PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 05TH OCTOBER, 2021

The SEAC met on 05TH October, 2021 at 03:00 PM through video conferencing in Google Meet under the Chairmanship of Sri. B.P. Singh. The following members were present in the meeting.

- 1. Sri. B. P. Singh
- 2. Dr. K. Murugesen
- 3. Dr. D. Swain
- 4. Prof. (Dr.) P.K. Mohanty
- 5. Prof. (Dr.) H.B. Sahu
- 6. Sri. J. K. Mahapatra
- 7. Sri. K. R. Acharya
- 8. Prof. (Dr.) B.K. Satpathy
- 9. Dr. Sailabala Padhi
- 10. Dr. K.C.S Panigrahi

- Chairman -
- Secretary -
- Member
- Member -
- Member -
- -Member
- Member -
- -Member
- Member -
- Member -

CONSIDERATION OF OLD PROPOSALS (COMPLIANCE RECEIVED):

The compliances furnished by the proponents were verified by the members through e-mail and also proceedings of the meeting were confirmed by the members through e-mail. The decision of the committee on case-to-case basis as follows:

<u>ITEM NO. 01</u>

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR GREENFIELD TEXTILE **PROJECT UNIT ESTABLISHMENT OVER AN AREA 60 ACRES LOCATED IN VILLAGES** - PAHIMAHURA & HELPUR, TAHASIL - BHANDARIPOKHARI, DIST - BHADRAK, ODISHA OF M/S. PARADEEP REFINERY INDIAN OIL CORPORATION LTD - EC.

- This is a proposal for Environmental Clearance of M/s Paradeep Refinery Indian Oil 1 Corporation Ltd. for Greenfield Textile project unit Establishment over an area 60 acres located in villages - Pahimahura & Helpur, Tahasil - Bhandaripokhari, Dist - Bhadrak, Odisha.
- The project falls under category "B" or activity Category 5(d) Man-made fibres 2. manufacturing in the 'Project or Activities' projects under EIA Notification dated 14th September 2006 as amended from time to time.
- 3. IOCL is proposing the Greenfield Textile project unit establishment in Villages Pahimahura & Helpur, Tahasil Bhandaripokhari, Dist. Bhadrak, Odisha, Odisha on a land measuring 59.625 acres or $2,41,292 \text{ m}^2$.
- Standard ToR was issued by MoEFCC vide letter no. IA-J-11011/57/2019-IA-II(I) 4. dated 24.03.2019. Now, as the project is 'B' category project, further application was made at SEAC/SEIAA, Odisha.
- 5. Public hearing was conducted on 30.12.2020 at Bhandaripokhari Higher Secondary School High School of Naguan Panchayat under Bhandaripokhari Tahasil in the district of Bhadrak (Odisha).
- 6. Location and Connectivity The plot area of the project site is 2,41,292 m2 (or 59.625 acres). The coordinates of the area is Latitude - 20° 59' 2.00"N to 20° 59' 20.60"N and Longitude - 86° 23' 48.05"E to 86°24' 13.61"E. The nearest Railway station is Manjuri Railway station located at an aerial distance of 5.1 km in NW

direction & Kenduapada Railway station at an aerial distance of 5.0 km in NNW direction & Bhadrak Railway station at an aerial distance of 18 km in E direction from the site. Bhubaneshwar airport located at an aerial distance of 102 km in SW direction. NH 5 & AH 45 at an aerial distance of 0.84 km in SE direction. Reba river is at 0.1km. Akhuapada High Level Canal is at 0.65km.

SI. NO.	PARTICULARS	AREA (SQ.M.)
1.	Total Plot area	2,41,292
2.	C.P. Building With Slurry Preparation	1,176
3.	POY/FDY SPG	9,600
4.	POY/FDY LAG Area & Trolley Area	3,640
5.	Paper Tube & Packaging	520
6.	DTY	39,476
7.	PSF Spinning	2,214
8.	PSF Storage	3,450
9.	PTA Bag Storage	4,784
10.	Admin Area & Parking Area	2,500

7. The Detailed Area Statement of the project is mentioned in the table:

8. Details of production capacity is given as:

S. No.	Name of Products	Total Production Capacity (TPA)
1	Polyester Staple Fibre	1,00,000
2	Draw Texturized Yarn	1,67,000
3	Fully Drawn Yarn	33,000
	Total	3,00,000

- 9. Project will comprise of:
 - Continuous Polymerization (CP) units,
 - Fibre/Yarn manufacturing units in one block and
 - Associated downstream units in another block

S. No.	Raw Materials	Consumption (MT/Annum)	Means of Storage	Capacity of storage Means	No. of Storage means/ Numbers	Total Capacity
1	Purified Terephthalic Acid (PTA)	257143	Warehouse	Silos & Bags	2	4,000 MT
2	Monoethylene Glycol (MEG)	99800	Tank	1,250 m³	2	2,500 m³
3	Diethylene Glycol (DEG)	1199	Tank	100 m³	1	100 m³
4	HSD	29368	Tank	600 m³	1	600 m ³
5	Heat Transfer Fluid (HTF)	15	Tank	600 m³	1	600 m³
6	Impure MEG	included in MEG	Tank	100 m³	1	100 m ³
7	TiO ₂	0.024	Warehouse	-	-	-
8	Catalyst	0.024	Warehouse	-	-	-
9	Modifyer	0.024	Warehouse	-	-	-

- 10. **Process** Polymer enters the spinning beam which discharges polymer through the spinneret into the quench chamber where the heated polymer is solidified by flow of cool dry air. Further, Tows are sent for drawing. The metering pump regulates the flow of polymer to spinneret. After this, the polymer goes through the spin pack which acts as a reservoir and filter that removes any contamination. Further, the polymer passes through spinneret plate that has several holes, imparting cross-sectional shape to the filaments.
- Green Belt Greenbelt Area at site is 59,900 m2 i.e. 14.81 acre (33% of total plant area of 2,41,292 m2 with not less than 1,500 trees per hectare). Approximately 12,035 Nos. of Trees will be planted. Plantation will be carried out in the three layers. Capital Cost: Rs. 12,00,000 /- and Recurring Cost / annum: Rs. 2,40,000 /-.
- 12. **Power Requirement** Permission has been taken from Odisha Industrial Infrastructure Development Corporation (IDCO) for 47 MW Power supply.
- Water Requirement Water will be supplied from IDCO from nearby Baitarni River. Permission Letter from IDCO has already taken. Total Water requirement is 9,674 KLD, 2289 KLD recycled water from RO & MEE. Hence, Total Fresh water requirement will be 7,385 KLD.
- 14. Wastewater Generation: Total wastewater generation will be 2,306 KLD (2,245 KLD Industrial + 61 KLD Domestic) will be treated in ETP (Capacity 2,400 KLD) followed by UF & RO (Capacity 2,500 KLD) & MEE & ATFD (Capacity 600 KLD). 2289 KLD treated water will be completely recycled and reused in cooling tower make up. The domestic sewage will also be treated in ETP.
- 15. **Hazardous waste Generation**: The details of the solid and hazardous waste generation, quantification, classification, collection, transportation and disposal facility as per Hazardous Waste Rules 2016 and its amendment are mentioned below:

S. No.	Hazardous Waste Category No.	Description of Hazardous Waste	Quantity	Source	Method of Collection	Treatment & Disposal
1.	5.1	Used Oil	5.5 TPA	Gear boxes, agitators, transformers, etc	Will be collected in drums and stored in	Will be sold to authorized
			51 TPA	DTY conning oil waste	designated area	pulles.
2.	24.1	Floor waste, sweeping Purified Teriphthalic Acid (PTA) powder & all other chemical waste	10 TPA	Sampling, floor sweeping, damaged bags, etc.	Will be packed in bags and stored at a designated area	Will be sold to authorized parties for reuse & recycle

S. No.	Hazardous Waste Category No.	Description of Hazardous Waste	Quantity	Source	Method of Collection	Treatment & Disposal
3.	24.1	Polyester polymer lump, chips, yarn waste, fibre waste, etc.	3,000 TPA	Sampling, breakdown, floor waste	This solid non harmful plastic material will be collected and stored	Recycled in house or sold to recycling parties
4.	20.2	Spent Solvent (Tri Ethylene Glycol)	6 TPA	Filter cleaning bath	Will be collected in drums and stored in designated area	Will be sold to authorized parties for reuse & recycle
5.	35.3	ETP Sludge	7,590 TPA	ETP	Solid and soil type material	Will be sent to TSDF
6.	1.3	FDY SFO Waste	7 TPA	Process	Emulsion type material which will be collected in drums	Will be sold to authorized parties
7.	33.1	Empty Liners / Bags	233 TPA	PTA empty bags, Sb ₂ O ₃ bags, TiO ₂ bags, POY bobbins cover PE bags	Will be stored at a separate storage area	Will be sold to authorized Scrap Vendor
		Empty Drums	1,665/7,929 Nos/ (TPA)	PP Drums	Will be stored at a separate storage area	Will be sold to authorized reconditioner

- 16. Rain water harvesting facility will be provided of 2800 m2 for collection of estimated run off rainwater of 4350.30 cum & its storage in rainwater harvesting tank will constructed.
- 17. Baseline data collection for the project has been conducted from period 1st December, 2019 to 29th February, 2020.
- 18. Employment generation from the project will be 2000 persons.
- 19. The estimated project cost of the proposed project is ~ INR 1,971 Crore. Capital cost on environmental matters will be ~ INR 31.0 Crore and recurring cost on environmental matter will be ~ INR 64.0 Crore per year. According to the CER office memorandum dated 01st May, 2018 of MoEFCC the CER budget for 5 years comes to INR 17.855 crores i.e. 1.5% of project cost INR 1,971 crores.
- 20. The consultant **M/s Kadam Environmental Consultants, Gujurat** along with the proponent have made a detailed presentation on the EIA/EMP report.

- 21. The SEAC in its meeting held on dated 02-08-2021 decided to take decision on the proposal after receipt of certain information / documents from the proponent. Simultaneously a prior site visit by SEAC Sub-committee since it is a potentially sensitive hazardous project and flood prone site.
- 22. The project proponent has furnished compliances as requested by the SEAC and same has been verified as follows:

SI.	Information	Compliance furnished by the proponent	Views of SEAC
NO.	Sought by		
	Clarification regarding category:	 As per EIA Notification dated 14th September 2006 amended till date the project is falling in 5(d)-B i.e. Manmade fibres manufacturing- However at time for Form-1 application, SEAC/SEIAA, Odissa committee was dissolved so application was done by IOCL at MoEF&CC, Delhi. Hence, standard ToR Letter was issued by MoEFCC vide letter no. IA-J-11011/57/2019-IA-II (I) dated 24.03.2019. Public hearing has been carried out on 30th December 2020. As the project is 'B' category project so application of EC with final EIA report is done at SEAC/SEIAA, Odisha. 	
(i)	The "Kisam" of the land is Agricultural lands and hence, needs to be converted to Industrial use before starting the construction of the project. An undertaking to this effect shall be submitted.	 Land Possession document was received from Odisha Industrial Infrastructure Development Corporation (IDCO) vide letter no. IDCO/P&A/LAE-7655/19-20/9646 on 01.07.2020. It has been mentioned on Page number 1 Point No. 3 in the letter that the land shall be utilized for establishment of Industries in village: Pahimahura (Acre: 8.665) & Helpur (Acre: 50.960) under Bhandaripokhari Tahasil in the district of Bhadrak only and shall not be sub-leased for any purpose to any other institution / individual. Land Allotment Letter is attached as Annexure 1. 	In the land allotment letter, khata number/plot wise area has been given but kissam has not been mentioned. Hence, khata/plot wise kissam of land as in ROR duly certified by Tahsildar shall be furnished.
ii)	Separate chapter for water balance and management including waste water.	 Separate chapter (Refer 2.11 of EIA report) has been provided in EIA Report for water consumption, wastewater generation & disposal. Summary of the same is as follows: Total Water requirement is 9,674 KLD, 2289 KLD recycled water from RO & MEE. Hence, Total Fresh water requirement will be 7,385 KLD. Water Balance is given in Annexure 2. Total wastewater generation will be 2,306 KLD (2,245 KLD Industrial + 61 KLD Domestic) will be treated in ETP (Capacity 2,400 KLD) followed by UF & RO (Capacity 2,500 KLD) & MEE & ATFD (Capacity 600 KLD). 2289 KLD treated water will be completely recycled and reused in cooling tower make up. Design Inlet & Outlet Characteristics of ETP 	

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent				Views of SEAC	
	ULAU	Sr No.	Name of plant	Unit	Design Inlet Characteristics for ETP	Design Outlet Characteristics of ETP	
		1.	Effluent	m ³ /	2,400	2,400	
			quantity	day	4.000	400	
		2.		mg/l	4,000	<100	
		<u> </u>	TDS	ma/l	5,000	5 500	
		5.	TSS	mg/l	250	<100	
		6.	рН		5.5-7.11	6.5-7.5	
		7.	Oil &	mg/l	50	<5	
			Grease				
		●上 2	TP treatm	ent wi	th ZLD are mentio	ned in Annexure -	
(iii)	Justification of 340 KLD water usage.	• As KLD wate	per EIA re (7385 Kl er). ailed Wate	eport, LD Fre r Balar	the Total water co esh Water and 22	onsumption is 9674 89 KLD is recycled	
(iv)	Provision for STP for domestic purpose needs to be incorporated.	 A seplace Treated center Detated Indu Ann 	eparate n e to trans atment Pla tralized ET as Industr ailed Wate ustrial effl	etwork sfer the ant con P will rial efflu er Bala uents	and pumping me e Domestic Efflue ning up under the be designed to ca uent. nce showing treatu in common ET	echanism will be in nt into the Effluent project. Thus, one ater for Domestic as ment of Domestic & P is attached as	Common ETP-cum- STP is not acceptable. Hence, a proposal for STP for domestic purpose needs to be submitted.
(v)	Details of treatment of colored materials (toxic-dyes etc.)	• Bas Text prop • Raw Ann	ed on the tile project posed to be material exure-3.	Raw n t, no c e used and	naterial and additiv olored materials (in the Process Fac additives summa	res summary for the toxic–dyes etc.) are cility. ary is attached as	 Function of Activated carbon Filter, 4 NOS may be explained? MEG and DEG are both organic toxic chemicals used as raw materials. How their uses managed and chemical
(vi)	Separate chapter for Hazardous	• Sep prov disp	arate cha rided in El osal. The	pter (F A Rep details	Refer 11.4.6 of El ort for Hazardous are also provided	A report) has been waste generation & as Annexure 4 .	reactions involved during operation to be furnished. Specific Condition to be stipulated.
	waste with chemical composition/ spent catalyst/	• Men prior	nbership fi r to commi	rom TS ssionir	SDF facility will be ng of the unit.	taken in due course	

SI. No.	Information Sought by	Compliance furnished by the proponent	Views of SEAC
	SEAC		
	generation,		
	management		
	and disposal		
	practice		
	including		
	warehousing/		
	packaging/		
	inventory		
	holding,		
	management		
	and disposal		
	practice/SOP		
	from time to		
	time along		
	with		
	agreement		
	copies with		
	vondore for		
	reprocessing		
	of hazardous		
	waste/ end		
	use and		
	disposal of		
	the waste		
	residues		
	thereof.		
(vii)	Details of	 Storage of explosive items/ HSD are given in Annexure 5. 	
	storage of	• The overall layout plan including the storage locations of	
	explosive	HSD tanks is attached as Annexure 6 .	
	items/ HSD,	• Post grant of EC/CTE, the PESO license for storage of	
	Storage	HSD and construction approval for the HSD storage tanks	
	locations in	shall be obtained.	
	the layout		
	and		
	liconco		
	thoroof from		
	appropriate		
	appropriate		
(viii)	Plan for solar	•5% (2.35 MW) of the Total Power requirement of 47 MW	Calculation of solar
(,	power usade	will be generated from Solar Power.	energy item wise to
	with exact		be submitted to
	calculations		show the usage of
	to be		47MW
	submitted.		
(ix)	Details of DG	• First Predominant wind direction is from N followed by ESE	
	sets to be	and NNE.	
	installed at	• As per the Stack Height Formula given in EPA Rule 96 =	
	the suitable	14XQ0.3, Q=Total SO2 emission from the plant in kg/hr.	
	places after	It is checked for DG set, considering 0.001% Sulphur	
	due	content in fuel (HSD - BS VI specification of 10 mg/Kg),	
	consideration	Sulphur emission = 0.016 kg/hr	

SI.	Information	Compliance furnished by the proponent	Views of SEAC
NO.	SEAC		
	of	SO2 emission= 0.032 kg/hr	
	predominant	Required Stack height = $14 (0.032) 0.3 = 5m$	
	wind	As per EPA Rule 96 (Annexure 7), DG Set stack height of	
	direction to	30 m is proposed	
	avoid air	• Plant Layout along with DG set location is given as	
	pollution	Annexure 6.	
	from entering		
	the dwelling		
	house of the		
	colony. Plant		
	layout along		
	with DG set		
	location w.r.t		
	wind		
	direction,		
	stack height		
	with layout /		
	installation		
	drawing of		
	the stack /		
	exhaust pipe		
	be		
()	submitted.		
(X)	Details of	• The Catalyst used in the process becomes a part of the	
	Catalyst	Finished Product, thus there is no spent catalyst generation	
	usaye anu	and further no disposal requirement.	
	quantity to		
	De useu. Details of		
	deneration of		
	spent		
	catalyst and		
	its disposal		
	practice.		
(xi)	Mitigation	For PM10	
(///)	measures to	• Adequate stack height will be provided to boilers thermic	
	be	fluid heaters and DG sets as per EPA rule 96.	
	undertaken	• Effective water spraving/ Mechanized Road cleaning will be	
	to limit PM10	done on the access roads to control PM	
	pollutant and	• Based on Natural gas (NG) availability in the region, NG	
	fluoride.	will be used as fuel in the Boilers/ heaters thereby	
		minimizing PM emissions.	
		For Fluoride	
		• Based on the emission summary of the unit, no fluoride	
		emissions are envisaged.	
(xii)	Occupational	•OHC with qualified professionals will be set up for	
	health study	employees/ workers operating in high risk area.	
	report for	• As a part of the CSR activity heath camps and checkups	
	employees	will be periodically carried out in nearby villages.	
	and nearby		
	villagers and		
	setting up a		

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	barricaded occupational Health centre with experts		
(xiii)	Physical measures towards issues raised in public hearing	 Physical measures to address issues raised in public hearing attached as Annexure-8. 	
(xiv)	Drainage pattern of land and details of surface runoff management during monsoon period.	 Two river namely Reba and Kaneri present in NE direction within the study area. Both the river flows form NW to SE direction and follow the general surface topography. Drainage map is attached as Annexure 9. Based on the Rainfall intensity, storm water drainage facilities will be designed suitably to dispose the surface run-off water. The engineering of the Storm water drainage facility will be carried out by the detailed engineering contractor. The storm water drainage will be hooked up with the overall drainage facilities of the textile park being developed by IDCO. 	Needs to be ascertained during site visit
(xv)	Details of Rainwater Harvesting System	 Storm water generated from Admin building area is proposed to be used for recharging ground water. As per CGWA data average rainfall of Balasore is 1.706 m/annum). The estimated runoff quantum using different run off coefficient applicable for roof top, Green belt and Roads is given below: S. Title Area, M² Rainfall Intensity coefficient generated (m³) Roof top 1 (admin 3000 1.706 0.85 4350.30 From the above it is inferred that ~4350.30 m3 effective run off water will likely be available and can be used for ground water recharge. 	Details of ground water recharging with no. of recharging pits and its design be submitted w.r.t. rain water harvesting and storm water/run off water after treatment generation.
(xvi)	Regular monitoring of water in Akhuapada High Level Canal and dewatering management in case of water logging due to HFL and surface water bodies	 Regular monitoring of water in Akhuapada High Level Canal shall be carried out as per surface water monitoring philosophy. In order to avoid waterlogging due to flood or rainfall, "plant FGL (Finished Ground Level) will be 0.6 m above the design flood level (HFL) of the area or based on drainage outfall level". 	

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	inside the proposed plant premises.		
(xvii)	Plantation needs to be increased from 1500 nos./ha to 2500 nos./ha. Under supervision of specialized persons.	• Shall be complied and the proposed project area will have a plantation of approximate 20,055 trees (8.0223 Ha x 2500 trees).	
(xviii)	Parking in terms of ECS for employees, floating population & visitors with locations needs to be submitted in tabular form and layout plan for parking area.	 Provision for parking has been provided in the overall plot layout attached as Annexure 6. 	
(xix)	Details of discharge of treated waste water need to be submitted.	 The unit ETP is designed to follow the concept of Zero Liquid Discharge System (ZLD) as a step towards prevention of water pollution and helps in water conservation. Treated effluent will be reused in the unit to minimize fresh water consumption. ETP Salt will be sent to TSDF site. Therefore, no treated waste water discharge is anticipated. 	 An affidavit is required that the Plant will operate with ZLD Force major plan needs to be in place.
(xx)	Chemical composition of ETP sludge and disposal thereof with SOP to be submitted.	 Zero Liquid Discharge System (ZLD) facility is proposed under the Project. The ETP sludge mainly comprises of salt on account of the High TDS content of RO reject. ETP Sludge will be sent to nearest TSDF site in Odisha. 	 TSDF site needs to be identified with copy of agreement. Composition of salt is required and to be furnished.
(xxi)	To indicate Boilers emissions standard visa-vis PM10 projected	• Expected PM10 emission from Boilers is 4.95 mg/Nm3 against the standard norms of 50 mg/Nm3.	

SI. No.	Information Sought by	Compliance furnished by the proponent	Views of SEAC
	value.		
(xxii)	Documentary evidence regarding the status of the plant i.e. whether this will be consider as IOCL unit or a joint venture project on PPP mode.	• The proposed unit will be considered as an IOCL Unit.	Documentary evidence as sought be submitted

23. The Sub-Committee of SEAC visited the site on 04.10.2021. The report of the Sub-Committee of SEAC is yet to be received.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of the compliance to the observations / views of the SEAC at para 22 above and compliance to the observations of the Sub-Committee of SEAC during the site visit.

I<u>TEM NO. 02</u>

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR RARBAHAL GRAPHITE MINES OVER AN MINING LEASE AREA OF 20.675 HA LOCATED AT VILLAGE- RARBAHAL, TAHASIL- BELPARA, DIST- BALANGIR OF SRI ANTARYAMI MISHRA - EC

- 1. This is a proposal for Environmental Clearance for Rarbahal Graphite Mines over a mining lease area of 20.675 ha located at Village- Rarbahal, Tahasil- Belpara, Dist-Balangir of Sri Antaryami Mishra.
- 2. The project falls under category "B" or activity 1(a) Mining of Minerals projects under EIA Notification dated 14th September 2006 as amended from time to time.
- ToR for this project has been granted by SEAC vide letter No. 849/SEAC/157 dated 12.10.2018. Public hearing was conducted on 22.01.2020 at Rarbahal Graphite Mines of village Rarbahal in Balangir district. Consent to establish from OSPCB, vide letter No. 3738/III CON(NOC)/34/2019-20, Dtd. 08.10.2020, has been obtained.
- 4. This is a proposal for graphite mining project with production capacity of 0.0138 Million Tonnes/Annum of Graphite Ore over mining lease area of 20.675 ha.
- 5. The mine lease is located at Plot No. 46, Village Rarbahal, Tahasil- Belpara, District Balangir, Odisha. The latitude 20° 34' 08" N to 20° 34' 27" N and longitude 83° 02' 10" E to 83° 02' 29" E. The highest altitude is of 258 mRL and the lowest altitude is 252 mRL. The area falls in the Survey of India Topo -sheet no. 64 P/ 2, 64 P/3, 64 L/14 & 64 L/15.The lessee is Sri Antaryami Mishra.
- 6. The lease area 20.675 ha is Government Non- forest land. The mining lease over an area of 20.675 ha was granted vide order of Dept. of Mines & Steel G.O. No.10334/SM/II(GR)SM -27/2017 dt.15.12.2017 (expiry on 14.12.2067) for fifty years in favour of Sri Antaryami Mishra. Due to adverse marketing conditions there was no mining in the lease area till the end of first lease period.

- Thereafter, the renewal of mining lease was granted to the lessee on over an area of 20.675 ha. for a period of 15 years from 05.03.2005 to 04.03.2020. Now, as per Rule 8 A (3) of MMDR (Amendment) Act 2015 lease period is valid up to 04.03.2040.
- The mining plan of Rarbahal Graphite Mining lease in Village Rarbahal, District Balangir, State – Odisha was approved under Rule 23 of MCDR, 2017 by the Regional Controller of Mines, Odisha Region, Indian Bureau of Mines vide letter No. MP/OTFM/04-ORI/BHU/2018-19/518 dated 16.05.2018.
- 9. Location and Connectivity The topography of the area represents a mild sloping terrain. General slope of the area is from West to East. Applied M.L area can be approached from Balangir (district head quarter) covering a distance of 64 km which is the sum of 38 km SH between Balangir and Patnagarh, 13 km SH between Patnagarh and Mandal square, 8 km metalled road between Mandal square & Mandal, 4 km metalled road between Mandal & by pass to Rarbahal and 1 km kuchha road between by pass to Rarbahal P.L area via village Rarbahal. Lease area is also approachable from Belpara PS town covering a road distance of 12 km. The nearest railway station is at Kantabanji on the Titlagarh Raipur rail track of the East-Cost Railway which is 25 km from the lease area. The nearest air port is at Bhubaneswar at a distance 390 K.M from the project site.
- 10. The total Mineable reserve is 96,799 MT. The ore occurs at shallow depth and rocks are mostly weathered and soft, hard in patches only. Graphite ore exposed in the existing quarry inform of small veins, pockets, lenses & vein etc. Therefore, mining will be done on single shift basis, by open cast semi mechanized method of mining with the help of excavators.
- 11. Mining will be done in a top downward manner by developing 3m high & 3m wide bench. Graphite from the bench floors will be transported manually by head load to the ore stacking & sorting site. The quarry will be developed between the RL 257.6 m and RL 222.2 m. Overall quarry slope angle will be kept at around 60° with the horizontal.
- 12. Excavation will be taken up on the north western side of the lease area. Average annual production during the ensuing plan period will be 13023 tonnes. Average working days during the year are about 300 days. Average daily production is about 43.4 tones. No drilling and blasting will be done for loosening of hard rock mass during mining operation.
- 13. During the development work of 2018-19 to 2022-23, the top soil in the tune of 93874.84 m³ will be spread on the waste dump and preserved for future plantation work.
- 14. During current scheme of mining (2018-19 to 2022-23), the volume of the waste/ OB generated (including side burden waste) will be 476744.6 m³. Thus the total new volume of waste generated during the coming years that is till the tentative end of the life of the mine, shall be 544920 m³. Therefore, the ultimate capacity of the waste dump at the end of the life of the mine shall be 544920 m³. The dumps shall be kept in terraces in a regular fashion. It is proposed to dump in south-western of the quarry. The ultimate capacity of proposed dump will be 544920 m³, with a height of 20 m having two terraces. Development of garland drain and retention wall will be done simultaneously with the development of dump.
- 15. Machinery used for mining purpose will be excavator, loader, tippers, sprinkler, jeep etc.

- Water Requirement Total 10 KLD per day water will be required for overall purposes.
 5 KLD water for drinking and domestic purposes, plantation, water sprinkling on land roads & agriculture purposes, 5 KLD for beneficiation of ore. Drinking water will be collected from a bore well and the rest water will be collected from the mining pit.
- 17. The maximum strength of workers will be 26 nos. Most of the workers will be hired from local villages. Besides there will be indirect employment for transportation, canteen, repair shop, security etc. Since there is no habitation in the lease area therefore no resettlement will be necessary. During the plan period 6000 plants will be planted in 10.06 m². The entire plantation will be done on the 7.5 m safety barrier. The project cost is about `80 Lakhs.
- 18. The extracted ore will be dispatched to secondary washing plant located at village-Dungripalli, Dist-Balangir at a distance of 25 Km. If in case the plant is not established as per the proposal than the ROM will be sent directly to the washing plant located at Village-Dungripalli of district Balangir.
- 19. Green Belt Total green area at the end of conceptual period is 19.29 ha land. No. of trees proposed to be planted = 6000 trees. Plantation of wide leaf trees, creepers, tall grasses around quarry sites, waste dumps, roads, colony and other surrounding barren zones.
- 20. Baseline data collection for the project has been conducted from period March 2018 to May 2018.
- 21. The total estimated cost of the project is approximately INR `0.8 Crores.
- 22. The consultant **M/s Green Circle. INC., Vadodara (Gujarat)** along with the proponent have made a detailed presentation on the EIA/EMP report.
- 23. The SEAC in its meeting held on dated 19-02-2021 decided to take decision on the proposal after receipt of certain information / documents from the proponent. Now the project proponent has furnished compliance as desired by SEAC and same has been verified as follows:

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent			Views of SEAC	
(i)	Plot wise Kissam of land duly certified by concerned Tahasildar.	The leasehold area of Govt. wasteland Bernamamuli, Anyanya forest lands in the lea the area is given in the Land use of the P.L follows: Name of Ownership the Village Rarbahal Private	comprises of (Attamamul a, Bagayat, I se area. The Table below Area as pe <u>Type of L</u> English Name Agricultu	f private agricul i, Attaunhari, Mundia & Patita) pre – operation r revenue depa and Oriya Name (As per land schedule) Attamamuli,	itural land and Malmamuli,). There are no nal land use of artments is as Area In acres 50.27	 Tahsildar shall certify that no DLC land is involved (in Govt. Ownership). Kisam of the land is Agricultural and not concerted to Mining & 98.4percent of land is private
			ral fields	Attaunhari, Malmamuli,		Agricultural land.Neither

SI. No.	Information Sought by SEAC		Compliance furnished by the proponent				Views of SEAC	
					Bernamamuli			ownership nor
			Govt	Waste	Mundia 8	0.82		lease deed/
			waste land	land	Patita	0.02		registered
			(Reserved)					agreement is
		Total		57.526		51.09		available. This
		The land d	ocument is a	ttached wi	th duly certified	d by Tah	asildar.	has to be complied.
(ii)	Copy of	Agreement	between ov	wners of	private land f	or com	bany is	
()	agreement	attached as	Annexure -2	2	•	I	,	
	between							
	owners of							
	private land							
	for company.							
(iii)	Details of silt	Attached a	as Annexure	-3				No management or
	management,							SOP is submitted.
	water logging							
	management							
	Mator							
	Management							
	besides							
	discharge /							
	disposal							
	management							
	with SOP /							
	mechanism of							
	water							
	accumulated							
	during rainy							
	season in							
(i)	Proposal for	Ground w	ator as well a	c curfaca y	wator will not be	offorto	t by tho	Compliance dees
(1V)	reduction of	proposed	mining opera	itions Surf	ace run off will	ha nrota	cted by	not relate to query
	around water	rain water	drains and se	ettling tank	s around the gu	arry.	olou by	not relate to query.
	usade.	(i) Drink	ing water will	be supplie	d through tanke	er.		
	5	(ii) Total	water require	ement is 10) KLD for proce	ess and	drinking	
		purpo	ose and dust	suppressio	n.		5	
		(iii) All a	round the qu	uarries and	l dumps garlar	nd drain	will be	
		provi	ded with settli	ing tanks.				
		(iv) The s	surface runoff	water of ra	ain will be chan	neled in a	a proper	
(.)		way a	as indicated in	n surtace d	rainage plan.			Osmalian
(V)	Details of	Attached	as annexure	-3				Compliance does
	∠eiu discharge							not relate to query.
	nronosal							
(vi)	Slope study	Attached	as Annexure	-4				No study/ or report
(*)	report to he			r				is submitted
	undertaken							
	both for mine							
	and OB /							
	waste dump							
	by domain							

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	expert and blasting study as well.		
(vii)	Details of waste management i.e. composition and nature of waste generated, tabulated form showing year wise waste generation, usage and storage i.e. complete waste / dump / OB management.	Attached as Annexure -5	Not complied.
(viii)	Documents related to permission letter from WR Deptt, Govt. of Odisha respectively for drawl of ground water.	Attached as Annexure -6	Letter DTD back 2019 addressed to WR department is enclosed and status as of today is not available.
(ix)	Status of physical condition and maintenance of approach roads from lease area to washing plant. NOC and maintenance of approach road from concerned authority.	Secondary washing plant located at village-Dungripalli, Dist- Balangir at a distance of 25 Km. If in case the plant is not established as per the proposal than the ROM will be sent directly to the washing plant located at Village- Dungripalli of district Balangir. This is a small mine whose average daily production level is 43.4 tons. The existing number of vehicles per day is nil. Once the operations start around two trucks will be engaged per day for transportation of mineral along with few cars and 2-wheelers. The ore raised from the mines will be transported to the various consuming industries by road or rail depending upon the distance involved & the network available with the consumer. If intended for transport by rail; the ore will be transported by truck to the nearest railway station Kantabanji at a distance of about 25 kms from the lease area & from there by rail. No village road will be disturbed for the transportation.	NOC is not available.
(x)	Possibility for water usage from River Lanth, to reduce load	Ground water as well as the surface water will not be affected by the proposed mining operation. Surface run off will be protected by rain water drains and silt settling tanks around the quarry. (i) Drinking water will be supplied through tanker. (ii) Total water requirement is 10 KLD for process and drinking	Not complied.

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	on ground water usage.	purpose and dust suppression. (iii) All around the quarries and dumps garland drain will be provided with settling tanks. The surface runoff water of rain will be channeled in a proper way as indicated in surface drainage plan.	
(xi)	Total Plantation should be carried out within 2 years and maintenance to be continued in remaining years. Trees present in mining area should be uprooted & transplanted in safety zone.	Noted Details of plantation given in Annexure - 7	Not complied.
(xii)	Sludge disposal from ETP and settling tanks, rain water harvesting and usage /recharge / recycling of it to reduce the use of ground water.	 Ground water as well as the surface water will not be affected by the proposed mining operation. Surface run off will be protected by rain water drains and silt settling tanks around the quarry. (i) Drinking water will be supplied through tanker. (ii) Total water requirement is 10 KLD for process and drinking purpose and dust suppression. (iii) All around the quarries and dumps garland drain will be provided with settling tanks. The surface runoff water of rain will be channeled in a proper way as indicated in surface drainage plan. 	Difficult to infer from the compliance w.r.to observation.
(xiii)	Detailed proposal for Rain water Harvesting.	Ground Water Recharge for Mine Lease Area The rainfall infiltration method is one of the best methods suggested in ground water assessment methodology of CGWB 2007 for first approximation of ground water resources of an area that receives good amount of rainfall. The study area consisting of 20.675 ha receives about 1052 mm rainfalls annually. Since the area is occupied by the hard, massive rock, rainfall infiltration is slow, the standard infiltration factor 10% of the total annual rainfall as mentioned in CGWB 2017 report is assumed. Annual Ground Water 20.675 x 1.052 x 0.1 recharge =2175.01 cum There are numbers of water bodies like rain fed ponds, dug wells and tube wells within the core and buffer zone.	Not complied.
(xiv)	Copy of modified mining plan	Enclosed	Not complied.

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	incorporating progressive mine closure plan.		
(xv)	Actual mineral deposit in 10 ha. Justify why they will require more than 20 ha. of land for mining.	Attached as Annexure-8	Not complied.
(xvi)	Occupational Health Study report, including identification of occupational health hazards for employees as well as neighboring habitation, remedial measures for it and periodical health checkups, at least once in six months by occupational health expert.	Attached as Annexure-9	Not complied.
xvii)	Detailed surface runoff management plan.	The rainfall infiltration method is one of the best methods suggested in ground water assessment methodology of CGWB 2007 for first approximation of ground water resources of an area that receives good amount of rainfall. The study area consisting of 20.675 ha receives about 1052 mm rainfalls annually. Since the area is occupied by the hard, massive rock, rainfall infiltration is slow, the standard infiltration factor 10% of the total annual rainfall as mentioned in CGWB 2017 report is assumed. Annual Ground Water 20.675 x 1.052 x 0.1 recharge = 2175.01 cum There are numbers of water bodies like rain fed ponds, dug wells and tube wells within the core and buffer zone.	Not complied.
k∨iii)	Justify the lease period is 50 years	During the Prospecting License the state govt was time bounded by two years, during that period we did not fully explore the mine, when the mines comes into the operation as per the approved	Compliance is not scientific.

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	when life of mine is less than 50 years.	mining plan we will explore by drilling the total area, accordingly it is difficult to calculate the life of mines. However after complete the exploration we may surrender the no mineralized zone area after back filling and plantation.	
(xix)	Project proponent may submit a certificate from concerned Executive Engineer, Water Resources Deptt, Govt. of Odisha that proposed mining will not interfere or cause hindrance to ongoing irrigation project.	Attached as Annexure-6	
(xx) (xxi)	Proceedings of public hearing to be submitted and actions proposed to be taken in physical terms for the environmental issues raised. SOP for zero discharge of	Attached as Annexure-10 Attached as Annexure-3	Not in place as
	discharge of slit and waste water to Agricultural.		sought.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of the compliance to the observations / views of the SEAC at para 23 above.

ITEM NO. 03

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S KHUSI REALCON PVT. LTD. FOR PROPOSED RESIDENTIAL / COMMERCIAL APARTMENTS TOWER-1 (2B+G+9), TOWER-2 (2B+G+22) & TOWER-3 (2B+G+23) OVER AN AREA 2.44 ACRES AT MOUZA- PAHALA, BHUBANESWAR, DIST- KHURDA, ODISHA OF SRI VIKASH KUMAR JAIN (PROJECT HEAD) WITH TOTAL BUILT UP AREA - 63215.5 SQM - EC

 The proposal is for Environmental Clearance of M/s. Khusi Realcon Pvt. Ltd. for Proposed Residential/ Commercial Apartments Tower-1 (2B+G+9), Tower-2 (2B+G+22) & Tower-3 (2B+G+23) over an area 2.44 acres at Mouza- Pahala, Bhubaneswar, Dist-Proceedings of the SEAC meeting held on 05.10.2021 Khurda, Odisha of Sri Vikash Kumar Jain (Project Head) with total built up area - 63215.5sqm.

- 2. The project falls under category "B" or activity 8 (a)-Building and Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
- M/s Khusi Realcon Pvt. Ltd. proposes to construct Residential / Commercial Apartments Tower-1(2B+G+9), Tower-2 (2B+G+22) & Tower-3(2B+G+23). The project is in Plot No.:-210, 199,208/1244, 126, 125/1242,123/1243/1844, 124,211/1746, 211, and Khata No.:-352/1205, 352/1206, 56/98,352/1226, 56/102, 352/122 and Kissam – Gharabari of Mouza- Pahal, Bhubaneswar, Dist- Khurda, Odisha.
- 4. Location and Connectivity The Project Site is a part of the Survey of India Toposheet No. 73H/15 & 73H/16. The proposed site is located at Mouza Pahala, Tahashil Bhubaneswar, Dist Khurda, Odisha. The Geographical co-ordinates of the project site is: Latitude –20° 20' 2.27" N & Longitude 85° 52' 57.78" E. The project site is well connected with National Highway NH-16 at a distance of approx 0.2 Km in East direction. The nearest railway station is Vani Vihar Railway station at a distance of approx 6.8 Km in South-West direction & Bhubaneswar Railway Station at a distance 10.3 Km in Southwest direction. The nearest airport is Biju Patnaik International Airport at a distance of approx. 13.7 Km in South-west direction from project site.
- 5. The site is coming under Bhubaneswar Development Authority. The project comprises of Tower 1 2B+G+9, Tower 2 2B+G+22, Tower 3 2B+G+23.
- 6. The total plot area is 9877.92 Sqmt with total built-up area 63,215.5 sqm Sq.mt.
- 7. The Building Details of The Project:

Particular	Proposed	
Project Name	Khushi Realcon Pvt. Ltd.	
Plot Area	9877.92 Sqm	
Ground Coverage	3225.0 sqm (32.65 %)	
FAR (Floor Area Ratio)	4.52	
Built up Area	63,215.5 sqm	
Maximum Height	78.85 m	
Total Parking Area	13,847.8 sqm	
Green Belt Area	2181.25 sqm (22.08%)	
Maximum No. of Floor	Tower 1 2B+G+9, Tower 2 2B+G+22, Tower 3 2B+G+23	
Power/Electricity Requirement & Sources	Total - 1543 KW Solar – 82.6 KW CESU – 1460.4 KW	
No. of DG sets	3x500 KVA	
Water requirement	156.0 KLD (Fresh)	
Sewage Treatment Plant	STP Capacity - 250 KLD	

- 8. **Water requirement**: The total water requirement for the project will be approx.235 KLD, out of which domestic water demand is 148.5 KLD and commercial is 7.5 KLD. The fresh water requirement will be 156 KLD. Fresh water will be extracted from ground water through borewell.
- 9. Waste water details: The project will generate approx. 200 KLD (sewage load) of wastewater. The wastewater will be treated in an onsite STP of 250 KLD capacity. Out of which 190.0 m3/day will be recycled within the project for flushing (79.0 m3/day), landscaping (8.7 m3/day), dust suppression (3.3 m3/day) and 99.0 m3/day will become surplus which will be discharged to drain.
- 10. Power requirement: The daily power requirement for the proposed complex is preliminarily assessed as 1543 KW (Solar System- 58 KW & CESU 1485 KW). In order to meet emergency power requirements during the grid failure, there is provision of 3 nos. of DG sets having 500 KVA capacities for power back up in the Residential/Commercial Building Project. Total Energy saving from renewable energy = (72.5+10.1) KW = 82.6 KW i.e 5.3 % is contributed from solar energy.
- 11. **Rain Water Harvesting**: Rain Water will be harvested and recharge through 11 recharge pits from the plot area.
- 12. **Parking Requirement**: Total parking area required 13847.8 m² Sq.mt./497 ECS and basement parking area will be provided.
- 13. Fire fighting Installations: Fire fighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guideline of NBC (part-4).
- 14. **Green Belt Development**: Out of the total area, green belt will be developed over an area of 2181.25 sqm (22.08% of the plot area).
- 15. **Solid Waste Management**: From the residential complex solid waste inform of food wastes from kitchen and miscellaneous wastes will be generated @ 0.45 kg/person/day, which will be about 729.0 kg/day. The generated solid wastes from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate-coloured bins. Proper waste management practices will be adopted during the collection, storage and disposal of the generated solid wastes and construction and demolition wastes. Around 100 kg/day of STP sludge will be generated.

S. No.	Category	Counts (heads)	Waste generated (kg/day)
1.	Residents	1620 @ 0.45 kg/day	729.0
2.	Commercial	50 @ 0.15 kg/day	7.5
3.	Club	100 @ 0.15 kg/day	15.0
4.	Floating Population	200 @ 0.15 kg/day	30.0
5.	STP sludge)	100.0
Tot	tal Solid Waste	Generated	881.5 kg/day

16. The total population of project will be 1970 persons.

- 17. The estimated project cost is `95 Crores and cost for EMP is 2.17 crores.
- 18. The project proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal.
- 19. The SEAC in its meeting held on dated 29-09-2021 decided to take decision on the proposal after receipt of certain information / documents from the proponent followed by visit of the sub-committee of SEAC to the site. Now the project proponent has furnished compliance as desired by SEAC and same has been verified as follows:

SI.	Information Sought by	Compliance furnished by	Views of SEAC
No.	SEAC	the proponent	
(i) (ii)	Detailed land schedule with kissam of land in tabulated form. Whether land kissam has been converted to "Gharabari", if so, detailed document to be submitted. Layout of drainage system	Total Land Area of proposed project is 9,877.92 Sqm/106325.04 Sqft. (2.44 Acres) and the Kissam of land is Gharabadi. Detail Land documents with kissam of land are attached in Annexure-1 . Layout plan showing drainage	 Needs verification during
	and exact distance of project site to nearest drain and outfall of drain.	system is attached in Annexure-2. The nearest drain is Municipal Drain which is approx. 50m from the project site. The Municipal Drain Photo is attached in Anenxure-3.	site visit
(iii)	Status of NOC from BMC/ appropriate authority for the above drain for sewage disposal.	Drainage Plan of the proposed building has been approved by Bhubaneswar Municipal Corporation (BMC) vide letter no. 66690, dated 19.08.2021. BMC letter is attached in Annexure-4.	
(iv)	Proposal to increase in usage of treated waste water in premises and thereby reducing quantity of discharge to drain. Revised water balance to be submitted.	Total Domestic and Flushing Water Requirement of the proposed project are 156.0 KLD and 79.0 KLD respectively. The treated water is re-used for flushing purpose, car washing purpose and gardening purpose (in non-monsoon period) and surplus treated water is discharged into BMC drain adjacent to site. The detailed Water Balance during Non-monsoon & monsoon season is given in Annexure- 5.	
(v)	Surface runoff management plan with details of surface water to be used in the project.	Instead of traditional percolation pits, we are providing bore well of 200mm dia. With percolation allowed	

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		at the aquifer level. Where we are drawing water for residential use. 06 Nos. of 16.24 Cu.mtr. each Rainwater Percolation pits are proposed. Hence total proposed volume of pit is 91.0 Cu.mtr. Detailed design calculations with section of percolation pit as per BDA and BMC norms provided in Annexure-6.	
(vi)	Percentage of Rain water Harvesting /recharging vis- à-vis fresh water consumption according to norms of CGWA be submitted.	We have recharge almost 91 cum/day water through 06 nos. of recharge pits to ground which is equivalent to 43% of total fresh water withdrawal.	
vii)	Details of DG sets to be installed at the suitable places after due consideration of pre- dominant wind direction to avoid air pollution from entering the dwelling house of the colony. DG set location w.r.t wind direction, stack height with layout / installation and drawing of the stack / exhaust pipe be submitted, considering cumulative capacity(s) of all DG sets and height of the tallest tower.	For required backup power, 2 nos. of DG Sets are proposed. The exhaust shall be provided as per pollution norms laid by CPCB. Since our DG Sets location are along the compound wall, we proposed the vent pipe along the building wall to highest point of the building & vent is 4.5 m in highest point. H = $78.85 + 0.2\sqrt{500}$ = $78.85 + 0.2 \times 22.36$ = $78.85 + 4.5$ = $83.35 \text{ m} \approx 83 \text{ m}$ Height of the DG Set stack is 83m. Layout drawing of DG Sets is attached in Annexure-7.	
riii)	Adequate parking in terms of ECS for dwelling units, floating population & visitors with locations including compatibility with the proposed parking space provided needs to be submitted in tabular form.	As per BDA, the parking requirement for Residential housing is 30%. Accordingly the parking space required for residential area is 13670.1 sqm which is equivalent to 497 ECS. So the total ECS is required for residential building is 488 ECS. Remaining 9 ECS for floating population like visitor to residential houses & visitor. Detail Parking area calculation in ECS is attached in Annexure- 8 .	Needs to be ascertained during site visit with drawings and plan
(ix)	Fire clearance from the	Recommendation letter for	

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	appropriate authority need to be obtained and their observations is to be submitted.	Fire Safety Clearance is given in Annexure-9 .	
(x)	Plan for solar power with exact calculations to be submitted.	The electricity installed capacity for this project is 1543.0 KW, accordingly to adhere to the 5.3% (82.6 KW) norms of solar energy we have planned to install Photovoltaic cell Frame shape of 80.0 sqm to be located on the terrace area. The solar power will be mainly used for open area lighting, common corridor lighting & corridor lighting. Total Energy saving is 5.3% which is generated from solar System. Detail Calculation is attached in Annexure-10.	Norm is not 5.3%. Further proponent to explain the details calculation during site visit.
(xi)	Since, this being a flood prone/ water lodging zone, detailed SOP for proper management of the same to be submitted.	The nearest gauging station in the upstream is Naraj (IB). The HFL at Naraj is 27.60m which is recorded in 31-Aug- 82, Flood data of Naraj (IB) is given in Annexure-11 . The project site is in the downstream, but as per the flood vulnerability Map, the site is not located in the flood prone area. (Source - BMTPC).	
xii)	Permission status from Water Resources Deptt. for usage of ground water.	Application has already submitted to Central Ground Water Authority vide application no. 21- 4/2832/OR/INF/2021, dated 03.06.2021; Application copy is attached in Annexure- 12 .	
kiii)	Details of solid waste management.	Total 881.5 kg/day Solid Waste will be generated for proposed project. Solid Waste will be collected in Color bins and it will be segregated in Organic Waste Converter. Detail Solid Waste proposal is given in Annexure-13 .	
iv)	Separate compartments for storing of storm water and sewage water.	Two separate drain will be provided for Storm Water & Sewage Water. Storm Water & Treated Water will be discharge different location. Drainage Plan is already	

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		given in Annexure-2.	
ĸ∨)	Findings of traffic study undertaken at point of intersection with NH Vis-a vis the norm in terms of PCU and traffic decongestion measures recommended if any be submitted.	The traffic study report is attached in Annexure-14.	

After detailed discussion, the SEAC decided to take decision on the proposal after a site visit by Sub Committee of SEAC.

<u>ITEM NO. 04</u>

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR ADDITIONAL INSTALLATION OF CHROME ORE BENEFICIATION UNIT OF THROUGHPUT CAPACITY 18,500 TPA WITHIN THE EXISTING CAMPUS OF M/S SHREE MONOLITHIC PVT. LTD. OVER AN AREA OF 7.76 ACRE OR 3.14 HA. IN PLOT NO. 30/301, AT VILLAGE: JAMINIBANDHA, P.O: BHANDARIPOKHARI, DISTRICT - BHADRAK, ODISHA-756120 OF M/S SHREE MONOLITHIC PVT. LTD (TOR)

- 24. 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 amendment thereafter.
- 25. The project falls under Category "B2", as the throughput capacity of the beneficiation plant is 18,500 TPA (<20,000 TPA) as per schedule of EIA Notification dated 14th Sep, 2006 as amended from time to time.
- 26. M/s Shree Monolithics Pvt. Ltd. proposes for establishment of Chrome Ore Beneficiation plant over an area of 7.76 Acres or 3.14 Ha with throughput capacity of 18,500 TPA within the existing Chrome Monolithic Unit.
- 27. The chrome monolithic unit does not attract Environment Clearance as it is only mixing of raw materials without any use of heat and chemical treatment. The present application for environment clearance is being made as the proponent is now proposing for installation of additional Chrome ore beneficiation plant within the existing premises.
- The existing chrome monolithic unit has obtained Consent to Operate vide Consent Order No. 270/2017-18 (WPC and APC) issued vide letter no. 594/con-908 / 2000 on dated 24.02.2018.
- 29. Connectivity: The proposed unit is located at Village Jaminibindha, P.O. Bhandaripokari, Dist: Bhadrak, Odisha. The lease area is bounded by Latitude: 20⁰57'26.88"N Longitude: 86⁰21'21.67"E. with Toposheet No.:73L/5 & 73K/8 having Plot No:25/285, 19, 27, 17, 18, 30, 20, 21, 96/321, 29, 30/301 and Khata No.: 9/9,92/67,9/5,92/61,9/6,92/65,92/62 and 92/64. The land area required for the project will be 7.76Ac. or 3.14 Ha. which comes under agricultural waste land category and belongs to the project proponent Nearest Railway Station is Bhadrak Railway station 7 Km and nearest airport is Bhubaneswar Airport 180 Kms from project site. There is no wild life sanctuary, corridor, National park, biosphere reserve located within 10Km buffer zone of the project site. The project is accessible through a 50ft wide road which connect to NH Proceedings of the SEAC meeting held on 05.10.2021

5 is located at a distance of 0.3 Km from the project site. Nearest railway station is at Manjuri road PH located at a distance of 7Km from the project site.

- 30. **Power Requirement:** The electricity load of 100 kVA will be procured from NESCO, Odisha. Also proposed to install125kVA DG set.
- 31. Water Requirement: Total water Consumption for the proposed project will be 153 KL/ day out of which 13 KLD will be the makeup water. About 95% of the water will be recirculated in the process and only 5% of the will be makeup water. There will be no waste water generation from the project. Domestic waste water will be treated through soak pit via septic tank and industrial waste water generated will be treated by settling and reused in the process.
- 32. The raw material i.e. low grade chrome ore will be sourced from mines of Odisha Mining Corporation, Sukinda which is located at a distance of 46 Km from the project site. The transportation of ore from the mines to the project site will be done through covered trucks.
- 33. **Green Belt:** Out of the total land 33% has been demarcated for development of green belt.
- 34. **Employment Potential** The project generates employment opportunities for 12 personnel which includes operator -2, supervisor 2, 4 no of semi-skilled labour and 4no of unskilled labour.
- 35. **Solid Waste Generation -** The major solid waste will be the tailings generated from the beneficiation process. The quantity of tailings to be 6500TPA having <10% Cr2O3. The tailings will be collected & treated with Ferro-Sulphate solution and dried through a filter press. Further, the tailing will be stored in the tailing dump. After drying the tailing will be blended in the chrome refractory mortar as per the demand of the customer. An area has been demarcated for storage of tailing within the plant premises. The land allocated for tailing storage will be 0.25 Acres. However, the tailing generated from the plant will be completely utilized in the chrome refractory mortar unit and thus there will be no tailing dumping in the long term. Further, an area of 0.25 acres has been demarcated for storage of tailing in case of any adverse situation, if tailing could not be sold out by the proponent
- 36. The project cost is `283 lakhs.
- 37. The Environment consultant **M/s Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee.
- 38. The Committee observed the following:
 - a) The proponent has applied to consider their project as Category-B2 as per MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 as throughput of Mineral Beneficiation activity is less than 20,000 TPA involving only physical beneficiation.
 - b) The MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 stipulates the Mineral Beneficiation activity listed in the schedule as Category-B will be treated as Category-B2 with throughput ≤ 20,000 TPA, involving only physical beneficiation.

- 39. The SEAC in its meeting held on Dt: 09.12.2020 decided to take decision on the proposal after receipt of the following from the proponent followed by a site visit of sub-committee of SEAC
 - (i) Date and year of establishment of existing unit.
 - (ii) Copy of Consent to Establish and Consent to Operate from State Pollution Control Board, Odisha, Bhubaneswar to be submitted.
- (iii) Copy of conversion of land for industrial use as this is an existing unit.
- (iv) Details of Technology to be used for process of treatment of Hexavalent Chromium in waste water.
- (v) Details of existing green belt and proposed with plant layout.
- (vi) Details of solar energy to be used.
- (vii) Details calculation and plant Layout showing location of rain harvesting recharging pits and quantity to be harvested.
- (viii) Documents supporting previous water consumption in the plant.
- (ix) Undertaking by project proponent for maintenance of haulage road.
- (x) Status of NOC/permission letter from CGWA/WR Deptt, Govt. of Odisha respectively for drawl of ground water.
- (xi) Details of Tailing and leaching management.
- (xii) Material Balance of the process.
- (xiii) Detailed linkage of raw materials such as source and agreement copy with the party for supply of raw material i.e., low grade Chromite Ore.
- (xiv) Revise Plant layout with all detailed features to scale super imposing the existing set ups/infrastructures/utilities/features.
- 40. The sub-Committee of SEAC visited the project site on dated 16.04.2021 and following observations and recommendations were made:
 - a) It is an existing monolithic unit / Plant having CTO for five products namely monolithic with low grade chrome ore, slag processing for metal extractions, hot mix for road construction etc.

They stated to have installed an old beneficiation unit in 2010 and is not operating since then. Now they want to operate it with capacity \leq 18,500 MT and hence, they have sought Environmental Clearance.

As such, they may be asked to furnish the following along with EIA report:

- i. Technical write up on process & operations.
- ii. List of old equipment's & their capacities.
- iii. Proposal production / beneficiation quantity.
- iv. Production / beneficiation quantity per cycle & cycle time.
- v. Material balance & failing management.
- b) There is no separate boundary / demarcation of different products for which CTO has been obtained. As such, a composite plant layout with dimension & demarcation containing operation of all products / process be submitted.
- c) In the monolithic unit, chrome ore (the raw material) was found to be stored in heap

under open sky with a tarpaulin cover having no garland drain.

- d) An old ramp in complete damaged condition was seen and so also, two water tanks in completely damaged & broken condition was found proximate to the beneficiation unit.
- e) No organized drain network / management is found to be in place.
- f) No provision for renewable energy / solar plant & water harvesting is in place.
- g) A DG set was found and in operating as and when required in open condition whose capacity could not be known, having no stack / chimney as per the norms.
- h) A single gate exists for entry & exit of incoming & outgoing vehicles.
- There is a gap of about 100 mtrs between NH-16 & their plant and the land belong to NH Authority as stated by the proponent & used by them for movement of their vehicles to & from the plant.
- j) A petrol pump exists just adjacent to the plant and agricultural land exist adjacent to the boundary of the plant in North, West & South side of the plant.
- k) Immense dust inside plant was found.
- I) The plant land is stated to be not converted to "Industrial use"

In the light of the above observations and recommendation the following are further recommended for compliance during EIA study / before EIA presentation.

- A complete drain management with network for individual operation for which CTO has been granted and the integration of the same thereof along with for proposed installation of chrome ore beneficiation unit.
- II. Location & layout of the storage for maximum inventory along with area & height of raw material i.e., chrome ore for monolithic unit & the proposed beneficiation plant. Single storage space for both will avoid duplication.
- III. Tailing management with detail design of tailing pond & the corresponding ETP and reuse of treated waste water.
- IV. Water management with water balance for the proposed unit & composite water management with water balance for the whole industrial premises having multiple operations.
- V. Water harvesting & management with use of it / recharging of it.
- VI. A bore well was found to be working and in use. 'NOC' from CGWA & permission from Water resources Deptt., Govt. of Odisha is required to be submitted.
- VII. DG set details with requisite stack height as per the norm & housing of the same to be submitted.
- VIII. Green belt as per the norm with required species in consultation with local Govt. Forest authority / botanist to be done. Only Eucalyptus plants were found around the boundary of the plant.

- IX. Separate material gate, both for entry & exit of incoming & outgoing vehicles and separate gate for employees to be installed of requisite size / dimension.
- X. No provision of solar power / renewable energy was seen. Hence, provision of solar power of at least 5% of total consumption be planned & detail worked out plan within a time frame for the same be submitted.
- XI. Internal roads inside the plant need to be concreted and provision of auto permanent water sprinkling arrangement be installed for dust suppression.
- XII. Clearance from OISD (Oil Industry Safety Directorate) of Govt. of India to be submitted in view of available petrol tank/pump adjacent to the plant on East – South side of the plant.
- XIII. Since multiple operations are happening inside one premises & a petrol pump is existing adjacent of the plant, a dedicated fire tender corridor be made and shown in the layout & submitted including clearance from fire Deptt. Govt of Odisha for the firefighting systems to be in place.
- XIV. 'ROW' from NH-16 or concerned appropriate Authority for perennial use of the land including constructed culvert on the canal for use & plying of vehicles of the proponent be submitted.
- XV. Document on conversion of the said land for "Industrial use" from appropriate authority be submitted.
- XVI. Copies of CTE/ CTO for five products / operations to be submitted.
- 41. The SEAC in its meeting dated 28.06.2021 recommended to consider the proposal after the proponent furnish the following information / documents along with EIA study report as pointed out by the Sub-Committee of SEAC in addition to the information/ documents as sought vide SEAC letter no. 794/ SEAC-(Misc)-28, dated: 24.12.2020.
 - I) Technical write up on process & operations.
 - II) List of old equipment's & their capacities.
 - III) Proposal production / beneficiation quantity.
 - IV) Production / beneficiation quantity per cycle & cycle time.
 - V) Material balance & failing management.
 - VI) A complete drain management with network for individual operation for which CTO has been granted and the integration of the same thereof along with for proposed installation of chrome ore beneficiation unit.
 - VII) Location & layout of the storage for maximum inventory along with area & height of raw material i.e., chrome ore for monolithic unit & the proposed beneficiation plant. Single storage space for both will avoid duplication.
 - VIII) Tailing management with detail design of tailing pond & the corresponding ETP and reuse of treated waste water.

- IX) Water management with water balance for the proposed unit & composite water management with water balance for the whole industrial premises having multiple operations.
- X) Water harvesting & management with use of it / recharging of it.
- XI) A bore well was found to be working and in use. 'NOC' from CGWA & permission from Water resources Deptt., Govt. of Odisha is required to be submitted.
- XII) DG set details with requisite stack height as per the norm & housing of the same to be submitted.
- XIII) Green belt as per the norm with required species in consultation with local Govt. Forest authority / botanist to be done. Only Eucalyptus plants were found around the boundary of the plant.
- XIV) Separate material gate, both for entry & exit of incoming & outgoing vehicles and separate gate for employees to be installed of requisite size / dimension.
- XV) No provision of solar power / renewable energy was seen. Hence, provision of solar power of at least 5% of total consumption be planned & detail worked out plan within a time frame for the same be submitted.
- XVI) Internal roads inside the plant need to be concreted and provision of auto permanent water sprinkling arrangement be installed for dust suppression.
- XVII) Clearance from OISD (Oil Industry Safety Directorate) of Govt. of India to be submitted in view of available petrol tank/pump adjacent to the plant on East – South side of the plant.
- XVIII) Since multiple operations are happening inside one premises & a petrol pump is existing adjacent of the plant, a dedicated fire tender corridor be made and shown in the layout & submitted including clearance from fire Deptt. Govt of Odisha for the firefighting systems to be in place.
 - XIX) 'ROW' from NH-16 or concerned appropriate Authority for perennial use of the land including constructed culvert on the canal for use & plying of vehicles of the proponent be submitted.
 - XX) Document on conversion of the said land for "Industrial use" from appropriate authority be submitted.
 - XXI) Copies of CTE/ CTO for five products / operations to be submitted.
- 42. The project proponent has furnished compliances as desired by the committee vide SEAC letter no. letter no. 794/ SEAC-(Misc)-28, dated: 24.12.2020 and same has been verified as follows:

	Information Sought by SEAC	Compliance furnished by the
		proponent
(i) D e	Date and year of establishment of existing unit.	The unit was established for production of chrome refractory bricks and chrome mortar since 31 12 2010 copy of

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	
		Acknowledgement receipt from DIC, Bhadrak attached Annexure 1	
(ii)	Copy of Consent to Establish and Consent to Operate from State Pollution Control Board, Odisha,	The consent to establish for the existing is attached Annexure 2 .	
	Bhubaneswar to be submitted.	The existing chrome monolithic unit obtained Consent to operate vide Consent Order No. 270/2017-18 (WPC and APC) issued vide Letter No. 594/con-908 / 2000 on dated 24.03.2018. Copy attached as Annexure 3 . Copy of the certified compliance report attached as Annexure 3 A	
(iii)	Copy of conversion of land for industrial use as this is an existing unit.	The land conversion is under process. The copy of the document attached as Annexure 4 .	
(iv)	Details of Technology to be used for process of treatment of Hexavalent Chromium in waste water.	Details technology for treatment of hexavalent chromium in waste water is attached as Annexure 5 .	
(v)	Details of existing green belt and proposed with plant layout.	There is the existing plantation of about 200 plants along the boundary. Further with the commencement of beneficiation plant there will be plantation over an area of 8903 Sq.m with plantation of 1200 saplings. The layout plan showing the existing and proposed green belt given in as Annexure 6.	
(vi)	Details of solar energy to be used.	There is the proposal for installation of 10 KW solar power for outdoor lighting.	
(vii)	Details calculation and plant Layout showing location of rain harvesting recharging pits and quantity to be harvested.	Rain water harvesting details has been given as Annexure 7	
(∨iii)	Documents supporting previous water consumption in the plant.	There is no use of water in the process as the processes only include mixing of ore.	
(ix)	Undertaking by project proponent for maintenance of haulage road.	The haulage road from the plant to the highway is only 100m. The document regarding the maintenance of haulage road attached Annexure 8.	
(X)	Status of NOC/permission letter from CGWA/WR Deptt, Govt. of Odisha respectively for drawl of ground water.	The project proponent will made application for obtaining permission from CGWA for water withdrawal. An undertaking in this regard is attached. The NOC will be submitted along with the final EIA/EMP report.	
(xi)	Details of Tailing and leaching management.	Details of trailing and leaching management attached Annexure 9	
(XII)	Material Balance of the process.	Material balance attached Annexure	
(xiii)	Detailed linkage of raw materials	The raw material i.e low-grade chrome	

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
	such as source and agreement copy with the party for supply of raw material i.e., low grade Chromite Ore.	ore will be sourced from mines of Odisha Mining Corporation, Sukinda which is located at a distance of 46km from the project site. The plant has MoU with OMC for the procurement of raw material. Linkage document attached Annexure 11.
(xiv)	Revise Plant layout with all detailed features to scale super imposing the existing set ups/infrastructures/utilities/features.	Revised plant layout attached Annexure 12

- 43. The SEAC observed that the proponent has not furnished the information / documents as sought vide SEAC letter no. 427(5)/ SEAC-Misc.28, dated 05.07.2021 w.r.t observation of sub-committee of SEAC during site visit.
- 44. The project proponent vide letter no : nil dated 20-09-2021 has requested to issue ToR in order to carry out necessary EIA/EMP study and to furnish compliances as sought by SEAC vide letter no. 427(5)/ SEAC-Misc.28, dated 05.07.2021 w.r.t observation of sub-committee of SEAC during site visit.
- 45. The SEAC opined that some of the points as pointed out in the site visit report of the subcommittee of the SEAC need to be complied by the proponent prior to issue of Terms of References and hence, the request of the proponent is not acceptable.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of point wise compliances to the SEAC letter no. 427(5)/ SEAC-Misc.28, dated 05.07.2021 w.r.t observation of sub-committee of SEAC during site visit.

ITEM NO. 05

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR CHROME ORE BENEFICIATION UNIT OF THROUGHPUT CAPACITY 18,500 TPA OVER AN AREA OF 2.54 ACRE AT VILLAGE: -BYREE, PO - BYREE, DIST- JAJPUR OF M/S A3 MINERALS AND EXPORT PVT LTD, SRI. AKSHAYA KUMAR SAMAL, PROPRIETOR - TOR

- 1. 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 amendment thereafter.
- 2. The project is coming under category 'B2 'as the throughput capacity of the beneficiation plant is 18500 TPA (<20,000 TPA) and requires environmental clearance as per EIA notification 2006 and its amendment no. J-13012/12/2013-IA-II (I).
- M/s A3 Minerals and Metal Export Pvt Ltd proposes for establishment of Chrome ore Beneficiation plant over an area of 2.545 Acres with throughput capacity of 18,500 TPA within the existing Chrome monolithic unit. The promoter of the project is M/s A3 Minerals and Export Pvt Ltd, and Proprietor of the project is Sri. Akshaya Kumar Samal.
- 4. The existing chrome monolithic unit obtained consent to establish vide letter no. 1198/IND-41 on dated 10.07.2020.
- 5. The existing Chrome monolithic unit was operating under the ownership of M/s R.C. Metals Industries. The consent to operate was transferred in the name of M/s A3 Minerals on 23.10.2019 for production of 625 TPM monlithics and other refractories.

- 6. Further M/s R.C Metal Industries obtained consent to operate for production of 30 TPM chrome concentrate which was also transferred in the name of M/s A3 Mineral.
- The proposed unit is bounded by Latitude: 20°38'25.0"N Longitude:86°01'38.5"E and is featured under the Toposheet No.- F45 T14/F45U2. Khata No- 1268/439, Plot no: 4149/4683, Khata no: 1268/433, Plot no: 4146, Khata no: 1268/432, Plot no: 4157/4872, 4156/4871, Khata no: 1268/431, Plot no: 4152, Khata no: 1268/436, Plot no: 4158, Khata no: 1268/437, Plot no: 4149, Khata no: 1268/438, Plot no: 4159 & Kissam - Gharabari and belongs to the project proponent located at Village - Byree, Po - Byree, Dist - Jajpur, Odisha. The land area required for the project will be 2.545 Acres.
- 8. The mining lease area is also accessible NH-5 through Kalkala Chatia road which pass near the project site. Bairi railway station is nearest at a distance of 1.2 km from the M.L area. Nearest airport is Biju Pattnaik Bhubaneswar Airport 50 Kms from project site. Nearest river/Jor is Bansi Jor at 2.5km, Mendhakhai river at 8 km & Birupa River at 10 km and. Nearest town is Chatia at 5 km. Nearest forest Dalijoda Reserve forest at 0.3km. Nearest habitation is within 3km from project site. Kapilash wild life sanctuary 11km.There is no wild life sanctuary, corridor, National park, biosphere reserve located within 10 Km buffer zone of the project site.
- 9. Raw material linkage has been established for the proposed plant from sukinda chromite mines of OMC, M/s B.C. Mohanty and M/s Misrilal & Sons. which is located at a distance of 35 Km from the project site. The transportation of ore from the mines to the project site will be done through covered trucks.
- 10. The process is a beneficiation process of conversion of low grade chrome ore having content less than 40% of Cr2O3 into semi high grade ore having content 50-65% of Cr2O3.
- 11. Generation of solid waste (tailings generated =6500TPA having <10% Cr2O3) will be properly stored in an impervious platform in earmarked area and will be blended with chrome refractory mortar and sold. So there will be no waste generation from the proposed project. However taking into consideration of maximum storage for 1 year on an area of 0.08 Acres has been demarcated for tailing storage.
- 12. **Employment Potential -** Proposed employment generation from proposed project will be 12 direct employment and 50 indirect employment.
- 13. **Power Requirement** The electricity load of 100 kVA will be procured from CESU, Odisha. Also proposed to install 125 KVA DG set.
- 14. Water Requirement Total water Consumption for the proposed project will be 153 KL/ day out of which 13 KLD will be the makeup water. About 95% of the water will be recirculated in the process and only 5% of the will be makeup water. There will be no waste water generation from the project. Domestic waste water will be treated through soak pit via septic tank and industrial waste water generated will be treated by settling and reused in the process.
- 15. The project cost is estimated to be ` 283 lakhs.
- 16. The project proponent along with the consultant **M/s Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar** made a detailed presentation on the proposal.
- 17. The Committee observed the following:
 - c) The proponent has applied to consider their project as Category-B2 as per MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 as throughput of Mineral Beneficiation activity is less than 20,000 TPA involving only physical beneficiation.
 - d) The MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 stipulates the Mineral Beneficiation activity listed in the schedule as Category-B will

be treated as Category-B2 with throughput \leq 20,000 TPA, involving only physical beneficiation.

- 18. The SEAC in its meeting held on Dt: 14.12.2020 decided to take decision on the proposal after receipt of the following from the proponent followed by a site visit of sub-committee of SEAC.
 - i. Date and year of establishment of existing unit.
 - ii. Copy of Consent to Establish and Consent to Operate from State Pollution Control Board, Odisha, Bhubaneswar for the existing plant (Chrome Monolithic Plant) to be submitted.
 - iii. Copy of conversion of land for industrial use as this is an existing unit.
 - iv. Details of Technology to be used for process of treatment of Hexavalent Chromium in waste water.
 - v. Detailed linkage of raw materials such as source and agreement copy with the party for supply of raw material i.e., low grade Chromite Ore.
- vi. Design of tailing pond and detailed life calculation of area 0.08 acres required for tailing storage including ETP.
- vii. Study of Waste Water Management.
- viii. Details of ore transportation to the plant.
- ix. Details of CSR activities already covered under the existing project.
- x. Details of Zero discharge proposal.
- xi. Detailed Process Technology for Chrome Ore Beneficiation.
- xii. Water Balance for monsoon and non -monsoon period.
- xiii. Details of leachate management.
- xiv. Details of existing green belt and proposed with plant.
- xv. Revised Plant layout to scale for the proposed Plant super imposing the existing setups/infrastructures.
- 19. The sub-Committee of SEAC visited the project site on dated 16.04.2021 and following observations and recommendations were made:
 - a) It is an existing operating chrome ore beneficiation & Monolithic unit as stated by the proponent to have been operating prior to 2006 & therefore, Environmental Clearance was not required and not been obtained till now.
 - b) Now they have sought Environmental Clearance since they want to increase the production / beneficiation capacity to <<u>18,500 MT</u>/ annum.

As such, they may be asked to furnish the following along with EIA report.

- i. Technical write up on process & operation.
- ii. Current & proposed production / beneficiation.
- iii. Production / beneficiation quantity per cycle and cycle time.
- iv. Material balance & tailing management.
- v. List of equipments and their capacities.
- c) Raw material (Chrome ore) was found to be in stock in heap under cover shed. To confirm maximum inventory at any time of raw material of low grade chrome

ore and beneficiated high grade product & Monolithic and the corresponding area required for storage of the same with calculation including the layout with the plant layout.

- d) No garland drain / drain was found on the south side of the cover shed where the raw material / finished products are stored and was advised for the same.
- e) Four nos. water tanks (Cemented chambers) with half full/ full with water were seen and stated to be for fresh / make up water, waste water / treated waste water & water harvesting pond and found to be interconnected as well as an ETP. But their capacities & networking could not be explained well. Therefore, their capacities with dimensions and the net working along with ETP capacity (with supporting document) be submitted along with EIA study containing water management & water balance.
- f) Drain management with drain network be submitted.
- g) Water harvesting details and the use of it is be submitted.
- h) A bore well is existing and stated to be used for both process water as well drinking purpose. As such, NOC from CGWA & permission from Water Resources Deptt, Govt of Odisha is required to be submitted.
- i) One layer of Plantation was found alongside the boundary and there is enough space for further planation for required species. Thus, the proponent was advised to have two layer of plantation in hierarchy of required species in consultation with local Govt. Forest authority / botanist as per the norm to cover 33% of the local area.
- j) Only one number of gate was found both for the vehicle for goods and the employees. So, to avoid conflict between incoming & outgoing vehicles, two separate gates are requires for goods & a separate gate for employees. Accordingly, the proponent may submit the layout of the plant with the provision of gate & their dimensions.
- k) Form the plant entry gate to the RD public road, there is a gap of about 100-200 mtrs which is presently being used for movement of vehicles by the proponent and stated to be "Anabadi" land. As such, the proponent is required to submit the 'ROW' from the concerned authority / land owner for perennial use of it.
- The vehicles of the plant are plying through few villages before crossing level crossing / before meeting NH. As such, necessary permission may be obtained for use of the village road from the Panchayats duly validated by concerned B.D.O.
- m) No provision of solar power found & hence to be provisioned / installed for 5% of total power consumption.

The above complies may be sought along with EIA study along with the document on conversion of land for "Industrial use"

- 20. The SEAC in its meeting held on Dt: 28.06.2021 decided to take decision on the proposal after the proponent furnish the following information / documents along with EIA study report as pointed out by the Sub-Committee of SEAC in addition to the information/ documents as sought vide SEAC letter no. 797(2)/ SEAC-(Misc)-28, dated: 24.12.2020.
 - I) Technical write up on process & operation.

- II) Current & proposed production / beneficiation.
- III) Production / beneficiation quantity per cycle and cycle time.
- IV) Material balance & tailing management.
- V) List of equipments and their capacities.
- VI) Raw material (Chrome ore) was found to be in stock in heap under cover shed. To confirm maximum inventory at any time of raw material of low-grade chrome ore and beneficiated high-grade product & Monolithic and the corresponding area required for storage of the same with calculation including the layout with the plant layout.
- VII) Proposal for garland drain / drain on the south side of the cover shed where the raw material / finished products are stored.
- VIII) Four nos. water tanks (Cemented chambers) with half full/ full with water were seen and stated to be for fresh / make up water, waste water / treated waste water & water harvesting pond and found to be interconnected as well as an ETP. But their capacities & networking could not be explained well. Therefore, their capacities with dimensions and the networking along with ETP capacity (with supporting document) be submitted along with EIA study containing water management & water balance.
 - IX) Drain management with drain network be submitted.
 - X) Water harvesting details and the use of it is be submitted.
- XI) A bore well is existing and stated to be used for both process water as well drinking purpose. As such, NOC from CGWA & permission from Water Resources Deptt, Govt of Odisha is required to be submitted.
- XII) One layer of Plantation was found alongside the boundary and there is enough space for further plantation for required species. Thus, the proponent was advised to have two layer of plantation in hierarchy of required species in consultation with local Govt. Forest authority / botanist as per the norm to cover 33% of the local area.
- XIII) Only one number of gate was found both for the vehicle for goods and the employees. So, to avoid conflict between incoming & outgoing vehicles, two separate gates are requires for goods & a separate gate for employees. Accordingly, the proponent may submit the layout of the plant with the provision of gate & their dimensions.
- XIV) Form the plant entry gate to the RD public road, there is a gap of about 100-200 mtrs which is presently being used for movement of vehicles by the proponent and stated to be "Anabadi" land. As such, the proponent is required to submit the 'ROW' from the concerned authority / land owner for perennial use of it.
- XV) The vehicles of the plant are plying through few villages before crossing level crossing / before meeting NH. As such, necessary permission may be obtained for use of the village road from the Panchayats duly validated by concerned B.D.O.
- XVI) No provision of solar power found & hence to be provisioned / installed for 5% of total power consumption.
- XVII) The document on conversion of land for "Industrial use".

21. The project proponent has furnished compliances as desired by the committee vide **Proceedings of the SEAC meeting held on 05.10.2021**

SEAC letter no. 797(2)/ SEAC-(Misc)-28, dated: 24.12.2020 and same has been verified as follows:

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	
(i)	Date and year of establishment of existing unit.	The existing unit was established by M/s R.C. Metals Industries and transferred to M/s A. Minerals. The date of establishment of existing unit was 19.05.2004. Copy of CTE in the name of M/s R.C.Metals attached Annexure1.	
(ii)	Copy of Consent to Establish and Consent to Operate from State Pollution Control Board, Odisha,	The Consent to establish for the existing unit is in the name of M/s. R.C Metals Industries copy attached Annexure 1 .	
	Bhubaneswar for the existing plant (Chrome Monolithic Plant) to be submitted.	Further consent to operate has been obtained for the existing unit by M/s. A3 minerals vide letter no. 1983/KNG/IND/41 dated 23.10.2021. Copy attached as Annexure 2.	
		Further A3 Minerals obtained consent to establish for the proposed enhancement of chrome ore beneficiation plant vide letter no. 1198/IND- on dated10.07.2020.	
iii)	Copy of conversion of land for industrial use as this is an existing unit.	Converted for industrial use. The copy of the document attached as Annexure 4.	
V)	Details of Technology to be used for process of treatment of Hexavalent Chromium in waste water.	 Detail technology for treatment of hexavalent chromium in waste water is attached as Annexure – 5. 	
v)	Detailed linkage of raw materials such as source and agreement copy with the party for supply of raw material i.e., low grade Chromite Ore.	The raw material i.e. low grade chrome ore will be sourced from mines of Odisha Mining Corporation and Misrilal Mines, Sukinda which is located at a distance of 35 km from the project site. The transportation of ore from the mines to the project site will be done through covered trucks. Linkage document attached Annexure 6.	
vi)	Design of tailing pond and detailed life calculation of area 0.08 acres required for tailing storage including ETP.	nd Detail design and calculation of tailing por attached as Annexure 7. ing	
rii)	Study of Waste Water Management.	Detail waste water management plan has been given in Annexure 5.	
iii)	Details of ore transportation to the plant.	The raw material requirement for beneficiation unit will be 18500 TPA i.e. 66 TPD. The raw material will be stored in a covered storage area within the plant premises. The raw material of chrome ore beneficiation plant is low grade chrome ore (26-40% CrZ03). The raw material i.e. low-grade chrome ore will be sourced from mines of Odisha Mining	

SI.	Information Sought by SEAC	Compliance furnished by the proponent
No.		
		Corporation, Sukinda which is located at a distance of 3SKm from the project site. The project site is well accessible through NH 5 and Kalkala – Chatia road (50m connecting to Highway) and raw material an transportation will be carried out by covered trucks. About 6 trucks will be used for transportation of raw material and product. The transportation route map attached for reference. Annexure - 8
x)	Details of CSR activities already covered under the existing project.	Details of CSR attached as Annexure-9
x)	Details of Zero discharge proposal.	Details of Zero liquid discharge proposals attached Annexure -10.
xi)	Detailed Process Technology for Chrome Ore Beneficiation.	Detailed process for Chrome Ore Beneficiation attached Annexure 11
(ii)	Water Balance for monsoon and non -monsoon period.	Copy of water balanced attached as Annexure-12
iii)	Details of leachate management.	Details of leachate management plan attached Annexure 7.
V)	Details of existing green belt and proposed with plant.	Green belt for the proposed project will be developed over an area of 0.84 Acre i.e (33% of total area). Detail green belt plan attached Annexure 13 .
V)	Revised Plant layout to scale for the proposed Plant super imposing the existing setups/infrastructures.	Copy of Layout plan attached as Annexure-14.

- 22. The SEAC observed that the proponent has not furnished the information / documents as sought vide SEAC letter no. 427(5)/ SEAC-Misc.28, dated 05.07.2021 w.r.t observation of sub-committee of SEAC during site visit.
- 23. The SEAC in its meeting held on dated 13-09-2021 decided to take decision on the proposal after receipt of compliance to the SEAC letter no. 427(5)/ SEAC-Misc.28, dated 05.07.2021 w.r.t observation of sub-committee of SEAC during site visit.
- 24. The project proponent vide letter no : A3/031/2021-22 dated 20-09-2021 has requested to issue ToR in order to carry out necessary EIA/EMP study and to furnish compliances as sought by SEAC vide letter no. 427(5)/ SEAC-Misc.28, dated 05.07.2021 w.r.t observation of sub-committee of SEAC during site visit
- 25. The SEAC opined that some of the points as pointed out in the site visit report of the sub-committee of the SEAC need to be complied by the proponent prior to issue of Terms of References and hence, the request of the proponent is not acceptable.

After detailed discussion, the SEAC decided to take decision on the proposal after the proponent furnish pointwise compliances as sought by SEAC vide letter no. 427(5)/ SEAC-Misc.28, dated 05.07.2021 w.r.t observation of sub-committee of SEAC during site visit.

ITEM NO. 06

PROPOSAL FOR EXTENSION OF VALIDITY OF ENVIRONMENTAL CLEARANCE OF KHAMARIGAON DECORATIVE STONE MINES OVER AN AREA OF 1.513 HA. AT VILLAGE - KHAMARIGAON, TAHASIL – PATRAPUR IN THE DISTRICT OF GANJAM OF M/S GALAXY ENTERPRISES – EXTENSION OF EC.

- This proposal is for Extension of validity of Environmental Clearance for Khamarigaon Decorative Stone Mines over an area of 1.513 ha. at village - Khamarigaon, Tahasil – Patrapur in the district of Ganjam of M/s Galaxy Enterprises.
- Based on the approved Scheme of mining in 2011 Environmental Clearance for production of 11520 cum has been granted by SEIAA, Odisha vide letter no. 883/SEIAA dated 26.03.2013.
- 3. DEIAA, Ganjam vide letter No. 192/DEIAA dated 20.02.2018 has issued the Environmental clearance for production of 3000 cum/annum of decorative stone for the period upto 2020-21.
- As per MOEF & CC Notification No 4254(E) 27.11.2020, SEIAA, Odisha vide letter no. 156/SEIAA dated 22.01.2021 extended the Environmental Clearance period upto. 30.09.2021.
- The mining lease of Khamarigaon Decorative Stone Mines over an area of 1.153 ha was granted in favour of M/s Galaxy Enterprises for mining of Decorative Stone vide proceeding No.: III(MM) SM.97/2006/ 18047/SM, Bhubaneswar, the 18.12.2006 for a period of 20 years.
- 6. The lease was Executed on 20.12.2006 and Registered 21.12.2006 (i.e., lease is valid upto 20.12.2026).
- Consent Order No :10/2013-14 DATE 16-04-2013 to produce 11520 cum/Annum. Based on Validity of E.C, the Mines obtained the C.O.P. from Regional office of S.P.C.B. Berhampur. The Present Consent to Operate order No-1233/CTO-530/2014 dated 05-04-2021 to produce 3000 cum of Decorative stone per annum valid up to 30.09.2021.
- 8. The entire Mining Lease area of 1.513 hectares comprises of non-forest land.
- 9. There is no sensitive ecological habitat like National Parks, Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant reserves within 10 km radius of ML area. No Schedule I species are found within the study area.
- 10. The proponent has made a briefing on the proposal before the Committee.
- 11. The SEAC in its meeting held on Dt: 02.08.2021 decided to take decision on the proposal after receipt of the following information / documents from the proponent. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
(i)	Certified copy of half yearly condition wise compliance Report on Environmental Clearance conditions submitted to MoEF&CC, Regional Office, Bhubaneswar	Yes, copy submitted

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
(ii)	Copy of lease sanctioned by the Steel and Mines Department, Govt. of Odisha.	Yes, copy submitted
(iii)	Year wise production details duly certified by Mining Officer.	Yes, copy submitted

Considering the information / documents furnished and presentation made by the proponent, the SEAC recommended for extension of validity period of Environmental Clearance upto lease period i.e. 20.12.2026 with stipulated conditions as per **Annexure – A**.

ITEM NO. 07

PROPOSAL FOR EXTENSION OF VALIDITY OF EC FOR LOKAMARI DECORATIVE STONE MINES FOR PRODUCTION OF 10,140 CUM PER ANNUM OVER AN AREA OF 4.178 HA LOCATED AT VILLAGE LOKAMARI, GANJAM, ODISHA OF MR. LLIYAS AHMED KHAN (EC)

- This is a proposal for Extension of validity of Environmental Clearance of M/s. Lokamari Decorative Stone Mines for production of 10,140 Cum per Annum over an area of 4.178 Ha located at village Lokamari, Ganjam, Odisha
- 2. This is an Ongoing Project. Environmental Clearance was granted by SEIAA, Odisha vide letter no.917/SEIAA, dated 26.03.2013, valid up to 25.03.2018 (5 years).
- 3. Lokamari Decorative Stone Quarry over 4.178 ha in village Lokamari under Badagarh P.S., Sorada Tehsil of Ganjam District was executed in favour of Mr. Iliyas Ahmed Khan on 27.05.2000 for a period of 10 years i.e. 27.05.2000 to 26.05.2010.
- 4. The entire ML area is Non Forest land falls under Abad Ajogya Anabadi. There is no forest land within the ML area. The lessee has applied for renewal of mining lease to the competent authority on 20.02.2010 and was under deemed extension.
- 5. The Scheme of Mining prepared and submitted under Rule 18 of GCDR, 1999 for a period of 5 year from 2016-16 to 2019-2020 was approved by Directorate of Mine on 28.10.2015. Mining operations are suspended since April 2015 for want of statutory approvals. During the intervening period of OMMC Rule, 2016 came into force w.e.f. 15.12.2016, the mining lease was extended upto 26.05.2030 vide letter no. 66881//SM dated 07.09.2019.
- 6. The Lokamari Decorative Stone Quarry is well connected by a well weathered road from Lokamari village and which is about 6 km (NW Direction) from Bargarh on Sorada-Seragarh State Highway. Nearest railway station is Berhampur which is at a distance of 70km from the ML area. The ML area is covered under Survey of India Toposheet No. E45A6 and is bounded by latitude 19040'35.5" to 19040'45.2 N and 84022'57.6' to 84023'66.2 E. The area falls under Parbat kissam. All type of infrastructure facilities like Water, Electricity, dispensary, schools etc are available in Lokamari village.
- 7. The mining shall be carried out by Opencast Semi-Mechanized method to achieve the peak rated production capacity of 10140 Cu M/Annum. The mineable reserve as estimated is 81160 Cu M.
- During the plan period (2020-21 to 2024-25), the planned production is 39900 Cu M. Based on the present reserve and planned production, the life of the mine is estimated to be 9.12 year. It has been proposed that the mining will be carried out in a systematic and scientific manner by adopting semi-mechanized open cast method of mining by Proceedings of the SEAC meeting held on 05.10.2021

developing the existing pit. The pit will be extended laterally as well as depth towards west. The height of the benches of the quarry will be kept 3 mtr and width will be 3m or more than the height. The individual slope of benches will be 80° whereas the overall slope of the proposed quarry would be kept 37°.

- 9. Opencast semi-mechanized method will be adopted using machineries such as Excavator, Line offset, compressor, jack-hammer, wire ropes and drill rods etc. Firstly the weathered zone of 2m will be scraped from the top. After removal of weathered zone granite block will be dismounted from the face of the quarry and sized in to blocks for cutting & polishing as finished product. Removal of blocks from the quarry face will be carried out by wire-saw cutting method. The accurately cut blocks will be dislodged from the quarry face to be further handled by the hydraulic excavator for its shifting to the processing yard or stock yard as per the requirement.
- 10. The sized block will be transported through 20 ton capacity Hyva tippers.
- 11. The depth of the conceptual quarry has been considered up to the probable limit, i.e., upto 129.00 mRL. The ultimate extent and size of the quarry will be 165m x 145 m. Ultimate pit slope at the time of closure of mine will be around 450.
- 12. During the proposed plan period a total of 59850 m3 of waste will be generated due to course of mining. However about 30% of the generated waste will be utilized for maintenance and construction of the haul road, approach and existing roads in the surrounding areas periodically. Therefore a total of 17955 m3 of waste will be utilized for construction and maintenance of roads and remaining 41895 m3 of waste will be dumped over the existing waste dump of area 212 m2. There will be two terraces in proposed waste dump and height of terrace will be 7.5 m. The proposed dump slope should be maintained at 28°.
- The Environment Consultant M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar along with the proponent made a detailed presentation on the proposal before the Committee.
- 14. The SEAC in its meeting held on Dt: 12.06.2020 decided to take decision on the proposal after receipt of the certain information / documents from the proponent. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

SI.	Information Sought	Compliance furnished by the	Views of SEAC
No.	by SEAC	proponent	
(i)	Detailed compliance to EC conditions duly certified by MoEF&CC, Regional Office, Bhubaneswar shall be furnished	The Compliance to the EC issued vide letter no. 917/SEIAA dated 26.03.2013 is enclosed as Annexure I and the same is being submitted for certified copy to the Regional Office, MOEF&CC.	Compliance to EC conditions duly certified by MoEF&CC, Regional Office, Bhubaneswar not furnished
(ii)	Undertaking for maintenance of safety zone and OB there as priority shall be furnished. Entire planting shall be completed before start of mining	An Undertaking in this regard is enclosed as Annexure II .	

SI. No.	Information Sought by SEAC	Compliance furnished by the	Views of SEAC
(iii)	Permission of Irrigation Department for drawal of water from Rushikulya River	There is no proposal to withdraw water from Rushikulya River for the project. The requirement of water is very minimal and shall be made from already accumulated in the pit. Drinking water required for the work force shall be met from the nearby village.	Detailed source of water has to be given.
(iv)	Harvesting of rain water and its use in dust suppression and waste dump reclamation	The lease area of Lokamari Decorative Stone quarry comprises of a single hillock sloping in all the direction with its peak at its centre. The highest and lowest altitude of the area is 141mRL and 129 mRL respectively and the granite is well exposed over the whole area. Hence, the rain water gets accumulated over the quarried area over the eastern part of the ML area over 0.265 ha and the same shall be used for dust suppression and waste dump reclamation. However, the lessee has proposed to 5 nos. of construct recharge pits along the eastern boundary and northern boundary.	
(v)	Details of haulage road to be used for transportation	Presently, haulage road has been developed on the eastern side of the ML area which run adjacent to the safety zone of the eastern side of the ML area to the north and then connects with the road(SH36) which shall be used for transporting the materials to the destination. The haulage road is 4mt width and 450m length. The same shall be used during the futuristic mining operation	Permission from the Gram Panchayat shall be obtained for use of haulage road.
(vi)	CSR activities in surrounding/concerned village	The CSR activities already undertaken by the lessee in the Lokamari village were construction of temple, supply of books & notebooks to the school. providing training to the local youth for skill development, construction of village road and various donations during puja to the locals. Till date, the lessee has spent 10.12 lakhs towards peripherial development	
(vii)	Copy of sabik kissam record showing no forest land duly certified by the concerned Tahasildar	The document is enclosed as Annexure III .	

SI.	Information Sought	Compliance furnished by the	Views of SEAC
No.	by SEAC	proponent	
(viii)	Garland drain length and cross section with adequacy	Garland drain of 150 mt has been constructed along the toe of waste dump area towards the northern side of the lease area which is connected to the settling pond. The cross section of the garland drain is enclosed herewith as Annexure IV .	
(ix)	Revised Google map showing location of mine and indicating different activities within 500 meters	The revised Google map showing buffer boundary as 500 metres from ML boundary is enclosed herewith as Annexure V .	
(x)	Other mines (i.e. names, lease areas and capacities) within 500 meters from the periphery of the lease area	There are no other mines within 500 meters from the periphery of the lease area. The certificate from the Mining Office, Ganjam Circle is enclosed as Annexure VI .	
(xi)	Average production plan, types of vehicles used in transportation and the time period along with frequency of transportation of materials	Total production will be 10140 cum. and 20 ton capacity Hyvas/Tippers will be used and on an average 1-2 trailers shall be required per day.	
(xii)	Copy of mining lease document indicating the lease period	Mining Lease document is enclosed herewith as Annexure VII . However, a supplementary mining lease document shall be obtained only after submission of extension of validity of Environmental Clearance.	
(xiii)	Letter of Steel & Mines Department, Govt. of Odisha indicating that the mining lease is in force and in favour of the lessee i.e. M/s. Lokamari Decorative Stone Mines	Department of Steel & Mines, GoO has issued letter vide no. 6681/SM, Bhubaneswar dated 07.09.2019 for extension of validity period of lease upto 26.05.2030 and is enclosed as Annexure VIII.	

15. The SEAC in its meeting held on Dt: 10.02.2021 decided to take decision on the proposal after receipt of the certain information / documents from the proponent. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

SI.	Information Sought by SEAC	Compliance furnished by the	Views of SEAC
No.		proponent	
(i)	Compliance to EC conditions duly certified by MoEF&CC, Regional Office, Bhubaneswar	Certified compliance report duly certified by MoEF & CC, Regional Office, Bhubaneswar issued on 02.09.2021 is enclosed herewith as Annexure – I .	

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
(ii)	Detailed source of water	Water requirement is very less. However, the water collected at the quarry pit shall be used for the drilling and other activities. Most of the workers are from nearby villages and the mine shall be working on single basis. Hence, the during water requirement can be met from the village tube well.	
(iii)	Permission from the Gram Panchayat for use of haulage	Permission from Gram Panchayat for use of haulage road is enclosed as	

Considering the information / documents furnished and presentation made by the proponent, the SEAC recommended for extension of validity period of Environmental Clearance upto lease period i.e. 26.05.2030 with stipulated conditions as per **Annexure – A**.

ITEM NO. 08

PROPOSAL OF ENVIRONMENTAL CLEARANCE OF M/S GREEN TECH ENVIRON MANAGEMENT PVT. LTD. FOR PROPOSED COMMON BIOMEDICAL WASTE TREATMENT FACILITY (CBWTF) AT MOUZA- PARMANPUR (PLOT NO. 473, CHAKA KATA NO. 536 AND 207), TAHASIL- MANESWAR, DISTRICT-SAMBALPUR OF SRI RAMAKANT BURMAN – EC

- The proposal is for Environmental Clearance of M/s Green Tech Environ Management Pvt. Ltd. for proposed Common Biomedical Waste Treatment Facility (CBWTF) at Mouza- Parmanpur (Plot no. 473, Chaka Kata no. 536 and 207), Tahasil- Maneswar, District-Sambalpur of Sri Ramakant Burman.
- 2. The project falls under schedule 7 (da) "Biomedical Waste Treatment Facility" Category-B as per the EIA notifications, 2006 amendments dated 17th April, 2015
- 3. M/s. GreenTech Environ Management Pvt. Ltd. has proposed a New Common Biomedical Waste Treatment Facility (CBWTF) Project at Plot no. 473, Chaka Kata no. 536 and 207, Mouza Parmanpur, P.S. Sason, Maneswar, District- Sambhalpur, Odisha
- 4. Location and Connectivity Geographical co-ordinates of the Project is Latitude: 21°32'16.96" N and Longitude: 84° 5' 34.32" E. Project site is falling in Survey of India Toposheet No. 64O/14, 64O/15, 73C/2 and 73C/3. Parmanpur Town is at 1.21 km. NH-6 is at 6.95 km. Sambalpur Railway Station at 14 Km. Raipur Airport at 245 km. Bhubaneshwar International Airport at 229 km. Harad nadi is at 3.5 Km. Malati Jhor Nadi is at 7.0 Km S, Munaki Nalla is at 6.0 Km. Jharghati Garpati RF is at 6.0 Km. Junan RF is at 9.0 Km. Lamdungri RF is at 9.0 Km. 5.Project site is 14 Km away from Critically Polluted Area, Ib Valley-Jharsuguda.
- 5. The proposed CBWTF unit consist of Incinerator (250 kg/hr) 1no., Autoclave (500 liters per batch) 1no., Shredder (100 kg/hr) 1 no. and ETP (50KLD) 1 no.
- Water Requirement Water requirement for the project will be 23 KLD. For drinking & domestic purpose water requirement will be 2 KLD, for process will be 18 KLD, for Green belt development and dust suppression will be 2 KLD. Borewell will be used for drinking and domestic purpose.
- 7. Power Requirement Total electricity requirement of the project is about 80 KVA. Required power will be sourced from The Grid Corporation of Odisha Limited (GRIDCO). Additionally, DG set of 62.5 KW capacity has been proposed as

backup support in case of power failure.

- 8. Green Belt- 33% (3329.75 acre) of total plot area shall also be developed under Green Belt.
- 9. Employment Potential: Total 60 nos. of manpower is proposed to be required to run the facility smoothly. Required manpower shall be sourced from local area.
- 10. ToR Application was submitted through online portal of MoEFCC on 17.11.2017. Project was considered for ToR Presentation on dated 05.01.2018.
- 11. ToR Letter for Baseline Environmental Studies and Preparation of EIA/EMP Report was granted on 25.01.2018.
- 12. Baseline data collection were conducted during 1st March, 2018 to 31st May, 2018 considering one non monsoon season.
- 13. Public hearing for proposed project was conducted on 18.01.2020.
- 14. Solid waste generation During Construction phase of the unit, solid & hazardous waste will be wooden, metallic waste, containers, oil drums and domestic waste from the labor unit etc. During operation of the unit main waste will be Ash from incinerator and Sludge from ETP. Total 100-200 kg/day of incineration ash and 20-30 kg/day of residues shall be generated from the treatment unit. Ash residue from high temperature incineration and other material residues from the process shall be collected into containers / bags and shall be stored at temporary ash storage shed and shall be disposed into the secured landfill periodically after sufficient accumulation. Approx. 200-300 kg /month of Sludge will be generated from ETP. During operation phase 60 persons are engaged in operation phase and approx. 60 kg/day municipal solid waste is generated. All generated waste shall be disposed to secured land fill site as per the direction of OSPCB.
- 15. The project cost is `25 crores.
- 16. The Environment consultant **M/s SMS Envocare Ltd. 301, Pentagon, P-3, Magarpatta City, Hadapsar, Pune, Maharashtra** along with the proponent has made a presentation on the proposal before the Committee on 18.11.2020.
- 17. The SEAC in its meeting held on dated 18.11.2020 decided to take decision on the proposal after receipt of the following information / documents from the proponent.
- 18. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
(i)	Distance of the site from another Bio-medical Waste facility at Sundargarh	Another Common Biomedical Waste Treatment Facility is Located in DHH, Sundargarh which is 65 km away towards South direction from proposed project site of Greentech Environ Management Pvt. Ltd. Google Image showing distance is enclosed as <i>Annexure-1.</i>
(ii)	75KM geographical domain should be left during collection of wastes as another unit has already established in Sundergarh after obtaining Environmental Clearance from SEIAA, Odisha. Details of coverage	Agreed. 75 Km geographical domain will be left during collection of wastes as another unit has already established in Sundergarh after obtaining Environmental Clearance from SEIAA, Odisha.

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
	area for waste collection to be provided	Proposed project will collect waste from Sambalpur, Jharsuguda, Bargarh, Balangir, Boudh, Subarnapur, Angul and Deogarh districts. We will not involve in the coverage area specified for CBWTF developed at Sundergarh.
(iii)	Status of NOC from CGWA and approval from Water Resources, Deptt. Odisha for use of ground water	Application for Ground Water Extraction is yet to be submitted to CGWA and approval from Water Resources, Dept. Odisha. NOC from CGWA and approval from Water Resources, Deptt. Odisha will be taken after getting EC.
(iv)	Study report on Occupational community health hazards and mitigative measures	Study report on Occupational community health hazards and mitigative measures is enclosed As <i>Annexure-2</i>
(V)	Report on possible hazardous waste generation and its disposal practice	During Construction phase of the unit, solid & hazardous waste will be wooden, metallic waste, containers, oil drums and domestic waste from the labour unit etc. During operation of the unit main waste will be Ash from incinerator and Sludge from ETP. Total 100-200 kg/day of incineration ash and 20-30 kg/day of residues shall be generated from the treatment unit. Ash residue from high temperature incineration and other material residues from the process shall be collected into containers / bags and shall be stored at temporary ash storage shed and shall be disposed into the secured landfill periodically after sufficient accumulation. Approx. 200 -300 kg/month of Sludge will be generated from ETP. During operation phase 60 persons are engaged in operation phase and around 50-60 kg/day municipal solid waste is generated. All generated waste shall be disposed to secured land fill site as per the direction of OSPCB.
(vi)	Recycle of Plastic should be opted if possible. Detailed proposal to be given	Plastic waste generated from medical and clinical activities are Contaminated Waste (Recyclable) Wastes generated from disposable items such as tubing, bottles, intravenous tubes and sets, catheters, urine bags, syringes (without needles and fixed needle syringes) and vacationers with their needles cut) and gloves etc. As per procedure it is stored in Red coloured non- chlorinated plastic bags or containers. Treatment of the same involved Autoclaving or micro - waving/ hydroclaving followed by shredding or mutilation or

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
		combination of sterilization and shredding. Treated waste to be sent to registered or <u>authorized recyclers</u> or for energy recovery or plastics to diesel or fuel oil or for road <u>making</u> , whichever is possible. There will not be disposal into CHWTSDF.
(vii)	Arrangement for collection of wastes from health centres with safety measures to be adopted	Waste from each health care establishment shall be collected on a daily basis. Segregated wastes collected in non- chlorinated, bar-coded and colour coded plastic bags from different wards and after internal shifting to the common collection point shall be the responsibility of health care establishments. Waste bags must be properly packed and sealed (tied) before shifting to avoid spillage. The common collection point room location, from where the operator's vehicle will lift the wastes must be mutually agreed for easy access of vehicle and environmental safe. Incinerable waste and autoclavable wastes must be kept with separate identity at common collection point for collection by the operator in separate colour coded closed containers for unloading in separate treatment area. The operator undertakes to transport the collected waste in GPS- enabled closed container vehicles. Personal protective equipment will be provided to all the workers during collection, transportation, shifting, segregation, treatment and final disposal. Operation of CBWTF will be strictly as per guidelines specified by CPCB
(viii)	Diesel to be used as fuel for incinerator. Details of storage facility and explosive licence status for storage of diesel at the site	High Speed Diesel (HSD) will be used for ignition of incinerator and for DG Set. Once Incinerator is charged, it will be run through electricity. Total fuel requirement for the project will be around 500-600 Liters/day. The same will be sourced from local market. PESO Licence for storage of HSD for such capacity is not required.
(ix)	Bio-medical wastes to be collected from individual health centres to the common collection centres by the project proponent only. This is to be confirmed by project proponent	Agreed. Greentech Environ Management Pvt. Ltd. will be responsible for collection, transportation, segregation at facility, treatment and disposal of waste. Operation of CBWTF will be strictly as per guidelines specified by CPCB and as per direction of OSPCB. Undertaking for the same is enclosed as Annexure-3

- Meanwhile, Mediaid Marketing Services, an OSPCB authorized common biomedical waste treatment & disposal facility (CBWTDF) operator having facility of 7TPD at Amasaranga. Majhapada, District Sundargarh has requested vide Ref no: MMS/2021/6204 dated 09.03.2021 that:
 - The public hearing was conducted on 26th Dec, 2018 at Majhapara Gram Panchayat office, Block-Sadar.
 - EC for the plant has been granted from State Level Environment Impact Assessment Authority (SEIAA), Odisha, Bhubaneswar vide ref no 7998/SEIAA dated 18 03 2020.
 - After completion of construction and machinery installation, consent to operate was taken from state Pollution Control Board, Regional office, Rourkela vide consent order no 11/2020-21 (WPC & APC) dated 30.09.2020.
 - It has come to their knowledge that a public hearing was held by M/s Green Tech Environ Management PVT Ltd for establishment of a new CBWTDF at Parmanpur. Sambalpur District. As per CPCB guideline 2016 for CBWTDF the coverage area of a CBWTDF located within the respective state/UT shall be allowed to cater healthcare units situated at a radial distance of 75 KMs. However. in a coverage area where 10.000 beds are not available within a radial distance of 75 KMs existing CBWTDF may be allowed to cater the healthcare units situated upto 150 KMs radius w.r.t its location. The Mediaid, CBWTDF plant has been designed to cater to 10,000+ beds with latest machinery. The regional bed strength within a distance of even 150 KMs radius is way less than 10,000 beds. So, setting up a new CBWTDF in Sambalpur district will be disastrous to their very existence and they are looking at huge financial losses as the bed strength in the region is already lower than 10,000 beds.
- Also, as per CPCB guidelines, 2016 under criteria for development of a new CBWTDF for a locality or region, if a coverage area requires additional treatment capacity, in such a case, action may be initiated by the prescribed authority for allowing a new CBWTDF in that locality without interfering the coverage area of the existing CBWTDF & beds covered by the existing CBWTDF. But this new proposed facility falls within the coverage area of their newly operational CBWTDF.
- Also, being a new facility, any consideration should be allowed only after achieving 10,000 beds. They humbly request to discontinue the process for setting up at any new facility in the region (within a distance of 150 KMs from existing CBWTDF) until & unless plant achieves full capacity. Also, the distance between Mediaid Marketing Services and proposed site in Sambalpur district is approx. 100 KMs.
- 20. The SEAC in its meeting held on dated 19-03-2021 decided to take decision on the proposal after a detailed joint consultation meeting with the proponent of both the CBWTDF i.e. Mediaid Marketing Services and M/s Green Tech Environ Management Pvt. Ltd. about the coverage area as both the CBWTF is located 65 Kms away from each other.
- 21. Both the proponents i.e. Mediaid Marketing Services and M/s Green Tech Environ Management Pvt. Ltd. were called for a joint consultation meeting on 05.10.2021 at 03:00 PM through Video Conferencing. The Managing Director of M/s Mediaid Marketing Services attended the meeting, but no body from M/s Green Tech Environ Management Pvt. Ltd. attended the meeting.
- 22. The Managing Director of M/s Mediaid Marketing Services had explained his problem to the Committee as pointed out in his appeal as per para 19 above.

Considering the information furnished and presentation made by the proponent and

consultation meeting with the existing CBWTF operating within 65 km from the proposed CBWTF, the SEAC recommended to reject Environmental Clearance for the proposal for the following reason.

 a) Para 7 (3) of Bio-Medical Waste Management Rules, 2016 stipulates "No occupier shall establish on-site treatment and disposal facility, if a service of Common Biomedical Waste Treatment Facility is available at a distance of seventy-five kilometers". The proposed CBWTF of M/s Green Tech Environ Management Pvt. Ltd. is proposed to be located within 65 km away from another existing CBWTF (i.e. M/s Mediaid Marketing Services) in Sundary district.)

1110

Approved

10.10.2021

SECRETARY, SEAC

CHAIRMAN, SEAC

Environmental Scientist, SEAC

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR DECORATIVE STONE MINES

A. Specific conditions

- 1. The Project Proponent shall obtain consent from the State Pollution Control Board, Odisha and effectively implement all the conditions stipulated therein.
- 2. Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted; All the old age people of the surrounding villages may be provided medical facilities.
- 3. Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages. The Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.
- 4. Project Proponent shall ensure the safeguard and wellbeing of villagers and school, regular health monitoring of all residents in the area and the compliance Report shall be submitted to the Regional office of the Ministry and SEIAA, Odisha.

B. Standard conditions

- 1. A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the SEIAA, Odisha 5 years in advance of final mine closure for approval.
- 2. No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.
- 3. No change in mining technology and scope of working should be made without prior approval of the SEIAA, Odisha.
- 4. No change in the calendar plan including excavation, quantum of mineral and waste should be made.
- 5. The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) for the project.
- 6. Mining shall be carried out as per the provisions outlined in the approved mining plan as well as by abiding to the guidelines of Directorate General Mines Safety (DGMS).
- 7. Protection of vegetation in the surrounding areas, and proper storage of solid waste, subgrade ore and their use have to be given priority during mining operation.
- 8. Digital processing of the entire lease area using remote sensing technique shall be

carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office and SEIAA, Odisha.

- 9. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haul road, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board.
- 10. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. The monitoring shall be carried out four times in a year pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected 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.
- 11. Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The project proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
- 12. 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 light/night hours.
- 13. Sufficient number of Gullies to be provided for better management of water. Regular Monitoring of pH shall be included in the monitoring plan and report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
- 14. There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
- 15. The Project Proponent has to take care of gullies formed on slopes. Dump mass should be consolidated with proper filling/leveling with the help of dozer/compactors.
- 16. The reclamation at waste dump sites shall be ecologically sustainable. Scientific reclamation shall be followed. The local species may be encouraged and species are so chosen that the slope, bottom of the dumps and top of the dumps are able to sustain these species. The aspect of the dump is also a factor which regulates some climatic

parameters and allows only species adopted to that micro climate.

- 17. The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
- 18. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps toprevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.
- 19. Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department and as per CPCB Guidelines. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
- 20. The Project Proponent shall make necessary alternative arrangements, where required, in consultation with the State Government to provide alternate areas for livestock grazing, if any. In this context, Project Proponent should implement the directions of the Hon'ble Supreme Court with regard to acquiring grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded against felling and plantation of such trees should be promoted.
- 21. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
- 22. As per the Company Act, the CSR cost should be 2 % of average net profit of last three years. Hence CSR expenses should be as per the Company Act/Rule for the Socio

Economic Development of the neighborhood Habitats which could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.

- 23. 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.
- 24. Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
- 25. 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.
- 26. 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.
- 27. The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.
- 28. A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
- 29. State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.
- 30. The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at www.environmentclearance.nic.in and a copy of the same should be forwarded to the Regional Office.
- 31. The SEIAA, Odisha may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 32. Any appeal against this 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.
- 33. The above mentioned stipulated conditions shall be complied in a time-bound manner. Failure to comply with any of the conditions mentioned above may result in cancellation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.