

MINUTES OF THE 106TH MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 18TH, 19TH, 20TH, 21ST and 22ND JULY, 2023.

The 106th meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 18th, 19th, 20th, 21st and 22nd July, 2023 under the Chairmanship of Shri Ashok Kumar Singh, IFS (Retd.) in the Conference Room at SEAC, Ranchi.

The following members were present:

1. Shri Ashok Kumar Singh, IFS (Retd.) - Chairman
2. Dr. Kirti Avishek - Member
3. Shri Niranjan Lal Agarwalla - Member
4. Dr. Raju Kumar - Member
5. Dr. Ajay Govind Bhatt - Member
6. Shri Srikant Verma, IFS - Secretary

SEIAA forwarded various projects to the SEAC for the technical appraisal after the last SEAC meeting held on 15th, 16th, 17th, 18th and 19th June, 2023. These projects have been put up for discussions. Besides, these Projects, wherein PP's were asked to provide requisite information / clarifications in the earlier meeting of SEAC, were also considered for appraisal. The Project Proponents have been asked to make technical presentation for the appraisal of their projects before the committee.

The following observations / recommendations were made during the presentation (Project -wise), as under :-

Day 1 : July 18th, 2023 [Tuesday]

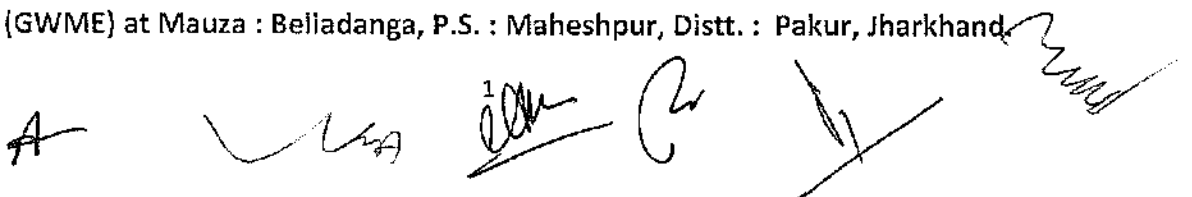
- A. Corrigendum EC letter for Common Bio Medical Waste Treatment Facility of M/s Greenland Waste Management Enterprises (GWME) at Mauza : Beliadanga, P.S. : Maheshpur, Distt. : Pakur, Jharkhand.**

(Proposal No : SIA/JH/MIS /302275 /2023).

The EC was granted to Common Bio Medical Waste Treatment Facility of M/s Greenland Waste Management Enterprises (GWME) at Mauza : Beliadanga, P.S. : Maheshpur, Distt. : Pakur, Jharkhand and this name is placed in all the sections of EC issued except on page no. 08 where it is mentioned as Common Bio Medical Waste Treatment, Storage and disposal Facility (CBMWTSDF) of M/s Nilawars Watergrace Waste Management Pvt. Ltd. at plot no. 955, Khata no. 34, at Vill : Pochra, Tehsil : Mandu, District : Ramgarh, Jharkhand (1.37 Acre).

The PA's vide online application no. SIA/JH/MIS /302275 /2023 has requested for necessary correction in Environmental Clearance issued vide letter no. EC/SEIAA/2020-21/2514/2020/143, dated 14.06.2023 with regard to rectification in name of the project , the corrected details of the project is being given below :

Common Bio Medical Waste Treatment Facility of M/s Greenland Waste Management Enterprises (GWME) at Mauza : Beliadanga, P.S. : Maheshpur, Distt. : Pakur, Jharkhand.



The SEAC considered the same and recommends for issuance of corrigendum EC with corrected details as stated above. Rest other terms & conditions mentioned in the previous EC letter no. EC/SEIAA/2020-21/2514/2020/143, dated 14.06.2023 shall remain the same.

B. Consideration of Proposals

1. Kujam 1 Bauxite Mine of M/s Hindalco Industries Ltd. (HIL), Village : Kujam, Dewragini & Chatam, Taluka : Bishunpur, Dist. : Gumla, Jharkhand (80.87 Ha).

(Proposal No. : SIA/JH/MIN/430452/2023)

Name of the consultant : J.M. Enviro Net Pvt. Ltd., Haryana

This is a existing mine which has been taken for appraisal on 18.07.2023

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94th meeting held on 10-14.05.2022 and SEIAA, Jharkhand has approved the ToRs in 95th meeting held on 14th, 15th & 16th June, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2018-19/2568/2018/131, dated 18.06.2022.

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 101th meeting held on 20-24.02.2023 and SEIAA, Jharkhand has approved the Corrigendum of ToRs in 102nd meeting held on 17th & 18th March, 2023. Corrigendum of TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2018-19/2568/2018/463, dated 24.03.2023. The final EIA / EMP submitted by PP to SEIAA on 06.06.2023 and which was forwarded to SEAC on 07.06.2023.

Hindalco Industries Limited (HIL) is a flagship company of Aditya Birla Group and is non-ferrous power house. The company is a public limited company registered under Indian Companies Act, 1956 having its Registered Office at Mumbai, India.

Jharkhand Bauxite Mines division of HIL caters Bauxite requirement of its alumina refineries located at MURI in Jharkhand and Renukoot in Sonbhadra district of U.P. M/s. Hindalco Industries Limited is operating an existing Kujam I Bauxite Mine (Area- 80.87 ha) with production Capacity of Bauxite 150000 TPA in Villages: Kujam, Dewragini & Chatam, Taluka: Bishunpur, District: Gumla, Jharkhand. Total Mining Lease area is 80.87 ha out of which 74.27 Ha Rayati land and 6.60 Ha is GM land.

Environment Clearance for Existing Kujam I Bauxite Mine (Area- 80.87 ha) with granted production capacity 150000 TPA was granted by MoEF& CC, Govt. of India vide letter no. J-11015/240/2005-IA.II(M), dated 14.08.2006.

Initially Mining lease was granted to M/s Indian Aluminium Co. Limited by Department of

A     

Mines and Geology, State Government of Jharkhand vide letter no 3/97-964/M dated 07.07.2005 for 20 years. Mining lease was transferred in favor of M/s Hindalco Industries Limited by Department of Mines and Geology, State Government of Jharkhand vide order no. 407/M dated 21.02.2006. Mining lease was executed in favor of M/s Hindalco Industries Limited on 13.03.2006. Validity of Mining lease was extended up to 12.03.2056 as per sub section 8A (3) of MMDR Amendment Act 2015 by State Govt. of Jharkhand vide letter dated 07.01.2017.



Khata no. & Plot no. of the project :

Khata No.	Plot No.
34	431
34	430
5	429
22	433
77	435
77	436
16	437
55	438
32	439
34	440
51	441
51	442
34	443
77	444
34	445
91	446
58	447
77	448
51	449
58	450
77	451
23	452
78	453
77	455
77	456
23	457
91	458
32	459
23	460
8	461
77	462
10	463
34	464
34	465

A

WMA

3
 (R)


77	467
78	468
8	469
23	470
8	471
16	472
77	473
91	474
16	475
16	476
91	477
10	478
77	480
78	481
23	482
91	483
8	413
78	414
77	415
16	416
16	417
91	419
16	420
17	421
16	422
32	423
34	424
32	425
34	426
51	427
51	428
8	1
66	2
76	3
54	5
66	6
8	7
54	15
30	404
30	405
4	406
32	407
32	408
4	409
3	411

4

A   B  

3	412
3	413
4	414
4	415
4	416
30	417
30	418
30	419
37	420
32	421
32	423
4	424
15	425
3	426
37	427
4	428
4	429
4	430
3	431
4	432
51	433
37	434
4	435
30	436
30	438
37	439
30	440
32	441
32	442
32	444
3	446
37	445
4	447
37	448
37	449
51	450
30	1177
32	1178
37	451
15	453
4	454
15	55
4	56
3	57
3	59

A

USA⁵  B

51	60
4	61
51	62
4	63
19	1179
4	464
3	465
3	466
15	468
15	469
22	470
19	472
19	473
51	474
22	475
22	476
3	477
3	478
4	479
4	480
3	481
3	482
3	483
4	485
4	486
32	487
4	489

Salient Features of the project :

S. No.	Particulars	Details
A.	Nature of the Project	Kujam I Bauxite Mine
B.	Size of the Project	
1.	Mining Lease Area	80.87ha
2.	Bauxite Production capacity	150000 TPA
C.	Location Details	
1.	Villages	Kujam, Dewragini & Chatam
2.	Taluka	Bishunpur
3.	District	Gumla
4.	State	Jharkhand
5.	Mine area coordinates	Latitude - 23°17'37.24"N to 23°18'38.31"N Longitude- 84°18'35.81"E to 84°19'21.68"E

6



6.	Toposheet No of study area	73A/3, 73 A/4, 73A/7 & 73 A/8	
D.	Cost Details		
1.	Total Project Cost	No capital investment as this proposal is being applied for Validation of EC as per MoEFCC Notification dated 06.04.2018. However, existing project cost is Rs. Rs. 8.0 Crore/-	
2.	Cost for Environment Protection Measures.	Particulars	
		Capital Cost	Rs. In crore
		Capital Cost for Environment Management Protection	4.25
		Capital Cost for Public Consultation issues	1.045
		Total	5.30
		Recurring cost	
	EMP Cost (Recurring)	0.18	
	Recurring Cost for Public Consultation issues	0.045	
	Total	0.225	
E.	Requirements of The Project		
1.	Water Requirement	23 KLD, Source: Mine sump water and natural spring water.	
2.	Manpower Requirement	Approx. 294 persons	

Mining details :

S. No.	Particulars	Details
1.	Method of mining	Fully Mechanized Opencast mining
2.	Total Geological Reserves	0.76 million tonnes (as on 01.04.2020)
3.	Total Mineable reserves	0.63 million tonnes (as on 01.04.2020)
4.	Life of the Mine	5 Years @ 0.15 million TPA
5.	Bench Height	6 m
6.	Bench Width	6m (Minimum)
8.	Elevation Range	1020 to 1046 m AMSL
9.	Present working depth	10 - 12 m
10.	Ultimate Working Depth	10 - 12 m
11.	ROM/Waste Ratio (Tonnes: Cum)	1 : 1.68

A *WMA* *7* *elk* *(a)* *B* *WMA*

12.	Number of Working Days	300 days
13.	Number of shifts per day	2 Shifts

Land use details :

S. No.	Type of land use	At present (Ha)	At the end of Plan/Conceptual Period (Ha)
1.	Excavated area (Backfilled)	15.02	22.19
	Excavated area (Water Reservoir)	0.86	10.95
	Excavated area (Re-grassing)	4.65	20.73
	Total	19.67	53.87
2.	Road	1.63	0.61
3.	OB Dump left for plantation	0.52	0.52
4.	Greenbelt on 7.5 m safety zone	3.16	7.86
5.	Undisturbed area	55.89	18.01
	Total	80.87	80.87

Past production details since inception of mine :

1.	2006-07	1.5	-
2.	2007-08	1.5	-
3.	2008-09	1.5	-
4.	2009-10	1.5	-
5.	2010-11	1.5	30645
6.	2011-12	1.5	149570
7.	2012-13	1.5	149018
8.	2013-14	1.5	149255
9.	2014-15	1.5	149360
10.	2015-16	1.5	149590
11.	2016-17	1.5	148770
12.	2017-18	1.5	141655
13.	2018-19	1.5	131115
14.	2019-20	1.5	44245
15.	2020-21	1.5	59695
16.	2021-22	1.5	94130

A

USA

[Signature]

[Signature]

[Signature]

[Signature]

Year-wise Proposed Production Details (cum)

Year	Total Excavation in {Cu.m.}	Soil & Morrum in {Cu.m.}	OB/SB/ IB {Laterite } In {Cu.m.}	ROM {Cu.m.}		Mineral reject*	ROM/ Waste Ratio
				Ore in {Cu.m.}	Mineral reject {Cu.m}		
2020-21	158286	71931	17669	61817	0	6869	0.40
2021-22	180346	109226	2589	61678	0	6853	0.15
2022-23	194446	122039	3579	61945	0	6883	0.17
2023-24	200903	109601	22514	61909	0	6879	0.47
2024-25	82522	35941	28738	16059	0	1784	1.90
Total	816506	448738	75089	263408	0	29268	0.40

Year-wise Proposed Production Details (Tonnes)

Year	Total Excavation in Tonnes	Soil & Morrum in Tonnes	OB / SB / ID (Laterite) in Tonnes	ROM (Tonnes)		Mineral reject	ROM / Waste Ratio
				Ore in Tonnes	Mineral reject (Tonnes)		
2020-21	311840	115090	35338	148361	0	13051	0.40
2021-22	340988	174762	5178	148028	0	13021	0.15
2022-23	364167	195262	7158	148669	0	13078	0.17
2023-24	382041	175362	45028	148581	0	13070	0.47
2024-25	156913	57506	57476	38542	0	3390	1.90
Total	1555949	717981	150178	632181	0	55609	0.40

Waste generation in next five years (Cum)

Year	Soil & Morrum	Lateritic OB	Total OB	Quarry waste	Total OB & waste
2020-21	71931	17669	89600	6869	96469
2021-22	109226	2589	111815	6853	118668
2022-23	122039	3579	125618	6883	132501
2023-24	109601	22514	132115	6879	138994
2024-25	35941	28738	64679	1784	66463
Total	448738	75089	523827	29268	553095

Waste management Plan in next five years (Cum)

Year	Top Soil and Murrum in Cu.m		Waste/ Quarry Rejects in Cu. m			
	Reuse/Spreading	Storage	Backfilling	Storage	Blending	Beneficiation
2020-21	71931	0	6869	0	0	0
2021-22	109226	0	6853	0	0	0
2022-23	122039	0	6883	0	0	0
2023-24	109601	0	6879	0	0	0
2024-25	35941	0	1784	0	0	0
Total	448738	0	29268	0	0	0

Currently, all overburden is backfilled in mined-out areas. These backfilling was started a little away from edge of the plateau and are suitably benched for stability. All excavated OB waste will be used for concurrent backfilling and soil will be used for reclamation of the backfilled quarry by spreading over the backfilled area. The height of backfilling in the area varies from 7m to 8m.

Waste generation vs utilization in reclaimed area

Year	Total OB & Waste	Reclaimed area in ha.
2020-21	96469	1.28
2021-22	118668	1.51
2022-23	132501	1.3
2023-24	138994	2.11
2024-25	66463	0.97
Total	553095	7.17

STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Lohardaga Forest Division vide memo no. 1386, dated 09.06.2021 certified that the proposed project site is adjacent to the notified forest land.
2	DFO Wild Life	:	Deputy Director, Palamau Tiger Project, South Division, Medininagar vide letter no. 457, dated 19.03.2021 certified that the proposed project site is outside Eco Sensitive Zone of Palamu Wildlife Sanctuary, Betla National Park and Mahuadanr Wolf Sanctuary.
3	CO certificate	:	The CO, Bishunpur (Gumla) vide letter no. 412, dated 11.10.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar & Register II.

10

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

The Primary baseline data for specific micro – meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during Summer Season (March – May, 2022). The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported.

Ambient Air Quality: The concentrations of PM10 and PM2.5 for all the 8 AAQM stations were found between 52.3 to 84.2 $\mu\text{g}/\text{m}^3$ and 28.5 to 49.8 $\mu\text{g}/\text{m}^3$, respectively. The concentrations of SO2 and NO2 were found in range of 6.03 to 11.05 $\mu\text{g}/\text{m}^3$ and 12.31 to 25.10 $\mu\text{g}/\text{m}^3$ respectively.

Ambient Noise Levels: Ambient noise levels were measured at 8 locations around the Mine site. Noise levels varied from 50.1 to 58.9 Leq dB (A) during day time and from 40.5 to 43.7 Leq dB(A) during night time.

Surface Water Quality: The Surface water analysis was done at 1 location shows that pH is 7.80. Odor was found agreeable and turbidity is less. Total hardness (54.4 mg/l), Total dissolved solids (82.0 mg/l), Chloride 22.4 mg/l, Alkalinity (42.7 mg/l) and conductivity (132.0 $\mu\text{s}/\text{cm}$) were found to be within standards in water samples. BOD was found below detection limit & COD was found 4.0 mg/l indicating that North Koel Rivers water is clear. The nutrients were also found viz. sulphate (1.09 mg/l), nitrate (2.18 mg/l), calcium (13.8 mg/l), magnesium (4.8 mg/l) indicate that the water bodies are rich in Calcium, silica, potassium, magnesium and bicarbonates.

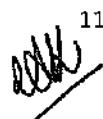
Ground Water Quality: The ground and drinking water analysis for all the 7 sampling stations shows that pH varies from 6.65 to 7.22, total hardness varies from 34.6 mg/l to 94.05 mg/l & total dissolved solids varies from 70.0 mg/l to 194.0 mg/l, chloride from 22.4 to 67.4 mg/l, SO₄ varies from 2.14 to 18.5 mg/l, Ca from 9.9 to 27.70 mg/l, Mg varies from 2.3 to 6.0 mg/l.

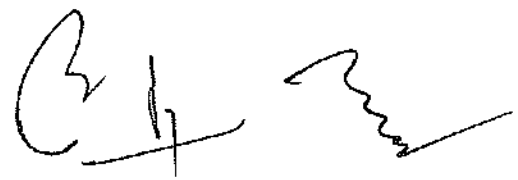
Soil Quality: The analysis result for soil shows that soil is neutral to slightly alkaline in nature as pH value varies from 6.85 to 7.94 and soil textures of the soil samples were sandy loam and sandy silt. The concentration of organic matter ranges from 0.80% to 1.18 %, Nitrogen is found to be in better amount as it ranges from 126.84 to 178.56 kg/ha and Phosphorous is very less as it varies from 21.56 to 44.85 kg/ha, whereas the Potassium is found to be ranging 76.11 to 436.13 kg/ha.

At the conceptual stage, out of the total lease area (i.e., 80.87 ha), total excavated area will be 53.87 ha out of which 22.19 ha area will be backfilled and reclaimed with agriculture, 10.95 ha area will be converted into water reservoir and 20.73 ha area will be under re-grassing. 0.52 ha area will be under plantation on area left for OB dump, 0.61 ha area will be under road, area under greenbelt will be under 7.86 ha. Total undisturbed area will be 18.01 ha on which plantation will also be done with due permission of land owners.

A



 11



S. No.	Description	Land Use (In Ha.)					Total
		Plantation/re-grassing	Agriculture	Water Body	Public Use	Undisturbed	
1.	a. Excavation (voids)	-	-	10.95	-	-	53.87
	b. Excavation (backfilled)	20.73	22.19	-	-	-	
2.	Ob dump area left for plantation	0.52	-	-	-	-	0.52
3.	Road	-	-	-	0.61	-	0.61
4.	Greenbelt on 7.5 m safety zone	7.86	-	-	-	-	7.86
5.	Undisturbed Area	18.01*	-	-	-	-	18.01
	Total	47.12	22.19	10.95	0.61	-	80.87

*Plantation on undisturbed area will be done with due permission of land owners

As per the MoEF & CC OM F.No. 22-4/2020-IA.III dated 16th Feb.,2021 (Pt. No. 3) Public consultation to be conducted for the project. Public hearing in the project is exempted and public consultation for the project held on 04.05.2023 with villagers, rural representatives, Hindalco and the officials of N.K.C.P.L. ToR corrigendum for public consultation in place of public hearing has also been obtained on 24.03.2023.

An amount of Rs. 1.045 Crore earmarked for issues raised during public consultation which will be spent in next three years.

Undertaking affirming that :

- I. There will be no use of ground water.
- II. Plantation will be done along the road upto a distance of 1.0 km along the transportation route outside the mining lease area.
- III. There will be no storage of Explosive in the ML Area.

Based on the presentation made and information provided, the Committee decided that the proposal for Kujam 1 Bauxite Mine of M/s Hindalco Industries Ltd. (HIL), Village : Kujam, Dewragini & Chatam, Taluka : Bishunpur, Dist. : Gumla, Jharkhand (80.87 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific condition :

- I. Since this is an existing mine located adjacent to the notified forest land. Therefore, 7.5 meter safety zone should be maintained as a special precautionary measure to protect the adjoining forest.

A











Day 2 : July 19th, 2023 [Wednesday]

Consideration of Proposals

1. Enhancement of MS Billet production from 27,000 TPA to 1,88,100 TPA through 3x15T (proposed) & 1x 12T (existing) Induction Furnaces along with CCM-1x2 Strand, Rad – 4/7, Slag Crusher from 15,000 TPA to 45,000 TPA capacity and production of 1,81,500 TPA TMT Bars & Rolled Products by installing Rolling Mill of capacity 550 TPD by M/s Divine Steels Pvt. Ltd. at Plot no. 13/IA, Barhi Industrial Area, Village : Konra, P.S. : Barhi, Distt. : Hazaribagh, Jharkhand.

(Proposal No. : SIA/JH/IND1/429703/2023).

Name of the consultant : Vardan Environet, Gurugram, Haryana.

This is a expansion project which has been taken for appraisal on 19.07.2023.

The proposal was considered by the committee to determine the "Terms of Reference (ToR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendments thereafter. For this purpose the Project Proponent has submitted the prescribed Form - I & PFR the proposed project falls under item 3 (a) Metallurgical Industries as per EIA Notification, 2006.

The project of M/s Divine Steels Pvt Ltd located at Plot No. 13/IA, Barhi Industrial Area, Village – Konra, Barhi, Hazaribagh, Jharkhand is for Enhancement of MS Billet production from 27,000 TPA to 188,100 TPA through 3x15T (proposed) & 1x12T (existing) Induction Furnaces, 1x12T LRF along with CCM-1x2 Strand, Rad- 4/7m, Slag Crusher from 15,000TPA to 45,000TPA capacity and production of 181,500 TPA TMT Bars & Rolled Products by installing Rolling Mill of capacity 550 TPD.

Salient features of the Project :

Sl.No.	Particulars	Details	Remarks
1.	Total Land	4.99 Ha (12.34 Acres)	Land Use: Industrial Land, already in industrial use.
2.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total area – 4.99 Ha [Acquired Land: 4.99 Ha,]	No additional land acquisition required.

A

MA






13
CDK

C2

g

CDK

Sl.No.	Particulars	Details	Remarks															
3.	Existence of habitation & involvement of R&R, if any	<p>Project Site: Nil</p> <p>Study Area:</p> <table border="1"> <thead> <tr> <th>Nearest Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Barhi Town</td> <td>0.08km</td> <td>North West</td> </tr> </tbody> </table>	Nearest Habitation	Distance	Direction	Barhi Town	0.08km	North West	R&R: Not Involved. Land acquired and allotted by JIADA.									
Nearest Habitation	Distance	Direction																
Barhi Town	0.08km	North West																
4.	Latitude and longitude of all corners of the project site	<table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>24°18'2.57"N</td> <td>85°26'13.13"E</td> </tr> <tr> <td>B</td> <td>24°18'3.31"N</td> <td>85°26'31.45"E</td> </tr> <tr> <td>C</td> <td>24°17'59.81"N</td> <td>85°26'31.12"E</td> </tr> <tr> <td>D</td> <td>24°17'59.43"N</td> <td>85°26'14.29"E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	A	24°18'2.57"N	85°26'13.13"E	B	24°18'3.31"N	85°26'31.45"E	C	24°17'59.81"N	85°26'31.12"E	D	24°17'59.43"N	85°26'14.29"E	--
Point	Latitude	Longitude																
A	24°18'2.57"N	85°26'13.13"E																
B	24°18'3.31"N	85°26'31.45"E																
C	24°17'59.81"N	85°26'31.12"E																
D	24°17'59.43"N	85°26'14.29"E																
5.	Elevation of the project site	407 meters above mean sea level	--															
6.	Involvement of Forest Land, if any	No involvement of Forest Land	--															
7.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<p>Project Site: Nil</p> <p>Study Area:</p> <table border="1"> <thead> <tr> <th>Water-body</th> <th>Distance (Km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Barhi Nadi</td> <td>1.36</td> <td>WSW</td> </tr> <tr> <td>Teliya Reservoir</td> <td>2.77</td> <td>NNW</td> </tr> <tr> <td>Barakar River</td> <td>5.15</td> <td>WNW</td> </tr> </tbody> </table>	Water-body	Distance (Km)	Direction	Barhi Nadi	1.36	WSW	Teliya Reservoir	2.77	NNW	Barakar River	5.15	WNW	--			
Water-body	Distance (Km)	Direction																
Barhi Nadi	1.36	WSW																
Teliya Reservoir	2.77	NNW																
Barakar River	5.15	WNW																
8.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	<p>Study area:</p> <p>Unit is located outside ESZ of Hazaribagh Wildlife Sanctuary, which is at a distance of 6.9Km and Hazaribagh Wildlife Sanctuary is located at a distance of 12.5Km.</p> <p>List of Reserve and Protected Forest</p> <p><u>Reserve Forest:</u></p> <p>Titahi RF at 8.50km in WNW direction</p> <p><u>Protected Forest</u></p> <p>Few Protected Forest within the 10 km study area –</p> <p>Karmatanr PF at 3.48Km in East Direction.</p> <p>Lachhudih PF is at 4.37km in SE Direction.</p>	--															

A     

LAND DETAILS :

Khata No.	Plot No.
32	1485 (P)
72	1491 (P)
78	1492
46	1493 (P)
64	1523 (P)
78	1524 (P)
52	1525 (P)
55	1522 (P)

The plant was installed and operating as per CTE & CTO from JSPCB, as the project did not attract EC as per EIA Notification, 2006 and amendments thereof. The existing project was accorded with Consent to Establish (CTE) having ref no. JSPCB/HO/RNC/CTE-12335290/2022/202 dated 04.05.2022 from Jharkhand State Pollution Control Board (JSPCB) for the production of 27,000TPA M.S. Ingot/Billet along with Slag Crusher of 15000 TPA (recovered Metal – 1500 TPA). Consent to Operate (CTO) was obtained from JSPCB vide ref no JSPCB/HO/RNC/CTO-14163539/2023/17 dated 04.01.2023 for the production of 27,000TPA M.S. Ingot/Billet along with Slag Crusher of 15000 TPA (recovered Metal – 1500 TPA), valid till 30.09.2023.

The unit configuration and capacity of existing and proposed project is given as below:

Sl. No	Plant Facilities	Existing Configuration	Proposed Configuration	Final Production Capacity (TPA)
1.	Induction Furnace	27000 TPA (1x12T) 300 working days	12,600 TPA (from existing 1x12T IF 330 working days)	188,100 TPA MS Billets (3x12T+ 1x12T, 1x12T LRF & CCM 1 x 2 strand Rad - 4/7) 330 working days
	LRF	--	1,48,500 TPA (3x15T) with 330 working days	
	Continuous Casting Machine	--	1x12T 1 x 2 strand Rad - 4/7	

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]






Sl. No	Plant Facilities	Existing Configuration	Proposed Configuration	Final Production Capacity (TPA)
2.	Rolling Mill (Direct Hot Charging)	-	181,500 TPA (550TPD)	181,500 TPA Roll Products (TMT Bars & Rolled Products/Rods etc.)
3.	Slag Crusher	15,000TPA (Recovered Slag metal – 1500 TPA)	30,000 TPA (Recovered Slag metal – 3000TPA)	45,000 TPA (Recovered Slag metal – 4500 TPA)

The details of the raw material requirement for the proposed project along with its source and mode of transportation are given as below:

Induction Furnace with CCM: (Billets – 570TPD ~ 188,100 TPA)				
Raw material	Specific Consumption /Ton	Consumption TPA	Source	Distance & Mode of Transportation
Sponge Iron	0.80	150,480	Local Plant in Hazaribagh, Ramgarh, Giridih etc.	40 to 120 Km By Road
Cast Iron/ Pig Iron	0.28	52,668		
MS Scrap	0.15	28,215		
Ferro Alloys	0.002	376		
TOTAL	1.232	231,739		
Rolling Mill: (Direct Hot Rolling– 181,500TPA)				
Hot M.S. Billets	1.036	188,100	In-house	Direct hot charging

- The existing water requirement of the plant is 35KLD. The total water requirement after the proposed expansion will be 305.5KLD. The water is sourced/proposed from ground water through bore well and the NOC for the same will be obtained from CGWA.
- The existing power requirement of 3.80MVA is sourced from DVC. After the proposed expansion the total power requirement will be 17.80MVA which will be sourced from the same.
- Total Capital Cost of the project after the proposed expansion is envisaged as Rs. 44.40 Crores including the existing project cost of Rs. 9.90 Crores. The employment requirement for the proposed expansion is 194 Nos.
- Name of the EIA consultant: M/s Vardan Environet [S.No. 37 in List of ACOs, Certificate no. NABET/EIA/2326/RA 0284, valid up to 04.05.2026].

Baseline data collection period: 1st March 2023 to 31st May 2023 as below:

A     

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
A. Air				
a. Meteorological parameters	Temp., Relative Humidity, Wind Speed, Wind Direction, Rainfall	1 Location	Hourly sampling for three months	Secondary data from IMD, New Delhi for the nearest IMD station
b. AAQ parameters	PM10, PM2.5, SO2, NOx, CO	8 Locations	24-hourly sampling, twice a week for 12 weeks	Monitoring Network: 1 at the project site, 1 in the nearby village, 2 in Down Wind, 2 in Upwind and 2 in Crosswind (Covering all sensitive receptors also)
B. Noise				
	Leq (Day & Night), Lmax (Day & Night), Lmin (Day & Night)	8 Locations	24-hourly sampling, twice in a week (working and non-working day) for 3 months	Monitoring Network: 1 at the project site, 1 locations in villages close to project site, 4 near Dense Habitation, 1 near highway and 1 near to PF (All the sensitive receptors covered)
C. Water				
a. Surface water quality parameters	pH, EC, NO3, Na, K, Fe, Al, Ca, Cl, Cr, Mg, TDS, TSS, DO, SO4, F, BOD, COD, Zn, Cu, Mn, Cd, Turbidity, Odour	8 Locations	Once in a day in each month for one season	Sampling from Rivers, Ponds within the 10km Study Area
b. Ground water quality	pH, Ca, Cl, Mg, TDS, SO4, F, NO3,	8 Locations	Once in a day in each month for	One grab sample per

A

[Handwritten signature]

17
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

parameters	Fe, Al, Zn, Cu, Mn, Cd, Pb, Hg, EC, Turbidity, Odour		one season	location
D. Land				
a. Soil quality	pH, Conductivity, Soil Texture, Water Holding Capacity, Cl, Ca, Na, K, Organic matter, Mg, N, Zn, Mn, Phosphorus, Pb, Cd, Cr, Cu.	8 Locations	Once in a day in each month for one season	One sample from project site and one from Agriculture land, forest area, near water body and nearby villages.
E. Biological				
a. Aquatic	Species of Plants and Avifauna	10 km Radius study area	one season	Secondary data has been collected from Government offices, NGOs, published literature
b. Terrestrial	Species of Plants and Animals	10 km Radius study area	one season	Secondary data has been collected from Government offices, NGOs, published literature
F. Socio-economic parameters	Demographic details and Occupational details	10 km Radius study area	One Season	Secondary data from census records, statistical hard books, Topo sheets, health records and relevant official records available with Govt. agencies.

It has been informed by the project proponent that no court case, litigation or show cause is pending against the unit.

STATUTORY CLEARANCES

1	Lease docs	:	Land lease deed from JIADA dated 19.04.2022.
---	------------	---	--

A *WCA* *LOW* *BS* *H* *W*

2	DFO Forest Distance	:	DFO, Hazaribagh West division vide letter no. 2741, dated 17.05.2023 certified that the distance of reserved/protected forest is more than 250 m from project site.
3	DFO Wildlife	:	DFO, Wildlife Hazaribagh vide letter no. 1233, dated 28.06.2023 certified that proposed project site is outside Eco Sensitive Zone of Hazaribagh Wildlife Sanctuary.
4	CO certificate	:	The CO, Barhi (Hazaribag) vide letter no. 401, dated 10.05.2023 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar & Register II.
5	Consent to Establish (CTE)	:	CTE issued by JSPCB vide Ref. no. : JSPCB/HO/RNC/CTE-12335290/2022/202, dated 04.05.2022.
6	Consent to Operate (CTO)	:	CTO issued by JSPCB vide Ref. no. : JSPCB/HO/RNC/CTO-14163539/2023/17, dated 04.01.2023.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 18, 19, 20, 21 & 22.07.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure II.






- Enhancement the production of MS Billets from 27,000 TPA to 99,000 TPA by installing additional 2x10 T Induction Furnace and 1x10 T LRF and to enhance the production of TMT Bar from 28,000 TPA to 96,000 TPA by modernizing the existing rolling mill capacity from 5 TPH to 10 TPH and Installation of Slag Crusher of 5 TPH Capacity within the existing plant premises of 1.51 Ha (3.73 Acres) by M/s Narayani Fuels Pvt. Ltd. at Plot no. D-165, Kandra Industrial Area, Village : Kanshitar, P.S. : Barwadda, Distt. : Dhanbad, Jharkhand.

(Proposal No. : SIA/JH/IND1/436829/2023).

Name of the consultant : Vardan Environet, Gurugram, Haryana.

This is a expansion project which has been taken for appraisal on 19.07.2023.

The proposal was considered by the committee to determine the "Terms of Reference (ToR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendments thereafter. For this

A   19   

purpose the Project Proponent has submitted the prescribed Form - I & PFR the proposed project falls under item 3 (a) Metallurgical Industries as per EIA Notification, 2006.

The project M/s NFPL is located at Plot No. D-165, Kandra Industrial Area, Village – Kanshitar, P.S. – Barwadda, District – Dhanbad, Jharkhand is for enhancing the production of MS Billets from 27,000TPA to 99,000TPA by installing additional 2x10T Induction Furnace and 1x10T LRF and to enhance the production of TMT Bar from 28,000TPA to 96,000TPA by modernizing the existing rolling mill capacity from 5 TPH to 10 TPH and Installation of Slag Crusher of 5 TPH Capacity

Salient features of the Project :

Sl.No.	Particulars	Details	Remarks																		
1.	Total Land	1.51 Ha	Land Use: Industrial Land																		
2.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total area – 1.51 Ha [Acquired Land: 1.51 Ha,]	The land was allotted by BIADA,																		
3.	Existence of habitation & involvement of R&R, if any	Project Site: Nil Study Area: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Nearest Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Bhitia Village</td> <td>0.42km</td> <td>NNE</td> </tr> </tbody> </table>	Nearest Habitation	Distance	Direction	Bhitia Village	0.42km	NNE	R&R: Not Involved												
Nearest Habitation	Distance	Direction																			
Bhitia Village	0.42km	NNE																			
4.	Latitude and longitude of all corners of the project site	<table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>23°50'48.67"N</td> <td>86°28'40.54"E</td> </tr> <tr> <td>B</td> <td>23°50'48.99"N</td> <td>86°28'43.46"E</td> </tr> <tr> <td>C</td> <td>23°50'43.68"N</td> <td>86°28'42.13"E</td> </tr> <tr> <td>D</td> <td>23°50'43.78"N</td> <td>86°28'38.76"E</td> </tr> <tr> <td>E</td> <td>23°50'47.54"N</td> <td>86°28'39.33"E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	A	23°50'48.67"N	86°28'40.54"E	B	23°50'48.99"N	86°28'43.46"E	C	23°50'43.68"N	86°28'42.13"E	D	23°50'43.78"N	86°28'38.76"E	E	23°50'47.54"N	86°28'39.33"E	
Point	Latitude	Longitude																			
A	23°50'48.67"N	86°28'40.54"E																			
B	23°50'48.99"N	86°28'43.46"E																			
C	23°50'43.68"N	86°28'42.13"E																			
D	23°50'43.78"N	86°28'38.76"E																			
E	23°50'47.54"N	86°28'39.33"E																			
5.	Elevation of the project site	253 meters above mean sea level																			
6.	Involvement of Forest Land, if any	No Involvement of Forest Land																			
7.	Water body (Rivers, Lakes, Pond, Nala,	Project Site: Nil Study Area:																			

(Handwritten signatures and initials)


Sl.No.	Particulars	Details			Remarks
		Water-body	Distance (Km)	Direction	
	Natural Drainage, Canal etc.) exists within the project site as well as study area	Khudia River	1.10	NW	
7.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Study area: No existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area List of Reserve and Protected Forest <u>Reserve Forest:</u> Dhangri Reserved Forest is at a distance of 2.35 km in SSE Direction <u>Protected Forest</u> Few Protected Forest within the 10 km study area			

The plant was operating on CTE/ CTO of JSPCB as the project did not attract any conditions as per the EIA Notification, 2006. The existing project was accorded with Consent to Establish (CTE) having ref no. LN-125 dated 10.07.2010 from Jharkhand State Pollution Control Board (JSPCB) for production of 28,000 TPA TMT Bars. Consent to Operate (CTO) having ref. no. JSPCB/HO/RNC/CTO-8608059/2020/1411 dated 01.09.2020 obtained from JSPCB for the production of 28,000TPA TMT Bar, valid till 31.03.2025. To enhance the upstream facility the company installed installing Induction furnace and CCM to produce 27,000TPA MS Billets after obtaining another CTE vide ref no. JSPCB/HO/RNC/CTE-90922274/2021/107 dated 17.03.2021 from JSPCB and CTO for the same production was obtained from JSPCB vide ref. no. JSPCB/HO/RNC/CTO-15250413/2023/610 dated 30.03.2023 and is valid till 19.07.2023.

LAND DETAILS :

Khata No.	Plot No.
03	114
09	115
21	116

A 

21 





14	117
----	-----

The unit configuration and capacity of existing and proposed project is given as below:

Plant	Existing installed Units and Capacity		Proposed Units		Total after Expansion	
	Unit	Capacity in TPA	Unit	Capacity in TPA	Unit	Capacity in TPA
Steel Melting Shop	1x10Ton Induction Furnace along with CCM (2 strands 4/7m)	27,000 MS Ingots	Modification of existing 1x10Ton IF + Installation of 2x10 Ton IF with LRF (1x10T)	72,000 MS Billets	3x10 Ton Induction Furnace with 1x10 Ton LRF and CCM (2 strands- 4/7 m)	99,000 MS Billets
Rolling Mill	5TPH	28,0000 TMT Bar	Capacity enhancement of existing 5TPH rolling mill to 10TPH	68,000 TMT Bars	10TPH	96,000 TMT Bars
Slag Crusher	--	--	1x5TPH	23,100	1x5TPH	23,100

The details of the raw material requirement for the proposed project along with its source and mode of transportation are given as below:

Raw Materials	Existing Quantity (TPA)	Quantity After Expansion (TPA)	Source	Distance in Km
MS Billets	27000	99000		
Sponge Iron	21,600	79,200	Local Market	50 Km
Pig Iron	7,560	27,720		
Scrap	4,050	14,852		
Ferro Alloy	54	198		

A

[Handwritten signature]

[Handwritten signature]

[Handwritten mark]

[Handwritten mark]

[Handwritten mark]

Total	33,264	121,968		
<i>Rolled Product</i>	<i>28000</i>	<i>96,000</i>		
Hot Billets	28,875	99,000	In House	--

- The existing water requirement for the plant is 50KLD. The total water requirement after the proposed expansion is 135KLD. The water is/will be sourced from ground water through bore well and the NOC for the same shall be obtained from CGWA.
- The total power requirement for the plant after expansion will be 11MVA out of which 6.5MVA is existing power required. The Power Requirement will be met by Damodar Valley Corporation (DVC).
- The existing project cost is Rs. 670.40 Lakh. Total estimated cost after the expansion will be Rs. 1426.00 Lakhs. The employment generation from the proposed expansion will be 30 Nos.
- This project will be installed within the existing area of 1.51 Ha (3.73 Acres). Additional land of 1.25 acres has been acquired to develop greenbelt and plantation over an area of 1.66 acres, out of which plantation inside premises will be on 0.41 acres. The plantation area will be 44.5% of plant area (3.73 acres) of project site and 33.33% of the total area combined.
- Name of the EIA consultant: M/s Vardan Environet [S.No. 37 in List of ACOs, Certificate no. NABET/EIA/2326/RA 0284, valid up to 04.05.2026].

Proposed Terms of Reference Baseline data collection period: 1st October 2023 to 31st December 2023 as below:

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
A. Air				
a. Meteorological parameters	Temp., Relative Humidity, Wind Speed, Wind Direction, Rainfall	1 Location	Hourly sampling for three months	Secondary data from IMD, New Delhi for the nearest IMD station
b. AAQ parameters	PM10, PM2.5, SO2, NOx, CO	8 Locations	24-hourly sampling, twice a week for 12 weeks	Monitoring Network: 1 location nearby village, 2 locations in upwind, 2 location in downwind, 2 in crosswind direction,

A     

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
				and one near RF (Covering all sensitive receptors also)
B. Noise	Leq (Day & Night), Lmax (Day & Night), Lmin (Day & Night)	8 Locations	24-hourly sampling, twice in a week (working and non-working day) for 3 months	Monitoring Network: 1 at the project site, 4 locations in villages close to project site, 2 near Dense Habitation, 1 near RF (All the sensitive receptors covered)
C. Water				
a. Surface water quality parameters	pH, EC, NO3, Na, K, Fe, Al, Ca, Cl, Cr, Mg, TDS, TSS, DO, SO4, F, BOD, COD, Zn, Cu, Mn, Cd, Turbidity, Odour	8 Locations	Once in a day in each month for one season	Sampling from 3 in Upstream and downstream of the Khudia Nadi And 5 in Village Ponds
b. Ground water quality parameters	pH, Ca, Cl, Mg, TDS, SO4, F, NO3, Fe, Al, Zn, Cu, Mn, Cd, Pb, Hg, EC, Turbidity, Odour	8 Locations	Once in a day in each month for one season	One grab sample per location
D. Land				
a. Soil quality	pH, Conductivity, Soil Texture, Water Holding Capacity, Cl, Ca, Na, K, Organic matter, Mg, N, Zn, Mn, Phosphorus, Pb, Cd, Cr, Cu.	8 Locations	Once in a day in each month for one season	One sample from project site and one from Agriculture land, forest area, near water body and nearby villages.

A

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
<i>E. Biological</i>				
a. Aquatic	Species of Plants and Avifauna	10 km Radius study area	one season	Secondary data has been collected from Government offices, NGOs, published literature
b. Terrestrial	Species of Plants and Animals	10 km Radius study area	one season	Secondary data has been collected from Government offices, NGOs, published literature
<i>F. Socio-economic parameters</i>	Demographic details and Occupational details	10 km Radius study area	One Season	Secondary data from census records, statistical hard books, Topo sheets, health records and relevant official records available with Govt. agencies.

It has been informed by the project proponent that no court case, litigation or show cause is pending against the unit.

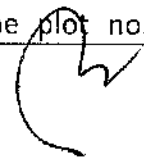
STATUTORY CLEARANCES :

1	Lease docs	:	Land lease deed dated 16.03.2010.
2	DFO Forest Distance	:	DFO, Dhanbad forest division vide letter no. 2045, dated 14.07.2023 certified that the distance of reserved/protected forest is 1000 m from project site.
3	DFO Wildlife	:	DFO, Wildlife Hazaribagh vide letter no. 1422, dated 11.07.2023 certified that proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	CO certificate	:	The CO, Govindpur, Dhanbad vide memo no. 1149, dated 14.07.2023 has mentioned the plot no. of the project is not

A



25





			recorded as "Jangle Jhari" in R.S. Khatiyar.
5	Consent to Establish (CTE)	:	CTE issued by JSPCB vide Ref. no. : i. LN-125, dated 10.07.2010 and ii. JSPCB/HO/RNC/CTE-9092274/2021/107, dated 17.03.2021.
6	Consent to Operate (CTO)	:	CTO issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTO-15250413/2023/610, dated 30.03.2023.
7	Compliance Report	:	Self certified compliance report of CTO conditions submitted in the light of MoEF&CC, Govt. of India OM F.no. IA3-22/10/2022-IA.III(E 177258) dated 08.06.2022.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 18, 19, 20, 21 & 22.07.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure II.

3. "Residential Housing Complex Shri Vrinda Green Phase - III" of M/s Morias Infrastructure Pvt. Ltd., Village : Morabadi, Ward no. : 4, Thana : Bariatu, Thana no. : 192, Distt. : Ranchi, Jharkhand.

(Proposal No : SIA/JH/INFRA2/429098/2023).


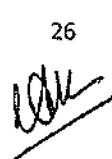



Name of the consultant : Gaurang Environmental Solutions Pvt. Ltd., Jaipur.

This is a case of violation which has been taken for reappraisal on 19.07.2023.

The project is a violation case since the project proponent has started the construction without prior Environmental Clearance from State Environment Impact Assessment Authority (SEIAA), Jharkhand.

However, The Honourable Supreme court in its order dated 9th December 2021 In the matter of the Civil appeal No 7576-7577 of 2021 in the Electro steel Steels Limited Vs Union of India and Ors in its para 93 has inter- alia observed the following :

"The interim order passed by the Madras high Court appears to be misconceived. However, this court is not hearing an Appeal from that interim order. The interim stay.

26
A     

passed by the Madras High court can have no application of operations of the Standard Operating Procedure to the projects in territories beyond the territorial jurisdiction of Madras High court. However, final decision may have been taken in accordance with the Orders/ Rules prevailing prior to 7th July, 2021."

Thus, the SEIAA, Jharkhand, in the light of Hon'ble Supreme Court order dated 9th December 2021, Office Memorandum no. F.No.22-21/2020-IA.III[E 138949] dated 28.01.2022 of MoEF&CC, Govt. of India and Standard Operating Procedure (SOP) issued by MoEF&CC, Govt. of India vide its file number 22-21/2020-IA-III, dated 07.07.2021, the matter has been taken for consideration & recommendation of EC for violation projects.

Project Category : 8 (a) Category B2 – (at par with B1 being violation case)

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 95th meeting held on 15-22.07.2022 and SEIAA, Jharkhand has approved the violation ToRs in 96th meeting held on 26th, 27th & 28th July, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2600/2022/218, date 06.08.2022. The final EIA / EMP submitted by PP to SEIAA on 21.06.2023 and which was forwarded to SEAC on 22.06.2023.

The proposed project involves the construction of Residential Housing Complex "Shri Vrinda Green Phase-III" at RS Plot No. 730, 731, 732, 736, 737, 738, 739, 740, 741, 742, 743; Khata No. 08, 61, 97 & 39, Village Morabadi, ward No. 4, thana Bariatu, Thana No. 192, District Ranchi, Jharkhand promoted by Morias Infrastructure Pvt. Ltd. The total plot area of the project as per deed is 13884.96 sq. m., as per site is 13,882.47 sq. m and after POS is 13113.22 sq.m. & Total Built-up area envisaged for the project is 46795.90sq.m and net built-up area is 37159.35 sq.m Thus, the project requires prior Environmental Clearance under Item 8 (a) (Building & Construction projects) of Schedule- EIA Notification 2006 and subsequent amendments thereafter from the State Level Environmental Impact Assessment Authority, Jharkhand. Construction has been started on 01.12.2017 before getting environmental clearance. 90% of construction has been completed at project site till now.

Salient Features of the Project :

Particulars	Details
Project address	Village Morabadi, ward No. 4, thana Bariatu, Thana No. 192, District Ranchi, Jharkhand.
Type of project	Group Housing Project (Building & Construction)
Screening category	Category 'B-2', item 8(a), (Building and Construction)
Total Plot area as per deed	13884.96 sq. m.
Total Plot area as per site	13,882.47 sq.m.
Plot area after P.O.S	13113.22 sq.m.

(Handwritten signatures and initials are present below the table)

Total Built up Area	46795.90sq.m.
Net Built-up area	37159.35 sq.m.
Ground Coverage	Permissible : 35% (4589.63 sq. m.) Proposed : 33.30 % (4366.70 sq. m.)
FAR	Permissible : 3.0 (39339.66 sq. m.) Proposed : 2.83 (37159.35 sq. m.)
Green Area	Total Green Area is 26.69% (3500 sq. m.) in which 15% (1966.98 sq. m) is Green belt area.
Parking facilities	Required Parking : 368 ECS Provided Parking : 368ECS
Power requirement	Connected load : 4224.50 KW Max. demand : 2137.60 KW
Power backup	DG sets of capacity of : 500 kVA, 1nos
Solar Power	100 KW (2.3% of Connected Load)
Water requirement & source	Total Water requirement : 195 KLD Fresh Water : 135 KLD Recycled Water : 60 KLD Source : Ground water Supply
Sewage treatment & disposal	Sewage treatment facility : STP of 180 KLD Capacity Waste water generated :150KLD
Municipal Solid waste	912 Kg/day
No. of RWH Pits	04
Project cost	Rs. 53.65 crores

Khata no.& Plot no. of the project :

Khata no.	Plot no.
39	730, 731,732
61	736, 737, 738
97	739, 740, 741
8	742, 743

A

WAA

WAA

R

S

Sind

Geographical coordinates:

Point -1		Point -2	
Latitude	: 23°23'56.46"N	Latitude	: 23°23'57.76"N
Longitude	: 85°20'50.71"E	Longitude	: 85°20'52.07"E
Point -3		Point -4	
Latitude	: 29°23'59.56"N	Latitude	: 23°23'59.82"N
Longitude	: 85°20'52.18"E	Longitude	: 85°20'52.64"E
Point 5		Point 6	
Latitude	: 23°23'59.13"N	Latitude	: 23°23'54.93"N
Longitude	: 85°20'55.71"E	Longitude	: 85°20'54.26"E
Point 7		Point 8	
Latitude	: 23°23'54.82"N	Latitude	: 23°23'55.79"N
Longitude	: 85°20'53.17"E	Longitude	: 85°20'50.58"E

The proposed Project involves the construction of Group Housing Project with Dwelling units (320 nos.), and other facilities like Community Hall.etc.

Project facilities are as under:-

S. No	Particulars	Details																						
1.	No of Blocks	4 Nos. (Block A, B, C, D)																						
2.	Block wise No. of Floors	As under:- <table border="1" style="margin-left: 20px;"> <thead> <tr> <th rowspan="2">Blocks</th> <th rowspan="2">Number of floors</th> <th colspan="2">Height (in m)</th> </tr> <tr> <th>Upto Terrace Level</th> <th>Upto Mumty Level</th> </tr> </thead> <tbody> <tr> <td>Block A</td> <td>B + G + 8 floors</td> <td>26.65</td> <td>30.55</td> </tr> <tr> <td>Block B</td> <td>B+G+10</td> <td>32.25</td> <td>36.25</td> </tr> <tr> <td>Block C</td> <td>B+G+10</td> <td>32.25</td> <td>36.25</td> </tr> <tr> <td>Block D</td> <td>B+G+12</td> <td>38.05</td> <td>42.5</td> </tr> </tbody> </table>	Blocks	Number of floors	Height (in m)		Upto Terrace Level	Upto Mumty Level	Block A	B + G + 8 floors	26.65	30.55	Block B	B+G+10	32.25	36.25	Block C	B+G+10	32.25	36.25	Block D	B+G+12	38.05	42.5
Blocks	Number of floors	Height (in m)																						
		Upto Terrace Level	Upto Mumty Level																					
Block A	B + G + 8 floors	26.65	30.55																					
Block B	B+G+10	32.25	36.25																					
Block C	B+G+10	32.25	36.25																					
Block D	B+G+12	38.05	42.5																					

29

3.	Block wise Dwelling units	320 nos. (8 dwelling unit/ floor) (3 BHK each) A Block : 64 B Block : 80 C Block : 80 D Block : 96
----	---------------------------	--

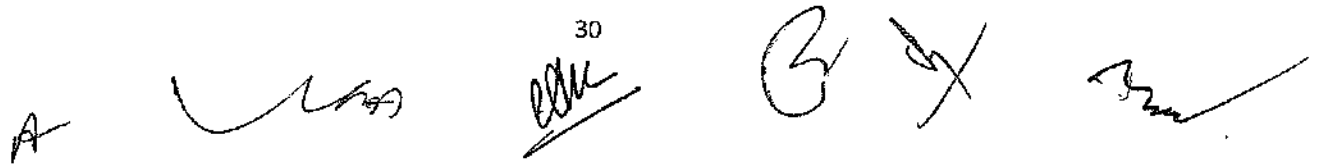
Land use Breakup

S. No	Particulars	Permissible	Proposed
1.	Total Plot area as per deed	13,884.96 sq. m.	
2.	Total Plot area as per site	13,113.22 sq. m.	
3.	Gross Built up area	46,795.90 sq. m	
5.	Ground Coverage	35% (4589.63 sq. m.)	33.30 % (4366.70 sq. m.)
6.	Green Area	26.69% (3500.00 sq. m.)	
7.	Paved area	40.01% (5246.52 sq. m.)	

Built Up Area Details:

Floor Name	Block-A+B+C+D+ Community Hall Block Built-up area details (sq.m.)		
	Total Built up area	Total deductions	Net Built up area
Basement	4043.40	3762.34	281.06
Ground floor	4367.4	3858.11	509.29
First floor	4030.11	100.35	3929.76
Second floor	3706.11	100.35	3605.76
Third floor	3706.11	100.35	3605.76
Fourth floor	3706.11	100.35	3605.76
Fifth floor	3706.11	100.35	3605.76
Sixth floor	3706.11	100.35	3605.76
Seventh floor	3706.11	100.35	3605.76
Eighth floor	3706.11	100.35	3605.76
Ninth floor	2770.22	79.20	2691.02

30



Tenth Floor	2770.22	79.20	870.99
Eleventh Floor	935.89	27.45	908.44
Twelfth Floor	935.89	27.45	908.44
Total	46795.90	8636.55	37159.35

Parking Details:

Particulars	Flats/ dwelling units	Basis	Required
Residential	320	@1 ECU/ flat	320 ECU
Visitors	-	@ 15% of total parking	48 ECU
			368 ECU

Required Parking : 368 ECU

Provided Parking : 368 ECU

Population Projection:

S. No	Particulars	No of flats/Area	Basis	Population
1.	Residential	320	@ 5 person/Flat*	1600
2.	Visitors	-	@15 % of residential Population	240
3.	Community hall (648 sqm.)	6972.48 sq. ft.	40 sq.ft./ person	174
4.	Staff			50
Total				2064

Water demand calculation

S. No.	Particulars	Population	Fresh water	Treated water	Total water
1.	Residential	1600	@ 80 LPCD: 128 KLD	@21 LPCD: 33.6 say 34 KLD	162 KLD
2.	Visitors	240	@5 LPCD: 1 KLD	@10 LPCD: 3 KLD	4 KLD
3.	Community Hall	174	@20LPCD: 4 KLD	@20 LPCD: 4 KLD	8 KLD
4.	Staff	50	@25 LPCD: 2 KLD	@20 LPCD: 1 KLD	3 KLD
5.	Landscaping @ 5 lt/sq.m.		-	18 KLD	18 KLD
Total			135 KLD	60 KLD	195 KLD

A

[Handwritten signature]

37
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]





[Handwritten signature]

STATUTORY CLEARANCE

- Airport Authority of India issued a height clearance NOC vide its NOC ID – RANC/EAST/B/020216/120503, dated 18.02.2016.
- A fire advisory has been issued by Fire Department, Jharkhad, Ranchi vide Letter No. – 305, dated 29.06.2015.
- The DFO, Wildlife Ranchi Vide Letter No. 398 Dated 07.05.2022 certified that the proposed project site is outside Eco Sensitive Zone of Paikot Wildlife Sanctuary.
- The DFO, Ranchi Forest Division vide Letter No. 2174 Dated 11.05.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
- The CO, Baragai, Ranchi vide Letter No. 845 Dated 19.11.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S Khatiyan.
- CGWA NOC for Ground Water abstraction has been obtained vide NOC No. CGWA/NOC/INF/ORIG/2021/13868 dated 30.11.2021, which was valid upto 29.11.2026.
- Building plan approved by Ranchi Municipal Corporation vide case no. 1156/2014/A, dated 21.09.2016.

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhan recommended an amount of rupees 148 Lakh as per CPCB guidelines towards remediation plan and natural & community resource augmentation plan to be spent within a period 03 years. The details of summary of Natural resource and Environmental / Ecological Damage assessment with budgetary provision for expenditure under the below mention head for remediation :-

S. No.	Particulars	Details	Cost (Rs. In Lacs)
1.	Air Environment and Plantation	Fund allocation for the air pollution mitigation measures Tree Plantation in consultation of DFO (Ranchi)	60
2.	Socio economic environment	Establishment of science and computer lab in the neighbouring Govt. School	13
		Construction of rain water harvesting structures (10 nos. @ 3 lacs each:) at various locations such as Govt. school, PHC, community center etc. in nearby villages (Construction of RWH will include cost of pipes to be laid from roof top to the RWH pit, channelization of storm water, and other associated civil costs as well)	30
3.	Energy conservation	Installation of solar powered PV plant (50 KW) at	40

A    






		nearby Govt. School	
4.	Community Resource	Jute/cotton bag distributions in school and village household as per prohibition of single use plastic (SUP)	5
Total cost			148 Lacs

- I. The Committee visited the project site on 18.07.2023 to verify the ground reality of the project. During inspection, Committee saw that the STP is installed and is operational, RWH has been installed with 04 no. of pits, dedicated solid waste handling site was in place and green belt has been developed. Fly ash dump site was existing before initiation of the project. It has been stabilized by development of green belt & green cover on the entire fly ash dump site and has improved aesthetic of the area.
- II. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. 148 Lakh.
- III. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. 148 Lakh towards remediation plan and natural and community resource augmentation plan with the Jharkhand State Pollution Control Board and evidence of the same submitted to SEIAA, Jharkhand prior to grant of EC.
- IV. The bank guarantee shall be released after successful completion of remediation plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.
- V. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.
- VI. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.
- VII. STP of adequate capacity shall be established within the project premises.
- VIII. Energy conservation measures adhering to part of ECBC norms shall be complied with.
- IX. The penalty of Rupees 14.68 Lakh being 1% of the project cost incurred till date (Rs. 14.68 Crore) shall be submitted to Jharkhand State Pollution Control Board in the form of demand draft and evidence of the same to be submitted to SEIAA, Jharkhand prior to grant of EC.
- X. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

Based on the presentation made and information provided, the Committee decided that the proposal for "Residential Housing Complex Shri Vrinda Green Phase - III" of M/s Morias Infrastructure Pvt. Ltd., Village : Morabadi, Ward no. : 4, Thana : Bariatu, Thana no. : 192, Distt. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure –III alongwith the following specific conditions :



- I. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- II. All raw material to be stored only under covered shed.
- III. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- IV. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- V. Trees should be developed & maintained not less than 15% of project area.
- VI. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- VIII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- IX. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging points to be installed.
- XII. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
- XIII. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.
- XIV. A cycling tract to be provided in residential complex so as to save on fuel and make in campus movement environment friendly.

A   34   

4. Proposed Commercial cum Residential "Eminence Mall" & Hospital Project of M/s Morias Infrastructure Pvt. Ltd., Mouza : Chadri, Thana : Lower Bazar, Thana no. : 199, Old Ward no. : 20, New Ward no. : 18, Tehsil : Ranchi, Distt. : Ranchi, Jharkhand.

(Proposal No : SIA/JH/INFRA2/430244/2023)






Name of the consultant : Gaurang Environmental Solutions Pvt. Ltd., Jaipur.

This is a new project which has been taken for appraisal on 19.07.2023.

The proposed project involves the construction of Proposed Commercial Cum Residential "Eminence Mall" & Hospital Project coming up at Mouza Chadri, Plot No.1824, Khata No.57, Thana-Lower Bazar, Thana No.199, Old Ward No.-20, New Ward No.-18, Dist. Ranchi, Jharkhand, Promoted by Morias Infrastructure Pvt. Ltd. The total plot area of the project is 6611.49 sq.m & built up area envisaged for the project is 28,467.87 sq.m (> 20,000 sq. m. and < 1,50,000 sq.m.). Thus, the project requires prior Environmental Clearance under Item 8 (a) {Building & Construction projects} of Schedule EIA Notification 2006 and subsequent amendments thereafter from the State Level Environmental Impact Assessment Authority, Jharkhand.

Sallient features of the Project :

Items	Details
Project address	Mouza Chadri, Plot No.1824, Khata No.57, Thana-Lower Bazar, Thana No.199, Old Ward No.-20, New Ward No.-18, Dist. Ranchi, Jharkhand.
Type of Project	Proposed Commercial Cum Residential & Hospital Project
Screening category	Category B2, item 8(a) (Building and construction)
Plot area	As under:
Total Plot Area	6611.49 sq.m
Surrender Area Free of Cost	196.54 sq.m
Net plot area	6414.94 sq.m
Built up area	28,467.87 Sq.m
Green Area	700.24 sq. m (10.91%of Net Plot area)
Ground Coverage	Permissible : 35.0% of Net Plot area (2245.23 sq.m) Achieved : 32.73% of Net Plot area (2099.60 sq.m)
FAR	Plot Area for FAR : 6611.49 sq.m
	FAR
	Area (sq.m)


A     

	Permissible	3.00	19,834.47		
		Maximum Permissible FAR Area 3.00 + 0.30 = 3.30	21,817.91		
	Proposed	3.29	21763.78		
Project facilities		As under:			
Particulars	Floor	Facilities	Height (in m) Upto		
			Terrace	Machine room/top level	
Block-A (Commercial Cum Residential)	Basement + Ground + 11th Floor	Dwelling units : 82 nos. • EWS : 19 nos. • LIG : 21 nos. • 3 BHK : 40 nos. • CFSI 1293 : 02 nos. Other Facilities: Shops, Retail Shops, Assembly Community Hall, Health Club	44.05 m	46.95 m	
Block-B (Hospital)	Lower Basement + Upper Basement + Ground +7 th Floor	200 Bedded hospital with 20 KL Oxygen Plant	29.55 m	33.85 m	
Parking facilities		Required Parking : 172 ECU & 377 Two Wheeler Proposed Parking : 184 ECU & 430 Two Wheeler			
Power requirement & source		Connected load : 1127 KW Maximum demand : 1060 KW			
Power backup		D.G Set Capacity	Number	Fuel	For Use
		400 kVA	1 No.	HSD	Block-A (Commercial Cum Residential)
		300 kVA	1 No.		Block-B (Hospital)
Renewable Energy		Solar PV: 60 KW (>5% of total Connected Load) ✓ Block-A (Commercial Cum Residential) : 30 KW			

	✓ Block-B (Hospital) : 30 KW	
Water requirement & source	Block-A (Commercial Cum Residential)	Block-B (Hospital)
	Total Water requirement : 77 KLD	Total Water requirement : 468 KLD
	Fresh Water : 46 KLD	Fresh Water : 315 KLD
	Recycled Water : 31 KLD	Recycled Water : 153 KLD
	Source : Ground Water	Source : Ground Water
Sewage treatment & disposal	Block-A (Commercial Cum Residential)	Block-B (Hospital)
	Sewage treatment facility : 70 KLD	Sewage treatment facility : 397 KLD
	Waste water Generation : 60 KLD	Waste water Generation : 480 KLD
	STP Technology : MBBR	STP Technology : MBBR
Effluent Treatment	ETP Capacity : 10 KLD Hospital Effluent : 8 KLD	
Solid waste generation, Bio- Medical waste and management	772 kg/day ✓ <i>Municipal Solid waste</i> : 697 kg/day ✓ <i>Biomedical waste</i> : 75 kg/day MSW : 697 kg/day ✓ <i>Biodegradable waste</i> : 279 kg/day (approx.40 %) ✓ <i>Non-Biodegradable waste</i> : 418 kg/day Organic waste convertor of Capacity 300 kg/day will be installed.	
RWH Structures	3 Nos.	
Project cost	Rs.45.82 Crores	
EMP Budget	Capital cost : Rs. 399 lacs	
	Recurring cost : Rs. 27 lacs	
Budget for Labour	Capital cost : Rs. 5,45,000/-	

A







	Recurring cost : Rs.5,10,000/-
Socio under EMP	Rs. 90 lacs

LAND DETAILS :

Khata No.	57
Plot No.	1824

Geographical coordinates of the project

S. No.	Latitude	Longitude	S. No.	Latitude	Longitude
1.	23°22'19.24"N	85°19'35.20"E	2.	23°22'19.17"N	85°19'35.87"E
3.	23°22'19.03"N	85°19'36.10"E	4.	23°22'18.94"N	85°19'36.39"E
5.	23°22'19.51"N	85°19'37.93"E	6.	23°22'19.10"N	85°19'39.21"E
7.	23°22'17.01"N	85°19'38.53"E	8.	23°22'17.06"N	85°19'37.71"E
9.	23°22'17.92"N 85°19'34.63"E				

LANDUSE BREAK UP :

S. No	Particulars	Permissible	Proposed
1.	Total Plot Area	6611.49 sq.m	
2.	Net Plot Area	6414.94 sq.m	
3.	Ground Coverage	35.0 % (2245.23 sq.m)	32.73 % (2099.60 sq.m)
3.	Landscape Area	-	15% (962.24 sq.m)
4.	Paved areas including Parking	-	52.27 % (3353.10 sq.m)

BUILT UP AREA DETAILS:

Commercial cum Residential (Block A)

Floor Name	Built Up Area (sq.m)	FAR Area (sq.m)
Basement Floor	2516.59	14.47
Ground Floor	1327.51	1303.24
First Floor	1344.89	1216.35
Second Floor	1393.50	1261.73
Third Floor	1393.74	1261.85

Fourth Floor	1331.34	1249.25
Fifth Floor	1230.42	1187.33
Sixth Floor	1230.42	1187.33
Seventh Floor	1275.37	1215.38
Eighth Floor	1275.37	1215.38
Ninth Floor	1275.37	1215.38
Tenth Floor	1275.37	1215.38
Eleventh Floor	1275.37	1215.38
Terrace Floor	0.00	0.00
Total	18145.26	14758.45

Hospital (Block B)

Floor Name	Built Up Area (sq.m)	FAR Area (sq.m)
Lower Basement Floor	1152.81	0.00
Upper Basement Floor	1716.75	0.00
Basement Floor	0.00	0.00
Ground Floor	822.41	792.31
First Floor	765.31	709.61
Second Floor	903.98	852.28
Third Floor	903.98	852.28
Fourth Floor	903.98	852.28
Fifth Floor	903.98	852.28
Sixth Floor	749.80	698.10
Seventh Floor	749.80	698.1
Eighth Floor	749.80	698.10
Ninth Floor	0.00	0.00
Tenth Floor	0.00	0.00
Eleventh Floor	0.00	0.00
Terrace Floor	0.00	0.00
Total	10322.60	7005.34

A

UWA

39
CMA

R

J

MAW

PARKING REQUIREMENT:

Particulars	Car		Visitors car		Two Wheeler	
	Required	Proposed	Required	Proposed	Required	Proposed
Commercial Cum Residential (Block A)	135	140	7	9	283	310
Hospital Block	30	35	--	--	94	120
Total	165	175	7	9	377	430

Required Parking : 172 ECU & 377 Two Wheeler

Proposed Parking : 184 ECU & 430 Two Wheeler

WATER REQUIREMENT:

Water demand Calculation: Commercial Cum Residential (BLOCK A)

The daily water requirement for the proposed development will be 77 KLD (fresh water: 46 KLD and the recycled/reused water demand: 31 KLD).

Criteria of water demand are given as under:

S. No.	Particulars	Population	Fresh water demand	Treated water demand	Total water demand
1.	Residential	429	@80 LPCD: 35 KLD	@21 LPCD: 10 KLD	45 KLD
2.	Assembly Community Hall & Health Club	124	@25 LPCD: 3 KLD	@20 LPCD: 2 KLD	05 KLD
3.	Visitors	43	@5 LPCD: 1KLD	@10 LPCD: 1 KLD	2 KLD
4.	Retail Shop & Shops	755	06 KLD	09 KLD	15 KLD
a.	Fixed	75	@25 LPCD: 1.87 KLD	@20 LPCD: 1.5 KLD	04 KLD
b.	Floating	680	@05 LPCD: 3.40 KLD	@10 LPCD: 6.80 KLD	10 KLD
5..	Staff	50	@20 LPCD: 1 KLD	@15 LPCD: 1 KLD	2 KLD
5.	Landscaping			08 KLD	08 KLD

A *U/A* *Law* *R* *S* *M*

Total	46 KLD	31 KLD	77 KLD
-------	--------	--------	--------

Water demand Calculation: Hospital (BLOCK B)

S. No.	Particulars	Details	Fresh	Recycled	Total
1.	Number of Bed	200	@300 LPCD: 300 KLD	@150 LPCD: 150 KLD	450 KLD
2.	OPD	500	@10 LPCD: 5 KLD	@5 LPCD: 3 KLD	8 KLD
3.	Labs & Operation Theatres & clinical activities etc.	LS	10 KLD	--	10 KLD
Total			315 KLD	153 KLD	468 KLD

STATUTORY CLEARANCES

1	DFO Forest Distance	:	DFO, Ranchi Forest division vide letter no. 466, dated 07.02.2023 certified that the distance of reserved/protected forest is more than 250 m from project site.
2	DFO Wildlife	:	DFO, Wildlife Division, Ranchi vide letter no. 64, dated 20.01.2023 certified that proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
3	CO certificate	:	The CO, Shahar, Ranchi vide memo no. 459(ii), dated 29.05.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyar.
4	AAI NOC	:	Airport authority of India issued NOC vide NOC ID RANC/EAST/B/011122/647883, dated 21.01.2022.
5	Fire Department	:	A fire advisory has been issued by Fire Department, Jharkhad, Ranchi vide memo no. 522/Tech./2022, dated 30.01.2022.
6	Building Plan	:	Building plan approved by Ranchi Municipal Corporation vide memo no. RMC/GH/1834/W18/2021, dated 22.10.2022.

Undertaking affirming that :

- There will be no use of ground water during construction phase.

A



41





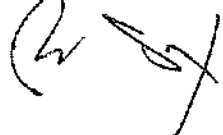






Based on the presentation made and information provided, the Committee decided that the proposal for Proposed Commercial cum Residential "Eminence Mall" & Hospital Project of M/s Morias Infrastructure Pvt. Ltd., Mouza : Chadri, Thana : Lower Bazar, Thana no. : 199, Old Ward no. : 20, New Ward no. : 18, Tehsil : Ranchi, Distt. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure -III alongwith the following specific conditions :

- I. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- II. All raw material to be stored only under covered shed.
- III. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- IV. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- V. Trees should be developed & maintained not less than 15% of project area.
- VI. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- VIII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- IX. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging points to be installed.
- XII. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
- XIII. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.
- XIV. A cycling tract to be provided in residential complex so as to save on fuel and make in campus movement environment friendly.

42

A    

5. Chasnalla Colliery including Washery of 1.2 MTPA / 1.5 MTPA (Normative / Peak) along with expansion of Coal Washery of 4.0 MTPA capacity and OB handling at surface for backfilling of exhausted West Quarry of M/s Steel Authority of India Ltd., Village : Chasnalla, Het Kandra, Tehsil : Jharia – cum – Jorapokhar – cum – Sindri, Distt. : Dhanbad, Jharkhand (230.88 Ha).

(Proposal No. : SIA/JH/CMIN/ 408531/2022)






Name of the consultant : CIMFR, Dhanbad, Jharkhand.

This is Chasnalla Colliery including expansion of Coal Washery project which has been taken for appraisal on 19.07.2023.

The project is a violation case since the project had come in to operation without obtaining prior Environmental Clearance. The project was considered by MoEF&CC, Govt. of India under the notification no. 804(E), dated 14.03.2017 and has approved the violation ToR vide letter no. IA-J-11015/26/2019-IA-II(M), date 31.12.2020. The final EIA / EMP submitted by PP to SEIAA in the light of notification no. S.O. 1886 (E), dated 20th April, 2022 on 15.07.2023, which was forwarded to SEAC on 16.07.2023.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Chasnalla Colliery including expansion of Coal Washery of Collieries Division, STEEL AUTHORITY OF INDIA LIMITED (Lease Area-230.88 ha)
2	Lessee:	: Collieries Division, Steel Authority of India Limited
3	Lease Address	: Chief General Manager (C&J) Collieries Division, SAIL-Chasnalla (Dhanbad), Jharkhand-828135 E-mail- gmchasnalla@gmail.com
4	Lease Area	: Ha: 230.88 ha Acres:570.5
5	Type of Land	: Private & Govt. land. There is no forest land.
6	Project Cost	: 45000 Lakhs
7	EMP Budget	: Capital: 461.79.Lakh Recurring: 153.93. Lakh / year
8	CSR / CER Budget	: Rs. 2.0 Crore
9	New or Expansion	: Expansion of production capacity 1.2/1.5 Million Tons (Normative/Peak) 4 MTPA washery (2.8 + 1.2)
10	Mineable Reserves	: 38.457 Million Ton
11	Mine Life	: OC – 9, UG 23 & Overall 23 years (as per the Mining plan)
12	Man power	: Total manpower 599.
13	Water Requirement	: Washery - 6400 KLD, Domestic 1660 KLD and Mining 300 KLD
14	Water Source	: Domestic water requirement is 1660 KLD source- Damodar River supply. Industrial water requirement is 6700 KLD source-Mine

A     





			water.
15	DG Set / power	:	1250 KVA. (Source-DVC and JSEB)
16	Crusher	:	Roll Crusher at Washery.
17	Nearest Water Body	:	Damodar River
18	Nearest Habitation	:	Chasnalla and Het Kandra village.
19	Nearest Rail Station	:	Sudamdih Railway Station-1 Km and Dhanbad Railway Station-16 Km from Chasnalla Mining Lease
20	Nearest Air Port	:	Ranchi Airport- 161 km
21	Nearest Forest	:	1250m away from project.
22	Road & Highways	:	NH-19 (Old NH-2): About 20 km away passes through Dhanbad

CO-ORDINATES

1	Latitude	Latitudes 23°40'03" to 23°38'33" N
2	Longitude	Longitude 86°26'52" to 86°27'57"E.

LAND DETAILS

	<p>Total land 230.88 ha of Mining Lease area.</p> <ul style="list-style-type: none"> • SAIL land: 174.43 ha • Private land: 16.10 ha • Government land:40.35 ha • Forest land : Nil <p>Chasnalla – Mouza No. 165</p> <p>1) Khata Nos. – 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13,14,15 , 16, 17 ,18, 19, 20, 21 , 22, 23,25, 26, 27, 28,29, 30, 31 32, 33, 34, 35, 36, 39, 40, 41,42, 43, 44, 45, 46, 47, 48, 49, 50, 51 ,52, 53, 54, 55, 56, 57 ,58, 59, 60, 61, 62, 63, 64, 65, 66, 67 ,68, 69, 70, 71, 72, 73, 74,75, 76, 77,79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111.</p> <p>2) Plot Nos. 1, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13,14,15 , 16, 17 ,18, 19, 20, 21 , 22, 23, 24, 25, 26, 27, 28,29, 30, 31 32, 33, 34, 35, 36,37, 38, 39, 40, 41,42, 43, 44, 45, 46, 47, 48, 49, 50, 51 ,52, 53, 54, 55, 56, 57 ,58, 59, 60, 61, 62, 63, 64, 65, 66, 67 ,68, 69, 70, 71, 72, 73, 74,75, 76, 77, 78,79, 80, 81, 82, 83, 84,85,86,87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116 ,117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135 , 136, 137, 138, 139, 140, 141, 142,143, 144, 145, 146, 147,148, 149 , 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204,</p>
--	--

A    

205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 409, 410, 411, 412, 414, 415, 416, 417, 418, 419, 420, 421, 422, 430, 434, 435, 436, 437, 438, 439, 444, 448, 449, 451, 452, 453, 460, 461, 464, 465, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 525, 526, 527, 528, 529, 535, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 76/651, 360/653, 475/654, 368/655, 64/656, 404/657, 312/658, 372/659, 111/660, 537/661, 87/662, 371/663, 395/664, 95/665, 80/666, 25/667, 511/668, 78/669, 579/670, 404/671, 523/672.

Het Kandra – Mouza No. 167

- 1) Khata Nos. – 34, 35, 37, 38.
- 2) Plot Nos. 333, 334, 337, 338, 339, 340, 341, 342, 343, 345, 346, 377, 378.

STATUTORY CLEARANCES

1	LOI/Lease docs	<p>: The total Lease hold area of Chasnalla is 230.88 Ha, containing two mouzas namely Chasnalla (226.80 Ha) and Het Kandra (81.38 Ha). Lease was granted in the year 1938 for a period of 750 years.</p> <p>The Ministry of Coal issued notification dated 1st October, 2021 regarding amendment of Mineral concession Rule and called Mineral Concession (Amendment) Rules, 2021. As per 24C (2) (Period of mining lease granted to Government companies or</p>
---	----------------	--

45

		corporation) all subsisting mining leases vested or granted to Government companies or corporation before commencement of Mineral Concession (Amendment) Rules,2021 for coal or lignite shall be deemed to have been granted for fifty years or till 31 st March 2030, whichever is later.
2	CO	: The CO, Jharia vide letter no. 886, dated 12.06.2023 has mentioned the plot nos. of the project is not recorded as "Jungle Jhari" in Haal Survey Khatiyon & Register II.
3	DFO Wild Life	: DFO, Wildlife Hazaribag vide letter no. 174 & 178, dated 24.01.2023 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	Territorial DFO	: DFO, Dhanbad Forest Division vide letter no. 1600 & 1601, dated 09.06.2023 certified that the distance of reserved / protected forest is 300 m from proposed project site.
5	Consent to Operate (CTO)	: CTO granted by JSPCB vide Ref. no. : JSPCB/HO/RNC/CTO-14147122/2022/1862, dated 30.12.2022.
7	Public Hearing	: Public Hearing conducted on 26.08.2022.
8	Mine Plan	: JHJH004/APP0061/2021, dated 10.11.2022.

Working Details

1	Mining Method	: Underground and Open Cast Mine. Longwall panel with hydraulic Sand/Bottom Ash stowing method. Shovel Dumper combination for Open Cast Mine.
2	Quarry Area	: 17.46 Ha
3	Waste Generation	: Nil
		Life of Mine –23 years
4	Stripping Ratio	: 1 : 4.5
5	Working Days	: 300
6	Benches: size & No	: Bench height 10 m width – Three times width of Dumper
7	Elevation of Mine	: 140.5 MRL
8	Ground Level Elevation	: 138m to 156m (Lowest and Highest contour)
9	Ultimate Working Depth	: 134m (underground), 38 m (Open Cast)
10	Water Table	: 4.31 to 9.79 m
11	Topography of Mine	: The area is characterized by gently undulating to a rolling topography with an overall slope towards east-southeast. The ground elevation of the area generally varies from 270 m in the South-western part to 120 m in the eastern part near the

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

		Damodar river
12	Explosive Requirement	: 40669.43 kg /Yearly (Permitted-5)
13	Diesel/Fuel requirement	: 2.15 KL/year (For DG set)

Production Details for first five year as per Approved Mining plan

Year	Production of coal (Million Ton)
1 st	0.2
2 nd	0.2
3 rd	0.27
4 th	0.35
5 th	0.42

Solid Waste Management

- Waste Generation will be Nil during the life of mine. It is an underground mine, stone generated during coal mining utilised for side wall packing of the u/g mine galleries.

Water Quality Management






- Underground Mining is planned below the ground water table.
- The rain water during rainy season will be collected in a rain water harvesting pit. Mine water is used for dust suppression and plantation. Garland drain has been made around working shaft.
- Retaining walls along the jore/nalla constructed to prevent water flowing into the lease area
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Presently Underground mines of Chasnalla Colliery is in operation. Being an underground mine, drilling at surface is not required. Moreover, drilling of roof rock at underground for installation of supports is done in conjunction with water spraying. Drilling of coal hole at underground is undertaken after the complete face has been wetted with water.
- Water sprinkling will be done on the transportation roads of Chasnalla.
- Regular water sprinkling at core zone as well as buffer zone.
- Use of personal protective equipment like dust mask etc shall be put in practice
- Monitoring of the ambient air quality is being carried out as per norm.

Undertakings affirming the following have been submitted:

- No ground water is used for domestic purpose, any mining activities or any other use and therefore undertakes that no ground water will be used for domestic purpose, any mining activities or any other use.
- The Boundary Pillars of the Chasnalla lease area will be maintained properly.

A     

- c. One season post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- d. The plantation work will be done as per the approved Mining Plan / Review of Mining plan of Chasnalla Colliery lease area.
- e. Sufficient water spray using water tankers will be done for effective dust suppression within the Core and Buffer zone.
- f. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records will be maintained.

PROJECT SUMMARY

The ToR/EC proposal for Chasnalla Colliery Mine of 1.2/1.5 MTPA capacity in mine lease area of 230.88 ha of M/s SAIL located in village Chasnalla and Het Kandra, Tehsil Jharia cum Jorapokhar cum Sindri, District Dhanbad (Jharkhand) was granted by MoEF&CC on 31.12.2020.

Details of project are given as under:

- i. Chasnalla Colliery of Collieries Division, M/s Steel Authority of India Ltd is located in the Eastern part of the Jharia Coalfield, District Dhanbad, Jharkhand and covers an area of about 3.5 sq. km. The Chasnalla mine concession lies between latitudes 23°40'03":23°38'33" N and longitude 86°26'52":86°27'57" E. It is covered by Survey of India Survey Sheet Nos. 88, 89, 94 & 95 (RF 1:10,000) of Topo Sheet No. 731/6 and falls within sheet no. 8 of the geological map (4" = 1 mile) published by the Geological Survey of India. Coal linkage of the project is proposed for Captive use for various Steel plants.
- ii. Employment generation: employment to 512 persons will be provided from the project.
- iii. The project is reported to be beneficial in terms of : The project will further improve the living condition of the people. The project will generate direct as well as indirect employment. The income thus generated will thus improve the beneficiaries living conditions.
- iv. Total mining lease area as per block allotment is 230.88 Ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the MoC.
- v. The land usage pattern of the project is as follows:

Land use details (Area in Ha)

S. No.	LANDUSE	Area (ha)	Area in %
1.	Agricultural land	Nil	0
2.	Forest land	Nil	0
3.	Wasteland	51.93	22.49
4.	Grazing land	Nil	0
5.	Surface water bodies	72.9	31.5
6.	Settlements	50.35	21.80

A











7.	Others (specify)		
i	Mining Area	17.46	7.56
ii	OB Dump	12.07	5.22
iii	Existing Washery	12.50	5.41
iv	Proposed modular washery site	4.8	2.07
v	Other Infrastructure	7.37	3.19
vi	Green belt	1.30	0.56
vii	Burning Ghat	0.20	0.086
	TOTAL	230.88	

- i. Total geological reserve reported in the mine lease area is 58.032 MT with 38.457 MT mineable reserve.
 - ii. Life of mine is 23 years @ nominal 1.2 MTPA / peak 1.5 MTPA.
 - iii. Transportation of coal has been proposed by Belt conveyor from mine to Chasnalla washery.
 - iv. No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
 - v. The ground water level has been reported to be varying between 4.31m to 9.79m during pre-monsoon and between 2.06 m to 6.40m during post-monsoon. Total water requirement for the project is 6700 KLD.
 - vi. Public hearing for the project of 1.2/1.5 MT capacity in an area of 230.88 Ha was conducted on 26.08.2022. Major issues raised in the public hearing included in the Final EIA-EMP report
 - vii. Consent to Operate for the existing capacity was obtained from the State PCB on 30.12.2022 and was valid till 31.12.2023
 - viii. Regular monitoring of ambient air quality is being carried out. The documented report is submitted to JSPCB and also to MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations which can be attributed to the specific local conditions during the day of sampling.
 - ix. **Total capital cost** of the project is Rs. 45000 Lakh, **CSR cost** to be incurred as per the guidelines. As it is an existing mine, most of the area under reference is developed with surface constraints of colliery complex and no R&R is involved. **Environment Management Cost:** Capital provisions for environmental control measures, which includes pollution control arrangement.
- Primary socio economic study has been done around 10km radius of project area (February-March, 2021) as mentioned in EIA report in Chapter 3 Page number 165-166.

A

MA

49
MA

MA

MA

MA

- Based on the primary survey needs of villagers has been identified and tabulated below along with the budget commitment, plan, and time-line.

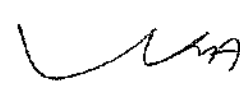

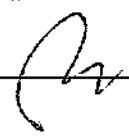


S.N.	Needs of Villagers	Budget provision (In Lakhs)
1	Medical facility	10.00
2	Drinking water	3.00
3	Education.	5.00
4	Electricity	2.00
5	Pakka Road	10.00
6	Employment	5.00 (Skill-Training)
7	Bathing Ghat	2.00

Public Hearing issues and Time bound plan with budget

क्र. सं.	प्रश्न/सुझाव/मुद्दे	इकाई प्रतिनिधि का जवाब	बजट प्रावधान (लाख रुपये)	कार्य पूरा करने का समय
1	• वायु प्रदूषण कि नियंत्रण कि व्यवस्था कि जाय |	• वायु प्रदूषण कि नियंत्रण कि व्यवस्था सुदृढ़ कि जाएगी |	• 12	• चल यान (मोबाइल वैन) द्वारा निरंतर
	• रेलवे साइडिंग से उड़ने वाली धूल को रोकने के व्यवस्था कि जाय |	• रेलवे साइडिंग में पानी के छिडकाव कि व्यवस्था को और सुदृढ़ किया जायेगा|	• 16	• ट्रोली माउंटेड फॉर (fog) वाटर मिस्ट केनन वित्तीय वर्ष 2023-24 में पूर्ण किया जाएगा|
2	• प्रदूषण मुक्त पीने कि पानी कि व्यवस्था कि जाय |	• चासनाला फिल्टर प्लांट से पीने कि पानी कि व्यवस्था पाइप लाइन के द्वारा दी जाती है |	• 10 (पाइप लाइन मेंटेनेंस)	• निरंतर |
	• पेयजल व्यवस्था को बेहतर किया जाये |	• फिल्टर प्लांट में पानी कि नियमित जाँच कि जाती है|	• 2	मासिक रूप से जाँच कराई जाती है
3	• जल प्रदूषण को लेकर लोगो में जागरूकता फेलाई जाये |	• स्वक्षता अभियान के तहत जल प्रदूषण के सम्बन्ध में सिविल लगा कर आम लोगो को जागरूक किया जायेगा|	• 1	• नियमित रूप से वर्ष में चार बार |
	• स्थानियों को रोजगार दिया जाये |	• स्थानीय लोगो को कार्य में प्राथमिकता दी जाएगी |	• 4	• वर्ष 2024-25 तक कौशल विकास केंद्र बनाया जाएगा|
	• विस्थापितों को नौकरी दी	• सी.एस.आर. के अंतर्गत कौशल		

A     

<ul style="list-style-type: none"> जाये | ● स्थानियों के कौशल विकास के लिए व्यवस्था कि जाय |	<ul style="list-style-type: none"> विकास पर कार्य किया जायेगा |		
<ul style="list-style-type: none"> ● ठेका मजदूरों को नियमित रोजगार मिले | ● भूमि अधिग्रहण के बदले रोजगार दिया जाय |	<ul style="list-style-type: none"> ● भूमि अधिग्रहण के एवज में नौकरी के सम्बन्ध में निति और नियमों के तहत करवाई कि जाती है |		<ul style="list-style-type: none"> लंबित आवेदनों का निष्पादन पात्रता के आधार पर २०२४-२०२५ तक किया जाएगा |
<ul style="list-style-type: none"> ● स्थानियों लोगों के इलाज कि सिविधा प्रधान कि जाए | ● सेल को जमीन देने वाले लोगों कि सेल अस्पताल में मुफ्त इलाज कि व्यवस्था कि जाय | ● स्वास्थ्य व्यवस्था बेहतर कि जाये |	<ul style="list-style-type: none"> ● सी.एस.आर. के तहत स्थानियों लोगों के स्वास्थ्य कि जाँच के लिए मेडिकल कैम्प लगाया जायेगा एवं दवा वितरण कि व्यवस्था कि जाएगी |	<ul style="list-style-type: none"> ● 12 	<ul style="list-style-type: none"> ● नियमित रूप से मोबाइल मेडिकल वैन के द्वारा |
<ul style="list-style-type: none"> ● बिजली एवं स्कूल कि व्यवस्था को बेहतर कि जाये | ● चासनाला अकादमी को दुरुस्त किया जाये | ● बच्चों को स्कूल ड्रेस दिया जाए |	<ul style="list-style-type: none"> ● बिजली एवं स्कूल कि व्यवस्था को बेहतर बनाने के लिए प्रबंधन प्रयाशरत है | ● चासनाला अकादमी कि व्यवस्था को और बेहतर बनाने के लिए प्रबंधन प्रयाशरत है | ● बच्चों को स्कूल ड्रेस सी.एस.आर. के तहत उपलब्ध कराया जायेगा |	<ul style="list-style-type: none"> ● 20 	<ul style="list-style-type: none"> 2024-25 FY तक पूर्ण किया जाएगा |
<ul style="list-style-type: none"> ● साइडिंग के इर्द गिर्द रोड कि व्यवस्था कि जाए | ● पैदल चलने वालों के लिए पाथवे को दुरुस्त किया जाए | ● के. के. गेट से सी. पी. पी. तक के रोड कि मरम्मत कि जाए |	<ul style="list-style-type: none"> ● साइडिंग के इर्द गिर्द रोड कि व्यवस्था कि जाएगी | ● पैदल चलने वालों के लिए पाथवे को ठीक किया जाएगा ● के. के. गेट से सी. पी. पी. तक के रोड कि मरम्मत कि जाएगी एवं पानी का छिडकाव कि व्यवस्था को और सुदृढ़ कि जाएगी |	<ul style="list-style-type: none"> ● 3000 (Rite द्वारा budgetary offer दिया जा चुका है) 	<ul style="list-style-type: none"> ● 2 वर्ष (2025-26 से 2026-27) के अंदर पूर्ण किया जाएगा |
<ul style="list-style-type: none"> ● वृक्ष रोपण किया जाए | ● प्रयावरण के पहलुओं को 	<ul style="list-style-type: none"> ● प्रयावरण सम्बन्धी कानून के पालन पर प्रबंधन कटिबद्ध है |	<ul style="list-style-type: none"> ● 2 	<ul style="list-style-type: none"> ● वार्षिक रूप से निरंतर किया

A     

ध्यान दिया जाये |	पोधो के वितरण एवं वृक्ष रोपण का कार्य क्रम जल्द से जल्द से प्रारंभ किया जायेगा |	जाएगा
-----------------	--	-------

COMMUNITY RESOURCE AUGMENTATION PLAN

Particular	Proposed measures	Cost of proposed mitigation measures (lakh)	Time line
Water Environment	Bore well with solar power pump : 10 numbers in buffer zone	60.00	2024-25 to 2026-27
Ecology	Distribution of 20,000.00 fruit bearing tree saplings like guava, mango, jamun, emli, sitaful, etc. in the buffer zone.	20.00	2024-25 to 2026-27
Air & Noise Environment	Grant to Rotary club for organising an Eye Camp in buffer zone.	5.00	2024-25 to 2026-27
	Medical Camp at villages in the Buffer Zone	20.00	2024-25 to 2026-27
Socio-Economic	Panchayat/Community Bhawan	20.00	2024-25 to 2026-27
	RO/water cooler in Government schools and colleges	5.00	
	Solar light	150.00	
	Skill development	20.00	
	Education	20.00	
	Development of a Chatt Ghat/Bathing ghat	14.79	
	Total	334.79	

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Air Pollution Mitigation

Proposed measures in buffer zone	Category of plan	Cost of proposed mitigation measures (In lakh ₹)	Time-Line
Water sprinkling in the buffer zone area with the help of mobile sprinklers.	Remediation Plan	20.00	Will be started FY- 23/24 and continue further
A green belt development along the road in the buffer zone with the help of forest department.	-- Do --	20.00	3 year contract will be awarded to forest department in the year 2024-25
Conversion of Kachcha Road with Cemented road (RCC).	-- Do --	45.00	Will start from FY 2024-25 and completed within 3 years
Maintenance of Pakka Road	-- Do --	10.00	Will start from FY 2025-26 and continued further as per requirement
	Total	95.00	

NATURAL RESOURCE AUGMENTATION PLAN

Proposed measures in buffer zone	Category of plan	Cost of proposed mitigation measures (In lakh)	Time line
Cleaning and maintenance of Basti Pond before the monsoon	Natural Resource Augmentation Plan	06.00	2025-26
Development of 01 number of a new pond	-- Do --	10.00	2026-27

Rain water Harvesting system at 25 locations in Buffer Zones	-- Do --	16.00	2024-25 to 2026-27
Total		32.00	






Budget estimate towards ecology restoration and biodiversity conservation:

- The budget of Rs. 85 Lakhs has been allocated for ecological restoration and biodiversity conservation and management.

Sl No.	Particular	Activity Proposed	Total amount in Lakh Rs.
1.	Strategic plantation with aim to conserve the biodiversity in the core and buffer zone. The activity may include plantation, habitat protection or as directed by the State Forest Department	Through DFO Dhanbad	85.00

Environmental Management Plan and Public Hearing Compliance costing

Sl. No.	Description	Item	Recurring cost for 5 years (Rs. in Lakhs)	Capital Cost (Rs. In Lakhs)
1	Air Pollution/ Occupational Health & safety	Nose masks	0.1/yearly	--
		Safety shoes	0.11/yearly	--
		Ear Plugs	0.03/yearly	--
		Helmets	1.3/yearly	--
		Hand gloves	0.3/yearly	--
		Medical check ups	1.0/yearly	--
		Water utility for dust suppression	35.00	--
		Others	50.00	--
2	Water & Soil erosion	Construction of garland drains, retaining walls, gabions & others	--	112.00
		De-silting operations	30.00	--
		Water harvesting pits	--	02.00
3	Noise pollution	Maintenance of Machinery	--	200.00
4	Biological & Socio-economic aspect	Greenbelt development & maintenance	--	15.00
		Water Supply to nearby villagers	--	10.50

A     

5	Environment data generation and EMP preparation, etc.	Provision of environmental monitoring equipment like Particulate Analyzer, Noise Meter, Water Quality Analyzer and chemicals & glass-wares	4.0/yearly	11.00- For PM10 System at washery, 32.00-For EIA-EMP report Rs. 20 lakh-for Environmental Audit
TOTAL			121.84	402.5
Public hearing compliance cost			3079.00	
Grand Total			3603.34	

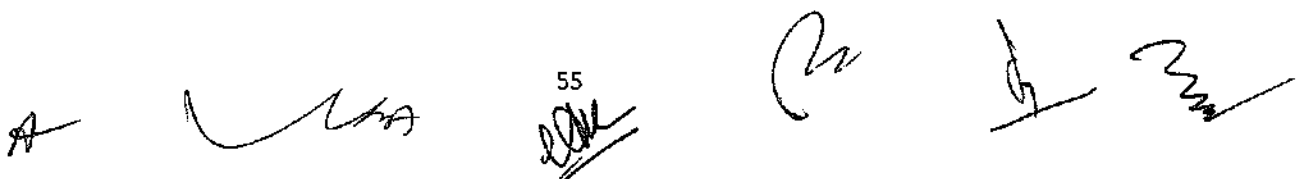
Assessment of ecological damage with respect to air, water, land other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommended an amount of rupees 4,61,79,260/- as per prevailing guidelines towards remediation plan and natural & community resource augmentation plan to be spent within a period 03 years. The details of summary of Natural resource and Environmental / Ecological Damage assessment with budgetary provision for expenditure under the below mention head for remediation :-

	Parameter	Damage Cost (Rs.)
1	Damage due to loss of Vegetation cover**	19,76,355/-
2	Damage due to Air pollution**	3,42,62,491/-
3	Damage due to Water Pollution***	99,40,414/
Total		4,61,79,260/-

- i. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. 4,61,79,260/-.

55



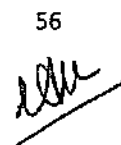
- II. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. **4,61,79,260/-** towards remediation plan and natural and community resource augmentation plan with the Jharkhand State Pollution Control Board and evidence of the same submitted to SEIAA, Jharkhand prior to grant of EC.
- III. The bank guarantee shall be released after successful completion of remedition plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.
- IV. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.
- V. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.
- VI. STP of adequate capacity shall be established within the project permises.
- VII. Energy conservation measures adhearing to part of ECBC norms shall be complied with.
- VIII. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

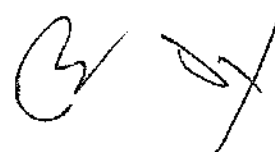
Based on the presentation made and information provided, the Committee decided that the proposal for Chasnalla Colliery including Washery of 1.2 MTPA / 1.5 MTPA (Normative / Peak) along with expansion of Coal Washery of 4.0 MTPA capacity and OB handling at surface for backfilling of exhausted West Quarry of M/s Steel Authority of India Ltd., Village : Chasnalla, Het Kandra, Tehsil : Jharia – cum – Jorapokhar – cum – Sindri, Distt. : Dhanbad, Jharkhand (230.88 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV alongwith the following specific conditions :

- I. A technical feasibility study to be conducted for transportation of coal from all coal mine sources using ROAPWAY aimed at reducing Air Pollution and to ensure road accident zero.

A



56






Day 3 : July 20th, 2023 [Thursday]

Consideration of Proposals

1. Expansion of existing Rolling Mill from Production Capacity of TMT Bars – 29,000 TPA to TMT Bars & Rolled Products – 2,00,000 TPA with Coal / Oil Fired Re-heating Furnace & Coal Pulverizer by M/s ASLE Rolling Mills Pvt. Ltd., Mauza : Manjhiladih, Thana no. : 267, Thana : Giridih, P.O. : Gadi Srirampur, Distt. : Giridih, Jharkhand.

(Proposal No. : SIA/JH/IND1/436455/2023).

Name of the consultant : Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar


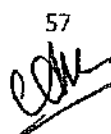



This is an expansion project which has been taken for appraisal on 20.07.2023.

The proposal was considered by the committee to determine the "Terms of Reference (ToR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendments thereafter. For this purpose the Project Proponent has submitted the prescribed Form - I & PFR the proposed project falls under item 3 (a) Metallurgical Industries as per EIA Notification, 2006.

The present application is for Expansion of existing Rolling Mill from Production Capacity of TMT Bars - 29,000 TPA to TMT Bars & Rolled Products - 2,00,000 TPA With Coal/Oil Fired Re-heating Furnace & Coal Pulverizer by M/s. ASLE Rolling Mills Private Limited (a wholly owned subsidiary co. of ASL Enterprises Ltd.)

Background of the project:

- The existing unit was established by M/s Adi Ispat Pvt. Ltd. after obtaining Consent to Establish (CTE) vide Ref. No. 3368, dated 28.09.07 from JSPCB For M.S. Ingot – 60 TPD and Rolled Sections and TMT Rods 100 TPD, and application was made for obtaining the Consent to Operate (CTO).
- M/s Adi Ispat Pvt. Ltd. was auctioned by the State Bank of India, Giridih Jharkhand, as per the NCLT, Kolkata Bench order dated 21.09.2021.
- The Unit was purchased and acquired by M/s ASL Enterprises Limited on 20th March 2023. The unit is located at Mauza – Manjhiladih, Thana No. 267, P.O.- Gadi Srirampur, District- Giridih, Jharkhand.
- CTO in the name of M/s ASL Enterprises Limited has been obtained from JSPCB vide Ref. No. JSPCB/HO/RNC/CTO-15745512/2023/1164, dated 29.06.2023, but operation of plant not yet started.
- Meanwhile, M/s ASL Enterprises Limited has transferred the unit to M/s ASLE Rolling Mills Pvt. Ltd. (a Wholly owned subsidiary Co. of ASL Enterprises Ltd.) as per Board Resolution dated March 21, 2023, the extract of same as below:

A   57   

“RESOLVED THAT, Pursuant to the provisions of Section 180 (1)(a) of the Companies Act, 2013 read with Rules made thereunder and subject to the approval of the shareholders of the company, consent of the Board be and is hereby accorded to transfer assets of the Company, situated at Majhiladih, Gadi Srirampur, Dist. Giridih-815301, Jharkhand to M/s ASLE Rolling Mills Private Limited (a wholly owned subsidiary of ASL Enterprises Ltd.) for a consideration of Rs. 15,00,00,000/- (Rupees Fifteen Crore only) as a going concern basis with immediate effect and on such terms and conditions as the Board of Directors of the Company consider beneficial to the Company.”

- Application for transfer of CTO in the name of M/s ASLE Rolling Mills Pvt. Ltd. (a Wholly owned subsidiary Co. of ASL Enterprises Ltd.) has been made to JSPCB vide letter dated 11.07.2023.
- Thus, the application for EC has been made in the name of M/s ASLE Rolling Mills Pvt. Ltd. (a Wholly owned subsidiary Co. of ASL Enterprises Ltd.)

M/s ASLE Rolling Mills Pvt. Ltd. is an existing steel plant at Mauza – Manjhiladih, Thana No. 267, P.O.- Gadi Srirampur, District- Giridih, Jharkhand. The total land area is 14.9116 acres, however the area to be utilized for the above-mentioned project is only 13.9063 acres, the land documents for the same including CO Giridih, and DFO Giridih Certificate (in name of Adi Ispat Pvt. Ltd.) incorporating all the khata and plot numbers have been obtained from the concerned authority in the SEIAA format and same submitted in the online EC application.





Company proposes to modify the existing mill to a High-Speed Rolling Mill with changing the required motors, gears and number of rolls, strands – as per requirement.

The project will procure the raw materials Billets and coal from open market and 4TPH coal pulverizer will be installed for uniform feed to reheating furnace with increased number of burners and rate of fuel charging.

The application for EC is also in compliance to the requirements of EIA Notification (Amendment) number S.O 3250 (E), dated 20.07.2022, regarding obtaining environmental clearance by all the existing rolling mills with capacity greater than 5000 TPA.

Proposed expansion shall be done within the existing plant area of 5.62 ha (13.90 Acres), land details as below:

Khata no.	Plots	Khata no.	Plots no.
56	851, 829, 830, 832, 824, 828, 849	17	746, 845, 844, 849, 834, 831, 821, 825, 731
39	985, 978, 979, 1011, 984, 985	42	813, 723
145	856	36	732
	736, 738, 737, 739, 819	79	987
		30	986, 1012

A    

68	742, 722		
		77	1013
20	988	133	724
33	989	65	672
86	846	58	855, 820
99	842	132	847
60	1014, 1015	55	818, 811, 812
18	733	75	1010


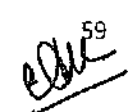



There are no Biosphere Reserve/ National Park/ Wildlife Sanctuary/ Ecological Sensitive Area within the 10Km radius of the Project Site.

The existing project cost is Rs. 15.00 Crores. The estimated project cost for the proposed expansion is Rs. 33.06 Crores. The total project cost after the expansion will be Rs. 48.06 Crores.12

Employment Generation after the proposed project will be 125 direct employment and approximately 70 - 80 people will be employed during the construction phase and will be recruited from the local villages surrounding the project site.

The capacity of different existing and proposed units is as follows:

Sl. No	Plant Facilities	Existing Installed Units and Capacity		Proposed Units and Capacity	Total after Expansion	
		Unit	Capacity		Unit	Capacity
1	Rolling Mill	1x5TPH	29,000 TPA TMT Bars	Modernization & expansion for additional 171000 TPA TMT Bars & Rolled Products	1x35TPH	200000 TPA TMT Bars & Rolled Products
2.	Reheating Furnace (Coal/Oil Fired)	1x5TPH	30,000 TPA Heated Billets	To be replaced with new efficient furnace	1x35TPH	208000 TPA Heated Billets
3.	Coal Pulverizer	<i>Producer gas Plant (1x3750 Nm3/hr) Will be dismantled</i>		Addition of 1x4TPH coal Pulverizer	1x4TPH	14560 TPA Pulverized coal
4.	Induction	1x6 T	60 TPD	Will be dismantled		

A     

Furnace	Will not be operated & dismantled
---------	-----------------------------------

Presently the unit is having a connected load of 1.0 MVA from DVC. Total power requirement for the project after expansion is envisaged as 3.15 MVA, which will be met from DVC.

The total requirement of makeup water for industrial and domestic purposes after the proposed expansion will be 214 KLD. The water requirement will be met from ground water through bore wells. NOC for the proposed ground water withdrawal will be obtained from CGWA.

Raw material for the plant would be procured from local and other state markets depending upon the quality. The transportation of raw material and the final products will be done through SH-13 that is nearby the project site. Total Raw material requirement after the proposed expansion of plant is given below:

Proposed Rolling Mill: TMT Bars & Rolled Products - 2,00,000 TPA			
Raw Material	Existing requirement	Final Capacity	Source
MS Billets	30,000 TPA	2,08,000 TPA	Giridih, Durgapur, Ramgarh etc.
Fuel for Reheating Furnace: Coal or Oil			
Coal Or F. Oil	Coal – 2,100 TPA -	Coal – 14,560 TPA Or Oil – 7,280 KL/Year	Imported coal through Haldia port F. Oil local IOCL/HPCL

Raw Materials	Required materials for Per Ton of product	Total Raw materials required After Expansion	Source location & distance	Mode of transportation
M.S. Billets	1.04	208000 TPA	Giridih, Durgapur, Ramgarh area Within 120 Km	Trucks/Trailers
Coal / or Furnace Oil	0.07/0.035 KL	14569 TPA Or 7280 KL	Imported coal via Haldia port – 374 Km F. Oil local market IOCL/HPCL	Covered Trucks Tankers

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Baseline data collection for 3 month (one season) has been carried out from 1st March to 31st May 2023.

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Land lease deed.
2	CO	:	The CO, Giridih Sadar vide letter no. 747, dated 10.06.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyar & Register II.
3	DFO Wild Life	:	DFO, Wildlife Hazaribag vide letter no. 1159, dated 14.06.2023 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary. Plot no. 824 has not been included in the certificate which is a part of project area. PAs has submitted an affidavit that they will submit a revised certificate from Wildlife DFO, including plot no. 824 which has been left out in the certificate issued vide letter no. 1159, dated 14.06.2023.
4	DFO Forest Distance	:	DFO, Giridih East Forest Division vide letter no. 2210, dated 05.07.2023 certified that the distance of notified forest is 300 meters from project site.
5	Consent to Operate (CTO)	:	CTO issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTO-15745512 /2023/1164, dated 29.06.2023.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 18, 19, 20, 21 & 22.07.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure II alongwith the following specific conditions :

1. Impacts and mitigation measures due to construction and demolition is to be included in EIA report.

A *[Signature]* *[Signature]* *[Signature]* *[Signature]* *[Signature]*

2. Installation of 0.5 MTPA combi Mill (Special Bar Quality and Wire Rod Mill) with re-heating furnace and finishing line of M/s Indian Steel & Wire Products Limited at Ward no. : 19, Jamshedpur notified area committee of Jamshedpur, Distt. : East Singhbhum, Jharkhand.

(Proposal No. : SIA/JH/IND1 /436639 /2023)

Name of the consultant : Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar

This is an expansion project which has been taken for appraisal on 20.07.2023.

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 100th meeting held on 09-14.01.2023 and SEIAA, Jharkhand has approved the ToRs in 101st meeting held on 23rd & 24th January, 2023. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2693/2022/369, date 30.01.2023. The final EIA / EMP submitted by PP to SEIAA on 15.07.2023 and which was forwarded to SEAC on 15.07.2023.

The present proposal is Greenfield Project for installation of 0.5 MTPA Combi Mill (Special Bar Quality and Wire Rod Mill) located in Khata no. 35, ward no. 19, Jamshedpur, District – East Singhbhum, Jharkhand by M/s The Indian Steel and Wire Products Limited (A Subsidiary of Tata Steel Limited).

The proposed project falls under Schedule 3 (a) "Metallurgical Industries", as Category B secondary metallurgical industry of the EIA notification 2006 and its amendments thereof.

The proposed combi mill will be located in Khata no. 35, Ward no. 19 of Jamshedpur Notified Area, District East Singhbhum, Jharkhand. The project lies in between latitude 22°46'7.356"N to 22°45'56.408"N and longitude 86°13'33.050"E to 86°13'33.033"E, details of the corner coordinates are as below:

Pt. no	Latitude	Longitude
1	22°46'7.356"	86°13'33.050"
2	22°45'58.262"	86°13'43.512"
3	22°45'48.997"	86°13'48.961"
4	22°45'47.568"	86°13'48.331"
5	22°45'49.081"	86°13'38.829"
6	22°45'50.374"	86°13'38.634"
7	22°45'51.243"	86°13'29.611"
8	22°45'54.684"	86°13'29.597"
9	22°45'54.684"	86°13'28.336"

A











10	22°45'56.708"	86°13'28.439"
11	22°45'56.408"	86°13'33.033"

Khata no. & Plot no. of the project :

Khata No.	Plot No.
35	360 (P), 367 (P), 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400 (P), 401 (P), 402, 405

Estimated cost for the proposed project is Rs. 1170 Crores. Employment Generation after the proposed project will be 385 direct employment and approximately 1000 people will be employed during the construction phase and will be recruited from the local areas nearby the project site. Raw material for the plant would be procured from Tata Steel Long Project (TSLP), GAIL & OEM.

The transportation of raw material and the final products will be done by existing roads adjacent to the project site. The capacity of different proposed units are as follows:

Unit	Capacity/Size (TPH)	Capacity/Size (TPA)*	No.
Billet Grinding Machine	16.4	130,000	1working+1future
Reheating Furnace	110	515464	1 set
Mill Strands	100	500000	1 set
Sizing Blocks	100	500000	1 set (bars), 1 set (wire rods)
Shears	--	--	5 nos.
Water Box	--	--	1 set
Bar Cooling Bed	--	78 m x 12 m	1 no.
Disk Saws	100	500000	2 nos.
Diverter	--	--	1 no.
Wire Rod Laying Head	100	500000	1 set
Wire Rod Coil Forming & Handling System	100	500000	1 set
In-line Profile Gauges	--	--	3 nos.
Bar Conditioning Line	25.25	200,000 TPA	1 set

A   ⁶³ B  

Bar Unloading and Singling System, Bar Straightening Machine, Shot Blasting Machine, Chamfering and Facing Machine, UT & MFLT, Re-Conditioning, Bar Traceability, Bar Bundling and Dispatch.

*As rolling ball bearing requires higher retention time, the production value will be less for the said period. Therefore, equipment of higher capacity has been proposed to achieve the proposed output.

Total requirement of power is estimated as 31.65 MW. Power requirement will be sourced from TSUISL (previously JUSCO). DG Set of capacity 1250 MVA for meeting emergency requirement of the plant shall be obtained.

Total Raw material requirement after the proposed expansion of plant is given below :

Sl. No.	Name of Raw Material	Proposed Requirement (per day)	Total Requirement (per annum)	Source	Mode of Transport
Raw Materials					
1	Billets/Bloom	1562 T	515464 T	TSLP	Road
Fuel					
1	Natural Gas	76000 Nm ³	25 MCum	GAIL	Pipeline
Consumables & Others					
1	SS shots	0.3 T	100 TPA	OEM	Road
2	Mill Rolls	1.81 T	600 TPA		
3	Bearing and guides	--	3 Sets		
4	TC Rings	--	3 Sets		
5	Refractories	1.51 T	500 T		
6	Lubricant & Greases	0.18 KL	60 KL/Yr		
7	Shear Knives	0.02 T	7 TPA		
Reheating furnace shall be fired only by natural gas, LDO will be kept in backup for emergencies & start-up.					

The total water requirement after the proposed project will be 1709 KLD, 1684 KLD for industrial use and 25 KLD for domestic use. Water requirement will be met from TSUISL (previously JUSCO) supply line. Existing STP of Jemco, based on MBBR technology will be used for treatment of domestic sewage (approx. 20 KLD) and ETP of 350 KLD, based on DAF technology will be installed for treatment of industrial effluent (approx. 306 KLD) from the project.

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]


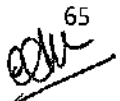



[Handwritten signature]

The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Environment consultant Visiontek Consultancy Services Pvt. Ltd. (VCSPL) has been accredited by NABET, QCI as per the NABET Certificate No.: NABET/EIA/2023/RA 0209, dated 29.06.2021. – Valid up to 16th December 2023.

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Lease deed dated 01.06.1935 with Tata Iron and Steel Company Limited.
2	CO	:	The CO, Jamshedpur, East Singhbhum vide letter no. : 2358, dated 07.12.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyar & Register II.
3	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. : 1735, dated 02.12.2022 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary. The additional comments given by the DFO, Dalma Elephant Project is not appropriate.
4	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. : 2898, dated 30.11.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
5	Public Hearing	:	JSPCB vide Ref. No. PC/PH/JSR/61-03/2023/B-1686, dated 03.07.2023 informed that Public Hearing conducted on 04.05.2023.
6	Diversion of HT Line	:	JBVNL vide Ref. No. 22/EEE/S/JSR, dated 03.07.2023 informed that diversion process of high-tension lines ongoing and will be completed by 15/09/2023.
6	Tree Felling Permission	:	DFO Jamshedpur granted permission for felling of 725 trees vide letters ACK262872INS, ACK399196INS, ACK955673INS, ACK441512INS, ACK725323INS, ACK666971INS, ACK156373INS, ACK786142INS, ACK179376INS, ACK394683INS dated 04.01.2023.
7	LDO Storage License	:	Drawings approved for installation of LDO storage tank vide ref. no. A/P/EC/JH/15/1195 (P559317) dated 09.03.2023.
8	MOU for STP	:	STP installed outside the plant area operated by JEMCO shall be used for domestic sewage. MOU set up vide letter no. ISWP/STP/2023 dated 23.02.2023.
9	Wildlife	:	Integrated Wildlife Management Plan has been prepared and submitted to PCCF-WL for approval vide letter no.

A   65   

Management Plan	ISWP/PCCF/IWMP/285/23 dated 12.07.2023
-----------------	--

Based on the presentation made and information provided, the Committee decided that the proposal for Installation of 0.5 MTPA combi Mill (Special Bar Quality and Wire Rod Mill) with re-heating furnace and finishing line of M/s Indian Steel & Wire Products Limited at Ward no. : 19, Jamshedpur notified area committee of Jamshedpur, Distt. : East Singhbhum, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – V.

3. Hosil Stone Mine of M/s Chataniya Mines (Partners : (i) Shri Mukesh Kumar (ii) Shri Uday Kumar Verma (iii) Shri Uday Kumar Sharma), Village : Hosil, Thana no. : 160, Thana : Vashishth Nagar, Distt. : Chatra, Jharkhand (2.98 Ha).

(Proposal No. : SIA/JH/MIN/ 436357/2023)

Applied Area : 7.37 ACRES (2.98Ha.)

Project Category : B2 – Application for Environment Clearance

EC Application for : 49,670cum / year (max)

Overburden: 55,320 Cum. during plan period.

DG Set: Not Required

Crusher- Not proposed

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 20.07.2023.

Project and Location Details :

Sl.	Parameter	Details
1	Project Name	Hosil Stone Mine Project Type – Stone Mine
2	Lessee:	M/S Chataniya Mines Partners- 1. Shri Mukesh Kumar 2. Shri Uday Kumar Verma 3. Shri Uday Kumar Sharma
3	Lease Address	Village- Hosil, Thana No.- 160, Thana- Vashishth Nagar, District- Chatra, Jharkhand
4	Lease Area	Ha:2.98 Acres:7.37

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]



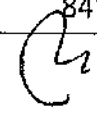


[Handwritten signature]

[Handwritten signature]

5	Type of Land	: Non-Forest – Raiyati Land
6	Project Cost	: 114.25 Lakhs
7	EMP Budget	: Capital: Rs. 12.565 Lakhs Recurring: Rs. 1.74 Lakhs/ year
8	CSR / CER Budget	: NA
9	New or Expansion	: New
10	Mineable Reserves	: Cu.M.:2,64,279 Tonnes:7,13,553
11	Mine Life	: 6.37 years only.
12	Manpower	: 18Person
13	Water Requirement	: 17.32 KLD (Drinking:0.27KLD, Dust Suppression: 4.48 KLD, Plantation: 12.57 KLD)
14	Water Source	: Water will be sourced from near by Abandon Mine and Water Tankers, to be purchased locally for Dust Suppression, Plantation, Drinking and Domestic Consumption.
15	DG Set / power	: Not Required
16	Crusher	: Not Applicable
17	Nearest Water Body	: Amjhar River -610m North
18	Nearest Habitation	: Hosil Village - 280m South
19	Nearest Rail Station	: Katkamsandi Railway Station at 42.52 km SE.
20	Nearest Airport	: Birsa Munda Airport, Ranchi, 149 km SE Direction.
21	Nearest Forest	: More than 250 m, as per forest division. Letter no – 191 Dt- 20-01-2023
22	Road & Highways	: MDR (Pratapur road) at 0.28 km South Direction. NH -22 (Chatra-Gaya Road) at 2.8 km East Direction

CO-ORDINATES :

Corner Point	Latitude	Longitude
1	24°19'23.89" N	84°45'54.16"E
2	24°19'23.79"N	84°45'49.80"E
3	24°19'24.12"N	84°45'49.72"E
4	24°19'24.64"N	84°45'49.90"E
5	24°19'26.93"N	84°45'49.69"E
6	24°19'27.27"N	84°45'48.55"E
7	24°19'27.57"N	84°45'48.08"E
8	24°19'28.63"N	84°45'47.78"E
9	24°19'28.06"N	84°45'49.65"E

A     

10	24°19'28.65"N	84°45'50.21"E
11	24°19'28.48"N	84°45'50.59"E
12	24°19'28.59"N	84°45'50.70"E
13	24°19'28.58"N	84°45'51.71"E
14	24°19'29.79"N	84°45'51.99"E
15	24°19'30.92"N	84°45'52.92"E
16	24°19'30.57"N	84°45'54.29"E
17	24°19'31.51"N	84°45'54.22"E
18	24°19'32.24"N	84°45'54.67"E
19	24°19'32.26"N	84°45'57.05"E
20	24°19'31.65"N	84°45'56.56"E
21	24°19'30.87"N	84°45'56.38"E
22	24°19'30.51"N	84°45'55.62"E
23	24°19'29.40"N	84°45'55.80"E
24	24°19'28.01"N	84°45'55.68"E
25	24°19'27.28"N	84°45'55.84"E
26	24°19'27.24"N	84°45'56.18"E
27	24°19'27.04"N	84°45'56.22"E
28	24°19'26.97"N	84°45'54.48"E
29	24°19'26.90"N	84°45'54.18"E
30	24°19'26.54"N	84°45'52.77"E
31	24°19'25.97"N	84°45'52.82"E
32	24°19'25.92"N	84°45'53.57"E
33	24°19'26.63"N	84°45'53.69"E
34	24°19'26.56"N	84°45'54.15"E
35	24°19'25.26"N	84°45'54.35"E

LAND DETAILS :

Khata No.	Plot No.
03	11
29	13 (P) & 19 (P)

STATUTORY CLEARANCES :

1	LOI / Lease docs	:	The Letter of Intent (Loi) has been issued by District Mining Officer, Chatra vide letter no. 358/Khanan, dated 08.04.2023.
2	CO	:	The CO, Hunterganj (Chatra) vide letter no. 74, dated 21.01.2023 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari"

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

			in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Chatra vide memo no. 533, dated 17.05.2023 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 148, dated 21.01.2023 certified that the proposed project site is outside Eco Sensitive Zone of Lawalong Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Chatra North Division vide letter no. 191, dated 20.01.2023 certified that the distance of reserved / protected forest is 260 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Chatra vide letter no. 516 / Khanan, dated 13.05.2023 has informed that this project is part of District Survey Report (DSR) of Chatra district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on dated 06.05.2023.
8	Mine Plan Approval	:	District Mining Officer, Chatra vide Letter No. 688, dated 26.06.2023.

WORKING DETAILS

1	Mining Method	:	Open Cast Semi- Mechanized Mining Method
2	Quarry Area	:	Plan period –1.71 Ha. Conceptual stage – 1.71 Ha.
3	Waste Generation	:	Plan Period : 55,320Cum. Conceptual Stage –55,320 Cum.
4	Stripping Ratio	:	1:0.28
5	Working Days	:	300 days/year
6	Benches: size & No	:	6 m x 6 m, No. of benches -6
7	Elevation of Mine	:	271 – 269 AMSL
8	Ground Level Elevation	:	269 AMSL
9	Ultimate Working Depth	:	239 AMSL
10	Water Table	:	207 AMSL
11	Topography of Mine	:	Gently sloping area
12	Explosive Requirement	:	40 Kg Slurry explosives/day
13	Diesel/Fuel requirement	:	HSD – 924 liters / day (277.2 KL/year)

A     

PRODUCTION DETAILS :

Years	Production In Cum/Year	O.B Production in cum. /Year	Production In Tons/Year	Bench RL in meters
1st	32648	36060	88150	A-A': 212 – 206 (Stone) B-B': 211 – 205 (Stone) A-A': 216 -212 (O.B.) B-B': 215-211 (O.B.)
2nd	34440	8400	92988	B-B': 215 – 211 (Stone) C-C': 210 – 204 (Stone) C-C': 214-210 (O.B.)
3rd	42064	10860	113573	C-C': 214 – 210 (Stone) A-A': 206 – 200 (Stone) B-B': 205 – 199 (Stone) C-C': 214 -210 (O.B.)
4 th	37930	0	102411	B-B': 205 – 199 (Stone) C-C': 204 – 198 (Stone)
5 th	49670	0	134109	B-B': 199 – 193 (Stone) C-C': 198 – 192 (Stone)
Total	196752	55320	531230	Depth – 20 m

LAND USE

Existing Land Use pattern

Category	Area in Acre
Mining Activities	0.00
Offices/ Store /crusher/ Magazine etc.	0.00
Dumping	0.00
Mining Road	0.00
Garland drain	0.00
Green belt/Safety Zone	0.00
Stone Stock yards	0.00
Unutilized	7.37
Total	7.37

Land Use Pattern during Proposed Plan Period of five Years:

Category	Area in Acre
Mining Activities	4.22

A

[Handwritten signature]

70
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Offices	0.08
Dumping	0.40
Mining Road	0.75
Garland drain	0.10
Green belt/Safety Zone	1.82
Total	7.37

Land Use Pattern after Life of the Mine:

Category	Area in Acre
Mining Activities + Mining Road	4.97 (Water Body)
Offices + Dumping + Safety Zone	2.30 (Plantation)
Garland drain	0.10
Total	7.37

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Green Belt & Other reclaimed area	: 0.93 Ha	2,325
2	Haul /Approach Road	: 0.28 Km.	188 Trees both side approach road.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management


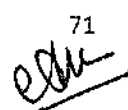



- Overburden Generation will be 55,320 Cum during the plan period. OB will be utilized for internal mine road construction & berm along the approach road construction & maintenance, so there is no requirement of waste dumping Plan for this mining plan.

Water Pollution Control Measures:

- Mining operation will be restricted to the depth of 30m from surface level.
- Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

- Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
- Overloading of the truck / tractor trolleys will not be done.

A   ⁷¹   

As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:

- Carts or tractor-trolleys will be developed on village roads.
- Tractors-trolleys will be well maintained and PUC certified.
- Timely maintenance of vehicles and their silencers to minimize vibration and sound.
- Minimum use of horns in the village area and silence zone (if any) as applicable.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Hosil Stone Mine of M/s Chataniya Mines (Partners : (i) Shri Mukesh Kumar (ii) Shri Uday Kumar Verma (iii) Shri Uday Kumar Sharma), Village : Hosil, Thana no. : 160, Thana : Vashishth Nagar, Distt. : Chatra, Jharkhand (2.98 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

4. Dumri – Kalan Stone Mine of M/s Anjani Stone Works (Partners : (i) Shri Sandeep Kumar Singh (ii) Shri Pranav Kumar Singh), Village : Dumri - Kalan, Thana no. : 75, Thana : Hunterganj, Distt. : Chatra, Jharkhand (1.99 Ha).

(Proposal No. : SIA/JH/MIN/ 433183/2023)

Applied Area : 4.93 ACRES (1.99 Ha.)
 Project Category : B2 – Application for Environment Clearance
 EC Application for : 29,088 cum / year (max)
 Overburden: 17,712 Cum. during plan period.
 DG Set: Not Required
 Crusher- Not proposed

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 20.07.2023.

Project and Location Details :

Sl.	Parameter	Details
1	Project Name	Dumri Kalan Stone Mine Project Type – Stone Mine
2	Lessee:	M/S Anjani Stone Works Partners- 4. Shri Sandeep Kumar Singh 5. Shri Pranav Kumar Singh
3	Lease Address	Village-Dumri Kalan, Thana No.- 75, Thana- Hunterganj, District- Chatra, Jharkhand
4	Lease Area	Ha: 1.99 Acres: 4.93
5	Type of Land	Non-Forest – Raiyati Land
6	Project Cost	89.65 Lakhs
7	EMP Budget	Capital: Rs. 9.575 Lakhs Recurring: Rs. 1.64 Lakhs/ year
8	CSR / CER Budget	NA
9	New or Expansion	New
10	Mineable Reserves	Cu.M.: 1,99,728 Tonnes: 5,39,265
11	Mine Life	6.87 years only.
12	Manpower	18Person
13	Water Requirement	10.81 KLD (Drinking:0.27KLD, Dust Suppression: 0.96 KLD, Plantation: 9.58 KLD)
14	Water Source	Water will be sourced from near by Abandon Mine and Water Tankers, to be purchased locally for Dust Suppression, Plantation, Drinking and Domestic Consumption.
15	DG Set / power	Not Required

(Handwritten signatures and initials)

16	Crusher	:	Not Applicable
17	Nearest Water Body	:	Falgu River – 450 m - East
18	Nearest Habitation	:	Bela Village- 500m – South
19	Nearest Rail Station	:	Katkamsandi Railway Station at 50.42 km SE direction.
20	Nearest Airport	:	Birsa Munda Airport, Ranchi, 155 km SE Direction.
21	Nearest Forest	:	More than 250 m, as per forest division. Letter no – 187 Dt- 20-01-2023
22	Road & Highways	:	Village road 0.06 km East direction NH-22 - 0.45 km -(Dobhi-Chatra Road)

CO-ORDINATES

Corner Point	Latitude	Longitude
1	24°23'58.09" N	84°48'22.88" E
2	24°23'58.32" N	84°48'21.99" E
3	24°23'59.31" N	84°48'22.06" E
4	24°23'59.52" N	84°48'21.23" E
5	24°24'00.42" N	84°48'21.29" E
6	24°24'00.35" N	84°48'22.20" E
7	24°24'00.79" N	84°48'21.41" E
8	24°24'01.05" N	84°48'21.59" E
9	24°24'01.85" N	84°48'21.79" E
10	24°24'02.10" N	84°48'20.77" E
11	24°24'02.89" N	84°48'20.93" E
12	24°24'03.27" N	84°48'20.15" E
13	24°24'05.04" N	84°48'20.62" E
14	24°24'05.34" N	84°48'20.90" E
15	24°24'05.31" N	84°48'22.25" E
16	24°24'05.81" N	84°48'22.34" E
17	24°24'06.13" N	84°48'23.65" E
18	24°24'05.68" N	84°48'25.00" E
19	24°24'05.36" N	84°48'25.30" E
20	24°24'04.52" N	84°48'25.26" E
21	24°24'03.63" N	84°48'25.18" E
22	24°24'03.58" N	84°48'25.39" E
23	24°24'02.50" N	84°48'25.29" E
24	24°24'02.31" N	84°48'24.43" E
25	24°24'01.70" N	84°48'24.48" E

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]




26	24°24'01.62" N	84°48'23.51" E
27	24°24'00.74" N	84°48'23.51" E

LAND DETAILS :

Khata No.	Plot No.
06	609 & 615
07	629
08	612 & 614
09	627
11	606 & 602
13	605
14	630 & 616
21	610
29	622
31	621
32	617
33	611
36	193 & 194
39	196
42	613

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (Loi) has been issued by District Mining Officer, Chatra vide letter no. 359/Khanan, dated 08.04.2023.
2	CO	:	The CO, Hunterganj (Chatra) vide letter no. 79, dated 25.01.2023 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Chatra vide memo no. 532, dated 17.05.2023 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 74, dated 16.01.2023 certified that the proposed project site is outside Eco Sensitive Zone of Lawalong Wildlife Sanctuary.
5	DFO Forest	:	Division Forest Officer, Chatra North Division vide letter no. 187, dated 20.01.2023 certified that the distance of reserved / protected forest is

A     

	Distance	398 m from proposed project site.
6	DSR	The DC-cum-District Magistrate, Chatra vide letter no. 516 / Khanan, dated 13.05.2023 has informed that this project is part of District Survey Report (DSR) of Chatra district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	Gram Sabha conducted on dated 15.05.2023.
8	Mine Plan Approval	District Mining Officer, Chatra vide Letter No. 612/Khanan, dated 12.06.2023.

WORKING DETAILS :

1	Mining Method	: Open Cast Semi- Mechanized Mining Method
2	Quarry Area	: Plan period –1.17 Ha. Conceptual stage – 1.17 Ha.
3	Waste Generation	: Plan Period : 17,712 Cum. Conceptual Stage –17,712 Cum.
4	Stripping Ratio	: 1:0.15
5	Working Days	: 300 days/year
6	Benches: size & No	: 6 m x 6 m, No. of benches -5
7	Elevation of Mine	: 238 – 233 AMSL
8	Ground Level Elevation	: 233 AMSL
9	Ultimate Working Depth	: 209 AMSL
10	Water Table	: 207 AMSL
11	Topography of Mine	: Gently sloping area
12	Explosive Requirement	: 32 Kg Slurry explosives/day
13	Diesel/Fuel requirement	: HSD – 924 liters / day (277.2 KL/year)

PRODUCTION DETAILS

Years	Production In Cum/Year	O.B Production in cum. /Year	Production In Tons/Year	Bench RL in meters
1st	27864	8424	75233	A-A': 183-181(O.B.) A-A': 181-175 (STONE)
2nd	29088	9288	78538	B-B': 184-182 (O.B.) B-B': 181- 175 (STONE)
3rd	22464	0	60653	A-A': 175 – 169 (STONE)
4 th	22248	0	60070	A-A': 169 – 163(STONE)

5 th	19440	0	52488	A-A': 169 – 163 (STONE)
Total	121104	17712	326981	Depth – 20 m

LAND USE

Existing Land Use pattern

Category	Area in Acres
Mining Activities	0.00
Office	0.00
Dumping	0.00
Mining Road	0.00
Garland drain	0.00
Green belt/Safety Zone	0.00
Stone Stock yards	0.00
Unutilized	4.93
Total	4.93

Land Use Pattern during Proposed Plan Period of five Years:

Category	Area in Acres
Mining Activities	2.88
Office	0.40
Dumping	0.61
Mining Road	0.10
Garland drain	0.10
Green belt/Safety Zone	0.74
Unutilized	0.10
Total	4.93

Land Use Pattern after Life of the Mine:

Category	Area in Acres
Mining Activities + Mining Road	2.98 (Water body)
Safety Zone + Office + Dumping + Unutilized area.	1.85 (Plantation)
Garland drain	0.10
Total	4.93

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Green Belt & Other reclaimed area	:	0.75 Ha	1,875
2	Haul /Approach Road	:	0.06 Km.	40 Trees both side approach road.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Overburden Generation will be 17,712 cum during the plan period. OB will be utilized for internal mine road construction & berm along the approach road construction & maintenance, so there is no requirement of waste dumping Plan for this mining plan.

Water Pollution Control Measures:

- Mining operation will be restricted to the depth of 30m from surface level.
- Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

- Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
- Overloading of the truck / tractor trolleys will not be done.

As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:

- Carts or tractor-trolleys will be developed on village roads.
- Tractors-trolleys will be well maintained and PUC certified.
- Timely maintenance of vehicles and their silencers to minimize vibration and sound.
- Minimum use of horns in the village area and silence zone (if any) as applicable.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard

A











- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Dumri – Kalan Stone Mine of M/s Anjani Stone Works (Partners : (i) Shri Sandeep Kumar Singh (ii) Shri Pranav Kumar Singh), Village : Dumri - Kalan, Thana no. : 75, Thana : Hunterganj, Distt. : Chatra, Jharkhand (1.99 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

5. Domchanch Stone Mine of M/s Jai Maa Chanchalini Stone Works (Partners : (i) Shri Mukesh Kumar (ii) Shri Yuvraj Mehta (iii) Shri Tinku Kumar), Village : Domchanch, Thana & P.O. : Domchanch, Anchal : Domchanch, Distt. : Koderma, Jharkhand (0.96 Ha).

(Proposal No. : SIA/JH/MIN/ 436736/2023)

Applied Area : 2.38 ACRES (0.96 Ha.)
 Project Category : B2 – Application for Environment Clearance
 EC Application for : 13,561 cum / year (max)

A    

Overburden: 19,099 Cum. during plan period.

DG Set: Not Required

Crusher- Not proposed

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 20.07.2023.

Project and Location Details :

Sl.	Parameter	Details	
1	Project Name	: Domchanch Stone Mine Project Type – Stone Mine	
2	Lessee:	: M/s Jai Maa Chanchalini Stone Works Partners :- 1. Shri Mukesh Kumar, 2. Shri Yuvraj Mehta, 3. Shri Tinku Kumar	
3	Lease Address	: Village- Domchanch, Thana & P.O.- Domchanch, Anchal- Domchanch, District- Koderma , Jharkhand	
4	Lease Area	: Ha: 0.96	Acres: 2.38
5	Type of Land	: Non-Forest – Raiyati Land	
6	Project Cost	: 73.70 Lakhs	
7	EMP Budget	: Capital: Rs. 3.85 Lakhs	Recurring: Rs. 1.54 Lakhs/ year
8	CSR / CER Budget	: NA	
9	New or Expansion	: New	
10	Mineable Reserves	: Cu.M.: 1,30,995	Tonnes: 3,53,687
11	Mine Life	: 9.66 years only.	
12	Manpower	: 18 Person	
13	Water Requirement	: 10.72 KLD (Drinking: 0.27 KLD, Dust Suppression: 6.6 KLD, Plantation: 3.85 KLD)	
14	Water Source	: Water will be sourced from near by Abandon Mine and Water Tankers, to be purchased locally for Dust Suppression, Plantation, Drinking and Domestic Consumption.	
15	DG Set / power	: Not Required	
16	Crusher	: Not Applicable	
17	Nearest Water Body	: Chando or Keso Nadi – 2.5 km- South	
18	Nearest Habitation	: Domchanch- 2.30 Km	
19	Nearest Rail Station	: Maheshpur Halt – Railway station at 0.89 km North.	
20	Nearest Airport	: Birsa Munda Airport, Ranchi, 145 km SW Direction.	

A *U* *egm* *C* *S* *Am*

21	Nearest Forest	:	More than 250 m, as per forest division. Letter no – 2823 Dt- 05-07-2023
22	Road & Highways	:	Pakka Road is at a distance of 0.33 Km in East direction. SH-13- (Koderma-Giridih Road) is at a distance of 1.40 km in North direction

CO-ORDINATES

Corner Point	Latitude	Longitude
1	24°27'17.00"N	85°42'13.20"E
2	24°27'17.90"N	85°42'10.50"E
3	24°27'21.20"N	85°42'11.10"E
4	24°27'20.30"N	85°42'14.10"E

LAND DETAILS :

Khata No.	Plot No.
1134	11015 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (Loi) has been issued by District Mining Officer, Koderma vide memo no. 1302/M, dated 07.07.2023.
2	CO	:	The CO, Domchanch vide letter no. 2357, dated 25.02.2023 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Koderma vide memo no. 1319/M, dated 11.07.2023 certified that 01 other mining lease area (6.74 Acre) exists within 500 m radius from proposed project site and total area is 9.12 Acre.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 687, dated 01.04.2023 certified that the proposed project site is outside Eco Sensitive Zone of Koderma Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Koderma Forest Division vide letter no. 2823, dated 05.07.2023 certified that the distance of reserved / protected

A     






		forest is 280 m from proposed project site.
6	DSR	The DC-cum-District Magistrate, Koderma vide letter no. 1323 / M, dated 11.07.2023 has informed that this project is part of District Survey Report (DSR) of Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	Gram Sabha conducted on dated 25.04.2023.
8	Mine Plan Approval	District Mining Officer, Koderma vide Letter No. 1344, dated 13.07.2023.

WORKING DETAILS

1	Mining Method	: Open Cast Semi- Mechanized Mining Method
2	Quarry Area	: Plan period -0.68 Ha. Conceptual stage - 0.68 Ha.
3	Waste Generation	: Plan Period : 19,099 Cum. Conceptual Stage -19,099 Cum.
4	Stripping Ratio	: 1:0.29
5	Working Days	: 300 days/year
6	Benches: size & No	: 6 m x 6 m, No. of benches -6
7	Elevation of Mine	: 450 - 448 AMSL
8	Ground Level Elevation	: 448 AMSL
9	Ultimate Working Depth	: 416 AMSL
10	Water Table	: 309 AMSL
11	Topography of Mine	: Gently sloping area
12	Explosive Requirement	: 7.5 Kg Slurry explosives/day
13	Diesel/Fuel requirement	: HSD - 916liters / day (274.8 KL/year)

PRODUCTION DETAILS

Summary Of Yearwise of Production						
Years	Production In Cum/Year	Production In Cum/Day	O.B Production in Cum/Year	Production In Tons/Year	Prod. In Tons. /Day	Bench RL in meters
1st	12780	43	6390	34506	115	A-A': 392-389 (O.B.) A-A': 389-383 (Stone)

A     

2nd	12780	43	5609	34506	115	A-A': 392-389 (O.B.) A-A': 389-383 (Stone)
3rd	12780	43	0	34506	115	A-A': 383-373 (Stone)
4 th	13561	45	7100	36615	122	A-A': 392-389 (O.B.) A-A': 389-383 (Stone)
5 th	12780	43	0	34506	115	A-A': 383-377 (Stone)
Total	64681	45 (Max)	19099	174639	122 (Max)	Depth- 15 m

LAND USE

Existing Land Use pattern

Sl. No.	Pattern of Utilization	Present/Existing land use pattern in (acres)
1	Mining Activities	0.00
2	Mining Road	0.00
3	Garland drain	0.00
4	Settling Pond	0.00
5	Green belt/Safety Zone	0.00
6	Unutilized	2.38
	Total	2.38

Proposed Land Use for Current Plan Period:

Sl. No.	Pattern of Utilization	Proposed Land use for current plan period (acres)
1	Mining Activities	1.69
4	Mining Road	0.02

A

[Handwritten signature]

83
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

5	Garland drain	0.10
6	Settling Pond	0.03
7	Green belt/Safety Zone	0.54
	Total	2.38

Land Use Pattern after Life of the Mine:

Si. No.	Pattern of Utilization	Land used at the conceptual stage ie end of mine life in (acres)	Area to be converted in the conceptual period.
1	Mining Activities + Mining Road	1.71	Water body
2	Garland drain/ Settling Tank	0.13	-
3	Green belt/Safety Zone	0.54	Plantation
	Total	2.38	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Green Belt & Other reclaimed area	: 0.22 Ha	550
2	Haul /Approach Road	: 0.33 Km.	220 Trees both side approach road.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as, h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Overburden Generation will be 19099 cum during the plan period. OB will be utilized for internal mine road construction & berm along the approach road construction & maintenance, so there is no requirement of waste dumping Plan for this mining plan.

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Water Pollution Control Measures:

- Mining operation will be restricted to the depth of 30m from surface level.
- Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

- Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
- Overloading of the truck / tractor trolleys will not be done.

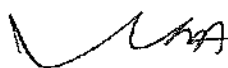
As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:

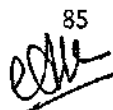
- Carts or tractor-trolleys will be developed on village roads.
- Tractors-trolleys will be well maintained and PUC certified.
- Timely maintenance of vehicles and their silencers to minimize vibration and sound.
- Minimum use of horns in the village area and silence zone (if any) as applicable.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.

A



85








- i. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the Domchanch Stone Mine of M/s Jai Maa Chanchalini Stone Works (Partners : (i) Shri Mukesh Kumar (ii) Shri Yuvraj Mehta (iii) Shri Tinku Kumar), Village : Domchanch, Thana & P.O. : Domchanch, Anchal : Domchanch, Distt. : Koderma, Jharkhand (0.96 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

6. Nawada & Purnadih Stone Mine of M/s Ramjanki Stone Mines (Prop. : Shri Nirpat Saw), Village : Nawada & Purnadih, Thana no. : 213 & 214, Thana : Nawalsahi, Distt. : Koderma, Jharkhand (1.07 Ha).

(Proposal No. : SIA/JH/MIN/ 436863/2023)

Project Category : B2 – Application for Environment Clearance
 EC Application for : 8,487 cum / year (max)
 Overburden: 6,088 Cum. during plan period.
 DG Set: Not Required
 Crusher- Not proposed

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 20.07.2023.

Project and Location Details :

Sl.	Parameter	Details
1	Project Name	: Nawada & Purnadih Stone Mine Project Type – Stone Mine
2	Lessee:	: Ramjanki Stone Mines Proprietor: Shri Nirpat Saw
3	Lease Address	: Village- Nawada & Purnadih, Thana No.- 213 & 214, Thana- Nawalsahi, District- Koderma, Jharkhand
4	Lease Area	: Ha: 1.07 Acres: 2.66
5	Type of Land	: Non-Forest – Raiyati Land

A     

6	Project Cost	:	72.60 Lakhs
7	EMP Budget	:	Capital: Rs. 8.945 Lakhs | Recurring: Rs. 1.54 Lakhs/ year
8	CSR / CER Budget	:	NA
9	New or Expansion	:	New
10	Mineable Reserves	:	Cu.M.: 53,150 | Tonnes: 1,43,505
11	Mine Life	:	9 years only.
12	Manpower	:	23 Person
13	Water Requirement	:	19.22 KLD (Drinking: 0.345 KLD, Dust Suppression: 9.92 KLD, Plantation: 8.95 KLD)
14	Water Source	:	Water will be sourced from near by Abandon Mine and Water Tankers, to be purchased locally for Dust Suppression, Plantation, Drinking and Domestic Consumption.
15	DG Set / power	:	Not Required
16	Crusher	:	Not Applicable
17	Nearest Water Body	:	Chando or Keso Nadi – 1.5 km- South
18	Nearest Habitation	:	Purnadih
19	Nearest Rail Station	:	Maheshpur Halt Railway station – 4.68 km – W
20	Nearest Airport	:	Birsa Munda Airport, Ranchi, 155 km SW Direction.
21	Nearest Forest	:	More than 250 m, as per forest division. Letter no – 2676 Dt- 21-06-2023
22	Road & Highways	:	SH-13- (Koderma-Giridih Road) at 0.62 km North direction. NH -20 (Ranchi-Patna Road) at 14.79 km West Direction,

CO-ORDINATES :

Corner Point	Latitude	Longitude
1	24°27'13.51" N	85°44'20.82" E
2	24°27'14.20" N	85°44'19.80" E
3	24°27'14.41" N	85°44'19.30" E
4	24°27'14.95" N	85°44'17.91" E
5	24°27'15.37" N	85°44'18.00" E
6	24°27'15.78" N	85°44'18.26" E
7	24°27'15.38" N	85°44'18.85" E

A

[Handwritten signature]

[Handwritten signature]
87

[Handwritten signature]

[Handwritten signature]

8	24°27'15.86" N	85°44'19.09" E
9	24°27'15.69" N	85°44'19.55" E
10	24°27'16.08" N	85°44'19.77" E
11	24°27'16.40" N	85°44'18.88" E
12	24°27'17.36" N	85°44'18.09" E
13	24°27'17.49" N	85°44'17.51" E
14	24°27'16.97" N	85°44'17.23" E
15	24°27'17.28" N	85°44'15.80" E
16	24°27'17.71" N	85°44'13.44" E
17	24°27'18.97" N	85°44'13.75" E
18	24°27'17.60" N	85°44'17.42" E
19	24°27'17.52" N	85°44'18.29" E
20	24°27'17.75" N	85°44'18.48" E
21	24°27'15.83" N	85°44'20.66" E
22	24°27'15.01" N	85°44'21.96" E

LAND DETAILS :

Khata No.	Plot No.
65 & 61	103 (P), 116, 117, 118, 119, 120 (P), 121, 125 & 928
209	2736 (P) & 2739 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Koderma vide memo no. 1241/M, dated 27.06.2023.
2	CO	:	The CO, Domchanch vide letter no. 657, dated 08.06.2023 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyan & Register II. As per the CO certificate there are about 10-12 Kacha huts within 500 m. The PAs have submitted an EMP for the people residing in these Kacha huts.
3	DMO	:	DMO, Koderma vide memo no. 1337/M, dated 12.07.2023 certified that 04 other mining lease area (3.00 Acre, 3.40 Acre, 0.64 ^{1/2} Acre & 1.07 Acre) exists within 500 m radius from proposed project site and

(Handwritten signatures and marks)

		total area is 10.77 ^{1/2} Acre.
4	DFO Wild Life	: DFO, Wildlife Hazaribagh vide letter no: 1324, dated 05.07.2023 certified that the proposed project site is outside Eco Sensitive Zone of Koderma Wildlife Sanctuary.
5	DFO Forest Distance	: Division Forest Officer, Koderma Forest Division vide letter no. 2676, dated 21.06.2023 certified that the distance of reserved / protected forest is 400 m from proposed project site.
6	DSR	: The DC-cum-District Magistrate, Koderma vide letter no. 1323 / M, dated 11.07.2023 has informed that this project is part of District Survey Report (DSR) of Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	: Gram Sabha conducted on dated 23.06.2023.
8	Mine Plan Approval	: District Mining Officer, Koderma vide Memo No. 1351/M, dated 14.07.2023.

WORKING DETAILS

1	Mining Method	: Open Cast Semi- Mechanized Mining Method
2	Quarry Area	: Plan period –0.42 Ha. Conceptual stage – 0.42 Ha.
3	Waste Generation	: Plan Period : 6,088 Cum. Conceptual Stage –6,088 Cum.
4	Stripping Ratio	: 1:0.186
5	Working Days	: 300 days/year
6	Benches: size & No	: 3 m x 3 m, No. of benches -6
7	Elevation of Mine	: 434 – 432 AMSL
8	Ground Level Elevation	: 432 AMSL
9	Ultimate Working Depth	: 418 AMSL
10	Water Table	: 309 AMSL
11	Topography of Mine	: Gently sloping area
12	Explosive Requirement	: 3.4 Kg Slurry explosives/day
13	Diesel/Fuel requirement	: HSD – 860 liters / day (258 KL/year)

A

[Handwritten signature]

89
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

PRODUCTION DETAILS

Years	Production In Cum/Year	Production In Cum/Day	O.B Production in Cum/Year	Production In Tons/Year	Prod. In Tons. /Day
1st	7175	24	1510	19373	65
2nd	8487	28	4578	22915	76
3rd	6273	21	0	16937	56
4 th	5725	19	0	15455	52
5 th	5049	17	0	13632	45
Total	32708	22 Av.	6088	88312	56 Av.

LAND USE

Existing Land Use pattern

Sl. No.	Pattern of Utilization	Present/Existing land use pattern in (acres)
1	Mining Activities	0.00
2	Offices/ Store /Magazine etc.	0.00
3	Mining Road	0.00
4	Garland drain	0.00
5	Settling Pond	0.00
6	Green belt/Safety Zone	0.00
7	Unutilized	2.66
	Total	2.66

Land Use Pattern during Proposed Plan Period of five Years:

Sl. No.	Pattern of Utilization	Proposed land use pattern in (acres)
1	Mining Activities	1.04
2	Offices	0.02
3	Mining Road	0.10

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

4	Garland drain	0.10
5	Settling Pond	0.06
6	Green belt/Safety Zone	0.98
7	Unutilized	0.36
	Total	2.66

Land Use Pattern after Life of the Mine:

Sl. No.	Pattern of Utilization	Land used at the conceptual stage ie end of mine life in (acres)	Area to be converted in the conceptual period.
1	Mining Activities + Mining Road	1.14	Water body
2	Office+ Safety Zone + Unutilized	1.36	Plantation
3	Garland drain	0.10	-
4	Settling Pond	0.06	-
	Total	2.66	

ENVIRONMENT MANAGEMENT


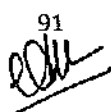



Green Belt Development

SL.	LOCATION	Area/Length	No. of Trees
1	Green Belt & Other reclaimed area	: 0.55 Ha	1375
2	Haul /Approach Road	: 0.62 Km.	414 Trees both side approach road.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Overburden Generation will be 6088 cum during the plan period. OB will be utilized for internal mine road construction & berm along the approach road construction & maintenance, so there is no requirement of waste dumping Plan for this mining plan.

A     

Water Pollution Control Measures:

- Mining operation will be restricted to the depth of 30m from surface level.
- Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:






- Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
- Overloading of the truck / tractor trolleys will not be done.

As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:

- Carts or tractor-trolleys will be developed on village roads.
- Tractors-trolleys will be well maintained and PUC certified.
- Timely maintenance of vehicles and their silencers to minimize vibration and sound.
- Minimum use of horns in the village area and silence zone (if any) as applicable.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.

A     

- I. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the Nawada & Purnadih Stone Mine of M/s Ramjanki Stone Mines (Prop. : Shri Nirpat Saw), Village : Nawada & Purnadih, Thana no. : 213 & 214, Thana : Nawalsahi, Distt. : Koderma, Jharkhand (1.07 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

7. Kusumdanga Stone Mine of M/s J.R.L. Engicon Pvt. Ltd. , Village : Kusumdanga, Thana no. : 19, Thana : Maheshpur, Distt. : Pakur, Jharkhand (2.02 Ha).

(Proposal No. : SIA/JH/MIN/ 436057/2023)

Applied Area :5.00 ACRES (2.02 Ha.)

Project Category :B2 – Application for Environment Clearance (Expansion)

EC Application for : 82,750 cum / year (max)

Overburden: 15,750 Cum. during plan period.

DG Set: Not Required


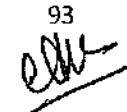
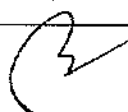


Crusher- Not proposed

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is an expansion project which has been taken for appraisal on 20.07.2023.

Project and Location Details :

Sl.	Parameter	Details
1	Project Name	: Kusumdanga Stone Mine Project Type – Stone Mine
2	Lessee:	: J.R.L. Engicon private Limited, Shri Rahul Kumar Sah,
3	Lease Address	: Village- Kusumdanga, Thana No.- 19, Thanna- Maheshpur,

A   93   

		District- Pakur, Jharkhand	
4	Lease Area	: Ha: 2.02	Acres: 5.00
5	Type of Land	: Non-Forest – Raiyati Land	
6	Project Cost	: 164.85 Lakhs	
7	EMP Budget	: Capital: Rs. 9.24 Lakhs	Recurring: Rs. 1.74 Lakhs/ year.
8	CSR / CER Budget	: NA	
9	New or Expansion	: Expansion	
10	Mineable Reserves	: Cu.M.: 5,40,375.17	Tonnes: 15,67,088
11	Mine Life	: 6.53 years only.	
12	Manpower	: 40 Person	
13	Water Requirement	: 18.16 KLD (Drinking: 0.60 KLD, Dust Suppression: 8.32 KLD, Plantation: 9.24 KLD)	
14	Water Source	: Water will be sourced from near by Abandon Mine and Water Tankers, to be purchased locally for Dust Suppression, Plantation, Drinking and Domestic Consumption.	
15	DG Set / power	: Not Required	
16	Crusher	: Not Applicable	
17	Nearest Water Body	: Brahmani River – 6.80 km - South	
18	Nearest Habitation	: Kusumdanga	
19	Nearest Rail Station	: Raigram at a distance of 14.5 km in East direction	
20	Nearest Airport	: Malda Airport which is about 64.70 km away from project site in NE direction	
21	Nearest Forest	: More than 250 m, as per forest division. Letter no – 1182 Dt- 30.09.2019	
22	Road & Highways	: Village kacha road - 0.52 km away from project site in West direction. Pakur- Chhotapaharpur Road- 2.61 km in the NW direction	

A     

CO-ORDINATES :

Corner Point	Latitude	Longitude
1	24°33'03.32" N	87°43'38.87" E
2	24°33'03.29" N	87°43'37.51" E
3	24°33'02.73" N	87°43'33.43" E
4	24°33'02.03" N	87°43'32.98" E
5	24°33'02.13" N	87°43'32.38" E
6	24°33'02.02" N	87°43'32.01" E
7	24°33'01.90" N	87°43'30.80" E
8	24°33'01.60" N	87°43'29.73" E
9	24°33'02.53" N	87°43'29.42" E
10	24°33'04.07" N	87°43'29.58" E
11	24°33'06.23" N	87°43'32.23" E
12	24°33'05.11" N	87°43'36.31" E
13	24°33'04.45" N	87°43'38.96" E
14	24°33'03.89" N	87°43'38.89" E

LAND DETAILS :

Khata No.	Plot No.
05	127 (P) , 128 (P) & 129 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	: i. The Letter of Intent (LoI) has been issued by District Mining Officer, Pakur vide letter no. 1921/M, dated 31.10.2019. ii. Lease deed (26.05.2021 to 25.05.2031)
2	CO	: The CO, Maheshpur vide letter no. 775/Ra, dated 19.09.2019 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyar & Register II.
3	DMO	: DMO, Pakur vide memo no. 59/M, dated 08.01.2020 certified that 01 other mining lease area (6.88 Acre) exists within 500 m radius from proposed project site and total area is 11.88 Acre.
4	DFO Wild Life	: DFO, Wildlife Hazaribagh vide letter no. 2167, dated 10.10.2019 certified that the proposed project site is outside Eco Sensitive Zone of

A

95

		Udhwa Lake Bird Sanctuary.
5	DFO Forest Distance	: Division Forest Officer, Pakur Forest Division vide letter no. 1182, dated 30.09.2019 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	: This project is mentioned in District Survey Report (DSR) of Pakur district in Page No. 69 at Sl. No. 59.
7	Gram Sabha	: Gram Sabha conducted on dated 21.09.2019.
8	Mine Plan Approval	: i. Deputy Director Mines, Santhal Pargana Circle, Dumka vide Memo No. 06/DDM, dated 16.01.2020. ii. Deputy Director Mines, Santhal Pargana Circle, Dumka vide Memo No. 322/DDM, dated 05.07.2023.
9	Previous Environmental Clearance (EC)	: Previous EC granted by SEIAA vide letter no. EC/SEIAA/2020-21/2305./2021/154, dated 27.01.2021.
10	EC compliance report	: EC compliance report certified by Regional Officer, Jharkhand State Pollution Control Board, Dumka vide letter dated 03.06.2023.
11	Consent to Establish (CTE)	: CTE granted by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-11502527/2022/24, dated 25.01.2022.
12	Consent to Operate (CTO)	: CTO granted by JSPCB vide Ref. no. JSPCB/RO/DMK/CTO-14746936/2023/10, dated 12.01.2023.
13	Earlier production figure	: Earlier Production figure issued by DMO, Pakur vide memo no. 1661/M, dated 18.07.2023.

WORKING DETAILS

1	Mining Method	: Open Cast Semi- Mechanized Mining Method
2	Quarry Area	: Plan period –1.38 Ha. Conceptual stage – 1.38 Ha.
3	Waste Generation	: Plan Period : 15,750 Cum. Conceptual Stage –15,750 Cum.
4	Stripping Ratio	: 1:0.039
5	Working Days	: 300 days/year
6	Benches: size & No	: 5 m x 5 m, No. of benches -7
7	Elevation of Mine	: 186 – 182 AMSL
8	Ground Level Elevation	: 182 AMSL

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

9	Ultimate Working Depth	:	152 AMSL
10	Water Table	:	65 m AMSL
11	Topography of Mine	:	Gently sloping area
12	Explosive Requirement	:	41.75 Kg Slurry explosives/day
13	Diesel/Fuel requirement	:	HSD – 1300 liters / day (390 KL/year)

PRODUCTION DETAILS

Summary Of Yearwise of Production						
Years	Production In Cum/Year	Production In Cum/Day	O.B Production in Cum/Year	Production In Tons/Year	Prod. In Tons. /Day	Bench RL in meters
1st	82750	275.83	15750	239975	799.91	131-130 (O.B.) 130-126 (STONE) 126-121(STONE)
2nd	82750	275.83	0	239975	799.91	126-121 (STONE)
3rd	69000	230.00	0	200100	667.00	121-116 (STONE)
4 th	82750	275.83	0	239975	799.91	121-116 (STONE) 116-111 (STONE)
5 th	82750	275.83	0	239975	799.91	116-111 (STONE) 111-106 (STONE)
Total	400000	-	15750	1160000		DEPTH: 131-106=25

LAND USE

Existing Land Use pattern

SL	Pattern	Existing Land Use (Ha)
1	Mining Area	0.31
2	Office	0.01
3	Dump	0.02
4	Road	0.02
5	Safety Zone	0.46
6	Safety Zone/ Settling Tank	0.02
7	Unutilized	1.18
	TOTAL	2.02

A

[Handwritten signature]

97
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Land Use Pattern during Proposed Plan Period of five Years:

SL	Pattern	Proposed Current Plan Period (Ha)
1	Mining Area	1.38
2	Office	0.01
3	Dump	0.06
4	Road	0.02
5	Safety Zone	0.46
6	Garland Drain / Settling Tank	0.02
7	Unutilized	0.07
	TOTAL	2.02

Land Use Pattern after Life of the Mine:






SL	Pattern	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area + Road	1.40	Water Body
2	Office + Dump+ Safety Zone+ Unutilized area	0.60	Plantation
3	Settling Tank /Garland Drain	0.02	---
	TOTAL	2.02	-

ENVIRONMENT MANAGEMENT

Green Belt Development

SL.	LOCATION	Area/Length	No. of Trees
1	Green Belt & Other reclaimed area	: 0.52 Ha	348
2	Haul /Approach Road	: 0.62 Km.	1500 Trees both side approach road.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment &

A     

Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Overburden Generation will be 15750 cum during the plan period. OB will be utilized for internal mine road construction & berm along the approach road construction & maintenance, so there is no requirement of waste dumping Plan for this mining plan.

Water Pollution Control Measures:

- Mining operation will be restricted to the depth of 30m from surface level.
- Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

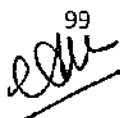
- Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
- Overloading of the truck / tractor trolleys will not be done.

As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:

- Carts or tractor-trolleys will be developed on village roads.
- Tractors-trolleys will be well maintained and PUC certified.
- Timely maintenance of vehicles and their silencers to minimize vibration and sound.
- Minimum use of horns in the village area and silence zone (if any) as applicable.

Undertaking submitted affirming :

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.



- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the Kusumdanga Stone Mine of M/s J.R.L. Engicon Pvt. Ltd. , Village : Kusumdanga, Thana no. : 19, Thana : Maheshpur, Distt. : Pakur, Jharkhand (2.02 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

Day 4 : July 21st, 2023 [Friday]

Consideration of Proposals

1. Proposed Residential Complex "Lalchand Eco Heights" of M/s Samriddhi Infracore Pvt. Ltd., Village : Katument, Tehsil : Champa, Distt. : Hazaribag, Jharkhand.

(Proposal No. : SIA/JH/INFRA2/ 436497/2023)

Name of the consultant: Rian Enviro Private Limited, Patna, Bihar

This is a new project which has been taken for appraisal on 21.07.2023.

Project is classified as Category 8(a) as per EIA Notification as the built-up area is less than 1,50,000 sqm. and development area is less than 50 ha.

M/s. Samriddhi Infracore Pvt. Ltd. is proposed to develop a Residential Building Project "Lalchand Eco Heights" on the total land area measuring 7246.5 sqm located at Khata No. 15, Plot no. 1047, Thana No. 157, Village-Cantonment, District-Hazaribagh, Jharkhand. The total build-up area is 33756.38 sqm.

A











Salient Features of the Project

Sr. No.	Particulars	
1.	Latitude	23°58'50.85"N
2.	Longitude	85°22'21.98"E
3.	Plot area	7246.5 Sqm
4.	Proposed Ground Coverage @29.40%	2130.64 Sqm.
5.	Proposed FAR @3.49	25296.68 Sqm.
6.	Parking Area & other Non-FAR area	8459.7 Sqm.
7.	Total Built-up Area	33756.38 Sqm.
8.	Total Parking Required	Four-wheeler: 217 Nos. Two-wheeler: 269 Nos.
9.	Total Parking Proposed (ECS)	Four-wheeler: 223 Nos. Two-wheeler: 309 Nos.
10.	Greenbelt Area	1172.45 Sqm. (Over Virgin Land @16.17%) 1271 Sqm. (Over Built Structure @17.5%)
11.	Rain Water Harvesting Pits (with size)	3 Nos. (18.85 Cumec.)
12.	STP Capacity	150 KLD
13.	Maximum Height of the Building (m)	Approx. 43 m
14.	Power Requirement	1496 KVA
15.	Power Backup	3 DGs of 315 KVA
16.	Total Water Requirement	~148 KLD
17.	Fresh/Domestic Water Requirement	~102 KLD
18.	Reuse of Recycled Water	~46 KLD
19.	Waste Water Generated	~125 KLD
20.	Solid Waste Generated (Operational)	~640 Kg/day
21.	Biodegradable Waste (Operational)	~256 Kg/day
22.	Non-Biodegradable Waste (Operational)	~384 Kg/day
24.	Number of Tower	03
25.	Basement	01
26.	Stories	2 Blocks- B+G+12 1 Block- G+4
27.	Total Cost of the project:	40.80 Crore
28.	EMP Budget	During Construction: Capital: 31 Lakhs Recurring: 15 Lakhs Operational Cost: Capital: 83 Lakhs Recurring: 20.5 Lakhs
29.	Construction i) Water	Fresh water – 9 KLD

A

[Handwritten signature]

101
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

	Phase:	Requirement & Source	Treated wastewater-12 KLD Source: Tanker water supply No use of ground water without due permission from CGWA.
		ii) STP (Modular)	20 KLD

Khata no. & Plot no. of the Project :



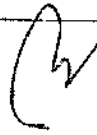


Khata no.	Plot no.	Area
15	1047	1.79 Acre

Detailed Area Statement

Sl. No.	Particulars	Area	Unit
1	Plot Area	7246.5	Sqm.
2	Permissible FAR @ 3.5	25362.75	Sqm.
3	Proposed FAR @3.49	25296.68	Sqm.
4	Permissible Ground Coverage @50%	3623.25	Sqm.
5	Proposed Ground Coverage @29.40%	2130.64	Sqm.
6	Road Area	735.74	Sqm.
7	Open Parking	324.04	Sqm.
8	Service Area (DG room, STP, OWC, Community Hall, Temple etc.)	2883.63	Sqm.
9	Greenbelt area (Over Virgin Land @16.17%)	1172.45	Sqm.
10	Green area @ (Over Built Structure @17.5%)	1271	Sqm.

Details of Site Surroundings and Connectivity

Connectivity & Site Surroundings			
S. No.	Description		Distance and Direction
1.	Nearest Junction Nearest Railway Station	Hazaribagh Railway station	Approx. 3.3 Km towards West.
2.	Nearest Airport	Birsa Munda Airport, Ranchi	Approx. 74.0 km towards South.
3.	Nearest Village	Hurthuru New Forest, Colony Om Puri, Colony Lakhe, Colony Patrattu, Village	Approx. 0.5 Km towards West. Approx. 0.7 Km towards NW. Approx. 1.2 Km towards NNE. Approx. 1.4 Km towards East. Approx. 0.8 Km towards SSE.

A     

4.	Nearest Highway/Roads	Hurhuru Road NH-20 Korraah Road	Adjacent (South) Adjacent (East) Approx. 0.8 km. towards NNE.
5.	Nearest School & College	Gurugram Public School Kids Kingdom School Gyanodaya Central School East Point School B.M. Public School	Approx. 0.2 Km towards SE. Approx. 0.4 Km towards NNW. Approx. 0.3 Km towards East. Approx. 0.27 Km towards East. Approx. 0.5 Km towards South.
6.	Nearest Hospital	ESIC Dhurwa Ranchi Jharkhand Doranda State Hospital Divisional Railway Hospital Sardar Hospital, New Barhi Toli, Ranchi	Approx. 1.72 Km towards ENE. Approx. 3.82 Km towards ENE. Approx. 3.62 Km towards SE. Approx. 6.30 Km towards NE.
7.	Places of worship	Hurhuru Durga Mandir Hanuman Mandir New Shiv Mandir Panchmukhi Hanuman Mandir	Approx. 0.1 Km towards WSW. Approx. 0.25 Km towards SW. Approx. 0.4 Km towards WSW. Approx. 0.5 Km towards SSE.
8.	Water Bodies	Hurhuru Pond Hazaribagh Jhill Siwane Nadi	Approx. 0.25 Km towards South. Approx. 3.0 Km towards NNW. Approx. 9 Km towards N.

Details of Building Blocks

Building Block	No. of Floors	No. of Flats
Block A	B+G+12	108
Block B	B+G+12	110
EWS Block	B+G+8	43
Total		261

Calculation of Population

Description	No. of units	Unit Population	Population
Main Dwelling Units (Residential) 3 BHK	144	6	864
Main Dwelling Units (Residential) 2 BHK	22	5	110
Main Dwelling Units (Residential) 1 BHK	95	4	380
Visitors (15% of the residential population)	..	..	203
Total			1557

Parking Details

A




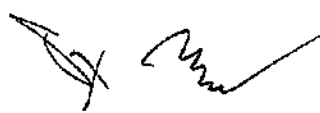
Vehicle Type	Required		Proposed	
	No.	Area	No.	Area
Car Parking	196	2450	197	2462.5
Visitor's Car Parking	21	262.5	26	325
Two-wheeler Parking	269	538	309	618
Other Parking				3253.17
Total		3250.5		6658.67

Calculation of Greenbelt

Total Plot Area	7246.5 Sqm.
Greenbelt Area	1172.45 Sqm. (Over Virgin Land @16.17%) 1271 Sqm. (Over Built Structure @17.5%)
No. of Trees will be Planted	3 tier plantation will be done as much as possible.

Details of Water Requirement

S. No.	Description	No. of units / Area in Sqm	Unit Population	Population	Unit water consumption (lpcd)	Total water required (kl)	Fresh water required (kl)	Flushing (kl)	Total Waste water (kl) (80% of domestic +100% Total flushing)
1	Main Dwelling Units (Residential) 3BHK/ 2 BHK / 1 BHK	261	6 /5/4	1354	100 (70+30)	135.4	94.78	40.62	116.44
2	Visitors (15% of the residential population)	...	...	203	15 (5+10)	3.04	1.01	2.03	2.84
3	Swimming Pool	4.075* 6.82*1 .5	...		...	6	6	...	5.40
Subtotal -I						144.44	101.79	42.65	124.68
Reuse of treated water									
1	Horticulture	1030	...	...	3 liter/sqm of Landscape area	3.09			
Subtotal II						3			
Grand Total I+II						148			


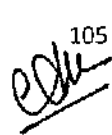



A    

S. No.	Net Energy saved (weighted Average Calculation)	
1.	Solar Based lighting will be done in the common areas, Signages, entry gates and boundary walls etc. of	28 KVA
2.	LED Based lighting will be done in the dwelling units	11.24 KVA
3.	Usage of energy efficient Lift (VVVF non gear lifts)	20 KVA
	Energy saved	59.24 KVA (4%)
	Total Energy consumption	1496 KVA
	Energy saving by Residence Envelope Transmittance Value (RETV)	20 %
	Energy saving in Lighting Common Area, Exterior & Parking and lighting Control	5%
	Total Energy Saving	29%

STATUTORY CLEARANCES:

1	DFO Forest Distance	:	DFO, Hazaribag East Division vide letter no. 1134, dated 21.04.2023 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO Wild Life	:	DFO, Wildlife Hazaribag Division vide letter no. 442, dated 28.02.2023 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribag Wildlife Sanctuary.
3	CO certificate	:	The CO, Hazaribag (Sadar) vide letter no. 1326, dated 10.07.2023 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
4	AAI NOC	:	Not Applicable, as there is no Domestic Airport in Hazaribag.
5	Fire Department	:	A fire advisory has been issued by Fire Department, Jharkhad, Ranchi vide memo no. 3922/Tech./2023, dated 07.07.2023.
6	Building Plan	:	Conceptual Plan submitted.

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed Residential Complex "Lalchand Eco Heights" of M/s Samridhi Infraworks Pvt. Ltd., Village : Katument, Tehsil : Champa, Distt. : Hazaribag, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure -III alongwith the following specific conditions :

A   105   

- I. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- II. All raw material to be stored only under covered shed.
- III. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- IV. Developers to promote energy conservation measures such that it offsets not less than, 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- V. Trees should be developed & maintained not less than 15% of project area.
- VI. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- VIII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- IX. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging points to be installed.
- XII. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
- XIII. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.
- XIV. A cycling tract to be provided in residential complex so as to save on fuel and make in campus movement environment friendly.

A



106









2. Medical College and Hospital of M/s Birsa Institute of Medical Sciences and Research, Village : Jiyarappa, Tehsil : Khunti, Distt. : Khunti, Jharkhand.

(Proposal No. : SIA/JH/INFRA2/ 436784/2023)

Name of the consultant: P & M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 21.07.2023.

Project is classified as Category 8(a) as per EIA Notification as the built-up area is less than 1,50,000 sqm. and development area is less than 50 ha.

Project Category: 8(a) Category B2 – Application for Environment Clearance

EC Application for: Proposed Medical College and Hospital. Total built-up Area: 89236.64 sq m.

PROJECT and LOCATION Details:

Parameters	Description
Plot Area	82960.56 sq m (8.296 ha/20.500 acres)
Project Cost	INR 97Crores
Built-up Area (@1.033 F.A.R)	89236.64 sq. m. (600 bedded Hospital with 1000 LPM Oxygen Plant)
Green Area (@ 42.20% of Plot Area)	35009.34 sq. m
Population	3130
Water Requirement	544 KLD
Fresh Water Requirement	255 KLD
Wastewater Generation	385 KLD(64 KLD Effluent + 321 KLD Sewage)
STP Capacity	350 KLD
ETP Capacity	70KLD
Total Municipal Waste	1030.73 kg/day
Total Bio-medical Waste	600 kg/day
Power Requirement	Maximum power demand for the Project during operation phase is estimated to be 2000 kVA. Source of power will be State Electricity board.
DG Sets	2 no. of DG set of Total 750 kVA (1* 250 KVA+1*500 KVA)
RWH Pits	21 no.

A



107








Parking Area	11137.50 sq. m
Connecting road	Project site abuts the road adjacent to it.
National Highway	NH-20 (Gumla-Khunti-Ranchi Road) - 1.35 km, East
Nearest Railway Station	Ranchi Junction is 23.16 km toward North
Airport	Birsa Munda Airport (19.40 km, NNE)
Nearest Hospitals	<ul style="list-style-type: none"> • CHC Karra (14.0 km, West) • St. Barnabas Hospital (24.0 km, NE)
Nearest Water Bodies	<ul style="list-style-type: none"> • Dhurwa Dam (13.54 km, North) • Jamunia Reservoir (19.26 km, WNW) • Ranchi Lake (24.40 km, NNE) • Chandil Reservoir (72.37 km, East)

CO-ORDINATES

Centre Coordinate	Latitude	Longitude
A	23° 9'14.63"N	85°15'11.84"E

Khata no. & Plot no. of the Project :

Khata no.	Plot no.
03	494, 498, 499, 515, 516, 517, 518, 519, 520, 521, 522, 525, 526, 527, 528, 530, 531, 615 & 619
04	523

Detailed area statement :

S. No.	Description	Area (Sq M) Total
A.	Plot Area	82960.56
B.	Proposed Ground Coverage (18.014 %)	14944.96
C.	Proposed FAR of the project (@1.033)	85736.64
D.	Non FAR approx. (4.22%)	3500
E.	Total Built-up area(C+D)	89236.64
F.	Green Area (42.20%)	35009.34
G.	Parking Area (13.43%)	11137.50
H.	Road Area/Paved Area / Open Area (21.78%)	18068.75

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Built-up Area Breakup Details: -Proposed Hospital :

Hospital Block (600 Bedded Hospital)

S. NO.	DESCRIPTION	AREA (SQ M)
1.	Basement	3859.2
2.	Ground Floor	10241.67
3.	First Floor	9541.12
4.	Second Floor	8628.67
5.	Third Floor	8628.67
6.	Fourth Floor	8628.67
7.	Fifth Floor	8628.67
8.	Total Area	58156.67

College Building (100 Admission)

S. NO.	DESCRIPTION	AREA (SQ M)
1.	Ground Floor	3733.29
2.	First Floor	3497.42
3.	Second Floor	3146.38
4.	Third Floor	3146.38
5.	Forth Floor	2653.25
6.	Fifth Floor	2653.25
7.	Total Area	18829.97

Boys Hostel (272 Student)

S. NO.	DESCRIPTION	AREA (SQ M)
1.	Ground Floor	640
2.	First Floor	705
3.	Second Floor	625
4.	Third Floor	625
5.	Fourth Floor	625
6.	Fifth Floor	625
	Total Area	4470

Girls Hostel (252 Student)

S. NO.	DESCRIPTION	AREA (SQ M)
1.	Ground Floor	630
2.	First Floor	650
3.	Second Floor	600
4.	Third Floor	600

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

5.	Fourth Floor	600
6.	Fifth Floor	600
7.	Total Area	4280

STATUTORY CLEARANCES:

1	DFO Forest Distance	: DFO, Khunti Forest Division vide letter no. 995, dated 16.06.2023 certified that the distance of reserved / protected forest is less than 250 m from proposed project site. This is a building & construction project the criteria for 250 m from forest boundary is not applicable. A minimum of 7.5 meter distance is to be left vacant as safety zone from forest boundary.
2	DFO Wild Life	: DFO, Wildlife Ranchi Division vide letter no. 588, dated 28.06.2023 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
3	CO certificate	: The CO, Sadar Khunti vide letter no. 318, dated 19.05.2023 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar & Register II.
4	Fire Advisory	: Advisory for fire safety has been applied by Application No.12858 dated 05.07.2023
5	AAI NOC	: Proposed area is not coming under AAI funnel zone
6	Building Plan	: Conceptual Plan submitted.

Water and waste water Requirement Details

Category	Population/ Area (sq m)/Capacity	Standard (LPCD)	Water Requirement (KLD)	Fresh Water Requirement (KLD)	Recycled Water requirement (KLD)
Domestic					
Outdoor patients	800	15	12	8	4
Indoor patients , Attendants, Visitors & Staff	600	450	270	189	81
Residential Staff (Jr & Sr. Resident, doctors, nurses,)	106	100	11	3	8

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Non-Residential Staff	424	45	19	13	6
Students & Interns	600	100	60	42	18
Total Domestic Water Demand			372	255	117
Laundry	600	100/bed	60	-	60
Horticulture	35009.34sq m	3 ltr/sqm	105	-	105
Fire Fighting		1% of total water requireme nt	2	-	2
DG set	1*250 KVA +1*500	0.9 l/kVA/hr	5	-	5
Total			544	255	289

(D.G. sets operation period is 8 hrs.)





Wastewater Calculations-ETP

Category	Total Quantity (KLD)
Effluent generation (Blood bank, OT, Laundry)	64(10+54)
Capacity of ETP (1 no's of 50 KLD)	70
Recovered water from ETP (90% of Waste water)	58

Wastewater Calculations-STP

Category	Total Quantity (KLD)
Fresh water Req.	255
Flushing water Req.	117
Sewage generation (@80% of the Fresh + 100% flushing water requirement)	321
Capacity of STP	350
Recovered water from STP (90% of Waste water)	289

Total Recycled Waste Water Generated STP	289
1. Flushing	117
2. Landscaping	105
3. Fire Fighting	2
4. DG cooling	5
5. HVAC	20

A  20/11/11   

Calculation of Solid Waste Generation

S. No	Description	Occupancy/Area	kg/capita/day	Total Solid Waste Generation (kg/day)
1.	Outdoor patients	800	@ 0.15 kg/day	120
2.	Indoor patients	600	@ 0.5 kg/day	300
3.	Attendants with IPD patients	600	@ 0.25 kg/day	150
4.	Residential Staff	106	@ 0.5 kg/day	53
5.	Non-Residential Staff	424	@ 0.25 kg/day	106
6.	Students & Interns	600	@0.5 kg/day	300
7.	Landscape Waste	8.65	@ 0.2 kg/acre/day	1.73
Total Municipal Waste				1030.73 kg/day
6.	Bio-Medical waste		@ 1 kg per bed day	600

Calculation of Solid Waste Generation-Totalbn

S.No	Description	Total Solid Waste Generation
1	Total Municipal Waste	1030 kg/day
2	STP Sludge	19 kg/day
3	ETP Sludge	30 kg/day
	Total Solid Waste	1079 kg/day

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Total green area provided at the site is 35009.34sq. m (42.20 % of the total plot area). which will enhance the beauty of the site and help combat air and noise pollution.
- The plant species will be selected on the basis of Guidelines for Developing Green Belts, CPCB March 2000.

A

Solid Waste Management

During Construction Phase

- Construction yards are proposed for storage of construction material.
- Excavated top soil will be stored in temporary constructed soil bank and will be reused for landscaping of the project.
- Remaining soil will be utilized for refilling/road work/raising of site level at locations.
- There will be "Refuse Containers" at site for the management of domestic waste generated by the construction labourers and these containers will be emptied at least once daily.
- Cement bags, waste paper and packing material (cardboard) will be sold off to recyclers.

During Operation Phase

- The solid waste will be segregated at source & collected.
- Adequate number of colored bins (green, white & Black) separate for bio-degradable, non-biodegradable and Hazardous waste are proposed to be provided at the strategic location within site.
- Bio-degradable (will be composted through organic waste converter).
- Recyclable wastes will be disposed to govt. or SPCB approved third party vendors.
- Dewatered sludge can be buried underground in a sanitary landfill. It also may be spread on agricultural land in order to make use of its value as a soil conditioner and fertilizer.
- The Hazardous waste generated will be managed as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016.
- Bio-medical wastes generated will be managed as per Biomedical Waste Management Rules, 2016.
- Horticultural Waste is composted and used for gardening purposes.


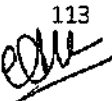



Water Quality Management

During Construction Phase

- The site drainage will be planned in such a way that there is no accumulation of water/wastewater within the project premises or in the vicinity of the site.
- Mobile toilets to be provided for construction Laborers.
- Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

- STP of capacity i.e. 350KLD is proposed for treatment of sewage whereas effluent from College and waste water from Hospital will be treated by an ETP of 70 KLD in capacity.
- Treated waste water would be reused for Horticulture, DG/HVAC cooling, flushing, fire fighting.
- 58 KLD of ETP treated water is recycled within the project or used in the nearby project site/Sewer which is being generated from Blood bank, OT, labs e.t.c.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 255 KLD of fresh water is required during operational phase of the project.

A   113   

Air Quality Management

- Warehouse/stock yard will be provided for storage of construction material.
- Covering of stored construction materials with tarpaulin covers which will be resold to authorized construction material handling agency for reuse.
- Covering of trucks carrying construction materials.
- Dust suppression by water sprinkling.
- Adequate maintenance of construction equipment & vehicles.
- Wheel wash facility at the entry/exit of the site to prevent dust emissions.
- Periodical Ambient Air Quality Monitoring.
- PUC Certified vehicles.
- Glow signs Speed Limits to 20 kmph to reduce emissions on site will be displayed at the important junctions.

Energy conservation

Energy will be conserved via solar power & LED of at least 5 % of the total power requirement.

Undertaking

1. An affidavit stating that no construction work.
2. An undertaking that 58 m³/day of recycled water from ETP and 289 m³/day of recycled water from STP at "Medical college and Hospital" at Thana No. 227, Khata no. 3 & 4 Village-Jiyarappa, Tehsil-Khunti, Ranchi, Jharkhand.
3. An undertaking that 2000 kVA Power requirement in "Medical college and Hospital" at Thana No. 227, Khata no. 3 & 4 Village-Jiyarappa, Tehsil-Khunti, Ranchi, Jharkhand.
4. Green belt will be developed all along the boundary.
5. Biomedical waste will be given to nearest authorized vendor.
6. There will no tree cutting involve, Tree cutting will be done only after getting approval from competent authority, and abide by their laws.
7. Ground water will be used after getting approval from competent authority.
8. There will be establishment of oxygen plant of 1000 LPM in the hospital premises.

Based on the presentation made and information provided, the Committee decided that the proposal for Medical College and Hospital of M/s Birsa Institute of Medical Sciences and Research, Village : Jiyarappa, Tehsil : Khunti, Distt. : Khunti, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure -III alongwith the following specific conditions :

- I. Continious online monitoring station for AAQ for PM 10 and PM 2.5 is to be installed in downwind direction. Daily maximum, minimum and mean figures are to be submitted alongwith six monthly compliance report.
- II. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- III. All raw material to be stored only under covered shed.

A






- IV. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- V. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- VI. Trees should be developed & maintained not less than 15% of project area.
- VII. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VIII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- IX. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- X. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- XI. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XII. Sufficient number of EV fast charging points to be installed.
- XIII. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
- XIV. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.
- XV. A cycling tract to be provided in residential complex so as to save on fuel and make in campus movement environment friendly.

3. Bicha Stone Deposit of M/s Shiv Mining & Stone Crushers (Partners : (i) Shri Charendra Bediya (ii) Shri Vinod Kumar Sinha (iii) Shri Vikash Kumar Sinha), Village : Bicha, Thana : Patratu, Distt. : Ramgarh, Jharkhand (0.987 Ha).

(Proposal No. : SIA/JH/MIN/ 434181/2023)

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 27439.32 cum/annum or 74086.18 TPA.

A   115   

Name of the consultant : P and M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 21.07.2023.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Bicha Stone Deposit
2	Lessee:	: M/S Shiv Mining & Stone Crushers, Partners- 1) Sri Charendra Bediya 2) Sri Vinod Kumar Sinha 3) Sri Vikash Kumar Sinha Jharkhand.
3	Lease Address	: Village – Bicha, Thana – Patratu, District- Ramgarh, Jharkhand
4	Lease Area	: 0.987ha Acres- 2.44Acres
5	Type of Land	: Non Forest – Raiyati Land
6	Project Cost	: Rs. 30Lakhs
7	EMP Budget	: Capital: 4.995Lakhs Recurring: 3.77 Lakh / year
8	New or Expansion	: New
9	Mineable Reserves	: cum.: 134791.7 cum Tonnes: 363937.59tons
10	Mine Life	: 4 years 11 months
11	Man power	: 22
12	Water Requirement	: 9.415 ~9.50 (Drinking: 0.22 KLD, Dust Suppression: 5.675 KLD, Plantation:3.52KLD)
13	Water Source	: From Nearby villages by tankers
14	DG Set / power	: 200 KVA
15	Crusher	: No crusher
16	Nearest Water Body	: Patratu Dam, approx 8.50 km towards NW direction.
17	Nearest Habitation	: Bicha, approx 0.50 km towards N direction.
18	Nearest Rail Station	: Daridag Railway station, approx. 4.90 km towards NE direction.
19	Nearest Air Port	: Birsa Munda Airport, approx. 29.50 km towards S direction.
20	Nearest Forest	: Bicha Protected Forest, approx 1.0 km towards SW direction. Ghaghra Protected Forest, approx 5.40 km towards North direction. Hariharpur Protected Forest, approx 4.80 km towards North direction. Jarad Protected Forest, approx 4.50 km towards NNW direction.
21	Road & Highways	: SH- 2, approx. 4.80 km. in West direction.

A

CO-ORDINATES

1	Latitude	From 23°33'53.4794" N	To 23°33'56.7255" N
2	Longitude	From 85°20'58.4530" E	To 85°21'06.6642" E

LAND DETAILS :

Khata No.	Plot No.
77	1136 (P)
88	1138 (P)
90	1137

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Ramgarh vide letter no. 416/Khanan, dated 25.04.2023.
2	CO	:	The CO, Patratu (Ramgarh) vide letter no. 529, dated 17.03.2023 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Ramgarh vide memo no. 520/Khanan, dated 18.05.2023 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 2553, dated 20.02.2023 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribagh Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Ramgarh Division vide letter no. 605, dated 31.03.2023 certified that the distance of demarcated forest is 260 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Ramgarh vide letter no. 505 / Khanan, dated 16.05.2023 has informed that this project is part of District Survey Report (DSR) of Ramgarh district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on dated 07.05.2023.

A



117








8	Mine Plan Approval	:	District Mining Officer, Hazaribag vide Letter No. 756/Mining, dated 19.05.2023.
---	--------------------	---	--

Working Details

1	Mining Method	:	Opencast semi mechanised method
2	Quarry Area	:	0.560 ha. Life of Mine – 4years 11 months
3	Waste Generation	:	14528.68 cum or 39227.42 tones
4	Stripping Ratio	:	1: 0.08
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	509AMSL to 549 AMSL
8	Ground Level Elevation	:	509AMSL
9	Ultimate Working Depth	:	504 AMSL
10	Water Table	:	489AMSL (20mbgl)
11	Topography of Mine	:	Area represents small hillocktopography
12	Explosive Requirement	:	70kg/day
13	Diesel/Fuel requirement	:	70 litre/day

Production Details

Year	Production of stone (Cum)	Production of stone (Tonnes)	Total Waste in (cum)	Bench RL in Meters
1 st	27410.35	74007.95	5816.35	540 mRL – 522mRL
2 nd	27439.32	74086.18	1932.18	522mRL – 516mRL
3 rd	27410.35	74007.95	1442.65	516 mRL – 504mRL
4 th	27410.35	74007.95	4126.65	522mRL – 510mRL
5 th	23006.15	62116.61	1210.85	510mRL – 504mRL
Total	132676.52	358226.62	14528.68	

Land Use

Type of Land Use	Existing (ha)	During Plan Period (ha)	During Conceptual Period/after closure of mines (ha)
Quarry	--	0.560	0.560 (Entire area will be converted water reservoir)

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Road	0.039	--	--
Waste Dump	--	-- (waste dump to be removed and backfilled)	-- (waste dump to be removed and backfilled)
Safety Zone Plantation	--	0.427	0.427
Total	0.039	0.987	0.987
Untouched Area	0.948	--	--
Total Lease Hold Area	0.987	0.987	0.987

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.427 ha	1070
2	Along Approach Road	0.59 km	590
3	In consulting local authorities	-	100

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

Total 14528.68cum in-situ, waste shall be generated during this plan period. The 50% of waste generated during the plan period i.e. 7264.34 cum (In situ) shall be utilized for approach & haul road maintenance. The waste material (50%) generated during the 1st to 3rd year shall be temporarily dumped in eastern part of the lease area, the maximum height of dump shall be 4.47m. During the 4th year onwards the 50% of generated waste and waste materials of temporary dump shall be used for partial backfilling of exhausted quarry in western corner of the area and it will cover 0.109ha area.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation.Excess water, if any shall be discharged in natural stream after settling of

A

[Handwritten signature]

119
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.

- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask e.t.c shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

A



- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Bicha Stone Deposit of M/s Shiv Mining & Stone Crushers (Partners : (i) Shri Charendra Bediya (ii) Shri Vinod Kumar Sinha (iii) Shri Vikash Kumar Sinha), Village : Bicha, Thana : Patratu, Distt. : Ramgarh, Jharkhand (0.987 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

4. Nawadih & Tolkhar Stone Deposit of M/s Anjani Sut Mining and Mineral Works LLP (Partners : Shri Santosh Mehta & Shri Pradip Kumar Kedia), Village : Nawadih & Tolkhar, Thana : Markacho & Nawalsahi, Distt. : Koderma, Jharkhand (1.279 Ha).

(Proposal No. : SIA/JH/MIN/ 436768/2023)

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 34013.25 cu.m/annum or 89999.06 TPA

Name of the consultant : P and M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 21.07.2023.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Nawadih & Tolkhar Stone Deposit (Area- 1.279 Ha or 3.16 Acre)
2	Lessee:	: M/s Anjani Sut Mining And Mineral Works LLP Partners- 1) Sri Pradip Kumar Kedia S/o- Late Satyanarayan Kedia 2) Sri Santosh Mehta S/o- Sri Chaman Mehta

A

121

		Address- IMS Road, PO- Jhumri Tilaiya, Thana- Tilaiya, Dist. – Koderma, Jharkhand.	
3	Lease Address	: Village – Nawadih & Tolkhari, Thana- Markacho & Nawalsahi, District – Koderma, State - Jharkhand	
4	Lease Area	: 1.279 ha	Acres- 3.16 Acres
5	Type of Land	: Non Forest – Raiyati Land	
6	Project Cost	: Rs. 30 Lakhs	
7	EMP Budget	: Capital: 3.726 Lakhs	Recurring: 4.27 Lakh / year
8	New or Expansion	: New	
9	Mineable Reserves	: cum.: 333469.50 cum	Tonnes: 900367.65 tons
10	Mine Life	: 10 years	
11	Man power	: 23	
12	Water Requirement	: 7.181 ~ 7.20 (Drinking: 0.23 KLD, Dust Suppression: 3.975 KLD, Plantation: 2.976 KLD)	
13	Water Source	: From Nearby villages by tankers	
14	DG Set / power	: 200 KVA	
15	Crusher	: No crusher	
16	Nearest Water Body	: Sakri nadi, approx. 4.0 km towards NW direction.	
17	Nearest Habitation	: Nawadih , approx 0.50 km towards NE direction.	
18	Nearest Rail Station	: Nawadih Railway station, approx. 1.80 km towards NE direction.	
19	Nearest Air Port	: Birsa Munda Airport, approx. 131.0 km towards SSW direction.	
20	Nearest Forest	: Bahadupur Protected Forest, approx. 1.5 km towards East direction. Dardahi Protected Forest, approx 2.0 km towards SE direction. Medwa Protected Forest, approx 3.0 km towards South direction.	
21	Road & Highways	: Markacho-Baryardih Rd, approx. 1.0 km. in East direction SH-13, approx. 5.75 km. in North direction.	

CO-ORDINATES

1	Latitude	From 24°23'52.77" N	To 24°23'58.18" N
2	Longitude	From 85°47'58.42" E	To 85°48'07.30" E

LAND DETAILS :

Khata No.	Plot No.
-----------	----------

122

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

34	1993
16	19 (P), 20 (P), 21 (P) & 22
61	2000 (P)
79	1996 (P), 1998, 1997 (P) & 1999
86	1992, 1994 & 1995 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Koderma vide memo no. 1242/M, dated 27.06.2023.
2	CO	:	The CO, Markacho (Koderma) vide letter no. 311, dated 05.06.2023 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. As per the CO certificate there are about 17 Kacha houses within 500 m. The PAs have submitted an EMP for the people residing in these Kacha Houses.
3	DMO	:	DMO, Koderma vide memo no. 1343/M, dated 13.07.2023 certified that 03 other mining lease area (2.65 ^{1/2} Acre, 3.28 ^{1/4} Acre & 2.07 Acre) exists within 500 m radius from proposed project site and total area is 11.16 ^{3/4} Acre.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1291, dated 04.07.2023 certified that the proposed project site is outside Eco Sensitive Zone of Koderma Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Koderma Forest Division vide letter no. 2677, dated 21.06.2023 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Koderma vide letter no. 1323 / M, dated 11.07.2023 has informed that this project is part of District Survey Report (DSR) of Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on dated 07.06.2023.
8	Mine Plan Approval	:	District Mining Officer, Koderma vide Letter No. 1350/M, dated 14.07.2023.

A

[Handwritten signature]

123
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Working Details

1	Mining Method	:	Opencast semi mechanised method
2	Quarry Area	:	1.279 Ha or 3.16 Acre
3	Waste Generation	:	11271.83 cum or 30433.941 tons
4	Stripping Ratio	:	1: 0.05
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	378 AMSL to 388 AMSL
8	Ground Level Elevation	:	378 AMSL
9	Ultimate Working Depth	:	358 AMSL
10	Water Table	:	345 AMSL (30mbgl)
11	Topography of Mine	:	Area represents a small hillock topography
12	Explosive Requirement	:	90 kg/day
13	Diesel/Fuel requirement	:	90 litre/day

Production Details

Year	Production of stone (Cum)	Production of stone (Tonnes)	Total Waste in (cum)	Bench RL in Meters
1 st	34013.25	89999.06	4430.27	382mRL – 376 mRL
2 nd	34013.25	89999.06	2555.27	382 mRL – 370 mRL
3 rd	33938.25	89800.61	678.77	370 mRL – 364 mRL
4 th	33863.25	89602.16	2927.27	382 mRL – 370 mRL
5 th	34013.25	89999.06	680.27	364 mRL – 358 mRL
Total	169841.25	449399.95	11271.83	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Quarry	--	0.569	0.844 (entire area converted into water reservoir)
Road	--	0.050	--

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Waste Dump	--	0.170	(to be removed and backfilled)
Safety Zone	--	0.435 (Plantation)	0.435 (Plantation)
Total	--	1.224	1.279
Balance	1.279	0.055	-
Lease Hold Area	1.279	1.279	1.279

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.435ha	1088
2	Along Approach Road	0.30 km	300
3	In consulting local authorities	-	100

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

It has been calculated that total 11271.83 cum in-situ, 14089.78 cum loose & 11976.31 compact waste shall be generated during this plan period. The 50% of waste generated during the plan period i.e. 5988.16 cum waste (compact) shall be utilized for approach & haul road maintenance. The waste material (50%) generated during the plan period shall be temporarily dumped in north western part of the applied lease area, the maximum height of dump shall be 4.02m, garland drain & retaining wall shall be constructed all along the dump, and it will cover 0.170ha area.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of

A

UAA

125
EDW

B

C

D

suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.

- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask e.t.c shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.



- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Nawadih & Tolkhari Stone Deposit of M/s Anjani Sut Mining and Mineral Works LLP (Partners : Shri Santosh Mehta & Shri Pradip Kumar Kedia), Village : Nawadih & Tolkhari, Thana : Markacho & Nawalsahi, Distt. : Koderma, Jharkhand (1.279 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

5. Purnadih Stone Deposit of M/s Gaura Pathar Mines (Partners : (i) Shri Yamuna Prasad Rana (ii) Shri Prayag Gop (iii) Shri Dwarika Rana), Village : Purnadih, Thana : Nawalsahi, Distt. : Koderma, Jharkhand (0.607 Ha).

(Proposal No. : SIA/JH/MIN/ 436744/2023)

Project Category: B2 – Application for Environment Clearance

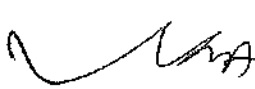
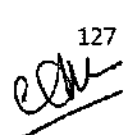
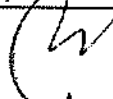
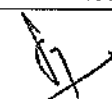

EC Application for: Proposed Capacity- 6120.00 cum/ annum or 16524.00 TPA Stone

Name of the consultant : P and M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 21.07.2023.

Project and Location Details :

S. No.	Parameter	:	Details
1	Project Name	:	Purnadih Stone Deposit
2	Lessee:	:	Gaura Pathar Mines Partner-(1) Sri Yamuna Prasad Rana, S/O- Late Bhatu Rana, Partner- (2) Sri Prayag Gop, S/O- Late Bhuneshwar Mahto,

A   127   

			Partner- (3) Sri Dwarika Rana, S/O- Late Tahal Rana At- Koderma, State-Jharkhand.
3	Lease Address	:	Village – Purnadih, Thana.- Nawalsahi, District – Koderma, State :-Jharkhand.
4	Lease Area	:	0.607 Ha. Acres- 1.50 Acre
5	Type of Land	:	Non Forest – Raiyati Land
6	Project Cost	:	Rs. 20 Lakhs
7	EMP Budget	:	Capital: 2.21 Lakhs Recurring: 3.77 Lakh / year
8	New or Expansion	:	New
9	Mineable Reserves	:	cum.: 61,140 cum Tonnes: 165078.00 tons
10	Mine Life	:	10 years
11	Man power	:	20
12	Water Requirement	:	4.34 ~ 4.50 KLD (Drinking: 0.20 KLD, Dust Suppression: 2.13 KLD, Plantation: 2.01 KLD)
13	Water Source	:	From Nearby villages by tankers
14	DG Set / power	:	200 KVA
15	Crusher	:	Yes
16	Nearest Water Body	:	Hurrahi Nadi, Approx. 1.50 km towards SSW direction. Chando or Keso Nadi, Approx. 4.50 km towards SSE direction.
17	Nearest Habitation	:	Purnadih, at approx 0.54 Km
18	Nearest Rail Station	:	Maheshpur Halt Railway station, approx. 2.50 km towards West direction.
19	Nearest Airport	:	Birsa Munda Airport, approx. 167.0 km towards South direction.
20	Nearest Forest	:	Phulwariya PF, approx 3.10 km towards E direction Masmohana PF, Approx. 4.85 km towards NE direction Partango PF, Approx. 4.15 km towards SW direction Kharuna PF, Approx. 4.90 km towards SSE direction Masnodih PF, Approx 3.60 km towards NNE direction
21	Road & Highways	:	SH- 13, Approx. 0.04 km in North direction.

CO-ORDINATES

1	Latitude	From 24°27'50.92"N	To 24°27'53.06"N
2	Longitude	From 85°43'27.22"E	To 85°43'33.97"E

A

[Handwritten signature]

128
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

LAND DETAILS :

Khata No.	Plot No.
02	167 (P)
79	165 (P)
109	162 (P)
176	170 (P)

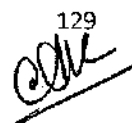
STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Koderma vide memo no. 1070/M, dated 01.06.2023.
2	CO	:	The CO, Domchanch vide letter no. 779, dated 13.07.2023 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyan & Register II. As per the CO certificate there is seasonal Nalla within 500 m. The PAs have submitted an EMP alongwith mitigation measures.
3	DMO	:	DMO, Koderma vide memo no. 1191/M, dated 19.06.2023 certified that 01 other mining lease area (1.51 Acre) exists within 500 m radius from proposed project site and total area is 3.01 Acre.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1254, dated 03.07.2023 certified that the proposed project site is outside Eco Sensitive Zone of Koderma Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Koderma Forest Division vide letter no. 2082, dated 22.05.2023 certified that the distance of reserved / protected forest is 370 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Koderma vide letter no. 1143 / M, dated 12.06.2023 has informed that this project is part of District Survey Report (DSR) of Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on dated 28.04.2023.
8	Mine Plan Approval	:	District Mining Officer, Koderma vide Letter No. 1216, dated 23.06.2023.

Working Details

1	Mining Method	:	Opencast Semi- Mechanized method.
---	---------------	---	-----------------------------------

A




2	Quarry Area	:	5 years- 0.277 ha.	Life of Mine – 10 Years
3	Waste Generation	:	5 years- 1730.00 cu.m	
4	Stripping Ratio	:	1: 0.02	
5	Working Days	:	300	
6	Benches: size & No	:	3m x 3m	
7	Elevation of Mine	:	370 AMSL to 371 AMSL	
8	Ground Level Elevation	:	362 AMSL	
9	Ultimate Working Depth	:	up to 355 AMSL	
10	Water Table	:	340AMSL (30 mbgl)	
11	Topography of Mine	:	Area represents a flat topography	
12	Explosive Requirement	:	70 Kg/day	
13	Diesel/Fuel requirement	:	70 litre/day	

Production Details

Year	Production of stone (Cum)	Production of stone (Tonnes)	Waste Generation (CuM)	Bench RL in Meters
1 st	5400.00	14580.00	861.00	370 mRL – 367 mRL
2 nd	5760.00	15552.00	869.00	370 mRL – 367 mRL
3 rd	5850.00	15795.00	-	367 mRL - 364 mRL
4 th	6120.00	16524.00	-	367 mRL - 364 mRL
5 th	6048.00	16329.60	-	364 mRL - 361 mRL
Total	29178.00	78780.60	1730.00	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Quarry	-	0.190	0.277 (Entire area will be converted into Rain water harvesting)
Road	0.008	comes under quarry	comes under quarry
Safety Zone	-	0.330	0.330
Proposed Crusher	-	0.012	-
Total	0.008	0.532	0.607

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Balance	0.599	0.075	-
Lease Hold Area	0.607	0.607	0.607

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.33 ha.	825
2	Along Approach Road	0.08 km	80
3	No. of plants in buffer zone consulting local authorities	--	100

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

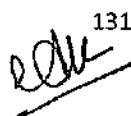
Waste Generation will be 1730.0 cum or 4671 tons during this Mining Plan period, so there is no requirement of waste dumping Plan for this mining plan but it will be used for village road and approach road maintenance.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table. The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

A



 131







Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask e.t.c shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

12	Water Requirement	:	5.365~5.50 KLD (Drinking: 0.21 KLD, Dust Suppression: 2.675 KLD, Plantation: 2.48 KLD)
13	Water Source	:	From Nearby villages by tankers
14	DG Set / power	:	200 KVA
15	Crusher	:	No crusher
16	Nearest Water Body	:	Hurrahi Nadi, approx. 2.80 km towards East direction of mine site. Chando or Keso Nadi, approx. 3.10 km towards SE direction of mine site.
17	Nearest Habitation	:	Approx 0.31 km towards NNE direction.
18	Nearest Rail Station	:	Nawalsahi Railway station, approx. 6.7 km towards SE direction.
19	Nearest Air Port	:	Birsa Munda Airport, approx. 135.30 km towards SW direction.
20	Nearest Forest	:	Partango Reserve Forest- Approx. 1.45 km towards West direction of mine site. Masmohana Protected Forest-Approx 3.30 km towards South direction of mine site. Kharauna Protected Forest-Approx. 4.60 km towards SE direction of mine site.
21	Road & Highways	:	SH-13, approx. 1.6 km in North direction.

CO-ORDINATES

1	Latitude	From 24°27'08.4144" N	To 24°27'14.6378" N
2	Longitude	From 85°42'15.8436" E	To 85°42'21.0582" E

LAND DETAILS :

Khata No.	Plot No.
600	11357

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Koderma vide memo no. 1303/M, dated 07.07.2023.
2	CO	:	The CO, Domchanch vide letter no. 601, dated 27.05.2023 has

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

		mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II. As per the CO certificate there is Talab within 500 m. The PAs have submitted an EMP for the protection of the Talab.
3	DMO	: DMO, Koderma vide memo no. 1311/M, dated 10.07.2023 certified that 01 other mining lease area (4.50 Acre) exists within 500 m radius from proposed project site and total area is 3.01 Acre.
4	DFO Wild Life	: DFO, Wildlife Hazaribagh vide letter no. 1417, dated 11.07.2023 certified that the proposed project site is outside Eco Sensitive Zone of Koderma Wildlife Sanctuary.
5	DFO Forest Distance	: Division Forest Officer, Koderma Forest Division vide letter no. 2756, dated 28.06.2023 certified that the distance of reserved / protected forest is 280 m from proposed project site.
6	DSR	: The DC-cum-District Magistrate, Koderma vide letter no. 1323 / M, dated 11.07.2023 has informed that this project is part of District Survey Report (DSR) of Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	: Gram Sabha conducted on dated 05.07.2023.
8	Mine Plan Approval	: District Mining Officer, Koderma vide Letter No. 1342/M, dated 13.07.2023.

Working Details

1	Mining Method	: Opencast Semi-mechanised method	
2	Quarry Area	: 1.082 Ha	Life of Mine – 10 Years
3	Waste Generation	: 22172.25 cum or 59,865.075 tons	
4	Stripping Ratio	: 1: 0.148	
5	Working Days	: 300	
6	Benches: size & No	: 6m to 6m	
7	Elevation of Mine	: 379 AMSL to 384 AMSL	
8	Ground Level Elevation	: 370 AMSL	
9	Ultimate Working Depth	: 360 AMSL	
10	Water Table	: 350 AMSL (20mbgl)	
11	Topography of Mine	: Area represents a small hillock.	
12	Explosive	: 90 kg/day	

A

[Handwritten signature]

[Handwritten signature]

135

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

	Requirement		
13	Diesel/Fuel requirement	:	90 litre/day

Production Details

Year	Production of stone (Cum)	Production of stone (Tonnes)	Total Waste in (cum)	Bench RL in Meters
1 st	28682.40	77442.48	15828.60	378
2 nd	29420.55	79435.49	1548.45	378-372
3 rd	30264.15	81713.21	1592.85	372
4 th	30580.50	82567.35	1609.50	372-366
5 th	30264.15	81713.21	1592.85	366
Total	149211.75	402871.73	22172.25	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Quarry	0.0	0.745	1.082 (0.183ha area shall be backfilled & 0.899 ha area shall be left as water reservoir)
Road	0.036	0.009	0.0
Waste Dump	--	0.208	0.0 (to be removed and backfilled)
Safety Zone	0.0	0.415 (Plantation)	0.415 (Plantation)
Total	0.036	1.377	1.497
Balance	1.461	0.120	--
Lease Hold Area	1.497	1.497	1.497

ENVIRONMENT MANAGEMENT

Green Belt Development

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.415 ha	1040
2	Along Approach Road	0.10 km	100
3	In consulting local authorities	-	100

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

It has been calculated that total 22172.25 cum in-situ, waste shall be generated during this plan period. The 50% of waste generated during the plan period i.e. 11086.13 cum (In situ) shall be utilized for approach & haul road maintenance. The rest waste material (50%) i.e. 11086.13 cum (In situ), 13857.66 cum (loose) & 11779.01 cum (compact) waste shall be temporarily dumped in south eastern part of the applied lease area, the maximum height of dump shall be 6.67m garland drain & retaining wall be constructed all the dump, and it will cover 0.208ha area.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

A



137








Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask e.t.c shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

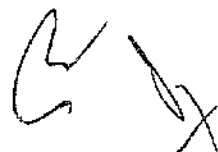
Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.

A









- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Domchanch Stone Deposit of M/s Jai Bhim Stone Works (Prop. : Shri Ashish Joshi), Village : Domchanch, Distt. : Koderma, Jharkhand (1.497 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

7. Raidih Stone Deposit of Shri Manoj Kumar Mehta, Village : Raidih, Thana : Nawalsahi, Distt. : Koderma, Jharkhand (1.570 Ha).

(Proposal No. : SIA/JH/MIN/ 436725/2023)

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 34513.50 cum/annum or 93186.45 TPA.

Name of the consultant : P and M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 21.07.2023.

Project and Location Details :

Sl	Parameter	Details	
1	Project Name	: Raidih Stone Deposit	
2	Lessee:	: Manoj Kumar Mehta, S/o- Late Yadunandan Mehta Village + PO - Behradih, PS. - Domchanch, District - Koderma, Jharkhand	
3	Lease Address	: Village - Raidih, P.S. – Nawalsahi, District – Koderma, State - Jharkhand	
4	Lease Area	: 1.57 ha	Acres- 3.88 Acres
5	Type of Land	: Non- Forest (Raiyati Land)	
6	Project Cost	: Rs. 50 Lakhs	
7	EMP Budget	: Capital: 3.87 Lakhs	Recurring: 3.77 Lakh / year
8	New or Expansion	: New	
9	Mineable Reserves	: cum.: 348972.052 cum	Tonnes: 942224.54 tons

A

[Handwritten signature]

139
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

10	Mine Life	:	10.1 years
11	Man power	:	21
12	Water Requirement	:	7.565~7.60 KLD (Drinking: 0.21 KLD, Dust Suppression: 3.935 KLD, Plantation: 3.42 KLD)
13	Water Source	:	From Nearby villages by tankers
14	DG Set / power	:	200 KVA
15	Crusher	:	No crusher
16	Nearest Water Body	:	Hurrahi Nadi, approx. 2.40 km towards East direction of mine site. Chando or Keso Nadi, approx. 2.60 km towards SE direction of mine site.
17	Nearest Habitation	:	Khargu, approx 0.94 km towards East direction.
18	Nearest Rail Station	:	Maheshpur Halt Railway station, approx. 1.95 km towards NW direction.
19	Nearest Air Port	:	Birsa Munda Airport, approx. 135.0 km towards SSW direction.
20	Nearest Forest	:	Partango Reserve Forest-Approx. 1.26 km towards West direction of mine site. Masmohana Protected Forest-Approx 2.50 km towards South direction of mine site. Kharauna Protected Forest-Approx. 3.80 km towards SE direction of mine site.
21	Road & Highways	:	SH-13, approx. 1.90 km. in North direction.

CO-ORDINATES

1	Latitude	From 24°26'43.7183" N	To 24°26'50.6929" N
2	Longitude	From 85°42'31.8426" E	To 85°42'39.1354" E

LAND DETAILS :

Khata No.	Plot No.
24	2904
54	121
68	122
98	124

A

[Handwritten signature]

140

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Koderma vide memo no. 1304/M, dated 07.07.2023.
2	CO	:	The CO, Domchanch vide letter no. 705, dated 22.06.2023 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II. As per the CO certificate there is Talab within 500 m. The PAs have submitted an EMP for the protection of the Talab.
3	DMO	:	DMO, Koderma vide memo no. 1318/M, dated 11.07.2023 certified that no other mining lease area exists within 500 m radius from proposed project site and total area is 3.01 Acre.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1218, dated 26.06.2023 certified that the proposed project site is outside Eco Sensitive Zone of Koderma Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Koderma Forest Division vide letter no. 2672, dated 21.06.2023 certified that the distance of reserved / protected forest is 350 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Koderma vide letter no. 1323 / M, dated 11.07.2023 has informed that this project is part of District Survey Report (DSR) of Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on dated 23.06.2023.
8	Mine Plan Approval	:	District Mining Officer, Koderma vide Memo No. 1345/M, dated 13.07.2023.

Working Details

1	Mining Method	:	Opencast Semi-mechanised method
2	Quarry Area	:	1.57 Ha or 3.88 Acre
			Life of Mine – 10.1 Years
3	Waste Generation	:	20816.25 cum or 56,203.875 tons
4	Stripping Ratio	:	1: 0.044
5	Working Days	:	300
6	Bench: size & No	:	6m to 6m
7	Elevation of Mine	:	360 AMSL to 372 AMSL
8	Ground Level	:	360 AMSL

A

	Elevation		
9	Ultimate Working Depth	:	345 AMSL
10	Water Table	:	335 AMSL (25mbgl)
11	Topography of Mine	:	Area represents a small hillock.
12	Explosive Requirement	:	90 kg/day
13	Diesel/Fuel requirement	:	90 litre/day

Production Details

Year	Production of stone (Cum)	Production of stone (Tonnes)	Total Waste in (cum)	Bench RL in Meters
1 st	34413.75	92917.13	8636.25	365-357
2 nd	34513.50	93186.45	6751.50	357-351
3 rd	34314.00	92647.80	1806.00	351
4 th	34513.50	93186.45	1816.50	351-345
5 th	34314.00	92647.80	1806.00	345
Total	172068.75	464585.63	20816.25	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Quarry	--	0.650	0.999 (0.210 ha. area shall be backfilled & 0.789 ha. area shall be left as water reservoir)
Road	--	0.008	--
Waste Dump	--	0.297	0.0 (to be removed and backfilled)
Safety Zone	--	0.571 (Plantation)	0.571 (Plantation)
Total	--	1.526	1.570
Balance	1.570	0.044	--
Lease Hold Area	1.570	1.570	1.570

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.571 ha	1430
2	Along Approach Road	0.180 km	180
3	In consulting local authorities	-	100

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

There is generation of 20816.25 cum or 56203.875 tons waste during the plan period. The 50% of waste generated during the plan period i.e. 10408.13 cum (In situ) shall be utilized for approach & haul road maintenance. The rest waste material (50%) i.e. 10408.13 cum in situ or 13016.16 cum loose or 11058.63 cum compact waste shall be temporary dumped in southern part of the applied lease area, the maximum height of dump shall be 5.67m, garland drain & retaining wall shall be constructed all along the dump, and it will cover 0.297ha area.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

A











Air Quality Management

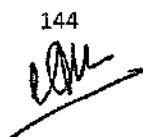
- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask e.t.c shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.

A



144








- I. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Raidih Stone Deposit of Shri Manoj Kumar Mehta, Village : Raidih, Thana : Nawalsahi, Distt. : Koderma, Jharkhand (1.570 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

8. Salboni Stone Mine of Sri Ragda Murmu, Mouza : Salboni, Thana no. : 115, Distt. : Pakur, Jharkhand (1.846 Ha).

(Proposal No. : SIA/JH/MIN/ 436510/2023)

EC Application for: Proposed Capacity- 39,064 cu.m/annum or 109379 TPA

Name of the consultant: P & M Solution, Noida, UP.

This is a new project which has been taken for appraisal on 21.07.2023.

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 96th meeting held on 16-19.08.2022 and SEIAA, Jharkhand has approved the ToRs in 97th meeting held on 25th & 26th August, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2623/2022/250, date 02.09.2022. The final EIA / EMP submitted by PP to SEIAA on 15.07.2023 and which was forwarded to SEAC on 15.07.2023.

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Salboni Stone Mine
2	Lessee:	: Sri Ragda Murmu S/o Late Misir Murmu R/O Gram- Pipaljori, Thana- Malpahari (O.P.), District- Pakur, Jharkhand
3	Lease Address	: Village – Salboni , Thana No.- 115, District – Pakur, State :-Jharkhand.
4	Lease Area	: 1.846 ha Acres- 4.56Acre
5	Type of Land	: Non Forest – Raiyati Land
6	Project Cost	: Rs. 20 Lakhs
7	EMP Budget	: Capital: 4.672 Lakhs Recurring: 3.27 Lakh / year
8	CSR / CER Budget	: Rs. 0.40 Lakhs
9	New or Expansion	: New
10	Mineable Reserves	: Cu.m.: 4,25,351.11 cum Tonnes: 11,48,448 tons

11	Mine Life	:	10 years
12	Man power	:	39
13	Water Requirement	:	10.10 KLD (Drinking: 0.39 KLD, Dust Suppression: 6.64 KLD, Plantation: 3.07 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / Power	:	60 KVA
16	Crusher	:	No crusher
17	Nearest Water Body	:	Torai Nadi, Approx. 7.40 km towards NW direction. Baghmari Nadi Approx. 5.74 km towards NE direction. Farakka Feeder Canal, Approx. 9.22 km towards NE direction.
18	Nearest Habitation	:	Saiboni , 0.40 km
19	Nearest Rail Station	:	Nagarnabi Railway station, approx. 1.15 km towards ESE direction.
20	Nearest Air Port	:	Kazi Nazrul Islam Airport, Durgapur, approx. 125.0 km towards SW direction.
21	Nearest Forest	:	Protected Forest, at approx. 3.21 km towards SW direction. Protected Forest, at approx. 8.70 km towards WNW direction.
22	Road & Highways	:	NH-114A, Approx. 5.00 km. in North direction. SH-7, Approx. 4.98 km in SE direction.

CO-ORDINATES

1	Latitude	From 24°35'28.69"N	To 24°35'34.59"N
2	Longitude	From 87°51'21.94"E	To 87°51'27.36"E

Land Details :

Khata No.	Plot No.
05	408 (P)
11	405
14	410
24	409 (P)
28	338 (P), 411, 412, 413, 414, 415, 335, 337

A *U* *CA* *CA* *C* *X* *CA*

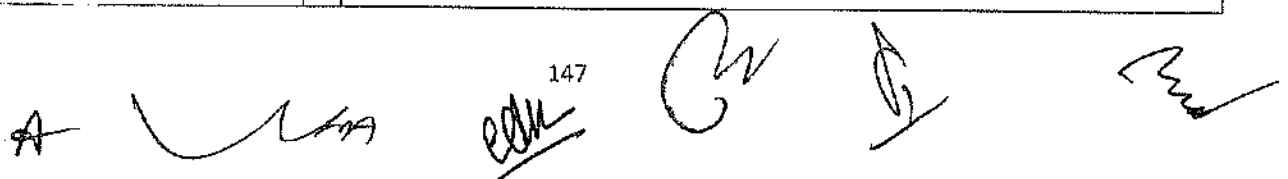
STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Pakur vide letter no. 600/M, dated 20.05.2021.
2	CO	:	The CO, Pakur vide letter no. 950, dated 27.06.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Pakur vide memo no. 1206/M, dated 20.06.2022 certified that 02 other mining area (4.75 acre & 7.0½ acre) exists within 500 m radius from proposed project site and total mining lease area is 16.32 Acre (more than 5 ha).
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 2196, dated 30.12.2020 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Lake Bird Sanctuary.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. 487, dated 05.03.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC – cum- District Magistrate, Pakur vide letter no. 1412/M, dated 12.08.2021 has informed that this project is part of District Survey Report (DSR) of Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Pakur vide Letter no. 1322, dated 22.06.2020 informed that Gram Sabha conducted on 17.06.2020.
8	Mine Plan Approval	:	DMO, Pakur vide Memo No. 1696/M, dated 24.09.2021
9	Public Hearing	:	JSPCB, Regional Office – cum- Laboratory, Dumka vide letter no. 1310, dated 09.06.2023 informed that Public Hearing conducted on 12.05.2023.

Working Details :

1	Mining Method	:	Opencast Mechanized Mining method
2	Quarry Area	:	5 years– 0.87 ha Life of Mine – 1.27 Ha
3	Waste Generation	:	5 years– 8472 cu.m
4	Stripping Ratio	:	1: 0.02
5	Working Days	:	300

147




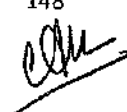


6	Benches: size & No	:	6m x 6 m
7	Elevation of Mine	:	44 AMSL to 46 AMSL
8	Ground Level Elevation	:	44 AMSL
9	Ultimate Working Depth	:	26 AMSL (12 mbgl)
10	Water Table	:	19 AMSL (19 mbgl)
11	Topography of Mine	:	Area represents a flat topography.
12	Explosive Requirement	:	5 T/month
13	Diesel/Fuel requirement	:	95 litre/day

Production Details

Year	Production of stone (Cum)	Production of stone (Tonnes)	Waste Generation (CuM)	Bench RL in Meters
1 st	39063	109376	4621	44 mRL – 45 mRL
2 nd	39039	109309	3851	44 mRL - 45 mRL
3 rd	39032	109290	-	32 mRL - 38 mRL
4 th	39064	109379	-	32 mRL - 38 mRL
5 th	39040	109312	-	26 mRL - 32 mRL
Total	195238	546666	8472	

Land Use

Pattern of Utilization	Existing (Ha)	Plan period(Ha)	Conceptual stage (Ha)
Quarry	-	0.87	1.27 ha (area will be converted into water reservoir)
Haul Road	-	0.03	0.02
Proposed Crusher	-	-	-
Green Belt in safety barrier	-	0.56	0.56
Dump with Parapet wall & Garland Drain	-	0.23	Nil (Waste dump to be removed and backfilled)

A    

Total area in use	-	1.69	1.846
Balances unused Area	1.846	0.156	-
Balance used area	-	-	-
Total applied Lease area	1.846	1.846	1.846

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.56 ha	896
2	Haul /Approach Road	:	0.64 km	640

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

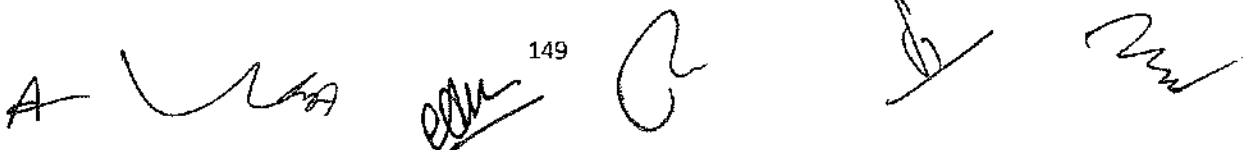
Solid Waste Management

- Waste Generation will be 8472 cum waste during the plan period which will be used for village & haul road maintenance.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 9m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to

149



prevent water flowing into the lease area from outside or from inside the lease area to the outside

- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask e.t.c shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

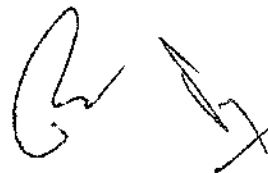
Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

A









- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling is required a permission should be taken from competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Salboni Stone Mine of Sri Ragda Murmu, Mouza : Salboni, Thana no. : 115, Distt. : Pakur, Jharkhand (1.846 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I alongwith following specific condition :

- I. All outgoing trucks carrying stone or any other material are to be covered with Tarpaulin. As evidence of the same, CCTV camera shall be installed at the exit gate of the project. Recording of the same are to be maintained and made available to regulatory bodies as and when required.
- II. Continious online monitoring station for AAQ for PM 10 and PM 2.5 is to be installed in downwind direction. Daily maximum, minimum and mean figures are to be submitted alongwith six monthly compliance report.

- 9. Kuchu Stone Deposit of M/s K V S Mines and Minerals (Partners : (i) Shri Sandeep Kumar Jaiswal (ii) Shri Kundan Hari (iii) Shri Sudhir Kumar Singh (iv) Shri Kumar Vikas Singh), Village : Kuchu, Thana : Angara, Thana no. : 71, Distt. : Ranchi, Jharkhand (1.89 Ha).

(Proposal No. : SIA/JH/MIN/ 436431/2023)

Project Category: B2 – Application for Environment Clearance

EC Application for: Stone: 60,102 Cu.M. / year i.e 1,68,290 Tonnes / year

Name of the Consultant: M/s P & M Solution, Noida -201301 UP.

This is a new project which has been taken for appraisal on 21.07.2023.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Kuchu Stone Deposit of M/s K V S Mines and Minerals.
2	Applicant Address:	: M/s K V S Mines and Minerals

A     

		<p>Partners: 1) Sri Sandeep Kumar Jaiswal At + P.O. - Basia, District – Gumla, State – Jharkhand, Pin code - 835229.</p> <p>2) Sri Kundan Hari At – 48, Radhika Niketan, Namda Basti, Golmuri, Jamshedpur, District – East Singhbhum, State – Jharkhand - 831003.</p> <p>3) Sri Sudhir Kumar Singh At – Blue Sapphire, Flat No. – 3 B, Block – D, Dela Toli, Near Sohrai Bhaban, Harmu, District – Ranchi, State – Jharkhand, Pin code- 834002.</p> <p>4) Sri Kumar Vikash Singh At – House No. B -126, Shivratri, Near Patel Park, Harmu Housing Colony, Harmu, District – Ranchi, State – Jharkhand, Pin code - 834002.</p>
3	Applied Area Address :	In Mouza - Kuchu, Thana – Angara, Thana No. - 71, District - Ranchi, Jharkhand
4	Applied Area	Ha: 1.89 Hectares Acres: 4.67 Acres
5	Type of Land	Non Forest – Raiyati Land
6	Project Cost	56 Lakhs
7	EMP Budget	Capital: 10.17 Lakhs Recurring: 7.19 Lakh / year
8	CSR / CER Budget	Rs. 1.12 Lakhs
9	New or Expansion	New
10	Mineable Reserves	Cu.M.: 3,00,447 Cu. M. Tonnes: 8,41,252 Tonnes
11	Mine Life	5 years
12	Man power	38
13	Water Requirement	18.11 KLD Drinking: 0.38 KLD, Dust Suppression: 7.25 KLD, Plantation: 10.48 KLD
14	Water Source	From nearby authorized sources.
15	DG Set / power	No
16	Crusher	No
17	Nearest Water Body	Subarnarekha River is flowing near about 3.22 Km away in the North direction from the applied area.
18	Nearest Habitation	Kuchu village is situated approx. 0.64 Km aerial distance away in North West direction.
19	Nearest Rail Station	Gautamdihara Railway Station is situated approx. 8.28 Km aerial distance away in South West direction.
20	Nearest Air Port	Birsa Munda Airport, Ranchi, Jharkhand is situated approx. 35.96 Km aerial distance away in South-West direction.
21	Nearest Forest	More than 250m away from the proposed project.
22	Road & Highways	Highway: SH-1 is about 6.08 Km aerial distance away in South West direction.

A     

	Approach Road: Badri Singari Road is about 0.85 Km away.
--	--

CO-ORDINATES

1	Latitude	:	From N23°25'13.09"	To N23°25'17.54"
2	Longitude	:	From E85°39'31.23"	To E85°39'38.32"

LAND DETAILS

Khata No.	90	62
Plot Nos.	1883	1878

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Ranchi vide letter no. 664/M dated 26.05.2023.
2	CO	:	The CO, Angara, Ranchi vide letter no. 313(ii), dated 06.05.2023 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyon or Register II.
3	DMO	:	DMO, Ranchi vide memo no. 734/M, dated 22.06.2023 certified that there is no other lease mine area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO Wild Life, Ranchi vide letter no. 539, dated 09.06.2023 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Ranchi Forest Division vide letter no. 1746, dated 09.05.2023 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC – cum - District Magistrate, Ranchi, vide letter no. 847/M, dated 10.07.2023 has informed that this project is part of District Survey Report (DSR) of Ranchi district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO Angara Vide letter no 589(ii) dated 08.05.2023 has informed that Gram Sabha conducted on 19.04.2023.
8	Mine Plan	:	Approved by the Assistant Mining Officer, Ranchi vide Memo No.

Handwritten signatures and initials: A, [Signature], [Signature], 153, [Signature], [Signature], [Signature]

Approval	684/M dated 09.06.2023.
----------	-------------------------

Working Details

1	Mining Method	:	Opencast Mechanized Mining.
2	Quarry Area	:	5 years – 1.41 Ha
3	Waste Generation	:	5 years–30,003 Cu.M (Gritty Soil & Intercalated Waste)
4	Stripping Ratio	:	1 : 0.09
5	Working Days	:	300 Days
6	Benches: size & No	:	Size: 6m x 6m, No. – 7.
7	Elevation of Mine	:	Highest RL 540m AMSL, Lowest RL 532m AMSL
8	Ground Level Elevation	:	532m AMSL
9	Ultimate Working Depth	:	498m AMSL
10	Water Table	:	488m AMSL
11	Topography of Mine	:	Sloping land.
12	Explosive Requirement	:	28.35 Tons/year
13	Diesel/Fuel requirement	:	42 KL/year (140 Litres/day)

Production Details

Year	Production of stone		Removal of Gritty Soil (Cum)	Intercalated Waste Generation (CuM)	Bench RL in Meters
	(Cum)	(Tonne)			
1st Year	60,090	1,68,251	6982	3162	540m – 528m
2nd Year	60,097	1,68,270	2621	3163	534m – 522m
3rd Year	60,090	1,68,251	000	3162	522m – 498m
4th Year	60,068	1,68,190	4588	3161	540m – 522m
5th Year	60,102	1,68,290	000	3164	522m – 498m
Total	3,00,447	8,41,252	14,191	15,812	

Land Use

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area (Quarry)	Nil	1.41 (including backfilling 0.24 Ha)	1.41 (including backfilling 0.24 Ha)	0.15	Back fill
					0.92	Water body
					0.34	Dead bench Plantation
2	Green Belt	Nil	0.43	0.43	0.43	Plantation

A *WLA* *PCW* *B* *Handwritten signature*

	Within Safety Barrier					
3	Road	0.02	--	--	--	--
4	Blocked area due to road safety	0.05	0.05	0.05	0.05	Plantation
5	Unutilized	1.82	Nil	Nil	Nil	--
	TOTAL	1.89	1.89	1.89	1.89	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area / Length	No of Trees
1	Safety Zone	:	0.43 Ha	1075 trees @ 2500 trees per Ha
2	Haul / Approach Road	:	0.34 Ha	568 trees on both sides – 3m distance
			i.e. Length 0.85 Km width 2m X both side	
3	Blocked Area (due to road safety)	:	0.05 Ha	125 trees @ 2500 trees per Ha
4	Dead Bench	:	0.34 Ha	850 trees @ 2500 trees per Ha

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste (Gritty Soil & Intercalated Waste) Generation will be 30,003 Cu.M. during the life of Mine.
- The area is covered with a layer of gritty soil. During quarry development in 1st & 2nd year gritty soil and intercalated waste will be removed and this will be temporarily dumped [1st year Area – 0.20 Ha, (L x W x H = 60m x 32m x 5m), 2nd year Area – 0.12 Ha, (L x W x H = 65m x 23m x 5m)] at the west part of the area with suitable precautions like constructing parapet wall, garland drain & in 3rd, 4th & 5th year removed soil, intercalated waste & existing dumped soil will be backfilled within the exhausted quarry.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.

A

UWA

155

G

↓

mm

- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the applied area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming :

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The water required for the mining activities shall be supplied by the tanker from nearby authorized sources.
- c. The letter issued in respect of District Survey Report (DSR), is issued by the competent authority. I will abide by any directives issued by any court of law in future.
- d. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard

A











- e. The Boundary Pillars of the proposed mine applied area will be maintained properly.
- f. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- g. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- h. Sufficient water spray using water tankers will be done for effective dust suppression within the mine applied area and on haul roads.
- i. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- j. If any tree felling than necessary permission shall be taken from the competent authority.
- k. Slope of the water bodies to be stabilized using gabion plantation crated at the end of the life of the mine.
- l. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of the life of the mine.
- m. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Kuchu Stone Deposit of M/s K V S Mines and Minerals (Partners : (i) Shri Sandeep Kumar Jaiswal (ii) Shri Kundan Hari (iii) Shri Sudhir Kumar Singh (iv) Shri Kumar Vikas Singh), Villiage : Kuchu, Thana : Angara, Thana no. : 71, Distt. : Ranchi, Jharkhand (1.89 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

10. Purnadih Stone Deposit of M/s Jai Maa Bhadrakali Stone Works, Village : Purnadih, Thana : Nawalsahi, Distt. : Koderma, Jharkhand (0.44 Ha).

(Proposal No. : SIA/JH/MIN/ 436773/2023)

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 5410 cu.m/annum or 15149 TPA

Name of the consultant : P and M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 21.07.2023.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Purnadih Stone Deposit

A

[Handwritten signature]

157
[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

2	Lessee:	:	JAI MAA BHADRAKALI STONE WORKS Partners : 1. Sri Ishwar Saw, 2. Sri Sanjay Yadav, 3. Sri Jamuna Prasad Yadav, 4. Sri Dashrath Yadav, 5. Sri Uma kant Rana Address: Vill- Purnadih, P.O. – Phulwariya, Thana- Nawalsahi, District- Koderma, Jharkhand, Pin Code - 825418
3	Lease Address	:	Village - Purnadih, P.S. – Nawalsahi, District – Koderma, State - Jharkhand
4	Lease Area	:	0.44 ha Acres- 1.08 Acres
5	Type of Land	:	Non- Forest (Raiyati Barren Land)
6	Project Cost	:	Rs. 20 Lakhs
7	EMP Budget	:	Capital: 5.90 Lakhs Recurring: 4.27 Lakh / year
8	New or Expansion	:	New
9	Mineable Reserves	:	cum.: 27018 cum Tonnes: 75651 tons
10	Mine Life	:	5 years (4 years 11 months)
11	Man power	:	25
12	Water Requirement	:	10.85 (Drinking: 0.25 KLD, Dust Suppression: 7.2 KLD, Plantation: 3.4 KLD)
13	Water Source	:	From Nearby villages by tankers
14	DG Set / power	:	200 KVA
15	Crusher	:	No crusher
16	Nearest Water Body	:	Hurrahi Nadi, approx. 0.51 km towards West direction of mine site.
17	Nearest Habitation	:	Purnadih, approx 50 meters towards NW direction.
18	Nearest Rail Station	:	Maheshpur Halt Railway station, approx. 3.40 km towards WNW direction.
19	Nearest Air Port	:	Birsa Munda Airport, approx. 133 km towards South direction.
20	Nearest Forest	:	Phulwariya Protected Forest-Approx. 4.26 km towards NE direction of mine site. Masmohana Protected Forest- Approx 3.29 km towards SW direction of mine site. Partango Protected Forest- Approx 3.30 km towards SW direction of mine site.
21	Road & Highways	:	NH-20, approx. 14.18 km. in West direction. SH-13, approx. 0.90 km. in North direction.

CO-ORDINATES

1	Latitude	From 24° 27' 29.50" N	To 24° 27' 32.91" N
2	Longitude	From 85° 43' 57.82" E	To 85° 44' 02.57" E

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

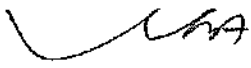
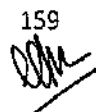
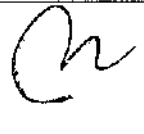


[Handwritten signature]

LAND DETAILS :

Khata No.	Plot No.
59	2840, 2841 & 2842
90	2843
23	2844
163	2845
100	2846 & 2850
295	2847 & 2849
92	2858 (P) & 2859 (P)
256	2860 (P)
118	2848

STATUTORY CLEARANCES:

1	LOI/Lease docs	: The Letter of Intent (LoI) has been issued by DMO, Koderma vide memo no. 1104/M, dated 06.06.2023.
2	CO	: The CO, Domchanch vide letter no. : 380, dated 25.03.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II. As per the CO certificate there are 15 Kacha huts within 500 m. The PAs have submitted an EMP for the people residing in these Kacha huts.
3	DMO	: DMO, Koderma vide memo no. 1192/M, dated 19.06.2023 certified that three other mining lease area (3.00 Acre, 3.40 Acre & 1.00 Acre) exists within 500 m radius from proposed project site and total area is 8.48 Acre.
4	DFO Wild Life	: DFO, Wildlife Hazaribagh vide letter no. : 1329 dated 05.07.2023 certified that the proposed project site is outside Eco Sensitive Zone of Koderma Wildlife Sanctuary.
5	DFO Forest Distance	: DFO, Koderma vide letter no. : 2088, dated 22.05.2023 certified that the distance of reserved / protected forest is 450 m from proposed project site.
6	DSR	: The DC – cum – District Magistrate, Koderma vide letter no. 1143/M, dated 12.06.2023 has informed that this project is part of District Survey Report (DSR) of Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.

A   159   

7	Gram Sabha	:	Gram Sabha conducted on 15.04.2023.
8	Mine Plan Approval	:	District Mining Office, Koderma vide memo no. 1267/M, dated 04.07.2023.

Working Details

1	Mining Method	:	Opencast Mechanised method
2	Quarry Area	:	0.20 Ha
			Life of Mine – 5 years (4 years 11 months)
3	Waste Generation	:	2712 cum or 7593.6 tons
4	Stripping Ratio	:	1: 0.052
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	362 AMSL to 366 AMSL
8	Ground Level Elevation	:	362 AMSL
9	Ultimate Working Depth	:	354 AMSL
10	Water Table	:	342 AMSL (20mbgl)
11	Topography of Mine	:	Area represents a gently sloping land.
12	Explosive Requirement	:	70 kg/day
13	Diesel/Fuel requirement	:	70 litre/day

Production Details

Year	Production of stone (Cum)	Production of stone (Tonnes)	Removal of Gritty Soil (cum)	Intercalated Waste in (cum)	Bench RL in Meters
1 st	5410	15149	270	285	366-360
2 nd	5398	15114	390	284	366-360
3 rd	5410	15149	630	285	366-360
4 th	5390	15090	000	283	360-354
5 th	5410	15149	000	285	360-354
Total	27018	75651	1290	1422	

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Quarry	--	0.20	0.20 (entire area converted into water reservoir)
Road	0.006	--	--
Safety Zone	-	0.24 (Plantation)	0.24 (Plantation)
Total	0.006	0.44	0.44
Balance	0.434	-	-
Lease Hold Area	0.440	0.44	0.44

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.24 ha	600
2	Along Approach Road	1.0 km	1000
3	In consulting local authorities	-	100

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

There is 2712 cum waste generated during this Mining Plan period. During quarry development in 1st, 2nd & 3rd year little amount of gritty soil and intercalated waste will be removed and this will be used in haul road dressing.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of

A

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.






- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask e.t.c shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

A     

- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as protecting clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Purnadih Stone Deposit of M/s Jai Maa Bhadrakali Stone Works, Village : Purnadih, Thana : Nawalsahi, Distt. : Koderma, Jharkhand (0.44 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

11. Golpur Stone Mine of M/s Grands Mining Works, Village : Golpur, P.O. : Khakhsa, P.S. : Pakuria, Distt. : Pakur, Jharkhand (14.43 Ha).

(Proposal No. : SIA/JH/MIN/ 436773/2023)

This is an application for expansion of production of existing mine for which EC was granted vide letter no. EC/SEIAA/2015-16/754/2015/1521, dated 25.08.2015.

During the presentation, the PAs could not provide certified production report for the period from the grant of previous EC to current period.

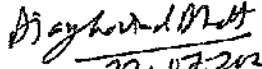
A current cluster report from the DMO is also to be submitted.

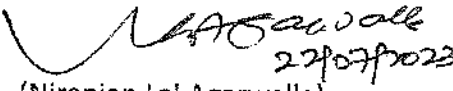
Hence, the project will be taken up for consideration after compliance of the above.

The page contains five handwritten signatures in black ink, arranged horizontally from left to right. The signatures are stylized and appear to be official approvals.

The meeting concluded with thanks to all present.



(Dr. Raju Kumar)
Member


22.07.2023
(Dr. Ajay Govind Bhatt)
Member


22/07/2023
(Niranjana Lal Agarwalla)
Member


22/7/23
(Dr. Kirti Avishek)
Member


(Srikant Verma)
Secretary


22/07/2023
(Ashok Kumar Singh)
Chairman

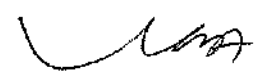
I. Statutory compliance

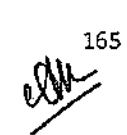
- i. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- ii. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- iii. The Project proponent complies with all the statutory requirements and judgement of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- iv. The Hon'ble Supreme Court vide order dated 08.01.2020 in W.P. (Civil) No.114/2014 in the matter of Common Cause vs. Union of India has directed that the area which has been mined should be restored so that grass and other vegetation including trees can grow in the mining area for the benefit of animals.

"The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

- v. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgement of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
- vi. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- vii. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- viii. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.
- ix. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP

A



165













- shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.
- x. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
 - xi. The Project Proponent shall follow the mitigation measures provided in MoEF&CC's Office Memorandum No. Z-11013/57/2014-IAJI (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
 - xii. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
 - xiii. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
 - xiv. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
 - xv. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.Environmentclearance.nic.in). A copy of the advertisement may be forwarded to the concerned MoEF & CC Regional Office for compliance and record.
 - xvi. The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

- i. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2; CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCUI, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.

A     

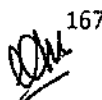
- ii. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance: Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF&CC/ Central Pollution Control Board.

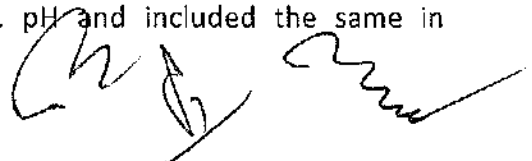
III. Water quality monitoring and preservation

- i. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF&CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- ii. Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- iii. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- iv. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in

A



 167



monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.

- v. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination. in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IAII (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
- vi. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.
- vii. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
- viii. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

- i. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- ii. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.

A












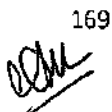


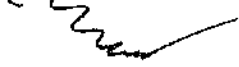
- iii. The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

V. Mining Plan

- i. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
- ii. The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.
- iii. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.

VI. Land reclamation

- i. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to

A   169   

- maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
- ii. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
 - iii. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
 - iv. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
 - v. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.
 - vi. Catch drains, settling tanks and ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
 - vii. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
 - viii. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VII. Transportation

- i. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of

A

WMA

PP

B

↓

PP

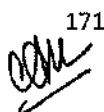
transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.

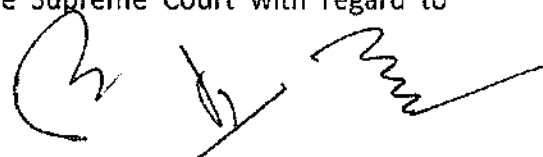
- ii. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

VIII. Green Belt

- i. The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
- ii. The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
- iii. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to

A 

171




- acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
- iv. The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
 - v. And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

IX. Public hearing and human health issues

- i. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.
- ii. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
- iii. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records

A     

- of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).
- iv. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.
 - v. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
 - vi. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
 - vii. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

X. Corporate Environment Responsibility (CER)

- i. The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the

A

USA

173
CER

R

dy

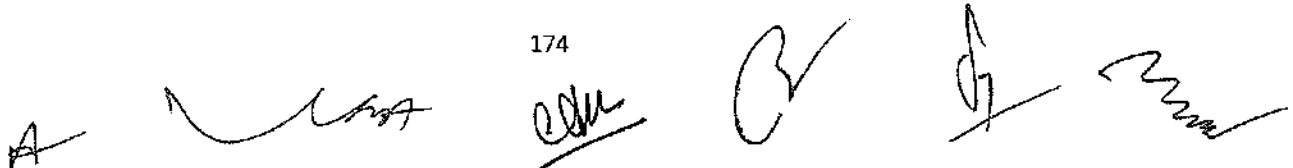
2018

same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.

- ii. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF&CC and its concerned Regional Office.

XI. Miscellaneous


- i. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
- ii. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- iii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.
- iv. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
- v. The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
- vi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- vii. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- viii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- ix. The Environmental Clearance accorded shall be valid for the period of lease of the mine. The PP shall not increase production rate and alter lease area during the validity of Environmental Clearance.

The bottom of the page features several handwritten signatures and initials. From left to right, there is a simple 'A', a cursive signature, a signature that appears to be 'S.M.', a large stylized 'B', a signature that looks like 'G', and another cursive signature.

- x. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

A 



Ch 

The TORs prescribed for undertaking detailed EIA study are as follows:

A. Standard Terms of Reference

1. Executive Summary

2. Introduction

- i. Details of the EIA Consultant including NABET accreditation.
- ii. Information about the project proponent
- iii. Importance and benefits of the project

3. Project Description





- i. Cost of project and time of completion.
- ii. Products with capacities for the proposed project.
- iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other chemicals and materials required with quantities and storage capacities
- vi. Details of Emission, effluents, hazardous waste generation and their management.
- vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
- ix. Hazard identification and details of proposed safety systems.
- x. Expansion/modernization proposals:

a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment, Forest and Climate Change as per OM no. F.no. IA3-22/10/2022-IA.III [E 177258], dated 08th June, 2022 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing / existing operation of the project from SPCB shall be attached with the EIA-EMP report.

b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification, 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

A   B  

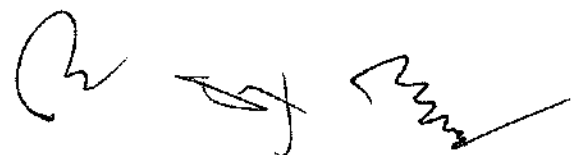
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Details w.r.t. option analysis for selection of site
- iv. Co-ordinates (lat-long) of all four corners of the site. .
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy

5. Forest and wildlife related issues (if applicable):

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area

A 

 177



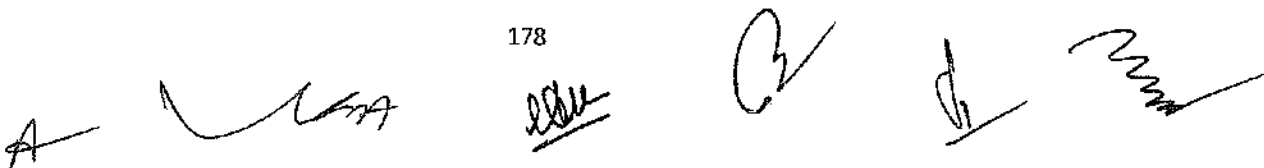
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6. Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule- I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

7. Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - In case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw

The bottom of the page features several handwritten signatures and initials in black ink. From left to right, there is a signature that appears to be 'A', a signature that looks like 'USA', a signature that is partially obscured and possibly 'ESU', a signature that is a large 'B', a signature that is a large 'S', and a signature that is a large 'M'.

materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor- cum-rail transport shall be examined.

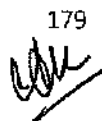
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control.
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 2500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,

A



179






iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

9. Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11. Enterprise Social Commitment (ESC)

- i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13. A tabular chart with index for point wise compliance of above TOR.

B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR METALLURGICAL INDUSTRIES (FERROUS & NON FERROUS)

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
3. Details on installation/activation of opacity meters with recording with proper calibration system
4. Details on toxic metals including mercury, arsenic and fluoride emissions
5. Details on stack height requirement for integrated steel
6. Details on ash disposal and management -Non-ferrous metal

A











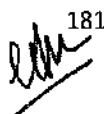
7. Complete process flow diagram describing production of lead/zinc/copper/ aluminium, etc.
8. Raw materials substitution or elimination
9. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
10. Details on Holding and de-gassing of molten metal from primary and secondary aluminum, materials pre-treatment, and from melting and smelting of secondary aluminium
11. Details on solvent recycling
12. Details on precious metals recovery
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
15. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
16. Trace metals in waste material especially slag.
17. Plan for trace metal recovery
18. Trace metals in water

C. Other

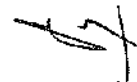
1. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered.
2. The Prescribed ToRs is valid as per O.M. F. No. IA3-22/10/2022-IA.III[E177258], dated 08.06.2022. of MoEF&CC, Govt. of India.

A



 181







I. Statutory Compliance

- i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightening etc.
- iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- v. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- vi. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- vii. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- viii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- ix. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- x. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- xi. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.

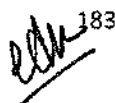
A



- xiii. Provision of drinking water, waste water disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.
- xiv. All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.
- xv. All vehicles/equipment deployed during construction phase shall be ensured in good working condition and shall conform to applicable air and noise emission standards. These shall be operated only during non-peaking hours.
- xvi. Accumulation/stagnation of water shall be avoided ensuring vector control.
- xvii. Water during construction phase should be preferred from Municipal supply.
- xviii. Unskilled construction labourers shall be recruited from the local areas.
- xix. Monitoring of ground water table and quality once in three months shall be carried out. Construction of tube wells, bore wells shall be strictly regulated.
- xx. Adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.
- xxi. Rest room facilities shall be provided for service population.
- xxii. Water body falling within premises (if any) shall not be lined or no embankment shall be cemented. The water bodies, if any, shall be kept in natural conditions without disturbing the ecological habitat.
- xxiii. Construction shall conform to the requirements of local seismic regulations. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications of all construction work from concerned authority.

II. Air quality monitoring and preservation

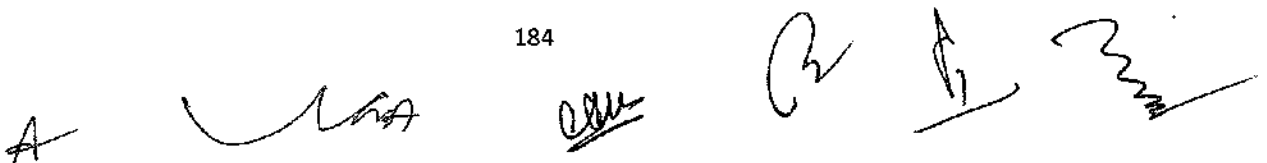
- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.



- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation

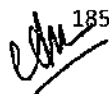
- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

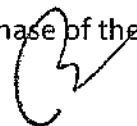
The bottom of the page features several handwritten signatures and initials in black ink. From left to right, there is a large capital letter 'A', a signature that appears to be 'M.A.', a signature that appears to be 'R.M.', a signature that appears to be 'R.', a signature that appears to be 'A.', and a signature that appears to be 'M.M.'.

- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.

A



 185







- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xviii. No sewage or untreated effluent water would be discharged through storm water drains.
- xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed based on the MBBR/MBR/SBR technology. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention

- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- ii. Outdoor and common area lighting shall be LED.
- iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
- vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

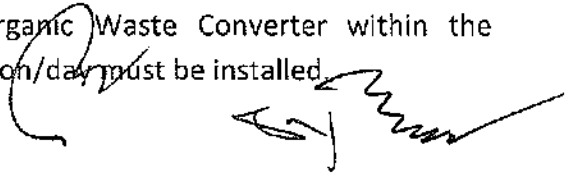
VI. Waste Management

- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.

A



 187



- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover

- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
- ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

A











VIII. Transport

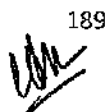
- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - b. Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation
- ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

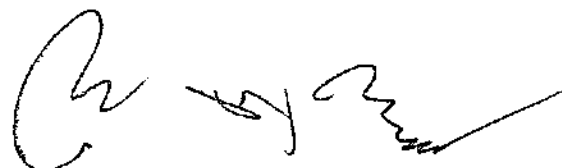
IX. Human Health Issues

- i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- ii. For indoor air quality the ventilation provisions as per National Building Code of India.
- iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Occupational health surveillance of the workers shall be done on a regular basis.
- vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

A




189

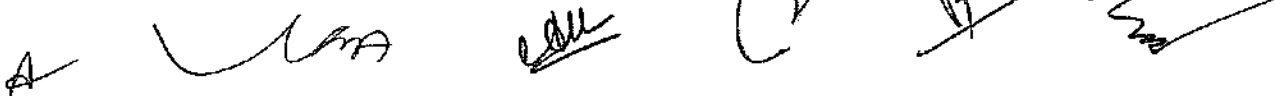


X. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Miscellaneous

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the

The bottom of the page features several handwritten signatures and initials in black ink. From left to right, there is a small 'A', a signature that appears to be 'VMA', a signature that looks like 'edu', a large stylized 'B', a signature that looks like 'S', and a signature that looks like 'M'. The signatures are scattered across the bottom of the page, some overlapping.

Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

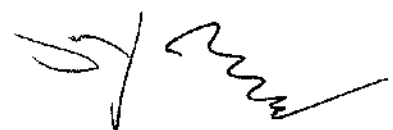
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.
- xvi. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.

A









EC Conditions for Open Cast Coal Mine.

- I. **Statutory compliance**
 - i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
 - ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
 - iii. The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
 - iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
 - v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
 - vi. The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
 - vii. Solid waste/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016 as amended from time to time.
- II. **Air quality monitoring and preservation**
 - i. Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring






The bottom of the page features several handwritten signatures and initials in black ink. From left to right, there is a large 'A', a signature that appears to be 'A. S.', a signature that appears to be 'S. S.', a signature that appears to be 'C. S.', a signature that appears to be 'S. S.', and a signature that appears to be 'S. S.'.

stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.

- ii. The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- iii. Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water / mist sprinkling / rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM2.5) such as haul road, loading/ unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- iv. The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- v. Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- vi. Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- vii. Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

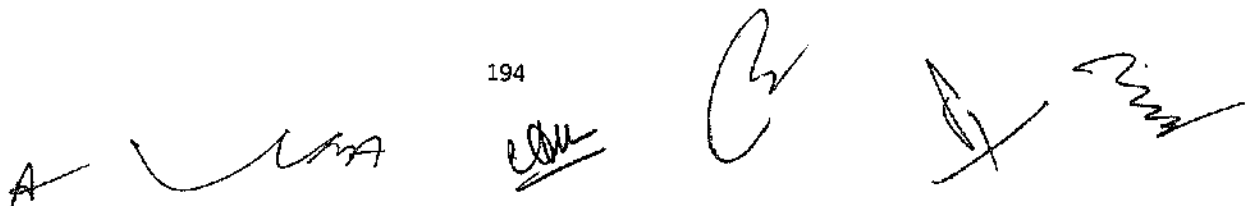
III. Water quality monitoring and preservation

- i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-1A.II (M) dated

A   193   

27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.

- iii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- iv. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change / Regional Office.
- v. Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
- vi. Catch and or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.
- vii. Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
- viii. Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP / STP needs to be provided.
- ix. The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.

The bottom of the page features several handwritten signatures and initials in black ink. From left to right, there is a signature that appears to be 'A', followed by a signature that looks like 'MA', then a signature that looks like 'CAU', a large stylized signature that looks like 'Ch', a signature that looks like 'A', and finally a signature that looks like 'Sind'.

- x. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.
- xi. The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A reverian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

IV. Noise and Vibration monitoring and prevention

- i. Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs / muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
- ii. Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.
- iii. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

V. Mining Plan

- i. Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- ii. Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- iii. No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980
- iv. Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

A



195






VI. Land reclamation

- i. Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEF&CC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- ii. The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural /forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
- iii. The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining" / "post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.
- iv. Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
- v. Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.
- vi. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

VII. Green Belt

- i. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be

The bottom of the page features several handwritten signatures and initials in black ink. From left to right, there is a simple 'A', a signature that appears to be 'S. M.', a signature that appears to be 'S. M.', a signature that appears to be 'S. M.', a signature that appears to be 'S. M.', and a signature that appears to be 'S. M.'.

prepared and implemented in consultation with the State Forest and Wildlife Department.

- ii. Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/coal transportation roads.

VIII. Public hearing and Human health issues

- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six-monthly basis.
- ii. The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.
- iii. Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- iv. Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- v. The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.1 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation / violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements /

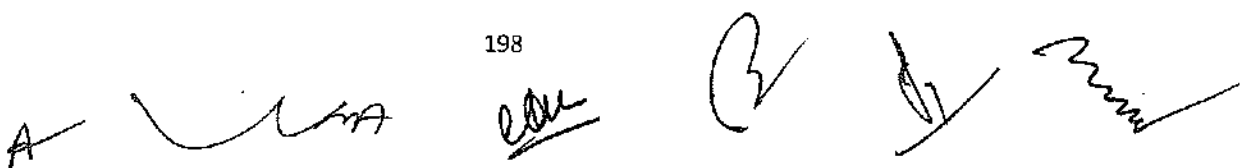
A *U* *197* *Ch* *S* *M*

deviation / violation of the environmental / forest / wildlife norms / conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

A series of handwritten signatures and initials in black ink, including a large 'A', a signature that appears to be 'M.A.', a signature that appears to be 'R.A.', a signature that appears to be 'B', a signature that appears to be 'S', and a signature that appears to be 'M.A.'.

- vi. The project proponent shall submit the environmental statement for each financial year in Form- V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EEMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false / fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010
- xvii. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.



EC Conditions for Under Ground Coal Mine.

I. Statutory Compliance

- i. The Environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, NGT and any other Court of Law, from time to time, and as applicable to the project.
- ii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- iii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iv. The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area).
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- vi. The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- vii. Solid waste/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016.

II. Air quality monitoring and preservation

- i. Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. to be carried out at least once in six months. Online ambient air quality monitoring station/stations may also be installed in addition to the regular air monitoring stations as per the requirement and/or in consultation with the SPCB.
- ii. The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25.9.2000

and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.


- iii. Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water sprinkling/rain gun/ mist sprinkling etc., shall be carried out in critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- iv. Major approach roads shall be black topped and properly maintained.
- v. The transportation of coal shall be carried out as per the provisions and route proposed in the approved mining plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed that the impact of sound, dust and accidents could be appropriately mitigated.
- vi. Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centers.
- vii. Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- viii. Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

III. Water quality monitoring and preservation

- i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-1A.11 (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- iii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and

A



201






- constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEF&CC/RO.
- iv. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
 - v. Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
 - vi. The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river / nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.
 - vii. Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff.
 - viii. The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
 - ix. Industrial waste water from coal handling plant and mine water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder, and as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste water.
 - x. Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
 - xi. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations shall be prepared, considering the presence of any river/rivulet/pond/lake etc., with impact of mining activities on it, and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan/ EIA-EMP submitted to this Ministry and



the same should be done with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS.

- xii. The project proponent shall take all precautionary measures to ensure reverian / riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

IV. Noise and Vibration monitoring and prevention

- i. Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in underground mining operations, operation of HEMM, etc. shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms/guidelines in this regard. Progress in usage of such accessories to be monitored. Adequate awareness programme for users to be conducted.
- ii. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

V. Mining Plan

- i. Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- ii. No change in mining method *i.e.* UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
- iii. Mining shall be carried out as per the approved mining plan (including mine closure plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- iv. Underground work place environmental conditions shall be rendered ergonomic and au breathable with adequate illumination in conformance with DGMS standards.
- v. No mining activity shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.
- vi. Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

A



203








VI. Land reclamation

- i. Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- ii. Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective State Government, as specified in the Guidelines for Preparation of Mine Closure Plan, issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
- iii. Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil/suitable material.
- iv. Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, alongwith fly ash for external dump of overburden, backfilling or stowing of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
- v. A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuous monitoring & implementation of mitigation measures be carried out.
- vi. Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of water in the mine.
- vii. Native tree species shall be selected and planted over areas affected by subsidence.
- viii. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

VII. Green Belt

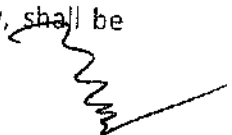
- i. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted/reported in the study area. Action plan, in this regard, if any, shall be

A 









prepared and implemented in consultation with the State Forest and Wildlife Department.

- ii. Greenbelt, consisting of three-tier plantation, of width not less than 7.5 m, shall be developed all along the mine lease area in a phased manner. The green belt comprising of a mix of native species shall be developed all along the major approach roads/ coal transportation roads.

VIII. Public hearing and Human health issues

- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored.
- ii. The Project Proponent shall undertake Occupational Health survey for initial and Periodical medical examination of the workers engaged in the Project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS Circulars. Besides carrying out regular periodic health check-up of their workers, 20% of the workers engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any.
- iii. Personnel (including outsourcing employees) working in dusty areas shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- iv. Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.
- v. Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.
- vi. Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing. Land oustees shall be compensated as per the norms laid out R&R Policy of the Company/ or the National R&R Policy/ R&R Policy of the State Government, as applicable.
- vii. The project proponent shall follow the mitigation measures provided in this Ministry'S OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.



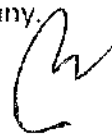
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental/forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

I. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

A 









- vi. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India./ High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- xvi. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.

A



 207







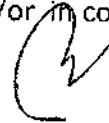
EC Conditions for Coal Washery

1. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- vi. Solid waste/hazardous waste generated in the washery needs to be addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016.
- vii. Coal beneficiation practices shall be carried out under strict adherence to provisions of the Factories Act, 1957 and subordinate legislations made there under.

2. Air quality monitoring and preservation

- i. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16th November, 2009 shall be complied with.
- ii. Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. carried out at least once in six months.
- iii. Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM₁₀, PM_{2.5}, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the




SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.


- iv. Transportation of coal by road shall be carried out by covered trucks/conveyors. The transportation of clean coal and rejects shall be by rail with wagon loading through silo. Effective measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulates such as roads, belt conveyors, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled at source. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board
- v. All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned. Coal transportation shall be carried out by covered trucks.
- vi. Covered trucks shall be engaged for mineral transportation outside the washery upto the railway siding, shall be optimally loaded to avoid spillage en-route. Trucks shall be adequately maintained and emissions shall be below notified limits.
- vii. Facilities for parking of trucks carrying raw material from linked mine shall be created within the unit.
- viii. Vehicular emissions shall be kept under control and regularly monitored. The vehicles having 'PUC' certificate from authorized pollution testing centres shall be deployed for washery operations.
- ix. Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
- x. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.
- xi. The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.

3. Water quality monitoring and preservation

- i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-IA.11 (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for compliance.

A



209








- iii. Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time.
- iv. The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the washery. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side stabilised with plantation so as to withstand the peak water pressure preventing any chance of inundation.
- v. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.
- vi. The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run off from reject dumping sites.
- vii. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.
- viii. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.
- ix. Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.
- x. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m³/tonne of raw coal.
- xi. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- xii. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.
- xiii. The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

A

MA

RDU

B

↓

~~~~~

#### 4. Noise and Vibration Monitoring and Prevention

- i. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.
- ii. Adequate measures shall be taken for control of noise levels as per noise pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

#### 5. Coal beneficiation

- i. Coal stacking plan shall be prepared separately for raw coal, clean coal, middling and rejects.
- ii. Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.

#### 6. Green Belt

- i. Three tier greenbelt comprising of a mix of native species, of minimum 30 m width shall be developed all along the washery area to check fugitive dust emissions and to render aesthetic to neighbouring stakeholders. A 3-tier green belt comprising of a mix of native species or tree species with thick leaves shall be developed along vacant areas, storage yards, loading/transfer points and also along internal roads/main approach roads.
- ii. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

#### 7. Public Hearing and Human Health issues

- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six- monthly basis.
- ii. The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any. as amended time to time.
- iii. Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- iv. Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the

action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.

- v. The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

## 8. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental/forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry / Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

## 9. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.



- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIAJEMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No change in coal beneficiation process and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC) with such conditions mentioned therein. No change in the maximum quantum of raw material feed per annum against the approved washery capacity shall be made.
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders

A



213  








passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- xvii. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.



A

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

**I. Statutory compliance:**

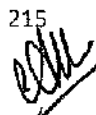
- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- vi. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

**II. Air quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31<sup>st</sup> March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015(Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

A



215  








- iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)
- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six- monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after *briquetting*/ agglomeration.
- ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.
- xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

### III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF / EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)

A













- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31<sup>st</sup> March 2012 (applicable to IF/EAF) as amended from time to time.
- vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

#### IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB (A) during day time and 70 dB(A) during night time.

#### V. Energy Conservation measures

- i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- ii. Practice hot charging of slabs and billets/blooms as far as possible.
- iii. Ensure installation of regenerative type burners on all reheating furnaces.

- iv. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- v. Provide the project proponent for LED lights in their offices and residential areas.

#### VI. Waste management

- i. Used refractories shall be recycled as far as possible.
- ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The waste oil, grease and other hazardous waste shall be disposed of as per the
- v. Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- vi. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

#### VII. Green Belt

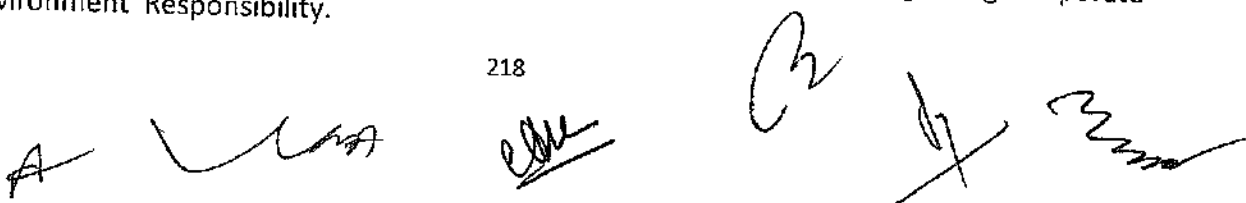
- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

#### VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

#### IX. Corporate Environment Responsibility






- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.

The bottom of the page features several handwritten signatures and initials in black ink. From left to right, there is a large 'A', a signature that appears to be 'V. S.', a signature that appears to be 'R. S.', a signature that appears to be 'Ch', a signature that appears to be 'S.', and a signature that appears to be 'M. S.'.

- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry / Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.
- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

#### X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters,

A   219   

indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false / fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other



orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

**C. Other Conditions:**

- i. The Authority reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority or for that matter for any other Administrative reason.
- ii. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.
- iii. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.

A



221  



