



# KAMALJEET SINGH AHLUWALIA

Mines Owner & Exporter

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Ref. No:

Dated 11<sup>th</sup> March 2019

**Dr. R.B. Lal**  
**Additional Director, (Non-Coal Mining)**  
**IA Division,**  
**Ministry of Environment, Forests & Climate Change**  
**Vayu-305, Indira Paryavaran Bhawan,**  
**Jorbagh Road, Lodhi Road, New Delhi-110003**

**Sub: Amendment in Environmental Clearance** for Nuagaon Iron Ore mining project of M/s Kamaljeet Singh Ahluwalia, located at village(s) Nuagaon, Guali, Topadihi, Barapada and Katasahi, Tehsil – Barbil, District-Keonjhar, Odisha (MLA: 767.284) – Regarding Installation of conveyor belt. – **Reg. submission of ADS compliance**

Ref.: 1. File No: J-11015/1156/2007-IA-II(M) & proposal No. IA/OR/MIN/7226/2007

Dear Sir,

With reference to the above subject, we are here with submitting the ADS compliance i.e. details about environmental measures taken by Lessee in recent past towards pollution control, social benefits that project brought to the area and as well as development of infrastructure in and around the lease area. The details are attached as **Appendix-I** which highlights current environmental practices and measures taken by the PP which has improved the environmental quality.

With the above submitted compliance, we request to recommend our proposal for amendment/relaxation of condition issued by MOEF vide letter no. J-11015/1156/2007-IA.II (M) dated 31.03.2017.

Thanking You  
Yours faithfully

A.K. Bhuyan  
Vice – President.-Mines

**PREAMBLE:**

Nuagaon Iron ore mines of M/s K.J.S Ahluwalia is in operation since year 1959. Presently mining of 5.62 MTPA of iron ore along with 2.0 MTPA beneficiation plant is in operation in this lease area after obtaining various statutory clearances & with due compliance of Supreme court order.

- MoEF while giving environmental clearance for mines on 02.02.2010, laid certain specific conditions (vide item V) “Alternative transport system such as dedicated Railway siding for transportation of mineral from their mine shall be studied and put in place at the earliest but not later than five years. No mineral transportation by road shall be permitted beyond 5 years”.
- While giving environmental clearance for 2 MTPA beneficiation plant, the MoEF& CC vide their letter no . J-11015/317/2009-IA.II (M) dt.16.02.2012 laid down that “Mineral transportation after the 5th year shall be carried out only by rail”

Based on the directives of the EC’s granted by MoEF & CC, the lessee undertook the following activities towards implementing alternative mode of transport system:

- 1) During the year 2012, engaged M/s a’XYKno Infrastructure Pvt. Ltd” who are accredited by the South East Central Railway and West Central Railway for evaluating the alternative transport system for transporting ore from the mine.
- 2) Engaged Central Road Research Institute (CRRRI), New Delhi 110025 during 2013-14 to conduct Traffic Study for Feasibility of Mineral Transportation in Joda-Barbil, Odisha.

Salient observation of the study are as follows:

## 1) **STUDY REPORT OF M/s a'XYKno Infrastructure Pvt. Ltd"**

M/s a'XYKno Infrastructure Pvt. Ltd" evaluated the following different transport system for ore transport from mine

- A) Laying the mine specific railway siding
- B) Installation conveyor belt from mine head to nearby public railway siding

### **A) Laying the mine specific railway siding**

2 Alternative routes were identified in the study namely:

#### **Alternative – 1 – Nuagaon Mines to Jaroli rail Siding**

#### **Alternative – 2 – Nuagaon Mines to Bolani Khadan Rail siding**

The length of the railway line is about 17km for both the options and the following difficulties were identified in establishing the own railway siding:

- ❖ The intervening terrain from the mines to the connecting existing railway line / RS is hilly and highly undulating with deep cuts and high banks.
- ❖ Major part of the route is forest area & surrender of such huge chunk of forest land for the siding may not be desirable.
- ❖ Due to Deep cuts and high banks there could be tunnels on the siding of up to 4 km overall length.
- ❖ There is hardly any space left in the mine lease area in which loading yard consisting of minimum 4 lines can be constructed.
- ❖ Similarly there is hardly any space near existing Jaroli & Bolani siding where additional lines can be laid.
- ❖ The ruling gradient on the proposed siding will be 1.25% which will restrict the train load or banking of trains.
- ❖ There are more than 10 working mines intervening the Nuagaon mines and the existing railway line / sidings and possibility of land availability for installation is less.

**B) Installation conveyor belt from mine head to nearby public railway siding:**

The length of the conveyor line is about 16km and the following difficulties were identified in establishing the own railway siding:

- The terrain is hilly and highly undulating.
- About 7 km length will be in forest area.
- The alignment of 16 km conveyor system would have been passing from numbers of other private mining lease, which is very difficult and time consuming exercise to get approval from these private institutes.
- There is hardly any space near existing Jaroli siding where additional land available for staking of conveyed Iron Ore from Nuagaon mines as mentioned by Railway.
- This report was submitted to Railway department. South Eastern Railway (SER) has expressed their inability to provide any new sidings taking off from Jaroli or between Barbil and Bolanikhadan vide ltr no AS/60/34Pt-XI dtd 25.02.2014.
- Railway department. South Eastern Railway (SER) have also conveyed that stacking / storing of mineral in the jaroli railway sidings is also not allowed vide their letter dated 02.04.2014.

**From the above it is evident that practically in the field there is no scope for laying of own railway siding or conveyor as of now.**

**2) Central Road Research Institute (CRRI), study report**

CRRI carried out studies one on the regional basis for estimating the carrying capacity of Joda - Barbil sector, Koira sector and another one exclusively for this lease entrusted by the lessee to understand the present road network and future improvement needs.

In the study, CRRI has taken the following data for evaluation:

- ❖ NHAI, Govt. of India data as the NH-215 passes through the mine.

- ❖ Real time traffic data was studied from I3MS, department of Steel & Mines, Govt. of Odisha
- ❖ Traffic study in different road networks of Joda – Barbil area & Koira area carried out by CRRI.
- ❖ Improvements such as road widening on NH 215 from 2 lane to 4 lane and conversion of KIDCO mineral transport corridor from Palasponga to Joda into concrete road and widening in to 4 way.
- ❖ Vehicle details from RTO to know the possibility of future increase of passenger car units.
- ❖ The existing ore production from different sectors and the expansion capacity of the mines on the anvil.

**Observation of the CRRI study:**

- CRRI study clearly showed that the Nuagaon lease area is in the safe category zone considering the cluster operation.
- As per the IRC norm the V/C ratio is under Category – B (<40%), which will further get eased out on completion of 4 laning.
- The nearby railway sidings are having surplus capacity for transporting more material.
- The allowable iron ore transportation in the Barbil – Joda road network as per maximum V/C threshold (0.70) of IRC norms is about 214 million tons per annum(MTPA) which provide more scope for road transportation from the existing quantity of around 100 to 110 MTPA of Iron Ore.
- National Highways Authority of India, Bhubneshwar reviewed this CRRI report and vide their Letter no NHAI/11012/7/RO (CRRI/2012/TIU/KJR/7092 dated 13.3.2015 categorically concluded that “ **it can be safely concluded that the concerned stretch of NH-215 after expansion to 4 lanes will be adequate enough to facilitate transportation of revised increased output of mines to the existing public railway sidings**”.

Under the above circumstances, mineral transportation from this mine can continue by utilizing the existing road network along with public railway sidings as the impact on the road network is under control/ very well within the limit at present as per the IRC norm”.

- ✓ **From the above it can be deciphered that there is enough road and railway siding capacity for continuing with mineral transportation from this lease by road itself. However it is pertinent to note almost 90% of transport is by public railway siding and the road carrying is limited from mines to railway siding only. All the railway sidings are within a radius of 20 to 25 kms.**

**Recommendation of CSIR-NEERI Report on “Carrying Capacity Study & Its implementation:**

- Recommendation of CSIR-NEERI Report on “Carrying Capacity Study for Environmentally Sustainable Iron and Manganese Ore Mining Activity in Keonjhar, Sundargarh and Mayurbhanj districts of Odisha State” is under implementation.
- The Nuagaon iron ore mines of 5.62MTPA production which falls under SOTM 1 which says for  $\geq 5$  MTPA - 100% by private railway siding or conveyor belt up to public railway siding or pipeline for captive mines and 70% for non-captive mines.
- Besides, various recommendation like minimizing pollution load, zero dust suspension of roads, selection of appropriate mining process, implementation of effective environmental control measures are suggested etc.
- Responsibility of implementation of different recommendation points were given to different agencies like Department of Steel & Mines- Government of Odisha, IBM, MoEF & CC, PWD,NHAI, Individual Mine lease holders etc. .
- On the basis of above NEERI recommendation State Government has carried out the following:

- ❖ Department of Steel & Mines , Government of Odisha is fixing the annual production capacity of each mines in Joda & Koira sector considering various limiting factors like ore demand, availability of road and rail network, environment etc.
- ❖ Meeting conducted by State Government on 21.06.2018 with all department official, respective district collectors towards its implementation of SOTM's suggestion.
- ❖ Recommendation with regard to new railway lines has been forwarded to the Ministry of Railway/Rail Board through Commerce & Transport Department for appropriate action.
- ❖ Already Formulated Odisha Rail Infrastructure Development Ltd. (A JV of Govt. of Odisha & Ministry of Railways) has been formed. Two new proposal i.e. new line from Nayagarh to Koira and new line from Jaroli to Barbil has been proposed. It is in the process of undertaking surveys & preparation of DPR

**Lesse has implemented the following NEERI recommendations:**

- ✓ Selection of appropriate mining equipment & process
- ✓ Effective implementation of various environmental control measures towards elimination /minimizing pollution.
- ✓ Controlling vehicle pollution by proper maintenance, vehicle exhaust measurement, covering of mineral transport vehicle with tarpaulin, avoiding overloading.
- ✓ Effective implementation of surface run off structures and other measures like construction of ETP , STP.
- ✓ Carrying out Green belt / plantation both within the mines as well as avenue plantation along roads.
- ✓ Besides Social plantation is being actively carried out in the surrounding villages
- ✓ Continuous monitoring of different environmental quality parameters as per EC & CTE/CTO

- ✓ Construction of cement concrete road from mine entrance & exit to the main road with proper drainage arrangements
- ✓ Black topping of village roads
- ✓ Development of parking plazas with amenities
- ✓ Initiating procurement of vacuum cleaners for cleaning of road aiming at “Zero dust resuspension”.
- ✓ The lessee has already implemented above measures voluntarily, to improve the ecology, surpassing others without any directive

All these measures will be effectively continued and further augmented based on the requirement and it will be ensured to prevent the ill effects on environment.

From the above it could be seen that the lessee being a ISO – 14001(EMS) certified mining company and also a responsible mine owner is giving more emphasize for preserving Environment by adopting various environmental protection measures both within the lease as well as in the surrounding villages. The lessee is also carrying out various CSR activities as a part of social benefits to the area.

All these activities have resulted in sustainable mining & transportation operation in the area so far.

Details of current practices implemented so far and improvements envisaged in the coming year i.e. beyond March 2019 in transport network, Environment & social benefits to the locals are given below in the subsequent paragraphs:

**Improvements in Environmental measures, infrastructure and social benefits to the area between 2017 - 19**

**Environmental Measures**

<b>S.No</b>	<b>Type of activity</b>	<b>Amount Spent (Rs in Lakhs)</b>
<b>A</b>	<b>3 number of tankers were additionally deployed increased for dust suppression</b> from the existing 6 number used prior to 2017.	<b>40.00</b>
<b>B</b>	<b>1 tanker is specifically used for dust suppression in the village roads</b>	<b>15.00</b>
<b>C</b>	<b>Additionally 1.4km length of Fixed sprinklers were laid during this period</b> thus making total to 2.9 kms.	<b>9.00</b>
<b>D</b>	<b>Green belt/ Plantation cover increased from 40 Ha to 69.56 ha by additionally planting 24,500 saplings.</b> Thus the total saplings is 2,85,000.	<b>36.75</b>
<b>E</b>	<b>Social plantation was carried out by planting additional 20,000 saplings covering 4 villages</b>	<b>70.00</b>
<b>F</b>	Avenue plantation carried out along village roads covering 12 km as per the directive of DFO, Keonjhar	<b>36.00</b>
<b>G</b>	<b>8 no's of check weirs were added during the period 2017-19</b> as a part of surface runoff management. Thus a total of 19 check dams/Weirs and 20 settling ponds were constructed at different locations	<b>10.40</b>
<b>H</b>	Solid waste Management is being <b>carried out by construction garland drain for 5000m, additional retaining wall for about 1200 m</b> (Total retaining wall is 6320 m). <b>Besides coir matting is added over an area of 75,000 sq.m</b> thus making the total to 1,48,000 sq.m	<b>104.00</b>
<b>I</b>	<b>Rainwater Harvesting is carried out in 6 places covering a surface area of 12,848Sq.m.</b>	<b>30.00</b>
<b>J</b>	Additionally one more piezo meter installed.	<b>1.50</b>
<b>K</b>	<b>3 no's of Online AAQ monitoring stations were established.</b>	<b>126.00</b>
	Regular monitoring of various environmental parameters are carried out through accredited agencies and the results are	<b>90.00</b>

	submitted to Authorities. The monitored test results are found to be within the prescribed statutory limits. This shall be construed as a testimony vital environmental parameters like Air, Noise and water are well within the prescribed limits	
	TOTAL	<b>568.65</b>

**Mineral transport:**

S.No	Type of activity	Amount Spent (Rs in Lakhs)
<b>A</b>	<b>Utilisation of high capacity trucks increased to about 60 % from 10 % prior to 2017</b>	<b>NA</b>
<b>B</b>	<b>Covering of trucks with tarpaulin was done for all the vehicles leaving the mines ( i.e. 100 % implementation)</b>	<b>NA</b>
<b>C</b>	<b>Regularly monitoring of emission of transport vehicles ensuring meeting the pollution norms was about 100 %</b>	<b>2.10 @ Rs 100/Vehicle</b>
	TOTAL	<b>Rs.2.10 lakhs</b>

**Infrastructural facilities improvements**

S.No	Type of activity	Amount Spent (Rs in Lakhs)
<b>A</b>	<b>Four laning of NH – 215 has started and almost 70 % of four lanning is completed 4- laning of NH-215 from Panikoili to Rimuli is already completed and Rimuli to Rajamunda is almost completed.</b>	<b>NA</b>
<b>B</b>	<b>Further towards easy movement of traffic the single line is converted in to double line. Except for a small stretch double line is almost completed.</b>	<b>NA</b>
<b>C</b>	<b>Concrete road from mine exit to public road used for transportation has been made.</b>	<b>Rs.210.00</b>
<b>D</b>	<b>1 more Parking plaza was added to the existing 1 number which was functioning</b>	<b>Rs.20.00</b>
	TOTAL	<b>Rs.230.00</b>

### Community benefits

S.No	Type of activity	Amount Spent (Rs in Lakhs)
A	Various CSR activities like provision of mobile ambulance, construction of toilets under swatch Bharat mission, provision of school books, bags, medical camps, electrification, drinking water supply, new bore wells, de-silting of ponds, tailoring machines for local women, training in mushroom cultivation etc were carried out between 2017 to 2019	301
B	Additionally about 125 local trucks was engaged for transportation thereby resulting in the employment of about 500 people	NA
C	Additionally about 500 number of local people were benefited due to transportation	NA
	TOTAL	301

### Benefits for State Exchequer

S.No	Type of activity	Amount Spent (Rs in Lakhs)
A	Royalty	31003
B	Additionally contribution to District Mineral Fund	9301
C	Additionally contribution to National Mineral Exploration Trust	620
	Total	40924

Towards continuing with the sustainable mining beyond March 2019, all the above said measures will be effectively continued and further augmented as detailed below towards preserving environment and creating more social benefits to locals.

**Improvements in Environmental measures, infrastructe and social benefits to the area proposed for the year 2019-20**

**ENVIRONMENTAL MEASURES**

<b>S.No</b>	<b>Type of activity</b>	<b>Amount Proposed (Rs in Lakhs)</b>
<b>A</b>	<b>1 number of tanker is proposed to be increased for dust suppression</b> from the existing 9 number used prior to 2019.	<b>15.00</b>
<b>B</b>	<b>2 tankers was specifically proposed for dust suppression in the village roads</b>	<b>30.00</b>
<b>C</b>	<b>Fixed water sprinklers proposed to be increased from present 2.9 kms to 4.0 kms during 2019-20</b>	<b>7.00</b>
<b>D</b>	<b>Green belt is proposed over an area of 7.84 Ha by planting 15000 saplings.</b> Thus a total of 77.40 ha will be covered by 3,00,000 saplings on Dumps, safety zone and avenue plantation	<b>22.50</b>
<b>E</b>	<b>Social plantation was carried out by planting 10,000 saplings covering 3 villages.</b>	<b>30.00</b>
<b>F</b>	Avenue plantation will be carried out along village roads covering 6 kms.	<b>18.00</b>
<b>G</b>	Surface runoff management has been implemented by constructing 19 check dams/Weirs. Besides 24 number of settling ponds will be in operation by the end of 2019-20 at different locations. <b>Thus during the year 4 settling ponds are proposed to be added.</b>	<b>12.00</b>
<b>H</b>	Solid waste Management- <b>Retaining wall 1100m and coir matting of 25000m is proposed during the year.</b> Thus the total retaining wall at the end of 2019-20 will be 7420 m, garland drains will be 5000 m and coir matting for 1,73,000 sq.m.	<b>51.00</b>
<b>I</b>	<b>For Environmental control measures a separate budget is set</b>	<b>163.91</b>

	<b>aside which includes environmental monitoring, green belt/plantation, addition of water sprinklers, for dust suppression, provision of water tankers, occupational health monitoring etc</b>	
<b>J</b>	1 more Peizometer for monitoring of Ground water level proposed	<b>1.50</b>
<b>K</b>	Installation of online AAQ monitoring stations is proposed in 1 more location to the existing 3(1 locations)	<b>42.00</b>
	<b>TOTAL</b>	<b>392.91</b>

**Mineral transport :**

<b>S.No</b>	<b>Type of activity</b>	<b>Amount Proposed (Rs in Lakhs)</b>
<b>A</b>	<b>Utilisation of high capacity trucks increased to about 70 % from 60 % existing at present i.e as on 2019.</b>	<b>NA</b>
<b>B</b>	Covering of trucks with tarpaulin for all the trucks will be strictly implemented	<b>NA</b>
<b>C</b>	Regularly monitoring of emission of transport vehicles ensuring meeting the pollution norms was about 100 %	<b>1.05 @ Rs 100/Vehicle</b>
	<b>TOTAL</b>	<b>1.05</b>

**Infrastructural facilities improvements**

<b>S.No</b>	<b>Type of activity</b>	<b>Amount Proposed (Rs in Lakhs)</b>
<b>A</b>	<b>The entire stretch of NH – 215 will be completed</b>	<b>NA</b>
<b>B</b>	<b>The double laning will be completed</b>	<b>NA</b>
<b>C</b>	Proper maintenance of road will be done	<b>30.00</b>
<b>D</b>	<b>To prevent fugitive dust generation vaccum cleaner/road sweeping machines</b> will be continuously used	<b>20.00</b>
<b>E</b>	<b>Parking plaza (2 No ) functioning will be provided with rest rooms</b>	<b>10.00</b>
	<b>TOTAL</b>	<b>60.00</b>

### Proposed Community benefits

S.No	Type of activity	Amount Proposed (Rs in Lakhs)
<b>A</b>	<ul style="list-style-type: none"><li>▪ Need based assessment study</li><li>▪ Engaging Self help groups</li><li>▪ Mobile dispensary</li><li>▪ Conducting medical camps</li><li>▪ Awareness camps on Hygiene, Wild life protection, occupational diseases</li><li>▪ Carry out extensive social plantation</li><li>▪ Construction of black top roads in villages for control of fugitive dust generation</li></ul>	<b>135.00</b>
<b>B</b>	<b>Additionally about 75 local trucks was engaged</b> for transportation thereby resulting in the <b>employment of about 300 people</b>	<b>NA</b>
<b>C</b>	<b>Additionally about 300 number of local people</b> were benefited due to transportation	<b>NA</b>
	<b>TOTAL</b>	<b>135.00</b>

### Benefits for State Exchequer

S.No	Type of activity	Amount Proposed (Rs in Lakhs)
<b>A</b>	<b>Royalty</b>	<b>42768</b>
<b>B</b>	<b>Additionally</b> contribution to <b>District Mineral Fund</b>	<b>12830</b>
<b>C</b>	<b>Additionally</b> contribution to <b>National Mineral Exploration Trust</b>	<b>855</b>
	<b>Total</b>	<b>56453</b>

Consolidated statement showing the details of various measures in different phase of mine operation for Nuagaon Iron mines is Given in Annexure – 1. Breakup of the individual details are given in **Enclosure 1 to 10**.

## Annexure-1

**CONSOLIDATED STATEMENT SHOWING VARIOUS MEASURES CARRIED OUT IN DIFFERENT PHASE**

SL.NO	PARTICULARS	UNIT	PRIOR 2017	2017-2019 (over all)	2019-20 (Over all)	Remarks
<b>I</b>	<b>ENVIRONMENTAL MEASURES</b>					
<b>A.</b>	<b>Dust suppression arrangement</b>					
a)	No of tankers used for water sprinkling	Nos.	6	9	10	Details are given in <b>Enclosure-1</b>
b)	Provision of Dry fog system for crusher, screens, Beneficiation plant	Nos.	In built in all the working units			
c)	Installation of fixed water sprinkling	Kms	1.5	2.9	4.0	
d)	Wet drilling / Provision of drills with dust extractors	Nos	In built in all the working units			
<b>B.</b>	<b>Green Belt Development</b>					
a)	Plantation area	Ha	40.00	69.56	77.40	Details are given in <b>Enclosure-2</b>
b)	No of species	Nos.	2,60,500	2,85,000	3,00,000	
c)	Location		Dump, Safety zone, back filled area & Avenue plantation			
<b>C.</b>	<b>Surface run off management structures</b>					
	Check weirs/ check dams	Nos.	11	19		Details are given in <b>Enclosure-3</b>
	Settling pits / ponds	Nos.		20	24	
<b>D.</b>	<b>Solid waste management</b>			18		
	Garland drain	m		5000		Details are given in <b>Enclosure-4</b>
	Retaining wall	m	5118	6320	7420	
	Coir matting	M2	73,000	1,48,000	1,73,000	
<b>E.</b>	<b>Rainwater harvesting</b>					
	Number of places			6		Details are given in <b>Enclosure-5</b>
	Surface area covered			12,848		

<b>F</b>	<b>Others</b>					
	ETP for treatment of workshop effluent		Already installed & running satisfactorily			
	Peizometer for monitoring of Ground water level		1	2	3	Details are given in <b>Enclosure-6</b>
	Installation of electronic display board		Already Installed at the entry gate			
	Wheel washing system at the exit gate		0	1	1	
	Utilisation of additives for dust suppression		nil	nil	Proposed to utilize	
	Installation of online AAQ monitoring stations		0	3	4	
	Regular Environmental monitoring		Carried out regularly & submitted at Authority			
	Submission of EC compliance report		Six monthly EC compliance report being submitted at Authority			
<b>G</b>	<b>MINERAL TRANSPORTATION</b>					
	Utilisation of high capacity trucks	%	10	60	70	Details are given in <b>Enclosure-7</b>
	Covering of trucks with tarpaulin	%	50	100	100	
	Regularly monitoring of emission of transport vehicles ensuring meeting the pollution norms	%	50	100	100	

SL.N O	PARTICULAR S	Nature of work	UNI T	PRIOR 2017	2017-2019	2019-20	Remarks
<b>II Infrastructural improvement in the area</b>							
A)	Road	4 laning of NH - 215. connecting Panikoili to Rajamunda passes through the lease area.	Kms	NH – 215 from Panikoili to Rajamunda was a two lane road	<ul style="list-style-type: none"> <li>• Four laning of NH – 215 has started and almost 70 % of four lanning is completed</li> <li>• 4- laning of NH-215 from Panikoili to Rimuli is already completed and Rimuli to Rajamunda is almost completed.</li> <li>• KIDCO road from Palasponga to Joda which is essentially a mineral transport corridor is being converted into 4 way concrete road. (About 70% is completed)</li> </ul>	<p>The entire stretch of NH – 215 will be completed.</p> <p>KIDCO road will be completed totally.</p>	<b>Enclosure-8</b>
B)	Railway	Doubling of South Eastern Railway Line for mineral transport	Nos	Single track was only available	<ul style="list-style-type: none"> <li>• Further towards easy movement of traffic the single line is converted in to double line.</li> <li>• Except small stretch entire area is completed.</li> </ul>	The double laning will be completed	
C)	Mine road	Concreting of road from mine exit to public road	No		Concrete road from mine exit to public road used for transportation has been made.	<ul style="list-style-type: none"> <li>• Proper maintenance of road will be done.</li> <li>• To prevent fugitive dust</li> </ul>	

						generation vaccum cleaner/road sweeping machines will be continuously used	
D)	Parking Plaza	Parking plaza with basic amenities like toilet & rest shelter		1	2	2	

SL.NO	PARTICULARS	UNIT	PRIOR 2017	2017- 2019(overall)	2019-20	Remarks
<b>III</b>	<b>SOCIAL BENEFITS</b>					
a)	<b>CSR Expenses</b>	Rs in Lakhs	1730	2031	2% of the profit	<b>Enclosure- 9</b>
b)	Engagement of local trucks for transportation	Nos.	300	425	425 (overall)	
b)	No of locals benefited due to transportation	Nos.	1200	1700	1700 (overall)	
<b>B.</b>	<b>Benefit to Government</b>					
a)	Royalty	Rs In cr	Paid as per prevailing rate		427.68 (Additional)	<b>Enclosure- 10</b>
b)	DMF	Rs In cr	135.17	228.18	128.30 (Additional)	
c)	NMET	Rs In cr	9.01	15.21	8.55 (Additional)	
	Total Revenue to Govt.	Rs In cr	NS	NS	<b>564.53</b> (Additional)	

**ENVIRONMENTAL MEASURES**

**A. Effective dust suppression arrangement:**

- Number of Water Tankers with different capacities of 2 X 18 KL, 2 X 12KL & 5 X 10KL are provided for adequate water sprinkling in the entire mine haul roads, transportation area as required.
- Dry fog systems got provided at Beneficiation plant hopper and crushing plants and are functioning effectively.
- Fixed water sprinklers of length 4.0 kms are also provided in the haul road & crusher area.





**DRY FOG SYSTEM AT CRUSHING PLANT**



**DRY FOG SYSTEM AT BENEFICIATION PLANT**



**CONVEYOR BELTS COVERED WITH HOODS**

**Wet drilling provision** is practice with dust extraction system to control dust generation right at the source. We also have drilling machine with Dry-fog provision.

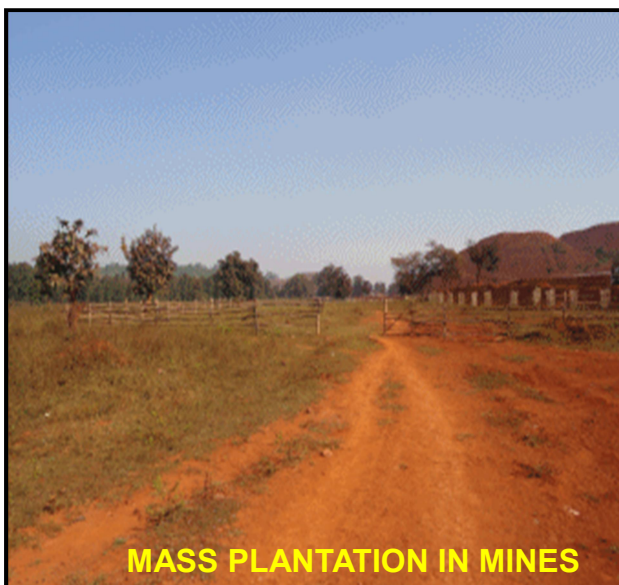
**DRILLING MACHINE WITH DUST EXTRACTOR & DRY-FOG SYSTEM**

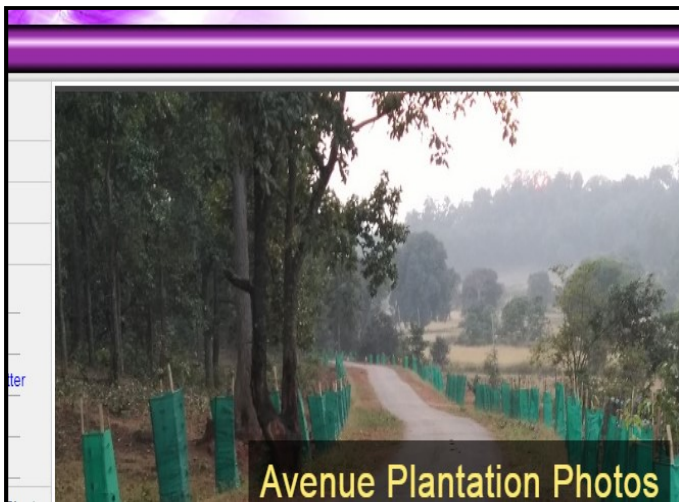


**B. Green Belt Development -  
Afforestation already carried out**

- Till date **2,85,000 plantations** have been done on safety zone, O.B dump, Avenue Plantation & road side, nalla side etc.
- A total plantation of **12,551 numbers of native species saplings** carried which includes the gap filling during the period **2018-19** across the safety zone, O.B dump, Avenue Plantation & road side, nalla side etc.
- Regular monitoring is going on by providing the watering facility during non-monsoon.
- A total of **69.561 Ha area** has already been covered under plantation in safety zone, dump area etc. within the lease area in the last 5 years. Its details are given below:

<b>Plantation</b>	<b>Area (Ha.)</b>
Safety zone and other area (Gap filling)	64.53
Backfilled area	0.550
Ultimate Benches	--
Dump plantation	4.481
<b>Total</b>	<b>69.561</b>







**Nalla side Plantation**



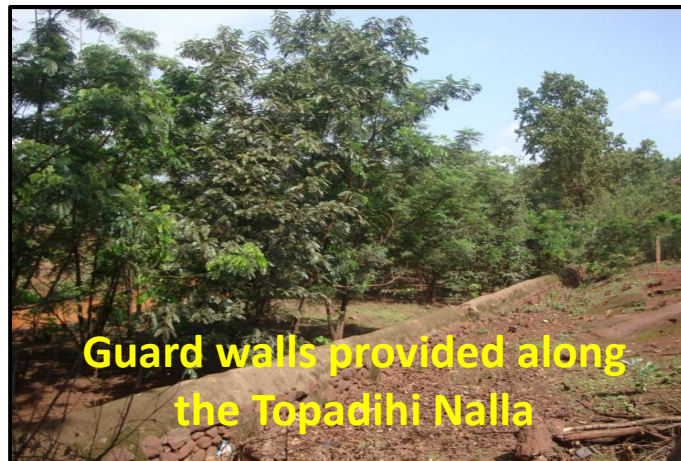
**Safety Zone Plantation**



**Site Nursery**



**Coco fiber fence installed at  
Topadihi Nalla**



**Guard walls provided along  
the Topadihi Nalla**

## **PROPOSED PLANTATION FOR YEAR 19-20**

Further, during ensuing plan period it has been planned to develop green belt within safety zone area over 2.05Ha. About 2.50Ha over the dump and 3.35Ha over the exhausted benches. Hence, during plan period, a total of 7.90Ha will be covered under plantation.

### **Afforestation during Plan period**

<b>Dump Plantation</b>	<b>Bench Plantation</b>	<b>Safety Zone Plantation</b>
2.50 Ha (Dump No-27 & 28)	1)1.05 Ha (Udalabary Quarry) 2)1.50 Ha (MDH Quarry) 3)0.80 Ha (Chenagoda Quarry)	1) 0.15 Ha (Near 29ML Pillar) 2) 1.00 Ha (ML Pillar No 64 to 74) 3) 0.40 Ha (ML Pillar No 84 to 86) 4) 0.50 Ha (ML Pillar No 96 to 98)

The details of the number of saplings to be planted in those areas, and the species which are to be planted are given below:

<b>Area of plantation (Ha)</b>	<b>No of saplings</b>	<b>Location</b>	<b>Name of the species</b>
2.05	2000	Safety zone	Neem, Mango, Chakunda, Sissom Shrubs
2.50	2500	Existing dump No-27 and 28	Grass type along the slope and other available local species on the top
3.35	3500	Bench plantation	Neem, Mango, Chakunda, Sissom Shrubs
--	1000	Gap filling	-Do-
<b>7.90</b>	<b>9000</b>		

**C. Details of Surface Run-off Management structures implemented in and around the lease area**

**1. THE DETAILS OF THE CHECK WEIRS / CHECK DAMS**

Particulars	Dimensions	Volume in CUM
Check Weir-1	7m x 1m x 1.2m	8.4
Check Weir-2	3m x 1.2m x 1.2m	4.32
Check Weir-3	7m x 1m x 1.4m	9.8
Check Weir-4	4.5m 1m x 1.1m	4.95
Check Weir-5	5m x 1.1m x 1.2m	6.6
Check Weir-6	4.5m x 1m x 1.4m	6.3
Check Weir-7	4m x 1m x 1m	4.0
Check Weir-8	4m x 1m x 1m	4.0
Check Weir-9	5m x 1m x 1.2m	6.0
Check Weir-10	10m x 1m x 1.2m	12.0
Check Weir-11	20m x 1m x 1.2m	24.0
Check Dam -1	15m x 1.8m x 1.8m	48.6
Check Dam -2	23m x 1.5m x 2m	69.0
Check Dam -3	28m x 1.5m x 1.7m	71.4
Check Dam -4	35m x 1.5m x1.8m	94.5
Check Dam -5	6m x 1.5m x 1.5m	13.5
Check Dam -6	8m x 1.8m x1.6m	23.04
Check Dam -7	6m x 1.5m x2m	18.0
Check Dam -8	10m x 1.5m x 2m	30.0





**Check weir at Barpada**



**B. Check weir at Gangeigoda**



**C. Check weir at Katasahi**



**Check weir at Udalbadi**

## 2. STRUCTURES OF THE SETTLING PITS & PONDS

<b>DETAILS OF SETTLING CUM HARVESTING POND</b>					
<b>Sl. No.</b>	<b>Location</b>	<b>Length (m)</b>	<b>Breadth (m)</b>	<b>Height (m)</b>	<b>Volume in CUM</b>
1	Settling Pond - 1	114	60	3	20520
2	Settling Pond - 2	80	60	2.5	12000
3	Settling Pond - 3	80	70	3	16800
4	Settling Pond - 4	90	60	3	16200
5	Settling Pond - 5	80	60	2.5	12000
<b>Details of the Settling pits of earthen structures</b>					
5	Settling Pit - 3	40	13	3	1560
6	Settling Pit - 4	40	12	2.5	1200
7	Settling Pit - 5	15	12	2.5	450
8	Settling Pit - 6	20	15	2	600
9	Settling Pit - 7	30	20	2.5	1500
10	Settling Pit - 8	30	20	2	1200
11	Settling Pit - 9	20	15	2	600
12	Settling Pit - 10	20	15	2	600
13	Settling Pit - 11	40	30	3	3600
14	Settling Pit - 12	40	15	3	1800
15	Settling Pit - 13	30	15	2.5	1125
16	Settling Pit - 14	30	15	2	900
17	Settling Pit - 15	30	20	2.5	1500
18	Settling Pit - 16	30	20	2.5	1500
19	Settling Pit - 17	40	30	2.5	3000
20	Settling Pit - 18	20	15	2.5	750
<b>Total Volume in CUM</b>					<b>99405</b>



**B. Settling Pond**



**C. Settling Pond**

## Enclosure - 4

### D. SOLID WASTE MANAGEMENT :

- All the sub grade and OB/Waste dumps are maintained with proper heights with terracing & proper slope with adequate protection measures
- A total length of 6.32 kms of Retaining wall with dimensions i.e. 1.5 M x 1.0 m created
- Garland drain 5.0 kms with proper dimensions i.e. 1.0 M x 1.0 m has been made at the toe of the dumps
- For better stabilization of dump slopes, coir matting with mixed grass seeds also applied towards green vegetation throughout the year to control the dump surface erosion during rainy season

### DETAILS OF RETAINING WALL

#### EXISTING:

Quarry	Dump Location	Length
Guali Quarry	Sub-grade stock no-5	302m
LP 97	Sub-grade stock no-36	160m
LP96	Sub-grade stock no-36A	137m
Udalbadi Quarry	O. B. Dump no-30	414m
Udalbadi Quarry	O.B DUMP 28	270m
Udalbadi Quarry	O. B. Dump no-27	314m
Chenaguda Quarry	Sub-grade stack no-16	658m
MDH Quarry	Sub-grade stack no-18	240m
Barpada Dump	Barpada Dump	1000m
B-Top	Sub-grade stock no-35	113m
B-Top	Sub-grade stock no-35	50m
B-Top	Sub-grade stock no-36	81m
Katasahi Quarry	Fines stock no-40	270m
Katasahi Quarry	Sub-grade stock no-10	420m
Katasahi Quarry	Sub-grade stock no-8	76m
Sonukucha Quarry	Sub-grade Dump	36m
Sonukucha Quarry	Sonukucha Dump	360m
Gangeiguda Quarry	Sub-grade stock no-33	170m
Kanhusahi Quarry	Sub-grade stock no-38	47m

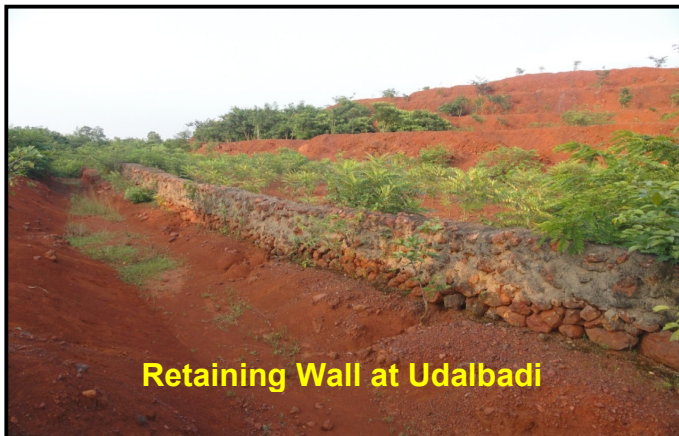
**PROPOSED RETAINING WALL:**

<b>PARTCULARS OF DUMP</b>	<b>RETAINING WALL (M)</b>
Existing Dump - 3	170
Existing Dump - 39	370
Existing Dump - 31 (A) & 18	340
Existing Dump - 13	220
<b>Total</b>	<b>1100</b>

**PROPOSED COIR MATTING:**

<b>Particulars of dump</b>	<b>Area (m<sup>2</sup>)</b>
Waste dump No - 27	11200
Waste dump No - 28	13800
<b>Total</b>	<b>25000</b>

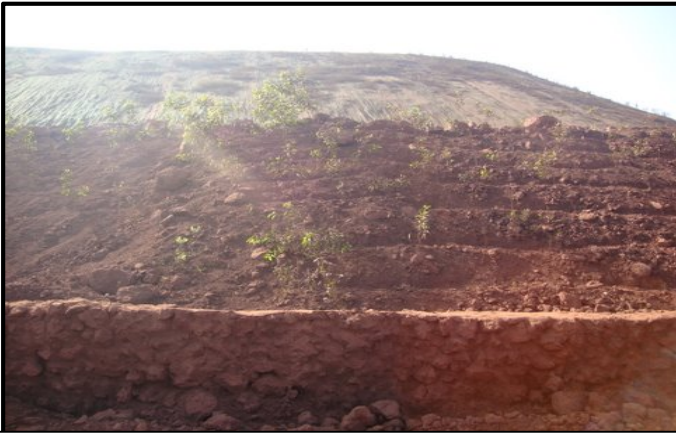
**PHOTOS OF SOLID WASTE MANAGEMENT & RETAINING WALL**





**Proper retaining wall provision at the bottom peripheral of the dump**

**COIR MATTING ON DUMSPD AS A PART OF DUMP STABILISATION**



**RETAINING WALL PROVIDED AT THE TOE OF THE DUMPS**

**E. DETAILS OF RAIN WATER HARVESTING STRUCTURES**

Type of Structure	Location	Surface Area
Rain Water Harvesting	Monnet Camp	1000 m <sup>2</sup>
	Nuagaon School	1100 m <sup>2</sup>
Water Shed	Katasahi village	4224 m <sup>2</sup>
	Barpada village	1924 m <sup>2</sup>
	Guali village	2400 m <sup>2</sup>
	Panduliposi village	2200 m <sup>2</sup>



**F.OTHERS**

**Waste water treatment**



**Ground Water Level Monitoring**



**Online AAQ Monitoring Station:** The project has installed 3 no's of **CAAQMS** monitoring station inside ML area as per the order from **SPCB @ 50 lakhs per station, Odisha** and data are being transferred through **SPCB RT\_DAS** server. Results are well within the norms.



### ONLINE AAQ MONITORING STATIONS



**Proposal of utilization of additives:** We have proposed to use additives towards effective dust suppression on the mines haulage road. This will further help towards reduction in water consumption.

**Wheel Washing System:** Lessee has proposed wheel washing system at the exit gate of mine which is under process of installation.

**REGULAR AAQ MONITORING:**

The monitoring of AAQ is being done in the core as well as buffer zone of the ML area. Monitoring of AAQ is carried out with other parameters PM10, PM2.5, SO<sub>2</sub>, and NO<sub>2</sub>. The monitoring report reveals that the parameter like PM10, PM2.5, SO<sub>2</sub> and NO<sub>x</sub> are well within the norm as per NAAQs notifications made by the CPCB.

<b>Summarised Ambient Air Quality Monitoring Report: Nuagaon Iron Ore Mining Project of Shri KJS Ahluwalia, District; Keonjhar, Orissa.</b>						
<b>Period: April 2018 to September 2018</b>						
	<b>Month</b>	<b>Results in micro.gm/CUM</b>				
		<b>Range</b>	<b>PM10</b>	<b>PM2.5</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>
A1 Mines Office Chenagoda	April-18	<b>Avg.</b>	<b>67.8</b>	<b>32.2</b>	<b>7.8</b>	<b>12.9</b>
	May-18	<b>Avg.</b>	<b>71.5</b>	<b>34.3</b>	<b>8.2</b>	<b>12.01</b>
	June-18	<b>Avg.</b>	<b>62.5</b>	<b>30.08</b>	<b>9.4</b>	<b>13.9</b>
	July-18	<b>Avg.</b>	<b>46.5</b>	<b>19.3</b>	<b>9.9</b>	<b>14.8</b>
	August-18	<b>Avg.</b>	<b>39.8</b>	<b>17.5</b>	<b>10.2</b>	<b>15.6</b>
	September-18	<b>Avg.</b>	<b>39.8</b>	<b>18.7</b>	<b>7.8</b>	<b>13.6</b>
A2 Site-Mines Office Nuagaon	April-18	<b>Avg.</b>	<b>64.8</b>	<b>30.8</b>	<b>7.4</b>	<b>12.5</b>
	May-18	<b>Avg.</b>	<b>64.8</b>	<b>30.8</b>	<b>7.4</b>	<b>12.5</b>
	June-18	<b>Avg.</b>	<b>57.1</b>	<b>27.1</b>	<b>8.6</b>	<b>13.1</b>
	July-18	<b>Avg.</b>	<b>45.3</b>	<b>22.8</b>	<b>8.7</b>	<b>13.9</b>
	August-18	<b>Avg.</b>	<b>39.1</b>	<b>19.3</b>	<b>9.2</b>	<b>14.6</b>
	September-18	<b>Avg.</b>	<b>39.8</b>	<b>17.8</b>	<b>7.4</b>	<b>13.2</b>
A3, Office at Monnet	April-18	<b>Avg.</b>	<b>69.6</b>	<b>33.1</b>	<b>8.06</b>	<b>13.1</b>
	May-18	<b>Avg.</b>	<b>67.6</b>	<b>32.5</b>	<b>7.7</b>	<b>11.2</b>
	June-18	<b>Avg.</b>	<b>63.5</b>	<b>30.4</b>	<b>8.4</b>	<b>11.9</b>
	July-18	<b>Avg.</b>	<b>45.5</b>	<b>26.6</b>	<b>8.5</b>	<b>12.1</b>
	August-18	<b>Avg.</b>	<b>40.3</b>	<b>24.2</b>	<b>9.07</b>	<b>13.3</b>
	September-18	<b>Avg.</b>	<b>42.5</b>	<b>19.3</b>	<b>8.08</b>	<b>13.8</b>
A4, Village –Katesahi	April-18	<b>Avg.</b>	<b>66.9</b>	<b>13.1</b>	<b>7.6</b>	<b>12.7</b>
	May-18	<b>Avg.</b>	<b>70.9</b>	<b>34.05</b>	<b>8.1</b>	<b>11.9</b>
	June-18	<b>Avg.</b>	<b>61.9</b>	<b>29.7</b>	<b>9.3</b>	<b>13.8</b>
	July-18	<b>Avg.</b>	<b>38.4</b>	<b>19.4</b>	<b>9.6</b>	<b>14.7</b>
	August-18	<b>Avg.</b>	<b>33.2</b>	<b>16.6</b>	<b>10.05</b>	<b>15.3</b>
	September-18	<b>Avg.</b>	<b>36.4</b>	<b>17.1</b>	<b>7.1</b>	<b>12.9</b>
A5 Village Loidapada	April-18	<b>Avg.</b>	<b>66.1</b>	<b>31.2</b>	<b>7.6</b>	<b>12.6</b>
	May-18	<b>Avg.</b>	<b>70.7</b>	<b>33.9</b>	<b>8.1</b>	<b>11.8</b>
	June-18	<b>Avg.</b>	<b>62.6</b>	<b>30.05</b>	<b>9.4</b>	<b>13.9</b>
	July-18	<b>Avg.</b>	<b>36.0</b>	<b>17.8</b>	<b>8.4</b>	<b>13.3</b>
	August-18	<b>Avg.</b>	<b>32.5</b>	<b>16.07</b>	<b>10.1</b>	<b>15.4</b>
	September-18	<b>Avg.</b>	<b>36.3</b>	<b>17.1</b>	<b>7.6</b>	<b>12.8</b>
A6 Village Panduliposi	April-18	<b>Avg.</b>	<b>66.2</b>	<b>31.2</b>	<b>7.6</b>	<b>12.7</b>
	May-18	<b>Avg.</b>	<b>67.1</b>	<b>32.2</b>	<b>7.7</b>	<b>11.2</b>
	June-18	<b>Avg.</b>	<b>57.8</b>	<b>27.8</b>	<b>8.8</b>	<b>13.2</b>

	July-18	<b>Avg.</b>	<b>37.2</b>	<b>18.2</b>	<b>9.2</b>	<b>14.1</b>
	August-18	<b>Avg.</b>	<b>32.0</b>	<b>15.9</b>	<b>9.2</b>	<b>14.3</b>
	September-18	<b>Avg.</b>	<b>38.0</b>	<b>17.8</b>	<b>7.4</b>	<b>13.2</b>
A7 Village Rengalbeda	April-18	<b>Avg.</b>	<b>64.9</b>	<b>30.8</b>	<b>7.4</b>	<b>12.5</b>
	May-18	<b>Avg.</b>	<b>72.1</b>	<b>34.5</b>	<b>8.2</b>	<b>12.1</b>
	june-18	<b>Avg.</b>	<b>61.3</b>	<b>28.6</b>	<b>9.6</b>	<b>13.9</b>
	July-18	<b>Avg.</b>	<b>42.5</b>	<b>19.5</b>	<b>9.9</b>	<b>14.8</b>
	August-18	<b>Avg.</b>	<b>37.0</b>	<b>17.9</b>	<b>9.9</b>	<b>15.2</b>
	September-18	<b>Avg.</b>	<b>37.4</b>	<b>17.6</b>	<b>7.3</b>	<b>13.8</b>
A8 Village Malda	April-18	<b>Avg.</b>	<b>64.9</b>	<b>30.8</b>	<b>7.4</b>	<b>12.5</b>
	May-18	<b>Avg.</b>	<b>67.5</b>	<b>32.4</b>	<b>7.7</b>	<b>11.3</b>
	June-18	<b>Avg.</b>	<b>59.1</b>	<b>28.4</b>	<b>9.01</b>	<b>13.5</b>
	July-18	<b>Avg.</b>	<b>38.7</b>	<b>19.7</b>	<b>9.5</b>	<b>14.6</b>
	August-18	<b>Avg.</b>	<b>42.4</b>	<b>15.5</b>	<b>9.3</b>	<b>14.4</b>
	September-18	<b>Avg.</b>	<b>35.4</b>	<b>16.2</b>	<b>6.7</b>	<b>12.5</b>
A9 Beneficiation Plant	April-18	<b>Avg.</b>	<b>67.1</b>	<b>31.7</b>	<b>7.7</b>	<b>12.8</b>
	May-18	<b>Avg.</b>	<b>66.8</b>	<b>31.5</b>	<b>7.7</b>	<b>12.8</b>
	June-18	<b>Avg.</b>	<b>59.02</b>	<b>27.8</b>	<b>9.0</b>	<b>13.5</b>
	July-18	<b>Avg.</b>	<b>38.8</b>	<b>19.4</b>	<b>9.2</b>	<b>14.1</b>
	August-18	<b>Avg.</b>	<b>35.6</b>	<b>17.8</b>	<b>8.7</b>	<b>13.8</b>
	September-18	<b>Avg.</b>	<b>39.5</b>	<b>18.6</b>	<b>7.7</b>	<b>13.5</b>

**Testing & sampling Carried by : Spectro Analytical Labs Limited, New Delhi**

**G. MINERAL TRANSPORTATION.**

**Higher capacity trucks are being encouraged** for mineral transportations. The vehicles carrying the loaded materials are being released with tarpaulins covers.



**Vehicular Emission monitoring:** Regularly monitoring the emission of all the transported vehicles entering to the mines premises to ascertain whether the vehicle meet the pollution norms. Also checking all desired licenses/permits along with **PUC certificate (Pollution under Control)** at the time of entry to mine premises. The vehicles which are carrying the loaded materials are being released with tarpaulin covers to check the emission of the vehicle & mineral spillage. The tests are being conducted on regular basis by engaging authorized Pollution Testing Centre.

OR09J2299  
27-Oct-2018 26-Apr-2019  
44.5  
STA-CTC-POLL-01/09

ସ୍ୱଚ୍ଛତା ପ୍ରମାଣ  
କାର୍ଯ୍ୟ ରକ୍ଷା

**COMPUTERISED EMISSION TEST CERT**  
AUTHORISED BY : Govt. OF ODISHA  
C. N. V. R  
MAA LAXMI POLLUTION TESTING CENTRE  
JODA BARBIL HIGHWAY, SERENDA, BARBIL, KEONJHAR, Tel/Fax: -

I. D. Number : ORDP094666 Licence No. : STA-CTC-  
Year Of Registration : 2007 Date : 27-Oct-2018  
Vehicle Registration No. : OR09J2299 Time : 10:10:28 AM  
Spedometer Reading(Kms) : 0 Driver : D  
Engine Number : 89765 Owner : MS. T. E.  
Ve → color : GREEN Test Fee: Rs. 150/-  
Chassis Number : 874786 Fuel : Diesel  
Vehicle Model : VOLVO Smk cell Temp 52  
Type Of Engine : Others Oil Temp : 78.0  
Type Of Vehicle : Others Test Station Code : 009 Valid UpTo : 26-Apr-2019  
Grade : A  
Test Result : Free Acceleration Validity: 6Months

No.Of K	Kval	MinRpm	MaxRpm	Interval	OilTemp
1	1.34	820	2250	5.4	75.0
2	1.31	810	2140	4.5	76.0
3	1.39	820	2180	5.4	77.0
4	1.43	810	2250	5.1	78.0
5	-	-	-	-	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-

## II. INFRASTRUCTURAL IMPROVEMENT IN THE AREA

### A, Four Lanning of NH-215 :

NH-215 connecting Panikoili to Rajamunda passes through the lease area. 4- lanning of NH-215 from Panikoili to Rimuli is already completed and Rimuli to Rajamunda is almost completed. As per the CRR I study the road network is adequate enough to facilitate the transport of mineral from the mine to public railway sidings and as per the IRC norm the V/C ratio is under Category – A (<25%).



## B. Doubling of South Eastern Railway Line:

There are ten Railway sidings like Bolani, Barbil, Jaroli, Banspani, Nayagarh, Deojhar etc. are well within 20-30 k from the mine lease. Presently half the capacities of the sidings are underutilization. Further towards easy movement of traffic the single line is converting in to double line. Except small stretch entire area is completed.



## C. MINE ROAD:

Concrete road from mine exit to public road used for transportation has been made.



**Vacuum Cleaner** – Sweeping on the mineral transport road is presently under practice by Lessee. However we are in the process of procuring two no of vacuum cleaner. We have already placed the purchase order @ 10 lakhs per unit from Vinayak Construction Equipment.



#### **D. PARKING PLAZA**

Two no's of parking plaza with basic facilities like toilet & rest shelter in compliance to NEERI recommendation Lessee has established



## E. Rain water harvesting outside the lease area



F. **Additional concrete roads** in the surrounding villages has been constructed by the Lessee.



### **III. SOCIAL BENEFITS**

#### **A) CSR activities already carried out:**

M/s. KJS Ahluwalia believes in inclusive growth and is committed in its social responsibilities. From year 2004 to till now the lease has spent Rs.20.31 crores towards CSR activities in the region with the following break up:

Year	Expenditure (In Lakh)
2004-05	18.69
2005-06	21.33
2006-07	107.68
2007-08	196.44
2008-09	163.04
2009-10	177.63
2010-11	206.69
2011-12	141.9
2012-13	113.48
2013-14	277.57
2014-15	132.21
2015-16	71.38
2016-17	102.00
2017-18	132.00
2018-19	169.00
<b>Total</b>	<b>2031.04</b>

M/s. KJS Ahluwalia has spent more than Rs. 4.37 Crores for various CSR programmes between 2014-15 to 2017-18. Some of the prominent activities are as follows:

**CSR EXPENDITURES FROM 2014-15 TO 2017-18**

Rs.in Lakhs

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>Total</b>
Rural Development Projects	64.40	-	25.00	18.20	<b>107.60</b>
Rural development Projects at peripheral villages	-	2.84	-	30.00	<b>32.84</b>
Public transportation and communication	0.13	0.70	0.50	0.70	<b>2.03</b>
Employment to Local inhabitant	1.75	1.31	2.50	3.10	<b>8.66</b>
Education and Training	41.66	10.55	10.00	10.50	<b>72.71</b>
Health, Safety Medical facility	15.66	10.30	15.00	20.00	<b>60.96</b>
Sanitation	-	-	1.00	1.50	<b>2.50</b>
Drinking Water	6.60	13.10	10.00	18.00	<b>47.70</b>
Housing	-	20.99	25.00	30.00	<b>75.99</b>
Others	2.01	11.59	13.00	-	<b>26.60</b>
<b>Total</b>	<b>132.21</b>	<b>71.38</b>	<b>102.00</b>	<b>132.00</b>	<b>437.59</b>

**Peripheral Development Work under taken by Nuagaon Iron Ore Mines For the year-2014-15**

<b>S. No.</b>	<b>Particulars</b>	<b>Estimated Budget (in lakhs)</b>	<b>Project Description</b>	<b>Expected out come (in lakhs)</b>	<b>Category</b>
2	Promoting Rural Development at Guali, Barpada Nuagaon village	2.00	Gift Prize at Barpada School, Sweets Republic Day at Barpada, Nuagaon Guali School, Donation for Sports activity at Barpada Nuagaon village, Donation for Puja activity at Guali, Barpada Nuagaon village, Donation for Social welfare	2.01	Rural Development
	Public transportation and communication	1.00	Public transportation and communication	0.13	
	Employment to Local inhabitant	2.00	Employment to Local inhabitant	1.75	
	Rural Development Projects	25.00	Construction of Parikrama Bhaban near Shiv Mandir at Nuagaon village of District Keonjhar, Odisha	22.40	
	Rural Development Projects	42.00	Sewerage, Treatment, Plantation, Drinking Water Harvesting, Water Treatment Etc	42.00	
3	Education and Training	10.00	Teacher Salary Katesahi, Guali, Gandhalpada, Kolharoadkala Barpada School, Boundary Wall repairing and cement painting at Guali, Nilanchal High School, Bhadrasahi School, School vehicle at Katesahi, Guali, Gandhalpada, Kolharoadkala Barpada School	9.31	Education & Skill Development
		1.50	I.T.I, Diploma, Graduate, Mgnit Trainee Etc	1.50	
		30.85	School Running, Mid-Day Meals, School Bus	30.85	
4	Drinking Water	7.00	Pipe Line water supply and water supply by water tanker at Barpada, Kolharoadkala, Guali, Nuagaon, Godasahi and Gandhalpada Village of Keonjhar District, Odisha, Joda Block	6.60	Healthcare
5	Health Projects	15.66	Dispensary, Pest Control Operation, Ambulance, Health Camp, Drinking Water Etc.	15.66	
<b>Total</b>				<b>132.21</b>	

Peripheral Development Work under taken by Nuagaon Iron Ore Mines For the year-2015-16					
Sl. No.	Particulars	Estimated Budget (in lakhs)	Project Description	Expected out come (in lakhs)	Category
1	Social Welfare	10.00	BABA Swapaneswar Self Hef Group Within Lease Area of Nuagaon Iron Ore Mines, Beutification at BBSR Air Port, Sarba Bhoutik Anath Sishu Ashram	11.59	Rural Development
2	Housing	20.00	Construction of Community Center at Nuagaon Village	20.99	
3	Employment to Local inhabitant	1.00	Self Employment at Barpada, Guali, Nuagaon, Panduliposi village, Widow Payment at Barpada Nuagaon village	1.31	
4	Public transportation and communication	1.00	Hiring vehicle provided at different villages of Guali Panchyat	0.70	
5	Rural development at Peripheral Villages	2.00	Gift Prize for Barpada, Nuagaon Guali School, Sweets Republic Day for Barpada, Nuagaon Guali School , Donation for Sports activity atBarpada Nuagaon village,Donation for Puja activity at Guali, Barpada Nuagaon village, Donation for Social welfare at Guali, Barpada Nuagaon village	2.84	Sports
6	Education Training	10.00	Teacher Salary at Katesahi, Guali, Gandhalpada, Kolharoadkala Barpada School,School Vehicle atKatesahi, Guali, Gandhalpada, Kolharoadkala Barpada School	10.55	Education & Skill Development
7	Drinking Water	13.00	Pipe line water supply at Barpada Kolharoadkala Village, upply by Water Tanker at Guali, Nuagaon, Godasahi Gandhalpada Village, Bore well Maintainance at Guali, Barpada Chormalda	13.10	Healthcare
8	Health, Safety Madical facility	10.00	Free medical treatment at Guali Dispensary for different village at Guali Panchayat,Ambulance Service at different village at Guali Panchayat	10.30	
<b>Total</b>				<b>71.38</b>	

**Peripheral Development Work under taken by Nuagaon Iron Ore Mines For the year-2016-17**

<b>Sl. No.</b>	<b>Particulars</b>	<b>Estimated Budget (in lakhs)</b>	<b>Project Description</b>	<b>Expected out come (in lakhs)</b>	<b>Category</b>
1	Others	10.00	Public Function at Within mining Lease Area of Nuagaon Iron Ore Mines	13.00	Swachh Bharat
3	Rural Development Projects	25.00	Gift Prize at Barpada School, Sweets Republic Day at Barpada, Nuagaon Guali School, Donation for Sports activity at Barpada Nuagaon village, Donation for Puja activity at Guali, Barpada Nuagaon village, Donation for Social welfare at Guali, Barpada Nuagaon village	25.00	Rural Development
4	Public transportation and communication	0.50	Hiring vehicle provided at different villages	0.50	Rural Development
5	Housing	25.00	Construction of Parikrama Bhaban near Shiv Mandir at Nuagaon Village,	25.00	Rural Development
6	Employment to Local inhabitant	2.00	Self Employment at Barpada, Guali, Nuagaon, Panduliposi village, Widow Payment at Barpada Nuagaon village	2.50	Gender Equality and Empowerment
7	Education and Training	10.00	Teacher Salary at Katesahi, Guali, Gandhalpada, Kolharoadkala Barpada School, Boundary Wall Repairing, Cementing Penting at Guali, Nilanchal High School and Bhadrasahi School, School Vehicle for Katesahi, Guali, Gandhalpada, Kolharoadkala Barpada School	10.00	Education & Skill Development
8	Health, Safety Madical facility	15.00	Supply of 125 nos Blanket at different villages of Keonjhar District, Free medical treatment at Guali Dispensary of different village at Guali Panchayat, Ambulance Service for different village at Guali Panchayat	15.00	Healthcare
9	Sanitation	1.00	Pest Control at Nuagaon Village Hutting	1.00	Healthcare
10	Drinking Water	10.00	Pipe line water supply at Barpada Kolharoadkala Village, Supply by Water Tanker at Guali, Nuagaon, Godasahi Gandhalpada Village	10.00	Healthcare
<b>Total</b>				<b>102.00</b>	

<b>Peripheral Development Work under taken by Nuagaon Iron Ore Mines For the year-2017-18</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Estimated Budget (in lakhs)</b>	<b>Project Description</b>	<b>Expected out come (lakhs)</b>	<b>Category</b>
1	Rural Development Projects	18.00	Public Function at Within Lease Area of Nuagaon Iron Ore Mines , Electricity at Nuagaon Hutting, Barpada Kolharoadkala	18.20	Rural Development
2	Rural development Projects at peripheral villages	30.00	Gift Prize to Barpada School, Sweets Republic Day to Barpada, Nuagaon Guali School, Donation for Sports activity to Barpada Nuagaon village, Donation for Puja activity to Guali, Barpada Nuagaon village, Donation for Social welfare.	30.00	Rural Development
3	Public transportation	0.70	Hiring vehicle provided for different villages	0.70	Rural Development
4	Employment to Local inhabitant	10.00	Self Employment at Barpada, Guali, Nuagaon, Panduliposi village, Widow Payment at Barpada Nuagaon village	3.10	Rural Development
5	Education and Training	10.50	Teacher Salary for Katesahi, Guali, Gandhalpada, Kolharoadkala Barpada School, Boundary Wall Repairing, Cementing Penting at Guali, Nilanchal High School, Bhadrasahi School, School Vehicle for Katesahi, Guali, Gandhalpada, Kolharoadkala Barpada School	10.50	Education & Skill Development
6	Health, Safety Madical facility	20.00	Supply of 125 nos Blanket at different villages at Keonjhar District, Free medical treatment at Guali Dispensary of different village at Guali Panchayat, Ambulance Service for different village at Guali Panchayat	20.00	Healthcare
7	Sanitation	1.50	Pest Control at Nuagaon Village Hutting	1.50	Healthcare
8	Drinking Water	18.00	Pipe line water supply at Barpada Kolharoadkala Village, Supply by Water Tanker at Guali, Nuagaon, Godasahi Gandhalpada Village	18.00	Healthcare
9	Housing	30.00	Construction of Club at Patra Basti at Guali Village	30.00	Rural Development
<b>Total</b>				<b>132.00</b>	

**PHOTOS OF CSR ACTIVITIES CARRIED OUT SO FAR**



**BOUNDARY WALL CONSTRUCTION AT NILACHAL HIGH SCHOOL**



**MEDICAL CAMP AT GUALI VILLAGE**



**HEALTH CAMP AT VARIOUS PLACES OF GUALI PANCHAYAT**



**SCHOOL AT KATASAHI & DISTRIBUTION OF FREE BOOKS TO VILLAGE KIDS**



**ELECTRIFICATION OF GUALI VILLAGE**



**ROAD REPAIRING ACTIVITIES**



**MID-DAY MEAL SYSTEM AT KATASAHI SCHOOL**



**CONSTRUCTION OF K-13 BRIDGE**



**CLUB HOUSE PROVIDED TO BARPADA VILLAGE**



**HOUSE CONSTRUCTED FOR POOR PEOPLE**



**BATHING GHAT FOR VILLAGERS**



**CONSTRUCTION OF TEMPLE**



**CONSTRUCTION OF PALA**

**B). Benefits under engagement of local trucks/tippers for transportation**

**Presently 425 local trucks/tippers and 1700 people engaged in transportation. The details are given in below table.**

Sl No	List of Truck Woner	Name of Transport	Village	Tripper	Hyva	Trucks	Total	Driver	Helper
1	Naba Apat	Shree Neelachal Mining and Minerals Pvt.Ltd.	Guali	10	50	25	85	170	170
2	Kusha Apat		Guali	8	10	10	28	56	56
3	Mithu Kishore Apat		Guali	0	4	2	6	12	12
4	Bhimsen Apat		Guali	0	3	0	3	6	6
5	Satyananda Ghana		Guali	5	8	2	15	30	30
6	Bishnu Apat		Guali	2	2	4	8	16	16
7	Mitrabhanu Apat		Guali	2	0	2	4	8	8
8	Mithun Apat		Guali	0	0	2	2	4	4
9	Sharma Khuntia		Guali	0	2	0	2	4	4
10	Havi Ranjan Barik		Guali	1	3	1	5	10	10
11	Niranjan Barik		Guali	1	0	3	4	8	8
12	Chitu Palli		Guali	2	2	0	4	8	8
13	Gouranga Palli		Guali	0	0	2	2	4	4
14	Ganeshwar Sahoo		Guali	0	2	0	2	4	4
15	Harekrishna Apat		Guali	2	4	0	6	12	12
16	Pitambar Tamundia		Guali	0	1	0	1	2	2
17	Kedar Barik		Guali	0	1	0	1	2	2
18	Ramesh Patra		Gandarpada	0	1	0	1	2	2
19	Mutu Munda		Guali	0	1	0	1	2	2
20	Dabra Munda		Gandarpada	0	5	0	5	10	10
21	Ramesh Mohanty		Guali	2	0	1	3	6	6
22	Bahadur Suren		Barpada	4	2	0	6	12	12

23	Bidyadhar Naik		Barpada	4	3	0	7	14	14
24	Girish Chandra Nayak		0	2	0	0	2	4	4
25	Juria Munda		Gandarpada	0	4	0	4	8	8
26	Damru Nayak		Barpada	2	1	0	3	6	6
27	Pinu Patra		Guali	2	0	0	2	4	4
28	Lalmohan Machua		Guali	0	2	0	2	4	4
29	Suresh Patra		Guali	1	0	0	1	2	2
30	Mahendra Ghana		Guali	1	8	6	15	30	30
31	Sujnana Barik		Guali	0	2	2	4	8	8
32	Shyam Barik		Guali	0	4	3	7	14	14
33	Sanjeeb Palli	S.K.Transport	Guali	8	0	5	13	26	26
34	Bidya Pallie	Susan Minerals	Guali	5	25	10	40	80	80
35	Kundar Khilar		Rugudhi	0	1	0	1	2	2
36	Sanjeeb Mahanta		Rugudhi	1	1	0	2	4	4
37	Rinku Jaswal		Rugudhi	0	4	0	4	8	8
38	Birinchi Mahakud	Maa Transport	Rugudhi	6	6	4	16	32	32
39	Birabar Mahakud	Jagannath Transport	Rugudhi	0	0	4	4	8	8
40	Dharmendra Modi		Roidapada	2	4	0	6	12	12
41	R.K.Jaiswal		Roidapada	2	0	0	2	4	4
42	Prakash Barik		Rugudhi	0	0	1	1	2	2
43	MD.Asif		Rugudhi	2	1	0	3	6	6
44	Aktar Barik		Rugudhi	0	0	4	4	8	8
45	Maheswar Ghana		Katasahi	8	8	0	16	32	32
46	Gouranga Ghana		Katasahi	4	6	2	12	24	24
47	Dasarath Barik	Rahul Associates	Katasahi	30	20	0	50	100	100
48	H.K.Singh		Katasahi	1	1	0	2	4	4
49	Balaram Naik		Topadhi	3	4	1	8	16	16
			<b>TOTAL</b>	<b>123</b>	<b>206</b>	<b>96</b>	<b>425</b>	<b>850</b>	<b>850</b>

**BENEFITS TO GOVERNMENT**

**As per MM(DR) Amendment Act, 2015 & Mineral (Auction) Rule, 2015, District Mineral Foundations (DMF)** are statutory bodies in India established by the State Governments by notification. They derive their legal status from section 9B of Mines and Minerals (Development and Regulation) Act, 1957 as amended on 26 March 2015 as Mines and Minerals (Development and Regulation) Amendment Act, 2015. This came into force from 12 January 2015.

Each District Mineral Foundation is established by the State Governments by notification as a trust or non-profit body in the mining operation affected districts. The committee constitutes district collector, Executive Engineer RWD, Executive Engineer R&B division, Project Director DRDA, ADM, Deputy Director Mines.

The objective of District Mineral Foundation is to work for the interest of the benefit of the persons and areas affected mining related operations in such manner as may be prescribed by the State Government.

Funds every mining lease holder will pay a fraction of royalty, not exceeding one-third of the royalty, to the DMF as per rates prescribed by Central Government. This fund will be used for welfare of the people affected in the mining affected areas.

The Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) will be implemented by the DMFs of the respective districts using the funds accruing to the DMF. The overall objective of PMKKKY scheme will be

- a) To implement various developmental and welfare projects/programs in mining affected areas, and these projects/ programs will be complementing the existing ongoing schemes/projects of State and Central Government;
- b) To minimize/mitigate the adverse impacts, during and after mining, on the environment, health and socio-economics of people in mining districts; and

- c) To ensure long-term sustainable livelihoods for the affected people in mining areas.

Hence, it is evident that the above activities mentioned form a part of the job to be executed through the District Mineral Fund (DMF).

**M/s. KJS Ahluwalia has paid Rs 228.18 Crore till March 2019 under DMF to State Government.**

For year 2019-20, the total revenue expected to state and central Government from royalty, DMF, NMET etc. per annum will be as follows:

<b>Existing Production/ Annum</b>	5.62	Million Tonnes
Amount of Royalty/Seigniorage Fee payable /Annum @Rs 761.00 /T	427.68 Cr	Rupees
Contribution Towards District Mineral Foundation Trust @30% of Royalty	128.30 Cr	Rupees
Contribution Towards National Mineral Exploration Trust @2% of Royalty	8.55 Cr	Rupees
<b>Total Revenue expected to Govt. Towards Royalty/Seigniorage, DMF &amp; NMET</b>	<b>564.53cr</b>	<b>Rupees</b>