BEFORE THE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE BENCH AT CHENNAI

APPEAL NO. 46 OF 2016

IN THE MATTER OF:

UMA MAHESWAR DAHAGAMA ...APPELANT

VERSUS

UNION OF INDIA & ORS ...RESPONDENTS

WRITTEN SUBMISSIONS ON BEHALF OF THE APPELLANT

MOST RESPECTFULLY SHOWETH:

1. That the Appellant is filing these written submissions in the above-mentioned Appeal. The appeal has been filed against the environmental clearance dated 20.1.2016 granted by Respondent No. 1 (Hereinafter called as "MoEF&CC") to the proposed 2x800 MW NTPC (Hereinafter called as "Project Proponent") Thermal Power Plant at Ramagundam, Karimnagar district, Telanagana State.

2. It is submitted that the Appellant has raised various critical issues such as Characteristic analysis of fuel not being done, its Radio Activity and Heavy metal content testing not being done and their impacts not being studied, False Ambient Air Quality (AAQ) monitoring being done, False results of AAQ being presented, Cumulative Impact Assessment not being done, Hydro-geological impacts not being considered, Health impacts not being studied, Various TOR not being complied and various environmental clearance conditions of existing plant not being complied by the Project Proponent. The Appellant has also submitted that the Expert Appraisal Committee (Hereinafter called as "EAC") and MoEF&CC have not considered the above issues and have granted the environmental clearance for the above-said project without the application of mind and without any reasons.

3. The following substantial questions arise out of the present Appeal:

I. Whether the non-compliance of Terms of Reference (TOR) completes and fulfils the objective and necessity of Environmental Impact Assessment (EIA) Study, Public Hearing and Appraisal under the EIA Notification, 2006, Environmental (Protection) Act, 1986 and Principles of Precaution and Sustainable Development?

II. Whether the submission of various project documents and technical reports, which are supposed to be presented in the draft EIA Report, Public Hearing and Appraisal stages, before the Hon'ble Tribunal in the Appeal stage be considered as valid and accepted as non-violation of EIA Notification, 2006?

III. Whether the non-compliance of the Hon'ble Tribunal direction in **Krishi Vigyan Arogya Sanstha & Ors Vs Union of India & Ors [Appeal No. 7 of 2011 (T)]** and the non-study of Radioactivity of the Coal proposed to be accepted as non-violation of EIA Notification, 2006?

IV. Whether it is appropriate and legal for a responsible public corporate to indulge wilful misinterpretation of requirement of TOR conditions and its non-compliance?

V. Whether it is appropriate and legal for a responsible public corporate to indulge into wilful falsification of information and obtain the Environmental Clearance for the project on the same basis?

VI. Whether the EIA Notification, 2006 and Principles of Precaution and Sustainable Development and EIA Notification, 2006 restrict the Cumulative Impact Assessment Study to only 10 kilometers radius of the project site?

VII. Whether the Ambient Air Quality (AAQ) monitoring conducted with four monitoring stations and within two kilometers radius of the project site can be considered as valid, when there are number of highly polluting industries in the 15 kilometers radius of the project site?

VIII. Whether the wilful and deliberate non-submission and consideration of the impacts of number of underground coal mines within 10 kilometers radius of the project site by branding them as non-polluting industries be considered as fulfilling the requirement of Cumulative Impact Assessment study?

IX. Whether the wilful and deliberate non-submission and consideration of any of the industries within 15 kilometers radius of the project site be considered as fulfilling the requirement of Cumulative Impact Assessment study?

X. Whether a responsible Public Corporate which has to be bound by Law and Principles of Precaution and Sustainable Development can assumed to be ignorant of highly polluting industries and other sources within the 15 kilometers?

XI. Whether a responsible Public Corporate which has to be bound by Law and Principles of Precaution and Sustainable Development can assumed to believe that there is lower level of pollution in the project area, in spite of overwhelming evidence that the pollution level in the project area way above the National Ambient Air Quality Standards (NAAQS), 2009?

XII. Whether the AAQ monitoring conducted in the winter season, which is known show the highest level of pollution, can be believed to show the lower level pollution than the AAQ monitoring conducted in the summer season, which is known to show lower level of pollution?

XIII. Whether the non-conducting of impact assessment study for the utilization of ground water for the construction of the project site renders the Hydro-geological impact assessment study as valid?

XIV. Whether the non-study of the water body to which the waste water from the power project will be sent and the impact of the waste water on the receiving water body renders the Hydro-geological impact assessment study as valid?

XV. Whether the non-study of the impact of the Ash Pond on the Ground Water pollution renders the Hydro-geological impact assessment study as valid?

XVI. Whether the non-study of Ground and Surface water pollution caused due to the discharge of untreated and polluted Ash Pond water renders the Hydro-geological impact assessment study as valid?

XVII. Whether the Polluter pays principle means the self-certification of the Polluter and escape with self-certified results as Gospel Truth, without any verification and action by the competent authorities?

XVIII. Whether the MoEF&CC and TSPCB are not bound by Water (Prevention and Control of Pollution) Act, 1974 and Environment (Protection) Act, 1986 to take appropriate criminal action on the Project Proponent for causing the Pollution of the Agricultural lands and Godavari River?

XIX. Whether the MoEF&CC and TSPCB have derogated their responsibility to take appropriate criminal action on the Project Proponent under Water (Prevention and Control of Pollution) Act, 1974 and Environment (Protection) Act, 1986 and the Principles Strict Liability and Polluter Pays set out by the Hon'ble Supreme Court of India.

XX. Whether the non-consideration of Environmental impacts relating to Flue Gas Desulphurization (FGD) renders the Hydro-geological impact assessment study as valid?

XXI. Whether the pollution of Ground Water and Surface Water way above the stipulated standards did not mean the competent authorities to identify the sources, reasons and polluters before the present was approved Environment Clearance?

XXII. Whether the non-study of incremental Ground and Surface Water pollution which will be caused by the proposed project renders the Hydro-geological impact assessment study as valid?

XXIII. Whether the non-consideration of scientific feasibility of Zero Liquid Discharge (ZLD) renders the Hydro-geological impact assessment study as valid?

XXIV. Whether the Judgment of the Hon'ble Tribunal in Samata Vs Union of India where the emphasis was laid on Hydro-geological impacts of Thermal Power Plants is not applicable to the present case?

XXV. Whether the TSPCB, EAC and MoEF&CC have failed to anticipate, prevent and attack the causes, as held by Hon'ble Supreme Court of India in **Vellore Citizens' Welfare Forum Vs Union of India (1996) 5 SCC 647: AIR 1996 SC 2715)**, for Air and Water above the stipulated standards in the project area?

XXVI. Whether the TSPCB and MoEF&CC were not required to take competent action on the Project Proponent on the non-compliance of existing project's Environmental Clearance conditions?

XXVII. Whether the EAC and MoEF&CC have accepted all the information furnished by the Project Proponent as Gospel Truth, without detailed scrutiny required under the EIA Notification, 2006?

XXVIII. Whether the EAC and MoEF&CC have failed to discharge their duties, obligations and legal expectation cast upon them under EIA Notification, 2006 and Environment (Protection) Act, 1986, Principle of Precaution and Sustainable Development and as held by the Hon'ble Tribunal in **Samata Vs Union of India [2014 ALL (I) NGT REPORTER (1) (SZ) 1]**?

XXIX. Whether the EAC and MoEF&CC were right in recommending the proposed project for Environmental Clearance before ensuring compliance of NAAQ Standards stipulated by CPCB and Water Quality standards stipulated by Bureau of Indian Standards?

XXX. Whether the EAC and MoEF&CC have not violated the Rule 3 (b) of the Environment (Protection) Rules, 1986 in recommending the proposed project for environmental although the Air Pollution and Water Pollution in the project area is already above the stipulated standards?

XXXI. Whether the Environmental Clearance for the proposed project is in not in violation of Carrying Capacity of the ecosystem and as held by Hon'ble Supreme Court of India in **Karnataka Industrial Development Board Vs C. Kenchappa [(2006) 6 SCC 371]**?

XXXII. Whether the Environmental Clearance granted for the project is not in violation of the Public Trust Doctrine?

XXXIII. Whether the Environmental Clearance granted for the project is not in violation of the EIA Notification, 2006, Environment (Protection) Act, 1986 and Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981?

XXXIV. Whether the Environmental Clearance granted for the project is not in violation of Principles of Precaution and Sustainable Development?

4. That at the outset, it is submitted that the Environmental Clearance granted to the present project is in violation of the EIA Notification, 2006, Environment (Protection) Act, 1986, Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 and Principles of the Precaution and Sustainable Development. The Appellant through the Appeal, Rejoinder and the affidavit to the sur-rejoinder of the Project Proponent has raised and highlighted various issues with facts relating to the proposed project which have not been considered by the EAC and MoEF&CC. The following are issues which have been raised by the Appellant in the present Appeal:

I. That the Coal proposed to be has not been tested for its Characteristics and the impact of the Radio activity and Heavy Metals have not been studied by the Project Proponent and appraised by the EAC and MoEF&CC.

II. That the Cumulative Impact Assessment study has not been conducted.

III. That the Ambient Air Quality (AAQ) Monitoring was falsely conducted by the Project Proponent.

IV. That false data on AAQ pollution in the project area has been presented by the Project Proponent.

V. That the proposed project is located on a water body.

VI. That the Ground Water and Surface Water in the project area are already above the stipulated standards of water quality.

VII. That the impact of the proposed project on the utilization of the Ground Water for the construction of the proposed project have not been studied.

VIII. That the impact of the Ash Pond of the proposed project on the Ground Water has not been studied.

IX. That the feasibility of Zero Liquid Discharge system has not been studied.

X. That the impact of the Waste Water which will be discharged from the proposed project has not been studied.

XI. That the environmental impacts relating to installation and operation of the Flue Gas Desulphurization (FGD) proposed to be used for the project have not been studied.

XII. That Hydro-geological impacts of the proposed project have not been studied by the Project Proponent and appraised by the EAC and MoEF&CC.

XIII. That the Health Impacts Assessment study has not been conducted.

XIV. That the EIA Study has not been conducted in compliance with the TOR prescribed for the project.

XV. That the Project Proponent has not complied with the Environmental Clearance conditions of its existing Thermal Power Plant.

XVI. That the EAC and MoEF&CC have not applied their minds and have not cleared the project with due diligence.

XVII. That the Environmental Clearance for the proposed project is devoid of any reasons.

5. The Appellant submits as under in respect of the above issues which have been raised in the present Appeal.

I. <u>COAL PROPOSED TO BE SUED FOR THE PROJECT HAS NOT BEEN TESTED FOR ITS CHARACTERISTICS AND THE IMPACT OF RADIOACTIVITY AND HEAVY METALS FROM THE SAME COAL HAVE NOT BEEN STUDIED BY PROJECT PROPONENT AND APPRAISED BY THE EAC AND MOEF&CC</u>

6. The Appellant has submitted in the Appeal that the Coal linkage for the proposed project has only been finalized and decided during the meeting in which the proposed was recommended for the Environmental Clearance for the proposed project. The Project Proponent has proposed to use the Coal produced from Mandakini – B Coal block of Western Corollaries Limited. The Appellant has submitted in the Appeal that although the details of Coal linkage for the proposed project was submitted by the Project Proponent, it has however failed to produce laboratorial reports relating to WCL Coal characteristics and its Radioactivity and Heavy Metal analysis, which is required under the TOR Nos. XXXIX and XL prescribed for the EIA Study of the proposed project. TOR Nos. XXXIX and XL are excerpted hereunder:

"xxxix) Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.

xl) Fuel analysis shall be provided. Details of auxillary fuel, if any, including its quantity, quality, storage etc should also be furnished."

7. It is submitted that as per the TOR prescribed for the proposed project, the Project Proponent is required to submit laboratorial reports relating to Coal proposed to be used for the project. As mentioned above, the Project Proponent has not provided any laboratorial reports relating to Characteristics, Radioactivity and Heavy Metal analysis of the WCL Coal proposed to be used for the project. It is submitted that the Project Proponent has not provided specific reply on the non-compliance of the above-mentioned TOR and on the failure to furnish the laboratorial reports relating to the WCL Coal proposed to be used for the proposed project. In fact, it has been

admitted by the Project Proponent that they have failed to produce laboratorial reports relating to Radioactivity and Heavy Metal analysis of the WCL coal proposed to be used for the project. Relevant excerpt from the reply of the Project Proponent is under:

"24. It is submitted that 3rd Respondent is pursuing the matter with General Manager (GM), Western Coal Field Ltd (WCL) to provide the proximate analysis report including its heavy metal and radioactivity contents of the quality of coal proposed to be supplied for the project…"

8. It is submitted that it is clear from the above submission of the Project Proponent that it has failed to produce the laboratorial reports relating to Characteristics, Radio Activity and Heavy Metal analysis of the WCL Coal proposed to be used for the project, during the appraisal of the proposed project and same have not been considered by the EAC and MoEF&CC. Thus, the Project Proponent has violated the TOR Nos. XXXIX and XL prescribed for the EIA Study of the proposed project. Further, the Appellant has also submitted in the rejoinder that the by not studying the impacts of the Radioactivity of the Coal proposed to be used for the project and appraising them, the Project Proponent, EAC and MoEF&CC have not complied with the direction of the Hon'ble Tribunal in **Krishi Vigyan Arogya Sanstha & Ors Vs Union of India & Ors [Appeal No. 7 of 2011 (T)].** Relevant excerpt from the judgment of the Hon'ble Tribunal is as under:

"However, the Environmental Impact Assessment as well as Expert Appraisal Committee have completely ignored the objections raised by Mr. Paliwal and others regarding nuclear radiation that would be caused by the proposed project. But we are of the opinion that in a project of this nature, as stated by Mr. Paliwal, in the Public Hearing, the effect of nuclear radiation was neither studied nor examined and it was simply brushed aside in the arguments before this Tribunal stating that there was no necessity of examining the project from nuclear radiation point of view as no such plant would cause nuclear radiation which harms the human habitation or the environmental ecology in the surrounding area.

……

…….

10. Taking all the above into consideration, we are of the considered opinion that this appeal requires to be disposed of with the following directions keeping in view the principles of sustainable development and precautionary principle.

a. The first respondent, Ministry of Environment and Forests is directed to look into the matter as to long term impacts caused by nuclear radiation from the thermal power projects, by instituting a scientific long term study involving Bhabha Atomic Research Agency or any such other recognized scientific institution dealing with nuclear radiation with reference to the coal ash generated by thermal power project (Respondent No. 3) particularly the cumulative effect of a number of thermal power project located in the area on human habitation and environment and ecology. The study shall also take into consideration the health profile of the residents within the area in which the pollutants are expected to spread from the thermal power project.

……

……..

c. The Ministry of Environment and Forests shall include in the Terms of Reference of all the future projects asking the proponent to furnish details of possible nuclear radioactivity levels of the coal proposed to be used for the thermal power plant.

d. The Ministry of Environment and Forests shall get the national standards prescribed, if not already available, from the Department of Atomic Energy, Govt. of India within a period of one year from the date of receipt of this order, as to permissible levels of nuclear radiation in residential, industrial and ecologically sensitive areas of the country.

9. It is submitted that the Hon'ble Tribunal in the above-mentioned Appeal has clearly noted and recognized that the study of the nuclear radiation form the Thermal Power Plants and consideration of the impacts relating to are part of the Principles of Precaution and Sustainable Development and it has accordingly directed the MoEF&CC to study and consider the impacts of nuclear radiation from the

proposed project. It is submitted that in the present case, the coal linkage for the proposed project has only got finalized during the meeting of the EAC in which the proposed project was recommended for Environmental Clearance. This means the Project Proponent has not studied the impacts of the Nuclear Radiation during the EIA Study of the project. Further, it is own submission of the Project Proponent in the reply that they have not produced the Laboratorial reports relating to Coal Characteristics, Radiation and Heavy Metal analysis during the appraisal of the project. Furthermore, the Project Proponent has submitted in the sur-rejoinder that the WCL coal has been tested for Radioactivity on 08.11.2016, which is after 10 months of the grant of Environment Clearance for the proposed project. Hence, it is submitted that the impact of the Radiation from the coal proposed to be sued be used for the project has not been studied by the Project Proponent and considered and appraised by the EAC and MoEF&CC during the appraisal of the proposed project.

10. Further, it is the own submission of the Project Proponent in the reply that the Heavy Metal analysis and related laboratorial reports have not been tested and submitted to MoEF&CC during the appraisal of the proposed project. As per the own submission of the Project Proponent in the sur-rejoinder, the WCL Coal proposed to be used for the project has been tested for Heavy Metal analysis only on 01.10.2016, which is more than 8 months after the grant of Environmental Clearance for the proposed project. Hence, it is also clear that the impact of the Heavy Metals has not been studied by the Project Proponent in the EIA Study and has not been appraised by the EAC and MoEF&CC during the appraisal of the proposed project.

11. It is also submitted that the based on the heavy metal test results of WCL Coal produced by the Project Proponent in the sur-rejoinder, the following quantum of different heavy metals shall be discharged to the Ash Pond of the proposed project.

NAME OF THE HEAVY METAL	QUANTITY OF DISCHARGE EVERY YEAR (IN TONNES)
Barium	336
Cobalt	80
Chromium	160
Copper	56
Manganese	856
Molybdenum	54.88
Iron	498.8
Nickel	198
Lead	388
Vanadium	184
Zinc	104
Total	**2,915.68 Tonnes** **or** **29,15,680 Kilograms per year**

12. It is submitted that the impact of the above quantum of Heavy Metals which shall be discharged into Ash Pond of the proposed project has not been considered by the EAC and MoEF&CC. The detailed submissions of the Appellant in this regard are presented in the subsequent related paragraphs of these written submissions.

13. In view of the above facts, it is submitted that the Project Proponent has not produced the laboratorial reports relating to the Coal Characteristics, Radiation and Heavy Metals in the WCL Coal proposed to be used for the project. Further, the impact of the Radiation and Heavy Metals have also not been studied by the Project Proponent as part of the EIA Study. Hence, the TOR Nos. XXXIX and XL have been completely violated by the Project Proponent. Further, the EAC and MoEF&CC have failed to note of the non-compliance of the TOR Nos. XXXIX and XL by the Project Proponent and have not considered the impacts of the Radiation and Heavy Metals which will be discharged by the Proposed project. Hence, the EAC and MoEF&CC have failed to comply with the directions of the Hon'ble

Tribunal in **Krishi Vigyan Arogya Sanstha & Ors Vs Union of India & Ors [Appeal No. 7 of 2011 (T)]**

II. CUMULATIVE IMPACT ASSESSMENT STUDY ON AAQ HAS NOT BEEN DONE

14. The Appellant has also submitted in the Appeal that the Project Proponent has also failed to undertake the Cumulative Impact Assessment of the number of industries within 15 kilometers radius of the project area and has not complied with the TOR Nos. I and XXXVIII prescribed for the EIA Study of the proposed project. The TOR Nos. I and XXXVIII are excerpted below:

"i. **Cumulative impacts including the rise in temperature** within 10/15km, as applicable shall be studied.

xxxviii) **Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed**. Details of the Model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The wind roses should also be shown on the location map as well."

15. It is submitted that the project area comprises of number of highly polluting industries within 15 kilometers radius of the project site. The details of all the polluting industries within 15 kilometers radius of the project site are as under:

S.No	Name of the Project	Production capacity in MTPA	Distance from the plant
1	Ramagundam OC-III (Named as SCCL OCP by Project Proponent)	6.80	4.5 km
2	Adriyal Shaft (UG)	3.14	15
3	Jallaram (UG)	2.28	10

4	Medapalli OC (Named as SCCL OCP IV by the Project Proponent)	4.09	8
5	Peddampet (UG)	1.45	6
6	Ramagundam OC-I	3.3	13
7	Ramagundam OC-II	4.5	15
8	Godavarikhani – 1 incline underground mine		5
9	Godavarikhani – 2 incline underground mine		5
10	Godavarikhani – 5 incline underground mine		7
11	Godavarikhani - 10 incline underground mine	0.45	10
12	Godavarikhani – 11A incline underground mine	1.75	9
13	Godavarikhani – 9 incline underground mine	4.5	10
	Total	More than 29 MTPA	
THERMAL POWER PLANTS			
S. No	**Name of the industry**	**Production capacity in MTPA**	**Distance from the plant**
1	NTPC Thermal Power Plant	2600 MW	Adjacent
2	SCCL Thermal Power Plant	1200 MW	13 KM
3	TSEB Thermal Power Plant	62.5 MW	2.1 KM
4	SCCL Thermal Power Plant	18 MW	3.7 KM
OTHER INDUSTRIES			
S.No	**Name of the industry**	**Production capacity in MTPA**	**Distance from the plant**

1	Kesoram Cements Limited		7.3 KM
2	Fertilizer Corporation Limited		1.7 KM

16. It is submitted that the above list of industries which are within 15 kilometers radius of the project area. As could be seen, there are number of the highly polluting industries such as Coal Mines, Thermal Power Plants and other industries within the 15 kilometers radius of the project site. It is submitted that as per the TOR No. I and TOR No. XXXVIII, the EIA Notification, 2006 and Principles of Precaution and Sustainable Development, the Project Proponent was required to undertake the Cumulative Impact Assessment study of all the above industries, including the proposed project site within 15 kilometers radius of the project site. However, in contrast, the Project Proponent has only considered the impact of few of the industries within 10 kilometers radius of the project site. This is clear from the list of the industries presented by the Project Proponent in the additional information submitted to the EAC, during the appraisal stage of the project. The same list is excerpted hereunder:

TABLE-5

LIST OF INDUSTRIES IN 10 KM RADIUS

Sr. No	**Industry**	**Type of Industry**	**Distance (KM)/ Direction**	**Status**
1	NTPC, Ramagundam	Thermal Power Plant	Adjacent	Operating
2	FCI Ramagundam	Fertilizer	1.7 KM, SE	Not working(Under Revival)

3	Telangana State Electricity Board (62.5 MW)	Thermal Power Plant	2.1 KM, NW	Operating
4	SCCL-OCP-IV	Coal mine	2.9 KM, N	Operating
5	Singareni Power House at Godavari Khani (18 MW)	Thermal Power Plant	4.5 KM, ENE	Operating
6	SCCL – OCP	Coal mine	4.5 KM, SE	Operating
7	Kesoram Cements Limited	Cement Plant	7.3 Km, SW	Operating

17. It is submitted that the perusal of the above tables reveals that the Project Proponent has not included many of the coal mines and other industries which are within 15 kilometers radius of the project site. A list of industries which have not been considered by the Project Proponent for the cumulative impact assessment study within 15 kilometers radius of the project site is marked as provided in the following table.

COAL MINES			
S.No	**Name of the Project**	**Production capacity in MTPA**	**Distance from the plant**
1	Adriyal Shaft (UG)	3.14	15
2	Jallaram (UG)	2.28	10
3	Peddampet (UG)	1.45	6
4	Ramagundam OC-I	3.3	13
5	Ramagundam OC-II	4.5	15
6	Godavarikhani – 1 incline underground mine		5
7	Godavarikhani – 2 incline underground mine		5
8	Godavarikhani – 5 incline underground mine		7
9	Godavarikhani - 10 incline underground mine	0.45	10
10	Godavarikhani – 11A incline underground mine	1.75	9
11	Godavarikhani – 9 incline underground mine	4.5	10
THERMAL POWER PLANT			
S. No	**Name of the industry**	**Production capacity in MTPA**	**Distance from the plant**
12	SCCL Thermal Power Plant	1200 MW	13 KM

18. It is submitted that the perusal of the above table clearly reveals that the Project Proponent has not considered the impact of many of the coal mines and also a 1200 MW Thermal Power Plant within the 15 kilometers radius of the project site. Further, this also means that the Project Proponent has also concealed the

presence of number of industries within 10 kilometers and 15 kilometers radius of the proposed project. Thus, the Project Proponent has violated the TOR Nos. i and xxxviii prescribed for the EIA Study of the proposed project.

19. In its reply to the above issue on not conducting the cumulative impact assessment study, the Project Proponent has misleadingly and falsely submitted that the TOR No. i only required them to conduct the Cumulative Impact Assessment with regard to only rise in temperature for 15 kilometers and the TOR No. xxxviii required them to study the cumulative impacts of industries within only the 10 kilometers radius of the project site. Relevant excerpt from the reply of the Project Proponent is as under:

"39.. With regard to Para 20 of the Appeal, it is stated that the proposed project is surrounded by various cluster of industries in the study area i.e. 10 Km radius. However, the contention of the Appellant is completely erroneous as the condition number (i) of Terms of Reference (TOR) approved by Ministry of Environment and Forest & Climate Change (MoEF&CC) specifically stipulates regarding rise in temperature within 10/15 km, as applicable. It is further submitted that under Terms of Reference (TOR) condition number (xxxviii), it was required to assess cumulative impact of all sources of emissions on the Ambient Air Quality of the study area (i.e. 10 Km radius) and accordingly the cumulative impact assessment prediction due to Industries in study area was done…"

20. It is submitted that the Project Proponent has misleadingly interpreted the requirement of TOR Nos. I and XXXVIII to suit its ends and has submitted that TOR No. I requirement it to conduct the cumulative impact assessment study for 15 kilometers radius with regard to only rise in the temperature and TOR No. XXXVIII required it to conduct Cumulative Impact Assessment study on AAQ for only 10 kilometers radius of the project site. The same submission has been re-iterated by the Project Proponent even in the sur-rejoinder. Relevant excerpt from the sur-rejoinder is as under:

14.. In reply to the contents of Para III sub para 15 to 27 of the rejoinder by Appellant, it is submitted that the averment and allegation made by the Appellant therein are erroneous and hence denied. It is submitted that the assumption of the Appellant is completely wrong and based on misconception of the appellant between two different Terms of Reference (TOR) conditions stipulated by MOEF&CC as the condition no (i) of TOR specifically stipulates to assess cumulative impact assessment regarding rise in temperature within 10/15 km, as applicable. However, TOR condition no. (xxxviii) only requires to assess cumulative impact of all sources of emissions on the AAQ of the study area (i.e. 10 Km radius) and accordingly the cumulative impact prediction due to industries in study area was carried out..”

21. It is submitted that the above submissions of the Project Proponent are misleading. It is submitted a bare perusal of the TOR Nos. I and TOR No. XXXVIII reveals that they have not restricted and no way required the Project Proponent to do the Cumulative Impact Assessment study to only 10 kilometers radius. The TOR No. I makes it very clear that “cumulative impacts **‘including’** the rise in temperature” must be studied by the Project Proponent. It is only the interpretation of the Project Proponent that it was required to conduct cumulative impact assessment study with regard to “only raise in temperature”, and not any other impacts of the industries within 15 kilometers radius of the project. This is a deliberate attempt by the Project Proponent to suit its end and mislead the Hon’ble Tribunal by falsely submitting that it was only required to submit the cumulative impact assessment to only 10 kilometers radius, when the TOR very clearly mandated that the Cumulative Impact Assessment study must be done for the 15 kilometers radius of the project site. In the similar way, even the TOR No. XXXVIII did not require the Project Proponent to study the cumulative impacts study on AAQ to only 10 kilometers of the project site. The same TOR specifically stipulates that the “Cumulative impacts from all sources of emissions..” must be studied by the Project Proponent. Hence, it is the own misleading and false misinterpretation of the Project Proponent that the TOR No. I and TOR No. XXXVIII required that it was required to study the Cumulative Impact Assessment study on AAQ for only 10 kilometers radius of the project site.

22. It is further submitted that even the submissions of the Project Proponent that it has conducted the Cumulative Impact Assessment of all the industries within 10 kilometers radius is also totally false. The Appellant in rejoinder has submitted that the Project Proponent has considered impact of number of coal mines within the project area and it has also not submitted the details of these coal mines to the EAC and MoEF&CC. This has been admitted by the Project Proponent in the sur-rejoinder as under:

"109.. All industries except underground mines are within the 10 Km radius are were considered in the Cumulative impact assessment study as underground mines are not polluting intensive industries. Therefore, the underground mines are not considered. The 3rd Respondent has already furnished and included the complete list of industries within 10 Km radius of the project site."

23. The above submission of the Project Proponent itself is a clear proof of the number of industries which have been considered by it for the so called Cumulative Impact Assessment study within 10 kilometers radius of the project site. It is submitted that there are underground coal mines within 10 kilometers radius and these are sources of air pollution and they produce air pollution through the Air Stack, Coal Handling, Coal Storage, Coal Transportation, etc. If the underground coal mines are not polluting industries and are not sources of Air pollution, there is no requirement of Environment Clearance under the EIA Notification, 2006 and Consent to Establish and Operate under the Air (Prevention and Control of Air Pollution) Act, 1981. It is submitted that the underground mines are polluting industries and hence they require Environment Clearance and Consent to Establish and Operate under EIA Notification, 2006 and Air (Prevention and Control of Air Pollution) Act, 1981. Hence, to frame the underground coal mines as non-polluting industries and not considering them as part of the Cumulative Impact Assessment study is nothing but a malafide effort to under show the existing level of pollution and thus obtain the environmental clearance for the proposed project.

24. It is submitted with the above facts that the submission of the Project Proponent that the Cumulative Impact Assessment Study was required to be conducted for

with regard to only rise in temperature for 15 kilometers radius is totally false and wrong. Both the TOR No. I and XXXVIII have categorically required the Project Proponent to conduct the Cumulative Impact Assessment for 15 kilometers radius. Further, the submission of the Project Proponent that it has conducted the Cumulative Impact Assessment Study for 10 kilometers radius is also false and totally void. The Project Proponent itself has admitted that it has not considered the impact of the underground coal mines by branding them as non-polluting industries. Furthermore, it is also own admission of the Project Proponent that it has not considered the impacts of the any of the industries between 10 kilometers and 15 kilometers radius of the project site for the Cumulative Impact Assessment study. Hence, it is submitted that the Cumulative Impact Assessment study on AAQ, as required as under the TOR No. I and TOR No. XXXVIII, has not been conducted by the Project Proponent and it has mislead the EAC and MoEF&CC by only submitting few of the industries within 10 kilometers and not submitting any of the industries between 10 to 15 kilometers radius of the project site.

25. It is submitted that the importance of the Cumulative Impact Assessment was recognized and noted by the Hon'ble Tribunal in **T. Muruganandam & Ors Vs. Union of India & Ors [Appeal No. 50/2012]** as under:

"41….. Thus, the Cumulative Impact as the term indicates is not the impact of any project in isolation but it is a total impact resulting from the interaction of the project with other project activities around it- past, present and those to come up in future. It is a comprehensive view of the impacts resulting from all the projects- past, present or planned ones on the environment. Cumulative Impact may be same or different and those arising out of individual activities and tend to be larger, long lasting and spread over a greater area within the individual impact. Such studies are therefore commonly expected to:

1. Assess effects over a larger area that may cross jurisdiction boundaries;

2. Assess effects during a longer period of time into the past and future;

3. Consider effects on other eco-system components due to interactions with other actions, and not just the effect of the single action under review;

4. Include other past, existing and future (reasonably foreseeable) action; and

5. Evaluate significant effect in consideration of other than just local and direct effects."

26. It is submitted that as the Hon'ble Tribunal noted above, the Cumulative Impact Assessment Study is a study which has to evaluate the combined impacts of all the sources of pollution and present the future impacts. In the present case, as already highlighted by the Appellant, the Project Proponent in the so called impact assessment study has not included many of the industries within 15 kilometers and also not studied the combined of all these industries and presented the future impacts. Hence, the Cumulative Impact Assessment as required under the EIA Notification, 2006 and Principles of Precaution and Sustainable Development has not been conducted by the Project Proponent and considered and appraised by the EAC and MoEF&CC.

III. <u>BASELINE MONITOIRNG OF AAQ HAS BEEN FALSELY CONDUCTED</u>

27. The Appellant in the Appeal has also submitted that the Project Proponent has conducted false monitoring of Ambient Air Quality (AAQ) which was as done as part of the EIA Study of the proposed project. It is submitted that it is clear from the above description that the project area comprises of number of highly polluting industries within 15 kilometers radius of the project site. Further, these industries are spread out in all directions within 15 kilometers radius of the project. Therefore, in order to effectively monitor and obtain accurate results of the prevailing AAQ pollution in the project area, the Project Proponent was required to identify potential polluting sources and their disbursement in the project area, identify the prevailing wind pattern, identify the area at which the maximum pollution is likely to occur, locate AAQ monitoring stations at all the potential polluting and monitor the AAQ. The Project Proponent is required to give all these details in the EIA Report of the proposed project and specify particularly the reasons, basis and justification for the selection of the Monitoring stations of the

proposed project. It is submitted that in the present case, the EIA Report of the proposed project does not provide any details of the potential sources of the Air Pollution in the project and the basis, reasons and the justification for the selection of the locations for the AAQ monitoring conducted for the project site. Without any of providing any of these details, the EIA Report of the proposed project simply states as under for the selection of the AAQ monitoring stations:

"3.4.1 Methodology Adopted for Air Quality Survey

3.4.1.1 Selection of Sampling Locations

The baseline status of the ambient air quality has been assessed through a scientifically designed ambient air quality-monitoring network. The design of monitoring network in the air quality surveillance program has been based on the following considerations:

- Meteorological conditions on synoptic scale;
- The methodology for conducting the baseline environmental survey and selection of sampling locations considered the guidelines given in the EIA manual of the MoEF & CC;
- Topography of the study area;
- Representatives of regional background air quality for obtaining baseline status; and
- Representatives of likely impact areas.

Ambient Air Quality Monitoring (AAQM) stations were set up at **four** locations. **Table-3.4.1** gives the details of environmental setting around each monitoring station. The location of the selected stations with reference to the plant area boudary is given in the same table and shown in **Figure-3.4.1**.

TABLE-3.4.1

DETAILS OF AMBIENT AIR QUALITY MONITORING LOCATIONS

Station Code	Name of the Station	Distance w.r.t Proposed Plant (Km)	Direction w.r.t Proposed Plant	Zone	Environmental Setting
AAQ 1	Proposed plant site	-----	---	Industrial	-
AAQ 2	Mallialpalli	2.5	W	Residential	Downwind
AAQ 3	Malkapur	1.8	NE	Residential	Upwind
AAQ 4	Near FCI gate	2.1	SE	Residential	Crosswind

28. It is submitted that apart from the above generic details, the EIA Report of the proposed project does not provide any description of the potential polluting sources and their disbursement in the project area and the basis, reasons and justification for the selection of sites for monitoring the AAQ of the proposed project. Without any description and evaluation, the Project Proponent has simply decided the locations of the AAQ Monitoring stations. Therefore, there is no basis and justification on which the AAQ Monitoring stations were selected by the Project Proponent.

29. The Appellant in the Appeal has submitted that although there are number of polluting industries within 15 kilometers radius of the project site, the Project Proponent has located only 4 monitoring stations within 2 kilometers radius of the proposed site. The perusal of the Figure 3.4.1 of the EIA Report clearly reveals that the Project Proponent has only located four monitoring stations within 2 kilometers radius of the project site. The same figure is excerpted hereunder:

30. It is submitted that the perusal of the above figure clearly reveals that the Project Proponent has conducted the AAQ monitoring at four locations within two kilometers radius of the project site. This means that the AAQ Monitoring has hardly covered two of the main pollution sources which are 2600 MW Thermal Power Plant and Fertilizer Production Called as Fertilizer Corporation of India (FCI) Limited. Apart from both these industries, the Project Proponent has not monitored the AAQ in the project area at a number of high pollution sources such as Open Cast coal mines, Underground Coal mines, Other Thermal Power Plants, Cement Plant, Major vehicular traffic and transportation areas, etc. Hence, the AAQ Monitoring conducted by the Project Proponent is false and does not present the accurate results of the prevailing polluting in the Project area.

31. The Project Proponent in its reply and also the sur-rejoinder has submitted that they have conducted the AAQ monitoring based on pre-dominant wind direction, population zone, guidelines of MoEF&CC and sensitive receptors like Forests in the project area. Relevant excerpts from the Reply and Sur-rejoinder of the Project Proponent are as under:

REPLY STATEMENT:

"28….. It is submitted that Ministry of Environment and Forest & Climate Change (MoEF&CC) Guideline or Terms of Reference (TOR) as not stipulated number of

sampling locations to be monitored, rather only require that the ambient air quality sampling stations should be monitored both in upwind an downwind direction. The ambient air quality was carried out during winter season from December 2014 to February 2015 at 4 different locations taking into consideration the upwind and the pre-dominant direction, population zone, villages in the vicinity and sensitive receptors including reserved forests…."

SUR-REJOINDER:

"21. Initially before initiating the baseline monitoring activity a preliminary survey for AAQ Monitoring location, modelling was executed to know the distance at which maximum ground level concentration would likely to occur. It was observed on the preliminary model prediction that the maximum Ground Level Concentration (GLC) would likely to occur at a distance of approximately 2 km from the proposed Telangana site, the monitoring was carried out within the range of 2-3 Km in different directions to measure the worst case post project scenario.

22. Accordingly the different AAQ baseline monitoring locations were identified at a distance of 2-3 Km in upwind, downwind and cross wind direction and also considering the factors such as topography of the study area, meteorological conditions, guidelines given in the EIA Manual of the MoEF&CC, representatives of regional background air quality for obtaining baseline status and representatives of likely impact areas"

23. It is noteworthy that the AAQ monitoring locations were selected in consideration of the prevailing wind pattern, type of location, all other essential factors which are prerequisite for monitoring as per the CPCB guidelines for AAQ monitoring at all locations."

32. It is submitted that the perusal of the above submissions of the Project Proponent reveals that the pre-dominant wind direction, population zone, guidelines of MoEF&CC and sensitive receptors like Forests in the project area. However, such submission of the Project Proponent is without any scientific basis and material facts. As submitted by the Appellant above, neither the EIA Report of the project nor any other project document provide any description about the basis, reasons

and justification for the selection of the AAQ monitoring locations. Further, the Project Proponent has also not replied on specific reasons for not monitoring the AAQ at many potential sources such as Open Cast and underground coal mines, Thermal Power Plants and other industries and the basis and justification for the selection of the monitoring sites for AAQ Monitoring.

33. It is further submitted that even the submission of the Project Proponent that monitoring stations were located in the directions in which maximum pollution is likely to occur and at the sensitive reports is also totally false. This clear from the perusal of the EIA Report itself. As per the figure 3.4.1 of the EIA report, it is clear that the NTPC has located its four monitoring stations in the West, North-Northeast and Southeast directions. However, the same EIA report at figures 4.1, 4.2 and 4.3 clearly shows that the maximum ground level concentrations could occur in the southwest direction of the plant site. Thus, the EIA Report of the project proponent itself conclusively demonstrates that the monitors were not located in areas where maximum concentrations of air pollution are likely to be found. Hence, it is submitted with the above facts that the AAQ monitoring done by the Project Proponent was flawed and futile. The Proponent in its sur-rejoinder has also submitted that they have complied with the TOR NO. XXXVI which mandated that the AAQ monitoring should be conducted at the place where the maximum ground level concentrations are likely to occur. However, it is clear from the above description that the Project Proponent has not located the AAQ monitoring stations at the place and direction at which the maximum concentrations are likely to occur. Further, the same TOR also mandated that the monitoring stations should be located at the sensitive receptors like Forests, etc. The perusal of the EIA Report of the proposed project does not provide any description of the sensitive receptors of the air pollution from the proposed project and monitoring which has been done to study the impact of air pollution on the sensitive receptors. Moreover, it is clear from the perusal of figure 3.4.1 of the EIA Report that the AAQ monitoring was not done at any sensitive receptors like Forests, etc. Hence, it is clear that the neither the EIA Report provides any description of sensitive receptors of the air pollution nor does the AAQ monitoring

was conducted at the sensitive receptors like Forests, etc. Thus, the claim of the Project Proponent that they have conducted the AAQ monitoring in compliance of the TOR No. xxxvi is totally false and contrary to the facts which have been provided in the EIA Report itself.

34. It is submitted with the above facts that the Proponent has deliberately conducted the AAQ monitoring to only two kilometers radius of the project site and only at four locations, as against the Water quality monitoring which has been done at 6 locations and Noise and Soil quality monitoring which has been done at 10 locations each. Further, contrary to the submission of the Project Proponent that they have done the AAQ monitoring in compliance with TOR NO. XXXVI, the EIA Report itself proves that the AAQ monitoring was not done in the place maximum air pollution is likely to occur and also at the sensitive receptors like forests, etc. Thus, the TOR No. xxxvi has been violated by the Project Proponent. Hence, it is submitted that the entire exercise of AAQ monitoring conducted by the Project Proponent is flawed, futile and completely false. It has been deliberately done by the Project Proponent in order to show lower level of pollution in the project area and thus obtain the environmental clearance for the project.

IV. FALSE DATA ON AAQ POLLUTION HAS BEEN PRESENTED

35. The Appellant in the Appeal has also submitted that the Project Proponent has also presented false data on AAQ pollution prevailing in the Project area. The Appellant has submitted that the project consists of number of highly polluting industries such as Open Cast Coal Mines, Underground Coal mines, Thermal Power Plants, Cement Industry, Fertilizer Industry, etc. and the pollution level in the project area is higher. Further, the Appellant submitted that the Project Proponent has presented false and lower results of Particulate Matter (PM) and Sulphur Dioxide (SO_2) concentration in the project area, as opposed to increasing evidence in the project area that both PM and SO_2 pollution concentration in the project area much higher than the false and lower results presented by the Project Proponent in the EIA Report. The Appellant submitted that as the AAQ monitoring results of Project Proponent in the EIA Report, the maximum PM and SO_2 concentrations have been

found to be 68.5 µg/m^3 and 23.5 µg/m^3, respectively. The Project Proponent conducted the AAQ monitoring in the winter season between December, 2014 to February, 2015. The winter season is known to show higher levels of Air Pollution due to natural climatic conditions. The Appellant submitted that these results presented by the Project Proponent are false as the AAQ monitoring conducted by the Fertilizer Corporation of India (FCI), which is at a distance of 1.7 kilometers distance from the project area, has shown higher values of PM and SO_2 pollution prevailing in the project area. As per the AAQ Monitoring conducted by the FCI, the PM and SO_2 values in the project area have been found to be 109 µg/m^3 and 34 µg/m^3. These results have been found by the FCI, in spite of the fact that it has AAQ monitoring in the summer season (March, 2014 to May, 2014), which is known to show lower level of Air Pollution due to the natural climatic conditions. Further, the Appellant has also submitted that not only the EIA Report of the FCI, but also the EIA Reports of the existing coal mines in the project area. On the basis of this, the Appellant has submitted that the Project Proponent has presented the false data on PM and SO_2 polluting in the project area.

36. The Project Proponent in its reply has baseless and falsely claimed that it is unscientific to compare the AAQ monitoring in two different seasons. Relevant excerpt from the reply of the Project Proponent is as under:

"33… It is further submitted that the period of baseline monitoring plays a very vital role in prediction Ambient Air Quality parameters concentration in any micro level environment and hence cannot be matched exactly with two different monitoring period & location. It is to be noted that location and period of monitoring the Fertilizer Corporation of India (FCI) & proposed project are also different. As the climatic parameters of any area for any period of time varies widely from season to season and year to year, hence comparing the ground level concentration of Fertilizer Corporation of India (FCI) Ambient Air Quality baseline data (representing summer season) with two different consultants data for two different period i.e. for one year data & one season data (representing winter season) is totally unscientific and illogical."

37. It is submitted that the above submission of the Project Proponent is baseless, false and totally unscientific. It is a common practice and well acknowledged that the results of AAQ monitoring conducted in two different seasons are compared, for the purpose of understanding and taking better view of the prevailing air pollution in the project area. Therefore, the submission of the Project Proponent that AAQ monitoring conducted in two or more different seasons cannot be compared with each other is false and baseless. Further, the Project Proponent itself in the EIA Report of the same project has compared its one season monitoring results with four seasons (i.e. one year). On the same comparison, the Project Proponent submitted as under in its reply as well as sur-rejoinder:

REPLY STATEMENT:

"31…….. It is further submitted that the basic purpose of comparison of maximum baseline values of Sulphur Dioxide (SO_2) for two different study periods in the Environmental Impact Assessment (EIA) report i.e. December, 2014 to February, 2014 with April, 2011 to April, 2012 is to confirm whether there is any major variation in monitoring values of Sulphur Dioxide (SO_2) in the study area…."

SUR-REJOINDER:

"29… It is further submitted that the basis purpose of comparison of maximum baseline values of Sulphur Dioxide (So2) for two different study periods in the Environmental Impact Assessment (EIA) report i.e. December, 2014 to February, 2015 with April, 2011 to April, 2012 is to confirm whether the variation in monitored values of Sulphur Dioxide (So2), Nox and PM in the study area confirms to the norms.."

38. It is submitted that through the above submissions, the Project Proponent itself has recognized the basic purpose of comparing two or more seasons of AAQ monitoring is to compare whether there is major variation in pollutants and whether the pollutants are within the prescribed norms i.e. NAAQ standards of CPCB. Thus, the Project Proponent itself has recognized the importance of comparison AAQ data monitoring conducted in different seasons. Thus, the claim of the Project Proponent in the Reply as well as the sur-rejoinder that it is

unscientific to compare two or more seasons itself is unscientific, baseless and false.

39. Further, the Appellant in the Rejoinder and also the Additional Rejoinder has provided further clear proofs of the prevailing PM and SO_2 pollution in the project area than the lower levels of PM and SO_2 pollution concentration shown by the Project Proponent. Apart from the FCI EIA Report which serves as the proof of higher values of PM and SO_2 pollution, the Appellant has submitted the EIA Report of one of the coal mines which has also recognized the higher concentration of PM pollution in the project area. Further, the Appellant in the additional rejoinder has also presented a copy of the letter dated 28.02.2015 communicated between TSPCB and CPCB which have inter-alia recognized that the Ramagundam area in not attaining the prescribed PM standard in the project area. Relevant excerpt from the same letter is as under:

"1. Review of overall state of air quality in the State to control air pollution in urban areas especially Non-attainment cities;

CPCB has identified 3 non-attainment cities i.e. Hyderabad, Patancheru and Ramagundam in respect to Particulate Matter. Accordingly, the TSPCB has installed 5 CAAQMS stations in twin cities of Hyderabad for continuous assessment of air pollution. These stations are in addition to the 22 NAPM/SAAQM stations which are in operation. Considering the pollution levels, the TSPCB is now proposing to install two more CAAQMS stations at Patancheru and Ramagundam non-attainment areas…."

40. It is submitted that the perusal of the above excerpt clearly reveals that the Ramagundam area is not attaining the prescribed standard of Particulate Matter (PM) which is 100 $\mu g/m^3$, than the very lower concentrations of the same PM pollutant reported as 68.5 $\mu g/m^3$ by the Project Proponent. Moreover, the letter of TSPCB is dated 28.02.2015 and the project Proponent has conducted the AAQ Monitoring during the same period between December, 2014 to February, 2015. Hence, this is clear proof of the manipulation and false PM results presented by the Project Proponent and it is also clear proof of the PM value in the project area

is much higher than that the stipulated standard of NAAQ and what has reported by the Project Proponent. Thus, the prevailing PM pollution concentration given by FCI in its EIA Report is totally correct. Further, the Appellant in the Affidavit filed to the sur-rejoinder of the Project Proponent has also provided copies of two of the CPCB reports of years 2013 and 2014 which have also categorically recognized that the PM pollution in the project area is way above the stipulated standards. Perusal of both the reports reveals that the PM_{10} concentration in the Ramagundam project area is way higher than the stipulated standard. As per the 2013 AAQ monitoring report of CPCB, the maximum PM_{10} concentration recorded in the Ramagundam area is 292 µg/m3 and the average annual PM_{10} was found to be 84 µg/m3. Further, the same report also highlights that about 33% of the times, the Ramagundam project area has not complied with the stipulated PM_{10} standard. Similarly, as per the 2014 AAQ monitoring report of CPCB, the maximum PM_{10} concentration recorded in the Ramagundam area is 164 µg/m3 and the annual PM_{10} average was found to be 55 µg/m3. The same report also highlights that about 9% of times, the Ramagundam project area has not complied with the stipulated PM_{10} standard. Hence, it is further proof that the Ramagundam area has higher pollution than the lower pollution level reported by the Project Proponent.

41. Similarly, the SO_2 pollution in the Project area is also much higher than what has been falsely reported by the Project Proponent. As per the AAQ monitoring conducted by the Project Proponent, the maximum SO_2 concentration in the project area was presented as 23.5 µg/m3, in spite of the fact that the AAQ monitoring was conducted by the Project Proponent during the winter season which is known to show the higher level of pollution. However, as per AAQ monitoring conducted by the M/s Kirloskar Consultants Pvt. Limited, which has been referred and compared by the Project Proponent itself in the EIA Report, the SO2 concentration in the Project area was found to be 29 µg/m3 during the 2011 to 2012 period. Further, as per the FCI EIA Report, the SO2 concentration in the project area was found to be 34 µg/m3, in spite of the fact that FCI conducted the

AAQ monitoring in the summer season which is known to show the lower level pollution.

42. Further, the Project Proponent in its sur-rejoinder has also submitted that the 2x600 MW SCCL Thermal Power Plant, which is at distance of about 13 kilometers from the project site, was not in operation at the time of the EIA study of the proposed project. This means that with power production of 2680 MW (2600 MW of existing NTPC Plant, 62 MW of TSGENCO Plant and 18 MW SCCL Plant) itself, the SO_2 value in the project area was found to be 34 µg/m3 by the FCI. If the SO_2 pollution from the SCCL project, which has now come into operation, is added, then the prevailing SO_2 pollution in the project area would be much higher than this value. The Project Proponent in its sur-rejoinder has clearly admitted that it has not taken the SO_2 incremental pollution of SCCL. This has been deliberately done by the Project Proponent, in order to present the lower level of SO_2 pollution. Thus, this also serves as a proof to the fact that there is higher SO_2 pollution in the project area, than what has been falsely reported by the Project Proponent.

43. In view of the above facts, it is submitted that there is clear evidence of the higher level PM and SO_2 pollution prevailing in the project area than the false lower level of PM and SO_2 pollution presented by the Project Proponent. Further, the Project Proponent itself has admitted that it has not considered the underground coal mines within 10 kilometers radius of the project site and none of the industries between 10 to 15 kilometers radius of the project site. Furthermore, the Project Proponent has conducted the falsely conducted the AAQ monitoring within 2 kilometers radius of the project site and at only 4 locations. The Project Proponent has misinterpreted the requirement of the TOR Nos. I and XXXVIII in order to suit its ends and falsely submitted that they were required the do cumulative impact with for only 10 kilometers radius, except for rise in temperature which had to be done for 15 kilometers radius of the project site. Further, the Project Proponent has also falsely claimed that AAQ monitoring conducted for different seasons cannot be compared with each other, whereas the Project Proponent itself its AAQ monitoring results with the AAQ monitoring results of M/s Kirloskar Consultants

Private Limited. It is submitted that all of these flaws have been committed by the Project Proponent in order to under show the pollution level in the project and to obtain environment clearance for the proposed project.

44. It is further submitted that Environment (Protection) Rules, 1986 clearly prescribed the combined impacts of pollution cannot be permitted exceed the stipulated standards. Relevant excerpt from the section 3 (b) Environment (Protection) Rules, 1986 is as under:

"(3B) The combined effect of emission or discharge of environmental pollutants in an area, from industries, operations, process, automobiles and domestic sources, shall not be permitted to exceed the relevant concentration in ambient air as specified against each pollutant in columns (3) to (5) of Schedule VII."

45. It is submitted that the Project Proponent has presented the false lower levels of PM and SO_2 pollution in the project area in order to evade from the above rule and obtain the Environmental Clearance by falsely submitted that the air pollutants in the project area are within the prescribed standards. Thus, it is submitted that the Project Proponent has presented the false data and results on PM and SO_2 pollution in the project area.

46. It is further submitted that a recent report titled "Ambient Air Pollution: A global assessment of exposure and burden of disease" of World Health Organization (WHO) dated September, 2016 highlights the health impacts, including mortality, due to Air Pollution in India. **The same report also highlights that Air Pollution is used as a marker for sustainable development**. Relevant excerpt from the same report is as under:

"Air pollution represents the biggest environmental risk to health. In 2012, one out of every nine deaths was the result of air pollution-related conditions. Of those deaths, around 3 million are attributable solely to ambient (outdoor) air pollution. Air pollution affects all regions, settings, socioeconomic groups, and age groups. While all people living in a given area breathe from the same air, there are nevertheless important geographical differences in exposure to air

pollution. Citizens in Africa, Asia or the Middle East breathe much higher levels of air pollutants that those in living other parts of the world. Some places have air pollution levels that are several times higher than those considered safe by the World Health Organization (WHO) Air quality guidelines.

Air pollution is used as a marker of sustainable development, as sources of air pollution also produce climate-modifying pollutants (e.g. CO2 or black carbon). Policies to address air pollution also generate a range of benefits to human health, not only through air quality improvements but also other health benefits, such as injury prevention or enabling physical activity."

[Emphasis Supplied]

Copy of the relevant pages from the same report is marked as **Annexure-A1**

47. The same report also presents the rate of morbidity and mortality due to Air Pollution in India. The report highlights that in India, the median average exposure to PM2.5 is 62 μg/m^3 and 66 μg/m^3, respectively among rural and urban populations in India. This is higher than stipulated PM 2.5 limit of 60 μg/m^3 in the National Ambient Air Quality Standards (NAAQS), 2009 of Central Pollution Control Board (CPCB). Further, the same report of WHO also highlights that in India, an estimated 621,138 human deaths have happened in the year 2012 as a result of various health diseases which have been suffered due to Air Pollution. Furthermore, the same report also highlights that in the India, in the year 2012, an estimated 1550 years of life has been lost for an average of 100,000 population as a result of Air Pollution. The Hon'ble Tribunal in its recent order dated 10-11-2016 in **Vardaman Kaushik Vs Union of India & Ors [Original Application No. 21 of 2014]** has taken note of this latest report of WHO. In the same order, the Hon'ble Tribunal has held as under:

"The basic and fundamental question that arises for consideration of this Tribunal is whether the State Government and more particularly NCT, Delhi can provide any justification acceptable scientifically in law as to why the people of Delhi should be exposed to such severe pollution and have endlessly suffered from

one disease or the other. This equally applies to other States as well. The Hon'ble Supreme Court of India decades back had declared that Article 21 of Constitution of India has to be expanded so as to include right to decent and clean environment as a fundamental right. Fundamental right is the right provided by the Constitution to the citizens and it could claim its enforcement to which the State can hardly raise a defense particularly of its inability to enforce laws on an environmental front.

The State owes a constitutional duty to protect public health and to provide at least clean air for its citizens to breathe. The principle of inter-generational equity does not support any development even if it is carried under the doctrine of sustainable development where the next generation would be exposed to the worst environmental and ecological environment. The children of today have a right to breathe clean air and play in the play ground rather than be ordered to be shut down in their respective homes. The present generation in any field including in the field of Governance owes a duty in law and on morality to provide cleaner and better earth to its next generation. Times have come where all concerned authorities irrespective of their stature must show concern to improve the environment and Ambient Air Quality in these States and more particularly in the NCT, Delhi. As we have already noticed, the Ambient Air Quality in these States and particularly in NCT, Delhi/NCR, Delhi have reached the limit which are unimaginable, unacceptable and are a clear indication of negligence on the part of the concerned authority to the disadvantage of the human health of the citizens. The prescribed limit of PM10 and PM2.5 is 100 µg/m3 and 60 µg/m3 respectively have been grossly exceeded. The experts appearing before us submit that the daily average of these values is even lower that is 60 µg/m3 and 40 µg/m3 respectively. If the daily average is to be taken into consideration then the violation is nearly 20 times in excess. Viewed from any rational angle, this is disastrous. It may be appropriate that the concerned authoirities including the Central Pollution Control Board has located at the air pollution in somewhat different way. It appears that to attain the prescribed standards as of now would be a dream difficult to achieve as of today."

Copy of the relevant pages from Hon'ble Tribunal's order in the above-said case are marked as **Annexure-A2**

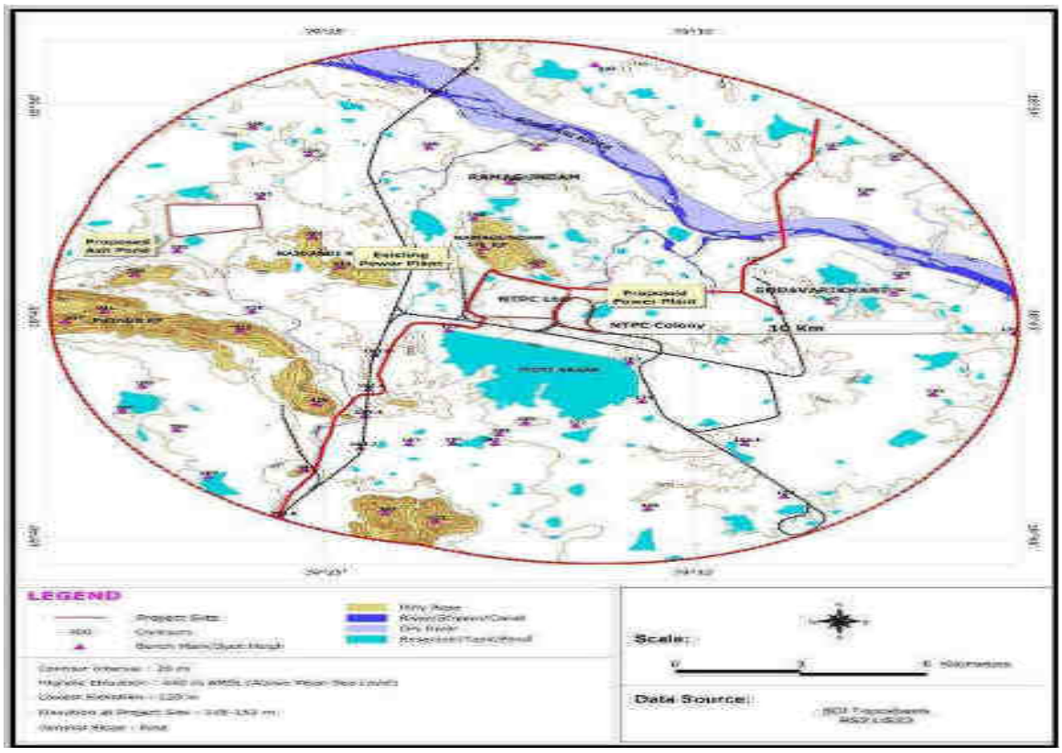
48. It is further submitted that the Hon'ble Supreme Court in **Karnataka Industrial Areas Development Board Vs C. Kenchappa & Ors [(2006) 6 SCC 371]** has held that the pollution created as a result of development of must not exceed the carrying capacity of the ecosystem. Relevant excerpt from the Hon'ble Supreme Court judgment is as under:

"…The pollution created as a consequence of development must not exceed the carrying capacity of ecosystem. The Courts in various judgments have developed the basic and essential features of sustainable development. In order to protect sustainable development, it is necessary to implement and enforce some of its main components and ingredients such as - Precautionary Principle, Polluter Pays and Public Trust Doctrine. We can trace foundation of these ingredients in number of judgments delivered by this Court and the High Courts after the Rio Conference, 1992."

49. It is submitted that the higher prevailing air pollution way above the stipulated standards is one of the critical factors which was needed to be considered and examines by the EAC and MoEF&CC before the proposed project was recommended and granted Environmental Clearance. However, the above facts presented by the Appellant clearly reveals that the EAC and MoEF&CC have not bothered to consider any of the aspects relating to prevailing higher air pollution in the project area and have cleared the proposed project without any application of mind.

V. <u>PROJECT IS LOCATED ON A WATERBODY</u>

50. The Appellant in the Appeal has also submitted that the proposed project is located on a water body, by referring to figure-5 in the Hydro-geological impact assessment report in the EIA Report of the proposed project. Copy of Figure-5 is excerpted hereunder:



51. It is submitted that the perusal of the above figure-5 of Hydro-geological impact assessment report from the EIA Report clearly reveals that the proposed project is clearly located on a water body. The Project Proponent in its reply ambiguously submitted that the proposed project is located not located on a water body. Relevant excerpt from the reply of the Project Proponent is as as under:

"46.. That in reply to the contents of the paragraph 23 sub para (B-II) of the Appeal, the contention made by the Appellant that this 3rd Respondent has concealed the information/fact that the project is located on a water body is not correct as it was mentioned under chapter-1 of the Environmental Impact Assessment Report (EIAR) that river Godavari is located at aerial distance of about 4.0 km from the existing project…"

52. It is submitted that the submitted that the Project Proponent has not replied to the specific issue which has been by Appellant in the Appeal, that the proposed project is located on a water body. The Project Proponent has ambiguously and misleadingly submitted that the Godavari River is 4 kilometers away from the project site. However, the Project Proponent has not replied to the specific issues raised by the Appellant. The Appellant further submitted in the rejoinder that the proposed project is located on the water body and the Project Proponent has not studied the impact of the proposed project on the water body. In the sur-rejoinder,

the Project Proponent changed its stand in the reply and has submitted that the project is not located on a water body and it is only the rain water which gets stagnated during the rainy season in the project area. Relevant excerpt from the reply of the Project Proponent is as under:

"42… It is further submitted that the land on which the proposed power plant is to be established is not a water body. There are certain location of low lying area where the storm water gets stagnated temporarily during the monsoon season. The rain water get drained in short time. Therefore the allegation that 3rd Respondents power plant is located on waterbody is not true and is incorrect."

53. It is submitted that the above submission of the Project Proponent is false and contrary to its own facts presented in the EIA Report of the project. As Appellant already submitted in the Appeal, perusal of the Figure – 5 from the Hydro-geological impact assessment study report clearly reveals that the proposed project is located on a water body. Further, even other images such as Figures-6, 8, 10, 11 and 12 of the Hydro-geological impact assessment report also clearly prove that the proposed project is located on a water body. The perusal of the Figures-11 and 12 of the Hydro-geological impact assessment report clearly shows the presence of the water in the water body within the project area, even during the pre-monsoon as well as the post-monsoon seasons. Therefore, the contention of the Project Proponent that it is not the water body which is present in the project area but only the stagnated rain water is totally false, misleading and contrary to the facts which have been submitted in the Hydro-geological impact assessment study report of the proposed project. The above figures which have been produced by the Project Proponent clearly provides the evidence that the proposed project is located on a water body.

Copy of figures 6, 8, 10, 11 and 12 of the EIA Report are marked as **Annexure-A3**

VI. GROUND WATER AND SURFACE WATER IN THE PROJECT ARE POLLUTED ABOVE THE STIPULATED STANDARDS

54. That the Appellant has also submitted that the Ground Water and Surface Water in the project area are already polluted above the stipulated standards of Indian Bureau of Indian Standards IS: 10500:2012. As per the Monitoring results published by the Project Proponent itself in the EIA Report, the parameters such as Turbidity (TDU), Total Dissolved Solids (TDS), Magnesium (Mg), Hardness (CaCo3), Calcium (C3), Alkalinity (Hco3) and Aluminium (Al) and Heavy Metals such as Manganese (Mn), Iron (Fe) and Copper (Cu) exceed the stipulated standards of water quality. The below table complied by the Appellant presents the details of range of water quality parameters and heavy metals in the ground water quality and number of locations at which water quality has exceeded the water quality limits.

Parameter	Units	Range (n = 7)	Acceptable Limit	Number of Exceedances
Turbidity	NTU	2 - 14	5	4
Total Dissolved Solids	mg/L	710 - 844	500	7
Total Hardness (as $CaCO_3$)	mg/L	345 - 433	300	7
Total Hardness (as HCO_3)	mg/L	127 - 413	200	4
Calcium (as Ca)	mg/L	72.5 - 101.9	75	6
Magnesium (as Mg)	mg/L	24.8 - 49.5	30	6
Copper (as Cu)	mg/L	<0.01 - 0.22	0.05	3
Manganese (as Mn)	mg/L	<0.01 - 0.24	0.1	5
Iron (as Fe)	mg/L	0.04 - 0.96	0.3	4
Aluminum (as Al)	mg/L	0.08 - 0.24	0.03	7

55. The perusal of the above table clearly reveals that the Turbidity (NTU) in the ground water exceeded the limits in 4 of the samples, Total Dissolved Solids (TDS) exceeded the limits in 7 samples, Total hardness (as CACO3) exceeded the limits in 7 samples, Total Hardness (Alkalinity) (as HCO3) exceeded the limits in 4 samples, Calcium (C3) exceeded the limits in 6 samples, Magnesium (Mg) exceeded the limits in 6 samples and Aluminum (Al) exceeded the limits in 7 samples. Further, Heavy Metals such as Copper (Cu), Manganese (Mn) and Iron (Fe) have exceeded the limits in 3, 5 and 4 samples respectively. Thus, it is submitted that as per own

monitoring results of the Project Proponent, the ground water in the project area is already polluted above the stipulated standards.

56. The Appellant has also submitted that the Project Proponent has restricted the heavy metal analysis in ground water to only 8 heavy metals, which are Arsenic, Cadmium, Copper, Lead, Manganese, Mercury, Selenium and Zinc. However, the other common heavy metals in coal such as Antimony, Chromium, Cobalt, Nickel, Silver, Thallium, etc. have not been tested as part of the ground water monitoring study conducted by the Project Proponent.

57. The Project Proponent in its sur-rejoinder has misleadingly and falsely submitted that the above parameters and heavy metals in the ground water are within the permissible limits prescribed by the Bureau of Indian Standards IS: 10500-2012. Relevant excerpt from the reply of the Project Proponent in the sur-rejoinder is as under:

"50.. With regard to allegation contained in Sections B-I to B-IV it is submitted that as per the latest IS 10500:2012 Indian Standard for Drinking Water Quality specified the acceptable and permissible limits (in the absence of an alternate source) in ground water. The standards recommends that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under "permissible" limit in the absence of alternative source, above which the sources will have to be rejected."

58. It is submitted that the above contention of the Project Proponent is completely false and misleading. The permissible limits of the water quality standards of Bureau of Indian Standards are only applicable when there are no alternate sources of drinking water. In the present case, there are multiple alternate sources such as Ponds, Lakes and also the biggest Godavari River itself. Hence, the permissible limits of water quality prescribed by the Bureau of Indian Standards are not applicable. The applicable standards for the ground water in the project area are the acceptable limits prescribed by the Indian Bureau of Standards. As

mentioned above, number locations in which the monitoring has been conducted by the Project Proponent itself, the ground water quality has been found to be above the prescribed acceptable limits of Indian Bureau of Standards. Thus, the ground water in the Project is polluted. This exceeding ground water pollution could also be due to the untreated effluent water which is continuing to be discharged even as on date by the Project Proponent into the agricultural lands and to the Godavari River. This aspect has been completely ignored by the EAC and MoEF&CC.

59. Further, the Appellant has also submitted that even the surface water in the project is also exceeding the stipulated water standards of Indian Bureau of Standards. The polluted state of both Godavari River and also the other surface waters in project area is also visible from the surface water monitoring results which have been presented by the Project Proponent in the Hydro-geological impact assessment report of the project. Perusal of the same report reveals that the Colour, Total Dissolved Solids, (TDS), Hardness (CaCo3), Calcium (Ca), Sulphates (So4), Aluminium (Al), Copper (Cu), Iron (Fe), Caliform and Turbidity (NTU) are exceeding the stipulated water quality limits. Hence, it also reveals the polluted state of the surface waters, including Godavari River water in the project area.

60. The Project Proponent in its sur-rejoinder has falsely and misleadingly submitted that it is the permissible limits prescribed by Bureau of Indian Standards for the surface water in the project area and the surface water quality is within the permissible limits. Further, the Project Proponent has also submitted that as per the CPCB report of water quality status dated 2012, the higher level of TDS in the project is because of the untreated domestic water discharge in the Ramagundam area.

61. It is submitted that both the above submissions of the Project Proponent are false and misleading. As already submitted above, the applicable standards of water quality for the Ramagudam area i.e. project area are the acceptable limits of Bureau of Indian Standards and not the permissible limits, as the project area

comprises of tanks, lakes and also Godavari River as water resources. Thus, the contention of the Project Proponent is false and misleading.

62. Further, even the submission that Central Pollution Control Board (CPCB) Report titled "Status of Water Quality in India-2012" has mentioned that the Godavari River water pollution is due to the untreated domestic water discharge into it is also totally false and misleading. It is submitted that the above-said CPCB Report dated 2012 clearly reports that the water pollution in Godavari River at Ramagundam area is not only because of the untreated domestic water discharge, but also because of industrial effluents discharge. Relevant excerpt from the same report is as under:

"14.2.1 Water Quality of River Godavari

…… ….. ….

The River Godavari at most of locations in Maharashtra and Bhadrachalam U/s, near Rly Bdg B/c of Rallavagu at Mancherial, Rajahmundry D/s, Godavarikhani, Ramagundam U/s & D/s and Burgampahad in A.P. is exceeding desired water quality criteria. **The sources of pollution is from domestic and industrial wastewater** generated from the large cities in Maharashtra and Mancherial, **Ramagundam**, Rajahmundry, Godavarikhani, Burgampahad and Bhadrachalam cities in Andhra Pradesh. Depletion of dissolved oxygen has been reported due to addition of sewage into the river besides bacteriological pollution…"

63. It is submitted that the perusal of the above excerpt from the report clearly reveals that the Godavari River water pollution in the Ramagundam area is because of pollution caused by both industrial as well as the domestic polluted water. Hence, the submission of the Project Proponent that the water pollution in Godavari River is because of the domestic water discharged is misleading and false.

64. It is further submitted that the exceeding surface water pollution could also be because of this untreated effluent ash pond water discharge by the Project Proponent. This aspect has been completely ignored by the EAC and MoEF&CC, which have cleared the proposed project without the application of mind.

65. It is submitted with the above facts that the Ground Water and Surface Water in the project area is already above the stipulated standards prescribed by the Indian Bureau of Standards IS: 10500-2012. The submission of the Project Proponent that it is the permissible limits which are applicable for the ground and surface quality is false and misleading. It is submitted that it is the acceptable limits which are applicable to both ground and surface water in the project and both the waters are above the acceptable limits, as the own monitoring results furnished by the Project Proponent.

VII. IMPACT OF THE GROUND WATER UTILIZATION FOR THE CONSTRUCTION ACTIVITIES HAS NOT BEEN STUDIED

66. The Project Proponent in the EIA Report has submitted that it will utilize ground water for the construction activities of the proposed project. Relevant excerpt from the EIA report of the proposed project is as under:

"During construction Phase

The ground water is proposed to be extracted only during the construction phase of the project to cater the water requirement for site construction work."

[Page 3 in Chapter-2 of EIA Report]

67. The Appellant in the Appeal has also submitted that the Project Proponent has not provided any details such as the quantum of ground water which will be utilized per day/month/year which will be utilized for the purpose of construction of the proposed project. The Appellant has also submitted that the Project Proponent has study the impacts of the ground water utilization for the purpose of construction activities of the proposed project. It is submitted that since this raised by the Appellant in the Appeal, the Project Proponent in its reply submitted that it will not

utilize the ground water for construction purpose for the construction of the project and the same requirement will me from the existing balancing reservoir. However, the Project Proponent has not provided any details of the water requirement for the construction of the project and the impacts related to it. Relevant excerpt from the reply of the Project Proponent is as under:

"47.. That in reply to the contents of the Para 23 sub para (A-III) of the Appeal, it is stated that the Environmental Impact Assessment Report (EIAR) says that ground water may be utilized during construction phase. However, it is submitted that this 3rd Respondent is not going to extract any ground water during construction phase and the water requirement will be met from its existing balancing reservoir…"

68. It is submitted that the above submission of the Project Proponent is complete deviation from what has been submitted by it in the EIA Report and before the EAC and MoEF&CC, that it will utilize ground water for the construction of the project site. As submitted above, since the Appellant has highlighted the issue that the Project Proponent has not provided any details of the water requirement for the construction of the project and its impact on the ground water, the Project Proponent has tried to cover it by submitted that the ground water will not be utilized and the water requirement will met from the balancing reservoir. The Appellant has raised these issues in the rejoinder filed to the reply to the Project Proponent.

69. The Project Proponent in its sur-rejoinder submitted that the water requirement for the construction of the project is about 1000 m3/day which will be met from the balancing reservoir and it will not cause any impact. Relevant excerpt from the sur-rejoinder of the Project Proponent is as under:

"49.. It is submitted that the water requirement for the proposed Telangana STPP for construction activities is approx. 100m3/day will be met from existing Balancing Reservoir. The current drawl of water for the existing units of Ramagundam STPP (2600MW) is approx. 2,20,000 m3/day and it is noteworthy to submit that the cumulative quantum of water drawl will be raise to 2,21,000 m3/day which is

comparatively very insignificant requirement (i.e. <0.005%). This implies that the impact from the additional drawl of 1000m3/day during the construction phase may not cause any severe impact on availability of ground/surface water regime..”

70. It is submitted that as per the own submission of the Project Proponent in the sur-rejoinder, the water required for the construction of the proposed project is 1000 m3/day. This means that Project Proponent is going to utilize 10,00,000 liters (ten lakh liters) of water per day or 3 crore liters per month or 36 crore liters per year. This is a huge quantum of water requirement which will greater consequences on the source from which it shall be drawn, be it ground water or surface water. The Project Proponent’s submission that it will have insignificant impact on ground or surface water is without any basis and impact assessment study conducted by it during the EIA Study of the project. It is further submitted that even the submission of the Project Proponent that water requirement for the construction of the project site will be met through the water of balancing reservoir is also totally irrelevant. The water to the balancing reservoir is drawn from the Godavari River. Hence, the water for the construction of the proposed project also has to be met from the Godavari River water only. Thus, the ultimate impact of water withdrawal is on the Godavari River. However, as mentioned above, the Project Proponent has not undertaken any impact assessment study of the water withdrawal from the Godavari River, for the construction of the project. Hence, it is submitted that it is required to undertake the impact assessment on the utilization of ground water in the project site. In the present case, it is completely ignored and not studied.

VIII. IMPACT OF THE ASH POND ON THE GROUND WATER HAS NOT BEEN STUDIED

71. It is submitted that the Appellant in the Appeal as well as in the rejoinder has specifically highlighted that the Project Proponent has failed to conduct the impact of the Ash Pond on the ground water and high possibility of ground water contamination with the Heavy Metals from the Ash Pond. The Appellant has also submitted that the average depth of the ground water below the ground water level is between 4-6 meters, which is clearly admitted by the Project Proponent

itself in the EIA Report. Based on this fact, the Appellant has specifically highlighted that since the ground water in the project area is available at a very shallow depth, there are higher chances of contamination from the Ash Pond. Further, the Appellant has also highlighted that neither the EIA Report nor the Hydro-geological impact assessment report of the proposed project provides any detailed geological characterization of the Ash Pond area, the engineering specifications such as the length, depth and width of the Ash Pond area, the depth at which ground water is available in the Ash Pond, the possibilities of ground water interaction with the effluent water in the Ash Pond and the impact that the proposed project will have on the ground water, etc. Despite the numerous issues highlighted by the Appellant in the rejoinder, the Project Proponent has not addressed even the most basic questions such as how and why the location of the proposed ash pond was selected. Instead, the Project Proponent only stated that the location was selected after making techno-feasible examination of all available option. However, no such details of "techno-feasible" criteria are cited in the EIA Report. It is submitted that these details have to be mandatorily given and the impact of the Ash Pond on the ground water must be studied.

72. In fact, neither the water impact assessment conducted under the impact assessment chapter (Chpater-4) of EIA Report nor Chapter-5, which is titled as "Impact of proposed project on water regime" of Hydro-geological impact assessment study, provide any details of the impact of Ash Pond on the ground water. Relevant excerpts from the EIA Report and Hydro-geological impacts of the proposed project as under:

EIA REPORT:

"4.3.4 Impact on Water Resources and Water Quality

The water system for the project has been developed in order to maximize the recycle and reuse of the waters and waste water for meeting various plant usage after proper treatment. The proposed Telangana STPP will have a recirculating cooling system with cooling towers with 5 COC and almost entire cooling tower blow down shall be used for

ash handling, service water system, coal handling and fire fighting. Therefore, no thermal impact on the receiving water body is anticipated.

The water system of the Telangana STPP, Stage-I has been designed with zero Liquid Discharge (ZLD) concept in order to reduce the quantity of effluents generated from the plant. The entire effluent generated from the project shall be adequately treated meeting to the statutory requirement and thereafter reused for various industrial purpose upto the maximum possible extent. However, during monsoon season when the evaporation losses are minimal, the excess waste water after proper treatment will be discharged into natural water course.

4.3.4.1 Impact on Surface and Ground Water Quality

No ground water source will be tapped for meeting the water requirements during operation phase of power plant. The entire water requirement of the project will be drawn from Yellampalli barrage on Godavari River. Hence, no adverse impact on ground water sources is envisaged.

Operation of the proposed thermal power project will not have any long-term impact on water quality as it is proposed to be almost ZLD from plant. The water system of the proposed project has been developed with maximum recycle and reuse of water, so as to reduce the quantity of effluents generated from the plant.

The project will have a closed cycle cooling system with cooling towers. Entire Steam generator blow down (Boiler blowdown) water would be routed to CW make up."

HYDRO-GEOLOGICAL IMPACT ASSESSMENT REPORT:

"5.0 IMPACT OF PROPOSED PROJECT ON WATER REGIME AND MITIGATION MEASURES

The impact of proposed project on water regime may be in different ways and on surface or ground water or both. Water environment may be affected by the proposed project in terms of disturbing natural water course or change in drainage pattern of the area, quantity and quality – due to drawl of water, discharge of polluted water/waste water, by contaminated leachate from disposal/dumping of solid waste etc.

5.1 Natural Drainage and Water Bodies

The proposed project will be implemented in an area of 95.10 hectares. Eastern part of the site encompasses part of Maddulapuram Cheruvu and nallah carrying surplus water from Jyoti Sagar to Maddulapuram Cheruvu passes through the proposed site. The nallah shall be properly realigned to maintain the natural stream course and not affecting Maddulapuram Cheruvu storage capacity. Storm water drains shall be planned and designed in line with the existing topography and drain network to safely and effectively manage the runoff.

5.2 Drawing Surface/Ground Water

The proposed project does not envisage any drawl of ground water. The stage of ground water development including existing industrial utilization in the study area is 48.92%.

The long term water level monitoring data of CGWB observation well data at Ramagundam and Mancherial in the study area indicate a marginal increasing trend of pre or post monsoon ground water levels. Water level data CGWB monitoring wells between 2005 and 2013 and the well hydrograph are presented in **Table 18** and **Figure 15** respectively. The average stage of ground water development in Karimnagar and Adilabad districts as per CGWB assessment is 31.0% and categorized as "safe". Hence, no impact on ground water quantity is envisaged.

The estimated water requirement for the proposed project is about 5825 m^3/hr (51.06 MCM per annum) which will be drawn from Sripada Yellampalli project located at a distance of 14.0 km. Water drawn from Yellampalli project is pumped to Jyoti Sagar which is used as Balance Rervoir along with its natural storage potential.

To understand the availability of water and flow during different seasons in Godavari River, flow monitoring data of CWC monitoring station near Mancherial is presented below. The flow monitoring data indicates that the surface flow during 2004-05 and 2009-10 non-monsoon periods was very low.

Along the Godavari River, the area is periodically flooded and well drained. The highest water level (HWL) at CWC monitoring station near Mancherial is 138.616 m above mean sea level occurred on 20.10.1995 with corresponding discharge of 29,200 cumecs. Since, proposed site is located on a higher elevation ground ranging between 145 – 152 m above mean sea level, the proposed project site is not prone to flooding.

Sripada Yellampalli project is an irrigation project located at Yellampalli village, Ramagundam mandal, Karimnagar district, Telangana. The project is fourth largest on the Godavari River in Telangana region. The project is designed to utilise about 63 TMC (1764 MCM) of water in the first phase. In the second phase, about 49.5 TMC (1386 MCM) would be lifted to the upland regions of Karimnagar, Adilabad, Nizamabad, Warangal and Medak districts. 6 TMC (168 MCM) of water is allotted for NTPC Ramagundam project. The project would supply water for NTPC power project reservoir (Jyoti Sagar – Balance Reservoir) near NTPC, Ramagundam.

As the required water from the Yellampalli project is very less compared to the availability, no adverse impact on surface water is envisaged.

5.3 Water Quality

The proposed project is designed maintaining zero discharge and zero spillage. Considering the following factors - 1) zero discharge from the existing and proposed project, 2) waste disposal mechanism and 3) analysis of all the surface and ground water samples are within acceptable limits of ISO:10500, any impact due to proposed project on surface and ground water quality is not envisaged. The storm water drains around the plant and other contamination sources and waste water drains shall be separately constructed to minimize storm water contamination with process water."

73. It is submitted that the perusal of the above relevant portions from the EIA Reveals that there is nothing specific called impact of the Ash Pond on the Ground Water, considering the very shallow level at which the ground water is available below the ground in the project area. Further, the Hydro-geological impact assessment report itself notes the shallowness of the ground water in the project

area. Relevant excerpt from the Hydro-geological impact assessment report is as under:

"7.0 CONCLUSIONS

…. …

… …

The depth to water level during pre-monsoon range from 1.65 m to 11.1 m below ground level with some of the wells going dry and average water level is 6.85 m. The depth to water during post-monsoon range from 0.50 m to 6.82 m below ground level and the average water level is 2.61 m. The average fluctuation between pre and post monsoon seasons is 4.34 m."

74. It is submitted that as the Hydro-geological impact assessment report itself notes above, the shallowness of the ground water in the project is 2.61 Meters below ground level and its depth during the pre-monsoon period itself is 0.50 Meters to 6.82 Meters. These facts provided by the Project Proponent itself demonstrates that there is higher possibility of the untreated waste water from the Ash Pond with the ground water and thus the potential consequences of ground water contamination, which is already polluted above the stipulated standards of water quality. However, as submitted above, neither the EIA Report nor the Hydro-geological impact assessment report provide any details of the study which has been conducted by the Project Proponent on the specific issue of potential possibility of ground water interaction with the untreated Ash Pond water and contamination.

75. It is further submitted that the as per the own data submitted by the Project Proponent in the rejoinder, there coal proposed to be used for the project has number of the heavy metal concentrations. As per the Annexure No. R3/31 of the Sur-rejoinder, the coal proposed to be used for the proposed project contains Heavy Metals such as Mercury, Arsenic, Barium, Beryllium, Cadmium, Cobalt, Chromium, Copper, Manganese, Molybdenum, Iron, Nickel, Lead, Antimony, Selinium, Vanadium, Zinc and Silver. With 8 Million Tonnes Per Annum (MTPA) of

Coal utilized by the proposed project, the following will be total quantum of various heavy metals which will be discharged to the Ash Pond every year:

NAME OF THE HEAVY METAL	**QUANTITY OF DISCHARGE EVERY YEAR (IN TONNES)**
Barium	336
Cobalt	80
Chromium	160
Copper	56
Manganese	856
Molybdenum	54.88
Iron	498.8
Nickel	198
Lead	388
Vanadium	184
Zinc	104
Total	**2,915.68 Tonnes** **or** **29,15,680 Kilograms per year**

76. It is submitted that as could be seen from the above table, the quantum of some of heavy metals which are discharged from the proposed project into the Ash Pond is very high. This is another significant factor which has been totally neglected and not studied by the Project Proponent. As already submitted above, considering the shallow depth of the ground water from the ground level, there is greater possibility of ground water interaction with the heavy metals which are discharged in huge quantities every year. It is further submitted that neither the reply nor the sur-rejoinder of the Project Proponent have addressed the above specific issues which have been highlighted by the Appellant. Without addressing these specific issues, the Proponent in both reply as well as in the sur-rejoinder has only submitted details of the mitigation measures like the HDPE lining and HCSD system which will be used by it. It is submitted that the until and unless above

specific issues are addressed and studied as part of the EIA Report, it cannot be said that the impacts of the proposed project have been studied by the Project Proponent and considered by the EAC and MoEF&CC.

77. It is further submitted that the there is also nothing in the EIA Report that demonstrates that a High Concentration Slurry Disposal (HCSD) system is "highly impermeable" and will create a coal ash matrix that will not leach its constituents into the underlying groundwater over the long-term. As already submitted by the Appellant in the rejoinder, measurements of the permeability and stability over time of the so called self-solidifying ash slurry or paste are not provided in the EIA Report. Further, the EIA Report also does not provide any other details such as the long-term mechanical integrity of this thin layer under dry conditions, the behavior of the paste under the water-saturated conditions that will occur when the pond is actively receiving coal ash, the long-term mechanical integrity of the paste in the presence of changing pH and Eh conditions as coal-ash leachate forms in the pond and the structural integrity and longevity of the slurry/paste when exposed to the weight of the massive overburden of coal ash that will accumulate above this "impermeable layer." It is highly unlikely that all coal ash leachate can be contained by this high-concentration ash slurry/paste. It is submitted that no consideration has been paid to the fact that leachate can migrate through the side containment walls of the ash disposal pond, particularly during summer monsoon season and/or during extreme rainfall events such as a tropical cyclone.

78. It is submitted that all the above facts that there are numerous potential issues with regard to the location of the Ash Pond, the contamination of the ground water with heavy metals and thus the consequences there of. In contrast, the Project Proponent has completely failed to consider and study any of the above issues and the impact of the Ash Pond on the ground water. Further, the EAC and MoEF&CC have also completely failed to appraise any of the above issues, as there is nothing in the meeting minutes or in any document of the consideration and appraisal which has been done by both the authorities.

IX. FEASIBILITY OF ZERO LIQUID DISCHARGE (ZLD) HAS NOT BEEN EVALUATED AND IMPACT OF THE WASTE WATER HAS NOT BEEN STUDIED

79. It is submitted that the Project Proponent in the EIA Report, Public Hearing and also the Appraisal stages of the proposed project has submitted that because the proposed is going to adopt Zero Liquid Discharge (ZLD) system, there will not be any discharge of waste water from the proposed project, except the monsoon season. Further, the Project Proponent has also submitted that during the monsoon season, waste water from the proposed project will be discharged to the natural stream/river.

80. The Appellant has submitted that the Project Proponent has not studied and evaluated the technical feasibility of the adoption of Zero Liquid Discharge for the proposed project. It is submitted that the Project Proponent neither in the reply nor in the sur-rejoinder has provided any details or referred to relevant portions in the EIA Report or Hydro-geological impact assessment study where the above-mentioned issues are addressed. On the issues relating to Zero Liquid Discharge (ZLD), the Project Proponent, both in the reply as well as the sur-rejoinder, has only submitted that the all the effluent generated will be systematically collected, treated, completely recycled and reused. Relevant excerpt from the reply of the Project Proponent is as under:

REPLY STATEMENT:

51.. That in reply to the contents of paragraph 23 sub para (B-IV) of the appeal, the contention made by the Appellant is denied as it mentioned in the Environmental Impact Assessment Report (EIAR) that the proposed project is designed with Zero Liquid Discharge (ZLD) concept thereby ensuring that all the generated from the plant process are systematically collected, treated, completely recycled and reused in the process again leaving no effluent water discharge outside the plant boundary to the surrounding environment under all conditions round the year..”

SUR-REJOINDER:

60.. Section A-I to A-V: It is once again submitted that the water system for the proposed project has been designed with Zero Liquid Discharge (ZLD) concept which ensures that all the effluent generated from the proposed plant process are systematically collected, treated, and completely recycled and reused in the process again leaving no effluent discharge outside the plant boundary to the surrounding environment. Hence, no impact on surrounding water regime can be anticipated.

61.. In addition, an Effluent Management System comprising of dedicated Effluent Treatment Plant (ETP) has been designed in such a way that all the industrial effluents shall be suitable collected, treated and recycled/reused for different main plant usages and no discharge shall be outside the plant boundary. A dedicated and well equipped Sewage Treatment Plant (STP) will also be installed for treatment of domestic effluents emanating from main plant area and town ship area confirming to the statutory standards (i.e. CPCB/SPCB standards). The treated effluent confirming to the prescribed standards shall be utilized for green belt development and horticulture to the extent possible and balance effluent shall be led to ash handling system for use in handling and disposal of ash system. The entire concept of Zero Liquid Discharge (ZLD scheme) is already presented in the form of water balance diagram which is designed in compliance to the latest gazette notification dated 7.12.2015 for thermal power plant..”

81. It is submitted that apart from the above statements, the Project Proponent has not provided any details or referred to relevant portions of the EIA Report where the Feasibility of Zero Liquid Discharge. It is further submitted that the perusal of the EIA Report only reveals that the Project Proponent has not carried out any evaluation and feasibility examination of the Zero Liquid Discharge. Relevant portions from the EIA Report are excerpted hereunder:

4.3.4 Impact on Water Resources and Water Quality

The water system for the project has been developed in order to maximize the recycle and reuse of the waters and waste water for meeting various plant usage after proper treatment. The proposed Telangana STPP will have a recirculating cooling system with

cooling towers with 5 COC and almost entire cooling tower blow down shall be used for ash handling, service water system, coal handling and fire fighting. Therefore, no thermal impact on the receiving water body is anticipated.

The water system of the Telangana STPP, Stage-I has been designed with zero Liquid Discharge (ZLD) concept in order to reduce the quantity of effluents generated from the plant. The entire effluent generated from the project shall be adequately treated meeting to the statutory requirement and thereafter reused for various industrial purpose upto the maximum possible extent. However, during monsoon season when the evaporation losses are minimal, the excess waste water after proper treatment will be discharged into natural water course.

E. Details of recycling mechanism

- Entire quantity of waste water generated shall be treated confirming to the regulatory standards and recycled/reused back for various plant usages resulting in Zero Liquid Discharge Handling system (ZLD) i.e. Cooling Tower Blow Down will be used in ash handling system, dust suppression in coal/ash handling system, ash disposal, fire fighting and service water. Boiler blow down in CW makeup etc.

- However, during monsoon, when the requirement for water horticulture/ plantation/Makeup of BAHP/dust suppression etc. reduces and evaporation losses are minimal, some quantity of effluent shall need to be discharged into natural water course after necessary treatment.

F. Mode of final discharge/disposal of treated effluent:

Proposed project will be operating on Zero Liquid Discharge (ZLD) Concept, there will be no discharge/disposal of treated effluent. However, negligible quantity will be discharged during monsoon after adopting adequate treatment."

82. It is submitted that except the above generic statement that the proposed project will be operated on Zero Liquid Discharge, the Project Proponent has not examined, evaluated and studied the feasibility of Zero Liquid Discharge proposed

to be used for the project. It is further submitted that the Appellant in the rejoinder as well as the Affidavit to the sur-rejoinder has highlighted that as per the table 2.3 (at page 3 of chapter-2) of EIA report, the waste water generated from the proposed project is 1935 m3/ hour or 1.935 million liters/per hour. This means that at 90% Plant Load Factor (PLF), the proposed project generates about 41.796 million liters of waste water per day. This is a huge amount of water to consistently collect and recycle and also to manage, control and handle safely between the proposed project and also the Ash pond which are more than 8 kilometers distance away from each other. The technical feasibility and evaluation necessary for handling such huge quantum of water has not been conducted by the Project Proponent. This was required under TOR No. xxiv which required the Project Proponent to critically examine the feasibility of Zero Liquid Discharge (ZLD) and furnish its details. TOR No. xxiv is excerpted hereunder:

"xxiv. Feasibility of zero discharge concept shall be Critically examined and its details submitted."

83. It is submitted that the as per the TOR No. xxiv, The Project Proponent was required to **critically examine and furnish the details of the feasibility of Zero Liquid Discharge**. However, the above facts clearly reveal that the Project Proponent has not done any such examination and evaluation on the feasibility of Zero Liquid Discharge, but only made generic statements that the Project will be operated on Zero Liquid Discharge. In view of the above facts, it is submitted that the Project Proponent has not studied the Feasibility of Zero Liquid Discharge and has violated the TOR No. xxiv.

X. IMPACT OF THE WATE WATER FROM THE PROPOSED PROJECT HAS NOT BEEN STUDIED

84. The Project Proponent in its EIA Report of the proposed project has submitted that the waste water which will be generated during the monsoon season will be discharged to natural stream/river. The Appellant has submitted in the Appeal as

well as the Rejoinder that the Project Proponent has also not provided any details of the quantum of waste water which will be discharged from the plant during the monsoon season, the surface water body or natural stream or river into which the water will be discharged and the impact that the waste water from the project will have on the receiving water body.

85. The Project in its reply has re-iterated the statement in the EIA Report that the waste water from the proposed project will be discharged to natural stream. However, the Proponent has not replied to the specific issues such as the quantum of waste water which will be discharged, the natural water course to which it will be sent and the impact of the waste water on the water course to which it will be sent.

86. Further, the Project Proponent in its sur-rejoinder has misleadingly and falsely submitted that even during the monsoon season, no waste will be discharged during the monsoon. Relevant excerpt from the reply of the Project Proponent in the sur-rejoinder is as under:

"67.. Section C-I & C-V: It is submitted that after the revision of scheme for water balance utilization/process wise water requirement for the proposed Telangana STPP in line with the latest MoEF&CC notification dated 07.12.2015, there will be no the possibility of discharge of industrial waste water even during the monsoon season. Thus, there will be no question of any quantity of effluent discharge from the point."

87. The above submission of the Project Proponent is misleading, false and contrary to its own statement which has been made in the EIA Report and during the appraisal of the proposed project. Since the Project Proponent does not have any reply to the specific issues of waste water discharge have been raised by the Appellant in the Appeal as well as the rejoinder, the Proponent is indulging into making false and contrary to its own statements. This is done by the Project Proponent in order to save itself and cover up the obvious issues highlighted by the Appellant. As further submitted above by the Appellant, the waste water which will be discharged by the proposed project is about 41.796 million liters per day.

The Project Proponent has neither evaluated and studied the feasibility of Zero Liquid Discharge during the non-monsoon nor during the monsoon season. The Submissions of the Project Proponent in the EIA Report, Reply affidavit and Sur-rejoinder are generic statements without any basis and scientific evaluation conducted on the feasibility of Zero Liquid Discharge. Further, the Project Proponent has also not studied the impact of the waste water from the proposed project.

XI. ENVIRONMENTAL IMPACTS OF FGD HAVE NOT BEEN STUDIED

88. The Appellant has also submitted that the Project Proponent has not studied the feasibility of Flue Gas Desulphurization (FGD) installation in the project layout and also environmental impacts relating to it. The Appellant has also submitted that the EAC has recommended the installation of FGD for the proposed project only during the meeting in which the project was recommended for Environment Clearance. However, the Project Proponent has not studied and presented the details of feasibility of FGD installation and environmental impacts relating to it during the EIA Study, Public Consultation and Appraisal processes of the proposed project. Further, the Appellant has also referred to one of the decisions of EAC during its 63rd EAC meeting in which it has deferred to appraise a Thermal Power Plant, sighting the non-consideration of feasibility of FGD installation in the project layout and non-study of Environmental Impacts relating to FGD operation. Relevant excerpt from the 63rd meeting minutes is as under:

"2. Absence of FGD in plant layout, and consequent processes:

PP has contended that the plant will comply with MOEFCC notification dt. 7thDecember 2015 regarding stack emission, and that FGD will be installed. EAC asked PP about the location of FGD in the plant layout. In response to this query, PP admitted that FGD has not been included in the plant layout yet. Similarly, FGD and associated processes are also not covered in water balance, process flow and mass balance calculations.

In light of this, the plant layout needs to be revised to include FGD and allied equipment/processes, and various plant processes need due consideration of issues like disposal of sludge in solid waste management, sulphur balance, water balance etc."

89. It is submitted that it is clear from the above meeting minutes that the EAC has taken note of the critical technical and environmental issues relating to FGD installation and operation. However, in the case of the present project, the EAC has mere recommended for installation of FGD in the last meeting in which the proposed project was recommended for Environmental Clearance. However, it has failed to consider any of the issues relating to FGD installation and operation.

90. The Project Proponent has not submitted anything related to the above issues raised by the Appellant but it has only submitted that the EAC has considered the issues related to FGD installation. However, as mentioned above, the EAC and MoEF&CC have not considered and appraised any of the issues relating to FGD installation and operation.

91. It is further submitted that the FGD installation and operation requires usage of natural resources and other infrastructure. The FGD operation for the present requires millions of liters of water every day. For example, the recent EIA report of the upcoming 4000 MW Yadadri Thermal Power Plant in the state of Telangana estimated that the water requirement for their FGD operation is 14880 m3/day or 1,48,80,000 liters per day (One crore forty eight lakhs and eighty thousand liters per day). This is a huge water requirement. Similarly, the same 4000 MW Yadadri Thermal Power Plant EIA Report also mentions that the waste water generated by their FGD unit is 1440 m3 per day or 14,40,000 (Fourteen lakhs and forty thousand liters per day). In the present case, neither the Project Proponent nor the EAC and MoEF&CC have studied the water requirement for the FGD operation, the source from which water will be drawn and the impact of the water withdrawal from source, the waste water which will be generated by the FGD, the impacts related to it, the water balance, etc. Without studying and evaluating of these impacts, the EAC and MoEF&CC have blindly recommended that the project proponent should use the FGD.

92. Further, the operation of the FGD requires huge quantum of Limestone in millions of tonnes every year and a crusher unit for pulverizing the limestone into power. Further, the operation of FGD generates Particulate Matter (PM) pollution through its stack and also fugitive dust emissions through various other operation sources. Similarly, the FGD operation also generates Gypsum as Solid Waste material in million tons every year. The Project Proponent has neither in the EIA Report nor in another documents provided any details of the quantum of limestone which will be required for the operation of FGD. Similarly, the neither the EIA Report nor any other project document provides any details of the Air pollution caused by the FGD unit and its related impacts due to the operation of the FGD. Further, neither the EIA Report nor any other project document provides any details of the Solid Waste Gypsum which will be generated, the environmental impacts relating to it and the method in which the Solid waste Gypsum will be disposed of by the Project Proponent.

93. It is submitted that it is clear from the above description that there are number of potential environmental impacts relating to the FGD installation and its operation. In the present case, neither the Project Proponent has studied these impacts as part of the EIA Study nor the EAC and MoEFCC have bothered to appraise the environmental impacts of the FGD installation and the operation. As mentioned above, the EAC and MoEF&CC have only blindly recommended that the Project Proponent should install FGD, without evaluating all the above-said and other related issues. As also mentioned above, because these details have not been presented in the EIA Report of Yadadri Thermal Power Plant, the EAC in its 63rd meeting has sighted this one of the strong grounds for rejection of the EIA Report.

XII. HYDRO-GEOLOGICAL IMPACTS HAVE NOT BEEN STUDIED

94. It is clear from the above description that the following issues have not been considered and studied by the Project Proponent and appraised by the EAC and MoEF&CC:

I. That the proposed project is located on a water body.

II. That the Ground Water and Surface Water in the project area are already above the stipulated standards of water quality.

III. That the impact of the proposed project on the utilization of the Ground Water for the construction of the proposed project have not been studied.

IV. That the impact of the Ash Pond of the proposed project on the Ground Water has not been studied.

V. That the feasibility of Zero Liquid Discharge system has not been studied.

VI. That the impact of the Waste Water discharge from the proposed project has not been studied.

VII. That the environmental impacts relating to installation and operation of the Flue Gas Desulphurization (FGD) proposed to be used for the project has not been studied.

95. It is submitted that the facts presented in relation to the above issues clearly prove that the Project Proponent has not considered and studied above-mentioned issues relating to the proposed project which have adverse impacts on the Hydro-geology in the project area. It is further submitted that so called Hydro-geological impact assessment study or the EIA Report of the proposed project does not in any way deal with the above issues relating to Hydro-geological impacts of the proposed project. The Hon'ble Tribunal, Southern Zone bench, **Samata Vs Union of India [2014 ALL (I) NGT REPORTER (1) (SZ) 1]** has suspended the Environmental Clearance granted to one of the Thermal Power Plants because the Hydro-geological impacts have not been studied. Relevant excerpt from the judgment of the Hon'ble Tribunal is as under:

> 61) The EAC is directed to discuss the following items in detail, even if these have already been taken into consideration and add specific mandatory conditions as appropriate
>
> 1. Impact of the project on drainage and surface hydrology during the normal and monsoon conditions. The specific engineering interventions

required to be made to preserve the hydrological integrity of the area should be clearly delineated as a mandatory condition.

2. The EAC is directed to call for an action plan for maintaining the drainage system from the Project Proponent, scrutinize the same from both engineering and environmental angles and stipulate mandatory conditions, if so required, in the list of conditions.

3. Prior to the issuance of the consent to operate, the Andhra Pradesh Pollution Control Board is specifically directed to satisfy itself in terms of design, projected efficiency levels of various treatment units and the quality characteristics with regard to the discharge of treated wastewater into river Janjavathi.

96. It is submitted that in present case too, the Project Proponent has not considered and studied number of issues relating to the Hydro-geological impacts of the present project. Thus, on this basis, the Environmental Clearance granted for the proposed project deserves to be set aside.

XIII. HEALTH IMPACTS OF THE PROPOSED PROJECT HAVE NOT BEEN STUDIED

97. It is submitted that the Project Proponent has also failed to conduct the Health impacts relating to the proposed project. The Appellant has submitted in the Appeal that the Project Proponent was required to undertake Health impact assessment study under TOR No. xxxiv. The Appellant further submitted that the Project Proponent furnished old Health impacts assessment report of the year 2009 of a consultant, namely M/s Pollucon Laboratories Limited, engaged by Project Proponent itself and has submitted that there are no health impacts in the project area. The EAC in its 45th meeting dated 29th and 30th October, 2014 has noted that the Project Proponent has not complied with the TOR No. xxxiv and had furnished old report. For the same reason, the EAC sought fresh details of Occupational health and epidemic health survey of the individuals in the project area. However, the same EAC in the very next meeting dated 26th and 27th

November, 2015 recommended the project for environmental clearance by noting as under:

"XI. As the data for the health studies was more than five years old, a fresh Occupational Health and epidemic health disorders survey of the study area (10 km radius) shall be conducted and the report submitted to the Ministry and its R.O. within one year."

98. It is submitted that although the EAC has specifically noted in its previous meeting that the Project Proponent has not conducted the Health impacts assessment study and asked for the same information, the same in the very next meeting went to clear the proposed project although the Project Proponent has furnished the same old report to the EAC in its meeting.

99. On the above basis, the Appellant has submitted that the Health impacts of the proposed project have not been done. The Appellant has also referred to various scientific studies which have provided ample evidence of the health impacts of Thermal Power Plants. The Project Proponent in its reply submitted that it has submitted that health impacts study of Pollucon Laboratories limited published in the year 2009 to the EAC during the appraisal of the project. Further, the Project Proponent has also submitted that various reports published by the Appellant cannot be relied upon as they are not related to the proposed Thermal Power Plant.

100. The Appellant in rejoinder submitted that even according to the report titled "Post-Clearance Environmental Impacts and Cost-benefit Analysis of Power Generation in India" by National Environmental Engineering Research Institute (NEERI) the people living within the 5 kilometers radius of the existing Thermal Power Plant of Project Proponent in Ramagundam are suffering from respiratory diseases. Relevant excerpt from the NEERI report is as under:

"3…..From the epidemiological data of the area surrounding the Ramagundam coal based plant, it has been observed that around 6.5% of population living within a 2 km radius of the plant suffers from respiratory disorders, while the

figure decreases to 3.2% at a distance of 2.5 km and becomes negligible (0.91%) at over 5 km from the plant. Thus it can be inferred that people living within 5 km radius of coal based power plant suffer from respiratory ailments."

101. The Project Proponent in its reply has again re-iterated that according to M/s Pollucon Laboratories limited report published in the year 2009, there are no health impacts due to industrial pollution in the year and has called the NEERI report as old.

102. It is submitted that the reply of the Proponent both in the Reply statement and also in the sur-rejoinder clearly reveals the non-appreciation of many of the scientific global studies and research documents which have systematically linked the Health impacts due to Thermal Power Plants. The Appellant has placed on record the copies of scientific studies such as the report of Physicians for Social Responsibility, a Nobel Prize winning professional association, titled as "Coal's Assault on Human Health" and published in the year 2009, NEERI Report dated 2009, Study of Pneumoconiosis in Thermal Power Station Workers published in the year 2012, The Toll from Coal published in the year 2010 and Coal Kills published in the year 2012. It is submitted that denial of this systematic scientific research which has time to time proved the co-existence between the pollution caused by Thermal Power Plants and the Health impacts of the people is denial of truth and fact by the Project Proponent which calls itself as the responsible public corporate. A responsible public corporate like the Project Proponent should appreciate and be open to the science and research which has proved the detrimental health impacts of Thermal Power Plants. It should not be one which proclaims the old study conducted by itself as correct and not conduct the health impacts assessment study of the present project and comply with the TOR requirement.

103. It is submitted with the above facts that the Project Proponent has not conducted the prior precautionary Health Impact Assessment study as part of the EIA Study. Although the EAC and MoEF&CC have noted that the Project Proponent has not conducted the health impacts assessment study and has provided an old report of M/s Pollucon Laboratories limited, both the authorities have cleared the project

without application of mind. It is further submitted the reply of the Project Proponent in both reply statement and sur-rejoinder reveals that it is not open to accepting the science research which has established health impacts of Thermal Power Plants and proclaims that the old study conducted by itself is only correct and not any other scientific literature and research.

XIV. TERMS OF REFERENCE ISSUED FOR THE EIA STUDY HAVE NOT BEEN COMPLIED

104. It is submitted that the Project Proponent has also not complied with the Terms of Reference (TOR) issued for the project. The Appellant in the Appeal has submitted that the Project Proponent has not complied with TOR Nos. I, III, XI, XIV, XX, XXI, XXXIV, XXXVI, XXXVII, XXXVIII and XXXIX. The Appellant submits as under in respect of non-compliance of the same TOR by the Project Proponent.

TOR Nos. I and XXXVIII

105. The TOR No. I required the Project Proponent conduct the Cumulative Impact Assessment study of the project for the 10/15 kilometers radius, as applicable. Further, the TOR No. XXXVIII required the Project Proponent to undertake the Cumulative impact of all sources of emissions on Ambient Air Quality (AAQ). The Project Proponent has only the conducted the cumulative impact assessment study for only 10 kilometers, in spite of the fact that there are number of highly polluting industries such as Coal mines and Thermal Power Plant between 10 kilometers radius to 15 kilometers radius of the project. On this basis, the Appellant has submitted that the Project Proponent has not complied with the TOR requirement and has restricted Cumulative impact assessment study to only 10 kilometers radius of the project site. Further, the Appellant has also submitted that the Project Proponent has not considered the number of underground coal mines within 10 kilometers radius of the project area as part of the cumulative impact assessment study which has been undertaken for 10 kilometers radius. The Project Proponent in the reply as well as the sur-rejoinder has submitted that they were required to undertake the Cumulative impact assessment study for 15 kilometers radius only

with regard to only rise in temperature. Further, the Project Proponent has also submitted that the underground coal mines within 10 kilometers radius have not been considered because they are not polluting industries. These submissions of the Project Proponent are false and baseless

106. It is submitted that the Appellant in the rejoinder, affidavit to the sur-rejoinder and also in the preceding paragraphs of these Written Submissions have already placed facts and provided detailed description on the above false statements of the Project Proponent. They are not repeated here for the sake of the brevity. It is submitted that all the facts and description provided by the Appellant clearly reveals that the Project Proponent has complied with the TOR Condition Nos. I and XXXVIII and has violated them.

TOR No. III

107. This TOR required the regional office of MoEF&CC to submit latest Monitoring Report on compliance of Environmental Clearance conditions of existing 2,600 MW Thermal Power Plant of Project Proponent. The regional office of MoEF&CC has several critical conditions such as AAQ not being in conformity to the latest NAAQ standards, Untreated effluent water being directly discharged into nearby agricultural fields, No online monitoring of gaseous emissions, 100% Ash utilization not being achieved, No separate environmental funds being maintained, Non-submission of Compliance reports regularly and no dedicated pipeline for effluent water, etc.

108. The Appellant has submitted that the Project Proponent has not complied with critical environmental clearance conditions of existing project. The Project Proponent in its reply as well as sur-rejoinder submitted that it has complied with most of the conditions prescribed in the Environmental Clearance granted to the existing project. The Appellant in the Rejoinder, Affidavit to the sur-rejoinder and also in the subsequent paragraphs of this rejoinder has provided details description on non-compliance of Environmental Clearance conditions of the existing 2,600 MW project. They are not repeated here for the sake of brevity. The perusal of

facts and description provided by the Appellant reveals that the Project Proponent has not complied with the conditions prescribed in the Environmental Clearance granted to the existing project.

TOR Nos. XI and XIV

109. The TOR no. xi required the Project Proponent to submit satellite imagery or the topo sheet indicating complete details of the study area and the TOR No. xiv required the Project Proponent to conduct the land use study. The Project Proponent only submitted satellite imagery, it has not submitted any toposheet. Further, even the satellite imagery furnished by the Project Proponent is poor, which has been noted by the EAC itself in its 46th meeting minutes is as under:

"I. As the Satellite Imagery submitted was not clear, a clear satellite imagery shall be submitted to the Ministry and its R.O. Further, latest authenticated satellite imagery shall be submitted on an annual basis to the Ministry and its R.O. to monitor the alterations of the area."

110. The Appellant has also submitted that the land use study conducted by the Project Proponent is based on the very old data, which dates to the data obtained from census – 2001. The TOR No. xi clearly specifies that the satellite imagery indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest villages, creeks, mangroves, rivers, reservoirs etc. in the study area should be furnished and the TOR No.xiv also clearly specifies that the land use study must be provided. These are essential details that the EAC has to study, analyse and evaluate before taking the decision to recommend the project for environmental clearance. In the present case, it is submitted that these details have not been furnished to the EAC. In addition, the EAC has also not visited the project site for verify and evaluate the above details sought in the TOR Nos. xi and xiv. Thus, it is submitted that the TOR Nos xi and xiv have not been complied by the Project Proponent. In spite of these non-compliances, the project has been recommended for EC by the EAC without analysing and evaluating environmental aspects pertaining to the project.

TOR Nos. XX and XXI

111. It is submitted that both the TOR Nos. XX and XXI required the Project Proponent to study the Hydro-geological impacts assessment study and also study the ecological impact, including the impact on fisheries, due to the withdrawal of water from Godavari River. The Appellant has provided detailed explanation in the Appeal, Rejoinder and Affidavit to the sur-rejoinder and also the in preceding paragraphs of these written submissions that the Project Proponent has failed to study the impacts such as such as the impact of project on Ground Water and Surface Water, the impact of aquatic ecology, the feasibility of Zero Liquid Discharge, etc. The same submissions are not repeated here for the sake of brevity. The perusal of all the facts and detailed description by the Appellant reveals that the Project Proponent has not complied with TOR Nos. XX and XXI and violated them.

TOR No. XXXIV

112. This TOR required the Project Proponent to undertake Health Impacts Assessment study of the project. The Appellant has already provided facts and detailed description on the failure of Project Proponent to undertake the Health impacts assessment study of the proposed project. The same submissions are not for the sake of brevity. The perusal of facts and detailed provided by the Appellant reveals that the Project Proponent has failed to undertake the Health impacts assessment study and has violated the TOR No. XXXIV.

TOR No. XXXVI

113. This TOR Required the Project Proponent to undertake the baseline monitoring of Ambient Air Quality (AAQ) in the project area. The Appellant has provided detailed description about the false AAQ monitoring conducted by the Project Proponent and it is repeated for the sake of brevity. The perusal of facts and detailed description provided by the Appellant reveals that the Project Proponent has not complied with TOR No. XXXVI and has conducted false monitoring of AAQ during the EIA Study of the project.

TOR No. XXXVII

114. This TOR Required the Project Proponent to give the list of the all the industries in study area. It is clear from the facts and description provided by the Appellant that the Project Proponent has willfully reduced the study area to only 10 kilometers radius of the project site, although there are number of potential polluting sources between 10 kilometers radius to 15 kilometers radius of the project site. Further, it is also clear from the facts and description provided by the Appellant also that the Project Proponent has not given the list of all the existing underground coal mines and has not complied with TOR No. XXXVII and has violated it.

TOR No. XXXVIII

115. This TOR required the Project Proponent to undertake the Cumulative impact assessment study of all sources of emissions. It is submitted that it is clear from the facts and detailed description provided by the Appellant that the Project Proponent has reduced the Cumulative impact assessment study to only 10 kilometers radius of the project site. Further, the Project Proponent has also not considered the impact of number of underground coal mines within 10 kilometers radius of the project. Hence, it is submitted that the Project Proponent has violated TOR No. XXXVIII and has violated it.

TOR No. XXXIX

116. This TOR Required the Project Proponent to submit laboratorial reports relating to Radioactivity and Heavy Metal content in the Coal proposed to be used for the project. It is clear from the facts and detailed description provided by the Appellant that the Project Proponent has not provided laboratorial reports relating to Radioactivity and Heavy Metal content in the Coal proposed to be used for the project. Hence, the TOR No. XXXIX has not been complied and violated by the Project Proponent

XV. THE PROJECT PROPONENT HAS NOT COMPLIED WITH THE ENVIRONMENTAL CLEARANCE CONDITIONS OF THE EXISTING THERMAL POWER PLANT

117. The Appellant in the Appeal has also submitted that the Project Proponent has not complied with various critical conditions of the Environmental Clearance granted for the existing 2,600 MW project. The non-compliance of various conditions of the Environmental Clearance letter have been highlighted by the Monitoring Report of regional office of MoEF&CC itself. However, the MoEF&CC, New Delhi has not taken note of these non-compliance and has not taken any action against the Project Proponent for not complying with the conditions prescribed in the Environmental Clearance letter. The Appellant submits as under on non-compliance of these conditions.

CONDITION NO. 6

118. The Monitoring Report of MoEF&CC has clearly highlighted that the Ambient Air Quality (AAQ) monitoring conducted by third party at the existing plant revealed that the Project Proponent has not complied with the latest NAAQ standards. Relevant excerpt from the Monitoring Report of MoEF&CC is as under:

"Ambient Air Quality monitoring is being carried out twice in a week by third party at 3 locations identified with SPCB and records are being maintained. However, third party monitored AAQ parameters are not conformed to the latest NAAQ standards…"

119. The Project Proponent in its reply as well as in the sur-rejoinder submitted that the AAQ monitoring was not conducted at the time of inspection undertaken by the regional office of MoEF&CC and hence, it was recorded in the Monitoring Report as "partially complied". It is submitted that Project Proponent is elusive and completely false. The Monitoring Report of MoEF&CC has in clear terms highlighted that "AAQ parameters are not conformed to the latest NAAQ standards", it did not anyway say that AAQ monitoring was not conducted by the Project Proponent at the time of the monitoring visit. Thus, the non-compliance of above condition has been clearly highlighted by Monitoring Report of MoEF&CC. The submission of the Project Proponent is misleading and completely false. Hence, it is submitted that this condition has not been complied by the Project Proponent.

CONDITION NO. 7

120. The Monitoring Report of MoEF&CC has clearly highlighted that the Project Proponent is discharging untreated and polluted effluent water from the Ash Pond directly into Agricultural lands and to the Godavari River. This is an offence under Environment (Protection) Act, 1986 and Water (Prevention and Control of Pollution), Act, 1974. In spite of this, no action was taken either by the MoEF&CC or by the Telanagana State Pollution (Hereinafter "TSPCB') under the above-mentioned statutes. The Project Proponent in both reply as well as the sur-rejoinder has admitted that it has been discharging untreated effluent water directly from the ash pond to the agricultural lands and to the Godavari River. However, the Project Proponent has self-certified itself by saying that the tests conducted by it on the agricultural lands and the Godavari river revealed that no contamination has happened as a result of the untreated waste water. Further, it has also submitted that that it has supplied untreated waste water from the Ash Pond to the agricultural land upon the request of farmers.

121. It is submitted that the above facts clearly reveal that the Project Proponent is the "Polluter". Hence, the so called test reports submitted by it cannot be relied upon as the polluter cannot certify itself on the pollution caused by it. The EAC and MoEF&CC have blindly accepted this statement by the Project Proponent and have not recommended for any proper and scientific study which needs to be conducted for the purpose of studying the damage which could have been caused due to the release of untreated waste water from the existing project. Further, the submission of the Project Proponent has supplied the untreated waste water from the Ash Pond to the farmers at their request is weird. Being a responsible public corporate which is aware of the consequences of the adverse impacts of the polluted water and the law of the land, it cannot be that the Project Proponent can release the polluted Ash water into the Agricultural lands of the farmers.

122. It is submitted with the above facts that the Project Proponent has not complied with the condition No. 7 of Environmental Clearance granted for the existing project. In spite of this, no action has been taken on the Project Proponent even as on date.

CONDITION NO. 13 AND 3:

123. It is submitted that these conditions required the Project Proponent to comply with 100% utilization of Fly Ash as under Fly Ash Notification, 2009 of MoEF&CC. The same notification clearly stipulates that the 100% Ash utilization has to be achieved within 5 years from the date of its notification. It is the submission of the Project Proponent that they have achieved 89% of Fly Ash utilization till today, although it has been more than 7 years from the date of Fly Ash Notification, 2009. Hence, it is clear that the Project Proponent not complied with the conditions nos. 13 and 3.

CONDITION NO. 20:

124. This condition required the Project Proponent to monitor the gaseous emission as part of the continuous monitoring of AAQ. The Project Proponent in its reply submitted that the gaseous monitoring shall be conducted by it. Hence, it is admitted by the Project Proponent itself that it has not complied with condition no. 20.

CONDITION NOS. 25 AND 5:

125. The Monitoring Report of MoEF&CC has also highlighted that the Project Proponent has not maintained separate funds for Environmental Protection measures. This has been admitted by the Project Proponent in its reply. Hence, the Project Proponent has not complied with Condition Nos. 25 and 5.

126. It is submitted with the above facts that although the Project Proponent has not complied with the above critical conditions of environmental clearance granted for the existing project, neither the EAC nor MoEF&CC have recommended and taken any action against the Project Proponent.

XVI. NON-APPLICATION OF MIND BY THE EAC AND MOEF&CC:

127. It is submitted that it is clear from the above details, facts and description provided by the Appellant that there are number of issues on which no consideration, deliberation and discussion has been done by the EAC and MoEF&CC. The Appellant submits that the EAC and MOEF&CC have failed to consider the following aspects while appraising the proposed project.

A. BASIC TASK OF APPLYING DUE DILIGENCE AND CROSS-CHECK THE INFOMRATION FURNISHED BY PROPONENT HAS NOT BEEN BY EAC AND MOEF&CC

B. NO DETAILED SCRUTINY HAS BEEN DONE AND NUMBER OF DEFICIES IN THE EIA REPORT HAVE NOT BEEN NOTED BY THE EAC AND MOEF&CC

C. THE EAC AND MOEF&CC HAVE FAILED TO SEE THE NECESSITY OF CUMULATIVE IMPACT ASSESSMENT STUY

D. THE EAC AND MOEF&CC HAVE FAILED TO RECOMMEND AND TAKE ACTION AGAINST THE PROJECT PROPONENT FOR THE WILFUL POLLUTION CAUSED TO AGRICULTURAL LANDS AND GODAVARI RIVER

128. The Appellant submits as under in respect of the above failures of EAC and MOEF&CC.

A. <u>BASIC TASK OF APPLYING DUE DILIGENCE AND CROSS-CHECK THE INFOMRATION FURNISHED BY PROPONENT HAS NOT BEEN BY EAC AND MOEF&CC</u>

129. It is submitted that the basic and foremost duty of both EAC and MoEF&CC is to first apply the principle of diligence and cross-check all the information furnished by the Project Proponent for truth and fact. In the present case, it is clear from the detailed description provided by the Appellant, that the EAC and MoEF&CC have never bothered to cross-check any information provided by the Project Proponent in the EIA Report and other documents of the proposed project. It is clear from the above facts presented by the Appellant that:

I. The Project Proponent has falsified the information about presence of number of industries within 10 kilometers radius of the project and has not detailed of these industries during the appraisal of the project. Further, the Project Proponent has also not considered the impact of these industries as part of the so called Cumulative Impact Assessment study which has been done by it.

II. The Project Proponent has falsely interpreted the requirement of TOR N.o.1 and has restricted the Cumulative Impact Assessment study to only 10 kilometers radius, although there are number of polluting industries between 10 kilometers radius to 15 kilometers radius of the project site.

III. The Project Proponent has presented false monitoring of Ambient Air Quality (AAQ) and has presented false information on pollution level of Particulate Matter (PM) and Sulphur Dioxide (SO_2) in the project area and has presented lower level pollution data of both the pollutants in the EIA Report, in spite of the overwhelming evidence that the higher amount of pollution is prevailing in the project area.

IV. The Project Proponent has concealed the fact that the proposed project is located on a water body.

130. It is submitted that the on all of the above aspects and other issues, neither the EAC nor the MoEF&CC have applied due diligence and have cross-checked any of the information furnished. Perusal of the EAC meeting minutes and also the Environmental Clearance letter of the proposed project reveals that both the authorities have not verified any information furnished by the Project Proponent and have accepted it as Gospel Truth.

B. **NUMBER OF DEFICIENCIES IN THE EIA REPORT HAVE NOT BEEN NOTED AND DETAILED SCRUTINY HAS NOT BEEN DONE BY EAC AND MOEF&CC**

131. It is submitted that it is clear from the facts and detailed description provided by the Appellant that there are number of deficiencies in the EIA Report which have

not been noted by the EIA Report and MoEF&CC. The following are deficiencies of the EIA Report of the proposed project.

I. It is clear from the EAC meeting minutes itself that the Project Proponent has not provided Clear satellite map, not conducted the health impact assessment study and not studied impact of the untreated and polluted waste water which is released from the Ash pond of the existing project.

II. The Project Proponent has not complied with the Terms of Reference (TOR) prescribed for the EIA Study of the project.

III. The Project Proponent has falsely conducted the AAQ Monitoring and has presented false data about PM and SO2 pollution in the project area. Further, the Project Proponent has not presented the details of industries within 10 kilometers radius and 15 kilometers radius and has done false cumulative impact assessment within 10 kilometers radius.

IV. The Project Proponent has not studied the impact of the project on water body present within the layout of the project, water which will be drawn for the purpose of construction of the project, the impact of the waste water which will be released by the project during the monsoon season, the feasibility of zero liquid discharge, etc.

V. The Project Proponent not studied the impact of Heavy Metals and Radioactivity from the Coal which is proposed to be used for the project.

132. It is submitted that on all of these aspects, the EIA Report is deficient and not complete. The EAC and MoEF&CC have failed to take note of these issues and undertake the detailed scrutiny and appraisal of the proposed project as required the EIA Notification, 2006. While addressing the importance of detailed scrutiny, the Hon'ble Tribunal in **Samata Vs Union of India [2014 ALL (I) NGT REPORTER (1) (SZ) 1]** has held as under:

> "55) The EAC, is a High Level Committee entrusted with the task of evaluating the projects, which exercise it has to do with its wisdom,

experience and expertise of the members. Needless to say, while doing that exercise for such evaluation, the Committee should keep wider interest of the nation as paramount in its mind. A duty is cast upon the EAC to strike a balance between the development on one side and ecology and environment on the other, thereby ensuring larger interest of the society of the State. While such vital and indispensable task is entrusted with the fervent hope and expectation, shirking of responsibility in a hasty or evasive manner would not only be against the objective of its constitution, but also defeats the purpose for which the Committee is functioning. Where a particular point is not decided unanimously, specific noting should be prepared and scientific reasons for accepting the majority view should be recorded and maintained for future reference. It should not be forgotten by the EAC that either the acceptance or rejection of a proposal should be the result of a proper and purposeful exercise on the recommendations of which the regulatory authority can safely act and take a correct decision thereon."

133. It is submitted that the Hon'ble Tribunal in the above case has noted that it is the indispensable duty of EAC to evaluate all the aspects of the project and conduct proper and purposeful exercise of Appraisal. However, in the present case, it is clear that both EAC and MoEF&CC have failed to verify the information furnished by the Project Proponent and also conduct the detailed scrutiny of the project. Hence, the both the EAC and MOEF&CC have not applied their minds and have not conducted meaningful and purposeful appraisal of the proposed project.

C. **THE EAC AND MOEF&CC HAVE FAILED TO SEE THE NECESSITY OF CUMULATIVE IMPACT ASSESSMENT STUDY**

134. It is submitted that in the present case, the indispensable task of EAC and MOEF&CC is that both the authorities required to ensure that prior and authentic Cumulative Impact Assessment study of all the projects within 15 kilometers radius of the project site were conducted, before they have conducted the appraisal of the proposed project. As submitted above, the project area consists of a number

of coal mines, thermal power plants and other industries. As a result of this, the pollution level in the region is also very higher. Hence, any new proposed project must be considered in accordance with the principles of precaution and sustainable development. The necessity of Cumulative Impact Assessment study in the industrialized areas has been well-recognized and held as prior requirement in the environmental jurisprudence and by many number of judicial verdicts. The Hon'ble Tribunal in **T. Muruganandam & Ors Vs. Union of India & Ors [Appeal No. 50/2012]** has held that the cumulative impact assessment is not the study of one project in isolation but the combined impact of number of past, present and future projects. Hence, it is submitted that the Cumulative Impact Assessment study was not only the requirement in the present case but a precedent. In the present case, the EAC has woefully accepted the so called argument of the Project Proponent that the EIA study requirement is only for 10 kilometers radius, although very first TOR granted for the project required the proponent to undertake the Cumulative Impact Assessment study within 15 kilometers radius. It is submitted with the above facts that the EAC has grossly failed to see the prior requirement of Cumulative Impact Assessment study before the proposed project was recommended for the environmental clearance.

D. THE EAC AND MOEF&CC HAVE FAILED TO RECOMMEND AND TAKE ACTION AGAINST THE PROJECT PROPONENT FOR THE WILFUL POLLUTION CAUSED TO AGRICULTURAL LANDS AND GODAVARI RIVER

135. It is also submitted that even though it was very clear to both EAC and MoEF&CC that the Project Proponent has indulged into offence of wilful pollution of agricultural lands and Godavari River though the discharge of untreated and polluter waste water from the existing project, no action has been taken was recommended and taken against the Project Proponent by both EAC and MoEF&CC. Further, the EAC and MoEF&CC have also failed recognize that before the proposed project was permitted with Environmental Clearance, it was necessary to undertake the comprehensive prior study of the pollution which has been caused due to the discharge of polluted and untreated waste water.

136. In view of the of above facts and circumstances, it is submitted that the EAC and MoEF&CC have failed to apply their minds and appraise the proposed in accordance with the EIA Notification, 2006, Environmental (Protection) Act, 1986 and Principles of Precaution and Sustainable Development.

XVII. ENVIRONMENTAL CLEARANCE GRANTED FOR THE PROJECT IS DEVOID OF REASONS

137. It is submitted that it has been held that numerous judicial verdicts that the administrative authorities have to give reasons in support of their decisions. The Hon'ble Tribunal in **Rudresh Naik vs. Goa State Coastal Zone Management Authority [Appeal No. 20 of 2013 before the NGT]**, the Hon'ble Tribunal held as under:

"It is a settled rule that administrative authorities which are dealing with the rights of the parties and are passing orders which will have civil consequence, must record appropriate reasons in support of their decisions. Certainly, these decisions must not be like judgment of courts, but they must provide insight into the thinking process of the authority as to for what reasons it accepted or rejected the requests of the applicant."

138. Apart from the above case, in a catena of other judgments such as the Hon'ble Supreme Court in **Namit Sharma v. Union of India [(2013) 1 SCC 745], Ravi YashwantBhoirVs Collector (2012) 4 SCC 407, Maharashtra State Board of Secondary Higher Secondary Education vs. K.S. Gandhi [(1991) 2 SCC 716],** the Hon'ble Delhi High Court in**UtkarshMandalVs Union of India [2009 X AD (Delhi) 365]**and the Hon'ble Tribunal in **SamataVs Union of India [2014 ALL (I) NGT REPORTER (1) (SZ) 1]** and in other judgments have clearly laid down that the administrative authorities have to give reasons in support of their decisions. Although EAC and MoEF&CC have been specifically directed by many judicial verdicts to give reasons in support of their decisions, the EAC and MoEF&CC have not been complying with it. In the present case, it is all the more important and necessary to give reasons as the proposed project is located in a heavily polluted area and proposed project could lead to potential

environmental impacts. However, no reasons have been given by EAC and MoEF&CC in support of their decisions.

139. In view of the above facts and circumstances, the Hon'ble Tribunal may be pleased to allow the prayer made in the Appeal.

Dated this the 14th of April, 2017 at Chennai

Counsel for the Petitioner