



File No: SIA/GJ/MIN/410406/20807/2022

Government of India

Ministry of Environment, Forest and Climate Change

(Issued by the State Environment Impact Assessment Authority(SEIAA),
GUJARAT)



Dated 29/11/2024



To,

BHAVESHBHAI PATEL
BHAVESHBHAI PATEL
Village- Asodara Taluka- Dabhoi District- Vadodara , VADODARA, GUJARAT, 391120
varundmine1@gmail.com

Subject: Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

This is in reference to your application for Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding in respect of project M/s. Varund Trading submitted to Ministry vide proposal number SIA/GJ/MIN/410406/2022 dated 30/03/2024.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO22B0108GJ5103742N
(ii) File No.	SIA/GJ/MIN/410406/20807/2022
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vii) Name of Project	M/s. Varund Trading
(viii) Name of Company/Organization	BHAVESHBHAI PATEL
(ix) Location of Project (District, State)	VADODARA, GUJARAT
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	no

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the Ministry for an appraisal by the State Environment Impact Assessment Authority(SEIAA) Appraisal Committee (SEIAA) in the Ministry under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered by State Environment Impact Assessment Authority(SEIAA) Appraisal Committee of SEIAA in the meeting held on 08/11/2024. The minutes of the meeting and all the Application

and documents submitted [(viz. Form-1 Part A, Part B, Part C EIA, EMP)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.

5. The brief about configuration of plant/equipment, products and byproducts and salient features of the project along with environment settings, as submitted by the Project proponent in Form-1 (Part A, B and C)/EIA & EMP Reports/presented during SEIAA are annexed to this EC as Annexure (1).
6. The SEIAA, in its meeting held on 08/11/2024, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Terms of Reference under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of specific and general conditions as detailed in Annexure (2).
7. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the State Environment Impact Assessment Authority (SEIAA) Appraisal Committee hereby decided to grant Terms of Reference for instant proposal of M/s. BHAVESHBHAI PATEL under the provisions of EIA Notification, 2006 and as amended thereof.
8. The Ministry reserves the right to stipulate additional conditions, if found necessary.
9. The Terms of Reference to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
10. This issues with the approval of the Competent Authority.

Annexure 1

Specific Terms of Reference for (Mining Of Minerals)

1. Annexure – B (Terms Of Reference For Proposals Involving Mining Of Ordinary Sand)

S. No	Terms of Reference
1.1	ANNEXURE – B (Terms of Reference for proposals involving mining of Ordinary Sand) 1. The Project Proponent shall obtain required Non Agriculture Document (N.A. for land use change) from the competent authority after obtaining Environmental Clearance and before commencing for mining operations. 2. Rate of Mining shall be restricted up to the depth of 1 m or the replenishment rate, whichever is less. 3. Authentication of ground water level data through concerned agency in order to prevent ground water intersection due to working of mine shall be addressed in detail in EIA report. 4. Community Health Centre for the entire cluster shall be facilitated on permanent basis through a corpus of cluster members. 5. PP shall submit replenishment rate study report prepared by department of Geology and Mining justifying rate of proposed mining is in accordance to rate of replenishment keeping guideline addressed in Sustainable Sand Mining 2016 and its amendment from time to time issued by MOEF&CC. 6. To form a corpus among the lease holders in cluster to identify need of the villages and commitments made by the project proponent to address concerns raised during the public consultation with inclusion of all the activities proposed by the PP or prescribed by SEAC as the case may be to be part of EMP. A mechanism to monitor implementation of these activities shall be framed by the members making a body among cluster. 7. To implement all safety measures regarding protection of lighting in mine as per the guidance

S. No	Terms of Reference
	manual of DGMS vide circular No: DGMS (Tech) Circular No: 10 of 2020 dtd. 23 June 2020. 8. To address all the concerns raised during the public consultation and to propose need-based activities preferably covering environmental aspects by the PP and shall be part of EMP vide OM dtd 30.09.2020. 9. To conduct survey for the approach road for the entire cluster and making a pacca road/s to be used by the concerned lease holders to be used by vehicles carrying mineral up to main road. 10. Vide letter of MOEF&CC dtd 07.07.2020, EIA, EMP submitted shall have Plagiarism report complying all the conditions mentioned therein. 11. Environmental Management Plan with details of capital and recurring cost including following details shall be included in EIA: a) Measures after post closure/working of mine, measures to be adopted as per OM of MOEF&CC dated 16/01/2020 addressing that after ceasing mining operations, PP shall undertake re-grassing of the mining area and any other area which have been disturbed due to mining activities and restore the land to a condition which is for the growth of fodder, flora and fauna. b) Details of Dust mitigation measures due to mining, handling of mineral, loading, unloading, transportation and other allied activities similar to the applicable measures guided in Notification issued by MOEF&CC dated 25/01/2018 vide GSR 94(E).

Standard Terms of Reference for (Mining of minerals)

1.

S. No	Terms of Reference
1.1	Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the time bound action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.

Additional Terms of Reference

PP shall comply with the conditions mentioned in Annexure-3.

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Ordinary Sand	Ordinary Sand	12360	Tons per Annum (TPA)	Road	

Annexure 3

Terms of Reference to Mining Proposal of Ordinary Sand mining to Varund Trading (Asodara Ordinary Sand & Gravel Block-01) located at Govt. Land & Survey No. – Opp. 305, 306, 310, & 311, Vil. Asodara, Ta. Dabhoi, Dist. Vadodara.

Category of the Projects: 1(a)

This office received an application from the following Project Proponent on 02.07.2024 for obtaining Terms of Reference.

PROJECT SUMMARY

I.	Project / Activity as per EIA Notification, 2006	:	1(a)
II.	Category	:	B1
III.	Purpose of Application	:	Terms of Reference [TOR]
IV.	Name of Mineral	:	Ordinary Sand & Gravel
V.	Application Number	:	SIA/GJ/MIN/410406/2022
VI.	Application inward date	:	02.07.2024

Sr. No.	Application No.	SIA/GJ/MIN/410406/2022
1.	Application Type	B1 - TOR
2.	Name of Project	M/s. Varund Trading(Asodara Ordinary Sand & Gravel Block-01)
3.	Name of Mineral	Ordinary Sand & Gravel
4.	S. No and Type of Land	Govt. Land & Survey No. – Opp. 305, 306, 310, & 311
5.	Village	Asodara
6.	Taluka	Dabhoi
7.	Dist	Vadodara
8.	Lease Area/LOI	1.10.00 Ha
9.	Validity of lease	LOI Letter No. GEO/Auction/OSD/VAD/2022-23/ 004/10015A/3575 On Date – 11/07/2022, For 5 years
10.	ROM	12,364 MTPA
11.	River	Orsang
12.	Nearest Human Habitation	Asodara- 0.24 Km
13.	End Use	Construction
14.	Investment in Rs	1,32,02,030/-
15.	Date of Application Accepted by SEAC	02.07.2024

A. Basic Information of the Project:

1.	Name of Project as per Form I	M/s. Varund Trading
2.	Address of the lease	Village: Asodara, Taluka: Dabhoi, District: Vadodara, State: Gujarat
3.	Name of lease holder	M/s. Varund Trading
4.	Lease area (Ha)	1.10.00 Hect
5.	Cluster Details	Cluster ID – VAD 5
	a. Total no. of leases in the cluster	64
	b. No. of TOR granted in cluster	-
	c. No. of EC granted in cluster	-
	d. Total area of the cluster	158.54.52
	e. Maximum individual lease area	7.31.75
	f. Minimum individual lease area	0.56.45
6.	Validity of lease with the date of expiry	LOI Letter No. GEO/Auction/OSD/VAD/2022-23/ 004/10015A/3575, Date 11.07.2022
7.	Rate of Mining (MT/Annum)	12,364 MTPA
8.	Details of EC obtained (for expansion projects), if any	Nil
9.	Name of River Bed	OrsangRiver
10.	Is the river perennial / non-perennial?	non-perennial (seasonal)
11.	Lease area (submerged / in stream / on dry river bed)	On dry riverbed

12.	All coordinates of the lease area as per Approved Mining Plan	Pillars	Latitude	Longitude
		1	22° 03' 26.5061" N	73° 29' 21.2265" E
		2	22° 03' 29.5597" N	73° 29' 18.3699" E
		3	22° 03' 31.5874" N	73° 29' 22.1256" E
		4	22° 03' 29.4289" N	73° 29' 23.2958" E
13.	Manpower requirement	13		
14.	Applicability of CRZ Notification	Not applicable		
15.	Minimum Setback distance proposed to be maintained from River Bed (m)	More than 10 meters		
16.	Minimum buffer distance from bridge piers / water intake wells / irrigation structures	SH 63 Bridge -2.08 km in SW Direction. for lease area		
17.	Maximum depth of sand removal (3 m or water depth whichever is less)	0.4 m per year.		
18.	Width of Riverbed (m)	900 meters		
19.	Average depth of water at lease area (m)	7-10m		
20.	Depth of mining (m)	1.0 m Per Annum		
21.	Ground Water Table in meter BGL	7-10m		
22.	Does ground water interfere approach road exit? (Yes / No) If yes, status report of CGWA	No		
23.	Distance between lease and main road	680 m		
24.	Length of kaccha road (m)	680 m		
25.	Length of pacca road (m)	00		
26.	Plan for making pacca road	No		
27.	Source of fresh water	Drinking water will be Purchase from nearby water suppliers. And for the dust suppression and plantation will be Purchase from nearby tanker suppliers		
28.	Water requirement (KLPD)	Total – 2.73 KLD		
	a. Domestic	0.4 KLD		
	b. Dust suppression	1.45 KLD		
	c. Gardening / Green belt development	0.88 KLD		
	d. others	Nil		
29.	Whether the Undertaking is submitted for identical information provided in Form I, Approved Mining Plan, Project Details validated by District Geologist, Pre-Feasibility Report, Lease Document, Environment Management Plan and other documents	Yes		

B. Environmental Sensitivities:

Sr NO	Mining Type	Actual distance	Minimum Distance	Locations
1	Residential	Asodara- 0.24 Km (Asodara population: 746 As per 2349 Census)	100M (When Blasting is not involved)	As per order of NGT before Principal Bench in the O.A. NO 85/2018 (WZ) dtd 30.09.2020
	Public buildings	Primary School at Asodara= 0.52 Km		As per order of NGT before Principal Bench in the O.A. NO 85/2018 (WZ) dtd 30.09.2020
	Inhabited sites	Asodara- 0.24 Km		
2.	A. Major Bridge	SH 63 Bridge -2.08 km in SW Direction. for lease area	1 km	On both sides of the lease (as per Sustainable Sand Mine Guideline of MOEF&CC)
	B. Highway	SH-63 about 1.44 Km SW Direction	1 km	On both sides of the lease (as per Sustainable Sand Mine Guideline of MOEF&CC)
OR				

3.	Bridge (Span of Bridge as X)	Not Applicable	5X in upstream or 200 m. 10X in downstream or 500 m	As per Sustainable Sand Mine Guideline of MOEF & CC
4.	Public Structure including water intake wells	There is no Public Structure under 1 km from lease area	a. 5X in upstream or 200 m. b. 10X in downstream or 500 m	As per Sustainable Sand Mine Guideline of MOEF & CC
5	Depth of working	0.4 meters Ground water table at lease area 7 m -10 meter	1 M or water level whichever is early	As per order of NGT before Principal Bench in the O.A. NO 85/2018 (WZ) dtd 30.09.2020)
6	Set Back Distance to prevent river bank erosion	More than 10 meters	10 M or 1/4th of width of river	As per order of Honorable SC dtd 27.02.2020 and Sustainable Sand Mine Guideline of MOEF&CC
7	Mineable Material per Hectare area for actual mining shall not exceed maximum production	12364 MTPA	60,000 MTPA Per Hectare	As per Sustainable Sand Mine Guideline of MOEF&CC
8	Water supply Scheme/Irrigation structure	Narmada Canal – 2.48 Km NW Direction	200 M	As per Sustainable Sand Mine Guideline of MOEF&CC
9	Railway Line	Railway Line – 6.58 km W Direction	100 M	As per Sustainable Sand Mine Guideline of MOEF&CC
10.	Reservoir / Canal	Narmada Canal – 2.48 Km NW Direction	100 M	As per CPCB Distance Criteria And order of NGT before Principal Bench in the O.A. NO 85/2018 (WZ) dtd 30.09.2020
11.	Other Road	Public Road about 1.68 Km	100 M	As per CPCB Distance Criteria And order of NGT before Principal Bench in the O.A. NO 85/2018 (WZ) dtd 30.09.2020
12	Eco-Sensitive Zone (if notified)	1. The lease area does not fall in any eco-sensitive zone. It falls outside of the Eco Sensitive Zone Of Shoolpaneshwar. 2. Distance of Eco Sensitive Zone Of Shoolpaneshwar About 25.20 Km 3. Eco Sensitive Zone Of Shoolpaneshwaris notified under Notification no. – S.O. 1653 (E) Date- 05/05/2016	i. Outside the Eco-Sensitive Zone (if located within Notified Eco-Sensitive Zone, Prior Clearance of NBWL required)	As per 3(i) of MoEFCC letter vide no. 6-60/2020WLPart (1), dated 16.07.2020
			ii. >1 km and <10 km of National Park / Wildlife Sanctuary (Prior Clearance of NBWL may not be applicable)	As per 4(ii) & 4(iv) of MoEFCC OM vide no. 22-43/2018-IA.III, dated 08.08.2019
			iii. Proposal involving mining of mineral within 1 km from boundary of National Park and Sanctuaries is prohibited	As per 4(iv) of MoEFCC OM vide no. 22-43/2018-IA.III, dated 08.08.2019 in accordance with the order of the Hon'ble Supreme Court dated 04.08.2006 in the matter of T.N. GodavarmanThirumulpad Vs. UOI in W.P.(C) No. 202 of 1995

13.	Eco-Sensitive Zone (if not notified)	Not Applicable	i Outside the Eco-Sensitive Zone ii. >1 km and <10 km of National Park / Wildlife Sanctuary (Prior Clearance of NBWL required)	As per 3(ii) of MoEFCC letter vide no. 6-60/2020WLPart (1), dated 16.07.2020
14.	Attraction of General Conditions for change in category from 'B' to 'A'.	Not Applicable	0 to 5 km from the boundary of Environmental sensitivities prescribed in the referred Notification	MoEFCC Notification no. S.O. 1599(E), dated 25.06.2014
15.	Distance of Coastal line from the site	More than 100 Km.	>500 M from HTL	Amended CRZ Notification 2011

C. Details of Mining:

1.	Method of Mining (Manual / Semi-mechanized / Mechanized).	Semi-mechanized
2.	Equipment's to be used for Mining bulldozers, hydraulic excavators, JCB, scrapers, loaders, Diesel Pump, etc.)	Hydraulic excavators, JCB, loaders
3.	Whether it includes blasting?	Not Applicable
4.	Details of Authorized Blasting Agency with date of validity certificate	Not Applicable
5.	Procedure / SOP (in brief)	Not Applicable
6.	Details of Blasting Parameters in brief	Not Applicable
7.	Frequency of blasting	Not Applicable
8.	Impact of blasting	Not Applicable
9.	Outcome of Vibration study	Not Applicable
10.	Blasting Activity Management Plan	Not Applicable
11.	Use of any Chemical with quantity	Not Applicable
12.	Precautions taken for Human Safety in brief	Not Applicable
13.	Crusher provided? If Yes, Measures taken for Air Pollution Control	Not Applicable
14.	Compliance of DGMS Guidelines for Blasting	Not Applicable
15.	Compliance of Sustainable Sand Mine Guidelines published by MoEFCC in 2016	Not Applicable
16.	Whether Replenishment Rate Study is approved by District Geologist? If yes, conclude in brief	Replenishment report is 100 %.

D. Details of Green Belt Development:

1.	a. Green belt development budget	27,500 Rs.
	b. Green belt area / location	Along river coarse and at approach road
	c. No. of trees to be planted	110
	d. Types of trees to be planted	Indigenous

E. Details of Environment Management Plan:

1.	Details of EMP	Impact	Mitigation Measures
	a. Land Environment	By the extraction of mineral from the lease area impacts to change the land pattern	The mining lease area granted in Orsang River bed, which is Govt land. Due to mining the land pattern will be change for some time but will be come up in its pre stage after monsoon.
	b. Water Environment	Pollution of surface run off. Depletion of ground water table.	❖ Depth of excavation /mining shall be restricted to 0.4 m or water level at site, whichever is less. ❖ No In stream mining will be done.

		Change in river coarse	❖ No effluent will be generated due to mining activities.
	c. Air Environment	1. Gaseous emission from vehicles and machineries used 2. Dust Pollution	❖ Proponents will Spend Rs 32,760 per year for sprinkling to internal road, loading point all transfer points. ❖ Proponent will develop green belt around the lease area with Rs 27,500 for the maintenance and replenishment of the plants. ❖ Attached road shall be sprinkle with water daily to prevent fugitive emission during vehicular. Speed of vehicle will only restrict to the 20 km/hour on Kutcha Road. ❖ Vehicles used in mines and transportation shall be maintained well to mitigate the fugitive emission.
	d. Noise Environment	Noise due to working through heavy machinery.	❖ Ear muffs will be used during high noise activity. ❖ Regular maintenance of machineries shall be done
	e. Biological Environment	Nil	Nil
	f. Human Environment		❖ Suitable and properly maintained first-aid outfit should be kept at the mine for use in case of accident ❖ Safety equipment's like dust masks and ear muffs etc. ❖ Health camps shall be arranged for local villagers and workers.
	g. Others		
2.	Occupational health & safety measures as per DGMS	❖ Lessee will spend about 1,82,700Rs for the safety of the workers by providing them PPE kits every year. ❖ Suitable and properly maintained first-aid outfit should be kept at the mine for use in case of accident ❖ Safety equipment's like dust masks and ear muffs etc. ❖ Health camps shall be arranged for local villagers and workers.	
3.	Safety measures proposed		
	a. Is First Aid facility provided by PP?	yes	
	b. Details of PPEs	Safety helmet, Hand gloves Shoes etc.	
	c. Whether Registration of Workers under Building and other Construction Workers' (regulation of Employment & Conditions of Service) Act, 1996 and as Beneficiaries with the Gujarat Building and other Construction Workers Welfare Boards is obtained or not?	Will be done after the agreement of the lease.	
	d. Insurance of Workers	Nil	
	e. Health checkup plan of workers	Every six-monthly plan for Health management.	

F. Transportation:

1.	No. of vehicles per day carrying Minerals	03
2.	Fugitive dust emission control measures	Attached road with lease shall be sprinkle with water daily to prevent fugitive emission during vehicular. Speed of vehicle will only restrict to the 20 km/hour on Kutcha Road
3.	Route plan in brief	Approach road is about 1.16 Km connected with Public Road

G. Financial details of the Project:

1.	Total cost of the project	Rs. – 1,32,02,030/-
	a. Upfront cost	1,48,365 /-
	b. Performance Security	1,48,365 /-
	c. Total Royalty	24,72,800/-
	d. Weigh Bridge Cost	8,00,000/-
	e. Labor cost equipment	50,70,000/- Loading Expense- Rs. 37,50,251/-
	f. Environment protection and implementation cost	It's already incorporated in point no h
	g. Green Belt Development & maintenance cost	It's already incorporated in point no h
	h. Cost of EMP	Capital Cost – 3,72,500/- Recurring Cost – 4,39,749/-
	i. Cost of Safety measures	It's already incorporated in point no h
	j. Cost of Post-Closure Mine Plan	Not applicable
2.	Budget allocated for CER	It's included under point h. already.
3.	Is need based survey for CER carried out? (Yes / No) If yes, give details of activities along with Budgetary Outlay	Need base CER will be given as need base after public hearing.
As per the Office Memorandum dated 01/05/2018 of Ministry of Mines, Forest and Climate Change, GOI, our project falls under the Greenfield project category having capital investment of Rs. 1,32,02,030/- Considering the capital cost of the project, we shall reserve the fund of Rs. 2,65,000/- 2% of project Cost) for Corporate Environment Responsibility * Need base CER will be given as need base after public hearing.		

H. Restoration / Reclamation Plan:

1.	Restoration / Reclamation Details	The lease site was refilled during one monsoonal phase.
2.	Post mining closure plan	Not Applicable
3.	Backfilling material and its quantity	Not Applicable
4.	Size of void for Rain Water Harvesting after backfilling	Not Applicable
5.	Post Closure Liability / Safety aspects and Measures to be taken to avoid wild life and human accidents/ casualties	Not Applicable
6.	Display of Caution Boards at strategic locations on the periphery of the pit area	Not Applicable
7.	Final Use of reservoir/ reclaimed land	Not Applicable

I. Details of Legal Action / Court Case:

1.	Details of Pending Court matter / Public Litigation Cases in any court of Law	No
2.	Details of Action taken by GPCB, if any	No
3.	Details of public complaint, if any	No
4.	Compliance of EC by RO-GPCB or MoEFCC-Bhopal	No

J. Contact Details:

1.	Contact details of Applicant	
2.	Name	M/s. Varund Trading
3.	Address	R/o- -- Tadvifaliyu, Thuvavi, Taluka- Dabhoi, Dist- Vadodara (Gujarat)- 391107.
4.	Contact no.	8141622456
5.	Email Id	varundmine1@gmail.com

6.	Contact details of consultant	
7.	Name	Bhoomi Geological Solutions LLP
8.	Address	209, Pramukh Corporate, Pdp Road, Raysan, Gandhinagar, (Gujarat) 382007.
9.	Contact no.	----
10.	Email Id	bgs.environment2@gmail.com

SEAC Deliberation:

- Shri Vinay Kumar Singh, the Consultant from M/s Bhoomi Geological Solutions LLP remained present in the meeting dated 05.07.2024 on behalf of the PP and has submitted the Authorization letter for the same
- Committee deliberated on method of mining, rate of mining, no. of working hours and no. of workers, EMP, CER budget and its activities, Green belt development, cluster situation etc
- The satellite images of the lease area for last several years across non-monsoon season and noted that the lease area is not submerged in the riverine water of Orsang River.
- Committee noted that the location of the lease is complying with the distance criteria prescribed by Hon'ble NGT before Principal Bench in the order of O.A. NO. 85/2019 (WZ) dtd. 30.09.2020; Sustainable Sand Mine Guideline of MOEF&CC, 2016; Enforcement & Monitoring Guidelines for Sand Mining issued by MoEFCC in January, 2020; MoEFCC letter vide no.6-60/2020 WLPart(1), dated 16.07.2020; MoEFCC OM vide no. 22-43/2018-IA.III, dated 08.08.2019 in accordance with the order of the Hon'ble Supreme Court dated 04.08.2006 in the matter of T.N. GodavarmaThirumulpad Vs. UOI in W.P.(C) No. 202 of 1995; Amended CRZ Notification 2011; MoEFCC Notification no. S.O. 1599(E), dated 25.06.2014 etc.
- The mining plan is approved by the Department of Geology & Mining Vadodara District vide letter no. GV/MP/QL/Block/2022/5307, dated 13.10.2022 with validity period of 5 year from the commencement of lease deed.
- Lease document is issued by the Letter of Intent no. GEO/Auction/OSD/VAD/2022-23/004/10015A/3575, Date: - 11/07/2022 with validity up to 5 years.
- Mining activity shall not intersect ground water table.
- Set Back Distance to prevent river bank erosion is more than 10 M
- No. of working days for mining activity for the proposal are 260 days in a calendar year as mentioned in the project details validated by the District Geologist.
- Project details validated by the District Geologist, Vadodara that no reserve / protected forest is located within 50 m radius of the proposed lease area.
- Method of mining is semi mechanized without drilling and blasting
- Water consumption of the project shall not exceed 2.73KLD and shall be met through nearby tanker suppliers.
- Employment for approximately 10 people will be generated from the proposed project
- Approved mining plan is prepared considering 0.4 m working depth as well as the working depth mentioned in project details validated by the District Geologist is also 0.6 m which in compliance to order of Hon'ble NGT in matter of O.A. no. 85/2019, dated 30.09.2020. Mining will be done only till 0.4 meter as per the approved DSR report.
- Mining activity shall not intersect ground water table.
- Proposal under consideration is identified in existing proposal list of approved DSR of Vadodara District and the project is enlisted at serial no. 91 in list of Mineral Block on page no. 55 of the approved DSR of Vadodara District. In this regard, the PP has submitted the Notarized Undertaking dated 04.07.2024 declaring (i) the proposal do not fall within the 'No Go Zones'/'Not recommended mining areas' (ii) the project is enlisted at serial no. 91 in list of mineral Block on page no. 55 of the approved DSR of Vadodara District; (iii) the rate of Replenishment for Ordinary Sand is 100% for Orsang River as mentioned in approved DSR.
- After scoping for the aforementioned proposal, committee decided to consider the proposal under B1 category & Hon'ble National Green Tribunal Order dated 13 September 2018 in view. It was decided to recommend TOR approved by SEIAA on 07/03/2019 for river bed **sand mining** for conducting the EIA study to be done for cluster situation evaluating cumulative impact of the mining leases in cluster considering 10 Km radius from the periphery of the mine lease area including public hearing and project specific TOR.

SPECIFIC CONDITIONS:

1. This ToR application is approved based on the inclusion of the lease area and name of the lease in Approved District Survey Report (minor minerals - Sand & Gravel) of Vadodara District by SEIAA.

2. In case, the area or proposal is found to ingress in to no-go area including ESZ, CRZ, submerged area etc., proponent shall have to submit revised map excluding the ingress area for approval.
3. Mining shall **be restricted upto the depth of 0.4 meter and post mine closure plan shall also 0.4 meter.**
4. The project proponent shall obtain required N.A. permission (N.A. for land use change) from the competent authority.
5. At the time of start of mining activity proponent shall ensure that it has credible and valid lease documents of Grant of LOI or lease.
6. PP shall obtain registration of workers under the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and as beneficiaries with the Gujarat Building and Other Construction Workers Welfare Board before starting mining activity.
7. Overburden, waste rock, debris and non-saleable minerals generated during mining operation shall be stored and disposed of in environmentally sound manner.
8. PP shall adopt the dust mitigation measures due to mining, handling of minerals, loading, unloading, transportation and other allied activities similar to the applicable measures guided in the Notification issued by MoEF&CC dated 25.01.2018 vide GSR 94(E).
9. PP shall take all the measures after post closure/ working of mine, measures to be adopted as per the OM of MoEF&CC dated 16.01.2020.
10. Waste Management Plan/ Implementation of waste management plan, for mineral waste & sub-grade mineral, to be generated during operation phase as mentioned in the application and in approved mining plan shall be done by PP.
11. PP shall submit approved Wild Life Conservation Plan by competent authority, as applicable.
12. PP shall fulfill the commitments given during the Environmental Public Hearing in letter and spirit and shall submit the compliance of same to department of geology and mining as well as integrated Regional Office, MoEF&CC Gandhinagar.
13. To conduct the survey for the approach road for the entire cluster and making a pacca road/s to be used by the concerned lease holders to be used by vehicles carrying mineral up to main road.
14. In the event, District Survey Report (minor minerals - other than sand & gravel) is modified which affect the proposed mining project site, project proponent shall not be allowed to claim equity or plead legitimate expectation.
15. The final judgment/directives passed by any Hon. Court of law including Hon. National Green Tribunal, for DSR and related matters (if any) from time to time and that/those pending before Hon. Court (s) of law, shall be binding to the project proponent/lease holder. These aspects are to be invariably mentioned / discussed and complied appropriately in the submitted final EIA Report.
16. Total no. of working days for mining shall be 260 days.
17. Rate of Mining shall be restricted up to the depth of 1 m or the water table, whichever is less.
18. Authentication of ground water level data through concerned agency in order to prevent ground water intersection due to working of mine shall be addressed in detail in EIA report.
19. Community Health Centre for the entire cluster shall be facilitated on permanent basis through a corpus of clust members.
20. PP shall submit replenishment rate study report prepared by department of Geology and Mining justifying rate of proposed mining is in accordance to rate of replenishment keeping guideline addressed in Sustainable Sand Mining 2016 and its amendment from time to time issued by MOEF&CC.
21. To form a corpus among the lease holders in cluster to identify need of the villages and commitments made by the project proponent to address concerns raised during the public consultation with inclusion of all the activities proposed by the PP or prescribed by SEAC as the case may be to be part of EMP. A mechanism to monitor implementation of these activities shall be framed by the members making a body among cluster.
22. To implement all safety measures regarding protection of lighting in mine as per the guidance manual of DGMS vide circular No: DGMS (Tech) Circular No: 10 of 2020 dtd. 23 June 2020.
23. To address all the concerns raised during the public consultation and to propose need-based activities preferably covering environmental aspects by the PP and shall be part of EMP vide OM dtd 30.09.2020.
24. To conduct survey for the approach road for the entire cluster and making a pacca road/s to be used by the concerned lease holders to be used by vehicles carrying mineral up to main road.
25. Vide letter of MOEF&CC dtd 07.07.2020, EIA, EMP submitted shall have Plagiarism report complying all the conditions mentioned therein.

26. Undertaking shall be submitted by project proponent that after completion of mining activity necessary reclamation and other requirements shall be complied as per the Environment Management Plan (EMP) or else project proponent shall be liable to pay the cost for the same and can be recovered as arrears of land revenue, under the Revenue Recovery Certificate (RRC) to be issued by the competent authority under the Land Revenue Code.
27. While doing the appraisal the proponent shall submit evidence to the SEAC that the said land is outside the prescribed limit from the boundary of forest or wild life sanctuary etc as may be applicable.
28. All advanced methods for controlling dust emissions and safety of workers and passersby and neighborhood, should be on feelingly addressed in the EIA.
29. Environmental Management Plan with details of capital and recurring cost including following details shall be included in EIA:
 - a. Measures after post closure/working of mine, measures to be adopted as per OM of MOEF&CC dated 16/01/2020 addressing that after ceasing mining operations, PP shall undertake re-grassing of the mining area and any other area which have been disturbed due to mining activities and restore the land to a condition which is for the growth of fodder, flora and fauna.
 - b. Details of Dust mitigation measures due to mining, handling of mineral, loading, unloading, transportation and other allied activities similar to the applicable measures guided in Notification issued by MOEF&CC dated 25/01/2018 vide GSR 94(E).

STANDARD CONDITIONS:

1. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given with compliance of lease condition validated by the concerned district geologist. In case of ordinary clay mining, NA permission/Permit/applicable permissions from competent authority shall also be submitted with compliance of conditions therein.
2. All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
3. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided including longitude, latitude. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
4. Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
5. It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
6. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining should be detailed. The proposed safeguard measures in each case should also be provided.
7. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
8. Land use of the study area with distance delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
9. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest

Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.

10. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
11. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
12. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
13. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications along with approved wildlife conservation plan from the competent authority and same shall be submitted.
14. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site, Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
15. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.
16. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority.
17. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the Predominant downwind direction. The mineralogical composition of PM10, particularly for free silica, Should be given.
18. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral and other operating mine in study area with their cumulative impact considering their full operation status in totality. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
19. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
20. Necessary clearance from the Competent Authority for drawl of requisite quantity of water foR the Project should be provided.
21. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
22. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
23. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The

- Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
24. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
 25. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
 26. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
 27. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
 28. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
 29. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
 30. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
 31. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
 32. Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
 33. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
 34. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
 35. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
 36. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly addressed.
 37. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
 38. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
 39. Besides the above, the below mentioned general points are also to be followed:-
 - 39.1 Executive Summary of the EIA / EMP Report.
 - 39.2 All documents to be properly referenced with index and continuous page numbering.
 - 39.3 Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - 39.4 Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.

- 39.5 Where the documents provided are in a language other than English, an English translation should be provided.
- 39.6 The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
- 39.7 While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
- 39.8 Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
- 39.9 As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change./R.O.,GPCB, as may be applicable.
- 39.10 The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.
40. Beside above standard TOR, following additional TORs are recommended :
- 40.1 A project details duly validated by the District Geologist specifically mentioning regarding location of lease whether located in dry river bed or it is an in-stream mining with details of cluster situation including names of lease holders, validity period of lease, lease area, longitude, latitude of each lease holder in cluster, survey numbers, name of mineral with details of EC if obtained by members of cluster.
- 40.2 Compliance of sustainable sand mining guidelines published by MoEF&CC shall be complied and included in EIA report as an individual chapter.
- 40.3 A study report for the annual rate of replenishment and time frame for replenishment after mining closure in an area through Competent Authority.
- 40.4 Project site specific details such as distance of the project site from nearest (1) Human Habitation (2)Water Body: River / Creek / Nallah / Lake / Pond / Reservoir / Canal/Bridge/Check dam etc (3) National Highway (4) State Highway (5) Railway line (6) Heritage site (7) National Park / Wild Life Sanctuary/Proposed Eco Sensitive Zone/Notified Eco sensitive Zone /Reserve Forest / Protected Forest shall be included in the rapid EIA report to be prepared covering one season (other than monsoon) data. A map indicating the aerial distance of the lease area from these entities.
- 40.5 Distance of nearby homogeneous mining lease areas from the periphery of the proposed project including a map covering distance of 500 meter from the periphery of the proposed project. In case of no mining lease areas are existing within 500 meter periphery of the proposed project, a certificate of the concerned geologist in this regard clearly mentioning that cluster situation does not exist.
- 40.6 Copies of all requisite permissions including permissions from District Collector, Commissioner of Geology & Mining, Indian Bureau of Mines, GPCB, current lease renewal status from Industries and Mine department, Government of Gujarat with opinion of the district geologist regarding compliance of all the conditions in lease deed and copy of renewed lease (if any) etc. to be incorporated.
- 40.7 Approved mining plan including progressive mine closure plan shall be provided with EIA report.
- 40.8 Detailed outlay of Environmental Management Plan (EMP) with year-wise budgetary provision including bifurcation of each activity with provision of capital cost and recurring cost.
- 40.9 A detailed outlay of CSR with year-wise budgetary provision including bifurcation of each activity with provision of capital cost and recurring cost.
- 40.10 Compliance of MoEF&CC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 regarding Corporate Environment Responsibility (CER). Fund allocation based on need based analysis for CER shall be made as per the said OM dated 01/05/2018 for various activities therein.

41. Validity of ToR:

- 41.1 The ToR prescribed for the project will be valid for a period of four years for submission of EIA & EMP report. ToR will lapse after four years from date of issue.
- 41.2 The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated form – I, based on proper justification and also recommendation of the SEAC.

Project specific TORs/additional TORs shall be considered for preparing draft EIA for cluster situation evaluating cumulative impact of the mining leases in cluster considering 10 Km radius from the periphery of the mine lease area. A model TORs available in the MoEF&CC's sector specific EIA Manual for Mining Projects shall also be considered by the PP for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The draft EIA report prepared shall be submitted to the GPCB for conducting the Environmental Public Hearing process as per the provisions of the EIA Notification, 2006 and OM of MOEF&CC dated 12th December 2018. The project shall be appraised on receipt of the final EIA report.

