

BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN  
ZONE AT CHENNAI

Appeal No.19 of 2020

B. Madhan Kumar Reddy  
SPSR Nellore District

...Appellant

Vs

The Government of India,  
Rep. by its Director,  
Ministry of Environment, Forest  
and Climate Change,  
New Delhi and others.

...Respondents

**WRITTEN SUBMISSIONS ALONG WITH ADDITIONAL**  
**DOCUMENTS**

**M/S. K.S.VISWANATHAN, T. HEMALATHA & S.RATHI**

**COUNSEL FOR 7TH RESPONDENT**

BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN  
ZONE AT CHENNAI

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B. Madhan Kumar Reddy  
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...Appellant

Vs

The Government of India,  
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...Respondents

**WRITTEN SUBMISSIONS ALONG WITH ADDITIONAL DOCUMENTS**

SL. NO.	Date	Particulars	Page Nos.
1.	16.07.2021	Written submission filed by 7th Respondent	1-11
2.	27.03.2019	Additional Information submitted by 7th Respondent to EAC	12-56
3.	25.02.2020	Bank Guarantee submitted by 7th Respondent for Rs.63,64,000/-	57-60
4.	05.11.2020	Permission granted by Government of AP to pay Dead Rent for the mine at Rs.97,01,614/- in 10 EMI payments	61
5.	02.06.2021	Payment of Dead Rent up to June 2021	62

The documents include in the typed set are attested to be true copies.

Dated: 16 .07.2021  
Place: Chennai

*P. Hemalath*  
**COUNSEL FOR 7th RESPONDENT**



BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN  
ZONE AT CHENNAI

Appeal No.19 of 2020

(1)

B. Madhan Kumar Reddy  
SPSR Nellore District

...Appellant

Vs

The Government of India,  
Rep. by its Director,  
Ministry of Environment, Forest  
and Climate Change,  
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...Respondents

**WRITTEN SUBMISSIONS FILED ON BEHALF OF 7TH RESPONDENT**

**PRAYER IN THE APPEAL**

The Appellant has prayed for setting aside the Environmental Clearance dated 16.04.2020 issued by MoEF in favour of the 7th Respondent in respect of its Silican Sand Mine Project.

**BRIEF FACTS OF THE CASE & CHROLONOICAL SEQNCE OF EVENTS:-**

Sl.No.	Dates	Events
1.	24.05.1975	Mining Lease granted in the name of V.Ramachandra REddy for a total extent of 512.01 acres in S.Nos. 695/22 and 696 Momidi Village, Chillakur Mandal, SPSR Nellore District
2.	04.09.1975	Mining Lease executed for a period of 20 years
3.	01.07.1985	Lease transferred in favour of M/s. Sri

		Kumaraswamy Silica Mines (7th Respondent) in which V.Ramachandra Reddy the lessee was a partner
4.	03.09.1995	Upon expiry of lease renewal granted by Government of Andhra Pradesh for a period of another 20 years
5.	---	This renewal was over a reduced area of 338.39 acres in S.No. 695/22 & 696 of Momidi Village
6.	23.11.2013	Application for Environmental Clearance made by 7th Respondent
7.	24 & 25.02.2014	EAC meeting held recommending issue of Terms of Reference (TOR)
8.	21.04.2014	MoF issues a letter stating the project should be considered as a violation case and directed to stop Mining activities
9.	April 2014	W.P.No. 14490 of 2014 filed by 7th Respondent challenging the order
10.	21.04.2014	Andhra Pradesh High Court holds that principles of natural justice violated and directs 7th Respondent to submit a representation to MoEF who will pass orders on the representation after personal hearing to 7th Respondent.
11.	03.07.2014	Fresh representation given by 7th Respondent
12.	---	O.A.No. 96/2015 filed before this Hon'ble Tribunal by one P. Mallikarjuna Reddy against

		48 Mining Units including 7th Respondent on the ground that they were operating without EC
13.	08.07.2015	Common interim orders passed by Tribunal and in respect of 7th Respondent MoEF directed to pass orders on the representation of the 7th Respondent based on the orders of the A.P. High Court.
14.	13.07.2015	One more representation by the 7th Respondent requesting for issue of ToR without any further delay.
15.	10.08.2015	ToR issued by 1st Respondent
16.	07.09.2015	Final orders passed in Application No. 96 of 2015
17.	---	In respect of 7th Respondent direction issued to MoEF to pass final orders in the Application for EC taking into account the ToR already issued on 10.08.2015
18.	29.04.2016	Public hearing held by APPCB
19.	23 & 24.05.2016	EAC recommends issue of EC to 7th Respondent subject to final decision of the Ministry on complaints of alleged violations.
20.	08.07.2016	Inspection conducted in the mine of the 7th Respondent by Regional Director MoEF, Chennai
21.	16.08.2016	Report submitted by Regional Director stating allegations made against 7th Respondent are baseless

22.	20.10.2016	1st Respondent writes to Sub Collector, Gudur asking for copy of the report of the Joint Inspection conducted by the Revenue Department which is referred to in the Regional Director's report.
23.	24.01.2017	Report submitted by the Revenue officials observing 7th Respondent has conducted Mining in the Lease area only and there is no encroachment.
24.	08.02.2017	1st Respondent writes a letter to the Additional Principal Chief Conservator of Forests, Chennai to examine the revenue records and various land records and certify whether any forest land involved in the lease area of the 7th Respondent
25.	14.03.2017 & 15.03.2017	Joint Inspection of the Mining area conducted by Forest and Revenue Officials
26.	---	Report sent to 1st Respondent observing S.No. 696 was never classified as reserve forest but it is only S.No. 692 which is a reserved forest
27.	----	No mining has taken place in the reserved forest area
28.	---	92.40 acres in S.No. 696 is classified as jungle poramboke in the year 1910 now treated as "Adavai (Jungle) Poramboke"
29.	---	S.No. 695/22 to an extent of 513.73 acres was classified as Government Dry Land
30.	---	PA filed by one B.Madhan Kumar Reddy

		before A.P. High Court to direct the Government of A.P. and to conduct survey of the Mining area of the 7th Respondent and also not renew the lease
31.	03.02.2017	Mining Lease of the 7th Respondent renewed up to the year 2035
32.	03.04.2017	1st Respondent informs the 7th Respondent that in view of the pendency of PIL, EC cannot be granted in the event of forest land being involved in the mining lease area
33.	10.07.2017	7th Respondent submits a detailed explanation
34.	---	O.A. No. 187 of 2017 filed by 7th Respondent before this Hon'ble Tribunal seeking directions to the 1st Respondent to consider Application dated 23.11.2013 for grant of EC
35.	19.09.2017	Hon'ble Tribunal passes final orders directing Application for EC to be considered taking into account the surrender of an extent of 17.49 acres of land in S.No. 696 as well as the report of the District Collector dated 10.04.2017
36.	05.04.2018	1st Respondent informs the 7th Respondent that Application has been made under violation category
37.	2018	APPCB initiated action under Section 19 of the EP Act against the 7th Respondent for carrying Mining operation without obtaining EC and 7th Respondent pays a fine of Rs.1 lakh

38.	15.11.2018	Additional ToR issued by the 1st Respondent
39.	25 & 26.02.2019	EAC meeting held and after detailed deliberation EAC defers the proposal and the project proponent is directed to furnish further information.
40.	27.03.2019	Additional Information submitted by Project Proponent
41.	15.04.2019	EAC meeting held and after considering the additional information submitted, EAC recommends the proposal for grant EC.
42.	25.02.2020	Project proponent submits bank guarantee for a sum of Rs.63,64,000/- valid upto 24.02.2025.
43.	05.11.2020	Government of Andhra Pradesh Mining Department permits the project proponent to pay dead rent together with interest amounting to Rs.97,01,614/- in 10 equal monthly installments.
44.	02.06.2021	Department of Mines & Geology confirms that project proponent has paid Rs.58,20,972/- so far and only 4 further installments are due amounting to Rs.44,36,545/-

**SUBMISSIONS:-**

1. It is submitted that at the time of renewal, recommendation was made by the District Collector for the entire extent of land, viz., 437.42 acres in S.No. 695/22 and 74.59 acres in S.No. 696 and total 512.01 acres. In spite of the recommendations for

the larger extent of lands, 7th Respondent voluntarily surrendered 117.52 acres in S.NO. 695/22 and 57.10 acres in S.No. 696, as no suitable material is available in the said extent of land.

2. It is submitted that 7th Respondent had not encroached upon forest lands and at any event since the 7th Respondent did not require the lands classified as a "Adavai Poramboke", they were also surrendered in order to avoid any doubt while considering Application for EC.

3. Mining Scheme of the 7th Respondent was approved by the 4th Respondent on 01.07.2017 for a period of 3 years. The EC was issued on 16.04.2020 and now the approval of the Mining scheme has been granted from 24.09.2020 by the 5th Respondent for a period of 5 years. Therefore, there is a subsisting mining scheme to conduct mining activities.

4. Regarding buffer zone, 7th Respondent has maintained buffer zones on all sides of the lease area. Necessary clarification sought for by the 1st Respondent regarding buffer zone were duly provided. The necessary clarifications sought for were provided by way of further information on 27.03.2019.

5. Regarding mining in the area on either side of spring channel, the inspections were conducted by MoEF Regional Director, on a complaint made by one Sharath Kumar Reddy and

Madan Kumar Reddy the channels and the allegations were found to be false by all agencies.

6. The 7th Respondent has not excavated Silica Sand beyond the ground water level and that has been confirmed in the report of the regional director, MoEF in his report and also the hydro geological survey that was conducted. In 2015, the State Government has appointed a sub-committee to assess the ground water level in the entire area and give recommendations. They have recommended that mining is sustainable at 2.5 mtrs without affecting the ground water and EC has been given on condition that mining has to take place only upto 2.5 mtrs.

7. The sea is at a distance of about 10 kms from the lease area and many agricultural lands are being cultivated and mines are also in operation. Therefore, the allegation that the ground water has become saline is without any substance. This Sona Kaluva is a minor source of irrigation that originates about 5-6 kms from the R-7 mine and ends in a canal shortly. Reports clearly indicate ground water is not at all affected by mining.

8. The Application made for grant of EC was never rejected. The letter dated 05.04.2018 referred to by the Appellant only directs the 7th Respondent to apply under violation category.

9. Regarding public hearing, the same has been conducted on 23.04.2016 wherein Appellant and all his associates who were already making a number of allegations against the project proponent fully participated and effectively made representations. The Appellant has not expressed any grievances about the conduct of the public hearing in the year 2016 and the same is not challenged. Therefore, there is no justification in seeking for a second public hearing in respect of the same project.

10. It is after this public hearing, an Additional ToR was issued on 15.11.2018 in order to comply with the requirements of violation category. Therefore, there is no question of second public hearing for the same project.

11. In 2015, the State Government has appointed a sub-committee to assess the ground water level in the entire area and give recommendations. They have recommended that mining is sustainable at 2.5 mtrs without affecting the ground water and EC has been given on condition that mining has to take place only upto 2.5 mtrs.

12. Regarding ground water level, the Regional Director MoEF has conducted an inspection on 08.07.2016 based on the allegations of the Appellant and his associates. The report of the Regional Director states that ground water level ranges from 10 to

20- mtrs in depth as evidenced by the bore wells that are located around mine site and considering the mining activity is only 2 mtrs the report concludes that the project proponent has not intersected the ground water table. (D)

13. The report of the Deputy Director, ground Water, Nellore also recommends mining up to the depth of 3 metres. Government of Andhra Pradesh independently has conducted a ground water survey in the mining area by appointing a committee which has recommended that mining can be done up to 2.5 mtrs.

14. Regarding the common cause case, the 7th Respondent has already submitted an Affidavit of undertaking to comply with all the obligations in respect of the directions contained in the said judgment of the Hon'ble Supreme Court.

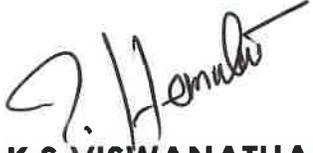
15. The Appellant and his associates have been trying to stall the mining operations of the 7th Respondent for a long time by making false allegations. A number of similar complaints made to Pollution Control Board, Forest Department, Ground Water Department, Revenue Department, Mining Department, and also the MoEF and all have been found to be false after repeated inspection survey and report. The Appellant is once again making

the same factual allegations that have been already considered by MoEF based on various reports in the present Appeal.

It is therefore prayed that this Hon'ble Tribunal may be pleased to dismiss Appeal No. 19 of 2020 and thus render justice.

Dated at Chennai on this the 16TH day of July 2021

**COUNSEL FOR RESPONDENT NO.7**

  
**M/S. K.S. VISWANATHAN  
& T. HEMALATHA**

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# Sri Kumaraswamy Silica Mines

Site : MOMIDI - 524 412, Chillakur Mandal  
SPSR Nellore Dt., Andhra Pradesh.

☎ : 08624 - 256150

**Ref: SK/MOEFCC/ADS/MINE/2019**

**Date 27-03-2019**

To,  
The Director (Violation Committee)  
Government of India,  
Ministry of Environment, Forests and Climate Change,  
Indira Paryavaran Bhawan,  
Jor Bagh Road, Ali Ganj, Lodi Colony,  
New Delhi, Delhi 110003

**Sub: Submission of information for the Additional Information Sought (ADS) For Environmental Clearance for the proposed production of 3,40,000 Tonnes/Annum of Silica sand mine of M/s. Sri Kumaraswamy Silica Mine located over an extent of 129.866 Ha in Survey No 695/22 of Momidi Village, Chillakur Mandal, S.P.S.R Nellore District, Andhra Pradesh-reg.**

**Ref: (1) Proposal no. IA/AP/MIN/74145/2018  
(2) TOR issued by MOEF & CC (Violation) vide 23-238/2018-IA.III (V), dated 15th November, 2018  
(3) EAC meeting dated 26.02.2019  
(4) ADS Raised by Ministry on 08.03.2019**

Dear Sir,

We thank you for giving us opportunity to present our case on 26.02.2019. As the points raised vide ADS reference (4), we are herewith enclosing point wise replies

We request the Ministry to process our proposal for grant of Environmental Clearance

Thanking you,  
Yours faithfully,



**Sri P. Ravindra Kumar Reddy**  
**Partner,**  
**M/s. Sri Kumaraswamy Silica Mine**

**Encl. as above**

**CLARIFICATIONS TO THE POINTS  
RAISED BY MoEFCC VIDE ADS DATED 08.03.2019**

**ON  
SRI KUMARASWAMY SILICA MINE  
At  
Survey No 695/22  
Momici Village, Chillakur Mandal,  
S.P.S.R. Nellore District, Andhra Pradesh**

**AREA OF MINING LEASE : 129.866 Ha  
(NON FOREST LAND)**

**3,40,000 Tonnes/Annum of Silica Sand Production**

**March, 2019**

**By  
M/s. SRI KUMARASWAMY SILICA MINES**

*Prepared By*



**B.S. ENV-TECH (P) LTD  
Secunderabad - 500 017**

**NABET Accreditation No: NABET/EIA/1619/SA064**

**Point – 1 : Capital cost of the proposal is to be revised including land cost and other expenditure.**

**Submission :**

The revised capital cost of the proposal is given below

		<b>Capital Cost Rs in Lakhs</b>
Land cost (dead rent paid to Govt of Andhra Pradesh for lease)		25
Mining Machinery		60
Fencing Cost	Along sona kaluva	3
	Along other sides of ML boundary	8
Infrastructure	Mine office, rest room and others	6
<b>Total</b>		<b>82.0</b>
<b>Environmental Management Plan</b>		<b>20.36</b>

**Point – 2 : A detail safety measure for the varava canal (sona kaluva) which is an irrigation canal passes between the two blocks of the mining lease area is to be submitted**

**Submission :**

Varava (Sona) Kaluva (also known locally as Sona Kaluva) is passing through the mining lease area (outside the ML Boundary). On 02-07-2015, ADMG, Nellore vide Notice No. 2634/NGT/2015 informed the Mining lease holders to leave safety barrier of 50 m on either side of Sona Kaluva.

Embankments with sand on either side of Sona Varava (Sona) Kaluva are existing. A view of the embankments on Kaluva is shown below



SKS will abide by the DMG order and no mining will be carried out on the 50 m safety zone.

Additionally SKS will take up following for protection of Kaluva

- Garland drain will be developed on both side of sona kaluva beyond 50 m safety zone to prevent runoff into the kaluva.
- Fencing will be provided on both side of the Kaluva
- SKS will plant a row of Casurina on both sides of Kaluva beyond 50 m zone as per the below program with a spacing of 1.5 m.

	<b>Number of Saplings</b>	<b>Plantation Cost</b>	<b>Total Rs Capital cost</b>	<b>Recurring cost (Rs)</b>
Western side = 0.8 Ha	2460	Rs *10 /- sapling	Saplings cost – Rs 24600	62000
Eastern side = 0.84		Plantation charges Rs 90 /-	Plantation charges– Rs 221400	
<b>Total</b>	2460	100 /- per sapling	246000	62000

\*as per social forestry, the sapling cost of 2.5 Paise/unit

**Point – 3 : Water quality analysis of varava canal is to be submitted**

**Submission :**

The water quality analysis of Varava Canal is already submitted (Reference Page – 119 of Final EIA Report). Test Report was enclosed as Annexure- 7 A(II) in the Final EIA Report submitted to MOEFCC. However, as per the MOEFCC ADS, a fresh sample was collected and analysis of the same is enclosed as **Annexure – 1**.

**Point – 4 : Revised land use pattern of mine area including stocking area is to be submitted**

**Submission :**

The revised land use pattern of mine area including stocking area is given below

**REVISED LAND USE PATTERN OF MINE AREA (HA)**

<b>S.NO.</b>	<b>LANDUSE</b>	<b>PRESENT</b>	<b>LIFE OF THE MINE</b>
1	Excavation (voids only)	72.20	110.0
2	Roads	10.54	0.0
3	Mine infrastructure	0.05	0.0
4	Greenbelt		
	Greenbelt on either side of Sona Kaluva with caurina plantation	0	1.64
	Greenbelt in 7.5 m barrier zone on periphery of the ML boundary	0	3.60
5	Safety Barrier for road and Canal	14.27	14.27
6	Others		
	Sand stocking area (temporary)	0.39	0.00
	Garland drain (on either side of Varava Canal)	0.16	0.16
	Undisturbed area	32.25	0.24
	<b>Total</b>	129.86	129.86

**Point 5 : Detail of garland drain to protect the canal is to be submitted**

**Submission :**

No surface runoff is expected from the Mining Lease area due to the porous nature of the strata. The same can be seen from the following two photograph

Closer view of Photograph of the surface of ML area is shown below

**Surface of ML area**



**Surface of ML area (with 15 lit poured in a given space)**



Based on the studies carried out, the rainwater accumulated in the mine pits during rain contribute to the water flow into the Sona Varuva canal. The garland drain will have the following impact on Varuva canal

- a. The garland drain formed on either side (incase of water accumulation) will result in weeping holes on the walls of varuva canal which will disturb the embankment
- b. The garland drain formed will be at higher altitude than the existing pits which will not collect any run off due to (1) sandy nature of the strata and (2) mined-out pits are existing the path of runoff.

However as per the advice of MoEFCC, garland drain of 810 m on eastern side and 800 m on western side of the kaluva beyond 50 m safety zone will be formed. Since the quantity of runoff could not be established due to constraints of the strata, garland drain of 1 m wide with 0.6 m depth is proposed.

**Point - 6 : Revised greenbelt plan along with final mine closure plan is to be submitted**

**Submission :**

The greenbelt plan has been revised considering development of greenbelt within the mining lease area as per the advice of MoEFCC. The Plan showing greenbelt is enclosed as **Annexure - 2**. The details of revised greenbelt are given below

**REVISED GREENBELT DEVELOPMENT PLAN**

	<b>Area (Ha)</b>	<b>No of saplings</b>	<b>Type of saplings Proposed</b>	<b>Year of Development</b>	<b>Cost per sapling</b>	<b>Total capital (Rs)</b>	<b>Recurring cost (Rs)</b>
Greenbelt on either side of Sona Kaluva with caurina plantation	1.24 Ha	1860	Casurina	First year - 1.24 Ha	Rs *10 /- sapling  Plantation charges Rs 90 /-	Saplings cost - Rs 78,600 /-  Plantation charges- Rs 7,07,400 /-	2,00,000
Greenbelt in 7.5 m barrier zone on periphery of the ML boundary	4.00 Ha	6000		Second year- 2.0 Ha			
				Third year 2.0 Ha			
<b>Total</b>	<b>5.24</b>	<b>7860</b>		Completion in three years		<b>7,86,000 /-</b>	<b>2,00,000</b>

Final mine closure along with revised greenbelt is enclosed as **Annexure - 3**

**Point - 7 : AAQ modelling needs to be revisited and submitted by considering the movement of trucks without control measures and with control measures**

**Submission :**

The AAQ modelling has been revised considering movement of trucks with and without control measures. The report on the same along with isopleths is enclosed **Annexure - 4** Summary of the Ground level concentrations is given below

**PREDICTED GROUND LEVEL CONCENTRATIONS AND OVERALL SCENARIO,  $\mu\text{g}/\text{m}^3$**

			Particulate Matter - PM <sub>10</sub>				
<b>Scenario - 1</b>	<b>Fugitive dust Emissions from Vehicular movement on Haul road of ML area</b>	<b>Without control measures</b>	Baseline concentration, max		58.2		
			Predicted Ground level Concentration (Max)		25		
			Overall Scenario		83.2		
		<b>With control Measures</b>	Baseline concentration, max		58.2		
			Predicted Ground level Concentration (Max)		2.5		
			Overall Scenario		60.7		
			<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>HC+NO<sub>x</sub></b>	<b>CO</b>	
<b>Scenario - 2</b>	<b>Emission from Vehicular Exhaust and Excavator Exhaust</b>	Baseline concentration, max		58.2	14.5	16.3	1144
		Predicted Ground level Concentration (Max)		0.128	0.82	1.15	9.6
		Overall Scenario		<b>58.32{100} 24-Hourly</b>	<b>15.32{80} 24-Hourly</b>	<b>17.45{80} 24-Hourly</b>	<b>1153.5 (2000) 8-hourly standard</b>

*NOTE: Values in parenthesis are National Ambient Air Quality (NAAQ) standard limits specified for Industrial, Residential, Rural and other areas.*

**Point - 8 : Water requirement need to be revised as per greenbelt plan and submitted**

**Submission :**

Greenbelt development program is drawn for three year as per the reply provided in point. Total number of sapling proposed for plantation area about 7860 nos. Considering agro climatic conditions of the area, green belt is proposed with Casurina species which grow well in sandy loam soils. These species are sensitive to forst conditions and excessive moisture in the soil. These species require water once in 10-12 days. Considering this, about 5 lit /sapling thrice in a month is considered and is average on daily basis as per the below calculation

Total number of saplings : 7860  
 Number of times water required in a month : 3  
 Water requirement per sapling considered : 5 lit

Total water requirement per month = 7860\*3\*5 = 117900 lit/month  
 (3.9 m<sup>3</sup>/day say 4.0 m<sup>3</sup>/day averaged to 30 days)

**WATER REQUIREMENT OF THE MINE**

Sno	Purpose	Requirement (m <sup>3</sup> /day)
1	Dust Suppression (worked out for worst cast of 1000 m lead length @ 0.2 lit/m <sup>2</sup> /hr for 8 hours)	8.0
2	Drinking purpose @ 4 lit/head for 35 persons	0.2
3	Sanitation purpose @ 50 lit/head for 35 persons	1.8
4	Greenbelt Development (given in the above paragraphs)	4.0
	<b>Total</b>	<b>14.0</b>

**Point - 9 : CER is to be revised as per the revised capital cost**

**Submission :**

The CER budget requirement based on Revised Capital cost of Rs 1.23 Crores in accordance to the MoEFCC's office Memorandum # F.No. 22-65/2017-IA.III dated 01.05.2018 is Rs 0.024 Crores (Rs 2.4 Lakhs) (2% considering the mine as greenfield project). The CER budget alongwith various activities for Rs 2.7 Lakhs proposed is given below

**BUDGET FOR CORPORATE ENVIRONMENT RESPONSIBILITY (CER)**

Activity	Unit Cost (Rs)	Total (Rs)
SK has identified Momidi Village which is jurisdiction village for providing the following infrastructure.		
Solar street lights - 5 Nos	4000	20,000
Community Toilet - 4 locations	50,000	2,00,000
Sewing machines to women - 20 Nos	1500 per machine	30,000
Distribution of sanitary napkins to surrounding school girls - 200 girls	100 per month per girl	20,000
<b>TOTAL</b>		<b>2,70,000</b>

**Point - 10 : EMP is to be revised by incorporating water sprinkling, greenbelt plan. Detailed EMP cost for both capital investment and recurring cost is to be prepared for all the environmental attributed and submitted**

**Submission :**

The EMP budget (given below) has been revised considering water sprinkling and revised greenbelt development plan.

**BUDGET FOR REVISED ENVIRONMENTAL MANAGEMENT PLAN**

<b>S.No.</b>	<b>Environment</b>	<b>EMP Measure</b>	<b>Capital Cost in Rs</b>	<b>Recurring Cost</b>
1	Air Environment	Dust Suppression (using Tanker)	6.0	1.0 (Maintenance and purchase of water)
2	Water Environment	Garland Drains – Length of drains –1660 M	2.0	0.2
		Check Dams (2 nos)	1.0	0.10
3	Land Environment	Greenbelt 7860 saplings	7.86	2.0
4	Occupation Health	Personal Protection Equipment for 35 persons	0.50	0.5
		Occupational Health test for 35 workers	1.00	1.0
7	Environmental Monitoring & Compliance to the conditions of EC	Monitoring of air with three stations and water of mine pit and Varuva (sona Kaluva)	2	8.0
<b>Total</b>			<b>20.36</b>	<b>12.8</b>

**Point – 11 : Details of aquatic fauna & flora need to be submitted**

**Submission**

The aquatic fauna and flora of Varuva (sona) Kaluva is enclosed as **Annexure - 5**

**Point – 12 : Damage assessment need to revised covering 80.35 ha mining area and submitted. Revised remediation plan as per the damage assessed, revised natural and community resource augmentation plan is to be submitted**

**Submission :**

Damage assessment has been revised covering 80.35 ha mining area. The revised damage assessment plan alongwith revised remediation plan along with natural and community resource augmentation plan is enclosed as **Annexure – 6.**

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**Point - 13 :**      **Clarification about the name of the canal**

**Submission :**

The name of Canal is Varava (Sona) Kaluva.



# B.S. ENVI - TECH PVT. LTD.

Recognized by MoEF & CC, Gol: Valid upto August, 2022

## TEST REPORT

Annexure - 1 **23**



Certificate No: TC-5233

BSET/TR/FORM -56

<b>Name &amp; Address of the Customer :</b> M/s. Sri Kumar Swamy Silica Mines, Mommidi Village, Chillakur Mandal, SPSR Nellore Dist, Andhra Pradesh.		<b>Test Report No. :</b> BSET/18-19/TR- 02446	
		<b>Lab Code No. :</b> 190805403	
		<b>Issue Date :</b> 15.03.2019	
		<b>Your Ref :</b> Letter Dated : 11.03.2019	
		<b>Date of Receipt :</b> 11.03.2019	
<b>Sample Description:</b> Surface Water Sample		<b>Date of Registration</b>	11.03.2019
<b>Qty :</b> 1 No. x 2 Ltrs Sample		<b>Date of commencement of testing</b>	11.03.2019
<b>Packing :</b> Plastic Bottle		<b>Date of completion of testing</b>	15.03.2019
<b>Test Required :</b> As given below		<b>Sample condition at receipt</b>	Found ok
		<b>Sample tested as received</b>	
<b>Sampling Details</b>			
<b>Date of Sampling:</b> 10.03.2019		<b>Sampling Method/Procedure:</b> IS 3025 Part 1	
<b>Location of Sampling:</b> Sample -1		<b>General Environment conditions:</b> Ok	
		<b>Page No:</b> 1 of 1	

### TEST RESULTS

S. No.	Test Parameter	Units	Test Method	Result	Requirement as per IS 10500:2012	
					Acceptable limits	Permissible limits in absence of alternative source
*1	Odour	--	IS:3025 -Part-5	Agreeable	Agreeable	Agreeable
2	Colour	Hazen Units	IS:3025 -Part-4	< 5	5	15
3	pH	--	IS:3025- Part-11	7.22	6.5-8.5	No Relaxation
4	Turbidity	NTU	IS:3025 -Part-10	5	1	5
5	Total Hardness as CaCO <sub>3</sub>	mg/l	IS:3025 -Part-21	65	200	600
6	Iron as Fe	mg/l	IS:3025 -Part-53	0.12	1.0	No Relaxation
7	Chlorides as Cl	mg/l	IS:3025 -Part-32	13	250	1000
8	Total Dissolved Solids @ 105°C, mg/l	mg/l	IS:3025 - Part-16	132	500	2000
9	Calcium as Ca	mg/l	IS:3025- Part-40	19	75	200
10	Magnesium as Mg	mg/l	IS:3025 -Part-46	4.4	30	100
11	Sulphate as SO <sub>4</sub>	mg/l	4500-SO <sub>4</sub> E, Turbidity Method, APHA 23 <sup>rd</sup> Edition 2017	< 4	200	400
12	Nitrate as NO <sub>3</sub>	mg/l	4500-NO <sub>3</sub> B Ultraviolet Spectrophotometric Screening Method	3.1	45	No Relaxation
13	Fluoride as F <sup>-</sup>	mg/l	4500-F D, APHA 23 <sup>rd</sup> Edition 2017	< 0.1	1	1.5
14	Total Alkalinity as CaCO <sub>3</sub>	mg/l	IS:3025 -Part-23	77	200	600
15	Boron as B	mg/l	4500-B B. Curcumin Method, APHA 23 <sup>rd</sup> Edition 2017	< 0.1	0.5	2.4
*16	Dissolved Oxygen (DO)	mg/l	IS:3025 -Part-38	5.3	-	-
*17	COD	mg/l	IS:3025 - Part-58	12	-	-
*18	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	2	-	-

\*Indicates the parameter not covered in NABL scope, Deviation from test method: Nil, Interpretation of results: Nil

Authorized Signatory  
(A.V. Hanumantha Rao)  
Director - Laboratory

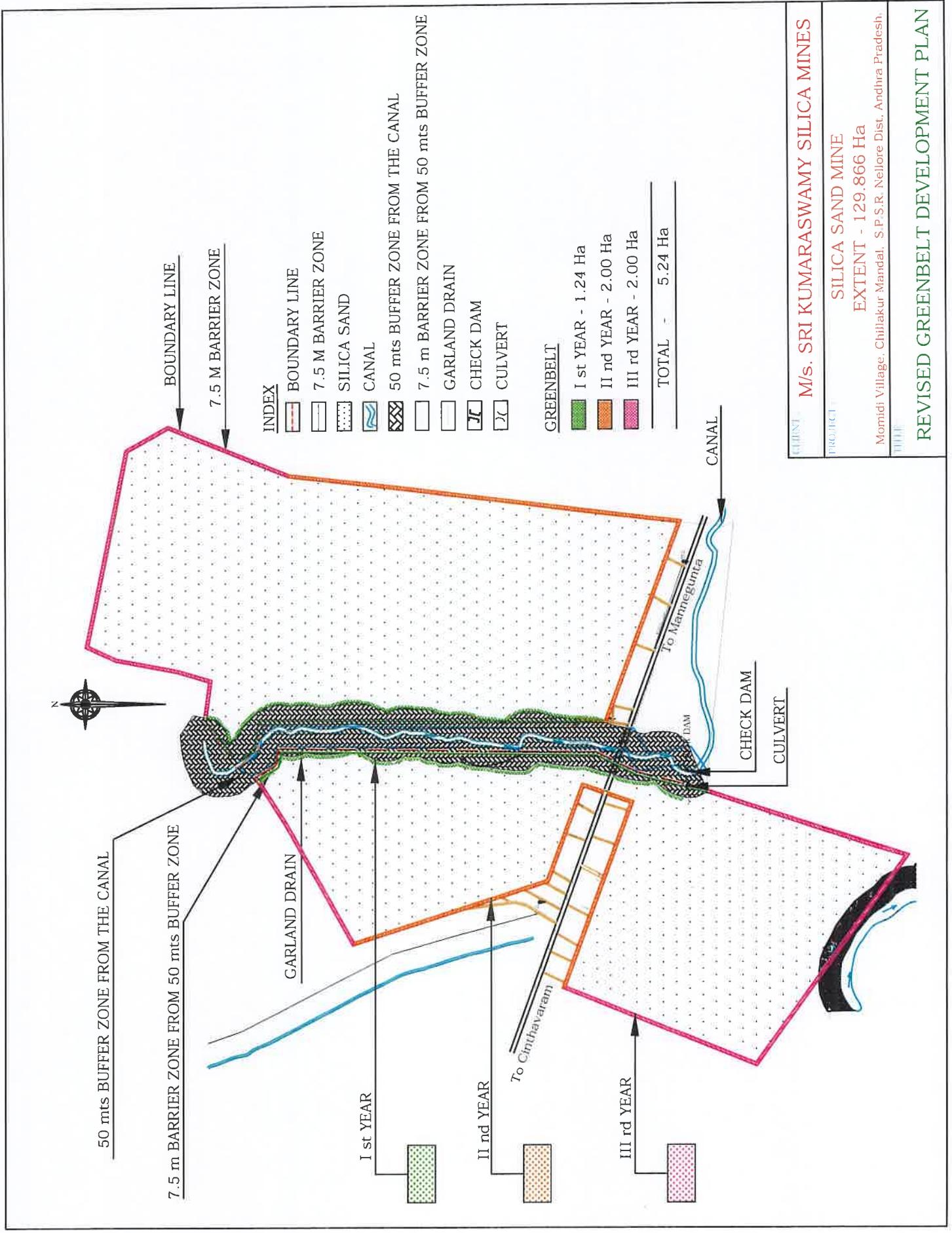
\*\*\* End of the Report \*\*\*

Note: This report is subject to the terms and conditions mentioned overleaf.

\*Complaints Register is available at Laboratory.

4<sup>th</sup> Floor, 'AMITY VILLE', 12-13-1270/71/73,  
St. Ann's Road, Tarnaka,  
Secunderabad - 500017,  
Telangana, India

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063  
Email : lab@bsenvitech.com, info@bsenvitech.com  
Website : www.bsenvitech.com  
CIN No. : U74210TG1999PTC032358



CLIENT	M/s. SRI KUMARASWAMY SILICA MINES
PROJECT	SILICA SAND MINE
	EXTENT - 129.866 Ha
LOCATION	Momidi Village, Chitlakur Mandal, S.P.S.R. Nellore Dist, Andhra Pradesh.
<b>REVISED GREENBELT DEVELOPMENT PLAN</b>	

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**ANNEXURE-3**

**FINAL MINE CLOSURE PLAN**

**Sri Kumaraswamy Silica Mines  
Momidi Village, Chillakur Mandal,  
S.P.S.R. Nellore District,  
Andhra Pradesh.**

<b>S.NO.</b>	<b>CONTENT</b>
<b>1.0</b>	<b>INTRODUCTION</b>
1.1	Reasons for Closure
1.2	Statutory obligations
1.3	Closure plan preparation
<b>2.0</b>	<b>MINE DESCRIPTION</b>
2.1	Geology
2.2	Reserves
2.3	Mining Method
2.4	Mineral Beneficiation
<b>3.0</b>	<b>CLOSURE PLAN</b>
3.1	Mined-Out Land
3.2	Water Quality Management
3.3	Air Quality Management
3.4	Waste Management
3.5	Top Soil Management
3.6	Infrastructure
3.7	Disposal of Mining Machinery
3.8	Safety and Security
3.9	Disaster Management and Risk Assessment
<b>4.0</b>	<b>MANPOWER RETRENCHMENTS</b>
<b>5.0</b>	<b>TIME SCHEDULING FOR ABANDONMENT</b>
<b>6.0</b>	<b>ABANDONMENT COST</b>

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## 1.0 INTRODUCTION

The lessee is **Sri Kumaraswamy Silica Mines (SK)**.

The mining lease area of 129.866 Ha is in Sy. No. 695/22 of Momidi Village, Chillakur Mandal, S.P.S.R. Nellore District, Andhra Pradesh.

Entire mining lease area is non forest land Government Land. The present land use and conceptual land use pattern is given below

**LAND USE PATTERN OF MINE AREA (HA)**

S.NO.	LANDUSE	PRESENT (PRE OPERATIONAL)	LIFE OF THE MINE
1	Excavation (voids only)	72.20	110.0
2	Roads	10.54	0.356
3	Mine infrastructure	0.05	0.00
4	Greenbelt	Greenbelt on either side of Sona Kaluva with caurina plantation	1.64
		Greenbelt in 7.5 m barrier zone on periphery of the ML boundary	3.60
5	Safety Barrier for road and Canal	14.27	14.27
6	7.5 m barrier zone	5.24	5.24
7	Others	Sand stocking area (temporary)	0.39
		Garland drain (on either side of Varava Canal)	0.16
		Undisturbed area	27.016
	<b>Total</b>	<b>129.866</b>	<b>129.866</b>

Mining will be carried out to a depth of 2.5 m with open cast semi mechanized method. No mineral processing is done within ML area

### 1.1 Reasons for closure:

The mine will be closed at the end of 20 years after exhaustion of the mineral.

### 1.2 Statutory obligations:

All statutory conditions imposed by the Ministry of Environment and Forests and APPCB will be complied from the opening of the mine to the closure of the mine

### 1.3 Closure plan preparation:

At the time of exhaustion of the mineral, SKS will resolve to close the mine after meeting all the statutory obligations and get the permission for closure by preparing the closure plan as get it approved by relevant statutory bodies

## 2.0 MINE DESCRIPTION:

### 2.1 Geology:

Local geology and Lithology of the area is as follows:

Silica sand	Silica sand 2.0 to 2.5 m thick.
Fine grade sandy soil	Sand with sedimentation of clayey material.
Schists and other rocks	Below 6m (not confirmed in any of the existing operating mines).

The area is fully sandy in appearance throughout. Therefore the geological sequences are referred in general way.

### 2.2 Reserves:

Indicate the mineral reserves available category wise in the lease area estimated in the last mining plan / mining scheme approved along with the balance mineral reserves at the proposed mine closure including its quality available ( for final mine closure plan only).

Reserves blocked under the 7.5m barrier zone : 4,20,000 T  
 Reserves blocked under 50m canal safety zone: 1,98,562 T  
 Mineable reserves : 69,11,000 T

*Source: Mining Plan, 2017*

### 2.3 Mining Method:

Mining method adopted is Semi Mechanised Method using excavator. No drilling or blasting are involved

### 2.4 Mineral Beneficiation:

No mineral processing is done within ML area

### 3.0 CLOSURE PLAN:

#### 3.1 Mined-Out Land:

The proposal for reclamation of mined-out land and the manner in which the site will be restored for future use is given below. The site being a Govt Land. With below reclamation, the site will be handed to Govt of Andhra Pradesh.

**REVISED LAND USE PATTERN OF MINE AREA (HA)**

S.NO.	LANDUSE		LIFE OF THE MINE	RECLAMATION
1	Excavation (voids only)		110.0	Aqua Ponds with pisciculture
4	Greenbelt	Greenbelt on either side of Sona Kaluva with caurina plantation	1.64	2460 trees of caurina
		Greenbelt in 7.5 m barrier zone on periphery of the ML boundary	3.60	5400 trees of caurina
5	Safety Barrier for road and Canal		14.27	Will remain undisturbed
7	Others	Garland drain (on either side of Varava Canal)	0.16	Will be retained
		Mine infrastructure and others	0.24	Dismantled and Levelled
<b>Total</b>			129.86	

#### 3.2 Water Quality Management:

No water bodies are existing within ML area.

Varava (Sona) Kaluva (also known locally as Sona Kaluva) is passing through the mining lease area (outside the ML Boundary). On 02-07-2015, ADMG, Nellore vide Notice No. 2634/NGT/2015 informed the Mining lease holders to leave safety barrier of 50 m on either side of Sona Kaluva.

SKS will abide by the DMG order and no mining will be carried out on the 50 m safety zone.

Additionally SKS will taken up following for protection of Kaluva

- Garland drain will be developed on both side of sona kaluva beyond 50 m safety zone to prevent runoff into the kaluva.

- Fencing will be provided on both side of the Kaluva
- SKS will plant a row of casurina on both sides of Kaluva beyond 50 m zone as per the below program with a spacing of 10 m.

The quality of water at the time of operation of the mine is given below

Water quality

The quality of water will be verified at the time of closure of the mine to take corrective measures to meet the water quality conforming the permissible limits. However the silica being stable mineral. No adverse impact on water quality is anticipated

A detailed hydrological study carried out has been carried out and the same was submitted to MoEFCC.

### 3.3 Air Quality Management:

The air quality status of the mining lease area and 10 km radius monitored for two seasons is given below

Code No	Location Name	With respect to MINE site		98 <sup>th</sup> Percentile values (ug/m <sup>3</sup> )			
		Distance (km)	Direction	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>
<b>Winter '15-16</b>							
A1	Mine Site	---	---	64.7	29.6	12.8	14.5
A2	Momidi Village	0.7	WNW	64.1	24.2	11.2	12.6
A3	Varagali Village	1.2	NNE	57.8	25.7	12.5	13.0
A4	Appichattitadulu Village	2.3	N	57.4	24.7	12.6	14.1
A5	Komaravaripalem Village	4.3	SSE	56.8	23.1	10.9	12.6
A6	Yeruru Village	1.1	SW	55.4	25.3	10.8	12.7
<b>November '18</b>							
A-1	Mine Site	---	---	51.4	24.1	14.2	15.2
A-2	Momidi Village	0.7	WNW	58.2	26.4	14.5	16.3
A-3	Varagali Village	1.2	NNE	61.6	33.6	18.1	23.0
A-4	Appichattitadulu Village	2.3	N	43.2	21.9	19.0	22.6

A-5	Komaravaripalem Village	4.3	SSE	49.3	28.0	13.1	16.0
A-6	Yeruru Village	1.1	SW	48.4	20.7	12.4	17.9

Sand size available at mine is from 20 to 100 mesh i.e. 149 microns to 841 microns whereas PM 10 and 2.5 as per NAAQ standard is of 2.5 to 10 micro sizes. Hence the dust emission resulting in PM10 and PM2.5 during mining will not be there. However SK will take up water sprinkling for control of fugitive dust within the ML area

### 3.4 Waste Management:

No waste is generated from the mine.

### 3.5 Top Soil Management:

The top soil available at the site and its utilization may be described.

The mine is devoid of top soil. Photograph of surface of mine is shown below



### 3.6 Infrastructure:

The existing infrastructural facilities include mine office and rest shelter. These structures will be dismantled at the closure of the mine

### 3.7 Disposal of Mining Machinery:

The mine will employ one excavator which will be disposed based on the wear and tear at the end of mine life

### 3.8 Safety and Security:

The mined out area will have shallow pit of depth 2.5 m with water column of less than 0.5 m due to sandy nature of the pit bottom. The mined out pits will be fenced and handed over to the Govt. of Andhra Pradesh as the ML area is under lease with SKS

### **3.9 Disaster Management and Risk Assessment:**

The area had recently seen a major flood due to the rains. This type of rains was previously ruled out. But now taking such calamities into consideration, the preparedness is given below.

Preparedness to face disaster: The meteorological department has method of pre-warning on possible heavy rains or folds or cyclones. During any such fore warning all the machinery and persons will be withdrawn and the mining site will be evacuated. In addition to prevent inadvertent entry of persons in to the flooded area where the excavated pits cannot be observed, long poles will be grouted in to the mined out areas before the men and machinery are withdrawn. Additionally warning boards in local language will be displayed in such a manner that they will not be disturbed. The area will be fenced to prevent entry of persons.

For the protection of mine and mined – out pits the watchman will be engaged when mine is temporarily discontinued.

### **4.0 MANPOWER RETRENCHMENT:**

At the end of mine life, the manpower employed will be supported by paying the salaries for one year so that they look for other employment avenues

**5.0 TIME SCHEDULING FOR ABANDONMENT:**

	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.	6 <sup>th</sup> Yr.	7 <sup>th</sup> Yr.	8 <sup>th</sup> Yr.	9 <sup>th</sup> Yr.	10 <sup>th</sup> Yr.	11 <sup>th</sup> Yr.	12 <sup>th</sup> Yr.	13 <sup>th</sup> Yr.	14 <sup>th</sup> Yr.	15 <sup>th</sup> Yr.	16 <sup>th</sup> Yr.	17 <sup>th</sup> Yr.	18 <sup>th</sup> Yr.	19 <sup>th</sup> Yr.	20 <sup>th</sup> Yr.	21 <sup>st</sup> Yr.	
Fencing of Mine																						
Greenbelt development																						
Disposal of Machinery																						
Dismantling of office structure																						
Retrenchment of Manpower																						
Handing over to Govt.																						

(when mining is reached upto the lease boundary or UPL)

**6.0 ABANDONMENT COST:**

The abandonment cost for closure of the mine is given below

**ABANDONMENT COST**

	<b>Rs in Lakhs As on 15.03.2019</b>	<b>Escalated cost At the end of 20 years @30 %</b>
Fencing of Mine	11	14.3
Disposal of Machinery	0	0
Dismantling of office structure	0.50	0.65
Mine pits converted to aqua ponds	5	6.5
Retrenchment of Manpower	6.30	8.19
<b>Total</b>	<b>22.8</b>	<b>29.64</b>

## ANNEXURE-4

**AIR QUALITY MODELLING CONSIDERING MOVEMENT OF TRUCKS**

Air quality modeling studies has been reworked based on the EAC appraisal and ADS raised considering the movement of trucks. Details of the study are presented below

The path of the trucks for movement within the ML area and outside ML area covering lead length of 2.54 km considered for modeling studies is shown in **Fig - 1**.

Fig - 1

**LEAD LENGTH CONSIDERED FOR MOVEMENT OF TRUCKS**

The following two scenarios has been worked to estimate the GLCs

## Scenario - 1

- Estimation of ground level concentration of fugitive dust (**without control measures and with control measure** i.e dust suppression) due to movement of trucks on the haul road of the ML area covering lead length of 1070 m from edge of ML (for worst case) as line source

## Scenario - 2

- Estimation of ground level concentrations of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> and CO considering emissions from exhaust of trucks covering a lead length of 2100 m from extreme edge of ML area (for worst case) to the road connecting Gudur - Mommidi Village and excavator used.

The emission details of fugitive dust considered for estimation of ground level concentrations is given in **Table - 1**

The emission details of line source from Vehicular Exhaust for estimation of impact due to movement of trucks is given in **Table - 2**

The air quality modeling has been carried out using EPA Recommended AERMOD MODEL VER 9.6.1 for Post monsoon, 2018. The incremental ground level estimated for the above scenarios are given below

**INCREMENTAL GROUND LEVEL CONCENTRATION ( $\mu\text{g}/\text{m}^3$ )**

	Scenario		PM10	Isopleth Figure Number
<b>Scenario - 1</b>	Fugitive dust emissions from Vehicular movement on Haul road of ML area	<b>Without control measures</b>	25	Fig -1
		<b>With control Measures</b>	2.5	Fig -2

		Parameter	Incremental GLC, $\mu\text{g}/\text{m}^3$	Isopleth Figure Number
<b>Scenario - 2</b>	Emission from Vehicular Exhaust and Excavator	<b>PM10</b>	0.128	Fig -3
		<b>SO<sub>2</sub></b>	0.82	Fig -4
		<b>NOx</b>	1.15	Fig -5
		<b>CO</b>	9.6	Fig -6

**OVERALL SCENARIO**

Predicted maximum cumulative ground level concentrations obtained are superimposed on the following existing baseline concentrations to project the overall post scenario in the study area.

The Overall Scenario with predicted concentrations over the base line are shown below.

**PREDICTED GROUND LEVEL CONCENTRATIONS AND OVERALL SCENARIO,  $\mu\text{g}/\text{m}^3$**

				Particulate Matter (PM <sub>10</sub> )
Scenario - 1	Emissions from Vehicular movement on Haul road of ML area	<b>Without control measures (for the Worst case)</b>	Baseline concentration, max	45
			Predicted Ground level Concentration (Max)	58.2

			Overall Scenario	103.2			
		<b>With control Measures (for the Worst case)</b>	Baseline concentration, max	4.5			
			Predicted Ground level Concentration (Max)	58.2			
			Overall Scenario	62.7			
				PM <sub>10</sub>	SO <sub>2</sub>	HC+NO <sub>x</sub>	CO
Scenario - 2	Emission from Vehicular Exhaust	Baseline concentration, max	58.2	14.5	16.3	1144	
		Predicted Ground level Concentration (Max)	0.128	0.82	1.15	9.6	
		Overall Scenario	<b>58.3</b> <b>{100}</b> <b>24-HOURLY</b>	<b>15.32</b> <b>{80}</b> <b>24-HOURLY</b>	<b>17.45</b> <b>{80}</b> <b>24-HOURLY</b>	<b>1153.5</b> <b>(2000)</b> <b>8-hourly standard</b>	

**NOTE: Values in parenthesis are National Ambient Air Quality (NAAQ) standard limits specified for Industrial, Residential, Rural and other areas.**

**Conclusion**

The ambient air quality values are not exceeding the stipulated standards when the predicted values are superimposed on the baseline value.

**Table - 1**  
**EMISSION DETAILS - FUGITIVE DUST**  
**(BASIS - AP-42: EMISSION ESTIMATION TECHNIQUE MANUAL FOR MINING)**

**Area Source : Excavation by Excavator**

Quantity, TPA		340000
Production, t/day		1030
<b>EMISSIONS</b>		
Emission of dust, g/t	PM <sub>10</sub>	0.136
Emission gm/sec		0.0024
Area of influence, m <sup>2</sup>		100
Emission rate, g/s/m <sup>2</sup>	PM <sub>10</sub>	0.000024
Uncontrolled emission		
Emission rate, g/s/m <sup>2</sup>	PM <sub>10</sub>	0.0000024
Controlled emission		

**Line Source : Transport of Silica Sand - Haulage Emissions**

Quantity, TPA		340000
Production, t/day		1030
Capacity of each truck		20
Total number of truck per day		52
Lead length per trip, km		2.14 (two way)
Total VKT per day		111.28
Emission kg/VKT	PM <sub>10</sub>	0.308
Emission in gm/sec		1.19
Emission gm/sec/m (Uncontrolled emission)	PM <sub>10</sub>	0.0011
Emission gm/sec/m (Controlled emission)	PM <sub>10</sub>	0.00011

**Note \* Emission factor computed based on wind speed of 2 m/sec and moisture of 10 %.**

**+ Emission factor computed based on silt content of 10 % and moisture content of 10%.**

**Table - 2**  
**EMISSION DETAILS - VEHICULAR EXHAUST**

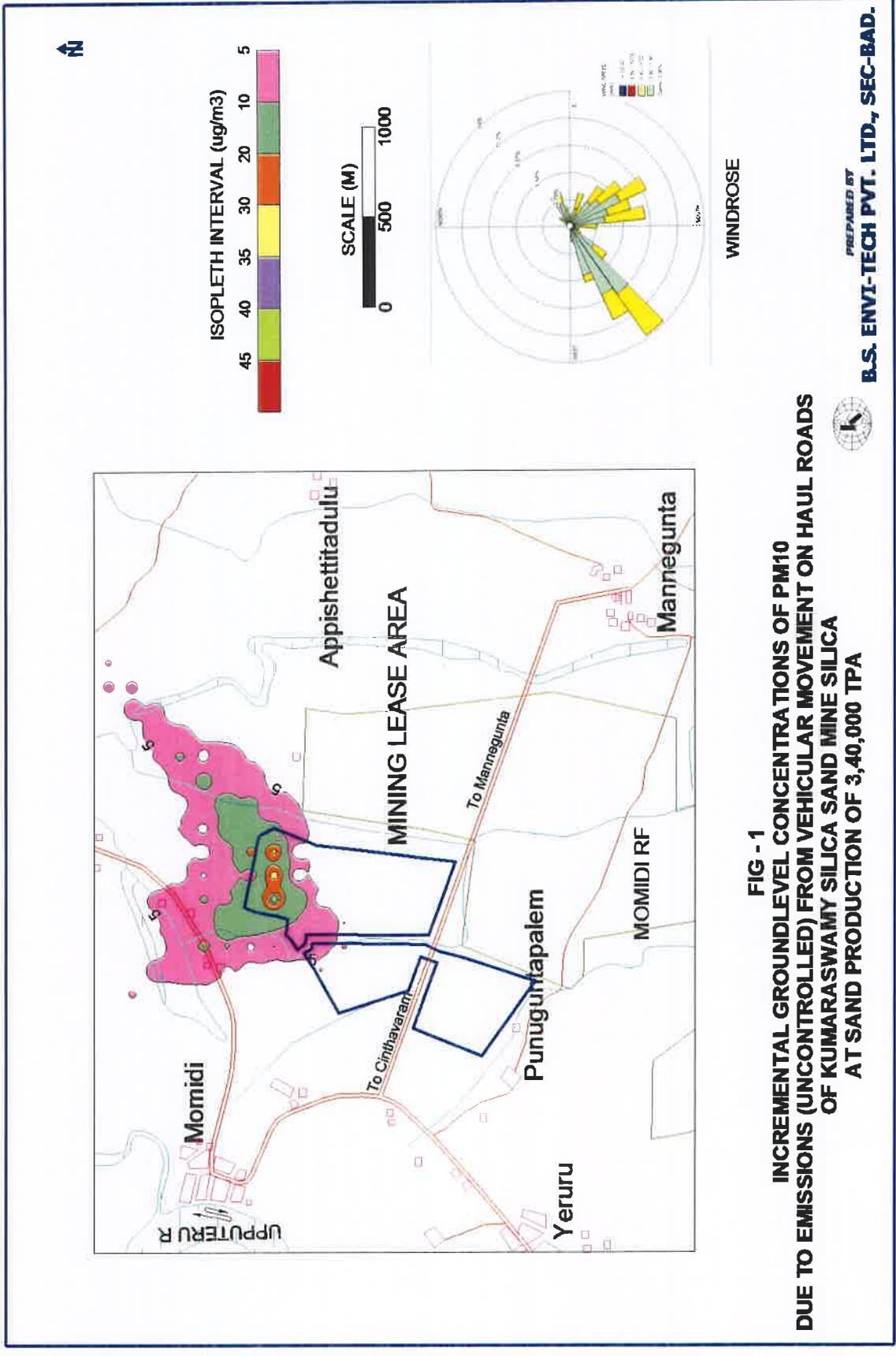
	Details
Quantity, TPD	1130
Capacity of each Truck, t	20
Total number of Truck per day (8 hours operation considered)	56
Lead length per trip, km	4.2 km (two way)
Total Vehicle km travelled per day in 8 hrs	235
Fuel Consumption (diesel consumption - truck)	0.3 lit/km
Total diesel consumption	70.5 lits (60 kg)
CO *emission factor, gm/kmhr	1.5
SO <sub>2</sub> emission factor	50 mg/kg of diesel
HC+NO <sub>x</sub> *emission factor, gm/kmhr	0.18
PM, *emission factor, gm/kmhr	0.02
Emissions (considering 300 days operation and 8 hr shift)	
CO emission rate, gm/sec/m <sup>2</sup>	5.80952E-06
SO <sub>2</sub> emission rate, gm/sec/m <sup>2</sup>	4.95238E-07
HC+NO <sub>x</sub> emission rate, gm/sec/m <sup>2</sup>	8.57143E-05
PM <sub>10</sub> , emission rate, gm/sec/m <sup>2</sup>	7.61905E-08

Source \*Emission Factors as per CPCB stipulated for heavy vehicles (diesel) as per Bharat Stage IV

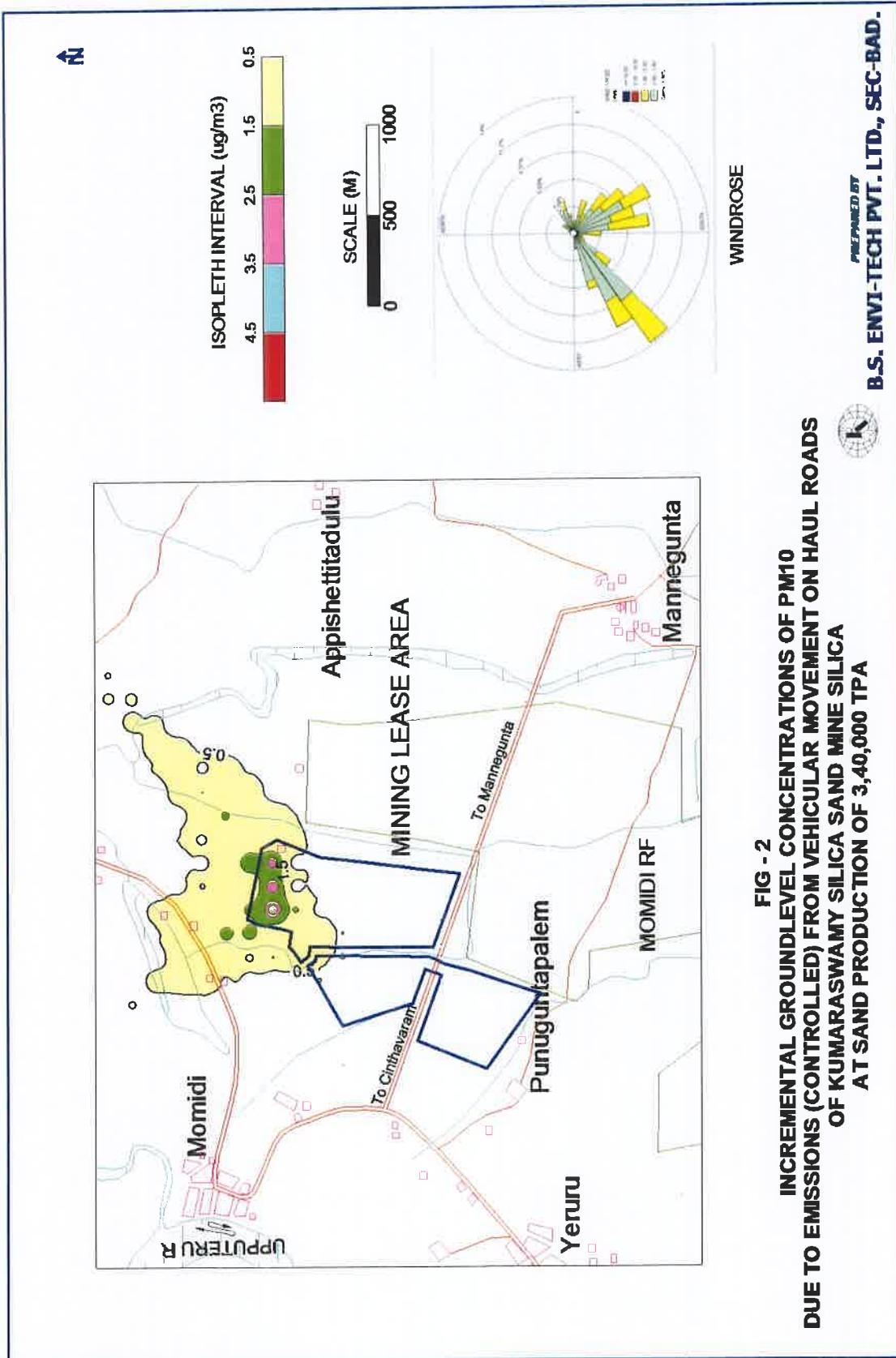
**EMISSION DETAILS - EXCAVATOR EXHAUST**

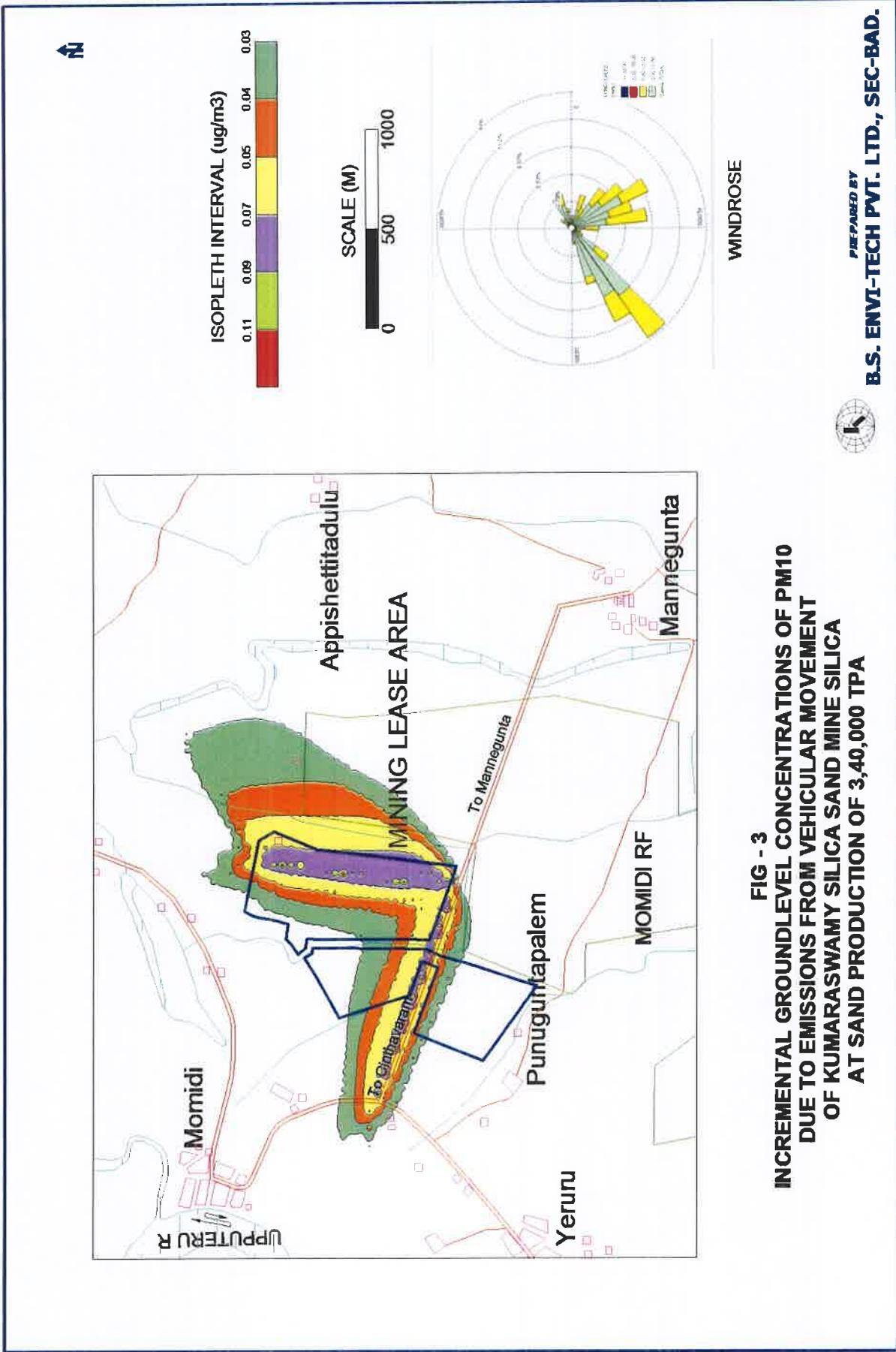
<b>Excavator</b>		
HP		57
working Hours /day		8
No.of HPhrs/day		456
Emission g/Hphr	*SO <sub>2</sub>	0.74
	*CO	1.3
Emission, g/sec	SO <sub>2</sub>	0.0117 g/sec
	CO	0.0205 g/sec

Source : AP-42



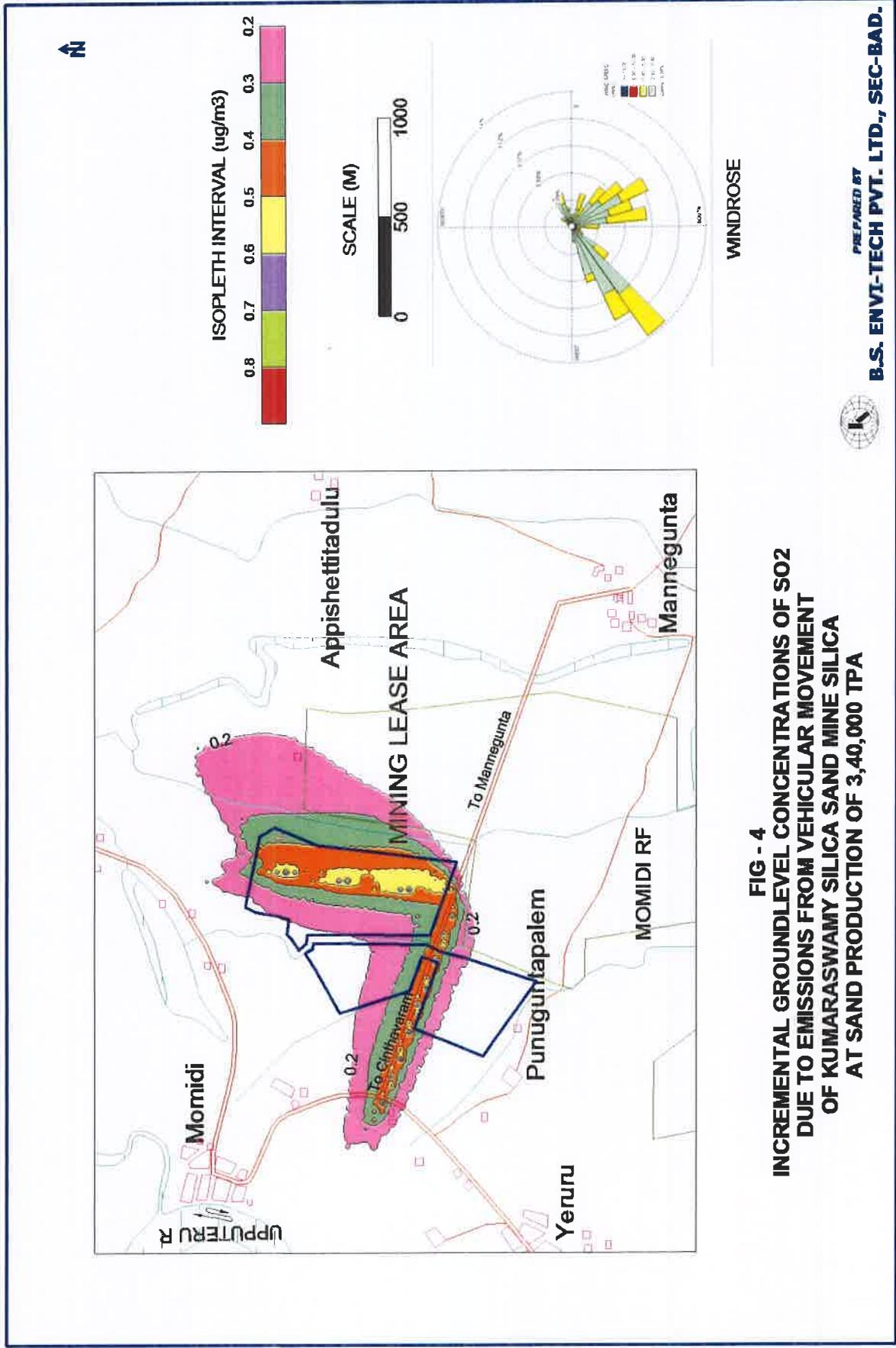
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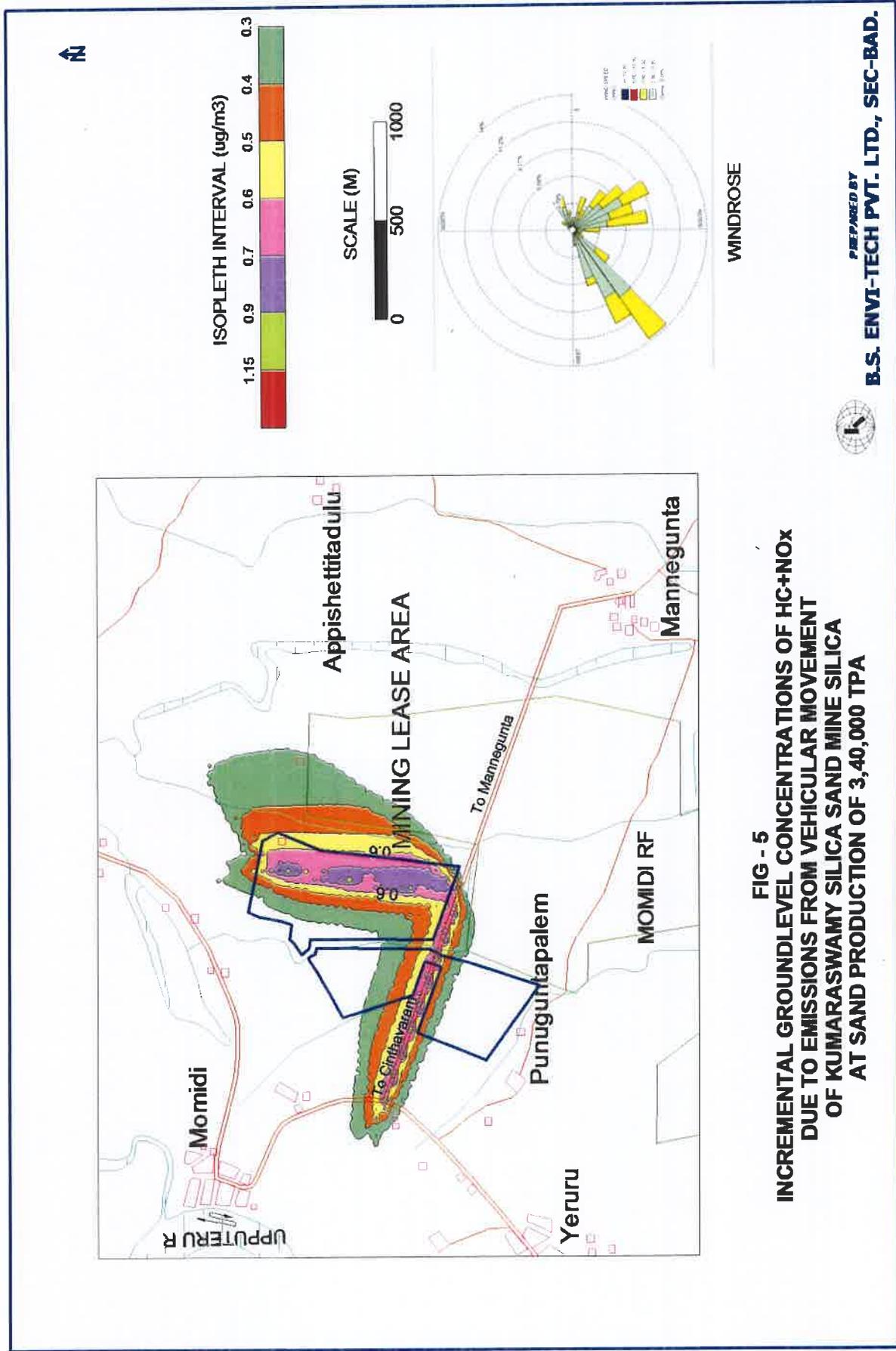


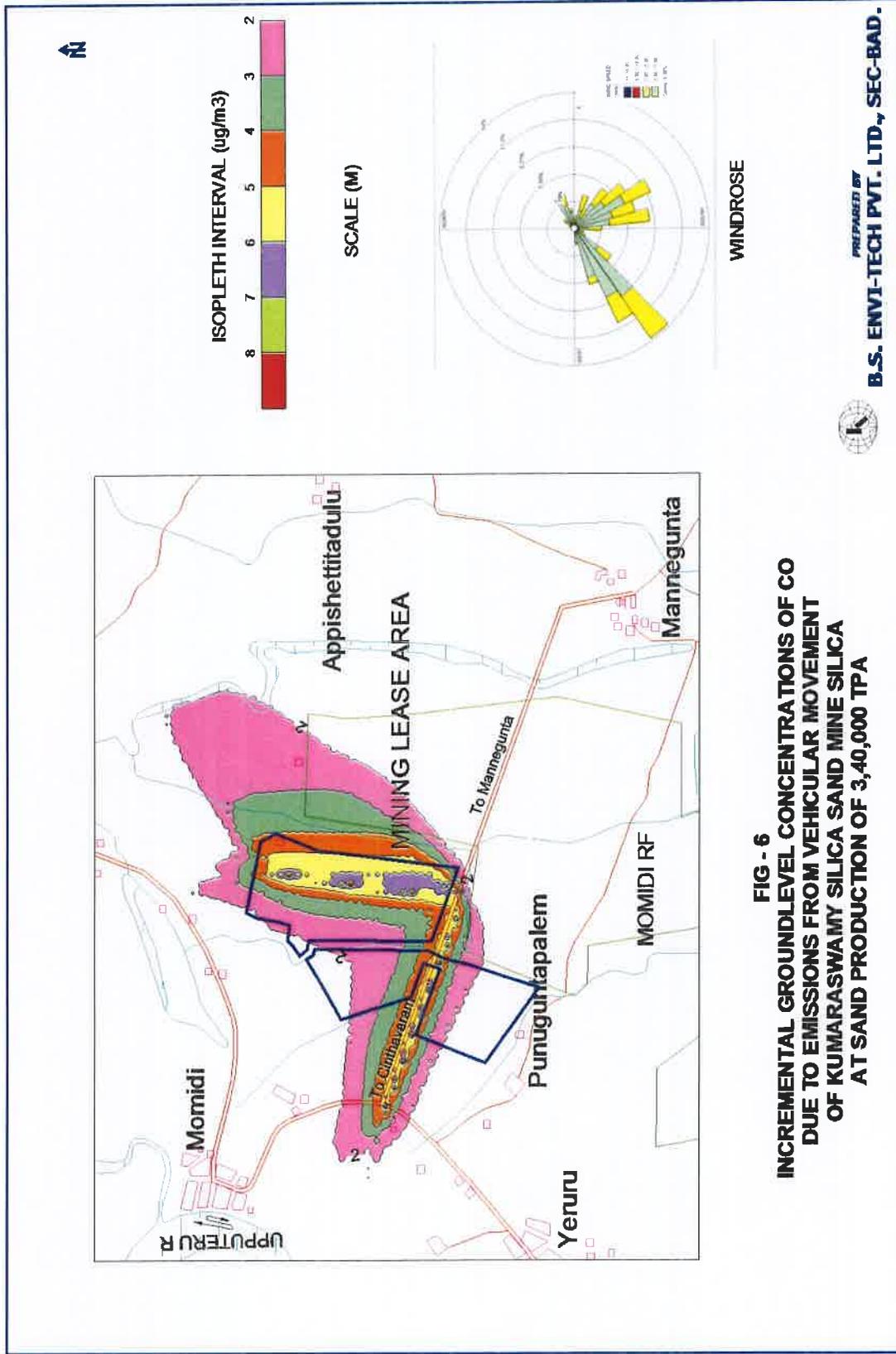


**FIG - 3**  
**INCREMENTAL GROUNDLEVEL CONCENTRATIONS OF PM10**  
**DUE TO EMISSIONS FROM VEHICULAR MOVEMENT**  
**OF KUMARASWAMY SILICA SAND MINE SILICA**  
**AT SAND PRODUCTION OF 3,40,000 TPA**









**ANNEXURE-5**

**AQUATIC FLORA AND FAUNA OF VARAVA (SONA) KALUVA)**

Aquatic Floral and Faunal studies of Varava (Sona) Kaluva have been carried out. The details of the aquatic flora and faunal species along with phytoplankton and zooplankton are given below

**Aquatic Flora and Fauna**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Observed</b>
<b><i>Sagittaria Lanceolata</i></b>	<b>Arrow Head</b>	On the bank of canal.
		<p>Sagittaria plant stock (the perennial rhizome) is a horizontal creeper (stoloniferous) and obliquely obovate, the margins winged, with apical or ventral beak; in other words, they are a small, dry, one-seeded fruit that do not open to release the seed, set on a slant, narrower at the base, with winged edges, and having a "beaked" aperture (one side longer than the other) for sprouting, set above or below the fruit body.</p> <p>In late fall or early spring, disturbing the aquatic mud in which the plant grows will cause its small tubers to float to the surface where they can be harvested, and then boiled.</p>
<b>Scientific Name</b>	<b>Common Name</b>	<b>Observed</b>
<b><i>Vallisnaria spiralis</i></b>	<b>Panchadub</b>	On the bank of canal.
		<p>Eel Grass is a stem-like submerged herb with coarse, up to 10 cm long, round runners. Leaves arise from root, linear-oblong, ribbon-shaped, upto 50 cm long, 1-1.5 cm broad, faintly 7-9-costate, costae parallel. intercostals present, longitudinally brown-black striped, margins faintly finely toothed to entire, blunt. Male spathes oblong, about 6 mm long, flower-cluster-stalks 2-3 cm long. Male flowers flower-stalklate, about 0.5 mm across; sepals unequal, recurved; stamen solitary by fusion or 2, erect. Female spathe 1-2 cm long, enveloping the ovary to more</p>

than half its length, bilobed at tip, flower-cluster-stalk thread-like, longer to nearly as long as leaves, spirally coiled in fruit. Female flower: solitary; sepals ovate-oblong. 1.5-4 mm long, about 1-2 mm broad, blunt, persistent; ovary 1.5-2.5 cm long, styles 3. bifid, alternating with the scarious rudimentary petals, stigmas hairy. Fruit is up to 20 cm long, greenish-yellow, many-seeded. Seeds are spindle-shaped to cylindrical, 1.5-3 mm long.

Scientific Name	Common Name	Observed
<b><i>Nymphoides cristata</i></b>	<b>Anthara tamara</b>	On the bed of canal



Water Snowflake is a pretty, fast-growing, perennial water plant. A blooming colony indeed looks like snow-flakes on water. It has flat, rounded, floating leaves, and delicate white and yellow flowers appearing in summer. Water snowflake has white flowers with yellow centres. The petals have unusual, feathery edges. The flowers are formed above the floating leaves with 2-4 cm long stalks. It gets its common name, of floating hearts because of the heart-shaped, bright green leaves which lie on the water surface like those of water lilies. Although they bear some resemblance to water lilies, they are not related. New plants are formed all the time where the floating stolons (above-ground, modified stems) form tufted plantlets along their lengths. The mother plant has a short, thick stem which is rooted in the mud at the bottom of the pond. In its natural habitat the plant may be subject to periods where the water may dry up, in this case it forms roots at the nodes to help it survive.

Scientific Name	Common Name	Observed
<b>Ceratophyllum demersum</b>	<b>Hornwort</b>	On the bed of canal
	An aquatic plant, <i>Ceratophyllum demersum</i> has stems that reach lengths of 1–3 m (3–10 ft), with numerous side shoots making a single specimen appear as a large, bushy mass. The leaves are produced in whorls of six to twelve, each leaf 8–40 mm long, simple, or forked into two to eight thread-like segments edged with spiny teeth; they are stiff and brittle. It is monoecious, with separate male and female flowers produced on the same plant. The flowers are small, 2 mm long, with eight or more greenish-brown petals; they are produced in the leaf axils. The fruit is a small nut 4–5 mm long, usually with three spines, two basal and one apical, 1–12 mm long. Plants with the two basal nut spines very short are sometimes distinguished	
Scientific Name	Common Name	Observed
<b>Aponogeton Natans</b>	<b>Nava dumpa</b>	On the bank and Floating from bed
	Floating Lace Plant is a small aquatic herb found in Sri Lanka and India. Its leaves are mostly floating, with only the long slender petiole below the surface of the water. Leaves are narrow-oblong or lance-shaped. Flowers are borne in dense, narrow spikes. The stalk carrying the spike is 10-45 cm long. Spike 3-7 cm, usually dense flowered. Floating Lace Plant is a popular plant in Western countries for use in aquariums.	

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Scientific Name	Common Name	Observed
<b>Eichhornia crassipes</b>	<b>Common water hyacinth</b>	On the bank of canal.
	<p>Water hyacinth is a free-floating perennial aquatic plant (or hydrophyte) native to tropical and sub-tropical South America. With broad, thick, glossy, ovate leaves, water hyacinth may rise above the surface of the water as much as 1 meter in height. The leaves are 10–20 cm across on a stem which is floating by means of buoyant bulb like nodules at its base above the water surface. They have long, spongy and bulbous stalks. The feathery, freely hanging roots are purple-black. An erect stalk supports a single spike of 8–15 conspicuously attractive flowers, mostly lavender to pink in colour with six petals</p>	
Scientific Name	Common Name	Observed
<b>Typha latifolia</b>	<b>Cattail</b>	On the bed of canal
	<p>Typha latifolia is a very vigorous, herbaceous perennial plant. Growing from a fast-spreading rhizomatous rootstock, it forms a colony of unbranched leafy stems 150 - 300cm tall. In suitable environments, the plant can form large almost monospecific stands. It is found as a native plant species in North and South America, Europe, Eurasia, and Africa. Typha latifolia has been found in a variety of climates, including tropical, subtropical, southern and northern temperate, humid coastal, and dry continental</p>	

Scientific Name	Common Name	Observed
<b><i>Lymnaea acuminata</i></b>	<b>Common Snail</b>	Canal Bank
	<p><i>Lymnaea acuminata</i> is a species of freshwater snail in the family Lymnaeidae common name IS snails belonging to large air-breathing freshwater snails, aquatic pulmonate gastropod mollusks, that belong to the clade Hygrophila. This snail lives in water bodies such as lakes and streams.</p>	
Scientific Name	Common Name	Observed
<b><i>Lamellidens corrianus</i></b>	<b>Alichippa or Muthyalachippa</b>	On canal bank
	<p><i>Lamellidens corrianus</i> closely resembles <i>L. marginalis</i>. The shell is narrow and elongated and more elliptical. The umbones slightly inflated, periostracum smooth and dark brown in colour. The dorsal margin of the shell is almost straight and long. Each valve has two cardinal teeth.</p> <p>It is found in sand, silt and mud substrate of large lowland rivers. This species prefers lotic water bodies with a very rich macro zoobenthic community.</p>	
Scientific Name	Common Name	Observed
<b><i>Pila Globosa</i></b>	-	On canal bank
	<p><i>Pila globosa</i> or the apple snail is one of the largest freshwater molluscs. It is commonly found in freshwater ponds, pools, tanks, lakes, marshes, rice fields and sometimes even in streams and rivers. They occur in those areas where there is a large amount of aquatic vegetation like Vallisneria, Pistia, for food. They are amphibious being adapted for life in water and on land.</p>	

Scientific Name	Common Name	Observed
<b>Indoplanorbis exustus</b>	-	Bank of canal and bottom of canal
	<i>Indoplanorbis</i> is a genus of air-breathing freshwater snail. The species is widely distributed across the tropics. It serves as an important intermediate host for several trematode parasites. The invasive nature and ecological tolerance of <i>Indoplanorbis exustus</i> add to its importance in veterinary and medical science.	

### Planktons

About 33 algal species were recorded from the sampling locations out which are mainly belong to Chlorophyceae followed by Bacillariophycean meberes. *Pennate diatoms* comprise of *Gomphonema sp*, *Fragillaria sp*, *Navicula sp*, *Pinnularia sp*, *Nitzschia sp*, and *Pleurosigma sp* and *etc*.

About 14 zooplankton species are recorded from all the sampling locations. *Chydorus reticulatus* and *Ceriodaphnia* are observed in all the sampling locations. Diversity of phytoplankton and zooplankton varies between 2.92-3.21 and 2.41-2.56 respectively. The highest diversity index for phytoplankton and zooplankton was reported in location-A-1 (3.21 and 2.56) and lowest in location A-2 (2.92) and 2.41 for phytoplankton and zooplankton. Based on the diversity index and this water can be classified as Mesotrophic in nature and slightly enriched with nutrients due to flow of water and recycling nutrients from sediments. The list of recorded planktonic flora from study area are given below

**LIST OF PLANKTON IN THE VARUVA (SONA) CANAL**

<b>Sr.No</b>	<b>Phytoplankton</b>	<b>Zooplankton</b>
1	<i>Achananthes affinis</i>	<i>Brachirous caudatus</i>
2	<i>Amphora sp</i>	<i>Daphnia sp</i>
3	<i>Ankistrodesmus falcatus</i>	<i>Ceriodaphnia reticulate</i>
4	<i>Ankistrodesmus var.tumidus</i>	<i>Mesocyclops sp</i>
5	<i>Chlorella sp</i>	<i>Arcella sp</i>
6	<i>Chlorococcum sp</i>	<i>Asplancha brighwell</i>
7	<i>Chroococcus minutus</i>	<i>Keratella monospina</i>
8	<i>Cyclotella meneghiana</i>	<i>Coleps hirsutus</i>
9	<i>Cymbella sp</i>	<i>Actinophyros sp</i>
10	<i>Euglena sp</i>	<i>Asplancha sp</i>
11	<i>Facus sp</i>	<i>Ceriodaphnia sp</i>
12	<i>Gyrosigma accuminatus</i>	<i>Colpidium colpoda</i>
13	<i>Gyrosigma sp</i>	<i>Mesocyclops leuckarti</i>
14	<i>Melosira granulate</i>	<i>Mesocyclops hyalinus</i>
15	<i>Microcystis sp</i>	
16	<i>Navicula gracilis</i>	
17	<i>Navicula radiosa</i>	
18	<i>Nitzschia gracilis</i>	
19	<i>Pandorina sp</i>	
20	<i>Pediastrum boryanum</i>	
21	<i>Pediastrum contortum</i>	
22	<i>Pediastrum duplex</i>	
23	<i>Pinnularia braunii</i>	
24	<i>Pleurosigma sp</i>	
25	<i>Scenedesmus bijuga</i>	
26	<i>Scenedesmus quadricaudata</i>	
27	<i>Spirulina princepes</i>	
28	<i>Synedra tabulate</i>	
29	<i>Coelosphaerium kuetzingianum</i>	
30	<i>Gleocapsa calcarea</i>	
31	<i>Oscillatoria annae van Goor</i>	
32	<i>Oscillatoria agardhii Gomont</i>	
33	<i>Phormidium mucicola</i>	

**REVISED  
DAMAGE ASSESSMENT REPORT  
ALONG WITH REVISED REMEDIATION PLAN, NATURAL AND  
COMMUNITY RESOURCE AUGMENTATION PLAN**

**OF**

**SRI KUMARASWAMY SILICA MINE  
At  
Survey No 695/22  
Momidi village, Chillakur Mandal,  
S.P.S.R. Nellore District, Andhra Pradesh**

**AREA OF MINING LEASE : 129.866 Ha  
(NON FOREST LAND)**

**3,40,000 Tonnes/Annum of Silica Sand Production**

**March, 2019**

**By  
M/s. SRI KUMARASWAMY SILICA MINES**

**Prepared By**



**B.S. ENVI-TECH (P) LTD**

*Secunderabad - 500 017*

NABET Accreditation No: NABET/EIA/1619/SA064

**REVISED ECOLOGICAL DAMAGE ASSESSMENT ALONGWITH REVISED  
REMEDICATION PLAN  
AND NATURAL AND COMMUNITY RESOURCE AUGMENTATION PLAN**

**1.0 REVISED DAMAGE ASSESSMENT**

Ministry of Environment, Forests and Climate Change, MoEFCC, Expert Appraisal Committee has appraised the project on 26.02.2019. As per the EAC appraisal and EDS raised by MoEFCC vide 08.03.2019, M/s Sri Kumaraswamy Silica Mines (SK) is informed to submit revised the Damage assessment covering 80.35 ha mining area and accordingly informed to Revise remediation plan as per the damage assessed and revised natural and community resource augmentation plan. The revised report as per the EAC appraisal and EDS raised by MoEFCC is presented below

**Ecological damage was earlier assessed for the area damaged between the year 1994 -2015 which was 9.47 Ha. The Ecological damage assessment has been revised considering 80.35 Ha as damaged area as per the EAC appraisal**

Based on the study carried out, the area was having an average tree density of 20 Trees/Ha of Cashew and some shrubs. The damage /loss is assessed in terms of plant cover/vegetation loss due to loss of cashew plants. **The total tree loss (cashew) from the disturbed/damaged area is  $80.35 * 20 = 1607$  trees**

**ECOLOGICAL DAMAGE – LOSS OF CASHEW PLANTATION**

For the development of Krishnapatnam Port and other power plants in the vicinity, The Govt of Andhra Pradesh has acquired lands of Private owners. SK also has surrendered (for land acquisition) some of their lands which were having Cashew plantation.

The Forest Department has estimated the compensation for each cashew plant under the Directions of Supreme Court which was estimated as Rs 126 /- per tree per year. The life of each Cashew plant is about 21 years and the loss is estimated to be about Rs 126 /- X 22 years = Rs 2646 /-

**The total ecological loss due loss of 1607 cashew trees from the disturbed area of 80.35 Ha during the period 94-2015 is : Rs 42,52,122 /-**

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**2.0 BUDGET FOR REMEDIATION PLAN, NATURAL RESOURCE AUGMENTATION PLAN AND COMMUNITY RESOURCE AUGMENTATION PLAN**

The total damage cost is estimated to be about Rs 42,52,122 /- (Rs 42.52 Lakhs. The summary of amounts which will be spent for Remediation Plan, Natural Resource Augmentation Plan and Community Resource Augmentation Plan is given below

**TABLE - 1  
BUDGET FOR REMEDIATION PLAN, NATURAL RESOURCE AUGMENTATION PLAN AND COMMUNITY RESOURCE AUGMENTATION PLAN**

S.No	Description	Estimated cost (in Lakh Rs)
1	Remediation Plan	20.34
2	Natural Resources Augmentation Plan	8.80
3	Community Resources Augmentation Plan	13.50
<b>Total Budgetary Provision</b>		<b>42.64</b>

Detail of Remediation Plan, Natural Resource Augmentation Plan and Community Resource Augmentation Plan alongwith budget and action plan is detailed below

**3.0 REVISED REMEDIATION PLAN**

The revised Remediation Plan with action plan specific to the region alongwith budget of Rs 20,34,000 /- (Rs 20.34 Lakhs) is given below

**TABLE - 2  
REVISED REMEDIATION PLAN WITH BUDGETARY PROVISIONS ALONGWITH ACTION PLAN**

Env. Component	Remediation Measures for Environmental Damage	2019-20	2020-21	2021-22	Total (Rs)
Air Environment	Distribution of fruit bearing saplings to the villages for 20 % of the houses in Momidi and Yeruru having total households of 460 @ Rs 50 /- per sapling	7200 (Yeruru Village)	16000 (Momidi village)	0	23200
	500 plants @ Rs 400 /- will be planted in the avenue roads of Momidi Village and Yerur Village	80000	80000	40000	200000
	Medical checkup - Pulmonary tests for	50000	50000	0	100000

Env. Component	Remediation Measures for Environmental Damage	2019-20	2020-21	2021-22	Total (Rs)
	100 persons @ Rs 1000 per person				
	Laying of road of 800 m in Momidi village @ Rs 8 Lakhs/km	640000	0	0	640000
	<b>Total (A)</b>	<b>777200</b>	<b>146000</b>	<b>40000</b>	<b>963200</b>
Noise Environment	Hearing aid equipment for 20 persons Supply of Sound Amplifier Ear Machine the Ear Hearing Aid @ Rs 800 /-	16000	0	0	16000
	<b>Total (B)</b>	<b>16000</b>	<b>0</b>	<b>0</b>	<b>16000</b>
Water environment	Supply of Agriculture water pump sets for 10 persons @ 12000 /- per set	120000	0	0	120000
	RO plant to school at Momidi village	100000	0	0	100000
	<b>Total (C)</b>	<b>220000</b>	<b>0</b>	<b>0</b>	<b>220000</b>
Land environment	Supply of organic fertilisers of about 6000 Kg @ Rs 80 per Kg	160000	160000	160000	480000
	<b>Total (D)</b>	<b>160000</b>	<b>160000</b>	<b>160000</b>	<b>480000</b>
Ecological Environment	Supply of equipment for manufacture of jute bags – 3 nos @ RS 40,000/- per unit	40000	40000	0	80000
	Supply of LED bulbs 1000 bulbs of 12 W @ Rs 250 /-	100000	15000	0	250000
	<b>Total (E)</b>	<b>140000</b>	<b>190000</b>	<b>0</b>	<b>330000</b>
Socio-economic Condition	Sponsoring spectacles to villagers for a about 50 persons @ Rs 500 per person	10000	10000	5000	25000
	<b>Total (F)</b>	<b>10000</b>	<b>10000</b>	<b>5000</b>	<b>25000</b>
<b>Grand Total (A)+(B)+(C)+(D)+(E)+(F)</b>					<b>20,34,000</b>

**TABLE - 3  
YEAR WISE BUDGET FOR REMEDIATION PLAN**

Environmental Component	2019-20	2020-21	2021-22	Total (Rs)
Air Environment	777200	146000	40000	963200
Noise Environment	16000	0	0	16000
Water environment	220000	0	0	220000
Land environment	160000	160000	160000	480000
Ecological Environment	140000	190000	0	330000
Socio-economic Condition	10000	10000	5000	25000
<b>TOTAL</b>	<b>13,23,200</b>	<b>5,06,000</b>	<b>2,05,000</b>	<b>20,34,200</b>

#### 4.0 REVISED NATURAL RESOURCES AUGMENTATION

The revised Natural Resource Augmentation plan specific to the region alongwith action plan with a budget of Rs 8,80,000 /- (Rs 8.8 Lakhs) is given below

**TABLE - 4**  
**REVISED NATURAL RESOURCES AUGMENTATION PLAN**  
**ALONGWITH ACTION PLAN AND BUDGET**

Environmental Component	Natural Resource Augmentation	2019-20	2020-21	2021-22	Total (Rs)
Water Environment	Assistance in developing aqua ponds for three aqua pond developers	100000	100000	100000	300000
Water Environment	Supply of water pots to 1000 households for summer season for three years @Rs 50 /-	50000	50000	50000	150000
Water Environment	Providing Rainwater harvesting network in Momidi school with a recharge pit	100000	0	0	100000
Air Environment	Supply of Bamboo window shades for 100 households @ 3 per house @ Rs 1100	130000	100000	100000	330000
<b>Total</b>					<b>880000</b>

#### 5.0 REVISED COMMUNITY RESOURCE DEVELOPMENT PLAN

The revised community resources development plan specific to the region alongwith action plan with a budget of Rs 13,50,000/- (Rs 13.50 Lakhs) is given below

**TABLE - 5**  
**REVISED COMMUNITY RESOURCE DEVELOPMENT PLAN**  
**ALONGWITH ACTION PLAN AND BUDGET**

S.No	Community Resource Development	2019-20	2020-21	2021-22	Total (Rs)
1	Supply of freezer boxes for fishing community	100000	100000	100000	300000
2	Providing assistance for settingup brick manufacturing plant keeping in view of coal based thermal power plant in the region	450000	0	0	450000
3	Supply of fishing nets to 60 fishermen of Momidi @ Rs 5000 per net	100000	100000	100000	300000
4	Boat building @ Rs 75000 /- each boat (4 nos)	150000	150000	-	300000
<b>Total</b>					<b>13,50,000</b>



CIN: L65190MH2004GOI148838

Branch:-KRISHNAPATNAM PORT, PO BAG NO 1, MUTHUKUR MANDAL, SPSR NELLORE Dist., AP -524344

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Date: 25-02-2020  
Krishnapatnam Port

To  
Member Secretary,  
Andhra Pradesh Pollution Control Board,  
Government of Andhra Pradesh, D.No.33-26-14, D/2,  
Near Sunrise Hospital, Pushpa Hotel Centre,  
Chalamavari street, Kasturibaipet, Vijayawada - 520010

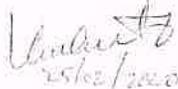
Dear Sir/Madam,

Bank Guarantee No: 201005IBGP00002  
Amount (Rs.) : 63,64,000.00  
Guarantee Cover From: 25.02.2020 to 24.02.2025  
Last date for Lodgement of Claim: 24.02.2026

This deed of guarantee executed by IDBI Bank Ltd., a company constituted under the Companies Act 1956 and deemed to be a banking company under the Banking Regulation Act. 1949, having its Registered Office and Head Office at IDBI Tower, WTC Complex, Cuffe parade, Mumbai 400005, and among other places a branch at Krishnapatnam Port Co., Po Bag No 1, Muthukur Krishnapatanam 524344 (Hereinafter referred to as "the Bank") in favour of Member Secretary, Andhra Pradesh Pollution Control Board, Government of Andhra Pradesh, D.No.33-26-14, D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalamavari street, Kasturibaipet, Vijayawada - 520010 (hereinafter referred to as "the Beneficiary") for an amount not exceeding Rs. 63,64,000/- (Rupees Sixty three lakh sixty four thousand only) at the request of M/s. Sri Kumaraswamy Silica Mines represented by partner (1) Smt. Sarada and (2) Shri. V. Kumaraswamy Reddy (Hereinafter referred to as "the Applicant(s)") This Guarantee is issued subject to the condition that the liability of the bank under this Guarantee is limited to maximum of Rs. 63,64,000/- (Rupees Sixty three lakh sixty four thousand only) and the Guarantee shall remain in full force up to 24.02.2025 (expiry date) and cannot be invoked otherwise than by a written demand under this Guarantee served on the Bank on or before the 24.02.2026 (last claim date). The beneficiary in its own interest is advised to seek a confirmation of the issuance of this Guarantee from the controlling office/Head Office enclosing a copy of the same.

TFHO address:  
IDBI BANK LTD.,  
Trade Finance Dept., 7th Floor, IDBI Tower  
WTC complex, Cuffe Parade, Mumbai-400005

This Guarantee consists of 4 pages including this page.

  
Authorised Signatory

PERAM VENKATESWARULU  
Manager & Branch Head  
Krishnapatnam Port / SOI : 1005.  
C.A. : 119275/Emp. Code : 698994

  
Authorised Signatory

KIRAN KUMAR M  
महायक प्रबंधक-Assistant Manager  
उ.क.सं-EIN-128557



पहली मंजिल, बैंकर्स कॉम्प्लेक्स, एडमिन बिल्डिंग के समक्ष में, मूथुकुर मंडल, एसपीएसआर नेल्लोरे जिला, नेल्लोरे-524344

IDBI Bank, Krishnapatnam Port, First Floor, Bankers Complex, Besides Administrative Building, Muthukur Mandal, SPSR Nellore District, Nellore Pin : 524 344

आईडीबीआई टॉवर, इकॉयूटीसी कॉम्प्लेक्स, कफे परेड, मुंबई 400 005 वेबसाइट : www.idbi.com  
IDBI Tower, WTC Complex, Cuffe Parade, Mumbai - 400 005. Website: www.idbi.com



ఆంధ్ర ప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

AE 954713

Serial No: 1474 Purchased By : PERAM VENKATESWARLU	Denomination: 50 For : IDBI BANK LTD KRISHNAPATNAM PORT BRANCH MUTHUKUR MD SPSR NELLORE DT	Date: 25-02-2020	Stamp S. no : AE 954713 Sub Registrar Ex. Office Stamp Vendor SRO Muthukur
KRISHNAPATNAM PORT MUTHUKUR MANDAL SPSR NELLORE D			

### Performance Bank Guarantee

To  
Member Secretary, Andhra Pradesh Pollution Control  
Board, Government of Andhra Pradesh, D.No:33-26-14,  
D/2, Near Sunrise Hospital, Pushpa Hotel Centre,  
Chalamavari street, Kasturibaipet, Vijayawada - 520010  
KRISHNAPATNAM PORT  
MUTHUKUR MANDAL SPSR NELLORE  
Dear Sirs,

BANK GUARANTEE No.:	201005IBGP00002
DATE OF ISSUANCE	: 25-02-2020
AMOUNT OF BG	: Rs. 63,64,000.00
BG Expiry date	: 24-02-2025
Last claim Date	: 24-02-2026

In consideration of Member Secretary, Andhra Pradesh Pollution Control Board, Government of Andhra Pradesh, D.No.33-26-14, D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalamavari street, Kasturibaipet, Vijayawada - 520010 (hereinafter referred to as the "Board" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators and assigns) having awarded to M/s. Sri Kumaraswamy Silica Mines, Partnership Firm with its Registered office at Momidi(V), Chillakur mandal, SPSR Nellore District, AP-524412 (hereinafter referred to as the 'Project Proponent' which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns), a project proposal bearing No. IA/AP/MIN/89769/2018 dated 04-Feb-2020 Valued at Rs. 63,64,000/- (Rupees Sixty three lakh sixty four thousand only) for Remediation plan and Natural & Community Resource Augmentation plan (hereinafter called the "project") and the Project Proponent having agreed to provide a project performance guarantee for the faithful performance of the entire project equivalent to Rs. 63,64,000/- (Rupees Sixty three lakh sixty four thousand only) to the board:

For IDBI BANK LIMITED  
आई.डि.बि.आई.बैंक लिमिटेड

*M. Lakshmi Kumar*  
25/02/2020  
आधिकारिक हस्ताक्षर Authorised Signatory



ఆంధ్ర ప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

AE 954714

Serial No:1475

Purchased By :

PERAM VENKATESWARLU

Denomination: 50

For :

IDBI BANK LTD

KRISHNAPATNAM PORT BRANCH

MUTHUKUR MD

SPSR NELLORE DT

Date 25-02-2020

Stamp S. no

AE 954714

*Wm*

Sub Registrar

Ex. Office Stamp Vendor

SRO Muthukur

KRISHNAPATNAM PORT

MUTHUKUR MANDAL SPSR NELLORE

D

We, IDBI Bank Limited, a banking company within the meaning of the Banking Regulation Act, 1949 and a Company incorporated under the Companies' Act, 1956, having its Registered Office at IDBI Tower, WTC Complex, Cuffe Parade, Mumbai 400 005 and a Branch at Krishnapatnam Port, Andhra Pradesh (hereinafter referred to as the 'Bank', Which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and under take to pay the Board, on demand any and all monies payable by the project proponent to the extent of Rs. 63,64,000/- (Rupees Sixty three lakh sixty four thousand only), as aforesaid at any time up to 24-02-2025 without any demur, reservation, contest, recourse or protest and/ or without any reference to the project proponent. Any such demand made by the Board on the bank shall be conclusive and binding notwithstanding any difference between the Board and the project proponent or any dispute pending before any court, Tribunal, Arbitrator or any other authority. The bank undertakes not to revoke this Guarantee during its currency without previous consent of the Board and further agrees that the Guarantee herein contained shall be enforceable till 12 months after expiry of its validity, i.e. up to 24-02-2026.

The Board shall have the fullest liberty, without affecting in any way the liability of the bank under this Guarantee, from time to time to extend the time for performance of the project by the project proponent. The Board shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the project proponent, and to exercise the same at any covenants, contained or implied, in the project between the Board and the project proponent or any other course or remedy or security available to the Board. The bank shall not be released of its obligations under these presents by any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Board or any other indulgence shown by the Board or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank. However Bank liability under this guarantee will be up to 24-02-2025 only.

For IDBI BANK LIMITED

आई.डि.बि.आई.बैंक लिमिटेड

*M. Venkateswara*  
M. Venkateswara  
అధికారిక హస్తాక్షర Authorised Signatory

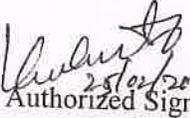
The Bank also agrees that the Board at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the project proponent and notwithstanding any security or other guarantee that Board may have in relation to the project proponent's liabilities. 60

Notwithstanding anything contained hereinabove:

- 1) Our liability under this guarantee shall not exceed Rs. 63,64,000/- (Rupees Sixty three lakh sixty four thousand only)
- 2) The Bank Guarantee shall be valid only from 25.02.2020 to 24-02-2025 and claim period till 24-02-2026.
- 3) Unless a demand or claim in writing is presented on the Bank at Krishnapatnam Port branch on or before 24-Feb-2026 (Including claim period), the Bank shall be released and discharged from all liabilities there under.

In witness thereof the Bank through its authorized officials, has set its hand and stamp on this 25<sup>th</sup> day of February, 2020 at Krishnapatnam port.

For IDBI Bank Limited

  
25/02/2020  
Authorized Signatory  
**PERAM VENKATESWARLU**  
Manager & Branch Head  
Krishnapatnam Port / SOL:1005.  
EIN : 119275/Emp. Code : 696994

M. Kiran Kumar  
**KIRAN KUMAR.M**  
सहायक प्रबंधक-Assistant Manager  
उ.क्र.सं-EIN-125557



Address: Krishnapatnam Port Branch, Muthukur Mandal,  
SPSR Nellore District, Andhra Pradesh-524344.

**GOVERNMENT OF ANDHRA PRADESH**  
**PROCEEDINGS OF THE DIRECTOR OF MINES & GEOLOGY:: IBRAHIMPATNAM**  
**(PRESENT : SRI V.G. VENKATA REDDY, DIRECTOR)**

Proceeding No.6111/R3-1/2016

Dated:05-11-2020.

Sub: Mines & Minerals - Mining lease for Silica Sand an extent of 512.01 Acres in the Sy.Nos.695/22, 696 of Momidi Village, Chillakur Mandal, SPSR Nellore District held by M/s Sri Kumaraswamy Silica Mines - Requested to issue Ten (10) installments for payment of Rs.97,01,614/- of Mineral Revenue Dues upto the year 2019-20 - Installments - Granted Orders - Issued.

Ref: 1. Lr. dt.03.10.2020 from M/s Sri Kumaraswamy Silica Mines.  
 2. Letter No.1785/M2/1995, dt.08.10.2020 from the ADM&G, Nellore.

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**ORDER:**

Through the reference 1<sup>st</sup> cited, wherein M/s. Sri Kumaraswamy Silica Mines has submitted a representation along with documents for grant of ten (10) installments for payment of arrears.

Through the reference 2<sup>nd</sup> cited, the Asst. Director of Mines and Geology, Nellore has reported that the lease holder having Mineral Revenue Dues upto the year 2019-20. Subsequently, the lessee has submitted Environmental Clearance (EC) vide F.No.23-238/2018-1A.II(V), the Govt., of India, Ministry of Environment, Forest and Climate Change (MoEF&CC), New Delhi, Consent Order for Establishment (CFE) of the Zonal Office, Andhra Pradesh Pollution Control Board, Vijayawada vide Order No.N-493/APPCB/ZO-VJA/CFE/RED/2020, dt.12.06.2020 and Consent Order (CFO) of the Zonal Office, Andhra Pradesh Pollution Control Board, Vijayawada vide Order No. N-493/APPCB/ZO-VJA/CFO/W&A/2020, dt.16.07.2020.

Further, as per the Asst. Director of Mines and Geology, Nellore reported that the lessee has to be pay the arrears upto 2019-20. The details are given below:-

Dead Rent (in Rs.)	S.R. (in Rs.)	CSR (In Rs.)	Interest (In Rs.)	ADR for 2020-21	Total (In Rs.)
49,15,201/-	14,969/-	2,016/-	21,72,108/-	25,97,320/-	97,01,614/-

Hence, the total amount of Rs.97,01,614/- (Ninety seven lakhs one thousand six hundred and fourteen rupees only) in **Ten(10) monthly equal installments** in favour of M/s Sri Kumaraswamy Silica Mines for the subject quarry lease. The Instalment shall be payable on or before 15<sup>th</sup> of every month. In case, if they obtain permits, the royalty shall be paid in full without linking to the installments now sanctioned. The first Instalment shall be started w.e.f. December-2020.

In any case of violation and non- payment of the amount as per the installments sanctioned will result in recovering the entire arrears together with interest in lump sum enforcing the provisions of the Revenue Recovery Act, 1864.

However, the sanction of the installments does not confer any preferential rights for process of any ML/PL/ QL/ GQL applications filed by the lease holder and in such cases, the dues have to be paid at once.

Sd/- V.G. Venkata Reddy  
 Director of Mines & Geology

// Attested //

*(Signature)*  
 Royalty Inspector

To  
 M/s Sri Kumaraswamy Silica Mines,  
 Momidi Village, Chillakur Mandal,  
 SPSR Nellore District, Andhra Pradesh - 524 412.

Copy to the Asst. Director of Mines & Geology, Nellore with direction to insist M/s Sri Kumaraswamy Silica Mines for payment of monthly installments regularly w.e.f. 15<sup>th</sup> December - 2020.

Copy to Deputy Director of Mines and Geology, Nellore for information and follow up action.  
 Copy to Mineral Revenue Section, O/o. Director of Mines and Geology, Ibrahimpatnam.

**GOVERNMENT OF ANDHRA PRADESH  
DEPARTMENT OF MINES AND GEOLOGY**

From  
Sri K. Venkateswarlu,  
Asst. Director of Mines & Geology (FAC),  
Nellore

To  
The Director of Mines & Geology,  
Ibrahimpattanam, Vijayawada.

**Letter No. 1785/M2/1985, Dated: 02-06-2021**

Sir,

**Sub:-** Mines & Minerals - Quarry Lease for Silica Sand over an extent of 129.866 Hectares / 320.90 Acres in Sy.No.695/22, 696 of Momidi Village, Chillakur Mandal, SPSR Nellore District held by M/s Sri Kumaraswamy Silica Mines (ID No.0912750001) - Sanctioned 10 (ten) Installments for payment of arrear amount of Rs. 97,01,614/- w.e.f. December'2020 - Paid six (6) Installments on 29.05.2021 & 31.05.2021 - Updated remaining four (4) Installments in OMEPS portal and MRA for the year 2020-21- Dues position submitted - Reg.

**Ref:-** 1. Proceedings No. 6111/R3-1/2016, dated 05.11.2020 of the Director of Mines & Geology, Ibrahimpattanam, Vijayawada.  
2. Letter dated 31.05.2021 from the Quarry Lease holder of M/s Sri Kumaraswamy Silica Mines.

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I invite kind attention to the subject and references cited and submit that through the reference 1<sup>st</sup> cited, the Director of Mines and Geology, Ibrahimpattanam, Vijayawada has sanctioned 10 (ten) Installments for payment of arrear amount of Rs. 97,01,614/- started from December'2020 to an Installment amount of Rs. 9,70,162/- per month on the Quarry Lease held by M/s Sri Kumaraswamy Silica Mines (ID No.0912750001) for Silica Sand over an extent of 129.866 Hectares / 320.90 Acres in Sy.No.695/22, 696 of Momidi Village, Chillakur Mandal, SPSR Nellore District.

In this connection It is submitted that, through the reference 2<sup>nd</sup> cited the lease holder M/s Sri Kumaraswamy Silica Mines has paid the earlier six (6) Installments for the period from December'2020 to May'2021 to an amounts of Rs. 29,49,120/- towards Dead Rent, Rs.8982/- towards Land Assessment, Rs.1212/- towards Cess on Land Assessment, Rs.13,03,266/- towards Interest and Rs. 15,58,392/- towards Advance Dead Rent, total an amount of Rs. 58,20,972/- and submitted original challans to this office. Further this office has enabled the remaining four (4) Installments in OMEPS portal on or before 15<sup>th</sup> of every month from June'2021 to September'2021.

In view of the above, It is submitted that, as per the MRA for the year 2020-21, the lease holder is having following dues:

ADR for the year 2021-22	LA	Cess on LA	Interest	Total
25,97,320/-	6493/-	2402/-	18,30,330/-	44,36,545/-

This is submitted for favour of kind information.

Yours faithfully,

Assistant Director of Mines & Geology (FAC),  
Nellore.

Copy submitted to the Deputy Director of Mines & Geology, Nellore for favour of information.