

BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE BENCH AT CHENNAI
APPEAL NO. 2 OF 2020 (SZ)

IN THE MATTER OF:

EAS Sarma

...Appellant

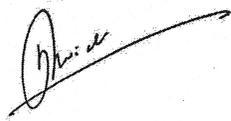
Versus

Union of India & Ors.

...Respondents

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Dated: 02.08.2021

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REJOINDER TO THE REPLIES FILED BY RESPONDENT NOS. 1, 3 and 4

MOST RESPECTFULLY SHOWETH:

1. That the Appellant through the present appeal has challenged the Environmental Clearance dated 12.06.2019 granted by the Ministry of Forests Environment and Climate Change to the Project Proponent for Kistaram Open Coal Mining Project of Capacity 2 MTPA of the Singareni Collieries Company Ltd. (SCCL) in an area of 435.68 Ha located in Village Kistaram Mandal Sathupalli, District Khammam, Telengana.
2. That, the averments made by the Respondent no.1,3 and 4 in their respective Replies are vehemently denied, unless specifically admitted herein and those in the Appeal are re-iterated. The main contentions which have been replied to/addressed by the Respondents no.1,3 and 4 are as follows:-

(i) All terms of reference (ToR) have been duly complied with and addressed in the EMP of Kistaram from page no. xviii to xiii

(ii) Respondent No.4 has relied on a study by Environment Protection Training & Research Institute (EPTRI) to show that Health assessment has been done and there is no adverse health impact.

(iii) Final forest clearance has been granted for diversion

- (iv) All the concerns of the local community were taken care into consideration during Public Hearing and all questions raised in Public Hearing have been considered by the EAC
- (v) The Ambient Air Quality has been correctly calculated and is within the NAAQ standards
- (vi) Compensatory Afforestation has been done in this case.

That the Appellant is rejoining/responding to the contentions raised by the Respondent No.1,3 and 4 in following paragraphs which are as follows:-

3. **(i) In rejoinder to the contention (i)** of the Respondent No.4 that all terms of reference (ToR) have been duly complied with and addressed in the EMP of Kishtaram from page no. xviii to xxiii it is stated that the same is wrong and denied. A perusal of the said page nos. xviii to xxiii show that it is a table which only provides a 'Reference for Prescribed Terms of Reference (ToR) issued by MoEF'. The four columns in the table mention "S.No.", "Description of ToR", "Section No." and "Page No." It doesn't give any description about compliance of those ToR's. Secondly, Reply to para 21 of the Appeal given by Respondent No.4 is very vague and does not give specific answer to para 21 of the Appeal wherein the Appellant has cited specific instances of ToR Non-compliance which are reproduced once again as follows:-

S. No	ToR Point No.	ToR Point	ToR Reply by PP	Non-Compliance
1.	6	Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land (as defined in the revenue records), forest areas (as per records), along with other physical features such as water bodies, etc. should be furnished.	Section 2.11, pg. no. 23-25; Fig. no. 2.11.4.1	The map given does not delineate the agricultural land (irrigated and un-irrigated, and uncultivable land (as defined in the revenue records). The bifurcation of land area in figure 2.11.4.1 has only been shown in as forest, government and private land.
2.	13	Impact of change in land use due to the start of the project if much of the land being acquired is agricultural land/forest land/grazing land.	Section 4.4.1, pg. 123-124	As per table 2.11.3.1- pre mining land use breakup of the project for core zone, the agricultural land area is 124.01 ha. However, no mention of the impact of mining on

				agricultural activities has been mentioned in section 4.4.1. The entire land not coming under forest has just been simply addressed as non-forest land.
3.	16	Study on the existing flora and fauna in the study area (10 km) carried out by an institution of relevant discipline and the list of flora and fauna duly authenticated separately for the core and buffer zone and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna. If the study area has endangered flora and fauna, or if the project falls within 15 m of an ecologically sensitive area, a comprehensive Conservation Plan should be prepared and furnished along with comments from the CWLW of the State Govt.	Section 3.3.7.1, pg. 69-95; Section 4.65, pg no. 184-186, Annexure V & VI	The list for core and buffer zone has not been separately authenticated.
4.	22	Impacts of mining and water abstraction and use in mine on the hydrogeology and ground water regime within the core zone and 10 Km buffer zone including long term studies on. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a decline in the groundwater availability and/or if the area falls in the grey or dark zone.	Section 4.5.3, pg. 145-173; Section 4.6.3.5, pg. no. 183	The proposed mining project partially covers the catchment area of Kistaram Tank. The proponent has proposed construction of garland drains and check dams. However, no concrete estimates have been given on the groundwater recharge resulting from the activities to be taken up by the proponent.
5.	28	Flow chart of water balance, treatment of effluents from workshop, township, domestic wastewater, mine water discharge etc., Details of STP in colony and ETP in mine. Recycling of water to the max. Extent possible.	Section 4.5.3.8.1, pg. no. 185	There is no mention of STP in the Final EIA/EMP report. And only septic tank has been shown in the water Balance. The total domestic consumption as per water balance is 40 KLD and 10 KLD of domestic waste water generation. The proponent has proposed 207 quarters, parking facility with basic amenities like washroom etc. and canteen. Therefore, only 40 KLD consumption of water in a day looks quite unrealistic. Also, no mention has been made on the capacity of the ETP or its design.

The above Table gives specific 5 instances where ToR Nos. 6, 13, 16, 22 and 28 have not been complied with. The Respondent No.4 wants the Hon'ble Tribunal to believe that just because these issues are dealt with in the EIA it should be taken as the gospel truth. The Appellant has specifically quoted the non-compliance of ToR Nos. 6, 13, 16, 22 and 28 in the Non-Compliances in the Table cited by him in Para 21 of the Appeal but no reply/rebuttal has been given in the Reply filed by Respondent No. 4. It is stated that in view of the above submissions of the Appellant it is stated that owing to the above Non-Compliances of the ToR the EIA study being incomplete and defective and the consequent EC deserves to be rejected on this ground alone.

(ii) In rejoinder to the contention (ii) that Respondent No.4 has relied on a study by Environment Protection Training & Research Institute (EPTRI) to show that Health assessment has been done and there is no adverse health impact, is misleading hence wrong and denied.

4. It is stated that a perusal of the EAC minutes of the 42nd meeting of the Expert Appraisal Committee (EAC) held during 24th January, 2019 rightly observed as follows:

"42.1.4 *The EAC, in the first instance, observed that the report submitted by the project proponent was lacking for the requisite details in respect of impact of mining operations on air and water quality, ground water, stability of residential structures, source of livelihood for the locals of Sathupalli town, their dependency on the forest, flora and fauna, methodology for health survey, etc. Further, the report was found generic in nature and not addressing actual assessment and impact on environmental parameters in and around Sathupalli town. **The Committee also observed that the said report was prepared by Kakatiya University in association with the project proponent themselves, which amounts to conflict of interest and thus not acceptable.** The proposal was deferred for the needful on the above lines."*

(Emphasis supplied)

Copy of the relevant pages of the minutes of the Meeting of the EAC dated 24th January, 2019 is already annexed alongwith the Appeal as Annexure-A8 which may kindly be perused in this regard.

5. That through this observation, EAC raised its concerns about the “conflict of interest” that seemed to characterise the environmental impact assessment studies and straightaway rejected the study conducted by Respondent No. 4 in association with Kakatiya University. In spite of the above cautionary warning sounded by EAC, Respondent No. 4 once again entrusted the ‘health study’ to EPTRI which, though a registered society, is managed by a Board of Directors comprising largely of the senior officers of Telangana Govt which has a 51% equity control of Respondent No. 4. Even the EIA study has been carried out by the Corporate Division of Respondent No. 4, which in itself suffered from the disability of “conflict of interest” emphasised by EAC as above. If the same logic of the above cited EAC observation were to be applied, even the EIA study is strictly unacceptable.

Copy of the EPTRI’s Board of Governors as mentioned on the website of EPTRI is annexed as **ANNEXURE-A13.**

Report of EPTRI gives vague response on Health assessment

6. That Respondent No.4 is relying upon a study of Environment Protection Training & Research Institute (EPTRI) to show that Health assessment has been done and there is no adverse health impact. The health assessment by EPTRI is given on pages 67-70 of the said Report. It is stated that

The data collected from the Sathupalli government hospital shows that lung diseases increased from two cases (in 2013 -14) to 27 (2014) and 233 in 2016. As regards *Chronic obstructive pulmonary disease (COPD)*, the number of cases recorded increased from 6 to 15 from 2013 to 2016. Tuberculosis cases were recorded as one (1) case in 2013 to 5 in 2015, 15 cases in 2016 & 74 cases in 2017. Hypertension cases steadily increased from 6 in 2013 to 742 by mid 2016. The patients of diabetes turn out increased from 18 in 2013 to 777 by mid- 2016 at Sathupalli Area Hospital. Detailed health records for the 2013 – 2014 are not available. *The increase in number of cases could be due to rise in population, rise in the awareness on the health among the public in the surrounding villages, increase in vehicular traffic and agriculture activities. The predominant wind direction is NE whereas the Sathupalli town is located in eastern direction and hence there will not be much impact on the Sathupalli town due to the mining activity.*

It is stated that it is a well known fact that in a coal mine area there would occur a number of Health problems like lung diseases, Hypertension etc. caused by:

1. Dust
2. Noise
3. Vibration
4. Traffic Volume in the area.

What was required was data with respect to only these related diseases as absolute data as given in Table 2.52 of the EPTRI Report cannot give the correct picture of increase and decrease of coal mine related diseases. The Table 2.52 of the EPTRI Report deals with cases of Acute Diarrhoea, Abdomen, Dog Bite, Snake Bite, Insect Bite, Dental Diseases, Tonsilitis etc. which have no relevance with coal mine activity. Secondly, the data given in Table 2.52 of the EPTRI Report does not give the total number of patients visiting the Hospital vis-à-vis the percentage of those patients suffering from coal mine related diseases like Lung diseases caused by dust in coal mine or Hypertension caused by high traffic volume and blasting. Thirdly, the Table 2.52 of the EPTRI Report does not give data of 2013 whereas in it's analysis of Health data at page 70 of this Report data of 2013 has been given. Therefore, the explanation of the Project Proponent that these disease have increased due to growth in population is vague and without any firm and valid basis.

EPTRI Report of March 2019 was never placed before Public during the Public Hearing or was part of the EIA Report

That the Public Hearing took place on 19.11.2015 at the proposed Project near Mandal Parishad Primary School, Jagannadhapuram Hamlet of Cherukupalli Grama Panchayat, Sathupalli Mandal, Khammam District of Telangana The

Final EIA was prepared in March 2016. The EPTRI Report was prepared in March, 2019 because there was an observation in the 42nd EAC minutes dated 24.01.2019 that a scientific study may be conducted on "Impact of Kistaram OCP in and around Sathupalli town" which clearly shows that till January, 2019 there was no scientific study before the EAC evaluating the impact of Kistaram OCP in and around Sathupalli area. Hence, the EIA of 2016 was seriously lacking on this issue and a need was felt for a study. Therefore, there is no question of the EPTRI Report being presented before the public during Public Consultation (2015) or being part of Final EIA(2016). Secondly, according to the Counter of the Respondent No.4, para 6 the EPTRI Report was prepared in March, 2019 by taking the BLD from December, 2014 to February, 2015 by EPTRI. It is stated when the alleged Health assessment of Sathupalli area by EPTRI shows exponential increase in cases of lung diseases, Chronic obstructive pulmonary disease (COPD), Tuberculosis cases, Hypertension and Diabetes, there is no explanation as to why the latest data of early 2019 was not taken in this case to get a recent picture rather than one based on old and stale data of 2014-2015.

It is important to highlight here that the Appellant has taken up this issue in his Appeal to which the Respondent No.4 responds as under in para 8 of its Counter:-

"In reply to the averment that the revised Report that is study on Impact of Kistaram OCP in and around Sathupalli town of March 2019 was never placed before the project affected community in Public Hearing, it is submitted that the same is not correct, hence denied and the Applicant is put to strict proof of the same. It is submitted that as per MoEF&CC S.O. 1533, during public hearing executive summary of the EIA/EMP has to be circulated to the public. Accordingly, the same was circulated in the meeting held on 19.11.2015 to the public..."

That it is stated as a Rejoinder to para 8 of the Counter of Respondent No.4 that the EAC itself was not satisfied with the EIA study before it and in the 42nd EAC minutes dated 24.01.2019 it asked for carrying out of a scientific study to

evaluate Impact of Kistaram OCP in and around Sathupalli town. This clearly shows that till January, 2019 there was no scientific study before the EAC evaluating the impact of Kistaram OCP in and around Sathupalli area and so there is no question that the Executive Summary circulated to the public in 2015 being sufficiently dealing with Impacts on Sathupalli area.

Copy of the relevant pages of EPTRI's Report is annexed as **ANNEXURE-A14.**

Report of EPTRI and the EIA fail to deal with impact of Radiation in Coal on local Population of Sathupalli Area

7. That even the EPTRI study has not fully covered the true nature of the environment implications of the project. It is stated that Coal is known to contain many toxic pollutants including heavy metals like mercury, lead, zinc, arsenic, cadmium etc. in addition, it contains radioactive isotopes of Uranium and Thorium, the environmental impact of which needs to be assessed in the EIA study as brought out unambiguously in Order dated 20.09.2011 titled in ***Appeal No.07 of 2011 (Krishi Vigyan Arogya Sanstha & Ors. Vs. The Ministry of Environment & Forests & Ors.)*** wherein this Hon'ble Tribunal had given the following directions:-

"Conclusion:

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.

b) The Ministry of Environment and Forests shall direct the proponent to synchronize the commissioning of the project with that of the Sewage Wastewater Treatment plant, treated water

from which is proposed to be used for the operation of the project. Until, there is such synchronization, no Consent to Operate shall be issued by the Maharashtra State Pollution Control Board and the Board shall monitor the mitigating measures suggested in the Environmental Clearance.

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.

e) If any of these directions are not carried out, the appellant is at liberty to take appropriate steps as required under the law.

With the above directions, the Appeal stands disposed of."

(Emphasis supplied)

8. That it is stated therefore it is apparent from a mere reading of the above directions that much before the EC is granted i.e. from the stage of grant of Terms of Reference, all the future projects need to furnish details of possible radioactivity levels of the coal proposed to be used for the thermal power plant. This view has been further reiterated by this Hon'ble Tribunal in ***Appeal No. 105 of 2016 (SZ) titled Dr. Lenin Dhanisetty vs Union of India and Ors.*** where this Hon'ble Tribunal vide it's Order dated 21st January, 2021 has issued the following direction:-

*"26. (iv) The MoEF&CC is directed to comply with the directions issued by the Principal Bench of National Green Tribunal, New Delhi in **Appeal No.07 of 2011 (Krishi Vigyan Arogya Sanstha & Ors. Vs. The Ministry of Environment & Forests & Ors.) dated, 20.09.2011** while issuing Terms of Reference (ToR) in respect of thermal power plant in its letter and spirit."*

9. That Respondent No.4 has failed to Respond to the allegation of the Appellant that impacts of radiation in the source coal for the proposed Coal Mine and the resultant coal ash. Radiation is a known environmental and human health

danger associated with coal, and the failure to evaluate these risks for the project constitutes a serious deficiency in the EIA as well as the EPTRI Report.

10. It is stated that opening of a new mine would surely aggravate the situation and so a comprehensive Health study ought to have been done and assessed by EAC with greater scrutiny.
11. That it is stated that there is a large volume of research papers and other published literature on the subject corroborates Health implications of burning Coal.
12. The fact that the presence of radioactive isotopes found no mention in the EIA study (Section 3.3.2.3 of the EIA report) shows that it was neither objective nor comprehensive enough, apparently suffering from the disability of conflict of interest that the EAC so clearly pointed out in case of study conducted by Kakatiya University and officials of Project Proponent which principle equally applies to the study conducted by EPTRI which point has been conveniently ignored by the EAC.

(iii) In rejoinder to the contention (iii) of the Respondent No. 4 that Final forest clearance has been granted for diversion it is stated that the Respondent No. 4 in it's Reply has mentioned that Stage-II forest clearance has been granted on 12.04.2019 and even the Government of Telengana has issued an Order dated 20.05.2019 in this regard. It is stated a perusal of Stage-II forest clearance dated 12.04.2019 issued by the MoEF&CC and Order dated 20.05.2019 of Government of Telengana the reference is only of grant of Stage-II Forest Clearance. Stage II forest clearance cannot be regarded as Final Forest Clearance Order in law.

13. The Project Proponent has not produced the final Section 2 order permitting Forest Clearance under Forest (Conservation) Act,1980 issued by the State Government. It is stated that it is well settled that without the final forest clearance order no forest land can be utilised by the project proponent for non-

forest purpose. In this case it would be appropriate if this Hon'ble Tribunal seeks a report as to how much of the Forest land has been broken into by this Project without getting the section 2 final forest Clearance.

14. That as per the law laid down by this Hon'ble Tribunal in ***Vimal Bhai & Anr v. Union of India & Ors. 2012 SCC Online NGT 77*** and ***Prafulla Samantara v. Union of India & Orc.,2014 SCC Online NGT 892*** it has been clarified to the effect that No Non-forest activity can be carried out before granting of the final state government Order under Section 2 of the Forest (Conservation) Act,1980 and that both Stage I (in principle) and Stage II are not Forest Clearances as required under the law. Non Forest use of forest land can be permitted only after an order is issued by the State Government under Section 2 of the FC Act, 1980.
15. This Hon'ble Tribunal in ***Vimal Bhai and Ors. v. MoEF and Ors., 2011 SCC OnLine NGT 16*** stated that:-

*"30. However, a party cannot be remediless, a person who is aggrieved by the Approval/Clearance granted by the Central Government has to avail an opportunity to assail the same. In the aforesaid scenario it can safely be concluded that after receiving a Stage - I and/or Stage - II Clearance, thereby granting a consent to permit use of forest land for non-forest purposes, from the Central Government, it is incumbent upon the State Government to pass a reasoned order transferring and/or allowing the land in question for being used for non forest purpose. **It is needless to be said that bereft or such order no forest lands can be put to use for non-forest purpose. Further, all activities done without such orders would be ab initio void.** An Appeal can be filed against the said order of the State Government under Section 2(A) of FC Act and/or under Section 16(e) of the NGT Act. In the event such an Appeal is filed it would be open for the person aggrieved, to assail the order/Clearances granted by the Central Government under Section 2 of the Act which forms an integral part and sole basis of the order passed by the State Government."*

(Emphasis supplied)

16. This Hon'ble Tribunal in ***Prafulla Samantara v. Union of India & Ors. 2014 SCC Online NGT 892*** has clarified that no non-forest activity can be carried out before the final State Government order-

"This question also came for consideration before a Bench of this Tribunal in the case of Vimal Bhai v. Union of India in Appeal No. 7 of 2012 dated 7th November, 2012.

In addition to the aforesaid-we do concur with the judgment of Bench of this Tribunal in Vimal Bhai v. Union of India (supra) to the extent that the State Government is obliged to pass an Order then alone non forest activity can be carried on in the forest area in terms of section 2 of the Act of 1980.

The Learned Counsel appearing for the parties have also brought to our notice a reply in the form of information to a RTI query raised under Right to Information Act, 2005. In this it is recorded that the State Government does not pass any order under Section 2 of the Act of 1980. This reply is contrary to the requirements of law and we, therefore, specifically set-aside such view and direct that all State Governments shall pass an appropriate order in accordance with law in terms of Section 2 of the Act of 1980.

Having answered the above question, nothing survives in this application and accordingly Original Application No. 123 of 2013 is disposed of. The Respondent No. 3 (Project Proponent) is at liberty to approach the State Government for appropriate Orders in accordance with law.

Till such Order is passed by the Competent Authority, Respondent No. 9 would not carry on tree cutting/felling in the forest area."

(Emphasis supplied)

17. **(iv) In Rejoinder to the contention (iv) of the Respondent No.4** that all the concerns of the local community were taken care into consideration during Public Hearing and all questions raised in Public Hearing have been considered by the EAC are wrong and denied. It is a matter of record as mentioned in Public Hearing minutes that "600 people have participated in the Public Hearing, only 16 people spoke in it".
18. That as a reiteration it is stated that the First speaker in the Public Hearing Sri Sandra Venkata Veeraiah, Hon'ble MLA, Sathupalli Constituency, Khammam District.has raised important issue that "Jagannadapuram is a Tribal village which has formed 400 years ago. If these people are re-located to another place, their cultural values and tradition will be lost." No satisfactory answer has been given on this issue by the Project Proponent.

19. The Public Hearing is just a mere sham and has been done only to complete the documentary/statutory requirement but in actual sense it has failed to address the issues taken up by project affected persons. The Reply of the Respondents 3 and 4 fails to respond to the specific issues on Public Hearing by the Appellant and therefore, the same are deemed to be correct.
20. That it is stated that the issue related to the cultural values and traditional resources was neither taken up in the Public Hearing nor in the EIA. It is stated that even the EIA does not deal with the issue of cultural values and traditional resources. In spite of this clear evidence, Section 3.3.8.19 of the EIA (Cultural and Aesthetic attributes) and Section 3.3.8.21 (Socio-Economic Assessment) makes no mention of these cultural resources. Moreover, Section 7.1 of the EIA (R&R Plan) assesses the impacts to PDF's and PAF in Jagannathapuram village as 84 and in Kistaram village PDF's and PAF's is 200 and 120 respectively on the basis of an R&R plan that involves mainly monetary compensation only. It is stated that cash payments under an R&R plan cannot remedy losses of these cultural resources continuing since last 400 years in this area.
21. The importance of consideration of Customary and Religious rights by Gram Sabha under the Forest Rights Act, 2006 has been highlighted by the Hon'ble Supreme Court in ***Orissa Mining Corporation vs Ministry Of Environment & Forest & Ors., 2013 (6) SCC 476***

"Customary and Religious rights (sacred rights)

63. Religious freedom guaranteed to STs and TFDs under Articles 25 and 26 of the Constitution is intended to be a guide to a community of life and social demands. The abovementioned articles guarantee them the right to practise and propagate not only matters of faith or belief, but all those rituals and observations which are regarded as integral part of their religion. Their right to worship the deity Niyam-Raja has, therefore, to be protected and preserved.

64. The Gram Sabha has a role to play in safeguarding the customary and religious rights of STs and other TFDs under the Forest Rights Act. Section 6 of the Act confers powers on the Gram Sabha to determine the nature and extent of "individual" or

“community rights”. In this connection, reference may also be made to Section 13 of the Act coupled with the provisions of the PESA Act, which deal with the powers of the Gram Sabha. Section 13 of the Forest Rights Act reads as under:

“13. Act not in derogation of any other law.—Save as otherwise provided in this Act and the provisions of the Panchayats (Extension of the Scheduled Areas) Act, 1996 (40 of 1996), the provisions of this Act shall be in addition to and not in derogation of the provisions of any other law for the time being in force.”

...

66. We are, therefore, of the view that the question whether STs and other TFDs, like Dongaria Kondh, Kutia Kandha and others, have got any religious rights i.e. rights of worship over Niyamgiri Hills, known as Nimagiri, near Hundaljali, which is the hilltop known as Niyam-Raja, have to be considered by the Gram Sabha. The Gram Sabha can also examine whether the proposed mining area Niyama Danger, 10 km away from the peak, would in any way affect the abode of Niyam-Raja. Needless to say, if the BMP, in any way, affects their religious rights, especially their right to worship their deity, known as Niyam-Raja, in the hilltop of the Niyamgiri range of hills, that right has to be preserved and protected. We find that this aspect of the matter has not been placed before the Gram Sabha for their active consideration, but only the individual claims and community claims received from Rayagada and Kalahandi Districts, most of which the Gram Sabha has dealt with and settled.

67. The Gram Sabha is also free to consider all the community, individual as well as cultural and religious claims, over and above the claims which have already been received from Rayagada and Kalahandi Districts. Any such fresh claims be filed before the Gram Sabha within six weeks from the date of this judgment. The State Government as well as the Ministry of Tribal Affairs, Government of India, would assist the Gram Sabha for settling of individual as well as community claims.

68. We are, therefore, inclined to give a direction to the State of Orissa to place these issues before the Gram Sabha with notice to the Ministry of Tribal Affairs, Government of India and the Gram Sabha would take a decision on them within three months and communicate the same to MoEF, through the State Government. On the conclusion of the proceeding before the Gram Sabha determining the claims submitted before it, MoEF shall take a final decision on the grant of Stage II clearance for the Bauxite Mining

Project in the light of the decisions of the Gram Sabha within two months thereafter.

69. The Alumina Refinery Project is well advised to take steps to correct and rectify the alleged violations by it of the terms of the environmental clearance granted by MoEF. Needless to say that while taking the final decision, MoEF shall take into consideration any corrective measures that might have been taken by the Alumina Refinery Project for rectifying the alleged violations of the terms of the environmental clearance granted in its favour by MoEF.

70. The proceedings of the Gram Sabha shall be attended as an observer by a judicial officer of the rank of the District Judge, nominated by the Chief Justice of the High Court of Orissa who shall sign the minutes of the proceedings, certifying that the proceedings of the Gram Sabha took place independently and completely uninfluenced either by the project proponents or the Central Government or the State Government.”

22. In it's order, the Hon'ble Supreme Court emphasised the need to reach out to the tribals in a sensitive manner, explain the provisions of the Forest Rights Act, the rights that accrue to them and encourage a comprehensive discussion based on which they should pass a resolution. The presence of a multitude of senior officers of the State and Respondent No. 4's representatives would have intimidated the tribals in the instant case into passing a resolution. The Gram Sabha ought to have been given adequate time to understand the proposal and respond. Apparently, such sensitivities were not evident in securing the Gram Sabha resolutions in this case. This raises doubts about the validity and spontaneity of the Gram Sabha resolutions. Under FRA and PESA, it is just not the land rights on which the Gram Sabha should pass a resolution but also on cultural rights as spelt out by the Hon'ble Supreme Court in the ***Orissa Mining Corporation vs Ministry Of Environment & Forest & Ors., 2013 (6) SCC 476*** case cited above.

(v): In Rejoinder to the contention (v) of the respondent no.1 and 4 that the ambient air quality has been correctly calculated and is within the NAAQ standards, is wrong and denied. It is stated by the Appellant in his Appeal that

“In the entire report the consultant has not disclosed geographical coordinate for air monitoring stations unlike given for surface water, ground water and noise monitoring stations. It seems that consultant does not want to disclose exact location of air monitoring stations to evaluate.”

It is stated that the Respondent Nos. 1, 3 and 4 have failed to provide any response to this Contention in their respective replies. It is re-iterated that the consultant has failed to disclose geographical coordinates for air monitoring stations

That in para 24 and 25 of the Appeal the Appellant has mentioned that:-

“24.The wind rose diagram for the monitoring period clearly shows that dominant wind direction is from NE to SW direction (page 37) but the details for monitoring stations given on page no. 38 clearly shows that only one stations has been established in the dominant down wind direction (SW) i.e. Kistram (BA4) which is also very close to core area (1.1 km). Non presence of any monitoring stations beyond 1.1 km in down wind direction may resulted into non capturing of SPM or RSPM (PM10 and PM2.5) concentration in the event of strong wind flow. Therefore the GLC concentration value predicted is showing always low concentration than AAQ standard. Even the predicted GLC concentration calculated for only monitoring station i.e. Kistaram is wrong. The base line value given at Kistram is 66.7 and predicted value 8.19 whereas the predicted value at Kistaram on map is showing 20.0 (page 139). The 98 percentile value for Kistram is given 79.6 (page 39) and therefore if added the predicted value 20.0 the resultant value will come around 100.

25. That it is stated that there is No analysis done for heavy metals in SPM and RSPM.”

It is stated that the Respondent nos. 1,3 and 4 have failed to provide any response to these contention in their respective replies. in fact the Respondent no.4 instead of responding to base line value and predicted value of Kistram (BA4) as mentioned in para 24 of the appeal, has given response with respect to AAQ at BA7 – Gudipadu village in it’s para 15 of the reply which clearly shows that the above contention of the appellant in para 24 of the Appeal that:-

"24.....Even the predicted GLC concentration calculated for only monitoring station i.e. Kistaram is wrong. The base line value given at Kistaram is 66.7 and predicted value 8.19 whereas the predicted value at Kistaram on map is showing 20.0 (page 139). The 98 percentile value for Kistaram is given 79.6 (page 39) and therefore if added the predicted value 20.0 the resultant value will come around 100"

has remained unanswered and is accepted as correct by the Respondent No.4.

It is stated that the Respondent No.4 in it's reply states in para 10 that:-

" Prediction of impact of particulate matter in air due to operations of the project was done by using aeromod software. Accordingly, the prediction was done for PM_{2.5} also and the same is furnished in final eia/emp report (table 4.5.1.4.3 of page no. 139A and table 4.5.1.5.4 of page 140). The values are well within limits after implementation of specified control measures proposed in the project"

That it is stated by the Appellant that the output of AEROMOD as given in page 137 of final EIA/EMP (Table No. 4.5.1.4.1) does not show any details about PM_{2.5}. Secondly a perusal of the EIA/EMP shows that there is no page 139A in the final EIA/EMP and hence there is no question of Table 4.5.1.4.3 of page No. 139A as contended by the Respondent No.4. A perusal of the final EIA/EMP also shows that at page 140 there is no Table 4.5.1.5.4 and therefore it is wrong to allege on the part of the Respondent No. 4 that "the prediction was done for PM_{2.5} also and the same is furnished in final EIA/EMP report (Table 4.5.1.4.3 of page no. 139A and Table 4.5.1.5.4 of page 140). Hence, there is no prediction done for PM_{2.5} as claimed by Respondent No.4.

Copy of relevant pages 136 to 140 of the final EIA/EMP is annexed herewith as

ANNEXURE-A15.

In rejoinder to the contention (vi) of the Respondent No. 4 that Compensatory Afforestation has been done in this case it is stated that the same is wrong and denied. it is stated that the erstwhile State of AP (including Telangana) defaulted in complying with the requirement of compensatory afforestation stipulated by the Supreme Court in *T.N. Godavarman case*. In particular, for forest lands diverted for SCCL (project proponent in this case), as

highlighted in the CAG report on the State, the requirement stands violated. CAG had even referred to false reporting by the authorities on compensatory afforestation, to somehow secure forest clearances on misleading assurances. Therefore, without compliance in respect of the earlier cases of diversion of forest lands, FAC/EAC should have questioned the proposal for Kistaram mine.

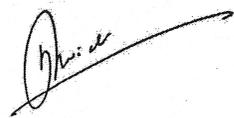
Copy of the relevant pages of CAG Report are annexed herewith as

ANNEXURE-A16.

x 

APPELLANT

THROUGH



RITWICK DUTTA SAURABH SHARMA G.STANLY HEBZON SINGH
ADVOCATES

Counsels for Appellant

N-71, Lower Ground Floor, Greater Kailash-I,
New Delhi- 110048

VERIFICATION

I, Emani Anantha Satyanarayana Sarma, S/o Shri Emani Lakshmi Narayana, aged about 78 years, R/o 14-40-41, Gokhale Road, Maharaniipeta, Vishakhapatnam-530002 do hereby verify that the contents of the Paras 1 to __ are true to my personal knowledge and that I have not suppressed any material fact.

x 

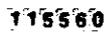
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<ol style="list-style-type: none"> 1. Director General, EPTRI, Vice Chairman 2. Special Chief Secretary / Principal Secretary, Environment, Forest, Science Technology Government of Telangana. – Vice Chairman/Member 3. Special Chief Secretary / Principal Secretary, MA&UD Department, Government of Telangana.-Member 4. Addl. Secretary/Jt. Secretary, Ministry of Environment Forests and Climate Change Government of India. -Member 5. Principal Secretary to Government, Industries & Commerce Department, Government of Telangana -Member 	<ol style="list-style-type: none"> 6. Principal Secretary to Government, Irrigation & Command Area Development, Government of Telangana -Member 7. Principal Secretary to Govt. Finance – Member 8. Principal Chief Conservator of Forests, Government of Telangana or a senior office nominated by Principal Chief Conservators of Forests -Member 9. Member Secretary, Telangana State Pollution Control Board, Government of Telangana -Member 10. VC & MD, Telangana New and Renewable Energy Development Corporation Limited – Member <p>(In the absence of the Chairman, the senior officer out of the two Vice Chairmen shall chair the meeting)</p>		

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The Singareni Collieries Company Limited
(A Government Company)

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Ref.No. CRP/ENV/A/406

Date: 13.03.2019

To
The Member Secretary,
Coal Mining Projects, Vayu Wing,
Indira Paryavaran Bhavan, MoEF&CC,
New Delhi - 110 003.

Sir,

Sub: Submission of additional details as sought by Member Secretary in respect of Kistaram Opencast Coal Mining Project of Singareni Collieries Company Ltd., Telangana State for issue of EC - Reg.

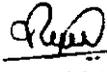
Ref.: Minutes of 42nd EAC (Thermal & Coal Mining Projects) meeting held on 24th January, 2019.

Kind attention is invited on the above subject. MoEF&CC deliberated the proposed Kistaram Opencast Project of SCCL in the 42nd EAC meeting and issued minutes vide reference cited. During appraisal of the proposal, the Committee observed that the report submitted by the project proponent was lacking for the requisite details in respect of impact of mining operations on Sathupalli town and other points.

In this connection, it is to bring to your kind notice that a study was carried out by the Environment Protection, Training and Research Institute (EPTRI), Hyderabad, Telangana on the "Impact of Kistaram Opencast coal mine on environmental parameters in and around Sathupalli town". The study report along with conclusions and recommendations is enclosed for your kind perusal.

It is requested to kindly consider the proposal for grant of Environmental Clearance for the proposed Kistaram Opencast Coal Mining Project and would be grateful if it could be placed in the ensuing EAC meeting.

Yours faithfully,


13.3.19
General Manager
Environment

Encl: A/a

**STUDY ON IMPACT OF KISTARAM
OPEN CAST COAL MINE
IN AND AROUND SATHUPALLI TOWN**

Prepared for

**THE SINGARENI COLLIERIES COMPANY LIMITED
(A Government Company)
KOTHAGUDEM COLLIERIES – 507 101 (T.S.)**

Prepared by



EPTRI

**ENVIRONMENT PROTECTION TRAINING & RESEARCH
INSTITUTE**

Sy. No. 91/4, Gachibowli, Hyderabad

March, 2019

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2.8.3. General Health Profile

2.8.3.1. Methodology of health survey:

Poverty, urbanization and demographic change play a crucial role in defining the disease pattern. The prevalent diseases have several causative factors specifically related to the environment, occupation, lifestyle, socio-cultural issues, access to quality health care and attitude towards disease and treatment. The patient treatment records were collected from the Sathupalli Area Hospital. The data provided by in-charge doctors is the only reliable source and certainly serve as the indicator of disease incidence in the region.

Sathupalli Area Hospital: It is a government hospital, located in the centre of Sathupalli town, proximate and opposite to the bus station. The hospital is intended to cater to the primary healthcare of the patients of the entire Sathupalli mandal. It is furnished with good infrastructure (operation theatre, etc.) and resident doctors available throughout.

Table 2.52 Sathupalli area hospital: Disease incidence record from Nov-2009, Dec-2010, Nov-2011, Oct.-Dec.-2012, Sept. & Nov.-2015 and May-2016.

Disease	2009	2010	2011	2012	2015	2016
Acid peptic diseases	0	0	5	0	431	0
Acute Diarrhoea	26	22	65	17	806	142
Acute Gastritis	0	0	0	142	93	0
Acute Respiratory infection	0	0	0	0	534	158
Ac.Abdomen	0	0	12	0	0	0
Amoebiasis	0	0	0	0	66	41
Accidental injuries	85	47	20	265	380	95
Head, Spinal card	0	0	0	0	70	0
Multiple Dislocations	0	0	0	0	111	0
Back ache	0	0	45	0	0	0
Other STD/AIDS/HIV	0	9	0	6	66	27
Dog bite	39	67	0	226	137	114
Snake bite	9	10	32	15	19	7
Insect bite	0	0	0	5	4	0
Burns	0	0	3	0	47	0
Bronchitis	0	6	0	16	87	42
Cardiovascular diseases	0	0	0	0	33	4
Arterial diseases	0	3	0	0	0	0
Hypertension	243	230	6	534	1257	742
Ischemic heart / Coronary artery diseases	0	3	0	0	0	0
Dental disease	0	0	0	280	0	0
Diabetes I,II	10	6	18	318	1234	777
Dehydration	0	0	0	5	0	0
Dysentery	0	0	0	44	0	0
Epitaxis	0	0	0	10	0	0
Sinusitis	0	0	0	29	0	0
Tonsillitis	0	0	0	9	0	0

Disease	2009	2010	2011	2012	2015	2016
Epilepsy	0	0	0	14	81	0
Conjunctivits, Cataract, Glaucoma	0	0	0	58	0	0
Belpharitis	0	0	0	18	0	0
Cataract	0	0	0	76	0	0
Eye injuries	0	0	0	3	0	0
Glaucoma	0	0	0	42	0	0
Sty	0	0	0	2	0	0
Cerebro-Vascular Accident	0	5	0	0	0	0
Enteric fever	3	7	21	18	101	4
Malaria	0	4	12	3	1	2
Rheumatic fever	0	0	0	0	34	0
Asthma	6	5	2	66	115	9

Source: Sathupalli area Hospital

Table 2.53 Sattupally Area Hospital health data

TB Cases				
Sathupally	2016-17		2015-16	
	TB No. Suspects	Positive	TB No. Suspects	Positive
January	55	9	70	7
February	46	2	66	9
March	44	9	46	9
April	29	7	45	5
May	45	13	42	4
June	42	5	49	7
July	33	1	50	10
August	38	7	68	16
September	37	4	64	13
October	57	9	60	3
November	44	3	57	1
December	39	5	52	7
Total	509	74	669	91

HIV						
Sathupally	2017-18		2016-17		2015-16	
	Total	Positive	Total No. Suspects	Positive	Total No. Suspects	Positive
January	11	0	55	1	70	19
February	1	0	46	0	66	9
March			44	0	46	5
April			29	0	45	1

May			45	0	42	0
June			42	0	49	0
July			33	0	50	0
August			38	0	68	0
September			37	0	64	0
October			57	0	60	1
November			44	0	57	0
December			39	0	52	0
Total	12	0	509	1	669	35

Malaria						
Sathupally	2017-18		2016-17		2015-16	
	Total MM	Positive	Total MM	Positive	Total MM	Positive
January	210	0	215		130	
February	246	0	120		130	
March	270	0	106		130	
April	215	0	92		95	
May			110		68	
June			120		84	
July			341		172	
August			462		408	
September			682		640	
October			362		672	
November			230		271	
December			240		192	
Total	941	0	3080	0	2992	0

The data collected from the Sathupalli government hospital shows that lung diseases increased from two cases (in 2013 -14) to 27 (2014) and 233 in 2016. As regards *Chronic obstructive pulmonary disease (COPD)*, the number of cases recorded increased from 6 to 15 from 2013 to 2016. Tuberculosis cases were recorded as one (1) case in 2013 to 5 in 2015, 15 cases in 2016 & 74 cases in 2017. Hypertension cases steadily increased from 6 in 2013 to 742 by mid 2016. The patients of diabetes turn out increased from 18 in 2013 to 777 by mid- 2016 at Sathupalli Area Hospital. Detailed health records for the 2013 – 2014 are not available.

The increase in number of cases could be due to rise in population, rise in the awareness on the health among the public in the surrounding villages, increase in vehicular traffic and agriculture activities. The predominant wind direction is NE whereas the Sathupalli town is located in eastern direction and hence there will not be much impact on the Sathupalli town due to the mining activity.

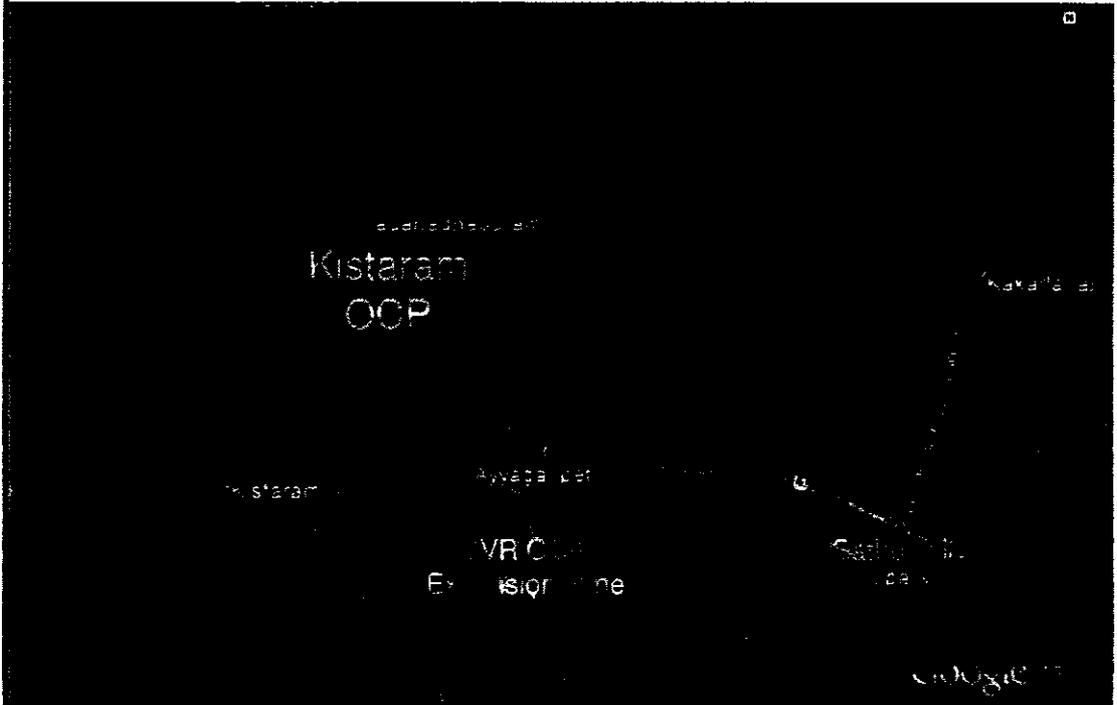
FINAL EIA/EMP REPORT

Final Environmental Impact Assessment / Environmental Management Plan

For the proposed

Kistaram Opencast Coal Mining Project

Near Kistaram Village, Sathupalli Mandal,
Khammam District, Telangana State.



Document Processing Solutions



Prepared By
ENVIRONMENT DEPARTMENT
(QCI/NABET Accredited EIA Consultant Organization)

March 2016



The Singareni Collieries Company Ltd.
(A Government Company)
Kothagudem Collieries -507101
Khammam District, Telangana State.

4.5.1.3. Air Quality Modelling

An ISCST – 3 Latest AERMOD Air Dispersion Model was used to predict changes in air quality in and around the project site i.e., maximum ground level concentration (GLC's) of particulate matter at the receptors (i.e. nearby villages, project area, sensitive areas if any) due to the various mining activities of the proposed mine. The model uses the steady state Gaussian plume equation for continuous source. 12000 m. X 12000 m, modelling block by reference point in the SW corner of the modelling block coordinates as (X = 3185144.0380; Y = 770293.8981) has been selected for modelling so as to include all the air quality baseline AAQ monitoring stations in the study area.

The inputs required for the model is:

- Hourly meteorological data consisting of year, month, date, hour, cloud cover, solar radiation, wind speed, wind direction, ceiling height, rainfall, relative humidity, etc.
- Source data such as open pit sources, area sources, line sources etc.
- Receptor data such as baseline AAQ was collected at 10 monitoring stations to compare the status of Air Quality after inception of the project.
- Programme control parameters, area characteristics like Albedo, Bowen ratio, Surface roughness based on land use type and season.

The emission rates have been taken considering the control measures proposed in **Table No. 4.5.1.2.17**. The emission rates were calculated for peak production achieved 2.00 MTPA. The total emissions from the proposed mining activities of Kistaram OCP after taking the proposed control measures is coming around 8.12 Grams/sec.

Out of total emissions, 5.34 Grams/sec emissions are coming due the activities in open pit and 2.78 Grams/sec emissions are due to poly area sources and surface activities.

Taking consideration into the three months meteorological data collected during **December 2014 to February 2015** and the PM10 emissions from different mining activities the model was run for prediction of GLC's with respect to PM₁₀.

4.5.1.4. Results and Conclusions:

The quarry area has been taken as a open pit source for all the dust emitting sources from different mining activities and the dump area and the road leading to dump yard from the quarry has been selected as poly area source for plying of dumpers/trucks and unloading of OB material. Appropriate emission factors, programme control parameters such as land use, UTM zone, Albedo, Bowen Ratio, Surface roughness, surrounding surface features, etc. and micrometeorological data was taken. The emission reduction by implementation of proposed control measures was also considered. The ground level concentrations are computed for **HIGH 1ST HIGH 24-HR CONCENTRATION VALUES** for all the baseline air quality monitoring stations by selecting them as discrete Cartesian receptors in the modelling area so that 10 receptors points taken for computation **24 -HR. AVERAGE CONCENTRATIONS** of particulate matter and the predicted increment of PM10 concentration at receptors for peak production capacities of the project are furnished in the **Table No. 4.5.1.4.1** and depicted in the **Figure Nos. 4.5.1.4.1 & 4.5.1.4.2**. The total predicted concentration at the receptors after coming of this project are furnished in **Table No. 4.5.1.4.2**.

Table No. 4.5.1.4.1 Predicted increment in Ground Level PM 10 concentration of Kistaram OCP

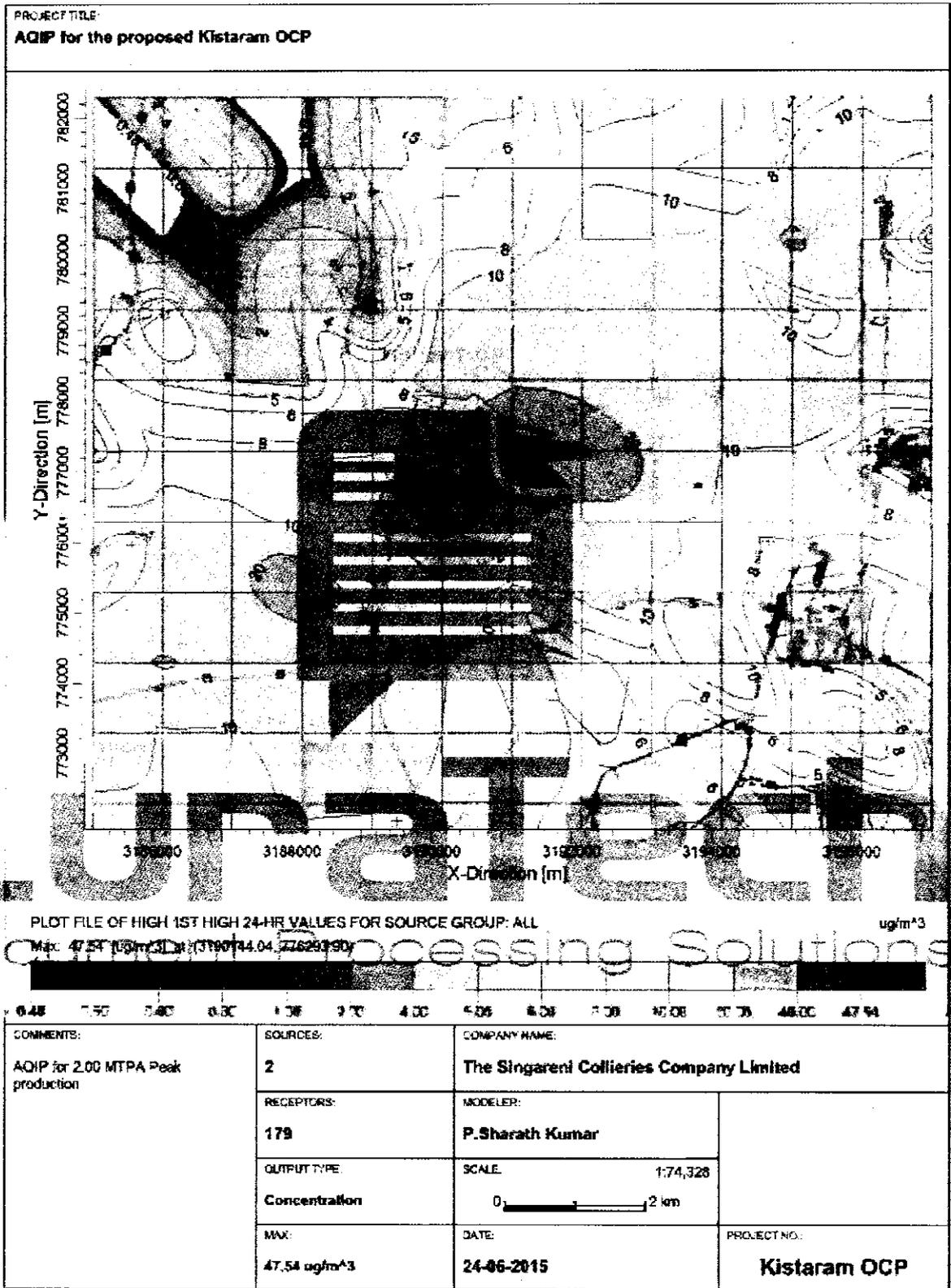
* AERMOD (14134): C:\Users\env3\Desktop\AQIP\Kistaram\Kistaram.isc 06/24/15
 * AERMET (14134): 15:49:03
 * MODELING OPTIONS USED: NonDEFAULT CONC FLAT and ELEV
 * PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL
 * FOR A TOTAL OF 10 RECEPTORS.
 * FORMAT: (3(1X,F13.5),3(1X,F8.2),3X,A5,2X,A8,2X,A5,5X,A8,2X,I8)
 *

X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	RANK	NET ID	DATE (CONC)
3189987.2700	777928.3100	7.87439	0.00	0.00	0.00	24-HR	ALL	1ST	CA1	15013124
3185488.7100	779312.1200	4.45723	0.00	0.00	0.00	24-HR	ALL	1ST	BA1	15010624
3188776.0800	779597.1600	1.48772	0.00	0.00	0.00	24-HR	ALL	1ST	BA2	15011924
3185698.2100	775954.6000	8.19480	0.00	0.00	0.00	24-HR	ALL	1ST	BA3	15011424
3189010.6700	775078.5400	14.67586	0.00	0.00	0.00	24-HR	ALL	1ST	BA4	15010824
3192937.1000	775356.6000	12.98714	0.00	0.00	0.00	24-HR	ALL	1ST	BA5	15012324
3196453.8000	779179.0100	19.07590	0.00	0.00	0.00	24-HR	ALL	1ST	BA6	15021424
3194816.3900	776025.7400	7.3406	0.00	0.00	0.00	24-HR	ALL	1ST	BA7	15010824
3194914.4600	781374.4600	6.28167	0.00	0.00	0.00	24-HR	ALL	1ST	BA8	15022124
3189501.6300	772048.3200	9.63376	0.00	0.00	0.00	24-HR	ALL	1ST	BA9	15013024

** CONCUNIT ug/m^3

** DEPUNIT g/m^2

Figure No. 4.5.1.4.1 Predicted GLCs of PM₁₀ in the Study Area



ASPMO View - Lakes Environmental Software

C:\Users\sharath\Desktop\AQIP\Kistaram\Kistaram.asc

Figure No. 4.5.1.4.2 Predicted GLCs of PM₁₀ in the Study Area – Overlay on Google

Table No. 4.5.1.5.2 Total concentrations at the Baseline AAQ Stations (Receptors)

(Figures in $\mu\text{g}/\text{m}^3$)

Stn ID	Location	Base level Concentration	Predicted Increment	Total Concentration	Standard
BA1	Ramachandrapur	65.2	7.87	73.07	100
BA2	Cherukupalli	68.4	4.45	72.85	100
BA3	Guruvaigudem	68.0	1.48	69.48	100
BA4	Kistaram	66.7	8.19	74.89	100
BA5	Vengalrao nagar	70.8	14.67	85.47	100
BA6	Toggudem	71.0	12.98	83.98	100
BA7	Gudipadu	65.0	19.07	84.07	100
BA8	Kommugudem	71.5	7.73	79.23	100
BA9	Kommepalli	64.8	6.28	71.08	100

From the above table, it is revealed that the ground level concentrations after implementation of project with specified control measures at all the receptor points are within the prescribed standards. However, the incremental values at Vengalrao Nagar, Toggudem and Gudipadu are high compared to other receptor points as these places are located in downwind directions. The actual incremental values may be less than the predicted values, since the down wash effect of the proposed dump in the north of the quarry and terrain is not taken in the assessment. The control measures suggested for each activity shall be strictly complied to keep the concentrations within the limits.

4.5.2 Impact of Noise

Ambient noise levels vary according to a number of factors including the local noise source, receptor locations and surrounding environment. Specific factors influencing noise levels within the local study area include noise intensity, number of sources, sound properties, source proximity, surrounding topography, buildings, vegetative barriers and atmospheric conditions. A variety of activities in the local study area also contribute to ambient noise levels, including road traffic, and construction activities. The growth of mechanization and steady increase in power rating of the mining equipment has led to an increasingly noisy environment. Noise levels are likely to rise from both The main sources

of noise in this mine are the electrical and Diesel-powered machines, Pumps, Drilling machines, Dumpers, Shovels, Workshop, Coal transportation trucks, Coal handling at pit head, etc. Mining operations and CHP are the main sources of the noise pollution, Noise due to vehicular movement is intermittent, but also adds to the background noise level.

It has been observed that mechanization of mining technology generally leads to higher noise levels if not properly controlled. Operation of drills, shovels, dumpers, loaders, rock breakers and dozers involve noise generation above 90 dB(A), which is the prescribed threshold limit value. However, these noise levels are not likely to have any effect on the occupational health point of view. The generation of noise levels due to operation of HEMM in the existing mining project is given in **Table No. 4.5.2.1**.

Table No. 4.5.2.1: Noise Levels from Existing HEMM

HEMM	Noise Levels dB(A)
Drills	90-100
Shovels	85-95
Dumpers	95-100
Dozers	95-110
Crushers	85-95

It is observed that at the mine site where the heavy earth moving machinery is in operation, it is more than 90 dB(A). However, the noise levels are observed within the tolerance limits at a distance of 15 to 20 m. The protection measures for operators have to be planned.

The cabins will be made sound proof and the employees working in the vicinity of HEMM will be provided with earplugs / muffs wherever required. Continuous exposure of workers to high level of noise may result in annoyance, fatigue, and temporary shift of threshold limit of hearing and permanent loss of hearing. Noise levels for damage risk criteria for hearing loss as given by Central Pollution Control Board is furnished in **Table No. 4.5.2.2**.

Table No. 4.5.2.2: Permissible Limits of Noise levels

Area code	Category of area	Limits in dB(A) Leq	
		Day time	Night time
A	Industrial area	75	70
B	Commercial area	65	55
C	Residential area	55	45
D	Silence zone	50	40

Note: Day time is reckoned in between 6 AM and 10 PM

Night time is reckoned in between 10 PM and 6 AM

Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, religious places or any other area, which is declared as such by competent authority.

(Source: Noise Pollution (Regulation and Control) Rules, 2000)

4.5.2.1 Noise Generation Due to Blasting

The noise generated by blasting is neither continuous nor shorter duration, but it is instantaneous. It takes less than 5 seconds to occur. Noise of blast is site specific and depends on type of blast, quantity of explosive, dimensions of drill hole, degree of compaction of explosive in the drill hole, nature of rock, VOD of the explosive used, charge per delay, mode of ignition, sequence of blasting, depth level of blasting site, etc. Noise levels generated due to blasting are studied in the existing JVR OC – I extension project to evaluate the impact of blasting and results are presented in **Table No. 4.5.2.1.1**.



सत्यमेव जयते

**Report of the
Comptroller and Auditor General of India
on
Compensatory Afforestation in India**



**Union Government
Ministry of Environment and Forests
No. 21 of 2013
(Compliance Audit)**

Report No. : 21 of 2013

(₹ in crore)

Year	Amount transferred to Ad-hoc CAMPA	Amount received by State CAMPA from Ad-hoc CAMPA	Expenditure incurred by State CAMPA	Accumulation of funds with State CAMPA ⁸
2006-07	270.85	Nil	Nil	
2007-08	270.42	Nil	Nil	
2008-09	234.83	Nil	Nil	
2009-10	677.84	89.78	10.87	78.91
2010-11	467.64	120.74	82.83	116.82
2011-12	183.96	118.57	153.56	81.83
Total	2105.54	329.09	247.26	

As can be seen from the table, in compliance with the orders of the Supreme Court, 16 per cent of the total Compensatory Afforestation funds remitted by State CAMPA to Ad-hoc CAMPA were released between 2009-12. Of ₹ 329.09 crore released, 25 per cent remained unutilised, leading to accumulation of funds with State CAMPA.

3. Receipts into State CAMPA

The cases of non recovery/short recovery of NPV/CA/PCA etc. in Andhra Pradesh that came to the notice of audit are given below. The gist of these cases is also given in table 24, 26 and 27 in Chapter 3.

(₹ in crore)

Sl. No.	Description	Amount
1	There were 22 cases ⁹ involving forest land of 1,053.10 ha in which NPV was not collected from the user agencies ¹⁰ to whom in principle approval was granted before October 2002 and the final approval was granted after that.	61.08 ¹¹
2	The Supreme Court revised the rate of NPV in March 2008. However test check of records of Paloncha and Bhadrachalam forest divisions revealed that NPV was not collected from user agency ¹² at revised rates. Ministry stated (April 2013) that at the time of stage-I clearance, the area of 101.81 ha was part of wildlife sanctuary and the area became part of national park only after compliance of stage-I conditions and there was no justification to apply the rate of NPV retrospectively. The reply of Ministry is not tenable as the revised rates of NPV were applicable in all cases where final approval was granted by MoEF after 28 March 2008, for diversion of forest land.	41.42

⁸Cumulative amount at the end of the year lying unutilised with State CAMPA out of the funds released by Ad-hoc CAMPA 2009 onwards.

⁹As per status report of MoEF issued on 16 March 2012.

¹⁰NHAI, M/s Prasad seeds Ltd., Vamshadhara Project, SCCL, Ananthapur mining corpn., M/s Amara Raja Batteries Ltd., M/s S. Shankar Reddy, Kakatiya Cement Sugar Industrial, M/s SwamyKasiRatnam, M/s KCP Ltd, M/s NCL Industries, M/s Essar Steels Ltd., M/s Singareni Collieries Company, M/s Tirumala Granites etc.

¹¹Audit estimated the total amount of NPV due in these cases on a conservative basis by applying the minimum rate of ₹5.80 lakh per hectare (1,053.10 x 5.80).

¹²Indira Sagar Polavaram Project