delhi Secretariat, I.P. Estate New Delhi
- 5. Delhi Pollution Control Committee (DPCC)
 Through Chairman
 4th Floor, ISBT Building,
 Kashmere Gate
 Delhi-110006
- 6. Central Pollution Control Board (CPCB)
 Through Chairman
 Parivesh Bhavan, CBD-cum-Office Complex
 East Arjun Nagar
 Delhi-110032
- 7. Delhi Development Authority (DDA)
 Through Vice Chairman
 Vikas Sadan, INA
 New Delhi-110023
- 8. Ministry of Environment and Forests, (MoEF)
 Government of India
 Through Secretary
 Paryavaran Bhawan, CGO Complex
 Lodhi Road
 New Delhi-110003
- 9. M/s. Jindal Urban Infrastructure Ltd. 28, Shivaji Marg
 New Delhi-110015

Government of Uttar Pradesh
 Through Principal Secretary Environment,
 601 Bapu Bhawan Secretariat, Vidhan
 Sabha Marg-Lucknow-226001 (UP).

.....Respondents

COUNSEL FOR APPLICANT:

Mr. K.K. Rohtagi, Mr. Pawan K. Bahl, Mr. S.N. Mehrotra and Mr. Dilpreet Singh, Advs. for Sukhdev Vihar R.W.A.

COUNSEL FOR RESPONDENTS:

Mr. Ravi Gupta, Senior Advocate with Ms. Puja Kalra, Advocate, for Respondent No. 1 & SDMC

Mr. Balendu Shekhar, Mr. Vivek Jaiswal Advocates for Respondent No. 2

Ms. Sakshi Popli, Advocate for Respondent No. 3

Mr. Raman Yadav, Advocate for Respondent No. 4

Mr. Biraja Mahapatra, Advocate and Mr. Dinesh Jindal, LO, DPCC

Mr. Raj Kumar, Advocate and Mr. Bhupender Kr., LA, Central Pollution Control Board

Mr. Rajiv Bansal, Mr. Kush Sharma and Ms. Arpita, Advocates for Delhi Development Authority

Mr. Krishna Kumar Singh, Ms. Deep Shikha Bharati, Advocates for Ministry of Environment, Forest and Climate Change

Dr. Abhishek Attrey, Advocate

Mr. Manoj Kumar Singh, Advocate for Respondent No. 9

Mr. Nasir Ahmed, Advocate for Respondent No. 11

Mr. Tarunvir Singh Khehar and Ms. Guneet Khehar, Advocates for GNCTD

Ms. Alpana Poddar, Advocate with Mr. Bhupneder Kr. LA, Central Pollution Control Board

Mr. Matrugupta Mishra, Advocate for DMSWSL

Ms. Puja Kalra, Advocate for North & SMCD

Mr. Abhishek Yadav, Advocates for State of Uttar Pradesh

Mr. Suryajyoti Singh Paul, Advocate, Mr. Manoj Kr. Singh and Mr. Nilava Bandyopadhyay, Advocates

JUDGEMENT

PRESENT:

Hon'ble Mr. Justice Swatanter Kumar (Chairperson)

Hon'ble Mr. Justice U.D. Salvi (Judicial Member)

Hon'ble Mr. Justice Raghuvendra S. Rathore (Judicial Member)

Hon'ble Mr. Bikram Singh Sajwan (Expert Member)

Hon'ble Mr. Ranjan Chatterjee (Expert Member)

Reserved on: 23rd December, 2016 Pronounced on: 2nd February, 2017

- 1. Whether the judgment is allowed to be published on the net?
- 2. Whether the judgment is allowed to be published in the NGT Reporter?

JUSTICE SWATANTER KUMAR, (CHAIRPERSON)

FACTUAL MATRIX OF THE CASE

A. CASE OF THE APPLICANTS

The Petitioners 'Resident Welfare Association' of Sukhdev Vihar, Jasola Vihar, and Ishwar Nagar, duly registered Cooperative Societies along with others have approached the Hon'ble High Court of Delhi at New Delhi by filing Public Interest Litigation under Article 226 of the Constitution of India praying that the construction of the proposed Waste to Energy plant close to Okhla STP should be stopped. Further, to shift the existing plant to any other site and to direct the official respondents to take action against the concerned officers who planned construction and commencement of the Waste to Energy plant in that area. This relief was claimed by the petitioners by invoking Article 21 of the Constitution of India.

2. The petitioners claimed in the petition that the Municipal Corporation of Delhi (for short, "MCD") is in the process of setting up of a Waste to Energy plant for processing and disposing municipal waste using Refuse-derived Fuel (for short, 'RDF') based incineration technology to generate 16 MW of power per day. According to the applicants, once, this plant becomes operational, it will bring disaster to the environment and ecology and there would be release of deadly sinister chemicals to the environment causing

air and water pollution. Further, 20% of residue left after burning of RDF pellets will be in the form of highly toxic ash, which will pollute the entire carriageway, wherever it is dumped. It will be dangerous to the lives of the residents of these colonies in particular and to the people in the city in general. It is averred that about 15 acres of land in Okhla, situated behind Central Road Research Institute and Okhla Sewerage Treatment Plant was allotted to the New Delhi Municipal Corporation (for short, "NDMC") in early sixties for setting-up and running a compost plant, which has been, by and large, non-functional for the last two decades. The compost plant was set-up in the area when there was no population around the site. With the passage of time, the scenario has completely changed and a number of large and densely populated residential colonies came up, surrounding this land. Some of the residential houses/flats are located 100 meters away from the project site. The Integrated Municipal Solid Waste Processing facility was proposed to be developed for dealing with the Municipal Solid Waste (for short, "MSW") that is generated in Delhi. The Integrated MSW Processing Complex consists of MSW processing plant to convert MSW to RDF, bio-methanation plant and power plant. The proposed plant was to process 1300 Tonnes per Day (for short, "TPD") of MSW to generate 450 TPD of RDF in the form of fluff. In addition, About 225 TPD of fluff from Timarpur plant was to be burnt to generate 16 MW of power per day based on RDF incineration technology. The plant was to operate in two shifts per day and for 330 days in a year. Waste was to be supplied by MCD and NDMC. Chlorinated plastic shredded, municipal waste which cannot be

segregated at source or point of use, when burnt, releases highly toxic compounds such as Dioxins, Furans, heavy metals and other pollutants. These pollutants would have adverse impacts as they are well known for their toxic impact on human health and environment. There exists overwhelming scientific evidence to show that incineration is a sure cause of ill-health and several dangerous diseases. MSW incineration emits large quantities of Green House Gases, including Carbon Dioxide (CO₂) and Nitrogen Oxides (NO) and contributes to global climate change. They are also a large source of indirect Green House Gases, including Carbon Monoxide, Non-Methane volatile organic compounds and Sulphur Dioxide. The incinerator also emits more CO2 per MW/hour than any fossil fuelbased power source including coal/fuel power plants. Incinerators also develop toxic ash or slag that must be then deposited into landfills. This ash contains heavy metals and gas pollutants which are toxic and pollute underground water. The Shukla Committee in its report encouraged the minimization and management of MSW but it also brought out the associated hazards of incineration of MSW. It is averred by the applicant that incineration is not a preferred option in India. The Ministry of Environment, Forest, and Climate Change (for short, "MoEF&CC") had framed the Municipal Solid Waste (Management and Handling) Rules, 2000 (for short, "Rules of 2000"). According to Schedule III on 'Specification for Landfill Sites', Clauses (ii), (iv), (viii) and (ix) relating to selection of landfill sites state that the sites should be away from habitation clusters, forest areas, water bodies, monuments, national parks, wetlands and places of important cultural, historical and religious

interest. It also provides that a buffer zone of no development should be maintained around landfill site and shall be incorporated in the Town Planning Department's land-use plans. Under these Rules, even the landfill sites should be an integral part of the plant or atleast be located quite close by as in the present case. Identified sites cannot be regarded as an integral part of the landfill sites. The nearest landfill site at Okhla is 10 km away from this location. Secondly, no landfill site can be created at or near the site of the proposed plant. Thus, it will be seen that the respondents have not cared to meet the important requirement under the Rules. White paper on pollution in Delhi by the Government of India refers to the NEERI studies on thermal treatment methods such as incineration of converted waste to briquetting and its subsequent use as fuel, and states that they are not feasible due to the low heat value of MSW in MCD area. It is also averred that the incinerator would be emitting carcinogenic and persistent pollutants. Even in Malaysia, the proposal to establish the Broga Incinerator Project of capacity of 2000 TPD led to huge public protest on the ground that it would affect the human health adversely. Some people close to the facility may be exposed directly through inhalation or indirectly through consumption of food or water contaminated by deposition of the pollutants from air to soil, vegetation, and water. In the developing countries, wherever such plants are permitted, the norms for such plants are very strict and stringent and no such project are allowed in residential areas. The proposed scheme of setting up the Waste to Energy plant at Okhla is a self destructive, anti-people scheme to endanger the lives of thousands of residents of the immediate

neighbouring colonies and would also affect the lives of lakhs of people in the surrounding colonies. The whole project is misconceived, mis-guided and mis-directed in terms of the development scheme.

- Vide its order dated 8th July, 2009, Hon'ble High Court of 3. Delhi issued notice to the respondents. Some of the respondents accepted notice on that very day and were directed to file their replies. No interim directions were passed by the Hon'ble High Court of Delhi. When the matter came up for hearing on 12th August, 2009, the learned Additional Solicitor General informed the Court that the project in question is one of the pilot projects recommended by the Expert Committee appointed by the Hon'ble projects were Supreme Court of India. Two such similar recommended at Vijayawada and Hyderabad and those two projects have already started functioning. For the project in hand, all necessary permissions have been obtained from the concerned authorities and the technologies adopted for this project are similar to the projects at Vijayawada and Hyderabad. The Court then ordered that it is not possible to entertain the Writ Petition and accordingly dismissed both the Writ Petition and the application before it.
- 4. The petitioners then filed a review application being Review Application No. 448 of 2009 seeking review of the order dated 12th August, 2009. The principal ground taken in the review was that the Sukhdev Vihar project was not one of the pilot projects on MSW as recommended by the Expert Committee. Similarly, the project at

Vijayawada and Hyderabad have been in operation since 2003 much prior to the order of the Hon'ble Supreme Court of India dated 16th May, 2007 passed in I.A. 18, Writ Petition (Civil) No. 888 of 1996 under which the Ministry of Non Conventional Energy Sources were permitted to go ahead with the five pilot projects chosen and recommended by the Expert Committee.

5. This review application remained pending. The application had been filed beyond the period of limitation and notice was issued by the Hon'ble High Court of Delhi vide its order dated 11th December, 2009. Vide its order dated 15th January, 2010, the Hon'ble High Court of Delhi allowed the Writ Petition primarily on the ground that the site of the project in Delhi was neither recommended nor approved by the Expert Committee appointed by the Hon'ble Supreme Court of India and the order was passed without prejudice to the rights and contentions of the parties. The Writ Petition having been restored, remained pending for hearing. Vide its order dated 2nd March, 2010, Hon'ble High Court of Delhi noticed that the only issue in the case is with regard to location of waste disposal plants and the Bio-medical waste plants. The Hon'ble High Court of Delhi has also called for the competent authority that is the Delhi Pollution Control Committee (for short, "DPCC") to explain the stand taken by it and also highlight the actions that have been taken to avoid pollution to be caused by the establishment of Waste to Energy plant at Okhla. On 15th September, 2010, the Hon'ble High Court of Delhi passed the following order:

"Let the matter be listed for final disposal on $12^{\rm th}$ January, 2011.

Any action taken by the respondent shall be subject to the result of this petition."

6. When the matter came up for hearing before the Hon'ble High Court of Delhi on 18th July, 2011, the Hon'ble High Court of Delhi noticed in its order that the DPCC had granted 'consent to establish' to the said plant. However, 'consent to operate' had not been granted as yet. Finally, *vide* order dated 23rd January, 2013, the matter was transferred to this Tribunal. The order dated 23rd January, 2013 reads as under:

"The writ petition concerns environmental issues covered under Schedule-I of the National Green 2010. By virtue of the said Act, Tribunal Act, particularly, Section 14, 29, 30 and 38(5), the matter concerning environmental issues covered in Schedule-I shall now be dealt with by the National Green Tribunal and decided under the said Act. The said issue came to be considered by the Apex Court in Bhopal Gas Peedith Mahila Udyog Sangathan vs. Union of India, (2012)8 SCC 326. Insofar as the fresh cases are concerned, the Apex Court had directed that all matters instituted after coming into the force of NGT Act, i.e. on 18th October, 2010 shall stand transferred and fresh cases can be instituted only before the NGT. Insofar as the cases pending trial at the time of coming into force of the said Act, as is the present case, the Apex Court directed that the Court may be well-advised to transfer such cases to NGT in its discretion. For a better appreciation, we quote paras 40 and 41of the said judgment:

40. Keeping in view the provisions and scheme of the National Green Tribunal Act, 2010 (for short the NGT Act) particularly Sections 14, 29, 30 and 38(5), it can safely be concluded that the environmental issues and matters covered under the NGT Act, Schedule 1 should be instituted and litigated before the National Green Tribunal (for short NGT). Such approach may be necessary to avoid likelihood of conflict of orders between the High Courts and the NGT. Thus, in unambiguous terms, we direct that all the matters instituted after coming into force of the NGT Act and which are covered under the provisions of the NGT Act and/or in Schedule I to the NGT Act shall stand transferred and can be instituted only before the NGT. This will help in rendering expeditious and specialized justice in the field of environment to all concerned.

41. We find it imperative to place on record a caution for consideration of the courts of competent jurisdiction that the cases filed and pending prior to coming into force of the NGT Act, involving questions of environmental laws and/or relating to any of the seven statutes specified in Schedule I of the NGT Act, should also be dealt with by the specialized tribunal, that is the NGT, created under the provisions of the NGT Act. The Courts may be well advised to direct transfer of such cases to the NGT in its discretion, as it will be in the fitness of administration of justice.

In our opinion, the issue raised in this petition being covered under Schedule-I of the Act, we deem it appropriate to transfer the same to National Green Tribunal for adjudication. In fact, there is no opposition for such direction, be it the appellant or the respondent. The parties agree that the issue of jurisdiction will not be raised before the Tribunal.

The Registry is directed to transfer this writ petition to the National Green Tribunal for adjudication. The interim order granted on 15.9.2010, shall continue till such time the same is considered by the Tribunal and the appropriate orders are passed. The petition should be transferred in a week s time so that it can be placed before the Tribunal for consideration in a week s time thereafter."

As would be evident from the above orders passed in the Writ Petition by the Hon'ble High Court of Delhi, there was no stay right from 8th July, 2009 to 23rd January, 2013 except when on 5th September, 2010 the Hon'ble High Court of Delhi observed that any action taken shall be subject to the result of the Writ Petition. Prior to that date, in fact, no protection of any kind had been granted to the applicant by the Hon'ble High Court of Delhi.

7. After the petition was transferred to this Tribunal, the applicants filed another application being M.A. No. 895 of 2013 seeking amendment to the petition. By this application, the applicants not only substantially changed the petition by bringing on record subsequent events but also materially altered their prayers. In the body of the application, specific averments were

made with regard to concealment of certain facts including the location of Sukhdev Vihar and other densely populated colonies. It was stated that there were deviations from the technologies outlined in the DPR and EIA report submitted by the project proponent. The initially proposed Waste to Energy plant was based on: MSW→MSW Segregation→RDF plant + Bio-methanation plant→RDF Boiler + to: Electricity. This has been modified MSW→MSW Segregation→Direct **MSW** feed of in Waste Energy to Boiler→Electricity.

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8. There was suppression and mis-representation of the facts in the EIA report. The emission standards provided by DPCC in relation to Dioxin and Furans are neither correct nor adequate. On a surprise check, the parameters of Particulate Matter (P_M) Dioxin, Furans, NO₂ were found to be in excess of the prescribed limits. The Expert Committee appointed by the National Green Tribunal (for short, "NGT") had also found that parameters of emission were exceeding the prescribed standards. Directions were again issued for measurement of Stack emission and Ambient Air Quality vide order of the Tribunal dated 30th April, 2013. While taking the additional grounds, reference was also made to the deviations from the Environmental Clearance (for short, "EC") in relation to number of boilers and with no facility for generation of RDF or for biomethanation plant. For these deviations, the project proponent ought to have taken a fresh EC. It also refers to various emissions, monitoring reports of DPCC. Referring to the reports of Shriram Institute for Industrial Research, it was stated that Suspended particulate matter (PM_{10}) (SPM), fine particulate matter (P_M), Benzene, Nickel which are injurious to health were found to be in excess. The Waste to Energy plant is immensely polluting the environment and threatening the right to life of the ten lakh inhabitants in and around the colonies near to the plant. On these averments, the applicant prayed for amendment of the prayer clause, which reads as follows:

- "A. Quash the Environment clearance granted by the Govt. of India Ministry of Environment of Forest vide letter No. 23-1/2006/1-A-III dated 31-3-2007.
- B. Direct the respondent no. 9 to produce the orders of consent to operate and its extensions and Quash the consent to operate and further extensions granted by DPCC.
- C. Direct the respondent no. 9 to shut down the WTE immediately and move to another location as per the Master Plan and the MSW Rules and the Environment Acts.
- D. Declare the "operating and emission standards" of incinerators as laid down in Schedule IV of the MSW (Management and Handling) Rules 2000 as *ultra vires* and direct the respondents to adopt the operating and emission standards of the European Union or the USA.
- E. Direct the respondent no. 9 to pay adequate cost/damages/penalty for restitution of the environment for the area around the WTE as considered adequate by this Hon'ble Tribunal.
- F. AND pass such other further orders in the interest of justice and circumstances of the case."
- 9. This application came to be allowed by the order of the Tribunal dated 5th December, 2013. However, while allowing this application, the contentions raised by the respective parties including the respondents were kept open to be heard on merits. Copies of the amended application were directed to be provided to the parties and replies were filed thereto.

B. CASE OF THE RESPONDENTS

- 10. All the respondents filed their respective replies to the original as well as amended application. It will not be necessary for us to refer to the earlier replies as all pleas therein have been taken in the replies to the amended application as well.
- **ACCORDING TO THE RESPONDENT NO. 9**, the application is mis-conceived, baseless and without merit. A specific objection has been taken by the respondent that the application is liable to be dismissed being barred by limitation. The application is barred both under Sections 14 and 16 of the National Green Tribunal Act, 2010 (for short, "Act of 2010"). The EC dated 21st March, 2007 had been granted prior to coming into force of the Act of 2010. Hence the same cannot be quashed under the provisions of the said Act. The reliefs claimed by the applicant under the Wildlife Act cannot be granted by the Tribunal as it is not one of the specified Acts in the schedule to the Act of 2010. The 'consent to operate' granted by the DPCC can be challenged before the appropriate Appellate Authority constituted under the statute and not directly before this Tribunal. The applicant seeks to challenge the vires of the Rules of 2000 which is beyond the mandate conferred upon the statutory body, and the said relief is also barred by limitation. Besides raising these preliminary objections on facts, the respondent no. 9 has stated that the National Capital Territory of Delhi (for short 'NCT of Delhi') has delegated the task of developing and managing Waste to Energy Plant to M/s. Infrastructure Leasing & Financial Services (for short 'IL&FS'). M/s IL&FS formed a Joint Venture company in the name of New Delhi Waste Processing Company Pvt. Ltd. (for short,

NDWPCL') with the Department of Power, Government of NCT of Delhi and developed the Integrated Municipal Waste Processing Project at NDMC compost plant site at Okhla by virtue of Special Purpose Vehicle (for short 'SPV') created for this project, namely, Timarpur Okhla Waste Management Company Ltd. (for short, "TOWMCL"). Agreements were signed with MCD and NDMC to set up an Integrated Municipal Waste Processing Complex at the NDMC compost plant site at Okhla. All the clearances in this regard for Okhla Waste to Energy project were obtained in the name of this SPV-TOWMCL.

12. On 20th January, 2007, public hearing was held for the proposed integrated plant near the existing Okhla Sewage Treatment Plant pursuant to publication of notice on December, 2006 in Hindustan Times and Navbharat Times. On 9th March, 2007, authorisation was issued by DPCC to NDMC to setup and operate waste processing/waste disposal facility at NDMC compost plant site under Rules of 2000 for a period of two years from the date of issuance of authorization and subject to terms and conditions mentioned therein. MoEF&CC on 21st March, 2007, granted EC to the Integrated Municipal Waste Processing Complex at Okhla and Timarpur under EIA Notification, 2006 subject to specific and general conditions stated in that letter. The DPCC also issued 'consent to establish' under the provisions of the Air (Prevention and Control of Pollution) Act, 1981 (for short, "Air Act") and the Water (Prevention and Control of Pollution) Act, 1974 (for short, "Water Act") on 3rd July, 2007 for setting up of the integrated waste processing/waste disposal facility at NDMC compost plant site near Okhla STP. In furtherance of this, on 4th January, 2008, a land license agreement was executed between NDMC and TOWMCL, whereby land at Okhla Compost Plant site was allotted to TOWMCL for the purpose of developing, establishing, designing, constructing, operating and maintaining the project at Okhla. On 29th January, 2008, letter of intent was issued by NDWPCL to M/s Jindal Urban Infrastructure Ltd./respondent no. 9 pursuant to the bidding process for implementation of an Integrated Municipal Solid Waste Processing Complex. On 22nd February, 2008, share purchase agreement was signed among IL&FS, TOWMCL and Jindal Urban Infrastructure Ltd. After execution of all these documents and upon agreed terms, on 4th September, 2008, the plot for Okhla Sewage Treatment Plant measuring 15 acres was handed over to M/s Jindal Infrastructure Ltd. by NDMC. In April 2009, the Writ Petition No. 9901 of 2009 was filed by the applicants.

13. The Ministry of New and Renewable Energy, Government of India granted the sanction for implementation of the program for setting up of five pilot projects for power generation from MSW in India. On 21st December, 2011, DPCC issued 'consent to operate' as well as granted authorisation to respondent no. 9 for a period of 3 months to operate waste processing/waste disposal facility near NDMC compost plant. The project proponent applied for grant of extension of 'consent to operate' and 'authorization' which was granted on 3rd May, 2012 and 2nd July, 2012 respectively. The plant started commercial operation on 1st September, 2012 and on

20th November, 2012 'consent to operate' under both Air Act and Water Act was granted by DPCC validating the period up to 20th March, 2013. The said consents were extended from time to time and are in force and lastly extended up to 31st December, 2016 under both the Acts. The project proponent has complied with all the requirements of law and is a non-polluting plant which has also been established by number of recent inspections conducted by the joint inspection team and as such the prayers made by the applicant need not even be entertained by the Tribunal.

ग्रस्ताचेत स्थाने

- 14. The Environment Clearance was granted to the applicant on 21st March, 2007. The same was in public domain. The NDMC had placed the same on record with its affidavit dated 8th February, 2010. The 'consent to establish' had also been granted by the DPCC at that time. The applicants filed rejoinder to the replies filed by NDMC on 1st January, 2010. Therefore, the application is hopelessly barred by the time as even the amendment application was filed on 8th October, 2013 nearly after the lapse of more than 3 years. The application for amendment has not been permitted to relate back to the date of institution of the Writ Petition.
- 15. Since the power of the Tribunal to condone the delay is limited and the Tribunal cannot condone the delay beyond the statutorily specified period under the relevant provisions of the Act. The Doctrine of Relation-Back, in case of amendment application is not one with universal application. Reliance has been placed upon the judgments of the Hon'ble Supreme Court of India in the cases of Singh Enterprises v. Commissioner of Central Excise, Jamshedpur

and Others, (2008) 3 SCC 70, Ashutosh Chaturvedi v. Prano Devi, (2008) 15 SCC 610, Ganesh Trading Co. v. Moji Ram", (1978) 2 SCC 91, Tarlok Singh v. Vijay Kumar Sabharwal, (1996) 8 SCC 367.

- 16. In the case of transfer of the writ petition to the Tribunal, the Tribunal is statutorily bound to look into the issue of maintainability and dismiss the appeal if filed beyond the limitation period. For reference *Raza Ahmad v. State of Chhattisgarh*, (2013) ALL (I) NGT Reporter (2) (Bhopal) 22.
- 17. The applicants have clubbed two different causes of actions available under Sections 14 and 16 of the Act of 2010 together in the application, which is impermissible. The order granting 'consent to operate' and E.C. are independently appealable and, therefore, could not be joined in the same application and, in any case, both do not lie under Section 14. On this ground also, the respondent no. 9 prays for dismissal of the application.
- 18. Further, in reply on merits, it is stated that the Rules of 2000 have been framed keeping in view the Indian conditions by competent forum of subordinate legislation. Existing emission standards have been designed keeping the Indian conditions in mind with European standards. The environmental conditions are different in each country and, therefore, absolute adoption of any principle or standard without scientific and technological data in that behalf would be improper. The project proponent is performing within the prescribed standards and therefore has committed no violation. It is reiterated that the land for the compost plant had

been allotted in favour of NDMC by the Delhi Development Authority (for short, "DDA") on 18th June, 1980 for setting up of a compost plant. Additional land was also allotted to NDMC for the same purpose on 4th August, 1995. The areas have proliferated around the plant site with the passage of time while the plant existed all along. Nearly 800 of such plants are operational all over the world where the technology using incineration has been installed in the middle of the cities. The estimated cost of the plant was nearly Rs. 200 crores. The respondent no. 9, however, has already invested approximately Rs. 282 crores to avail the best in class facility available. According to the applicant, it is pertinent to state that the project was set up to tackle the pollution caused by open landfills that emit very harmful pollutants. The plant was set up to generate 16 MW of electricity. The entire area has been designated as a waste management area and has facilities like Sewage Treatment Plant by DJB, MCD Compost Plant, Synergy Biomedical Waste Processing Plant and the Waste to Energy plant. The E.C. dated 21st March, 2007 had imposed stringent conditions for control of pollution which have been adhered to by the answering respondent and in the year 2013, the plant had already run for nearly a year. Respondent no. 9 had even strengthened the manual sorting system by deploying more people and the length of conveyor belt was increased to ensure proper segregation and, therefore there is a sustainable reduction in emission of Dioxin and Furans. The performance of the project in question is being monitored under the orders of the Tribunal by a Joint Inspection Team and the emission reports have shown improvements over a

period of time as even stated by the CPCB in its affidavit dated 12th November, 2013. Until 5th January, 2014, approximately 205 units of electricity had been generated by processing 1.1 million tons of solid waste. Delhi Electricity Regulatory Commission (for short, "DERC") in terms of regulation of 2012 has provided that every obligated entity shall purchase electricity from renewable source for fulfilment of a defined minimum percentage of the total quantum/consumption under the regulation. Well managed incinerators with modern technology are unlikely to have any significant or detectable effects on cancer incidence, the incidence of adverse birth outcomes (including infant mortality), or the incidence of respiratory disease. Reliance has been placed upon the report dated 1st March, 2012 prepared by AEA Technology, U.K. as well as by Health Protection Agency, a public body in U.K. It is specifically denied that the impact of plant will endanger the lives of the residents and there would be a constant foul smell that will suffocate the atmosphere. Now, when the plant is in operation, there is no odour of the municipal solid waste. The plant is a stateof-the-art facility for the purpose of MSW processing. It is also denied that the transportation of the waste to the facility will choke the roads. The project in question does not violate Article 21 of the Constitution of India in relation to the rights of the applicants. It is also specifically denied that there has been a mis-representation or suppression of facts in the EIA report. The site was a landfill site. Due to paucity of land for landfills, it was felt desirable by the special purpose vehicle created by respondent no. 1 in consultation with other government agencies to reclaim the land whereby the

waste was removed and the plant was covered. The plant is in operation and there is no harm caused to the colonies in the vicinity. It is also submitted that the minimum quantity of 100 TPD of green waste is required to run the bio-methanation plant. Contract for the same was not finalised during the project development by Government of NCT Delhi. The said plant was, therefore, put on hold. Pelletisation facility was removed because pellet formation was not needed. It was to optimise handling of RDF. Pelletisation facility requires high energy intensive equipment, used to reduce RDF volume when RDF needs to be transported to far off locations. Boiler size and design installed is sufficient to handle pre-processed waste/RDF. The experience of previous years justifies the calorific value requirement of the fuel required in the Waste to Energy plant. According to the Project proponent, there is no deviation in the project, only reconfiguration of facilities is being done, due to non-availability of any successful and proven plant in India based on the technology predicted in tenderer's detailed project report. Boundary limits remain the same and all necessary safeguards have been taken. Amongst others, the following steps have been taken:

- Waste i. MSW Segregation, Preparation for possible segregation maximum recyclables, PVC, rubber based reusable, plastics, hazardous items.
- ii. RCC enclosed MSW pit with Negative pressure to control odour and fugitive gases before feeding into Boiler.
- iii. State-of-the-art Leachate Collection and Treatment System.
- iv. Efficient Rain Water Harvesting System installed.
- v. Ultrasonic Hooter System to avoid Bird menace installed.
- vi. Efficient fire-fighting system installed.

- vii. Wind Anemometer is installed for checking close watch on wind direction and speed.
- viii. Public display system has been installed.
- ix. Green belt created across the plant to reduce impact on environment."

19. It is also denied that there is any deviation from the technology outlined in DPR and EIA report. It is submitted that, pursuant to the order dated 28th May, 2013 of the Tribunal, the inspection was conducted by the joint inspection team and the report stated that performance improvement in controlling emission can be contributed to the measures taken by the plant such as cleaning of boilers along with associated flue gas treatment system reaction tower and bag house filters during March to June 2013, replacing of 92 damaged filter bags, improving efficiency of bag filters by maintaining differential pressure to 150 kilo Pascals across the bag house chambers. Besides that other improvements were also noticed by the team. It is stated that lower generation of power observed on 10th July, 2013 is because boiler number 3 was not operating from 8th July, 2013 to 10th July, 2013 which became operational and was noticed in the inspection during July 11 – 12, 2013. In using waste to produce electricity, there is no harm caused to the environment and public health. A Health Impact Assessment undertaken for a Waste to Energy 'Exeter' plant in the U.K. located between public areas concluded that the no adverse effects to health are seen in the vicinity of a modern technology Waste to Energy plant. The content of plastic (polychlorinated hard plastic) responsible for generation of dioxin and furans is very little due to its effective removal at primary level of municipal solid waste collection followed by effective source segregation by rag pickers

at *dhallao* level. There has also been a ban on the use of polythene in the State which has resulted in substantial reduction in plastic content of incoming municipal solid waste. The technology selected and implemented has inbuilt features of removal of dioxin and furans first within the boiler with inbuilt retention time of more than 2 seconds followed by minimum operating temperature of at least 850 degrees centigrade. It ensures that dioxin and furans are not formed within the boiler level. Possibility of any further reformation is minimised by effective quenching of flue gas followed by treatment of flue gases with activated carbon and lime in reaction tower and collection in bag house filters. The technologies have been thoroughly reviewed and are finally approved by CPCB. In the inspection conducted by the joint inspection team in furtherance to its order dated 30th April, 2013, it has been noticed that the incineration of metals to bottom ash and fly ash does not exceed the limit and therefore, cannot be categorised as hazardous waste. The standards cannot be relaxed or varied on case to case basis. They are expected to provide uniformity and ensure that the plants operate within the prescribed limit so as not to cause any pollution.

20. Respondent No. 9 had filed its reply to the submissions of the petitioner. It referred in some detail to the facts in regard to compost site as well as the present plant allocation of land to NDMC which we have already referred in detail. It may be noticed that according to the respondent no. 9 there was no change in original purpose of allotment of land as originally it was allotted for

Compost Site and the site has been earmarked for disposal of municipal waste. On 5th April, 2006, decision was taken to setup SWM Project with incinerator site at Timarpur which did not take off. After obtaining all requisite statutory permissions/clearances, the Waste to Energy Project at Okhla had been setup. The land was always earmarked for disposal of MSW as per Master Plan of Delhi. Further, it is averred that there is no violation of orders of the Hon'ble Supreme Court of India. After the order of the Hon'ble Supreme Court dated 15th May, 2007, the Ministry of New and Renewable Energy, Government of India had given its nod to setting up of five pilot projects for recovery of energy from MSW and this was to be taken up by urban local bodies of the governments. Accordingly, the proposed plant was established after issuance of a Letter of Intent after a successful tender bid. The project was not expected to be a prototype but rather a full scale test project to demonstrate effectively and fully, the complete functioning and output of the Plant. It is also the case of the respondent no. 9 that there is no violation of the Rules of 2000. The steps for establishment of Integrated Waste Processing Plant were being taken pursuant to order of the Hon'ble Supreme Court, passed in the Writ Petition (Civil) No. 888 of 1996 case of 'Almitra H. Patel & Anr. vs. Union of India & Ors.'. The plant offers a clean, efficient and effective alternative to dumping of MSW in landfill sites, in addition to its other public benefits, while complying with the requirements and recommendations of the Expert Committee appointed by the Central Government. Stringent environment standards are already being adhered to and all Environmental

Clearances stand duly obtained by the Project proponent. There is no violation of Schedule IV of the Rules of 2000, as claimed by the applicants. It is reiterated that technology of the proposed plant is state-of-the-art. It is indeed a technologically improved version of the basic incineration technology recognized under the Act and Rules, particularly, Schedule II and IV of the said Rules. It is stated that there are nearly 800 MSW Waste to Energy Plants in operation all over the world, which are located close to the residential or developed areas. Copies of satellite pictures from Google Earth Maps showing the location of similar plants in countries like Denmark, Japan, Italy, Sweden, United Kingdom, Singapore, France, China have been placed on record. In Japan about 87% of the municipal waste is disposed of by using the same technology. The NCT, Delhi finds itself in a similar position like that of Japan because of paucity of geographical space. The generation of MSW in Delhi is expected to touch 18000 MT per day by 2020 from 8000 MT per day prior to 2011. The projects have been given Consent to Operate by the DPCC. It is in public interest that the plant should operate. It is incorrect to suggest that the Refuse-derived Fuel (for short, "RDF") incineration technology as developed by DST-TIFAC-India is not used anywhere in the world. The same technology is being used in Hyderabad and Vijayawada. The Plant is being installed with state-of-the-art technology, based upon a 'Scrubber and Bag Filter House' mechanism for containment of the ambient particulate matter exposure well within all prescribed national statutory limits. The efficiency and collection range of particulate matter is also the highest, with such technology graph being attached to the reply in that behalf. The Plant is utilizing only nonhazardous solid waste, which is segregated by the collection agencies into 'recyclable' and 'metal'. As an additional safeguard, any 'metal' left behind in the recyclables is detected and removed in the metal recovery section of the plant. In addition to the same, an 'Advanced Flue Gas Cleaning System' ensures that all the pollutants remain well within their respective permissible limits. It is denied that the heavy metals which find their way into the solid waste will not be detected and segregated at the initial stage itself especially with the use of the 'Advanced Activated Carbon Injection System'. There is due compliance with law, procedure and principles of natural justice, a public notice was issued in terms of the EIA Notification of 2006 and a public hearing was conducted on 20th January, 2007. No representation from any Resident Welfare Association including Sukhdev Vihar was received and no NGO filed any objection against the same and finally the clearance was given to the project. Based on the submissions of the applicant and the fact that the operation of the plant is under stringent monitoring, the application deserves to be dismissed.

Pebruary, 2010 before the High Court. In that affidavit it was specifically stated that the affidavit was being filed with respect to the limited issue of choice of the location of the MSW Okhla Project by the NDMC. The stand taken was that, pursuant to the directions issued by the Hon'ble Supreme court of India in the case of *Almitra H. Patel (supra)*, various meetings were held with the

representatives of the various government departments of Delhi Government for taking necessary steps in furtherance thereto and for establishing and developing Integrated Waste Processing Project. The State of NCT Delhi delegated the task of evolving and developing of the techniques/technologies for the management of the MSW to M/s. IL&FS. M/s. IL&FS along with Andhra Pradesh Technology Development Centre (an agency of Ministry of Science and Technology, Government of India) undertook an elaborate exercise to provide suitable solutions to this problem. It was decided that the proposed technology would be an integration of MSW and Sewage Treatment Plant (for short 'STP') in the same complex. They were to provide a complete solution. In turn, this would also reduce the burden on Government for providing landfill sites to the municipal authorities. M/s. IL&FS after conducting initial study of the project vide its letter dated 8th June, 2006 invited NDMC to attend the public consultation for the project and give their views on betterment of value additions of the project. In this letter, it was stated as follows:

"There is a partly operational compost plant of NDMC on the site with a lot of waste spread across complete area without any efficient treatment facility. After the implementation of the Project, the entire waste will be removed from the site and the proposed plant would be totally covered as not to cause any nuisance in the area....also the methane, which is presently making its way into the atmosphere will now be controlled and same will comply to India's commitment to International pollution norms."

22. A meeting was held on 7th July, 2006 chaired by the Hon'ble Chief Minister of Delhi and was attended by heads of all Departments of the Delhi Government. It was highlighted in the

meeting that Delhi was facing acute shortage of landfill sites as with the over increasing population, the waste generation is also substantially increasing. In order to reduce the transportation cost involved in the disposal of MSW to the landfill sites, it was proposed to have decentralized Waste Management Scheme all over Delhi. The Chief Secretary, Delhi invited inputs from various agencies and NDMC and stated that they were agreeable to provide the land for Compost Plant at Okhla for the project and for that purpose the land measuring 8.5 acres was allotted by DDA to NDMC. from the very beginning, the site at Okhla was earmarked only for disposal of the municipal waste/compost plant which was undertaken by the NDMC. Memorandum of Understandings for Okhla Project besides Timarpur etc. was also signed. The DDA stated that they had agreed to the Integrated Waste Management Project and had accordingly given their NOCs for the project at Okhla. The Hon'ble Chief Minister of Delhi, in principle approved the project and suggested that the project should be implemented soon and a task force was directed to be constituted under the chairmanship of the Chief Secretary for this purpose. furtherance of the decisions taken in the meeting dated 7th July, 2006, another meeting was held on 25th July, 2006, where all the agencies extended their support to the proposed MSW projects at It was also directed that decentralized scheme may be adopted to ensure that transportation of garbage is for minimal distance only. It was also decided that the land for SPV should be provided from the land already available with the authorities. The MoU was entered between MCD, NDMC and M/s. IL&FS to

implement the project to process MSW in an effective and beneficial The project envisaged an integrated MSW processing manner. facility at Okhla and Timarpur which will generate electricity from MSW supplied by the municipal bodies of Delhi. It was ensured that the project was complying with all the requirements and recommendations of the Expert Committee appointed by the Central Government pursuant to the order of the Hon'ble Supreme Court dated 6th May, 2005 passed in the case of Almitra H. Patel & Anr. v. Union of India and Ors. (supra). The Committee had recommended use of integrated technology for the processing of MSW against the traditional methods of disposing of the waste by dumping in landfills sites. A SPV called 'TOWMCL' was formed to undertake the project of converting municipal waste to energy. The bids were invited and vide letter dated 29th January, 2008 the successful bidder was declared. The persons likely to be affected were given notice to submit their objection in furtherance to the public notice dated 17th December, 2006. A public meeting was held at the office of the Deputy Commissioner (South) at 11:00 A.M. In the course of hearing there was no representation from any member of Resident Welfare Association of Sukhdev Vihar or any nearby areas or any Non-Governmental Organization. The applicants were fully aware of the project, as the public notice was published on 17th December, 2006 and they had been sending letters to various authorities and bodies.

23. A status update on the project was submitted to the Principal Secretary (Power), Government of NCT of Delhi, wherein it was

clearly provided that the project had undertaken all statutory clearances as required under the law. It included EC from MoEF, Authorisation under MSW Rules of 2000, Clearance for Stack Height from Airports Authority of India and from Air Force Head Quarters, No Objection Certificate from Central Ground Water Authority, Clearance from DDA, Clearance from Town & Country Planning and Consent to Establish for Okhla from DPCC. project was undertaken in accordance with Schedule IV of the MSW Rules of 2000 which provides for waste disposal by way of incineration or pelletisation. Vide License Agreement dated 24th January, 2008 land at Okhla Compost Plant was allotted to TOWMCL to develop, establish, design, construct, operate and maintain the project in accordance with the concession agreement executed between the parties. On 4th September, 2008, possession was handed over to respondent no. 3. The total project cost is estimated at around Rs. 203.99 crores, out of which the amount, respondent no. 9 spent towards advances for the import of environment friendly power plant and other equipments for which signed contracts with suppliers, preparation and he development of Project Site etc. The process on which the project is based does not involve utilization of waste in received form, but the same is burnt in a Boiler as fuel after proper treatment. combustion of MSW takes place after proper segregation of waste which includes segregation of plastics, Poly Vinyl Chloride (PVC), HDPE/LDPE etc. besides segregation metals/glass. The PVC is handpicked from slow moving conveyor by workers along with other recyclable material. This process provides fuel and used in a Boiler

just as the coal or any other solid fuel is used in Boilers. The burning process is done under controlled combustion. The technology is environment friendly and issues and concerns of the petitioners pertaining to foul smell, etc. can be negated by use of chemical spray to kill the smell and such chemicals are readily available and are being used world over in such waste processing units. In a country like India with high population density and low land mass and where the cost of land as well as that of transportation is high, Waste to Energy Plants should be the order of the day, like it is happening the world over. This project is being developed as a Clean Development Mechanism (CDM) project and has already been registered with United Nations Framework Convention on Climate Change (for short UNFCCC'). The CDM Projects are such projects which adopt such a technology, which takes care of all environmental issues as per the international standards, including stoppage of generation/emission of Green Houses Gases and are considered to be environmentally friendly, and are thus eligible for carbon credit. The detailed Project Design Document dated 28th July, 2006 was also submitted to the UNFCCC by TOWMCL highlighting the details of the project and also pointing out the pollution control mechanisms of the project. This was done to ensure that it is in line with UN policies. On behalf of this respondent, it is submitted that the need of processing and disposing of the MSW arises from the fact that the garbage lying in the landfills gives rise to a host of microbial and parasitic activities and releases a host of dangerous gases like Methane, Carbon Dioxide, oxides of Sulphur and Nitrogen in the atmosphere. As the

MSW is often dumped in the open ground, it results in ground water contamination by way of leachate. It is further submitted that processing of the MSW is a necessity and in the process, the resultant MSW in form of processed fuel can be utilized to generate electricity and other products which will not only help in keeping the environment clean but also serve as an alternative fuel. In their reply, they have spelled out the benefits of the Integrated MSW Processing facility as follows:

It is worth mentioning that this project is not similar to any other power generation project. It is submitted that following benefits will emanate from the subject project:

- (a) The Project will reduce the MSW disposal load in the State of Delhi by 676500 tons annually. This is important in the light of the fact that all the landfills in the state of Delhi have already exhausted their operational life and are working in excess of their capacity.
- (b) The resultant fly ash will be used by the brick making industry for manufacture of fly ash bricks. This ensures that there is no waste residue left after the entire process is completed.
- (c) The Project will generate employment opportunities for the local population during both its construction phase and operational phase. The project site at Okhla alone is expected to employ about 355 people daily.
- (d) That the Project aims to tackle the population caused by the open landfills. The MSW that lies open in the landfills have been known to emit huge quantities of the Methane gas which is 40 times more harmful as a Green house gas than Carbon Di-oxide. In addition to the above benefits treating of the MSW is the controlled environment at the Plant will also stop the problem of bad odour and leachate polluting the environment.
- (e) That the processed fuel so produced after the processing of MSW is a clean and environment friendly fuel. The use of this processed fuel has proved to be less polluting than the burning of fossil fuels like Coal etc.
- (f) The Project being an environment friendly source of generation of power will also be eligible for getting carbon credits and thus can help the country to generate valuable foreign exchange.

24. According to this respondent, the present application is an abuse of the process of the Court and the application should be dismissed by the Tribunal. At this stage it may be noticed that when the reply was filed before the Hon'ble High Court of Delhi in the Writ Petition, MCD was a single entity/corporation having jurisdiction over entire NCT of Delhi, however, later on by Notification dated 24th January, 2012, the government of Delhi trifurcated MCD into South Delhi Municipal Corporation (for short, "SDMC"), North Delhi Municipal Corporation & East Delhi Municipal Corporation (for short, "EDMC"). The areas falling in this jurisdiction have been clearly defined and divided. The SDMC has divided the entire area under its jurisdiction into four zones namely Central Zone, South Zone, West Zone and Najafgarh Zone. Okhla based Waste to Energy Plant in question falls under the territorial jurisdiction of Central Zone of SDMC. All the municipal corporations have filed separate affidavits. Out of these affidavits the most relevant affidavit would be of SDMC under whose jurisdiction the Plant in question falls.

25. **SOUTH DELHI MUNICIPAL CORPORATION** has filed three different affidavits on 3rd April, 2013, 17th February, 2014 and 12th January, 2016, respectively. In the first affidavit filed by the SDMC, it is stated that the Sanitary landfill site is situated at Maa Anand Mai Road, Central Zone having an area of approx 32 acres. The operation at site includes disposal of waste, its levelling and providing cover, over it with inert material/malba. The site has already got exhausted long time back and the height of the landfill

is presently about 50 meter above the ground level but due to nonavailability of any other alternative site, duping the present site is being continued by raising the level of filling. It has reached such a stage where the SDMC is finding it difficult to operate it, too at the risk of human life, settlement and property. There is looming danger of disaster which may take place any time due to formation of toxic gases at the landfill site and may cause danger to the lives of the residents living nearby. The Compost Plant in Okhla is situated at Okhla and is being operated by M/s. IL&FS. The plant has capacity of converting 200 MT of MSW per day into compost. This plant is working on an average of 60% of its designed capacity. Waste to Energy Plant at Okhla has the capacity of processing 1950 MT of MSW per day to produce 16 MW of power and is being (managed by M/s. operated by TOWMCL Jindal Infrastructure Ltd.). The plant is working to the optimum of its designed capacity. 40% residue is returned to the sanitary landfill site, Okhla Phase-I for disposal. The Hon'ble Supreme Court and High Court directed that sufficient landfill sites should be allotted to the Corporations for starting projects to deal with the waste generated. In fact, the Hon'ble Supreme Court in the case of Almitra H. Patel (supra) had passed an order dated 15th February, 2000, the relevant extracts of which read as under:

[&]quot;....We direct that sites for landfills will be identified bearing in mind the requirement of Delhi for the next twenty years within a period of four weeks from today by the exercise jointly conducted by Union of India through the Ministry of Urban Development, Government of National Capital Territory of Delhi, Commissioner, MCD, and chairman, NDMC and other heads of statutory authorities like the DDA etc. These sites will be identified keeping in mind the environmental considerations and in identifying the same Central Pollution

Control Board's advice will be taken into consideration. The sites so identified shall be handed over to the MCD and or NDMC within two weeks of the identification, free from all encumbrances and without MCD or the NDMC having to make any payment in respect thereof...."

".....We further direct Union of India through Ministry of Urban Development, Government of National Capital Territory of Delhi, Commissioner, MCD, and Chairman, NDMC and other statutory authorities like DDA etc. to identify and make available to the MCD and NDMC within four weeks from today sites for setting up compost plants. Initially considering the extent of solid waste, which is required to be treated by compost plants, the number of sites, which should be made available, will be eight. Such sites shall be handed over to the MCD/NDMC free of cost and free from all encumbrances within two weeks of identification. MCD and NDMC shall thereupon take appropriate steps to have the compost plants/processing plants established or caused to be established and to be in operation by 30th September, 2000....."

26. That provision in Master Plan for Delhi 2021 has been made on the basis of recommendations given by National Environmental Engineering Research Institute (NEERI). It is stated that only 10% of the required land had been provided to MCD which is highly inadequate to absorb the huge MSW that is generated in Delhi. It is averred that the effective land made available to erstwhile MCD for development of Sanitary Landfill sites as well as setting up of Compost/Processing Plant is only 150 acres out of 339.86 acres against the requirement of 1500 acres of land for next 20 years. This Corporation has then stated that it is necessary for operating Waste to Energy Plant and has provided the following reasons in that behalf:

"a) That disposal of MSW is the incessant necessity round the year on the part of the Corporation, which is facilitated by the Waste to Energy Plant at Okhla. The disposal of MSW is pre-condition for existence of a healthy society and also to avoid diseases, epidemics & unhygienic conditions, which may arise due to formation of accumulated garbage. Also for SDMC, there is no plant except Okhla of disposal/processing of MSW. The

- disposal of MSW at Okhla cannot be dispensed with under any circumstances unless an alternative landfill site is made available to the SDMC by any of the Govt. agency.
- That in compliance of the orders of the Hon'ble Supreme Court of India dated 15.02.2000, the Timarpur-Okhla Waste to Energy Plant project was conceptualized by Govt. of NCT of Delh (GNCTD), erstwhile Municipal Corporation of Delhi (MCD), New Delhi Municipal Council (NDMC) and IL&FS Waste Management and Urban Services Limited to assist in managing around 1950 MT per day of Delhi's Municipal Solid Waste. This project is considered important for implementing Delhi's Green Agenda. The project has been awarded by the GNCTD to M/s. Timarpur-Okhla concessionaire, Management Company Private Limited (TOWMCL) for Development, Construction, Operation and Maintenance of Integrated Municipal Waste Processing Project and to generate 16MW of electricity per day at Timarpur & Okhla, Delhi.
- c) That the only alternate available with SDMC for Okhla based Waste to Energy Plant is to dump the MSW at existing Sanitary Land Fill site at Okhla Phase-I. However, there are a number of adverse effects of dumping of the MSW at SLF Okhla Phase-I.
 - (i) That the existing SLF site at Okhla Phase-I is completely saturated and at present the height of the land fill site is 50 meter above the ground level. It is a potential hazard to life and property in the vicinity as well as for persons working at the site.
 - (ii) That dumping of MSW at SLF sites is an environmental hazard. MSW dumped at SLF generates gases such as Methane such as leachate; both are highly toxic and hazardous pollutants of Air and Water. Thus, if Waste to Energy Plant is closed, much adverse impact on environment would be caused.
- d) Waste to Energy plant has come to major rescue to SDMC which is internationally considered to be the most viable option for treating the Municipal Solid Waste."
- 27. It is stated that SDMC has no role in either setting up or granting any license/permission to operationalize the Okhla based Waste to Energy Plant. The role of the SDMC is to provide daily garbage i.e. MSW to the tune of 1550 MT per day to the plant, which is being used as raw material for generation of electricity. MCD has

signed the Concession Agreement dated 29th January, 2007 with TOWMCL. The role of the SDMC is limited only to ensure uninterrupted supply of MSW to the Okhla based Waste to Energy Plant round the year without any remuneration. As already noticed vide order dated 15th February, 2000, the Hon'ble Supreme Court had directed the authorities of Union of India and Delhi to setup eight numbers of Compost/Processing Plants for disposal/processing of MSW in Delhi. As on date four Compost/Processing Plants are operational i.e. one Compost Plant at Bhalswa, One Integrated Waste Facilities at Narela-Bawana, One Compost Plant at Okhla and one Waste to Energy Plant at Okhla. One Waste to Energy Plant at Ghazipur is under construction and three other Compost/Processing Plants would be setup once the required land is provided to the Corporations.

In the second affidavit dated 17th February, 2014, the 28. Corporation only emphasised upon the necessity and other detailed information in respect of Waste to Energy Plant Okhla, qua the if Corporation. is stated that Project It the proponent decreases/stops consuming daily waste of 1200 MT, SDMC has no other alternative to dispose/dump that quantity of the waste elsewhere. It is also stated that the SDMC is facing acute paucity of land space while handling of daily MSW and Construction & Demolition waste/malba/debris/inert material. The Corporation has been constantly pursuing the matter of allotment of land for setting up of Plants in furtherance to the order of the Hon'ble Supreme Court afore-referred. DDA has recommended in its report

in first phase that about 298 acres of land is required to be allotted/handed over to SDMC at three different sites and the facilities are proposed to be shared by SDMC &EDMC. It is averred that this is the only facility available with the Corporation in that area for processing/disposing off MSW. In its final affidavit dated 12th January, 2016, SMDC has stated that it has a total area of 656.91 Sq. Kms with a population of approximately 56 lakhs in its jurisdiction. The Corporation collects, transports and disposes all the MSW of different kinds, including that from unauthorized colonies/slum areas/regularized colonies. It is responsible for providing municipal and civic services for benefit of the public residing within its territory. The composition of MSW is biodegradable waste, recyclable waste, non-biodegradable waste, inert waste, which includes street sweeping, C&D waste and drain silt. In terms of percentage, biodegradable waste is nearly 38.6% of the total waste. It is stated that nearly 3000 MT of MSW is collected daily from about 1200 collection centres/(Dhalaos/ Dustbins/Open sites) existing in different parts of all the zones of this Corporation. The MSW does not include segregated waste picked up by rag pickers/kabariwalas at the door step and collection centres. This waste is taken to Sanitary landfill site at Okhla Phase-I, which is already overflowing, the Waste to Energy Plant, Compost Plant at Sanitary landfill site at Bhalswa, disposal/processing. The Corporation has entered into Concession Agreement for collection and transportation of waste which has provided a benchmark of 20% from 85th month from commercial operation date. In terms of the Rules of 2000, every municipality

within its territory is responsible for implementation of these Rules including segregation of MSW and it must transport the waste in accordance with Rules. This waste is being disposed of at the landfill sites and out of total 3000 MT of MSW, about 500 MT is Construction and Demolition (C&D) waste, about 300 MT is silt and The Sanitary landfill site at Okhla Phase-I, as 600 MT is Ash. already stated, is overflowing and this site has got exhausted long back. Details of Waste to Energy and Compost Plant have already been made in the earlier affidavit by this Corporation which has been repeated in this affidavit as well. The corporation also proposes to establish additional Waste to Energy Plant on the proposed site adjoining existing SLF site Okhla Phase-I on the land of CONCOR/CCI/Railway/DDA as well as another Plant at Najafgarh area. However, the suitable land is not made available to the Corporation despite orders of the Hon'ble Court. This respondent also prays that the Tribunal may issue necessary directions to DDA and Government of NCT, Delhi to allot land at the sites stated in the affidavit.

29. **NORTH DELHI MUNICIPAL CORPORATION** also filed written synopsis. The affidavit hardly related to the project in question. The stand of this Corporation before the Tribunal primarily is with regard to the Narela, Bawana Waste to Energy Plant and they have hardly referred to any relevant facts with regard to the project in question. In their affidavit they have stated that the NDMC had entered into an agreement with the concessionaire for door to door collection, segregation, transfer and transportation of MSW and for

developing an Integrated Municipal Solid Waste Processing facility & Engineered Sanitary Landfill facility in terms of Rules of 2000 at Civil Lines, Rohini and Vasant Kunj & Dwarka-Papankalan zones in Delhi on 17th July, 2009 between erstwhile MCD and M/s. Delhi MSW Solution Ltd. for a period of 20 years. The scope of work also related to adopting two processing technologies for processing waste with an object to maximize waste recycling treatment and to ensure that minimum waste is going to the landfill site. The technologies so selected/adopted were Windrow Composting and Refuse derived The concessionaire was to be paid Rs. 1494/- per MT as tipping fee. Certain disputes had arisen between the Corporation and the concessionaire in relation to revenue sharing from generation of power. This matter, however, came to be resolved by the judgment of the Tribunal in the case of Kudrat Sandu v. State of NCT, Delhi, decided on 2nd December, 2016. The Plant was directed to commence its processing of MSW to the extent of 2000 MT per day and to generate power in terms of the Concessionaire Agreement. The revenue sharing was permitted, payable 8 years from the date the generation of power starts, at a rate of 3% provided by the Tribunal subjected to the final determination in the arbitration to which the parties had decided to refer the matter to. At this stage we may also notice that another Waste to Energy Plant at Ghazipur was also subject matter before the Tribunal and by the same judgment that Waste to Energy Plant has also been directed to operate and generate energy in terms of the agreement between the parties. Thus, the affidavits or documents filed by NDMC & EDMC

in the present case were only regarding the disputes which had been settled in the case of *Kudrat Sandhu* (supra).

- 30. **DELHI DEVELOPMENT AUTHORITY** in its affidavit filed before the Hon'ble High Court that as per Zonal Development Plan of Zone 'F', green buffer (District Park) in between the approved residential colonies named Sukhdev Vihar, Jasola Residential Scheme and compost plant has been provided. The adjoining colonies to the compost plant are Hazi colony, Ghaffar Manzil, Okhla Vihar, etc. which are unauthorised colonies and are settled on the site earmarked for compost plant and recreational area. As per the Master Plan for Delhi 2021, in South Delhi, no specific sites for the sanitary landfill have been earmarked. Generally, such sanitary landfill sites are identified by MCD. It is clarified that only the unauthorised colonies settled on Government land are abutting the compost plant. So far as approved residential colonies are concerned, there is a provision of green buffer in between them, the compost plant and residential colonies. As per the provisions of Master Plan for Delhi-2021, a clear approach towards management of 4 types of waste generated in Delhi has to be adopted. The approach should take into account the need for adopting the clean Development Mechanism and the awareness of the carbon credits that can be earned and encashed through a planned and organized mechanism.
- 31. **THE STATE OF UTTAR PRADESH**, which was impleaded as a Respondent No. 10 *vide* order of the Tribunal dated 5th July, 2013, has also filed a separate reply. The State of UP has primarily

concerned itself with Okhla Birds Sanctuary which is located in the Capital Region of Delhi (NCR). It is located at a point where River Yamuna leaves the territory of Delhi and enters the State of UP. One of the most prominent features of this site is a large lake created by the construction of a barrage on the River Yamuna adjoining Okhla village towards the West and Gautam Budh Nagar towards the East. The Sanctuary area comes under the Irrigation Department of the State of UP. On 8th May, 1990, the UP Government declared 400 hectares of land to be protected land and further, as the Okhla Birds Sanctuary under Section 18 of the Wildlife (Protection) Act, 1972. In terms of the provisions of this Act, obligations are placed upon the persons not to destroy, exploit or remove any wild life from national parks and also, to not carry out activities which are not allowed in that area. In pursuance of the order of the Hon'ble Supreme Court of India dated 4th December, 2006 passed in Writ Petition No. 460 of 2004 'Goa Foundation vs. Union of India', in case any project requiring EC is located within the eco-sensitive zone around a wildlife sanctuary or national park or in absence of delineation of such zone within a distance of 10 km from its boundaries, the user agency/project proponent is required to obtain recommendations of the Standing Committee of the National Board for Wild Life. According to the State of UP, even though Respondent no. 9 is running its establishment in Delhi, the activities of respondent no. 9 are falling within 10 km width from the Okhla Bird Sanctuary, which as per the orders of the Hon'ble Supreme Court and in light of the subsequent guidelines issued by the MoEF&CC from time to time on this matter, would require the

proponent /operator, in this case to seek prior clearance from the Standing Committee of the National Board for Wildlife before seeking EC. Sections 29 and 35 of the Wildlife Protection Act, 1992, are not attracted in the case as the concerned area of the operation is not falling within the boundary of national park and wildlife The MSW to Energy facility falls within administrative control area of Delhi Government and the Tribunal may pass such orders as it deems fit. The State of UP organized a meeting under the Chairmanship of the Chief Secretary on 11th May, 2011 and decided to constitute a Committee at District level under the Chairmanship of District Magistrate with members drawn from various departments for declaring the Eco-sensitive Zone around the Okhla Birds Sanctuary. At the time of filing of affidavit, the recommendations were under the process with the Committee, which was subject to the final view and approval of the Government of UP.

32. **GOVERNMENT OF NCT**, **DELHI** filed an affidavit on 4th July, 2013. In that affidavit, it was stated that in terms of the order of the Tribunal dated 21st May, 2013 a Committee has been formed and its meetings were held. This Committee was to decide the manner in which the sites are to be identified and what clearances are required to be obtained and the timeframe for doing the needful. After holding a number of meetings, the sanitary landfill sites were jointly inspected by the DDA and MCD as per locations given. Besides the sites which had been handed over to MCD already, some of the sites were found to be unsuitable which have been

stated in the earlier list. Finally, 11 sites were identified which are as follows:

- "1. Site near IGNOU behind Maidan Garhi.
- 2. Site near Rang Puri.
- 3. Site near Chhatterpur Pahari.
- 4. Site near Metro Station (under construction) and opposite Kalindi Kunj.
- 5. Site near Resettlement colony Madanpur Khadar.
- 6. Site between Chawala village and Najafgarh.
- 7. Site near Delhi Police Training Complex (TYA).
- 8. Site near college on Wazirabad Road.
- 9. Site near Shastri Park.
- 10. Site in front of DTC Bus Depot Yamuna Vihar.
- 11. Site near Khichari Pur."

याखायील असमे

The joint inspections of the newly proposed sites were being carried on and it was also proposed that the smaller sites from 5 to 15 acres should be identified in NCT Delhi. The Vice Chairman of DDA was requested to examine the feasibility of cancellation of the perpetual lease granted to the Cement Corporation of India and Railways/CONCOR at Okhla as they were adding to problems and huge land so vacated could be utilised for appropriate purpose including landfill sites. Government of NCT, Delhi had not raised any serious dispute with regard to the facts stated in the affidavit filed on behalf of the project proponent and, in fact, was quite in consonance with the stand taken by the DPCC.

33. **DELHI POLLUTION CONTROL COMMITTEE** had filed its first affidavit in reply dated 9th February, 2010 before the Hon'ble High Court. In that affidavit while referring to the factual background of the case, it was averred that the daily garbage generation in the country, particularly in Delhi, is expected to increase at a phenomenal rate. The waste is classified into commercial, industrial

and residential. This is excluding hazardous and biomedical waste that is generated every day. Safe and beneficial disposal of the waste is becoming an area of grave concern for the Government of Delhi as all the current landfills in and around the city have exhausted their operational life. The garbage lying in the landfills gives rise to a host of microbial and parasitic activities and releases a host of dangerous gases like methane, carbon dioxide and oxides of Sulphur and Nitrogen in the atmosphere. It is dumped in the open ground and also results in contamination of the ground water. Conversion of waste to biogas and use of RDF that is, refining the MSW through a series of processes to form a cleaner and higher calorific value fuel is used for generation of electricity. The project would even reduce the municipal solid waste disposal load in the State of Delhi by 1950 tons per day and will produce a substantial amount of energy to the tune of 16 MW per day. This electricity is to be supplied to the State grid. The resultant fly ash will be used by the manufacturer of building materials to ensure that there is no waste residue left in the entire process. It will be a protection against the pollution resulting from the landfill sites.

It is averred that the petitioners have been aware of the present project since 2006 when public notice was issued by the Board and public hearing was held on 20th January, 2007. The petitions have been filed belatedly and, in fact, it has to be dismissed on the ground of *laches*. Reference is also made to the Timarpur Plant which was also established to process the waste and propose bio gas from bio-methanation plant. After conducting

the public hearing, the project proponent had applied for consent under the Water and Air Acts to establish and subsequently to operate the plant. The consent was granted on 19th March, 2007 and stringent conditions have been imposed in relation to control air, water and underground water and solid waste pollution. The plant was provided authorisation in terms thereof. The project was to ensure the following:

"Treatment of municipal solid waste using (a) DST-TIFAC Technology of Mixed Municipal Waste to RDF/fluff RDF plant. (b) Biogas shall be generated from organic waste integrated within the sewage treatment plant. The unit shall ensure that the processing of waste shall be done as per the technology mentioned in the application dated 10.05.20107.

- i. That the unit shall design, construct, maintain and operate the waste processing facility in accordance with the quality, procedure and standards outlined in the Schedule II, III and IV of the Municipal Solid Waste (Management and Handling) Rules 2000 and also the guidelines/manual prepared by the Central Pollution Control Board in this regard.
- ii. That the unit shall dispose the non-combustible waste and reject at the sanitary secured landfill site in an environmentally acceptable manner, as it affects the population residing nearby these sites in the outskirts of the towns.
- iii. That the unit shall adhere to utilisation programme for waste processed (product utilisation) strictly.
- iv. That the unit shall adhere to same methodology as mentioned in the application for disposal of waste processing rejects (quantity & quality) strictly.
- v. That the unit shall ensure that the dry sludge from the Bio-methanation system shall be used as manure.
- vi. That the unit shall ensure that the solid waste generated (sand * silt) from the Common Monitoring Basin shall be disposed off to a landfill site.
- vii. That the unit shall provide waste inspection facility to monitor waste brought in for treatment, office facility for record keeping and

- shelter for keeping equipment and machinery, including pollution monitoring equipment.
- viii. That the unit shall ensure that the fly ash & the bottom ash generated from the HAG after combustion in the boiler shall be utilised for manufacturing the building material.
- ix. That the unit shall ensure that the bottom ash from the Power Plant and HAG shall be disposed in proper manner so that it does not create environmental havoc.
- x. That the unit shall provide approach and other internal roads for free movement of vehicle and other machinery existing at the Municipal Waste Processing Site.
- xi. The unit shall also ensure monitoring of ground water quality, prior inspection before commencement of the unit and monitoring of the unit at least three times – one pre-monsoon monsoon (July-August) and monsoon (November & January) periods. The monitoring data shall be submitted to Delhi Pollution Control Committee as well as Central Ground-water Board on annual basis for its official use. The unit shall ensure adequate number of groundwater observation wells. The unit may in consultation with Central Ground Water Board and State Unit office plan additional observation wells. The unit may use Peizometers for monitoring ground-water quality in and around the project area. Groundwater monitoring report shall submitted to Central Groundwater Board, State Unit Office, New Delhi, at least once in a year for assessment."

Similarly, the 'consent to establish' under the Water Act was granted by the order dated 3rd July, 2007 subject to the conditions stated therein. The plant was also expected to comply with all such terms and conditions. The conditions imposed under these consent orders read together would clearly demonstrate that more than adequate measures have been taken to protect the environment and conditions were quite stringent and in consonance with the Rules in force. The Government of India granted E.C. to the plant vide its order dated 21st March, 2007 which further imposed additional

conditions. On 5th May, 2009, the site was inspected by the officials of the DPCC. The plot in question is of 15 acres of land. It was reported that 40,000 MT waste from NDMC was cleaned, which was dumped in compost plant of NDMC at this location. The Okhla plant was to treat 1300 MT of MSW to produce 450 tons of RDF and the Timarpur plant was to treat 650 MT of MSW to produce 225 tons of RDF, which would then be used to generate 16 MW power. The site in question was being used by the NDMC since 1985 till 2006 for compost plant of MSW.

प्रकारित स्थाने

- Second affidavit was filed by the DPCC in October 2011 34. wherein it was stated that the Timarpur Okhla Waste Management Company Pvt. Ltd. had only been issued 'consent to establish' and the said company did not even apply for 'consent to operate' till the date of filing of the affidavit and the averment that 'consent to operate' has been issued was factually incorrect. The mistake in the minutes of the meeting has been corrected and a corrigendum dated 25th August, 2011 had been issued and posted on the website of the DPCC. Respondent no. 9 was to apply for 'consent to operate' one month before commissioning of the plant under the Rules of 2000. Emission standards for incineration have been provided and are applicable. Incineration of chlorinated plastic is prohibited. The dioxins/furans thus released would be fully trapped in the flue-gas cleaning system proposed to be installed and the project has to meet the specification that it should not be more 0.1 mgTEQ /Nm³.
- 35. In a subsequent affidavit dated 31st May, 2012, it was stated that during the operation after consent was granted and

authorisation was issued, DPCC had been regularly monitoring the emission level of the Waste to Energy plant with respect to particulate matters, Oxides of Nitrogen and Hydrogen Chloride. The monitoring on 19 different dates starting from 30th January, 2012 had revealed that barring a couple of occasions, when the particulate matter was high, the emission levels apropos all these parameters were below the prescribed levels. Chart showing the same has been placed on record. The DPCC itself had no facility to monitor emission relating to dioxin/furans as per the report filed by the Project proponent from Shriram Institute for Industrial Research and test results showed that dioxin and furan emissions were within the prescribed limits.

36. Last affidavit on behalf of the DPCC was filed on 13th November, 2013. The ground of delays was reiterated in this affidavit even with reference to application for amendment. Specific averment was made with regard to the fact that the expected increase in MSW was likely to be 18000 MT per day by 2021 and major portion of the municipal solid waste was being dumped in the landfill sites. The consent to operate and authorisation to Timarpur Okhla Waste Management Company Pvt. Ltd. was granted for the period of 3 months vide order dated 21st October, 2011. The consent and authorisation was granted in favour of the project proponent till 20th March, 2013.

37. MINISTRY OF ENVIRONMENT, FOREST & CLIMATE

CHANGE filed on affidavit dated 4th August, 2015. In that affidavit while referring to the Rules of 2000, it was stated that waste

processing and disposal facilities are required to meet specifications and standards as specified in Schedule-III, for 'Specifications for Landfill Sites and Schedule IV for Standards for Composting, Treated Leachates and Incineration'. The operating standards and emission standards have been prescribed for incinerators under Schedule-IV. The prescribed value of PM is 150 ng TEQ/Nm3.

Higher standards had been fixed and directions had been issued by the DPCC against this. Timarpur Okhla Waste Management Company Pvt. Ltd. had filed an appeal before the Advisory and Appellate Authority, Ministry of Environment which disposed of the same vide order dated 3rd August, 2015. It was directed in this order that the project should be allowed reasonable time period, not exceeding 12 months, to install and operate additional pollution control equipments in the facility to comply with the directions. The appellant was to submit a time bound action plan to reduce the emissions limit further to 13 ng TEQ/Nm3 and efforts to arrest dust emission from chimney and they should stop dumping fly ash anywhere, instead utilise the same for fly ash brick manufacturing and other valuable products.

38. **CENTRAL POLLUTION CONTROL BOARD** did not file any specific response by reply affidavits either before the Hon'ble Delhi High Court or before this Tribunal. They filed inspection reports conducted individually or by the Joint Inspection Team either by way of affidavits or by filing reports simpliciter. Suffice it to note from the above pleadings filed by the respective parties that the

factual matrix of this case arises for consideration. We would be discussing the reports under the head to follow hereunder:

Directions issued by the Tribunal and analysis of inspection reports:

39. Since the entire controversy in the present case primarily revolves around the environmental pollution resulting from the activity of the project, the Tribunal had passed orders from time to time, constituting different teams for inspecting the project site and submitting a complete and comprehensive report in relation to the functioning of the Plant as well as Stack emission and Ambient Air Quality (AAQ) prevailing in the area in question. Earlier, the DPCC had conducted inspections of the Plant from time to time but as already noticed according to the DPCC itself it had no mechanism for analysing furans, dioxins & oxides of Nitrogen such as NO₂ etc. The emissions from the chimney of the Plant were of serious concern as the petitioners had serious grievances that the ash emissions from the Plant were making the life of the residents miserable. The ash would settle on their houses, vehicles and the surrounding areas and this was affecting their health and living conditions adversely. Thus, it was essential that teams of various Scientists and highly responsible Officers from the regulatory authorities be constituted to examine the functioning of the Plant, its emissions as well as the grievances of the petitioners. The Joint Inspection Teams had submitted reports from time to time before the Tribunal. Depending upon the recommendations made by the Joint Inspection Teams, the Project proponent was required to take remedial and preventive measures where-after the Plant was

subjected to Joint Inspections and more severe and stringent conditions were imposed. The Plant was subjected again to Joint Inspections to ensure that there was no pollution caused by the Plant.

- 40. Therefore, it is of some significance for us to concisely notice the directions issued by the Tribunal from time to time and the various reports that had been submitted by CPCB, DPCC and/or by the Joint Inspection Teams.
- 41. After the transfer of this petition to the Tribunal on 23rd January, 2013, the Tribunal passed a detailed order on 11th March, 2013. In this order after noticing the contentions raised by the counsel appearing for the parties, it was recorded that the foremost question that needs be answered is whether or not the Plant is causing environmental problems and is releasing hazardous discharge/emissions which would be injurious to the health of the residents of the colonies in the vicinity of the project site. To answer this question it was necessary for the Tribunal to have proper data. Thus, it passed detailed directions, constituting a team of experts headed by the Member Secretary of the CPCB and consisting of Member Secretary of the DPCC, representative and Scientists from MoEF, Technical Experts even of the applicant, Technical representative of respondent no. 9 and Environmental Engineer from DPCC. As per the directions of the order the Committee was to conduct surprise inspection as well as planned inspections. They were to collect samples from the residential area within one to three kilometres of the site of the Plant. The samples

were to be analysed in two different laboratories, one of the CPCB and other from a laboratory approved by the MoEF, such as, Shriram Institute of Industrial Research. Quantity and quality of the ash being emitted were to be analysed. In the order dated 4th April, 2013, it was noticed that disputes were being raised with regard to the collection of samples, sampling procedure, location and time at which the samples were collected. Thus, further directions were issued and even Local Commissioner was appointed to visit the site and the samples were to be collected in the presence of the Local Commissioner appointed by the Tribunal. The Local Commissioner was even to visit houses of the members of the petitioner's society and notice if any ash was noticed or any other pollutant noticed therein. It was brought on record that the collection of bottom ash and fly ash is not being regulated as per norms. It was stated that the samples were being collected and the Board was directed to file analysis report. The Member Secretary of the CPCB had been directed to hold a meeting with the representatives of the Ministry and other Departments and put up recommendations in relation to the matters stated in the order of the Tribunal dated 28th March, 2013. In the report dated 4th April, 2013, it was pointed out that upon analysing the samples, emissions were found to be in excess of the prescribed values. In the subsequent report, it was noticed that the values had considerably decreased but were still in excess of the prescribed limits in relation to particulate matter, Dioxins and Furans. The inspecting team had not made any adverse comments with regard to emissions, as the values had considerably improved but they

pointed out that the segregation of the waste was very unsatisfactory at the plant. Thus, the Tribunal on 10th September, 2013 passed a detailed order, operative part of which reads as follows:

"We may notice that vide the Order of the Tribunal dated 28th May, 2013 under directions C, it was specifically directed that project can install Municipal Solid Waste (MSW) segregation plant in accordance with Municipal Solid Waste (Management and Handling) Rules, 2000.

Apparently, it has not been done as yet. In view of the circumstances afore indicated, in the interest of justice and taking note of precautionary principle, we pass the following Order on this Application:-

- a) As an interim measure, we decline the request of the Applicant for closure of the Plant.
- b) The Project proponent shall, within a period of three weeks from today, ensure that all the above said parameters are brought within the prescribed limits
- c) Complete steps should be taken to ensure automatic and proper segregation of MSW before it is put to the plant for its disposal in accordance with Municipal Solid Waste (Management and Handling) Rules, 2000.

We make it clear that in the event of Project proponent now defaulting in compliance of the directions of the Tribunal, the Tribunal would be compelled to direct the closure of this industry on an appropriate Application, now moved by the Applicant.

The Inspection Team shall inspect this Unit after the expiry of three weeks and put a Report to the Tribunal before the next date of hearing."

42. Vide order dated 12th November, 2014, the Tribunal directed the Project proponent to ensure that its online system would be accessible to the respective Boards and DPCC without hindrance or obstruction, round the clock. The Boards were directed to exercise effective supervision over the functioning of the plant. Continuously, for a period of one week, the Joint Inspection Team was to inspect the Plant and collect samples from the Stack and to

analyse the Ambient Air Quality from the premises of the unit during 06:00 AM to 08:00 AM and 05:00 PM to 06:00 PM and analysis reports were directed to be placed before the Tribunal. On 18th November, 2015 the learned Counsel appearing for the CPCB stated before the Tribunal that, samples of Stack emission and Ambient Air Quality were collected and analysed in relation to Particulate Matter, SO₂, No_x, HCl, CO and CO₂ and the report was awaited. They were directed to place the complete report on record. In the report, it was also noticed that segregation in the Plant was not working satisfactorily. This was the main cause for discharge of emissions containing pollutants higher than the prescribed limits. Thus, it was recommended that it was imperative for the project proponent to improve technology that would ensure proper segregation of MSW before it was put into the furnace. The comments of the Experts were also called for in that behalf. The Project proponent had made a statement that the claim of the applicants that samples were collected when the plant was not operating to its optimum capacity was factually incorrect. The plant was operated to its optimum capacity of generating 16 MW of electricity. In this view of the matter, the Tribunal vide order dated 4th April, 2016, had directed the Shriram Institute of Industrial Research to join the Joint Inspection Team and carry out the directions of the Tribunal as stated in that order.

43. After receiving the reports and data from the authorities, the Tribunal passed a detailed order on 2nd December, 2016. This order primarily dealt with the other two Waste to Energy Plants at

Bawana (Narela) and Ghazipur. However, certain other directions were also passed with regard to the collection, transportation and disposal of MSW. We must notice here that some data of generation and disposal of MSW which was filed before the Tribunal suffered from patent factual errors and was not scientific in its form or content but even if those figures were technically correct, Delhi generates nearly 14,100 MT of waste/day in the city including all kinds of wastes i.e. municipal waste, C&D and inert waste, ash and silt etc. The Plant at hand would deal with only 1950 MT of waste i.e. supplied to it by the Corporations.

44. It was also brought on record that this plant had the capacity to process 3000 MT of MSW and the Project proponent wanted the Corporations to supply them the enhanced quantity of waste. The SDMC had also requested the plant to take additional load of 1000 MT waste per day and project proponent was required to take clearance from the DPCC in accordance with law. The Tribunal directed the Narela and Ghazipur Waste to Energy plant to operate to their optimum capacity in accordance with law. There it also directed proper segregation of waste at dhalao and even at source of collection. The public authorities including DDA, NCT Delhi, etc. were directed to draw up an Integrated Waste Management plan for the city of Delhi for identifying landfill sites, improving existing landfill sites, and also the efficiency and functioning of the waste processing units. The authorities were also directed to provide new landfill sites for the purpose of dumping the waste in accordance with the Rules of 2016. Keeping in view the deficiency in the data

provided by the Corporations with regard to MSW, the Corporations were also directed to collect proper data by physical verification and not based on assumption. This, at the first stage, relates to one unauthorised colony and one planned colony under the jurisdiction of each Corporation.

- 45. The purpose of the various orders passed by the Tribunal from time to time was twofold. First, collection of scientific and properly supervised data with regard to generation of MSW in NCT, Delhi and its collection/segregation and disposal in accordance with Rules of 2016 and the conditions stated in that order. Secondly, to ensure that the plants or facilities more particularly Waste to Energy plants by incineration do not cause any pollution or have any adverse impacts on environment and human health in NCT, Delhi. Some success was seen at the ground level during the pendency of these applications. The plant in question also showed significant improvements in collection and segregation of waste as well as in bringing its emission within the prescribed limits. Once, these three plants start functioning to their optimum capacity, nearly 7000 to 8000 MT of MSW shall be processed for generation of power and once it is ensured that these plants do not cause any kind of pollution, it will certainly be a healthy situation for the NCT, Delhi.
- 46. Now, we shall proceed to deal with the functioning of the plant and its environmental impacts particularly with reference to the inspection and analysis reports. The DPCC had granted consent to operate the plant for a period of 3 months on 21st December, 2011.

The DPCC had been regularly monitoring the emission levels of the plant primarily on three parameters i.e. particulate matter, NO₂ and HCl. Monitoring and inspections starting from 30th January, 2012 had shown that the emission levels except on couple of occasions were found to be below the prescribed levels. A chart containing readings from 30th January, 2012 and 26th April, 2012 has been placed on record as Annexure R-5/3 to the reply filed by respondent no. 5. The inspections had been conducted by the Board and there was regular monitoring. However, as stated by the DPCC itself, it did not have the facility to monitor emissions relating to Dioxin and Furans. The authorisation was extended upto 20th June, 2012 along with consent to operate.

47. The plant was subjected to inspection again by the DPCC officials on 29th December, 2012. A notice to show cause for revocation of consent under the Water Act and Air Act was issued on 14th January, 2013 to which the project proponent had submitted a reply on 23rd January, 2013. The same was considered and the remedial measures suggested by DPCC were required to be complied with by the Project proponent. Again inspection was conducted on 7th March, 2013 and by that time the petition had been transferred to this Tribunal. On 10th September, 2013, the Tribunal directed the unit to bring the parameters within the prescribed limit and a joint inspection was directed to be conducted by the team of the officers from CPCB and DPCC. The inspection was conducted on 15th and 16th December, 2013 and the following deficiencies were pointed:

- "i. Distinct fluffy dust deposits was noticed on some of the parked cars, plants and water reservoir tank at Delhi Jal Board office in pocket-A of Sukhdev Vihar near residence of the complainant, during the inspection of joint team of officials from CPCB and DPCC on 15th and 16th December, 2013.
- ii. No dust fall was noticed during the time of inspection by the joint team of officials. The complainant has informed that the dust fall was seen till 9 am on 15th December, 2013.
- iii. The waste to energy plant was operational with two boilers (Boiler no. 2 and Boiler no. 3) on 16th December, 2013 and about 6.2 MW (average) of power was generated. Boiler was under shutdown and cleaning operations were in progress.
- iv. The meteorological observations during 14th 16th December, 2013 indicate mostly calm wind conditions, which point to poor dispersion chimney emissions.
- v. Puff of white emission was seen from chimneys at a regular interval (noticed immediately after the feed of MSW into the boilers), which disappears at a short distance from exit of the chimney. This may be attributed to high moisture content in the MSW feed and also the meteorological conditions of winter season.
- vi. The Boiler No. 1 of the plant was under shut down and cold maintenance work was in progress.
- vii. The data recorded by on-line emission measuring equipment installed by the Waste-to-Energy plant shows that all the values observed for PM and NOx, between 14 16 December, 2013 were meeting the prescribed standards except on one observation on 16th December, 2013 where emission value of PM has exceeded the limit of 150 ng TEQ/Nm3.
- viii. It was observed that on-line emissions data pertaining to particulate matter & NOx was not recorded for a period of about 3 4 hours in the morning and also in the evening on 15th December, 2013, the day on which the complaint was lodged.
- ix. The representative of the Waste to Energy Plant did not reveal or agree for any reasons for occurrence of such high dust emissions associated with dust fall during the period between night of 14th December, 2013 and morning till 9 am on 15th December, 2013.
- x. The team is of the view that there was an episodic release of high dust emission associated with dust fall from the chimney(s) of Waste to Energy Plant that occurred for some duration between the night of 14th December, 2013 and morning till 9 am on

15th December, 2013. The reason for the same may be associated with shutting down operations of Boiler No. 1, which started on 14th December, 2013."

With reference to these deficiencies on 10th January, 2014, the DPCC issued show cause notice as to why the plant be not ordered to be closed. The different show cause notices were issued under the Water and Air Acts and for authorisation under the Rules of 2000.

- 48. The Tribunal had directed joint and surprise inspections *vide* its order dated 19th February, 2014. It may be noticed that in terms of the order of the Tribunal dated 10th September, 2013, joint inspection team had conducted an inspection on 3rd October, 2013 and found that the Stack emissions were partially complied with. *Vide* order dated 5th July, 2014, CPCB was directed to conduct another surprise inspection but informed the applicant about it after reaching the site. The plant had been shut for renovation and the inspection team could not collect the samples. Then detailed directions with regard to inspections and for introduction of system of segregation at the collection point were also passed.
- 49. The CPCB and DPCC had both conducted individual as well as joint inspections. The CPCB had conducted two inspections after 11th March, 2013 while DPCC had conducted inspection prior to that period as already referred. All other inspections were conducted by joint inspection teams consisting of both the Boards and even Experts from MoEF or other approved laboratories in terms of the directions of the Tribunal. In compliance of the order of

the Tribunal or otherwise as many as 14 inspections had been conducted between the period from 11th March, 2013 to 4th April, 2016. The reports prior to 18th December, 2014 reveal that emissions particularly with regard to all the parameters including Dioxin and Furans at the Stack were partially complied with. Thereafter, by and large the plant was found to be operating within the prescribed limits and found compliant. Variations, if any, were not very material and exceeding by a very marginal difference. The inspections conducted on 17th December, 2015 and onwards have found that the emissions from the Stack adhered to the prescribed limits and that the plant was in compliance. However, there were variations noticed with regard to ambient air quality. Variations, noticed in the ambient air quality are not attributable to the plant. It is the cumulative effect of emissions resulting from other industries, residential areas, transportation and construction activities, etc. in the entire area. Even the inspection team has not found the pollutants in the ambient air quality to be exceeding the prescribed limits, attributable to or containing the pollutants emitted by the plant. At this stage, it will be appropriate to refer to the following chart which depicts the compliance of orders by the inspection team and the parameters noticed upon analysis after samples were collected by the team:

Inspections/monitoring of the Waste to Energy Plant at Okhla, new Delhi, in compliance with the various orders/directions including verbal direction passed by the Hon'ble National Green Tribunal, in the matter of Application No. 22(THC) of 2013; Sukhdev Vihar Residents Welfare Association & Ors. Vs. State of NCT of Delhi & Ors.

In compliance with the various directions/orders including verbal direction passed by the Hon'ble National Green Tribunal, in the aforesaid matter, surprise inspections, Stack emission monitoring of the Waste-to-Energy Plant, Okhla and ambient air quality monitoring within and around the said Plant were carried out by CPCB jointly with DPCC/MoEF&CC or independently during March, 2013 to April, 2016. Compiled results of the same is given at Annexure. Inspection/monitoring reports on the same have been submitted to the Hon'ble Tribunal to time. Brief summary time inspections/monitoring carried out of the Waste-to-Energy Plant at Okhla, New Delhi is given below:

S1 No.	Hon'ble NGT Order/ Direction dated	In compliance with the order / direction of the Hon'ble NGT, Joint Inspection / monitoring carried out by CPCB jointly with DPCC/MoEF&CC or independently	monitored
1	11/03/2013	Hon'ble NGT on 25/03/2013. Carried out	emission: PM, HCI, NOx, Dioxins & Furnas, combustion efficiency, HF, SO ₂ ,
2	04/04/2013	In presence of the Local Commissioner appointed by the Hon'ble NGT, samples of bottom ash, fly ash collected on 06/04/2013. Stack emission monitoring during April 17-20, 2013 and ambient air quality monitoring during April 10-12, 2013 & April 17-19, 2013 carried out CPCB jointly with DPCC	Bottom & Fly Ash: VOC, LOI, TOC and heavy metals Stack emission: PM, HCI, NOx, Dioxins & Furnas, combustion

3	28/05/2013	Stack emission monitoring and ambient air quality monitoring around the plant was carried out jointly by a team of CPCB and DPCC during July 09-12, 2013.	PM, HCI, NOx, Dioxins & Furnas,
4	22/7/2013 "if any complaint is made to the Delhi Pollution Control Committee or the Central pollution control board in relation to pollution caused by the plant including ash being spread to the houses of residents, the representatives of both the authorities shall immediately inspect the premises and put the report before the Hon'ble	Complaints received from residents of Sukhdev Vihar (Applicant): (i). 15/08/2013: Inspection carried out jointly by CPCB and DPCC on 26/08/2014. (ii). 15/12/2013: The joint team of officials from CPCB and DPCC inspected the area in Pocket-A of Sukhdev Vihar on 15/12/2013 and subsequently the team visited the Plant on 16/12/2013. (iii). 10/01/2014: Inspection carried out jointly by CPCB and DPCC on 10/01/2014. (iv). 02/02/2014: Inspection carried out jointly by CPCB and DPCC on 03/02/2014.	
5	Tribunal." 10/09/2013	_	NOx, Dioxins & Furnas,

	1		
			HF, SO ₂ , Results: Partial compliance #
6	19/02/2014	Surprise inspection carried out jointly by a team comprising CPCB, MoEF and DPCC on 25/02/2014 followed by Stack emission monitoring independently by CPCB (February 25-26, 2014 and March 12-13, 2014) and M/s Vimta Lab (March 10-11, 2014).	emission: PM, NOx, Dioxins & Furnas, combustion efficiency, SO ₂ , Results:
7	05/07/2014 & 06/08/2014	Surprise inspection carried out by CPCB on 23/07/2017 followed by Stack emission monitoring during July 23-24, 2014	emission: PM, Dioxins & Furnas,
8	Passed verbal order that CPCB contact details of officials of CPCB to the counsel of applicant, so that whenever the applicant informs about black smoke emission from the Stack of	Inspection carried out by CPCB on 21/10/2014. (ii). About 8:15 AM on 26/10/2014: Inspection followed by Stack emission monitoring carried out by CPCB on 26/10/2014. (iii). About 10:15 AM on 14/12/2014: Inspection carried out by CPCB on	emission: PM, combustion efficiency

	such		
	information.		
9	12/11/2014	Stack emission monitoring carried out for a period of one week during 18-24 November, 2014 as well as ambient air quality monitoring in the plant premises during 19-25 November, 2014, jointly by a team of CPCB and DPCC	emission: PM, Ambient Air Quality: PM ₁₀ , SO ₂ , NO ₂ Results: Complied # Partial
10	18/12/2014	Inspection carried out jointly by a team comprising MoEF&CC, CPCB and DPCC on 13/01/2015 followed by Stack emission monitoring at different timings of the day for a period of one week during 13-19 January, 2015, including one Stack emission monitoring at late odd hours in the night of 17/01/2015 (early hours of 18/01/2015). Also carried out Dioxins & Furans during February 19-20, 2015.	emission: PM, combustion efficiency Results: Complied # (Slightly exceeded 02 out of 22 samples for Particulate
11	CPCB, jointly	Stack emission monitoring carried out by CPCB jointly with DPCC, during November 16-17, 2015 for conventional parameters.	emission: PM, Dioxins & Furnas,

		discussion with the representatives of the project proponent wherein representatives of Sukhdev Vihar RWA also participated. On the day of visit, Stack emission monitoring also carried out by CPCB jointly with DPCC during November 19-21, 2015 for Dioxins & Furans.	
12	17/12/2015	Jointly visited High Power Inspecting Team constituted by Hon'ble NGT on 11/01/2016 followed by Stack emission monitoring and ambient air quality monitoring during January 11-12, 2016	emission: PM, NOx, and combustion efficiency Ambient Air Quality:
13	21/03/2016	Surprise inspection carried out jointly by a team comprising MoEF&CC, CPCB, DPCC and South Delhi Municipal Corporation (SDMC) during March 22-23, 2016 followed by Stack emission monitoring	Stack emission: PM, Dioxins & Furnas, NOx, and combustion efficiency,
14	04/04/2016	Inspection carried out jointly by a team comprising MoEF&cc, CPCB, DPCC and South Delhi Municipal Corporation (SDMC) followed by Stack emission monitoring as well as ambient air quality monitoring during April 11-13, April 2016	Stack emission: PM, Dioxins Furnas, NOx, HCI, HF and combustion efficiency Ambient Air Quality:

and 18-19 April, 2016	NO_2
	Results:
	Complied* in case of Stack
	emission whereas,
	ambient air quality partial
	compliance

- # Prescribed standard of 150 ng TEQ/Nm³ under the Municipal Solid Waste (Management & Handling) Rules, 2000, of the Environment (Protection) Act, 1986 and limit stipulated by DPCC for Dioxins & Furans.
- * Limit of 75 ng TEQ/Nm³ has been prescribed by DPCC vide directions dated 03/07/2014 exercising power conferred under section 31 (A) of Air (Prevention and Control of Pollution) Act, 1981 and amendments thereof instead of earlier limit of 150 ng TEQ/Nm³ prescribed by DPCC in the Consent to Operate.

The above analysis reports which have been prepared either by DPCC or by CPCB or both of them together show that the plant had shown considerable improvement in its operations and in its Stack emissions from October 2014. With effect from October 2015 the emissions including PM, NOx, SO2, NO2 and onwards, combustion efficiency were found to be in conformity with the prescribed standards. These reports equally point out that prior thereto, particularly on 18th December, 2014, the plant was emitting pollutants into the air and its functioning was also found to be deficient. It was obligatory upon the plant to operate strictly in terms of the prescribed norms, the conditions of the 'consent to operate', E.C. and the rules and laws in force. The Principle of Strict Liability is spelled out under Section 17 of the Act of 2010 under which the onus purely lies upon the polluter of the environment to show that it has taken all the necessary protections to ensure that it is not causing any pollution and in fact is not doing so. If the unit fails to discharge such onus and on the contrary if it is found to be polluting with reference to the scientific data like inspection and analysis reports by the experts, liability to pay environmental compensation on Polluter Pays Principle arises against the project proponent.

- 50. In order to appropriately analyse the merit of the contentions raised by the respective parties before the Tribunal, it would be appropriate to spell out the matters in issue before the Tribunal. They are:
 - 1. Whether the application is barred by limitation under the provisions of the NGT Act, 2010 and this Tribunal has no jurisdiction to entertain the application?
 - 2. Whether the application is liable to be rejected on the ground of mis-joinder of two causes of action i.e. under Sections 14 and 16 of the NGT Act, 2010, if so, to what effect?
 - 3. Whether the Okhla Waste to Energy Plant is liable to be closed and/or shifted to another site, it being a continuous source of pollution and an inconvenience to the residents living near the vicinity of the plant, as averred by the applicant?
 - 4. Whether the Environmental Clearance granted suffers from any inherent or other irregularity or illegality, so as to

render the Environmental Clearance granted ineffective in law and therefore, should the Tribunal order shut down of the plant amongst others for the following reasons:

- A. There has been serious deviation from the approved technology in terms of E. C. under the Notification of 2006 and 'Consent to Establish' under the Air/Water Acts.
- B. Site selection is defective and is without following the due prescribed procedure including public hearing.
- C. The project proponent had made mis-representations in its EIA report in relation to material facts.
- D. Absence of clearances under different laws including Wildlife (Protection) Act, 1972.
- 5. Whether the plant is not adhering to the prescribed standards of emission and is a continuous source of air pollution. The project is causing adverse impacts on environment and upon day-to-day living of the applicants causing health hazards. Therefore, the plant should be directed to shut down forthwith and/or any other directions be issued by the Tribunal including payment of environmental compensation?
- 6. What is the effect of comparative analysis on public interest, public health and environment with reference to the Principle of Sustainable Development and Precautionary Principle?

- Issue Nos. 1. Whether the application is barred by limitation under the provisions of the NGT Act, 2010 and this Tribunal has no jurisdiction to entertain the application?
 - 2. Whether the application is liable to be rejected on the ground of mis-joinder of two causes of action i.e. under Sections 14 and 16 of the NGT Act, 2010. If so, to what effect?

51. Both these issues can be conveniently taken up for discussion together. The objection taken by some of the respondents is with regard to the maintainability of the present application on the ground of limitation and mis-joinder of the cause of action. It is submitted that the present application is hopelessly barred by time and in any case there is no application filed by the applicants for condoning the delay and thus the application is liable to be rejected on that ground alone. According to the respondents, if the application is treated to be an application filed under Section 14 of the Act of 2010 then it ought to have been filed within a period of six months from the date from when the cause of action first arose and in any case within 60 days thereafter and not beyond that. If the present application is to be treated as an appeal within the meaning of Section 16 of the Act of 2010 then it ought to have been filed within a period of 30 days from the date of communication of the order/decision and in any case within 60 days thereafter and not later than that. It is also submitted that the application for amending the petition was filed and was numbered as M.A. No. 895 of 2013 which was allowed vide order dated 5th December, 2013 of the Tribunal. Even then the amendment cannot relate back to the original date of filing. It is also true that the doctrine of relation

back in case of amendment application is not one with universal The Tribunal would be reluctant to pass an order application. relating the amendment back to the date of original filing of the proceedings unless there exist special circumstances justifying passing of such order. It cannot be implied and there has to be a specific order to that effect. In the present case, there is no order passed by the Tribunal directing that the amendment allowed would relate back to the date of institution of the petition. On the contrary, it has been specifically ordered that the amendment is allowed without prejudice to the rights and contentions of the parties. Thus, these amendments would not relate back to the date of original filing as by the applicant. The result is that the application is barred by time and the Tribunal has no jurisdiction to entertain and decide the application and it should be dismissed on that ground alone. In support of these contentions, reliance has been placed by the respondents on these cases, Singh enterprise v. Commissioner of central excise, Jamshedpur & ors (2008)3 SCC 70, Janhit Seva Samiti v. Union of India & ors NGT PB decision dated 24.05.2012, Ashutosh chaturvedi v. Prano Devi (2008)15 SCC 610, Amen Seti V. State of Rajasthan (Para 8) NGT PB, Suni Kumar Samantha v. West Bengal Pollution Control Board, 2014 ALL(I) NGT REPORTER(2)(DELHI) 250, Munnilal Girijanand Shukla & ors v. Union of India, 2014 ALL (I) NGT REPORTER (2) (PUNE) 80, and Ganesh trading Co v. Moji Ram (1978)2 SCC 91, Tarlok Singh v. Vijay Kumar Sabharwal (1996)8 SCC 367, Sampath Kumar v. Ayyakannu (2002)7 SCC 559.

- 52. The other contention besides limitation raised by the respondents is that the applicant has joined different causes of action in the same application which is not permissible under Rule 14 of the National Green Tribunal (Practices and Procedure) Rules, 2011 (in short, "Rules of 2011"), which reads as follows:
 - "14. Plural remedies. An application or appeal, as the case may be, shall be based upon a single cause of action and may seek one or more relief provided that they are consequential to one another."
- The only relief prayed in the original Writ Petition filed before the Hon'ble High Court of Delhi was for stopping and shifting the Waste to Energy plant from the site in question, while in the amendment application, the applicant has prayed for quashing the E.C. dated 21st March, 2007 and for shutting down the Waste to Energy plant as well as for declaring operation and emissions standards for incineration as laid down under Schedule-IV of the Rules of 2000 as ultra vires and also to direct adoption of European or US emission standards for incinerators. Thus, according to the 9th respondent, the applicants could not have clubbed these causes of action as they are not consequential to one another but are independent of each other. Furthermore, even if the application could be heard on that aspect, the amendment would not relate back to the date of institution of the application as the amendment application was allowed vide order dated 5th December, 2013 and the order being challenged is E.C. dated 21st March, 2007. The appeal would be barred by time even if there is exclusion of period of limitation from 2009 when the Writ Petition was instituted before

the Hon'ble High Court of Delhi to 23rd January, 2013 till it stood transferred to the Tribunal, though, under the provisions of the Act of 2010, this advantage cannot be given to the applicants. However, the applicants on the other hand had contended that the application is not barred by time. It is averred that it is a continuous cause of action and in fact the cause of action still persists as the plant is operating in violation of prescribed standards and is causing health hazards. The possession of the site was given to the project proponent in 2008 and the Writ Petition before the Hon'ble High Court was filed in July 2009 which stood transferred to the Tribunal on 23rd January, 2013 as such the application cannot be rejected as not maintainable on the ground of limitation. Furthermore, the amendment allowed by the Tribunal vide its order dated 5th December, 2013 would relate back to the date of institution of the petition and therefore the objection in relation to limitation would not be available. In support of this contention, reliance has been placed by the applicant on the judgment of the Hon'ble Supreme Court in the case of Union of India v. Tarsem Singh, (2008) 8 SCC 648.

54. The law in relation to limitation so far as this Tribunal is concerned, is no more *res integra* and it has been squarely stated in the larger bench judgment of the Tribunal in the case of *Forward Foundation vs. State of Karnataka & Ors.* 2015 ALL (I)NGT REPORTER (2)(DELHI)81. Section 14 and 16 of the Act of 2010 both provide for different period of limitation for institution of an application or appeal as the case may be. However, the extended

period of limitation remains to be identical under both the provisions, which is 60 days. Beyond a period of 60 days, the right to institute an application/appeal is barred and therefore the Tribunal would have no jurisdiction to entertain an application or an appeal beyond that period and also to condone the delay if prayed for beyond the extended period of limitation. The provisions clearly state 'not exceeding' thus implying that the Tribunal would have no jurisdiction to condone the delay beyond the prescribed period. The provisions of exclusion in terms of Part III of the Limitation Act, 1963 are not attracted. Viewed from that angle the plea of limitation raised by the respondents would have substance and merit but the present case is not one of fresh institution but is that of transfer from the Hon'ble High Court to the Tribunal. When the Hon'ble High Court passed the order of transfer dated 23rd January, 2013, the parties appearing before the Hon'ble High Court did not reserve their right to raise the plea of limitation before the Tribunal, in fact none of the parties was granted any liberty to raise any specific plea before the Tribunal in relation to maintainability. Thus, impliedly the parties to the *lis* waived their right, if any, to raise such a plea. It is a settled principle of law that limitation being a question of law can be examined and should be examined by the Court or the Tribunal of its own. These, if not specifically raised, would have no application to the present case in as much as the Writ Petition instituted before the Hon'ble High Court in July 2009 when admittedly the construction of the plant has not even started. It was only at the planning stage though the possession of the plot had been given initially to the corporation and in turn to the project

proponent after 4th September, 2008. In their respective replies filed before the Hon'ble High Court, the plea of delay and latches was not even raised much less adjudicated. The application for amendment was allowed by the Tribunal vide its order dated 5th December, 2013 and the plea of the parties were kept open. In other words, the order passed by the Tribunal was without prejudice to the rights and contentions of the parties. No doubt, there was no specific order directing that amendment allowed would relate back to the date of the institution of the application. It is apparent that the relief before the Hon'ble High Court of Delhi was wider as it included in as much as both closure of the plant and its shifting from the site in question. The reliefs prayed by the applicants before the Tribunal vide amendment application are in fact within the ambit and scope of the original petition. The question of limitation would lose its significance where the matter is directed to be heard by the Tribunal upon transfer by the Hon'ble High Court in exercise of its powers under Article 226 of the Constitution of India.

55. Another factor which has to be taken into consideration by the Tribunal is that the Writ Petition before the Hon'ble High Court of Delhi was filed even prior to the NGT Act, 2010 (for short, 'Act of 2010') coming into force. In normal course, the rights of the parties would have been determined by the Hon'ble High Court without any objection to limitation. Reliance has been placed by the respondent upon the judgment of the Tribunal in the case of *Raza Ahmed* (supra). This case has not laid down any principal of law, the observations made by the two Member Bench of the Tribunal are in

the peculiar facts and circumstances of that case which are apparently distinguishable. In that case, the bench noticed that the appellant was challenging the EC dated 1st May, 2008 against which they had not filed any appeal before the National Environment Appellate Authority (NEAA) constituted under Section 11 of the NEAA Act, 1997. For the first time in that case, the appellant had filed a PIL challenging the order granting EC before the Hon'ble High Court of Chhattisgarh on 8th September, 2011. In other words, the applicant had not availed the statutory remedy within the prescribed period of limitation under the Act in force and no proceedings were pending before any Court of law including Hon'ble High Court as on 18th October, 2010 when the National Green Tribunal (NGT) came into force.

56. As far as relief relating to quashing of the EC dated 21st March, 2007 granted to the project is concerned, it is apparently barred by time. Admittedly, the EC granted on 21st March, 2007 was within the knowledge of the applicants as it had been placed in the public domain immediately thereafter. The applicants took no steps whatsoever to challenge the said EC for a period of two years. Thereafter in 2009 when they filed a Writ Petition before the Hon'ble High Court of Delhi they choose not to challenge the EC. The Writ Petition was pending, it was dismissed, restored and finally transferred to the Tribunal on 23rd January, 2013. In other words, for a period of six years, the applicants made no efforts to challenge the EC for all these years. The applicants also preferred no appeal before the Tribunal after coming into force of the Act of 2010 in the

year 2010. The application for amendment was filed before the Tribunal at a much later stage and was allowed vide order dated 5th December, 2013 without prejudice to the rights and contentions of the parties and it was not ordered to be related back to the original date of the institution of writ/application. The applicant, now, after a lapse of nearly nine years cannot be permitted to challenge and pray for quashing the EC dated 21st March, 2009 when the prescribed period of limitation under Section 16 for filing an appeal against the order granting EC is 30 days with the additional period of 60 days, that is within the outer limit of 90 days. Thereafter, the applicants have no right to institute the appeal and Tribunal has no jurisdiction to entertain such appeal or even condone the delay beyond the statutorily prescribed period as stated above. Having accepted the contention of the respondents partially that challenging EC dated 21st March, 2007 is barred by time, even then the application under Section 14 of the Act of 2010 would be maintainable on the plea of 'recurring cause of action'. We cannot accept the contention of the applicants that it is a continuous cause of action and therefore, the application filed under Section 14 ought to be treated within the permissible time. The expression 'continuous cause of action' is quite contradictory in terms to the expression 'cause of action first arose' as used under Section 14 of the Act of 2010. Continuous cause of action would not stretch the period of limitation in view of the language used by the legislature under this provision. It is the recurring cause of action which would trigger a fresh period of limitation depending on the facts and circumstances of the case. Recurring cause of action is one which

arises from a composite & complete cause of action in itself that has subsequently arisen on a fresh or new event. This principal had been reiterated earlier by the Tribunal in the case of Forward Foundation (supra). Thus, we need not detail this issue any longer. The events when the plant had been found to be violating the prescribed parameters and is causing pollution would constitute a complete cause of action on different dates and thus would be a recurring cause of action that would trigger a fresh period of limitation, particularly, within the ambit and scope of Section 14 of Act of 2010. In stricto sensu the amendment made to the original petition is not an appeal challenging the EC. The reliefs prayed by the applicants in the original Writ Petition would consequentially cover the reliefs prayed for in the amendment application as well as the primary object of the applicants was that the plant should be shutdown and be shifted to the another area for the reasons and grounds stated either in the original petition or in the amendment application. In these circumstances, we find no substance in the submission of the respondents that the present application should be treated as barred by time as even in the year 2014, the plant was found to be operating in violation of the conditions stipulated under the consent to operate and its emissions were found to be in excess of the prescribed parameters.

57. Another factor is that, the applicants could not have filed an appeal under Section 16 and an application under Section 14 of the Act together and join them as a common petition. This certainly would be impermissible in light of Rule 14 of the Rules of 2011. For

this reason, we hold that the relief of the applicant in so far as it relates to quashing of the EC dated 21st March, 2007 is hopelessly barred by time. While we decline to entertain this relief and decide that this prayer is barred by limitation, dismissal rejection of this relief would not call for dismissal of the entire application on the ground of limitation. The other reliefs prayed for by the application would fall within the prescribed period of limitation and we would proceed to examine them independently. Equally without merit is the contention raised on behalf of the respondent that the application is liable to be rejected as being filed in violation to the mandatory provision contained in Rule 14 of the Rules of 2011. It is true that Rule 14 as referred above contemplates that an appeal or an application should be based upon a single cause of action. However, such application or appeal may contain one or more reliefs in relation thereto which are consequential to one another. In other words, there has to be one cause of action as the foundation of an application or an appeal though different reliefs so claimed with regard to that cause of action may be consequential to each other. If we examine the original petition of the applicants as well as the amendment application, one cause of action is that the plant is operating in violation of the conditions of the consent order/EC and is causing pollution, health hazards and should be shifted to another location. Another cause of action is the air pollution that the applicants have suffered, as a consequence of the operation of the plant by the project proponent in violation of all environmental norms. The reliefs claimed by the applicants, thus are interconnected.

58. Of course, the reliefs in relation to quashing of the EC dated 21st March, 2007, cannot be claimed by the applicants, being barred by limitation while the other reliefs are in relation to functioning of the plant and regulation of its emissions. These reliefs are interlinked and consequential to each other. It is a well settled canon of procedural law that the rules of procedure should be applied to achieve the ends of justice and an approach which will achieve the end object of the rules should be adopted, of course where the rules are mandatory. When non-compliance of such rules would cause prejudice to the other side, then the Tribunal may take recourse to rejection of the application. In the present case, we do not see such a requirement and in any case we have held that the reliefs claimed by the applicant except one, are consequential, interdependent and are well within period of limitation.

- Issue No. 4: Whether the Environmental Clearance granted suffers from any inherent or other irregularity or illegality, so as to render the Environmental Clearance granted ineffective in law and therefore, should the Tribunal, order shut down of the plant amongst others for the following reasons:
 - A. There has been serious deviation from the approved technology in terms of E. C. under the Notification of 2006 and 'Consent to Establish' under the Air/Water Acts.
 - B. Site selection is defective and is without following the due prescribed procedure including public hearing.
 - C. The project proponent had made misrepresentations in its EIA report in relation to material facts.
 - D. Absence of clearances under different laws including Wildlife (Protection) Act, 1972.

- 4. A. There has been serious deviation from the approved technology in terms of E. C. under the Notification of 2006 and 'Consent to Establish' under the Air/Water Acts.
- 4.1.1. We have already noticed that the relief claimed by the applicant, in fact, to challenge and quash the EC is patently barred by time and therefore liable to be rejected by the Tribunal. It is in light of this finding that issue no. 4 and the various reasons stated therein are to be discussed by the Tribunal. The grounds taken for quashing of EC would be the reasons to be taken up by the Tribunal to examine whether for such alleged violations of the conditions of the EC, Consent to Operate and the rules in force whether the plant should be directed to be shifted from present site and or directed to be shutdown.
- 4.1.2. DDA on 18th June, 1980 had allotted an area of 8.5 acres for a compost plant at Okhla to NDMC. Again on 4th August, 1995 an additional contiguous 5 acres of land was allotted to NDMC for compost plant. Since that time, the site in question has been earmarked for and used for disposal of MSW. The allotment letter dated 18th June, 1980 had two significant clauses, one that the land was allotted for compost plant at Okhla and second that the NDMC shall use the site for construction of compost plant and for no other purpose whatsoever. The allotment letter dated 4th August, 1995, also had similar terms. In other words, there was a restriction on the parties for the purpose for which the land could

be utilised and there was also a restriction contemplated that the land would be used for no other purpose other than for the aforesaid purpose mentioned. On 5th April, 2006, the Principal Commissioner, DDA had taken up a meeting to discuss the setting up of Solid Waste Management Project at various landfill sites in Delhi. In the meeting dated 7th July, 2006 chaired by Hon'ble Chief Minister of Delhi with all government departments of Delhi, the problem of shortage of landfill sites and waste disposal sites were highlighted and they decided to take appropriate steps. furtherance to the meeting dated 7th July, 2006 another meeting was held on 25th July, 2006 where all authorities were in agreement that the MSW project at Timarpur and Okhla should be established and efforts should be made so that the garbage is transported for a short distance for its disposal. The special purpose vehicle called TOWMCL was created for this purpose. The bids were invited and respondent no. 9 was declared as successful bidder vide letter dated 29th January, 2008 for construction and operating of MSW plant. All requisite permissions and clearances were obtained from the concerned authorities. The project was to be implemented strictly in accordance with Schedule IV of the Rules of 2000. The Central Ground Water Board granted clearance to the project on 4th May, 2006, DPCC issued Consent to Establish under Air and Water Act on 6th July, 2006, Authorization under Rules of 2000 was issued on 9th March, 2007, Ministry of Environment, Forest & Climate Change issued EC on 21st March, 2007, 'Consent to Establish' under Sections 21 and 22 of the Air Act and under Sections 25 and 26 of Water Act. The Land License Agreement was

executed between respondent no. 3 and TOWMCL on 24th January, 2008 for the purposes of developing, establishing, designing, constructing, operating and maintaining the plant, in furtherance to which on 4th September, 2008 the possession of the land was handed over to the respondent no. 9 by respondent no. 3. The project was being developed as a Clean Development Mechanism project to reduce the MSW load in Delhi State and also to generate electricity from the waste so collected.

The EC was granted vide letter dated 21st March, 2007 4.1.3. for Integrated MSW Processing Complex at Timarpur and Okhla in favour of the TOWMCL. The EC was issued after conducting public hearing on 20th January, 2007 and various specifications were stipulated under the EC and as per the specifications in the EC, the said project of the Project proponent pertains to setting up of an Integral Municipal Waste Processing Complex at Okhla to process 1300 TPD of mixed garbage and 100 TPD of green waste and the plant at Timarpur was designed to process 650 MT of garbage. The plants were to have two identical process streams, each handling, 650 MT of MSW/day to produce 225 MT of RDF from each of the streams. The fluff produced from both the plants was to be used at Okhla project to feed power plant. The power plant would be able to produce 15 MW power (Gross) at generator terminals. The power plant was to have single boiler/single turbine configuration with 4.0 Tonnes Per Hour capacity palletising facility to produce RDF pellets from RDF, biomass and horticulture waste. The pellets were to be 20 mm to 25 mm in diameter and 20 mm to 40 mm long with a bulk density of 650 kg/cum. Ash coming out of Hot Air Generator (HAG) and power plant boiler was to be disposed of to a landfill site located at Jaitpur/Bhatti mines nearly 20 km away. The specific and general conditions imposed under EC include the Project proponent to obtain Consent under the Water and Air Act and as well as authorization under the relevant rules. The construction of the proposed structures had to be undertaken meticulously conforming to the existing Central/local rules and regulations. For odour management at the plant and for transportation, rules were required to be followed strictly. The Ministry has reserved the right to revoke this clearance, if any of the conditions stipulated were not complied with to its satisfaction.

4.1.4. Consent to Establish was granted to TOWMCL to set up and operate waste processing/waste disposal facility at Compost Plant site near Okhla STP subject to the conditions that was prescribed therein. It provided various parameters to be adhered to in relation to pH, Suspended solids, Oil & Grease, Biological Oxygen Demand, Chemical Oxygen Demand (COD), Ammoniacal nitrogen and Phosphate and to conduct bioassay test, so as to meet the quality of treated effluent to the prescribed standards. The effluent quantity was to be minimized and the treated effluent was to be reused/recycled to the maximum extent. Treatment of the waste was to be done by 'DST-TIFAC technology of mixed Municipal Waste to RDF/Fluff RDF' and Biogas was to be generated from organic waste integrated within the STP. The consent to establish provided for imposition of various conditions to protect the environment,

particularly, the AAQ. The operation of the plant was to be kept under close monitoring of the concerned authorities. The Project proponent was required to adhere to same methodology as mentioned in the 'application for disposal of waste processing rejects (quantity & quantity)' strictly. Then consent to operate had been granted to the Project proponent in similar terms as that of consent to establish. The Project proponent was to carryout regular monitoring of AAQ at least six times a year after the commissioning of the plant. The consent was valid for a limited period which is already noticed and was extended from time to time. It is apparent from the above facts that there has been a change in process to be adopted in the facility of the Project proponent. In terms of the EC and consent granted, the plant was to operate and generate power from waste by bio-methanation and RDF.

4.1.5. In terms of the order granting consent to establish and E.C., the technology to be adopted by the project proponent was based on MSW→MSW Segregation→RDF plant+Bio-methanation plant→RDF Boiler+Electricity. There is no dispute to the fact that this technology has not been adopted and followed by the project proponent in establishing the waste to energy plant. The change in technology and consequently in the process for Waste to Energy plant is MSW>MSW Segregation>Direct feed of MSW in WTE Boiler>Electricity. It is also not in dispute before the Tribunal that the project proponent did not approach the concerned authority keeping in view the changes in the technology adopted in the Waste to Energy plant. However, the consent to operate was granted to the

project proponent from time to time and is valid upto 31st December, 2016. The orders passed by the DPCC from time to time extending the consent and authorisation were done on inspections and after taking into consideration the altered technology adopted in the Waste to Energy plant. According to the project proponent, in fact, there is no serious change in the technology adopted for the Waste to Energy plant. It is submitted that the technology adopted by the project proponent remains the same with only minor re-configuration. Two Hot Air Generators along with two dryers in the Okhla plant and one HAG/dryer of part of RDF Timarpur being process plant have clubbed/integrated with the boiler. There are proper measurements of gross calorific value of the waste. Pelletisation facility for RDF is not needed because pelletization facility is high energy intensive equipment used to reduce RDF volume when RDF needs to be transported to far off locations. The segregation and use of reciprocating stoker boiler installed in the plant completely meets the requirement of achieving high combustion efficiency. It is also on record that the RDF plant at Timarpur did not take off and in fact was not even constructed. It was for the reason that separate tenders even after called for making available of 100 tonnes of vegetable market waste were never materialised and therefore, the bio-methanation plant could not be constructed at Okhla. The vegetable or such wet waste to run the bio-methanation plant was not provided to the project proponent and the project was thus put on hold. On the contrary, both the components for RDF have been clubbed together at Okhla plant thus completely obviating the

necessary for establishment of the RDF plant at Timarpur which in fact has not even been established till date. We may notice that this factual position while is admitted by all the parties including the applicants, the applicants have averred that there is a substantial change in the technology requiring amendments of the original EC granted to the project proponent. The project proponent is stated to have used reciprocating stoker type boilers. The project proponent has used 3 boilers, improved segregation, installed magnetic separators, vibrator screens, plastic separators and shredders particularly from the year 2015 onwards which has helped in improving the combustibility and calorific value of the waste which in turn makes up for elimination of a separate process for generation of RDF pellets which has been substituted by RDF fluff. With that process the plant is generating 16 MW of electricity. As already noticed, it is true that conversion of Waste into RDF by pelletization is not a part of the process of the plant.

4.1.6. We are unable to see that there has been any substantial or significant change in the technology which warrants for amendment in the E.C. granted. This fact stands fortified for the reason that the DPCC, the appropriate authority for granting consent, upon due inspection noticed the said change in the technology, granted consent to operate. In fact, as per the stand taken by the DPCC, the technology adopted by the project proponent is a better technology and for said variation in the technology, the project proponent was not required to apply for amendment of the EC. The various reports filed by the DPCC on

record clearly demonstrate the fact that the project proponent had established the project in consonance with the orders issued by the authorities and alteration in the technology was well within the knowledge of the said authorities. The fact that the expert body like DPCC did not find that such alteration in technology was significant, in any manner whatsoever. This stand of the DPCC also finds support from the stand taken by the CPCB, Corporation and MoEF&CC. Even the MoEF&CC had argued that such modification would not require issuance of a fresh E.C. It was observed that there was no increase in capacity of the plant and the plant was operating within the capacity for which the original sanction had been granted. If there was no enhancement in the capacity of the plant, issuance of a fresh EC would be meaningless so far as the terms and conditions of the EC are complied with and there is no pollution. The EC granted to the project proponent pertaining to setting up of an Integrated MSW Processing Complex at Okhla, an amended EC was issued on 9th May, 2007 substituting power generation of 15 MW to 16 MW. The entire waste including the waste meant for Timarpur plant was directed to be supplied to the plant at Okhla in order to facilitate effective implementation of the new technology adopted. In the entire application of the applicant, there is no averment to show that what are the adverse environmental impacts resulting from this minimal change in the technology adopted in the Waste to Energy plant. The minimal change in the technology adopted is primarily for the reasons not attributable to the project proponent. The two fundamental reasons stated are non-availability of green/wet/vegetable waste for the biomethanation plant as originally proposed at Timarpur which never even took off and secondly that the corporation failed to supply green/wet/vegetable waste for Okhla plant and it is evident that none of these reasons can be directly or indirectly attributable to the project proponent. According to the project proponent, the change in technology would have greater benefits of better prevention and control of pollution, resulting from the controlled emissions from the plant as well as for higher generation of power. The technology presently adopted is not a modified technology with any fundamental changes but has only changes in the nature which are resultant of combining two different stages into one integral stage. The process of RDF pelletisation and storing them in the form of pellets for generation of 16 MW of power would itself require large portions of land which is highly scarce in NCT, Delhi. Furthermore, non-formation or non-pelletisation would not materially affect the process in so far as calorific value, combustibility and the moisture content remain the same in the RDF fluff. Thus, we have no hesitation in arriving at a conclusion that the stated change in technology does not amount to a fundamental or a significant change in the whole process of Waste to Energy plant and such change would not require any fresh EC or an amendment to the original EC. The stand taken by the MoEF&CC, and DPCC in that behalf thus cannot be faulted. We would hasten to add that there should not be any pollution resulting from functioning of the plant on account of the alleged change in technology. This aspect, we would discuss separately hereinafter.

While relying upon Schedule II, III & IV of the Rules of 4.1.7. 2000, it is contended that use of technology adopted by the Project proponent is not permissible. In terms of these rules, the MSW should be processed and are to be dealt with to prevent contamination of ground water, surface water and AAQ. In terms of Rule 7 the management and handling of MSW are to be done in accordance with the compliance criteria and the procedure laid down in Schedule II and the specifications and standards for the waste disposal facilities are to be in terms of Schedule III & IV. These Rules and Schedules also contemplate that long distance transportation of MSW should be avoided which implicitly means that such plants have to located nearby to the residential colonies and due precautions in the interest of public health should be taken while transporting the waste to the plant and its disposal has to be done strictly in consonance with the rules and that would minimize the pollution level. In terms of Schedule II, Clause (iv) and (v), the transportation vehicle has to be designed so that multiple handling of waste, prior to final disposal, is avoided. The authorities shall adopt suitable technology combination of such technologies to make use of wastes so as to minimise burden on landfill. Mixed waste containing recoverable resources shall follow the route of recycling, incineration with or without energy recovery including pelletisation may also be used for processing wastes in specific cases. In other words, incineration is a specific mode provided under the relevant provision of Rules of 2000. Under Schedule III, the development authority has to identify the landfill sites and hand over the sites to the concerned municipal

or local authorities. The rules also contemplate that the landfill site has to be away from habitation clusters, forest areas, water bodies, monuments, National Parks, Wetlands etc. A buffer zone of nodevelopment shall be maintained around the site. provides 'standards for Composting, Treated leachates Incineration'. The waste processing or disposal facility shall include composting, incineration, pelletisation, energy recovery or any other facility based on state-of-art technology duly approved by the CPCB. In terms of Schedule IV Clause (v), in case of compost plant, the windrow area shall be provided with impermeable base of the requisite thickness i.e. 50 cm to ensure that there is no leachate. The AAQ has to be regularly monitored. The operating and emission standards for incinerators are provided and are to be maintained with a minimum combustion efficiency of 99.00 per It is also specified that Chlorinated plastics shall not be EN TRIBUNI incinerated.

4.1.8. It is specifically averred by the Project proponent that they have not violated the Rules of 2000 or any part thereof and the technology that is being used at the plant is one of the four technologies that had been recognized and approved under the Rules as well as by the CPCB under its reference Manual. The Project proponent has already obtained necessary permissions, clearances and consent from the concerned authorities. Various inspections conducted by the Joint Inspection Team have atleast for the last six months have found as a matter of fact that the plant is operating within the framework of law and its emissions are not

violating the prescribed standards. There is no pollution reported atleast, on record, of the groundwater. This aspect has already been noticed and we would be discussing it shortly. Hereinafter, we find no merit in the contention raised on behalf of the applicant in relation to the violations of the rules, as none has been pointed out by the CPCB or in the Joint Inspection Reports. On the contrary, stringent standards have been imposed the functioning of the plant which the Project proponent had complied with or ensured to carry out further improvements latest by the end of January, 2017.

- B. Site selection is defective and is without following the due prescribed procedure including public hearing.
- The next contention on behalf of the applicant is that the site 4.2.1. selected for the Waste to Energy Plant suffers from various legal and factual infirmities. Firstly, the site in question is neither an identified nor an earmarked site under the Master Plan for Delhi, 2021 (for short 'MPW 2021) and therefore, the Waste to Energy Plant could not be set up at the site in question. It is also contended that as per the Zonal Development Plan of 1998, the area where the Waste to Energy plant is located was earmarked for 'green district park' and 'education & research'. It was used by NDMC as a compost board and the adjoining land was used for STP. Further, the plant in question is located on part of the green belt and there is no specified green belt between the plant and the surrounding residential areas. It is also averred that there are large number of residential colonies in and around the plant and the adequate distance in terms of the Rules of 2000 has not been maintained between such plant and habitation centres.

From the pleadings of the parties which we have afore-4.2.2. referred and the contentions raised before the Tribunal, it is absolutely clear that the land in question was allotted by DDA to MCD right from 1980 to 1985 totalling upto 13.5 acres of land was for compost yard. In the year 2006, Planning Department had clarified that incinerator site at Timarpur and the composting plant and sanitary landfill site at Okhla were earmarked as solid waste landfill in Zonal Development Plan and, therefore, there could be no objection to setting up of a Solid Waste Management Project in the earmarked sanitary landfill site and the site in question had been continuously used as the landfill site and as a compost yard. It is the own case of the applicants that the site in question was used as a compost site and STP was located adjacent to it. According to DDA, as per the Zonal Development Plan of Zone-F, green buffer (District Park) between the approved residential colonies named Sukhdev Vihar, Jasola residential scheme and compost plant has been provided. The same is also provided under the Delhi Master Plan for Development, 2021. So far as the approved residential colonies are concerned, there is a provision of green buffer between the compost plant and residential colonies. However, unauthorised colonies have settled on the Government land abutting the compost plant. The MPD, 2001 under Clause (b)(iii) space has been earmarked for park, parking, circulation and public utilities in all use zones. The MPD 2021 as modified upto 31st March, 2016 also has similar clause. On the strength of these the project proponent and DDA have taken a common stand that the expression 'public utilities' would cover the plant in question particularly keeping in view of the fact that, since 1980 the site is being used as a landfill site and as a compost yard. We do find substance in this contention. Furthermore, the letter of allotment to MCD in the year 1980 and 1995 had also placed a specific restriction that the land would be used for the

prescribed purpose. At the initial stage, when 8.5 acres of land was allotted to NDMC in the year 1980 it was to be used for compost plant and for the landfill site. Similar was the purpose even as on 4th August, 1995, when additional land was allotted. Thereafter and in view of the observations of the Hon'ble Supreme Court of India in the case of Almitra H. Patel (supra), Integrated MSW Processing Complex was to be established. The Ministry of New and Renewable Energy, Government of India in consultation with other local authorities and NCT, Delhi had planned to set up the plant at the site in question, for which the project proponent had obtained various clearances. The setting up of a Waste to Energy Plant could squarely fall within the expression of 'public utility service' and could be permitted in all zones subject to compliance with the conditions imposed and the laws in force.

4.2.3. The purpose of allotting the site right from 1980 onwards was for compost plant and as a landfill site with primary emphasis on processing and disposal of MSW. Such usage had been accepted by all concerned authorities including DDA for the purpose as referred to in its allotment letters afore referred. 'The Environmental Guidelines for Industries' issued by MoEF&CC specifically refers that care should be taken to minimise the adverse impact of the industries on the immediate neighbourhood as well as in the distant places. Economic and social factors are to be recognized and assessed while siting an industry, environmental factors are also to be taken into consideration. It should be taken care that forest area should not be diverted for 'non-forest activities' and the land should be sufficient for establishment of such a project.

Appropriate distance should be maintained between the green belt of two adjoining large scale industries and sufficient green belt has to be maintained around the battery limit of the industry. Ambient Air Quality measuring stations of at least three in number within 120 degree angle between the stations should be maintained by the industries. Besides this, photographs and other relevant materials have been placed on record to show that there are large number of Waste to Energy Plants constructed all over the world and are located near to the residential areas or even within the residential The Master Plan clearly shows that 'public utility services' could be established in any zone. The present site in question was earmarked for compost plant, landfill site and thereafter for Integrated Solid Waste Management Processing Complex and has been operating as such now for a considerable time. Thus, while we find no merit in the contention of the applicant in regard to the site selection as the plant has already been constructed on that site and all concerned local and regulatory authorities had given their Consent to operate the plant in accordance with law. Despite all this, all that the plant has to ensure is that it does not cause any environmental violations and operates strictly within four corners of law.

4.2.4. The other ground, on which challenge has been raised to the EC dated 21st March, 2007, is that the public hearing was not held and conducted in accordance with the Notification of 2006 and it was a mere eye wash. The requirement of publishing the notice in two national newspapers was not complied with and the

consultation was bogus as no member of the public attended the same. Firstly, we may notice that challenge to EC claimed by the applicant is barred by time. However, we would still proceed to discuss the contention in the alternative. It is on record that the public notice dated 17th December, 2006 has been published both in the Hindustan Times and in NavBharat Times. Copies of which have been placed on record. The public hearing was held on 20th January, 2007 in the Office of Deputy Commissioner (South), M.B. Road Saket, which is about 5 km away from the project site. The minutes of the public hearing have been placed on record and it reveals that no objections were raised by anybody including the Government of Uttar Pradesh. The applicants according to the project proponent were aware of coming up of the project at the site in question. According to the DPCC, it was asked by the MoEF&CC to undertake a public hearing inviting suggestions, views, comments, objections from the persons likely to be affected from the project within 30 days from the publication of the notice, it was published in one Hindi and one English newspaper and two Governmental Departments i.e. DPCC and Office of Deputy Commissioner were involved in holding the public hearing which in fact was held but no objections were raised. In these circumstances, we are unable to find any merit in this contention as well.

4.2.5. This Tribunal is primary concerned with the substantial question of environment as contemplated under Section 14 of the Act of 2010 and not with the violation or otherwise of the Municipal Bye laws or the Master Plan *per se*. Similar view was expressed by

another bench of the Tribunal in the case of *Gaur Green Residents* Welfare Association v. State of UP, 2013 ALL (I) NGT REPORTER (DELHI) 519, where challenge was raised against the installation of a 400 KV Gas Insulated Power Sub-station which was not specifically provided in appendix to the Master Plan. The Bench while declining to deliberate the issue in regard to Master Plan passed directions only with regard to substantial question of environment arising in the case.

Now, we will examine the contentions of the applicant 4.2.6. that the Waste to Energy Plant in question violates provisions of the Rules, 2000, with respect to the location. The contention raised on behalf of the applicant is that the plant in question is located within impermissible distance under the Rules of 2000 and industrial siting criteria issued by the MoEF&CC. The plant in question does not satisfy the site selection criteria and the requirements of a Rule 7 of the Rules of 2000, stipulates that compost plant. management and handling of MSW has to be in accordance with the compliance criteria and procedure under Schedule II and specifications and standards for setting up of the facility for management of MSW are controlled by Schedule III & IV, respectively. We have already noticed that suitable technology has to be adopted by the municipal authorities to reduce the burden on landfill. These Schedules do not provide for any specific distances to be maintained from any particular point or user. selection for landfill site under Clause (iv) of Schedule III requires that site should be selected to make use of the nearby waste

processing facility or otherwise it should be planned as an integral part of the landfill site. It further requires that it should be away from habitation clusters, forest areas, water bodies, monuments, National Parks etc. and buffer zone should be maintained around the site. As we have already discussed and DDA has specifically stated that between the residential colonies and the compost plant, under its Master/Zonal Plan space is specifically earmarked as a green belt. The Schedule III of the Rules of 2000 also provides that a buffer zone of no development shall be maintained around landfill site and shall be incorporated in the Town Planning Department's land-use plan. However, even this Schedule does not provide a specific mandate for buffer zone of no development around the 'Waste to Energy plant' or a processing facility. However, the unauthorized and illegal colonies are located quite close to the green belt which had been constructed much prior to coming into existence of these colonies. It requires that no development zone should be maintained around the landfill site and the same has to be incorporated in Town Planning Department's land-use plan. The landfill site and compost plant existed from 1980s and the Integrated Waste Processing Complex has been established to ensure proper disposal of the waste as the landfill sites in Delhi has reached their point of saturation. None of the authorities before the Tribunal has pointed out any violations of these Rules by the Project proponent. It is also stated that the land was reclaimed by removing dumped garbage of approximately 40,000 MT. The Project proponent has also raised a contention that Schedule II and III do

not relate to facility of incineration but primarily deal with landfill sites and as such reference by the applicant is of no consequences.

4.2.7. Under the Environmental Guidelines issued by the MoEF&CC stipulating guidelines for siting an industry, the relevant 'areas to be avoided' for our purposes would be half a kilometre from flood plain. Alteast 25 kms distance has to be maintained from the projected growth boundary of the settlement and the siting of the proposed project. As per the siting criteria, there should be a green belt around the battery limit of the plant and restrictions are placed on conversion of forest land, agricultural land and such other lands for such facility. And these are the guidelines which should preferably be followed when the site for a project is to be selected. Guidelines are required to be adopted at the initial stage of the project and they are to be adhered keeping in view other attendants, circumstances and the rules. The statutory rules which were in force at the relevant time were the Rules of 2000 which do not contemplate any specific distance to be maintained from such a facility and the habitation centres. It is on record that a green belt exists between the approved colonies and the plant. The plant is not on a forest area but is on a land which was specifically allocated and earmarked for the purpose of a compost plant and landfill site and it is so operated since 1980. The plant in question was established in the year 2009 and was commercially commissioned in 2012. For a plant to be uprooted and stopped at this stage, there has to be violations of statutory rules coupled with serious prejudice to environment and public health. If they singly or

cumulatively do not satisfy these criteria, it will not be appropriate for the Tribunal to direct closure of such plant, particularly, when it has all the required permissions, clearances and consents from the regulatory and other authorities. Furthermore, the distance from a bird sanctuary or a national park is not specified in the Rules of 2000.

- C. The project proponent had made misrepresentations in its EIA report in relation to material facts.
- The other contention raised on behalf of the applicant is 4.3.1. that the project proponent had made misrepresentations in the EIA Report with regard to project location and distance of the project in question while obtaining EC. Referring to the EIA report submitted to DPCC by the project proponent, it is submitted that under the head 'project location' in Sl. No. 2.2, it has not been stated that Sukhdev Vihar is one of the colonies situated nearby. Referring to the North and South side of the plant in question, it is stated that the Northern side is less densely populated and the colonies like Zakir Nagar, New Friends Colony, Joga Bai Gafoor Nagar is located at a distance of about 1.8, 2, 1.7 Km respectively. On the South era side, Mathura road is approximately 1 km from the site, the southern boundary of the site is flanked by Okhla Industrial Area (Phase II) and Shyamnagar lies in the South-Western side of the project site. Applicants have also stated that the landfill and project site has to be geographically integrated in terms of the MSW Rules, which the present site is not. From the records before the Tribunal, it is evident that the project proponent in its EIA report

and its application for EC has not specifically stated that Sukhdev Vihar is a colony which is located in close vicinity to the plant. There is a controversy as to the exact distance of the colony from the boundary of the plant in question. It is also evident that the applicant had stated that various planned and unauthorised colonies are situated at different distances from the project site. According to the project proponent in the Adequacy Report Against The Efficacy Report submitted by the project proponent in relation to Integrated MSW Processing Facility, at Sl. No. 1.2 'project location', it was stated that the plant is located adjacent to the existing STP which is at a distance of 15 km from Central Delhi and the plant would receive MSW from different colonies. Beside this, the project proponent had been submitting compliance status in relation to consent to establish granted by the DPCC. The project proponent has denied that he had made any misrepresentation or suppressed any facts in the EIA report. However, the above position is clear from the record before the Tribunal. The project proponent also submits that the site in question was a landfill site and due to paucity of land, it was felt desirable by the special purpose vehicle created by Respondent no. 1 in consultation with other Government agencies to reclaim the land whereby, the waste was removed and the plant was covered. The project proponent has also taken a distinct stand that the unauthorised colonies and even other colonies have proliferated around the plant with the passage of time though the plant existed all along and the land was used for the same purpose for years together. This stand of the project proponent is also supported by the DDA. The MoEF&CC who

granted EC to the project proponent have not raised any such issue. In fact, vide order dated 3rd August, 2015, the Advisor and Appellate Authority under Air Act while disposing of the Appeal No. 1 of 2014 filed by the project proponent, wherein challenge was raised against the stringent emission standards imposed by the DPCC, granted a period not exceeding 12 months to install and operate additional pollution control equipments in the facility. The question we have to really consider is that whether nondisclosure of one colony amongst number of colonies which are situated at some distance from the project site in the EIA report, would it be proper for the Tribunal to quash the EC or to direct the closure of the plant. The information sought for has to be supplied by the project proponent without default. The project proponent had disclosed in its EIA report, names of the colonies and its distance from the plant etc. except one colony, namely, Sukhdev Vihar. This omission which has been termed as misrepresentation would not result in vitiation of EC for two reasons. Firstly, we have already held that challenge to EC dated 21st March, 2007 is barred by time. Secondly the plant has already come up, it is operational and all concerned authorities have granted requisite consents, permissions and clearances in exercise of their statutory powers. Unless and until, the non-disclosure of information was so very vital that it would in the normal course of business, besides violating the statutory provisions, caused serious prejudice to the public health and environment, in our considered view, should not be the basis for closure of the plant because name of other colonies

and locations have been specifically mentioned in the various other documents.

4.3.2. The second leg of submission of the applicant is that the project proponent has not given the exact and correct distance of the landfill site from the project site. The Waste to Energy Plant in terms of the Rules has to be an integral part of the project. If it is not so, the project has to face consequences of shutting down and shifting to another place which is so earmarked for that purpose. Clause (iv) of Schedule-III of the Rules of 2000 requires that the landfill site be selected to make use of nearby waste processing facility otherwise waste processing facility has to be planned as an integral part of the landfill site. Similarly, even Clause (iii) under Schedule-I of the Rules of 2016 reads identically, the purpose of these Rules which is in consonance with the provisions of the Environment Protection Act, 1986 and Rules framed there under that unnecessary transportation of waste is to be avoided or the transportation of waste to the plant facility should be for a short distance only. The processing of waste should be at the site itself or in a nearby location. The framers of the Rules have very specifically referred that the very object is to make use of nearby waste processing facility otherwise effort should be made to construct an integrated landfill site situated near to the processing facility. The plain reading of the Rules does not suggest that plant has to be geographically integrated and not in any other manner. Both the options provided under the Rules have to be applied depending upon the situation in a given case. Wherever a landfill site is being established, it should be ensured that it is closer to the processing facility and *vice-versa*. Where both are being constructed and established as an integrated scheme, then it may even be geographically integrated depending upon the availability of the land and satisfaction of other relevant factors under law. The Committee that had been appointed by the Hon'ble Supreme Court of India in the case of *Almitra H. Patel (supra)* had also recommended use of integrated technology in the processing of MSW against the traditional method of disposing of waste by filling landfill site. We may hasten to add that the constituted Committee was not recommended any particular location for these projects. Five different MSW projects on Waste to Energy plant were established under the recommendations of the said Committee.

D. Absence of clearances under different laws including Wildlife (Protection) Act, 1972.

4.4.1. The contention that the Waste to Energy plant is located quite close to the residential areas or the bird sanctuary does not have any merit. The applicant contended that the project is located less than 1.7 km from the Okhla Bird Sanctuary and less than 10 km from Asola Bhatti Wild Life Sanctuary which is of violation to Notification issued by the MoEF under the Environment (Protection) Act, 1986. We may notice that the MoEF&CC on 19th August, 2015, issued a Notification in relation to fixation of boundary from the Okhla Bird Sanctuary in district Gautam Budh Nagar of Uttar Pradesh and South district of NCT of Delhi and the site in question falls in that area. At this stage, we may also notice that the said Notification is subject matter of challenge before the Tribunal in the case of 'Anand Arya vs. Union of India'. In terms of this Notification,

the distances would range from 100 mtrs to 1.27 kms. Thus, even viewed from that angle the applicant's contention needs to be rejected with reference to the said Notification because certainly no portion of the site in question is within 100 meters of the Ecologically Sensitive Area of the Okhla Bird Sanctuary and is towards the side of Uttar Pradesh/Yamuna line and is certainly not located within 1.2 kms. For this reason, the Project proponent would not be required to obtain clearance from National Board for Wildlife under the provisions of the Wildlife Protection Act, 1972. The above contentions are considered to avoid undue prolonged litigation between the parties and in the larger public interest.

- 59. Answering Issue No. 3 would depend directly upon the findings that are returned by the Tribunal on Issue No. 5. Therefore, we would proceed to discuss Issue No. 3 and 5 together.
- Issue No. 3. Whether the Okhla Waste to Energy Plant is liable to be closed and/or shifted to another site, it being a continuous source of pollution and an inconvenience to the residents living near the vicinity of the plant, as averred by the applicant?
- Issue No. 5: Whether the plant is not adhering to the prescribed standards of emission and is a continuous source of air pollution. The project is causing adverse impacts on environment and upon day-to-day living of the applicants causing health hazards. Therefore, the plant should be directed to shut down forthwith and/or any other directions be issued by the Tribunal including payment of environmental compensation?
- 5.1.1. In support of this issue, it is contended by the applicants that there is complete absence of any segregation mechanism in the plant leading to mass burning of chlorinated plastic which is prohibited. There are comparable emission standards for Waste to

Energy plant internationally which according to applicant has to be adopted in India as well. The analysis recorded by CPCB is unreliable and manipulated. Unregulated disposal of incinerated ash into landfill site is contrary to Schedule IV of the Rules of 2000. Toxic substances released by the plant causes respiratory and reproductive health issues along with cancer and while collecting the samples by the inspecting team the applicants were not present. Direct exposure to carcinogenic gases such as Dioxin and Furans will lead to massive degradation of public health. On the contrary, according to the project proponent the plant is a state-of-art facility based upon a scrubber and bag filter house mechanism for containment of ambient particulate matter exposure well within the prescribed national statutory limits. There is proper segregation of received waste at the plant and chlorinated plastic is never incinerated. Plant utilises only non-hazardous solid waste, metals detected in the recyclables are removed in the Metal Recovery Section in the plant, heavy metals are detected and segregated at initial stage by advanced activated carbon injection scheme. There are no adverse impacts on environment and human health in functioning of the plant. The plant has complied without the directions issued by the Board even with regard to more stringent conditions imposed under the notified norms.

5.1.2. The pollution by a Waste to Energy plant could be attributed primarily to two factors: Firstly, pollution resulting from improper operation of the plant with regard to segregation, processing and induction of waste thereof into the incinerator and

secondly, the pollution caused when the emissions from the plant are found to be in violation of the prescribed norms. Either of them could lead to serious pollution and adverse impacts on environment and public health. To analyse this aspect, we must examine the inspections reports submitted by the regulating agency as well as by the joint inspection team appointed by the Tribunal. As already noticed, the project had been granted EC, consent to establish, consent to operate and permissions from the various authorities including the DDA to operate the Integrated MSW Processing Plant at the site in question. The Tribunal had appointed joint inspection team consisting of scientists and experts from CPCB, DPCC and MoEF&CC, even applicants were permitted to participate during the inspections. Besides all this, the Tribunal had also appointed a Local Commissioner vide order dated 4th April, 2013 and even the said Local Commissioner had submitted its report with regard to compliance of the directions that recorded the functioning of the plant as well as emissions.

5.1.3. In this context, we may now examine the reports. After granting it consent, the DPCC had subjected the project to inspection and monitoring during the period of 28th March, 2013 to 31st March, 2013. The results of these inspections and analysis reports had found that in relation to boiler-I & II in Stack-I, the emissions of Dioxin and Furans (in ng TEQ/Nm³) were found to be 12.413 against the permissible value of 0.1. The parameters in relation to particulate matter (in ng TEQ/Nm³), HCl (in ng TEQ/Nm³) Oxides of Nitrogen (in ng TEQ/Nm³) and Combustion

Efficiency (in %) were found to be compliant to the prescribed parameters. The parameters with regard to Sulphur Dioxide (SO₂) (in ng TEQ/Nm³), Carbon Dioxide (CO₂) (in %), Carbon Monoxide (CO) (in ng TEQ/Nm³) and Oxygen (O₂)(in %) were found to be compliant when compared to the emission standards prescribed under the Rules in inspection dated 26th June, 2012.

- 5.1.4. In relation to emissions from Boiler-III in Stack-II, particulate matter (in ng TEQ/Nm³), HCl (in ng TEQ/Nm³), Oxides of Nitrogen as NO₂ (in ng TEQ/Nm³) and Dioxin and Furans (in ng TEQ/Nm³) were found to be violating the prescribed parameters. Combustion Efficiency (in %) was within the prescribed limits i.e. 99.986. Other parameters were found to be compliant.
- 5.1.5. It was noticed in this inspection that that bottom ash from the Boiler-I was not collected for a period of about 15-20 minutes at around 6.00 pm on 30th March, 2012. It was also noticed that operator of facility informed that there was mechanical problem in *bottom ash forward stocker* of boiler-I which was attempted to be rectified immediately. The Stack emission results were found non-compliant with particulate matter as well as Dioxins, Furans and Oxides of Nitrogen in one of the two samples. The operator was directed to take following measures:
 - a) "Optimise dosing of lime and activated carbon for the existing bag filter house;
 - b) Reducing particulate matter emissions by enhancing performance of bag filter house as emission of Dioxins & Furans are mainly contributed in adsorbed form in Particulate Matter or adsorbed Activated Carbon that escapes from bag filter house;

In case compliance to Dioxins & furans emissions is not demonstrated with the above mentioned measures, the operator needs to install additional treatment system such as activated carbon slurry scrubbers, activated coke moving bed filters etc.

- (iv) High value of Oxides of Nitrogen Dioxide in one of the two samples of only Stack-II (connected to Boiler 3) and that too wide variation with rest of sample results, point towards possibility of contamination of sample and thus it would be appropriate to re-monitor the same.
 - (v) The online Stack values, as indicated by the online measuring system installed by the operator, do not match with the CPCB monitored values. Thus, the operator needs to calibrate its online measuring system and the same should be done periodically at regular interval of time."
- 5.1.6. The AAQ monitoring was also taken up by the team in terms of the directions of the Tribunal. It was noticed that AAQ monitoring station around the facility was selected within the radius of 1 km and 3 km and monitoring were conducted in phases. As per this report, Sukhdev Vihar is at a distance of 0.45 km in NNE direction. Similarly the distance of other colonies from the plant were also mentioned. In this report it has been stated that experts from the Resident Welfare Association were also present and had requested for proper collection of samples in a particular manner. The samples were collected and sent for analysis.

From the above record, it is evident that during the pendency of the case before the Hon'ble High Court and even prior thereto, DPCC had not carried out strict monitoring and inspections as contemplated under the law. There is evidence to show on record that prior thereto the industry was polluting and it has operational deficiencies and its emissions were in excess of the prescribed limit.

- 5.1.7. In furtherance of the orders of the Tribunal dated 30th April, 2013, the inspections were carried out in presence of the Local Commissioner appointed by the Tribunal. In its report, the Local Commissioner had stated that the schedule was finalised for inspection of various stages of process as well as for collecting the samples of AAQ and Stack emission. On 6th April, 2013, samples from storage hopper of fly ash were collected in presence of Local Commissioner. Samples of bottom ash from all the 3 boilers were also collected. The production was observed at full capacity between 15.5 MWs to 16.2 MWs. The record shows that waste received from 30th March to 5th April, 2013 shows that the daily output of the waste was ranging between 1782.5 tons to 1959.9 tons. The AAQ samples were collected within 1 km radius of the Waste to Energy plant from 4 different locations including from Sukhdev Vihar. The Ld. Local Commissioner had also verified various records of the project during the course of his inspection and had taken photographs.
- 5.1.8. As per the inspection report and analysis report submitted to the Tribunal, it is evident that Boilers-I & II of Stack-I showed excessive particulate matter of 190.9 (in ng TEQ/Nm³) as opposed to the permissible value of 150 (in ng TEQ/Nm³). The Dioxins and Furans were found to be in excess, at 3.863 (in ng TEQ/Nm³) as against the prescribed value of 0.1 (in ng TEQ/Nm³). Other values were found to be within the permissible limits. Similarly, Boiler-II in Stack-II showed excessive emissions of

particulate matter, Dioxin and Furans. The inspecting team recorded its findings and suggested measures as follows:

"Findings

The aforesaid analysis results reveal that:

- (i) The Stack emission of boilers do not comply with prescribed standards for 02 parameters namely Particulate Matter and Dioxins & furans;
- (ii) The VOC in Bottom ash comply with the prescribed standard except in one of the Boilers (viz. Boiler 1). Further, the composite Bottom ash sample (i.e. Bottom ash samples of all the three Boilers mixed proportionately) complies with the prescribed standard of VOC;
- (iii) The TCLP concentration of metals in Bottom ash and fly ash vis-a-vis concentration limits prescribed in the Schedule II of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008, indicates that concentration of these parameters in both the Bottom ash and fly ash do not exceed the limits so as to categorize the same as hazardous waste. however, the same requires to be handled and transported in an environmentally sound manner'
- (iv) The Wind Rose Diagrams given at Figure 2a * 2b and ambient air quality depicted in Figure 1a & 1b indicate that:
 - (a) Stations viz. Sukhdev Vihar and Meerabai Institute are in upwind directions from Waste to Energy plant and hence there is no direct impact on these stations due to emissions from the plant. However, at both these locations the PM 10 concentration was exceeding the ambient air quality standards of 100 µg/m3.
 - (b) The locations namely GB Pant College, Kalkaji School, Okhla STP, Hazi Colony and Okhla CETP in downwind directions were also not complying with ambient air quality standards for PM10 concentrations.
 - (c) The other monitored parameters viz. NOX and SO2 were within the ambient air quality standards.
 - Based on the monitoring conducted, no direct conclusions can be drawn regarding impact on ambient air quality at the monitored locations due to operation of the Waste to Energy plant. The results indicate that air quality at different locations may have been influenced by local factors rather than the emissions from Waste to Energy plant's chimney where emissions are released at a height of 60m. the other local factors contributing to the impact can be vehicle

traffic, natural dust, DG sets, industrial sources etc.

Suggested of Measures required to be taken:

- (i) In order to comply with the prescribed standard of Particulate Matter in Stack emission, the operator of the Waste to Energy unit may enhance performance of Bag filter house by replacing the damaged fabric filters, if any; optimizing pressure drop across bag houses augment the capacity of bag dust collectors by increasing number of bags in each of the Bag filter houses.
- (ii) For the observed non-compliance with the emission standard of Dioxin & furans, the operator may need to optimize combustion of waste by controlling temperature in the combustion zone, supply of combustion air, residence time and turbulence in combustion chambers.

The operator shall also take following measures, wherever possible:

- (a) Optimize dosing of lime and activated Carbon prior to bag filter house;
- (b) Reducing particulate matter emission by enhancing performance of bag filter house as emission of Dioxins & Furans are also contributed in adsorbed form in Particulate matter or adsorbed Activated Carbon that escapes from bag filter house;

In case compliance to Dioxins & Furans emission is not demonstrated with the above mentioned measures, the operator needs to install additional treatment system such as activated carbon slurry scrubbers, activated coke moving bed filters etc.

- (iii) The exceedance of VOC in Bottom ash in one of the three Boilers (viz. Boiler 1) indicates incomplete combustion of waste in the Boiler. It may, therefore, be appropriate to maintain uniformity in the feed. This would not only facilitate compliance with the VOC parameter in Bottom ash but also helps in effective combustion and thus better performance of the plant thereto.
- (iv) The operator may increase efficiency of segregation of municipal waste received at their site and ensure the same prior to boiler feed. This may also help in better combustion and thus better performance of the plant thereto.
- (v) The fly ash may be loaded and transported in closed containers mounted on the vehicles or any other suitable arrangement to minimize fugitive emissions during loading/transportation instead of current practice of transferring of ash into open vehicles followed by covering the same manually with Tarpaulin. Further, such closed containers or any other suitable arrangement made to the

- vehicles may also have a provision of small opening which can be integrated with transfer conduit silos as closes system in such a way that no fugitive emissions occur during the same.
- (vi) The bottom ash may be received into trucks directly as the same is in wet condition where no fugitive emission occurs during transfer and loading operation, however the vehicles may leave the premises only after covering the same manually with Tarpaulin. Further, the loading on the vehicles may be restricted to about 80% height of the carriage to minimize spillage, if any, during transportation.
- (vii) Instead of current practice of disposal of Bottom ash and fly ash in MCD sanitary landfill at Okhla, the operator may explore possibility of utilisation of the same in a time bound manner. The fly ash collected from bag filters, could be utilised in brick manufacturing, road pavements etc. In case of bottom ash, the options could be for road construction, filling of low lying area or as underground backfilling material. However, the same need to be studied and examined.

 The agencies like Central Road Research Institute.

The agencies like Central Road Research Institute, New Delhi Central Building Research Institute, Roorkee, etc. may be helpful in exploring aforesaid utilisation or other utilisations of Bottom ash and fly ash."

As it is mentioned in this report, it was also noticed that Sukhdev Vihar and Meerabai Institute are in upwind directions from Waste to Energy plant hence there is no direct impact on these stations due to emissions from the plant, though, the AAQ analysis showed excessive PM_{10} concentration.

5.1.9. On similar lines, the inspections were conducted by Joint Inspection Team under the orders of the Tribunal and in the reports during the period from 28th May, 2013 to 26th October, 2015. The unit was found to be partially compliant and some parameters of emission were found to be exceeding the prescribed limits. In these reports, it was noticed that the project was mainly deficient in

compliance with the emission standards, though its operational aspects had improved.

5.1.10. Before we deal with the other reports on record, it is necessary to note that in furtherance of the order of the Tribunal dated 28th May, 2013, there was a specific direction by the Tribunal with regard to installation of a segregation plant to ensure effective segregation of MSW in accordance with the Rules of 2000. The Tribunal had directed *inter alia* as follows in the order dated 28th May, 2013:

"Thus, we issue the following direction;-

- 1. The Member Secretary of the Central Pollution Control Board (CPCB), Member Secretary of DPCC, a representative of Ministry of Environment and Forests (MoEF) and the Project proponent shall hold a meeting within two weeks from today.
- 2. In the meeting inter alia but definitely the following shall be discussed and conclusion recorded thereupon:-
 - (a) The suggestion made in the Report dated 28th May, 2013 filed before the Tribunal today.
 - (b) How to ensure that even particulate matters and Dioxin and Furan in the emissions are brought well below permissible limits.
 - (c) How early the Project proponent can install the segregation plant to ensure effective segregation of MSW in accordance with the provisions of the Municipal Solid Wastes (Management and Handling) Rules, 2000.
- 3. Even after installation of the segregation plant what should be the a definite time schedule to be prescribed for disposal of plastic waste through the incinerator and burnt at a temperature which shall be decided by this Committee so as to ensure no obnoxious gas emission takes place.
- 4. The Committee shall take at different intervals, the samples of emission from the Stack as well as of ambient air quality around the Unit. The samples taken shall be analyzed by the CPCB laboratory and due record thereof shall be maintained and presented before the Tribunal on the next date of hearing.

- 5. While analyzing samples so collected, laboratory shall report if any heavy metals particularly mercury is found in the emission. If the answer is in the affirmative, it shall report to its quantity and source.
- 6. The Committee may also comment upon whether it is possible to do any upgradation of pollution control equipment to ensure maintenance of prescribed parameters.
- 7. Learned counsel appearing for CPCB may also place on record the standard/values for Municipal Solid Waste (MSW) incinerators.
- 8. The Committee shall also consider the possibility of online monitoring of emissions.
- M.A. No. 204 of 2013 and M.A. No. 205 of 2013 do not survive for consideration in view of the above observations. Accordingly the same are disposed of. List for compliance of this Order on 22nd July, 2013. "
- The Committee had then specifically stated that the 5.1.11. manual segregation was not adequate to achieve the optimum segregation levels. Improved segregation and shredding of waste mechanism is required for better combustion and reduction of pollutants in the emission. In this report, it was also directed that the emissions, particularly in relation to Dioxins, Furans and particulate matter should be brought within the prescribed limits. It also recommended that the fly ash could be utilized for manufacturing bricks. The unit was required to install online display system at the main gate of the plant for data dissemination. It was also directed to increase the length of segregation conveyor belt, install four mechanical shredders with capacity of 15 TPH. Installation of vibratory screens for the proposed shredders to remove finer material such as silt and installation of destoner to remove inert material like construction debris etc.

In the report it was also noticed that there was noncompliance with the emission standards of Dioxins and Furans. There was exceedence of VOC in bottom ash in one of the three It was also stated that unsatisfactory and improper segregation of waste was the reason for operations and emission The Tribunal had also passed an order on 12th deficiencies. November, 2014 in furtherance to which the Joint Inspection Team had conducted an inspection and analyzed the emission samples. In the order dated 12th November, 2014, the Tribunal had noticed that greater and effective supervision is called for, both from the and DPCC on the overall functioning of this unit continuously for a period of one week from the date of the order. It was noticed that keeping in view the wind direction, the AAQ of the plant showed that emissions of SO₂ and NO₂ have complied with the notified standards of AAQ. PM₁₀ at location 2 was found to be higher and it observed that the higher concentration of PM₁₀ may not only be attributed to the emissions from the boilers of the Waste to Energy plant, as the location 2 is near to the service road and about 50 meters down, the fly ash silos are located the where the fly ash is loaded from trucks. In this report it was noticed that the samples collected at different timings for the entire week were found to be higher than the prescribed limits in regard to the PM₁₀ at location 1 and location 2. However at both the locations emissions levels of NO₂ and SO₂ were found to be within the prescribed limits and even below the detectable limit (BDL).

- 5.1.13. Now, we will discuss the reports of the Joint Inspection Team conducted from 11.1.2016 to 18-19.4.2016 in terms of the order of the Tribunal dated 17th December, 2015, 21st March, 2016 and 4th April, 2016. In the first report, it was stated that the PM, NOx and combustion efficiency were compliant. The Stack emission results were also compliant. However, the AAQ was found to be non-compliant. In the second report, Stack emissions were found to be compliant in all respects. In the third report, Stack emissions were found to be compliant along with combustion efficiency. However, AAQ in relation to PM₁₀, PM_{2.5}, SO₂, NO₂ were found to be partially compliant.
- 5.1.14. In the inspection report conducted on 9th November, 2015, the inspecting team had found deficiencies in segregation of municipal waste. It noticed that though there were two segregation channels, the shredder of the capacity of 30 tonnes per hour was installed only in one of the two channels. Manual segregation and plastic segregation were found to be inefficient. Even the performance of the shredder was found to be poor. The power generation was noticed between 15.35 MW to 20.03 MW with feed of mixed municipal solid waste about 23 tons/hour into each of the three boilers. A brick manufacturing plant (capacity 20,000 bricks/day) utilising 45 tons/day of fly ash generation was under installation and the team was informed that the same was expected to be completed by December 2015. The inspection team also noticed that proposal of the project proponent for improving the quality of segregation by installation of a new system and the two

segregation lines each was to 1000 tons/day of mixed MSW and each line shall have a ballistic separator and heavy duty shredder with screen of 100mm along with manual segregation on moving conveyor belt and magnetic separator. Combustibles system of 100 mm size from first screen shall be conveyed into a heavy duty shredder which shall be specifically designed for MSW having moving cutting tips of special alloy to shear the fed MSW into 80 mm size by maintaining appropriate clearance between the cutting tip and the anvil. Installation of this system was to be completed by December 2016. The joint inspection team concluded that despite not very effective segregation of mixed MSW, the plant had demonstrated compliance with the prescribed standards combustion efficiency of more than 99% Particulate Matter limits, HCl and NOx as notified under the Rules of 2000 in the various inspections conducted by the CPCB jointly with DPCC independently in the recent past.

5.1.15. In furtherance to the order of the Tribunal dated 17th December, 2015 the inspection was conducted on 8th January, 2016. Details of this inspection require to be noticed for proper and better appreciation of the functioning of the plant as it was a joint inspection team by a very High Powered Committee which consisted of officers of NCT, Delhi, Member Secretaries of CPCB & DPCC, Senior Scientists from MoEF&CC and officers from Irrigation Department of State of UP. The Chief Engineer of the Corporation and the representative of IPGCL were also present. The inspecting team consisted of 11 members who inspected not only the plant in

question but other plants i.e. Rajghat Power House, Badarpur Thermal Power Station and the project in question. In the first two projects, the inspection was aimed primarily at values of emissions and the utilisation of fly ash generated from these plants. About the plant in question, it was noticed that the plant was receiving nearly 2000 tons of mixed solid waste everyday and there was a large pit under a covered shed. The said pit has provision to collect leachate generated and this leachate is treated in multi effect evaporator. The mixed MSW taken from the pit is segregated before being fed to generation of electricity through turbines. segregation of waste before it is fed into the boilers is essential to maintain the required parameters. The inspecting team found that a brick manufacturing plant has been installed for utilising the fly ash generated during the process. The team has endorsed the views and opinion of the team of CPCB and DPCC officials regarding effective enhanced segregation and shredding for obtaining better performance of the plant. The analysis report of Stack-I and II connected to boilers 1 and 3 was found to be compliant. The Particulate Matter, Oxides of Nitrogen, Combustion efficiency were found to be compliant with prescribed standards. The result of ambient air quality inspection carried out at two different locations, revealed that PM₁₀ exceeded the prescribed standards. They specifically noticed that air quality in the area surrounding the plant is influenced by a number of factors rather than just the emissions from waste to Energy Plant's chimney. In fact, emissions from Waste to Energy plant are released at a height of 60m. The other local factors contributing to the ambient air quality are

vehicular traffic, natural dust, DG sets, industrial sources, etc. Again emphasis was laid on achieving continuous compliance in emissions standards as prescribed and to ensure effective segregation of the MSW. The plant operator was required to install temperature probes in the boiler system to capture temperature at the two relevant ends of the flow to confirm that temperature is at the optimal limit required for neutralizing noxious substances.

Four officers of CPCB, DPCC, MoEF&CC and SDMC 5.1.16. again inspected the plant on 1st April, 2016. The samples analysed from Stack-I and II both showed that the measured emissions values were much below the prescribed permissible limit. Particulate Matter was measured at 42.95 against the prescribed value of 150 (in ng TEQ/Nm³) NO₂ was found to be 31.21 - 49.52 against the prescribed value of 450 (in ng TEQ/Nm³). Sulphur Dioxide was found below detectable limit and Combustion efficiency was found to be 99.99. In the observations, power generation was noticed and it was also noticed that the temperature in all the three boilers was maintained at >850°C. Pressure drop across bag filter houses connected to each of the three boilers was maintained between 1.44 kPa - 1.78 kPa and dosing of activated carbon and lime prior to bag filter house were maintained between 71.90 kg/hour - 79.10 kg/hour and 171.1 kg/hour - 177.2 kg/hour respectively. Segregation level of MSW was found to be not very effective.

5.1.17. The last inspection report on record in furtherance to the order of the Tribunal dated 4th April, 2016 was conducted during

the period 11th - 13th April, 2016 - 18th - 19th April, 2016 and 24 hour ambient air quality monitoring around the plant during the same period. All the three boilers were found operating with pollution control devices. Hourly power generation was also noticed. Other details of temperature of the boilers were found to be in order. It was again noticed that the plant received 2000 tonnes per day of mixed solid waste for processing in the plant. Some of the main features of this inspection were that Online Continuous Emission Monitoring System (for short, "OCEMS") had been installed and was under maintenance for some duration during the inspection. Magnetic separator, an electromagnet with moving belt to trap ferrous metals from the waste was functional. Vibratory screen and plastic separator were operating on both the lines. Work for construction of additional storage pit was in progress. The samples were collected and analysis results of samples were submitted by CPCB and even a private laboratory M/s Shriram Institute which revealed that both the Stacks of Waste to Energy plant comply with prescribed emissions standards of PM, Hydrogen Chloride, Hydrogen Fluoride, NOx, Carbon Monoxide in accordance with the Rules of 2000. The Dioxines & Furans samples which were taken had to be submitted later to the Tribunal. These reports were analysed specifically and they also showed the measured values within the prescribed limit of 0.1 (ng TEq (Nm³) and it was so recorded in the report submitted to the Tribunal.

5.1.18. The analysis of ambient air quality showed that PM_{10} values were found to be exceeding. The other monitored parameters

for NO₂ and SO₂ were within the air quality standards at all the three locations. This inspection was also conducted by four different officers from different Board/Authority/Ministry.

The above data collected by the High Powered Committee, joint inspection team of the CPCB, DPCC jointly or severally clearly brings to the fore that till the year 2014 the Waste to Energy plant at the site in question was found deficient in operations of the plant as well as it was violating the prescribed parameters. There is clear statutory and contractual obligation on the part of the project proponent to ensure that it does not cause any pollution or environmental degradation much less adversely affecting the health of citizens. The Principle of Strict Liability that is contemplated under the provision of Section 17(iii) of the Act of 2010 places unquestionable onus upon the project proponent to show that, firstly it had taken all necessary measures to prevent environmental pollution and secondly that there was in fact no pollution resulting from the activity that the project proponent was carrying on. The inspections reports and analysis reports for that period show that there were serious deficiencies or ineffective working of segregation. The heavy duty shredders and ballistic separators were not operating satisfactorily or were not found connected to both the lines. The temperature of the boilers was found to be fluctuating and even the emissions from the Stack were found to be in excess of the prescribed limits. They were releasing Dioxins and furans when operating earlier, as DPCC did not have the means to check up the extent of pollution resulting from carrying on of operations of the

Waste to Energy plant at that time. For this period, the project proponent is liable to pay environmental compensation as it violated the conditions of the consent order, realised emissions in excess of the prescribed limits and its plant was also found to be in efficient and deficient in performance of its process. Thus, in our considered view, it will be difficult to define the extent of liability with exactitude at this stage following the Principle of Strict Liability enunciated under the provisions of Section 17(iii) of the Act of 2010, we direct that the plant would pay environmental compensation to the extent of Rs. 25 Lakh for the period ending upto 18th December, 2014.

5.1.19. Thereafter, the Waste to Energy plant had taken substantial measures for improving its operations and to prevent environmental pollution.

This aspect is squarely depicted in the different joint inspection reports conducted by the teams consisting of officers from varied departments and Boards. The aspect of segregation had been subjected to specific improvements by the project proponent. It increased the strength of the men doing manual segregation, length of the belt was increased, various mechanism such as trommel for breaking lumps and primary screening, magnetic separator to separate ferrous metals, shredders, vibratory screen to separate silt/dust of size less than 6mm (newly installed and in operation) and plastic operator was also provided for. All these joint inspection teams observed that segregation of the MSW needed greater effectiveness in order to ensure working of the plant compliant to the prescribed standards of the emission. The project

proponent had agreed to install an automatic segregation plant for which the project proponent had already taken steps and in fact such plant is expected to be operative by 31st January, 2017. During the course of arguments, we were assured by the learned counsel appearing for the project proponent that MSW automatic segregation plant with improved performance and which was in addition to the improvements already made would completely provide for proper segregation of MSW even on stringent standards then prescribed under the Rules of 2000.

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- 5.1.20. The project proponent also took effective measures to improve the working of the boilers by maintaining constant temperature for operation of the boilers. It also made definite improvement by replacing and providing of more effective bag filters for reducing different pressure to the prescribed standards. Definite improvements were shown in the functioning of the boilers alongwith associated flue gas treatment system, reaction tower and bag house filters during the period in question.
- 5.1.21. The third stage for improvement dealt with the emissions from Stack. The Stack samples which were analysed during the year 2013-14 were found to be violative of the prescribed standards while the analysis of the samples subsequent to 19th November, 2014 upto 2016 have been found to be compliant. The ambient air quality samples taken from different locations were found to be existing in some of the locations but that was not attributable to the project proponent and in fact could not be attributed to him because of other direct sources of pollution of

ambient air quality keeping in view the fact that the plant was located near to roads which had heavy traffic, dust emissions and other burning, etc.

5.1.22. In the written submissions the applicants have raised certain pleas which were certainly not raised in the Writ Petition filed by them before the Hon'ble High Court and some of them were not even taken in the amended application filed before the Tribunal. However, we would still proceed to discuss the merit of those contentions, in addition to the contentions that we have already discussed in some detail above. According to the applicant, the MSW is a mixed solid waste and, therefore, the end-product i.e. the emission content and quality is not known which may be injurious to environment and public health. This argument is ill-founded. The inspection teams have conducted inspections on various intervals and have collected the Stack samples on different times under the orders of the Tribunal. The inspections lasted for weeks together and as noticed above, the analysis reports for the years 2015-16 have been found to be within the prescribed parameters. There is no parameter mentioned by the applicant which according to him can be present in the emissions and has not been analysed by the DPCC, CPCB and Shriram Laboratory. The other contention raised is that the fly ash and bottom ash generated because of working of Waste to Energy plant also contains heavy metals and other pollutants which pollute the environment during the transportation and even when dumped at the site, it causes leachate polluting the groundwater. Again this argument is without any proper study or

basis. In terms of the directions issued by the regulatory project proponent authorities, the has put up brick manufacturing plant within the premises. This plant manufactures 20000 or more bricks per day. Thus, larger part of the fly ash is utilised for brick making without any emissions. According to the project proponent, transportation in the past and presently is done by taking proper measures. The trucks or carrier vehicles carrying fly ash or bottom ash are fully covered and they do not pollute the air quality in any manner whatsoever. There is no report or analysis before the Tribunal to reach to any reasonable conclusion that the deposited fly ash by the project proponent causes leachate and has actually polluted the groundwater. The landfill site is not only allotted to the applicant but to other local bodies as well and other stakeholders are also entitled to dump their waste at the Okhla landfill site. For years now, it has already been exhausted. For higher generation of fly ash bricks, there has to be a market of purchasers of such bricks. The MoEF&CC has issued a Notification dated 14th September 1999, wherein it is mandatory for coal/lignite based thermal power plants to manufacture brick from fly ash to the areas in their vicinity. Further, there is an obligation upon the bodies doing construction within 300 km (by persons or amendment dated 25th September, 2016) of such Thermal Power Plant which generated fly ash to buy such bricks and utilise atleast 25% of the bricks used in construction of such bricks. Even Delhi Government has issued similar directions based upon the above Notification of MoEF&CC. Thus, it is necessary that the State Government and even the local authorities or developing agencies

should ensure their best to implement this Notification in its totality and with effectiveness. This would reduce the need for landfill sites on the one hand and on the other hand would prevent air pollution from indiscriminate dumping of fly ash, etc.

5.1.23. In view of this discussion, we have no hesitation in observing that as of present, the plant in question should not be directed to either shut down or shifted to another site. There is definite evidence before the Tribunal to arrive at a finding that the project proponent is compliant and non-polluting. In the inspections, even the applicants were permitted to participate and of course they have raised some objections stating that different teams appointed by the Tribunal have given incorrect reports and manipulated the reports. These submissions to say the least are without any substance much less supported by even an *iota* of evidence.

Issue No. 6: What is the effect of comparative analysis on public interest, public health and environment with reference to the Principle of Sustainable Development and Precautionary Principle?

6.1.1. The purpose of comparative analysis is to provide solutions to the multi-faceted environmental issues arising in this case. The object is to find an adequate and effective mechanism which would be completely consistent with the Principle of Sustainable Development and Precautionary Principle. These principles of environmental jurisprudence are applied uniformly all over the world. However, in India they attain a more specific meaning and definite application in view of the fact that they form part of statutory provisions, i.e., Section 20 of the Act of 2010. The

Tribunal has to consider various aspects regarding public interest, public health and environmental protection before arriving at any final decision. What does public interest demand in a city which generates 14100 MT of MSW every day, processing of which itself is a herculean task. The factors which aggravate and make processing of municipal solid waste more difficult in NCT Delhi are: scarcity of land, lack of proper mechanism for collection and segregation of municipal waste and inadequate appropriate processing facilities. All this leads to indiscriminate dumping of mixed solid waste on land, whether earmarked for that purpose or not and even in drains. The obvious results are serious adverse impacts on environment and public health. The sanitary landfill sites have already reached their saturation point against the permissible height of 30 meters. The landfill sites in Delhi have already crossed more than 50 meters height. Again the waste has not been deposited at the landfill sites scientifically and in consonance with the Rules of 2000 or 2016. Such unscientific, unregulated and indiscriminate dumping of MSW, results in release of methane, odour and its burning further causes release of green house gases and to add to all these, leachates causes groundwater pollution. Transportation of MSW also adds to the degradation of human health and environment. The public interest would require that the concerned stakeholders must find appropriate ways and means to process MSW in accordance with scientific methods and in consonance with the Rules. It is their obligation to see that if, they are unable to follow Waste to Wealth Principle, they should atleast have un-questionable methodology to process the waste to

its best utilization within the infrastructure available with them and in conformity with the laws in force. They are required to reduce the load on the sanitary landfill sites as well as to improve their present status. The site at Okhla and other landfill sites which are overflowing with MSW are to be settled by adopting biostabilization. The concept of 'Not in my backyard' has to be subservient to processing of waste in accordance with the Rules in the public interest. It has to be seen and practiced as to what is the best possible way of handling and processing such huge quantity of waste generated by the residents of NCT of Delhi. Out of total generated waste of 14100 MT per day, all the three Waste to Energy Plants established in Delhi, if operated to their optimum capacity, as on today can handle and process only 5300 MT leaving a balance of 8300 MT per day which is required to be deposited or dumped in the landfill sites. The other two plants at Ghazipur and Narela Bawana are also operating and processing part of the above stated MSW. The C&D plant at Shashtri Park is processing 500 MT of C&D waste per day. All stakeholders should consider with utmost expeditiousness the requirements for processing of the remaining 8300 MT of municipal waste per day. The Government of NCT of Delhi and DDA have already been directed in different cases to provide more landfill sites to encourage compost and by biostabilization of the MSW at these sites. Waste to Energy is a methodology to process the waste which is scientifically accepted all over the world and more than 800 plants are in operation around the world without causing any environmental degradation or pollution. Under Schedule IV of the Rules of 2000, this has been

of the accepted waste processing as one methodology, therefore, proper operationalisation of Waste Energy plant would serve larger public interest, which must prevail over a limited inconvenience. The public at large has to overcome the mental block that there cannot be compost yard or Waste to Energy Plant in the neighbourhood of their residential area. Of course, the project proponent of the plant is expected to adhere to the prescribed standards or even more stringent standards if imposed upon the project proponent. He has to make the plant pollution free and has to operate strictly within the prescribed parameters. It must provide the green area and the green belt so that the very appearance of the plant is acceptable to the society at large. Unless and until, the waste is converted into power generation and the fly ash and bottom ash generated thereupon is properly utilized for manufacture of bricks or construction material products, it will become impossible to deal with such a mega quantum of MSW. No matter how many landfill sites are allotted, given the tremendous scarcity of land in Delhi, it will be virtually impossible and impracticable to handle such a huge quantity of waste unless it is incinerated properly and in accordance with law. The purpose should be to protect the environment which is the fundamental duty of the citizens and all concerned stakeholders so as to make the Fundamental Right meaningful i.e., Right to Decent and Clean Environment as mandated under Article-21 of the Constitution of India by protecting the environment and not by opposing the operation of the plant, which can be operated, and should alone be operated when it is environmentally compliant and

causes no injury to public health. As of present, it appears to be the only plausible solution when the influx of population is increasing day by day. Development activities in the private and public sectors both, are expanding manifold. Thus, to meet all these demands, we necessarily must follow the law and do what is the need of the day. The Corporation and other public authorities have vehemently contended that it is the only viable option available with them as of present to deal with such huge amount of waste comprised of peculiar qualities and constituents.

ग्रस्कारेस स्वर्धन

The project in question has been developed as a Clean 6.1.2. Development Mechanism (for shot, "CDM") project. According to the applicants, it has been registered with the United Nations Framework Convention on Climate Change (UNFCCC). projects are such projects which have adopted the technology which takes care of all environmental issues as per the international standards including stoppage of generation of Green House Gas emissions and are considered to be environment friendly, and are thus eligible for carbon credit. There is no doubt that operation of such plants should be permitted to continue only and only if they operate in accordance with the prescribed parameters and do not cause pollution or degradation of environment. In the present case, the project proponent has taken anti-pollution measures, improved technology, introduced new mechanism for segregation and has brought emissions not only within the prescribed limits but even to the more stringent standards imposed upon the project proponent by the regulatory authorities. The last five inspections have shown

that Stack emissions are much below the prescribed values. The inspecting teams did not notice any spreading of fly ash around the plant and more particularly in the colony of the applicants. Inconvenience, if any, caused to the applicants or the surrounding areas must give way to the large public interest of handling and processing of MSW in NCT Delhi. Of course, they cannot be permitted to operate if they are causing any public health or environment hazards. The Joint Inspection Reports conducted by the varied officers of various departments have consistently found that the plant is non-polluting and compliant. We have no reason to reject such scientific analysis particularly when no scientific evidence to the contrary has been placed by the applicants on record. The Hon'ble Supreme Court in *G. Sundarrajan vs. Union of India and Ors.* (2013) 6 SCC 620 relying on the judgment in *Narmada Bachao Andolan* held as under:

"Normally such decisions are taken by the Government after due care and consideration. In a democracy welfare of the people at large, and not merely of a small section of the society, has to be the concern of a responsible Government."

"I have referred to the aforesaid pronouncements only to highlight that this Court has emphasized on striking a balance between the ecology and environment on the one hand and the projects of public utility on the other. The trend of authorities is that a delicate balance has to ecological struck between the impact development. The other principle that has been ingrained is that if a project is beneficial for the larger public, inconvenience to smaller number of people is to be accepted. It has to be respectfully accepted as a proposition of law that individual interest or, for that matter, smaller public interest must yield to the larger public interest. Inconvenience of some should be byepassed for larger interest or cause of the society."

- Development as well as industrialization in a society 6.1.3. raises new challenges in the field of environmental justice. Sustainable development is an appropriate answer but it has to be applied in its correct perspective while ensuring that there is no irreversible damage to nature, environment and ecology. Precautionary Principle is one of the most significant tools which the Tribunal would use to protect the environment, right at the initial stage rather than provide for remedies post environmental damage. The Hon'ble Supreme Court of India extensively dealt with this doctrine of Precautionary Principle in the case of 'Vellore Citizens Welfare Forum v. Union of India & Ors' (1996) 5SCC 647.
- 6.1.4. The Principle of Sustainable Development leads to some inconvenience and thus causes some impacts on environment. Unless such impact and effect is irretrievable within the limit of Sustainable Development, the Tribunal would be inclined to permit such plants to operate. The Precautionary Principles require us to ensure that all such restrictions and mandates should be put upon the project proponent to ensure that it is strictly non-polluting and compliant. The directions that we propose to issue in this case would ensure compliance to the Precautionary Principle on the one hand and bring the case within the safe limitations of Sustainable Development.
- 6.1.5. We may also refer to another important aspect of this case under this issue. This site was an earmarked area since 1980 for compost plant and landfill site. All along it had been adjacent to an STP. Even when more land was allocated, the purpose continued

to be the same and as already noticed, all authorities are ad-idem with regard to the purpose of allotment of its usage and no complaints from any quarters were received. The Waste to Energy plant has been established/constructed and has been in operation 2011 onwards. The Applicants approached the Hon'ble High Court in the year 2009 but the Hon'ble High Court did not grant them any interim order either for shifting the plant or even construction and completion thereof. The Writ Petition came to be dismissed. However, it was restored and it was for the first time on 15th September, 2010 that the Hon'ble High Court ordered that any action taken by the respondents shall be subject to the result of that Writ Petition. This petition came to be transferred to the Tribunal in 2013 and the Tribunal also passed no interim order stopping the operation of the plant and the interim application i.e. M.A. No. 19 of 2014 filed by the applicant was ordered to be listed with the original application. On the contrary, the plant was permitted to operate under strict supervision and regular inspections by the joint inspection teams appointed by the Tribunal. Right from 2013 till date, if the applicants felt dissatisfied from any of the orders passed either by the Hon'ble High Court or by the Tribunal, they ought to have assailed them before the Hon'ble Supreme Court. Today, the plant has been completely constructed and is effectively in operation since 2012 particularly and for the last nearly three years it has been found to be nonpolluting and compliant. In our considered opinion, the public interest does not require us to direct shutting down or shifting of the plant. The record does not demonstrate any adverse impacts on

public health and environment. As already noticed, larger public interest demands that the plant should be permitted to operate, however, it must strictly comply with the prescribed standards and norms and there should be regular monitoring by the High Powered Committee for the operation of the plant and there should be analysis of its emissions as well. In addition to this, there are advantages which would ensure processing of municipal solid waste by the waste to energy plant, such as other eco and socio environmental benefits in NCT Delhi. The Tribunal cannot be oblivious of the fact that the Government agency can provide only a limited amount of land for such purposes in NCT Delhi given that it is a highly scarce asset. A waste to power generation plant has to be environment centric. It would generate power which itself is of acute shortage in the NCT of Delhi. More usefully, the bottom and fly ash generated from the plant would be used for making bricks and other construction materials, for which the project proponent has already established and constructed a brick manufacturing plant. This would avoid transportation of the fly ash. These amongst others, are some of the benefits of operating a waste to energy plant in the larger interest of the society as well as for prevention and control of environmental pollution resulting from the indiscriminate dumping of municipal solid waste, which is a regular feature of the day.

6.1.6. Upon comparative analysis, it is noticed that public interest and public health examined in conjunction with environmental protection, the balance tilts in favour of permitting

the plant to continue its operation of processing the municipal solid waste from waste to energy. The passing of appropriate directions by the Tribunal would take care of the applicability of the Precautionary Principle to the facts of the present case while regular monitoring and adherence to the more stringent standards would satisfy the fundamentals of Sustainable Development. The Tribunal, while imposing environmental compensation upon the project proponent for causing environmental pollution till 18th December, 2014, cannot allow the public at large to suffer the consequences of the indiscriminate dumping of municipal solid waste in relation to both public health and environment. We have already noticed that NCT Delhi is generating 14,100 metric tonnes of mixed waste every day. This fact alone is sufficiently indicative of the magnitude of the problems related to the handling and disposal of MSW in Delhi. The need of the hour is to ensure processing of the Municipal waste with least residue by recourse to developed and tested technologies in that behalf. This waste is going to increase by the day. The local authorities ought not to take it as a commercial venture but should be very cautious of the fact that it is their statutory duty to process the municipal solid waste in accordance with the Rules of 2016 and ensure that there are no adverse impacts on public health and environment. They need to tackle this huge problem with utmost sense of sincerity and objectivity. Similarly, the public at large should not propagate the Principle of 'Not in my backyard' that too founded on no scientific data but only mere apprehensions. The Tribunal cannot accept such contentions and it has to give precedence over such apprehensions

Development in the interest of both public health and environment. Waste to wealth is the most plausible and suitable mechanism to provide solution to this massive menace of municipal solid waste in NCT Delhi. Waste to energy is certainly one of the most accepted methodologies for processing such waste as even accepted by various judgments of the Tribunal, including in the case of Almitra H. Patel and Kudrat Sandhu (supra). Protection of environment is of utmost importance as that alone would protect the right of the people in terms of Article 21 of the Constitution of India. However, that necessarily does not mean that it can alone be achieved by shutting down such plant or shifting the plant to another site without any appropriate alternative for handling and processing such huge quantity or MSW.

ORDERS AND DIRECTIONS:

- 60. For the reasons afore recorded and in the interest of public health and environment, we issue the following order and directions:
- 1. We hold that the claim of the applicants in so far as it challenges the Environmental Clearance granted to the Project Proponent by MoEF&CC *vide* its order dated 21st April, 2007, is barred by time. Thus, for that reason and even for additional reasons stated in the judgment, we dismiss this claim of the applicant.
- 2. The objection of the respondent that even the other reliefs claimed by the applicants are barred by limitation under the provisions of the NGT Act, is untenable and is therefore

- rejected. These prayers of the applicant have been dealt with on merits and answered by the Tribunal in this judgment.
- For the pollution resulting from deficient functioning/operation 3. of 'Waste to Energy Plant' and its Stack emissions being in of prescribed parameters up to the period 18th December 2014, we hold that the Project Proponent is liable to pay Environmental Compensation of Rs. 25 Lakhs in terms of Section 15 & 17 of the NGT Act, which shall be payable to the CPCB and DPCC in equal shares. The said amount would be utilized for prevention and control of air pollution in that area, subject, to the orders of the Tribunal. The 'Waste to Energy Plant' would be permitted to operate till further orders of the Tribunal and/or CPCB/DPCC, as the case may be. The plant shall operate to its optimum capacity and would not cause any environmental pollution. In other words, its emissions should be strictly compliant with the prescribed standards imposed by CPCB/DPCC in the Consent Operate/Joint Inspection Reports, whichever is more stringent. The plant will be permitted to operate subject to the stringent standards and regular inspections and monitoring by the Joint Inspection Team constituted by the Tribunal vide its order dated 13th March, 2013.
- 4. Joint Inspection Team shall conduct monthly inspections, while one would be a surprise inspection and other monthly inspection would be upon giving notice to the Project Proponent. In other words, there will not be more than one inspection in a month. A detailed and comprehensive inspection

report shall be prepared by the Joint Inspection Team and be submitted to this Tribunal for appropriate directions. The Joint Inspection Team shall take Stack as well as Ambient Air Quality samples and analyze the same in two different laboratories i.e., CPCB and DPCC laboratories. The Project Proponent should construct an automatic segregation plant, operative within one week from the date of pronouncement of judgment, if not, made operative by 31st January, 2017. The inspecting team shall carry out detailed inspection and record its findings in relation to proper segregation of waste strictly in accordance with the Solid Waste Management Rules of 2016, initially for a period of one year and if the plant is found to be complying in all respects, then the Joint Inspection Team is to conduct inspections once in three months.

In the event, the plant is found to be deficient in its operations 5. or violates the prescribed standards of emissions, it would be liable to pay Environmental Compensation of Rs. 5 Lakhs per incident, in addition to such other order or directions that may be passed by the regulatory authorities and/or this Tribunal including closure of the plant. One technical representing the applicant would be entitled to participate both in the surprise as well as inspections upon notice by the Joint Inspection Team. The joint inspection team shall make its recommendations to the Tribunal identifying the deficiencies/violations of parameters and their environmental impact. Environmental compensation of Rs. 5 Lakh would be payable subject to the orders of the Tribunal.

- 6. The Joint Inspection Team shall collect samples from the locations at regular intervals in all directions of the plant and would analyse the same.
- 7. The Project Proponent would ensure that its brick manufacturing plant, utilizing the fly/bottom ash is operative to its optimum capacity. Thus, every effort would be made to minimise the transport of fly/bottom ash generated from the 'Waste to Energy Plant' to a landfill site. The transportation of fly/bottom ash shall be carried out strictly in accordance with the Rules while ensuring that there is no fugitive release of ash into the air either during the loading, unloading and transportation.

We direct the NCT of Delhi and all local authorities in NCT Delhi to make it mandatory for all construction projects (public or private) to use the bricks manufactured from fly ash in their construction activities. Every effort should be made by all government authorities including DPCC to popularise the use of ash bricks and to provide incentives, thereof. The Government of NCT Delhi, DPCC, joint inspection team and other concerned authorities would issue clear directions with regard to utilisation of fly ash bricks in construction and allied activities, quality, quantity and percentage of such use.

8. The CPCB, DPCC & MoEF&CC shall direct the NCT Delhi as well as all the concerned local authorities to provide more landfill sites in Delhi and such sanitary landfill sites should be

- maintained and utilized strictly in accordance with the Solid Waste Management Rules of 2016.
- 9. The Tribunal having dealt with the issue of MSW in NCT Delhi in different cases, particularly *Almitra H. Patel, Kudrat Sandhu* and the present case is of the considered opinion that NCT Delhi, local authorities and even the Central Government should make contribution in all respects to ensure establishment of more 'Waste to Energy Plant' at appropriate sites and strictly in accordance with the Rules of 2016. This direction is necessitated for the reason that nearly 8300 MT of MSW will still be dumped at different sites as is being done presently.
- 10. Existing landfill sites should be improved, their heights should immediately be reduced and bio-stabilization of all the landfill sites should be expedited. The re-usable material particularly inert and plastic waste should be recovered and utilized for construction of roads (National Highways) and embankments in NCT of Delhi or any other area.
- 11. We direct that the plant should have online monitoring system which should be linked to the websites of CPCB and DPCC. Furthermore, outside its premises, the project proponent shall provide a link to the online system in the public domain to enable the public at large including the applicants to know the emission standards and day-to-day functioning of the plant.
- 12. DPCC shall issue appropriate directions to all the local authorities to ensure segregation of the MSW at source. The

- C&D waste collected at *dhallos* or at source should strictly be transported to C&D Plant at Shastri Park and Burari.
- 13. The Project Proponent is hereby directed to improve the green belt by planting trees all around the site. It should also improve the green area which is part of the project site itself.
- 14. We direct that the terms, conditions and directions passed in the judgment of this Tribunal in the cases of *Kudrat Sandhu* and *Almitra H. Patel* (supra) shall *mutatis mutandis* apply to the project in question as well.
- 61. The Original Application No. 22 (T_{HC}) of 2013 is disposed of in terms of the order and directions contained in paragraph no. 60 of this judgment. Consequently, M.A. No. 19 of 2014 does not survive for consideration and is accordingly disposed of.

Swatanter Kumar Chairperson

U.D. Salvi Judicial Member

Raghuvendra S. Rathore Judicial Member

> Bikram Singh Sajwan Expert Member

> > Ranjan Chaterjee Expert Member

New Delhi 2nd February, 2017