PROFORMA FOR ENVIRONMENTAL APPRAISAL OF MINING PROJECTS

(MINING SECTOR PROJECTS)

Note 1: All information to be given in the form of Annex/s should be properly numbered and form part of reply to this Performa.

Note 2: Please enter √ in appropriate box where answer is Yes / No

Note 3: No abbreviation to be used - **Not available** or **Not applicable** should be clearly mentioned.

Note 4: **Core zone** is the mining lease area.

Buffer zone in case of ML area up to 25 ha is to be considered as **5 km** all around the periphery of the core zone and for ML area above 25 ha an area **10 km** all around the periphery of the core zone.

Note 5: Adopt **Scoping process** in carrying out EIA study.

1.	**General information**	
a	Name of the project	Sand Mining Project Block- 06 (Milky/Chilaungiya) Sand Ghat on Sakri River (40.5 ha) for a Peak Production of 8,74,800 TPA at Village-Milky/Chilaungiya, District-Nawada, Bihar
I	Name of the proponent	Hans Indhan Kendra, Prop.- Raju Raj S/o- Rameshwar Prasad
ii	Mailing Address	Hans Indhan Kendra, Prop.- Raju Raj S/o- Rameshwar Prasad R/o Bardaha, P.O. - Manjhauli, P.S- Sirdala, Dist.- Nawada, Bihar- 805127.
	E-mail	
	Telephone	-
	Fax No.	-
b	Objective of the project	Mining of Sand
c	**Location of mine (Buffer Map is attached as Annexure-I)**	
	Village	Milky/Chilaungiya
	Tehsil	-
	District	Nawada
	State	Bihar

d	Does the proposal relate to	**Yes**	**No**
i	New mine	√	-
ii	Expansion	-	√
iii	Increase in ML area	-	√
iv	Increase in annual production	-	√
v	Renewal of ML	-	√
vi	Modernization	-	√
e	Site Information		
i	Geographical Location		
	Latitude/Longitude		

Pillar	Latitude	Longitude
A	24°56'55.56"N	85°36'14.54"E
B	24°56'50.28"N	85°36'27.49"E
C	24°57'21.19"N	85°36'45.76"E
D	24°57'26.56"N	85°36'32.75"E

	Survey of India Topo sheet number	G45/N12	
	Elevation above Mean Sea Level	-	
	Total mining lease area (in ha.)	40.5 ha	
ii	Dominant nature of terrain	**Yes**	**No**
	Flat	√	-
	Undulated	-	√
	Hilly	-	√
2.	**Land usage of the mining lease area (in ha.)**		
a	Agricultural	-	
b	Forest (Jungle-jhari)	-	
c	Waste land (G.M.Land)	--	
d	Grazing	--	
e	Surface water bodies	--	
f	Others (River Bed)	40.5 ha	
g	Others (Road)	--	
	Total	40.5 ha	
3.	**Indicate the seismic zone in which ML area falls. In case of zone IV & V, details of earth quakes in last 10 years.**	Seismic Zone– III	
a	Severity (Richter Scale)		
b	Impact i.e. Damage to	**Yes**	**No**
	Life	-	√
	Property	-	√
	Existing mine	-	√

4. Break-up of mining lease area (in ha.) as per approved conceptual plan:

Purpose	Mining Lease Area				Total	Area acquired				Area to be acquired			
	Government		Private			Government		Private		Government		Private	
	Forest	Others	Agri.	Others		Forest	Others	Agri	Others	Forest	Other	Agri.	Others
1. Area to be excavated	-	40.5	-	-	40.5	-	40.5	-	-	-	-	-	-
2. Storage for top soil	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Overburden / Dumps	-	-	-	--	--	-	-	-	--	-	-	-	-
4. Mineral storage	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Infrastructure (Workshop, Administrative Building)	-	-	-	--	--	-	-	-	--	-	-	-	-
6. Roads	-	-	-	-	-	-	-	-	-	-	-	-	-
7. Railways	-	-	-	-	-	-	-	-	-	-	-	-	-
8. Green Belt	-	-	-	-	-	-	-	-	-	-	-	-	-
9.Parapet wall	-	-	-	--	--	-	-	-	--	-	-	-	-
10.Garland Drain	-	-	-	--	--	-	-	-	--	-	-	-	-
11.Coal handling plant / mineral separation plant	-	-	-	--	--	-	-	-	--	-	-	-	-
12. Township area	-	-	-	-	-	-	-	-	-	-	-	-	-
13.Other (Land unused)	-	-	-	--	--	-	-	-	--	-	-	-	-
TOTAL	-	40.5	-	-	40.5	-	40.5	-	-	-	-	-	-

5	**Township (outside mining lease)**	**Not Applicable**
a	Total area (in ha)	**-**
b	No. of dwelling units	**-**
c	Distance from mine site	**-**

6	**Distance of water bodies (in km)**	
Distance from	River Bank *	Other Water bodies * Sea / creek / lake / nalla etc. (specify)
Mining lease boundary	It is a river bed mining	-
Ancillary facilities	**-**	**-**
[* From highest flood line / high tide line]		

7	For projects falling within the Coastal Regulation Zone (CRZ)				
	Whether the mineral to be mined is of rare nature and not available outside CRZ?	**No**	**-**	**No**	-

if yes, annex a scaled location map showing low tide line (LTL), high tide line (HTL) duly demarcated by one of the authorized agencies* [*Director, Space Application Centre, Ahmedabad: Centre for Earth Sciences Studies, Thiruvananthapuram: Institute of Remote Sensing, Anna University, Chennai: Institute of Wetland Management & Ecological Designs, KolKata: Naval Hydrographers's Office, Dehradun: Sakrional Institute of Oceanography, Panjim, Goa: and Sakrional Institute of Ocean Technology, Chennai], boundary of mining lease area, distance of ML area from LTL and HTL CRZ boundary and CRZ classification of the project area as per the approved Coastal Zone Management Plan, and settlements, sand dunes, mangroves, forest land/patches, turtles breeding and nesting sites etc., if any, in the project area.

8	**Indicate aerial distance from the periphery of core zone / area from the periphery of the buffer zone to the boundary of following (up to 10 km):**			
S. No.	Area	Name	Aerial distance from (in km.)	
			Core Zone	Buffer Zone
1.	Sakrional Park / Sanctuary	Nil	-	-
2.	Biosphere Reserve / Tiger Reserve / Elephant Reserve / any other Reserve	Nil	-	-
3.	Forest (RF / PF / unclassified)	• PF	-	• 8.20 km
4.	Habitat for migratory birds	Nil	-	-
5.	Corridor for animals of schedule I & II of the Wildlife (Protection) Act, 1972	Nil	-	-

6.	Archaeological sites * Notified * Others	Nil	-	-
7.	Defence Installation	Nil	-	-
8.	Industries / Thermal Power Plants	Nil	-	-
9.	Other Mines	-	-	-
10.	Airport	JPN International Airport, Patna	-	88 Km in NW
11.	Railway Lines	Baghi Bardiha Railway, Bihar	-	4.3 Km in SE
12.	National / State Highways	SH-83	-	670 m in E
[* Buffer zone in case of ML area up to 25 ha. is to be considered as **5 km** all around the periphery of the core zone and for ML area above 25 ha. an area **10 km** all around the periphery of the core zone].				

9. Description of flora & fauna separately in the core and buffer zones.*

[* Consult the Wildlife (Protection) Act, 1972 as amended subsequently and list species with (1) Common name (2) Scientific name and (3) under which schedule of the Wildlife (Protection) Act the identified species fall. Get the list authenticated by an Expert in the field / credible scientific institute / University / Chief Wildlife Warden Office. **Information to be based on field survey.]**

Kindly refer annexure-II for details.

10	**Details of mineral reserves (as per approved Mining Plan)**	Quantity (in cum)	
a	Proved	8,10,000 cum	
b	Indicated	-	
c	Inferred	-	
d	Mineable reserves	7,51,234 cum	
11	**Major geological formation / disturbances in the mining lease area**	**Yes**	**No**
a	Geological maps submitted **(Annexure-III)**	√	**-**
b	Geological sections submitted **(Annexure-III)**	-	√
c	Contour map submitted **(Annexure-IV)**	-	√
d	Whether the presence, if any, noted of		
I	Faults	**-**	√
Ii	Dykes	**-**	√
Iii	Shear Zone	**-**	√
Iv	Folds	**-**	√
V	Other weak zones	**-**	√
e	Source of data (Indicate)	-	
12	**Production of mineral(s) and life of mine**		
a	Rated capacity of mine mineral wise (Tonnes / annum)	8 74,800 TPA	
b	Life of mine at proposed capacity (Years)	-	
c	Lease period (Years)	5 years	
d	Date of expiry of lease (D /M /Y)	-	
e	Indicate in case of existing mines	-	
i	Date of opening of mine	After environmental clearance	

ii	Production in the last 5 years 1st year 5thyear from year 2006-07 to year 2010-2011in million tonnes.	-
iii	Projected production for the next 6th to 10th year 5 years from year 2011-12 to year 2014-15.in million tonnes.	-
iv	Whether mining was suspended after opening of the mine?	**-**
v	If yes, details thereof including last production figure and reason for the same.	-
f	Whether plans & sections provided?	**Yes (Annexure-V)**
13	**Type and method of mining operations**	

TYPE		**METHOD**	
Opencast	√	Manual	**-**
Underground	-	Mechanized	**-**
Both	-	Semi-mechanized	√

14	**Details of ancillary operations for mineral processing**	
a	Existing	Not applicable
b	Additional	Not applicable
15	**Mine details**	
a	**Opencast mine**	
i	Stripping ratio (mineral in tonnes to over burden in m^3)	--
ii	Ultimate working depth (in m bgl)	2.0 m (maximum)
iii	Indicate present working depth in case of existing mine (in m bgl)	-
iv	Thickness of top soil (in m.)	-
a	Minimum	--
b	Maximum	--
c	Average	--
v	Thickness of overburden (in m.)	--
a	Minimum	--
b	Maximum	--
c	Average	--
vi	Mining Plan	
a	Height and width of the bench in overburden / waste.	--
b	Height & width of the bench in ore body / coal seam.	-
c	Proposed incliSakrion / slope of the sides of the opencast mine (separately for overburden, coal / ore and overall slope of the pit sides) both while operating the mine as well as at the time of closure of the mine.	-
d	Whether transverse sections across the opencast mine at the end of fifth year and at the end of the life of the mine have been	Yes

	submitted?		
vii	Type of blasting, if any, to be adopted	-	
b	Underground mine-	**Not Applicable**	
i	Seam / Ore body		
	Min. Depth (m)	-	
	Max. Depth (m)	-	
	Avg. thickness (m)	-	
	Rate of dip	-	
	Direction of dip in degree	-	
ii	Mode of entry into the mine		
	Shaft	-	
	Adit	-	
	Incline	-	
iii	Details of machinery		
	On surface	-	
	At Face	-	
	For transportation	-	
	Others	-	
iv	Method of stopping		
	Open	-	
	Filled	-	
	Shrinkage	-	
	Caving	-	
	CombiSakrion of above	-	
	Others (Specify)	-	
v	Extraction method		
	Caving	-	
	Stowing	-	
	Partial extraction	-	
vi	Subsidence		
	Predicted max. subsidence (in m)	-	
	Max. value of tensile strain (in mm/m)	-	
	Max. slope change (in mm/m)	-	
	Whether identified possible subsidence area(s) superimposed on Surface Plan has been submitted?	-	
	Major impacts on surface features like natural drainage pattern, houses, buildings, water bodies, roads, forest, etc.	-	
	Salient features of subsidence management (monitoring and control).	-	
16	**Surface drainage pattern at mine site**	**Yes**	**No**
a	Whether the pre-mining surface drainage plan submitted?	-	√

b	Do you propose any modification / diversion in the existing natural drainage pattern at any stage? If yes, when. Provide location map indicating contours, dimensions of water body to be diverted, direction of flow of water and proposed route / changes, if any i.e. realignment of river / nallah / any other water body falling within core zone and its impact	-	√
17	**Embankment and / or weir construction**		
a	Do you propose, at any stage, construction of		
i	Embankment for protection against flood?	No	
ii	Weir for water storage for the mine?	No	
b	If so, provide details thereof.	-	
c	Impact of embankment on HFL and settlement around.	-	
d	**Impact of weir on downstream users of water**	-	

18	Vehicular traffic density (**outside the ML area**)			
		Type of vehicles	No. of vehicles per day (in PCU)	
a	Existing	Car, Jeep , Truck	SH 83- 2085	
b	After the proposed activity	Car, Jeep , Truck	SH 83- 3057	
c	Whether the existing road network is adequate?		Yes	
	If no, provide details of alterSakrive proposal?		-	
19	Loading, transportation and unloading of mineral and waste rocks on surface		**Yes**	**No**
a	Manual		√	-
b	Tubs, mine cars, etc.		-	√
c	Scraper, shovels, dumpers / trucks		√	-
d	Conveyors (belt, chain, etc.)		-	√
e	Others (specify)		-	√

20	Mineral(s) transportation outside the ML area			
		Qty. (in tonne)	Percentage (%)	Length (in km)
a	Road	3240	100	-
b	Rail	-	-	-
c	Conveyors	-	-	-
d	Rope way	-	-	-
e	Water ways	-	-	-
f	Pipeline	-	-	-
g	Others (Specify)	-	-	-
	Total	**3240**	**100**	**-**

21. Baseline Meteorological and Air Quality data

(a) Micro-meteorological data

[Continuous monitoring through autographic instrument for one full season other than monsoon]

(i) Wind rose pattern for one full season (16 points of compass i.e. N, NNE, NE, ---) based on 24-hourly data. For coastal area also furnish day-time and night time data. (Attached as Annexure-VII)

- Day time
- Night time
- 24 – hours period

(ii) Site specific monitored data

Month	**Wind Speed (km/h)**			**Temperature (°C)**		
	Max	Avg	Calm%	Max	Min	Avg
March 2023	24	5	18	33	16	25
April 2023	22	7	13	39	22	31
May 2023	23	8	00	40	26	33

* 24-hours rainfall should be reported from 08:30 hrs. IST of previous day to 08:30 hrs. IST of the day.

* Rainy day is considered when 24 hrs. rainfall is ≥ 2.5 mm.

** Visual observations of cloud cover should be recorded four times a day at regular intervals.

(iii) Indicate name and distance of the nearest IMD meteorological station from which climatological data have been obtained for reporting in the EIA report, if any.

(b) Ambient air quality data* (RPM, SPM, SO_2, and NOx)

[*Monitoring should be carried out covering one full season except monsoon – same season as in 21 (a) (i)]

[*Frequency of sampling: Sampling to be done twice a week for the entire season 24 hourly for SPM & RPM. For gaseous pollutants 24- hourly data be given irrespective of the sampling period.]

(i) Season and period for which monitoring has been carried out. Pre Monsoon **Season (March 2023-May 2023)**

(ii) No. of samples collected at each monitoring station**: 24**

Name of monitoring equipment used			$PM_{2.5}$(µg/m³)			PM_{10} (µg/m³)			SO_2 (µg/m³)			No_x (µg/m³)			Pb**		
			Envirotech FPS – APM 5.50			RDS 460 BL			APM 411 attachment with RDS 460 BL			APM 411 attachment with RDS 460 BL			-		
Equipment sensitivity			< 0.5 µg/m3 from 0.000 mg to 0.100 mg/ m³			< 0.5 µg/m3 from 0.000 mg to 0.100 mg/ m³			< 0.5 µg/m3 from 0.000 mg to 0.100 mg/ m³			< 0.5 µg/m3 from 0.000 mg to 0.100 mg/ m³			-		
Permissible AAQ standard (CPCB)		R	60 µg/m³			100 µg/m³			80 µg/m³			80 µg/m³			-		
		I	60 µg/m³			100 µg/m³			80 µg/m³			80 µg/m³			-		
		S	60 µg/m³			100 µg/m³			80 µg/m³			80 µg/m³			-		
Monitoring Location	No. of Samples Drawn	Category* (R, I, S)	Min	Max	98% tile	Min	Max	98% tile	Min.	Max.	98% tile	Min.	Max.	98% tile	Min	Max	98 % tile
AQ1	24	I	71.30	91.30	91.21	36.12	48.97	48.97	8.79	14.09	13.85	9.13	16.90	16.46	-	-	-
AQ2	24	I	71.30	89.70	89.19	38.44	48.27	75.35	8.28	11.99	11.94	9.45	13.48	13.26	-	-	-
AQ3	24	R	66.20	87.28	86.95	32.12	45.67	45.66	6.78	13.20	12.88	8.98	13.69	13.58	-	-	-
AQ4	24	R	63.45	83.99	83.65	29.56	42.56	42.55	6.45	8.85	8.52	8.69	12.56	12.55	-	-	-
AQ5	24	R	58.78	80.14	80.00	29.56	41.25	41.24	8.13	15.60	15.27	9.21	17.20	17.06	-	-	-
AQ6	24	R	65.10	85.79	85.73	33.28	44.98	44.92	7.15	15.26	13.99	8.74	15.26	14.43	-	-	-
AQ7	24	R	68.30	90.81	90.81	33.48	47.67	47.66	8.85	15.70	14.64	8.45	15.87	15.45	-	-	-
AQ8	24	R	58.70	80.14	79.69	26.54	40.58	40.57	4.12	7.25	7.20	5.89	10.50	10.37	-	-	-

*R = Residential; I = Industrial; S = Sensitive
**Pb for mineral specific sites only.
Annex a location map indicating location of AAQ stations, their direction and distance with respect to project site.

(AAQ station location map is attached annexure-VIII)

22. Stack and emission details, if any* **Not Applicable**

S. No.	Process / unit of operation (e.g. DG Set, Boiler)	Height of stack (m)	Internal top dia. (m)	Flue gas exit velocity (m/sec)	Emission rate (kg/hr)				Heat emission rate from top of stack (K.cal/hr)	Exhaust / Flue gas			
					SPM	SO_2	NO_x	CO		Temp ^oC	Density	Specific Heat	Volumetric flow rate (m^3/hr.)

23. Details of fugitive emissions during mining operations*
Given in Chapter 4

24. Air Quality Impact Prediction (AQIP)* Not Applicable

(a) Details of model(s) used for AQIP including grid size, terrain features, and input meteorological data

(b) Maximum incremental GLC values of pollutants based on prediction exercise

(in µg/m^3)

S. No.	Pollutants	Incremental Value	Ambient Air Quality	Resultant Air Quality
1.	SPM	5.9	91.21	97.11
2**.	SO_2			
3**.	NO_X			

[* Question Number 22, 23 & 24 need not be filled-in for mines having ML area of **25 ha. or less.**]
[**Information on item no. 2 & 3 to be provided in cases with captive power generation of 500 KVA and above]

25. Water requirement (m^3/day)

Purpose	Avg. Demand	Peak Demand
A. Mine site		
1. Mine operation	-	-
2. Land reclamation	-	-
3. Dust suppression	0.81	0.81
4. Drinking & domestic	1.14	1.14
5. Green Belt	8.40	8.40
6. Beneficiation	-	-
7. Washeries	-	-
8. Fire Service	-	-
9. Others (Mining and Allied Activities))	-	-
B. <u>Township</u>		
1. Green Belt	-	-
2. Domestic	-	-
C. Other (specify)	-	-
Total	**10.35**	**10.35**

26. Source of water supply*

S. No.	Source	m^3/day
1	River (name)	-
2	Ground water	-
3	Mine water (sump / pit)	
4	Other surface water bodies (water will be tapped from plant supply)	**10.35** KLD from nearby village

[*Annex a copy of sanction letter / permission from the concerned authority (Central Ground Water Authority in case of ground water abstraction is from notified area / State Ground Water Board in case of non-notified area / State Irrigation Department for surface water pumping) for drawing water.

27	**Lean season flow in case of pumping from river / nalla (cumecs)**	**Not applicable**
28	Ground water potential of the study area	-
28.1	**Ground water availability**	
a	Range of water table (m bgl)	-
i	Pre-monsoon (April/May)	

	Core Zone	6
	Buffer zone	12
ii	Post-monsoon (November)	
	Core Zone	4
	Buffer zone	8
b	Total annual replenishable recharge (million m^3/ year)	
i	By ground water table fluctuation method	-
ii	By rainfall infiltration factor method	-
c	Annual draft excluding estimated draft through mine discharge (million m^3/ year)	-
d	Estimated draft through mine discharge (million m^3/ year)	-
e	Net annual ground water availability (million m^3/ year)	-
f	Stage of ground water development (%)	-

28.2. Water demand - Competing users of the water source

S. No.	Usage	Present Consumption (m^3/day)		Additional proposed as per local plan (m^3/day)		Total (m^3/day)	
		Surface	Ground	Surface	Ground	Surface	Ground
1	Domestic	-	-	-	1.14	-	1.14
2	Irrigation	-	-	-	-	-	-
3	Industry	-	-	-	-	-	-
4	Mining	-	-	-	-	-	-
5	Others (Dust suppression + Green belt)	-	-	9.21	-	9.21	-
Total		--	--	9.21	1.14	9.21	1.14

29. Water quality*

(a) Annex physico -chemical analysis of water at intake point **

(Attached as Annexure-IX).

(b) In case of existing mine, annex report on quality of water discharge i.e. complete physico - chemical analysis**

[*For non-discharging mines at least four ground water samples to be taken preferably from downstream direction of the mine in pre-monsoon and post-monsoon periods and analysed. For discharging mines six samples are to be analysed]

**All parameters as per BIS 10500. Indicate name of Methodology, Equipment used for analysis, and Detection Level (DL) for each parameter.

*** Wherever any analytical parameter is below detection level, "BDL" (Below Detection Level) should be written instead of 'NIL'.

30.	**Impact on ground water regime / stream / lake / springs due to mine dewatering ***	Not required
a	Radius of influence (in m) [To be estimated based on analysis of pumping test data and application of empirical formula]	-
b	Whether saline water ingress will take place?(applicable to coastal areas)	-
c	Impact on stream / lake / springs	-

[* Provide a comprehensive hydro-geological assessment report if the average mine dewatering is more than 100 m^3/day and or going below water table in non-monsoon period. The report should be based on preferably latest one year pre-monsoon and post-monsoon baseline data covering information on ground water situation, aquifer characteristics, water level conditions (April – May and November), estimate of ground water resources, predicted impact of the project on ground water regime and detailed remedial / conservation measures such as artificial recharge of ground water etc. The report should be based on actual field inventory out of existing wells, at least 30 observation wells in the buffer zone with supplementary information from secondary sources (mention name). For estimation** of ground water resource (refer question no. 28 above) be designated study area of the buffer zone may be sub-divided into command and non-command areas, watershed-wise (in case of hard rock / consolidated formations) / block-wise / mandal-wise in case of alluvial / unconsolidated formations)**]**

**For estimating ground water resources in the area follow the Ground Water Estimation Committee recommendations of 1997]

31.	**Waste Water Management**	Not Applicable
a	Daily average discharge (m^3/day) from different sources	-
i	Mine water discharge during	-
	Lean period	-
	Monsoon period	-
ii	Workshop	-
iii	Domestic (mine site)	-
iv	Beneficiation / Washeries	-
v	Coal Handling Plant	-
vi	Tailings pond	-
vii	Others (Specify)	-
	Total	-
b	Waste water treatment plant; flow sheet for treatment process attached.	-
C	Quantity of water recycled / reused / to be recycled in	-
i	Percentage	-
ii	m^3 /day	-

d	Point of final discharge	-	
	Final Point	-	
1	Surface	-	
i	Agricultural land	-	
ii	Waste land	-	
iii	Forest land	-	
iv	Green belt	-	
2	River / nallah	-	
3	Lake	-	
4	Sea	-	
5	Others (specify)	-	
	Total	-	
e	Users of discharge water	**Yes**	**No**
i	Human		
ii	Livestock		
iii	Irrigation		
iv	Industry		
v	Others (specify)		
F	Details of the river / nalla, if final effluent is / will be discharged (cumecs)		
i	Average flow rate		
ii	Lean season flow rate		
iii	Aquatic life		
iv	Analysis of river water 100 meters upstream and 100 meters downstream of discharge point submitted.		
G	Township		
a	Waste water generation from township (m3/day)		
b	Are you planning to provide sewage treatment plant?		
C	Usage of treated water		
32.	**Attach water balance statement in the form of a flow diagram indicating source (s), consumption (Section-wise) and output.**		

Purpose	**Demand (KLD)**
Drinking/Domestic	1.14
Dust Suppression	0.81
Green Belt	8.40
Total	10.35

33	**Ambient noise level leq dB(A)**	Details given in Chapter III
34	**Solid Waste-**	**Not Applicable**
a	Top soil and Solid waste quantity and quality	

Name (Lump/fines/slurry /Sludge/others)	Composition	Quantity (cum)	Method of disposal
Mining activity*			
a. Top Soil		--	
b. Over burden		--	--
c. Others (20%		--	

intercalated waste)			
Effluent Treatment Plant (sludge)		-	-
Total		--	--

[* Annex layout plan indicating the dump sites.]

b (i)	Does waste (s) contain any hazardous/toxic substance/radioactive materials or heavy metals?	No
(ii)	If yes, whether details and precautionary measures provided?	NA
c	Recovery and recycling possibilities.	NA
d	Possible user(s) of the solid waste.	Used in the mine itself
e (i)	Is the solid waste suitable for backfilling?	Yes
(ii)	If yes, when do you propose to start backfilling?	Simultaneous backfilling

Solid waste (s)	Already accumulated (A)	To be generated (B)	% of A & B to be backfilled	
			A	B
Over burden		--		
Others (20% intercalated waste)		--		-

	<u>Land reclamation Plan</u>	**Not Applicable**
f	In case waste is to be dumped on the ground, indicate	
i	Associated environmental problems	
ii	Number & type of waste dumps	
	No. of external dumps	
	Max. projected height of dumps (in m)	
	No. of terraces and height of each stage	
	Overall slope of the dump (degree)	
	Proposed reclamation measures	
iii	Section of the waste dump in relation to the adjacent ground profile attached	
35	**Fuel / Energy requirements*** [*To be furnished for mines having ML are more than 25 ha. or captive power genera of 500KVA and above]	**Not Applicable**
a	Total power requirement	(in MW)

S. No.		Mine Site	Township	Others (specify)	Total
1	Present				
2	Proposed / additional				

Total				

b	Source of power			(in MW)
S. No.		SEB/Grid*	Captive power plant	DG Sets
1	Present			
2	Proposed / additional			
Total				

[* Annex a copy of the sanction letter from the concerned authority]

c	Details of fuels					
S.No.	Fuel	Daily Consumption (TPD)		Calorific value (Kcals/kg)	% Ash	% Sulphur
		Existing	Proposed			
1	HSD					
2	LSHS					
3	Other (specify)					

36	**Storage of inflammable / explosive materia**			**Not Applicable**
S. No.	Name	Number of Storages	Consumption (in TPD)	Maximum Quantity at any point of time
1	Fuels			
2	Explosives			

37	**Human Settlement**	
	Core Zone	Buffer Zone
Population*	-	Details given in Chapter III
No. of villages	-	
Number of households village-wise	-	

[* As per 2001 census record or actual survey]

38.	**Rehabilitation & Resettlement (R&R) Plan** [*Provide a comprehensive rehabilitation plan, if more than 1000 people are likely to be displaced, other-wise a summary plan]	**Not Applicable**
a	Villages falling within the study area	

	Villages	
	Number	Name
Core zone		
500 m from the blasting site (s)		
Buffer zone		
Township site		

b	Details of village(s) in the core zone			
S. No.	Village name	Population*		Average Annual Income
		Tribal	Others	
1				

[*As per 2001 census / actual survey]

c	Population to be displaced and / or Land	

	Oustees					
Name of village(s) falling within		Number of oustees				
		Land (only)	Homestead (only)	Land and Homestead (both)		
Mining Lease 1.						
Township Site 1.						
d	Whether R&R package has been finalized? If yes, salient features of R&R plan for oustees.			**Not Applicable**		
i	Site details where the people are proposed to be resettled & facilities existing / to be created.					
ii	Funds earmarked for compensation package					
iii	Agency /Authority responsible for their resettlement.					
iv	Time of commencement of resettlement of Project Affected People (PAP).					
v	Period by which resettlement of PAP will be over.					
39	**Lease -wise plantation details**					
a	Lease area (in ha.)			Existing	Proposed	
	i. Area broken up			--	-	
	ii. To be broken up			-	-	
	iii. Area not to be broken-up			-	-	
b	Township area (in ha.)			-		
c	Area afforested and proposed (in ha.)			-		
		Peripheral	Dumps	Roads	Township	Others
i	Existing					
ii	Proposed					
d	No. and type of trees planted and proposed					
i	Existing			--		
	When plantation was started?			Month / Year		
No. of plant species planted				Number saplings (per ha.)		
--				-		
Survival rate %				Avg. height		
ii	Proposed					
	No. of plant species to be planted			**Number of saplings (per ha.)**		
	-			**405**		
40	**Environmental health and safety**					
a	What major health and safety hazards are anticipated?			Refer Chapter VII		
	What provisions have been made/proposed to be made to conform to health and safety requirements?			As per Mines Act/ Rules		
	In case of an existing mine					

i	Comprehensive report on health status of the workers as under the Mines Act annexed	As per Mines Act/ Rules
ii	Mineralogical composition of RPM (dust)	
	• Free silica	Not applicable
	• Chromium* (Total as well as Hexavalent)	Not applicable
	• Lead** [* Only for Chromite mines] [**Only for Base Metal mines]	Not applicable
	Information on radiation protection measures, if applicable	Not applicable

41. Environmental Management Plan

Salient features of environmental protection measures

S. No.	Environmental issues*	Already practiced, if applicable	Proposed
1	Air pollution	-	Regular water sprinkling, Wet drilling, plantation
2	Water pollution	-	Retaining wall around dump, Garland drain, settling tank
3.	Water conservation	-	General awareness,
4.	Noise pollution	-	Preventive maintenance of machines, use of earplugs.
5.	Solid waste / Tailings	-	Not applicable
6.	Land degradation	-	Reclamation and rehabilitation by afforestation and conversion into water reservoir.
7.	Erosion & Sediment	-	Not applicable
8.	Top soil	-	Used for topping of backfilled area.
9.	Ground vibration	-	Controlled Blasting
10.	Wildlife conservation	-	Not applicable
11.	Forest protection	-	Not applicable
12.	Others (specify)	-	Social training and general awareness

[* As applicable]

42	**Compliance with environmental safeguards** (For existing units)	**Yes**	**No**
	Status of the compliance of conditions of Environmental clearance issued by MoEF, if any, enclosed.	-	√
	Status of the compliance of 'Consent to Operate' issued by SPCB, if any, enclosed.	-	√
	Latest 'environmental statement' enclosed.	-	√

43	**Scoping of EIA**	**Attached as Annexure-X**
	Whether environmental impact assessment of the project has been carried out by following scoping process?	Yes
	If yes, a copy of scoping of EIA annexed.	Details are given in Chapter I
44	**Mine closure**	
a	Have you planned mine closure?	No
b	Submitted a conceptual mine closure plan.	No
c	If yes, indicate estimated amount for implementing the same (in Rs. lakhs)	No
45	**Capital cost of the project (in Rs. Lakh) (Based on latest estimate)**	**Rs 6.0 Lakh**

46. Cost of environmental protection measures (in Rs. Lakh)

S. No	Description	Capital Cost (lakh)	Recurring Cost (lakh)
1	Pollution Control & Dust Suppression	Nil	2.0
2	Pollution Monitoring i. Air pollution ii. Water pollution iii. Soil iv. Noise Pollution	--	2.0
3	Plantation and salary for one gardener (parttime basis)	4.5	0.5
4	Haul road Maintenance Cost	1.5	1.75
Total		**6.0**	**6.25**

47	**Amount earmarked for socio-economic welfare, measures for the nearby villages other than R&R plans.**	**28.952 Lakh**
48	**Public Hearing**	
a	Date of Advertisement in Newspapers	08/08/2023
b	Name Of Newspaper	• Dainik Samachar • Times of India • Hindustan Times
c	Date of Public Hearing Venue	10/09/2023 at 1:00 Hrs. Tehsil Office- Warisaliganj, District–Nawada
d	Public Hearing Panel chaired by members present	• Shri Ujjawal Kumar Singh Additional District Magistrate, Nawada at Tehsil/Anchal Office Akbarpur, District- Nawada
e	No. of people attended the public hearing meeting	Around 50
f	Summary/details of public hearing in tabular form	Given in Chapter 7 of EIA report

49	**Whether the following approvals* (wherever applicable) have been obtained?**	**YES**	**NO**
a	Site clearance from MoEF	-	√
b	Consent for Establishment' from the State Pollution Control Board	-	√
c	NOC from Atomic Mineral Division	-	√
d	Mining plan approval from IBM / Ministry of Coal	√	-
e	In case of existing mines, mining scheme approval from IBM	-	√
f	Forestry clearance under FCA, 1980	-	√
g	NOC from Chief Controller of Explosives	-	√
h	Commitment regarding availability / pumping of water from the concerned Authorities	-	√
i	In case of ML area falling in notified areas of the Central Ground Water Authority, NOC from them.	-	√
[* Annex copies of approvals and number them]			
50	**Was / is there any court case relating to the project or related activities? If so, provide**	No	

Verification: the data and information given in the Performa are true to the best of my knowledge and belief.

Date:

Place:

(Authorized Signatory)
Hans Indhan Kendra,
Raju Raj S/o- Rameshwar Prasad,
Add. – Bardaha, P.O. - Manjhauli,
P.S- Sirdala, Dist. - Nawada, Bihar- 805127.