



सत्यमेव जयते

File No: SIA/GJ/MIN/402401/22107/2022

Government of India

Ministry of Environment, Forest and Climate Change

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

\*\*\*



Dated 02/01/2025



To,

District Geologist  
Geology and Mining Department  
Geology Mining Department Room No:817, 8th Floor, "I" Block, Kuber Bhavan, Vadodara-390001 ,  
VADODARA, GUJARAT, , 390001  
geologist-vad@gujarat.gov.in

**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 Pilot Project for the Block of BARKAL Block A, B, C, D, E, F submitted to Ministry vide proposal number SIA/GJ/MIN/402401/2022 dated 03/04/2024.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO22B0107GJ5468490N
(ii) File No.	SIA/GJ/MIN/402401/22107/2022
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vii) Name of Project	Pilot Project for the Block of BARKAL Block A, B, C, D, E, F
(viii) Name of Company/Organization	NIRAV BAROT
(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 09/11/2024. 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 09/11/2024, 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. Nirav Barot 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

S. No	Terms of Reference
1.1	ANNEXURE – B

### Standard Terms of Reference for (Mining of minerals)

#### 1.

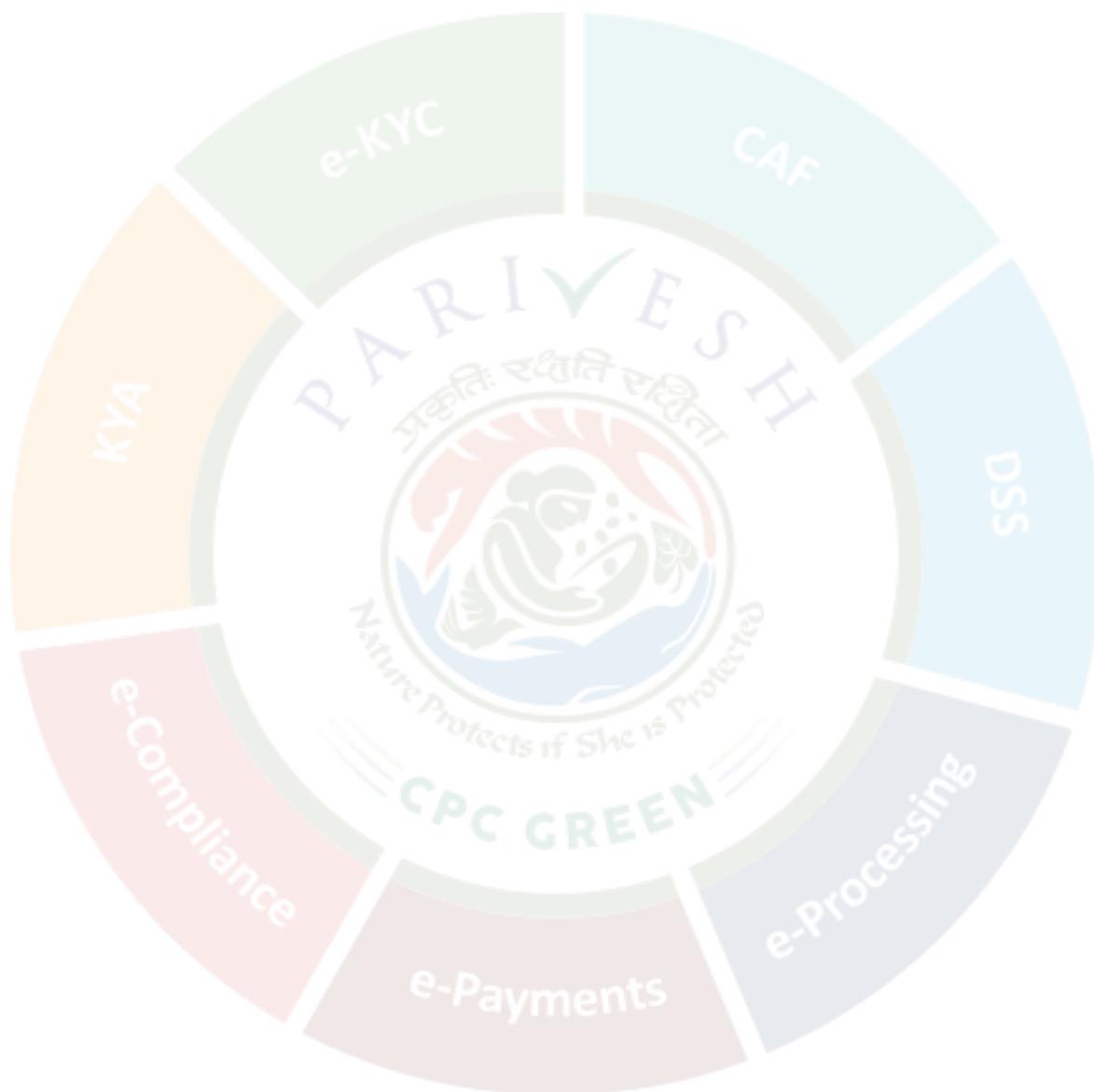
S. No	Terms of Reference
1.1	Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the time bound action proposed with budgets in suitable 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 incorporate all the conditions mentioned in Annexure-3.

**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	282797.4	Tons per Annum (TPA)	Road	



**Terms of Reference to Mining Proposal of Ordinary Sand mining to District Geologist,  
Vadodara Mining of River bed ordinary sand from Pilot Project at Cluster ID VAD 12 (Barkal  
Ordinary Sand & Gravel Block- A, B, C, D, E, F) on the Narmada River near Village: - Barkal  
Taluka: - Shinor , District: - Vadodara.**

Category of the Projects: 1(a)

Sr no.	Application No	SIA/GJ/MIN/402401/2022
i.	Application Type	Terms of Reference TOR
ii.	Name of Project	District Geologist , Vadodara Mining of River bed ordinary sand from Pilot Project at Cluster ID VAD 12 (Barkal Ordinary Sand & Gravel Block- A,B,C,D,E,F) on the Narmada River near Village: - Barkal Taluka: - Shinor , District: - Vadodara , State: - Gujarat.
iii.	Name of Mineral	Ordinary Sand
iv.	S.No and Type of Land	Barkal A (Narmada River bed paiki, Oppto.Sr. No. 31,32/1) Barkal B (Narmada River bed paiki, Oppto.Sr. No. 31) Barkal C (Opposite To 31) Barkal D (Narmada River bed paiki, Opp .sur.no.- 31) Barkal E (Narmada River bed paiki, Oppto.Sr. No. 31) Barkal F (Narmada River bed paiki, Oppto.Sr. No. 31)
v.	Village	Barkal
vi.	Taluka	Shinor
vii.	Dist	Vadodara
viii.	Lease Area	Total Lease Area : 17.41.00Ha  Barkal Block A – 3.00.00 Ha. Barkal Block B – 3.00.00 Ha. Barkal Block C – 3.00.00 Ha. Barkal Block D – 3.00.00 Ha. Barkal Block E – 3.00.00 Ha. Barkal Block F – 2.41.00 Ha
ix.	Validity of lease	Barkal Block A (GEO/Auction/OSD/VAD/2021-22/007/10007A/ 6395 dated 03/12/2021 valid for 5 years) Barkal Block B (GEO/Auction/OSD/VAD/2021-22/009/10009A/ 6295 dated 31/12/2021 valid for 5 years) Barkal Block C (GEO/Auction/OSD/VAD/2021-22/014/10011A/ 1413 dated 28/03/2022 valid for 5 years) Barkal Block D (GEO/Auction/OSD/VAD/2021-22/013/10010A/ 1417 dated 28/03/2022 valid for 5 years) Barkal Block E (GEO/Auction/OSD/VAD/2021-22/008/10008A/ 6387 dated 03/12/2021 valid for 5 years) Barkal Block F (GEO/Auction/OSD/VAD/2021-22/006/10006A/ 6299 dated 31/12/2021 Valid For 5 Years)
x.	ROM	282797.40 MTPA  Barkal Block A – 48,600 MTPA Barkal Block B – 48,420 MTPA Barkal Block C – 48,780 MTPA Barkal Block D – 48,780 MTPA Barkal Block E – 49,320 MTPA . Barkal Block F – 38,897.40 MTPA
xi.	River	Narmada River Bed
xii.	Nearest Human Habitation	Barkal Village – 0.55 km, North-East Varkhad Village - 0.53 km, South-West
xiii.	End Use	Construction

xiv.	Investment in Rs	Rs. 8,81,76,741.6/-
xv.	Date of Application Accepted by SEAC	

This office received an application from the following Project Proponent on 03-04-2024 for obtaining Terms of Reference.

**A. Basic Information of the Project:**

1.	Name of Project as per Form I	Proposed River bed Ordinary Sand & Gravel Mining of <b>Barkal Ordinary Sand &amp; Gravel Block- A, B, C, D, E, F</b> on the Narmada River near village: - Barkal, Taluka: - Shinor, District: - Vadodara, State: - Gujarat.																																										
2.	Address of the lease	Pilot Project at Cluster ID VAD 12 (Barkal Ordinary Sand & Gravel Block- A,B,C,D,E,F) on the Narmada River Village: Barkal Taluka: Shinor District: Vadodara																																										
3.	Name of lease holder	District Geologist , Vadodara																																										
4.	Lease area (Ha)	17.41.00Ha																																										
5.	Cluster Details																																											
	a. Total no. of leases in the cluster	07																																										
	b. No. of TOR granted in cluster	00																																										
	c. No. of EC granted in cluster	1																																										
	d. Total area of the cluster	22.38.60Ha																																										
	e. Maximum individual lease area	4.97.60 Ha																																										
	f. Minimum individual lease area	2.41.00 Ha																																										
6.	Validity of lease with the date of expiry	5 Years from the date of lease deed																																										
7.	Rate of Mining (MT/Annum)	282797.40 MTPA  Barkal Block A – 48,600 MTPA Barkal Block B – 48,420 MTPA Barkal Block C – 48,780 MTPA Barkal Block D – 48,780 MTPA Barkal Block E – 49,320 MTPA . Barkal Block F – 38,897.40 MTPA																																										
8.	Details of EC obtained (for expansion projects), if any	NA																																										
9.	Name of River Bed	Narmada Riverbed																																										
10.	Is the river perennial / non-perennial?	Non-Perennial																																										
11.	Lease area (submerged / in stream / on dry river bed)	On dry river bed																																										
12.	All coordinates of the lease area as per Approved Mining Plan	<table border="1"> <thead> <tr> <th colspan="3">Barkal A</th> </tr> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>21°54'52.5452"N</td> <td>73°25'11.8964"E</td> </tr> <tr> <td>2</td> <td>21°54'51.9052"N</td> <td>73°25'13.4227"E</td> </tr> <tr> <td>3</td> <td>21°54'51.6265"N</td> <td>73°25'17.0411"E</td> </tr> <tr> <td>4</td> <td>21°54'46.1074"N</td> <td>73°25'05.6110"E</td> </tr> <tr> <td>5</td> <td>21°54'49.3962"N</td> <td>73°25'04.0148"E</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="3">Barkal B</th> </tr> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>21°54'55.85"N</td> <td>73°25'06.02"E</td> </tr> <tr> <td>2</td> <td>21°54'54.09"N</td> <td>73°25'08.19"E</td> </tr> <tr> <td>3</td> <td>21°54'52.54"N</td> <td>73°25'11.89"E</td> </tr> <tr> <td>4</td> <td>21°54'49.39"N</td> <td>73°25'04.01"E</td> </tr> <tr> <td>5</td> <td>21°54'54.18"N</td> <td>73°25'01.41"E</td> </tr> </tbody> </table>	Barkal A			Point	Latitude	Longitude	1	21°54'52.5452"N	73°25'11.8964"E	2	21°54'51.9052"N	73°25'13.4227"E	3	21°54'51.6265"N	73°25'17.0411"E	4	21°54'46.1074"N	73°25'05.6110"E	5	21°54'49.3962"N	73°25'04.0148"E	Barkal B			Point	Latitude	Longitude	1	21°54'55.85"N	73°25'06.02"E	2	21°54'54.09"N	73°25'08.19"E	3	21°54'52.54"N	73°25'11.89"E	4	21°54'49.39"N	73°25'04.01"E	5	21°54'54.18"N	73°25'01.41"E
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13.	Manpower requirement	90 (15 per block) number of manpower will be employed																																																																					
14.	Applicability of CRZ Notification	NA																																																																					
15.	Minimum Setback distance proposed to be maintained from River Bed (m)	More than 10 m																																																																					
16.	Minimum buffer distance from bridge piers / water intake wells / irrigation structures	No structures are found.																																																																					
17.	Maximum depth of sand removal (3 m or water depth whichever is less)	1 m																																																																					
18.	Width of Riverbed (m)	700 m Average																																																																					
19.	Average depth of water at lease area (m)	Dry River bed																																																																					
20.	Depth of mining (m)	Maximum Depth of sand removal is 0.6 m.																																																																					
21.	Ground Water Table in meter BGL	50 to 55 m																																																																					
22.	Does ground water interfere approach road exit? (Yes / No)	No																																																																					
	If yes, status report of CGWA																																																																						
23.	Distance between lease and main road	5.21 Km																																																																					
24.	Length of kaccha road (m)	0.36 km																																																																					
25.	Length of pacca road (m)	5.21 Km																																																																					
26.	Plan for making pacca road	No																																																																					
27.	Source of fresh water	Well/Water Tanker																																																																					
28.	Water requirement (KLPD)	24 KLD(4 KLD For each block)																																																																					
	a. Domestic	6.0(6*1 KLD)																																																																					
	b. Dust suppression	12.0 (6*2 KLD)																																																																					

	c. Gardening / Green belt development	6.0 (6*1 KLD)
	d. Others	-
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	Environmental Sensitivities	Actual Distance	Minimum Distance	Reference
1	Residential	Barkal Village – 0.55 km, North-East Varkhad Village - 0.53 km, South-West	100 m  (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 Varkhad– 0.83 km, South-West Shri Vyasheshwar Vidyalaya, Barkal- 1.03 km, North-East		As per order of NGT before Principal Bench in the O.A. NO 85/2018 ( WZ) dtd 30.09.2020
	Inhabited sites	Not in 100 m of study area		
2	A. Major Bridge	Not in 1 km of study area	1 km	On both sides of the lease (as per Sustainable Sand Mine Guideline of MOEF&CC)
	B. Highway	State Highway 160 – 5.21 km North-East State highway 64 – 6.52 km, South – East National Highway 953-12.06km South-East	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 in 10 km of project study area	a. 5X in upstream or 250 m. b. 10X in down stream or 500 m	As per Sustainable Sand Mine Guideline of MOEF&CC
4.	Public Structure including water intake wells	NA	a. 5X in upstream or 250 m. b. 10X in down stream or 500 m	As per Sustainable Sand Mine Guideline of MOEF&CC
5.	Depth of working	0.6 M	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	10 M	10 M or 1/4 <sup>th</sup> 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	282797.40 MTPA	60,000 MTPA Per Hectare	As per Sustainable Sand Mine Guideline of MOEF&CC
8.	Water supply Scheme/Irrigation structure	Not in 1 km of project study area	200 M	As per Sustainable Sand Mine Guideline of MOEF&CC
9.	Railway Line	Chandod Railway Station – 10.92 km, North-east	100 M	As per Sustainable Sand Mine Guideline of MOEF&CC
10.	Reservoir/Canal	Not in 1 km of project study area	100 M	As per CPCB Distance Criteria And order of of NGT before Principal Bench in the O.A. NO 85/2018 ( WZ) dtd 30.09.2020
11.	Other Road	Not in 1 km of project study area	100 M	As per CPCB Distance Criteria And order of of NGT before Principal Bench in the O.A. NO 85/2018 ( WZ) dtd 30.09.2020
12.	Eco-Sensitive Zone (if notified)	Lease area is located outside Eco Sensitive Zone Shoolpaneshwar Wildlife Sanctuary– 42.20 km South-East S.O.1653 (Dt: 5th May 2016) Lease area is located outside Eco Sensitive Zone Jambugoda Wildlife Sanctuary– 55.09 km North-East S.O.1316 (Dt: 8th March 2019)	>1 km / outside the notified Eco-Sensitive Zone	Vide directives of MOEF&CC dtd 16.07.2020
13.	Eco-Sensitive Zone (if not notified)	Not in 10 km of project area	>1 km and <10 km = Prior Clearance from NBWL is required	Vide directives of MOEF&CC dtd 16.07.2020
14.	Distance of Coastal line from the site	NA	>500 M from HTL	Amended CRZ Notification 2011

### C. Details of Mining:

1.	Method of Mining (Manual / Semi-mechanized / Mechanized).	Semi Mechanized Opencast Mining
2.	Equipments to be used for Mining bulldozers, hydraulic excavators, JCB, scrapers, loaders, Diesel Pump, etc.)	Hydraulic excavator will be used for excavation and loading of sand. Trucks and dumper will be used for transportation.
3.	Whether it includes blasting?	No
4.	Details of Authorized Blasting Agency with date of validity certificate	NA

5.	Procedure / SOP (in brief)	NA
6.	Details of Blasting Parameters in brief	NA
7.	Frequency of blasting	NA
8.	Impact of blasting	NA
9.	Outcome of Vibration study	NA
10.	Blasting Activity Management Plan	NA
11.	Use of any Chemical with quantity	NA
12.	Precautions taken for Human Safety in brief	NA
13.	Crusher provided? If Yes, Measures taken for Air Pollution Control	NA
14.	Compliance of DGMS Guidelines for Blasting	NA
15.	Compliance of Sustainable Sand Mine Guidelines published by MoEFCC in 2016	Yes
16.	Whether Replenishment Rate Study is approved by District Geologist?	Yes

**D. Details of Green Belt Development:**

1.	a. Green belt development budget	1,00,000
	b. Green belt area / location	Green belt will be developed along river bank, haul road and nearby villages
	c. No. of trees to be planted	1,000 @ Rs.100/- per sample in year (Total amount Rs.1,00,000/).
	d. Types of trees to be planted	Plantation of species as per EC conditions Peepal, Mango, Bel, Amla, Amaltas, Banyan, Neem, Bahada, Acacia etc. and others as suggested by SPCB/Forest Department

**E. Details of Environment Management Plan:**

1.	Details of EMP	Impact	Mitigation Measures
	a. Land Environment	Temporary changes in the land use due to excavation	Mining will be done by Opencast Semi Mechanized method. There will be temporary changes in land use due to excavation process; however the area will be naturally reclaimed monsoon seasons
	b. Water Environment	There are no competing users. The total water requirement will be 24 KLD (for 4 KLD each Block) for dust suppression (12 KLD), domestic (6 KLD) and plantation (6 KLD), which will be sourced from water tanker.	Sewage water will be passed into soak pit of septic tanks. Discharge of sewage or other effluents to water or the land is not expected.
	c. Air Environment	Dust emission during excavation and transportation, vehicular movement	Water sprinkling will be done on the roads regularly  Care will be taken to prevent spillage by covering the carrying vehicles with tarpaulin and sprinkling of water, if in dry form  Proper tuning of Engine of vehicles will be ensured to keep the gas emissions from the vehicles within the prescribed norms.  Plantation of trees along the roads will be done to

			attenuate the impact of dust in the nearby villages /surrounding area.
d. Noise Environment	Noise generated from extraction, exploration of minerals & from vehicles (dumpers, trucks and excavation etc.)	Regular maintenance of machinery will keep the generated noise level below the minimum prescribed limits  Minimum use of Horns at the village area  Timely maintenance of vehicles and their silencers to minimize vibration and sound  Phasing out of old and worn out trucks.  Awareness will be imparted prior to mining operations to all the operators & other persons concerned, so that they must be aware of detrimental effects of noise pollution	
e. Biological Environment	Minimum disturbance to local flora and fauna due to mining activity.	Green belt plantation will be done along the haul roads	
f. Human Environment	Employment generation	Occupational health check-up for the workers shall be carried out  Safety training from time to time to all staff  Providing Helmet, Safety Shoes & Hand Gloves  Various amenities like drinking water, rest shelter & toilet will be provided to workers.	
g. Others	-	-	
<b>2.</b>	Occupational health & safety measures as per DGMS	Occupational health safety measures will be taken as per DGMS	
<b>3.</b>	Safety measures proposed		
a.	Is First Aid facility provided by PP?	First aid facility will be provided by the project proponent	
b.	Details of PPEs	Providing Helmet, Safety Shoes & Hand Gloves	
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	Yes	

	Boards is obtained or not?	
	d. Insurance of Workers	Occupational health check-up for the workers shall be carried out and insurance will be done
	e. Health checkup plan of workers	Occupational health check-up for the workers shall be carried out

**F. Transportation:**

1.	No. of vehicles per day carrying Minerals	50 vehicles per day
2.	Fugitive dust emission control measures	Regular control of fugitive dust emissions from the source. Water spraying on haul roads, loading and at transfer points.  Truck mounted water tanker to be used from dust suppression during mining and transportation
3.	Route plan in brief	Mined out ordinary sand & Gravel will be transported through the pucca road

**G. Financial details of the Project:**

1.	Total cost of the project (Lakh)	Rs. 8,81,76,741.6/-
	a. Upfront cost (Lakh)	Rs. 29,21,282.4/-
	b. Performance Security (Lakh)	Rs. 32,70,979.2/-
	c. Total Royalty (Lakh)	Rs. 5,65,59,480/-
	d. Weigh Bridge Cost (Lakh)	Rs. 27,00,000/-
	e. Labor cost equipment (Lakh)	Rs. 1,01,25,000/-
	f. Equipment protection and implementation cost (Lakh)	Rs. 1,05,00,000/-
	g. Cost of EMP (Lakh)	Rs. 21,00,000/-
2.	Budget allocated for CER (Lakh)	Rs. 18,00,000/- (Eighteen Lakhs) as principal amount and 3,00,000/- (Three Lakh) as recurring amount has been allotted for Environmental management plan . It is proposed to invest ~ Rs.18,00,000/- for social environmental development over a period of next 3 years, to be considered for implementing the activities in the context of the local scenario of the area as a part of EMP . Proposed Heads are as below.
3.	Is need based survey for CER carried out? (Yes / No)  If yes, give details of activities along with Budgetary Outlay	

Sr. No.	Activities in Barkal Village	Total (inRs.)			
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total
1	Total of 40 Solar panel with capacity 100 Watt (Price Rs.4000) with lamp On the Roof top Of Primary School Varkhadin the Varkhad village to support Smart Classroom and Electricity availability for bright future of children.	Installation Cost: 1,60,000	Up keeping Maintenance Cost: 40,000		2,00,000/-
2	Total of 15 Solar panel with capacity 75 Watt (Price Rs.3600) with lamp On the Roof top Of Terrace of Gram panchayat/ Office with Consultation of Gram Panchayat Barkal.	Installation Cost: 54,000/-	Up keeping Maitainence Cost: 46,000/-		1,00,000
<b>Total</b>		<b>2,14,000/-</b>	<b>86,000/-</b>		<b>3,00,000/-</b>
<b>Total For 6 Block</b>					<b>3,00,000*6=18,00,000/-</b>

**H. Restoration / Reclamation Plan:**

1.	Restoration / Reclamation Details	The area will get naturally reclaimed due the Replenishment of sand in the monsoon seasons.
2.	Post mining closure plan	At the end of current three Years mining plan maximum depth of pit will be 1.0 m. The excavated pits will be replenished by the sand transported by river flow every year in monsoon. The river bed will remain as river bed only. So there is no need for reclamation or progressive closure of mine of the stage.
3.	Backfilling material and its quantity	The area will get naturally reclaimed due the Replenishment of sand in the monsoon seasons.
4.	Size of void for Rain Water Harvesting after backfilling	-
5.	Post Closure Liability / Safety aspects and Measures to be taken to avoid wild life and human accidents/ causalities	-
6.	Display of Caution Boards at strategic locations on the periphery of the pit area	-
7.	Final Use of reservoir/ reclaimed land	-

**I. Details of Legal Action / Court Case:**

1.	Details of Pending Court matter / Public Litigation Cases in any court of Law	NA
2.	Details of Action taken by GPCB, if any	NA
3.	Details of public complaint , if any	NA
4.	Compliance of EC by RO-GPCB or MoEFCC-Bhopal	NA

**J. Contact Details:**

1.	<b>Contact details of Applicant</b>	
2.	Name	District Geologist - Vadodara
3.	Address	Geology Mining Department, Room No:817, 8th Floor, "I" Block, KuberBhavan, Vadodara-390001
4.	Contact no.	9727706356
5.	Email Id	<a href="mailto:geologist-vad@gujarat.gov.in">geologist-vad@gujarat.gov.in</a>
6.	<b>Contact details of Consultant</b>	
7.	Name	ULTRATECH ENVIRONMENTAL CONSULTANCY AND LABORATORY(Gazetted By MoEF) Accredited EIA Consultant Organization by NABET/EIA/21-24/SA 0217 Validity of Accreditation-18/10/2024
8.	Address	Head Office : 206, Jai Commercial Complex, Khopat Thane (W), Maharashtra
9.	Contact no.	9558117469/7777065675
10.	Email Id	<a href="mailto:gujarat@ultratech.in">gujarat@ultratech.in</a>

**Deliberation:**

- Shri Arun Kumar the consultant of the PP from M/s. Ultra-Tech ENVIRONMENTAL CONSULTANCY AND LABORATORY) (NABET/EIA/2023/RA0194\_Rev01, Validity of Accreditation-18/10/2024 and Shri Roshan Shrivastava remained present in the meeting dated 27.03.2024 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 days and no. of workers, EMP, CER budget and its activities, Green belt development.
- 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 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 Narmada river
- Working will not intersect ground water table.
- Set Back Distance to prevent river bank erosion is more than 10m
- Approved mining plan is prepared considering 0.6 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.
- The mining plan is approved by the Department of Geology & Mining Vadodara District vide letter no Barkal Block A. (GV/MP/2021-22/1383 to 1384 dated 28/03/2022), Barkal Block B (GV/MP/QL/Block/2022/3767 - 3768 dated 18/07/2022) Barkal Block C (GV/MP/QL/Block/2022/3765 dated 18/07/2022), Barkal Block D (GV/MP/QL/Block/2022/3095-3096 dated 13/06/2022), Barkal Block E (GV/MP/2021-22/1381 to 1382 dated 28/03/2022), Barkal Block F (GV/MP/2021-22/1371 to 1372 dated 28/03/2022) with Period of proposal 5 years
- LOI/ Lease document is issued by the District Geologist, Vadodara District vide LOI No. Barkal Block A (GEO/Auction/OSD/VAD/2021-22/007/10007A/ 6395 dated 03/12/2021), Barkal Block B (GEO/Auction/OSD/VAD/2021-22/009/10009A/ 6295 dated 31/12/2021), Barkal Block C (GEO/Auction/OSD/VAD/2021-22/014/10011A/ 1413 dated 28/03/2022), Barkal Block D (GEO/Auction/OSD/VAD/2021-22/013/10010A/ 1417 dated 28/03/2022), Barkal Block E (GEO/Auction/OSD/VAD/2021-22/008/10008A/ 6387 dated 03/12/2021), Barkal Block F (GEO/Auction/OSD/VAD/2021-22/006/10006A/ 6299 dated 31/12/2021) with 5 years from the date of lease deed
- No. of working days for mining activity for the proposal are (For each Block 225) days in a calendar year as mentioned in the project details validated by the District Geologist.
- District Geologist, Vadodara has validated in the submitted Project Details (Barkal A, vide letter no GV/4613, dated 07/09/2022) Barkal B (vide letter no GV/4612, dated 07/09/2022), Barkal C (vide letter no GV/4611, dated 07/09/2022), Barkal D (vide letter no GV/4614, dated 07/09/2022), Barkal E (vide letter no GV/4610, dated 07/09/2022), Barkal F (vide letter no GV/4609, dated 07/09/2022) that no reserve / protected forest is located within 10km radius of the proposed lease area.
- Method of mining is Semi mechanized without blasting
- Water consumption of the project shall not exceed 24 KLD (4 KLPD For each Block) and shall be met through nearby tanker suppliers.
- Employment for approximately 90 (15 For each Block) people will be generated from the proposed project.
- No. of working days for mining of ordinary sand are 225 days as mentioned in the project details validated by the District Geologist
- Proposal under consideration is identified in existing proposal list of approved DSR of -Vadodara District and the project is enlisted at serial no. 79 to 84 in list of existing leases on page no. 54 & 55 of the approved DSR of Vadodara District.
- In this regard, the PP has submitted the Notarized Undertaking dated 11.07.24 declaring (i) the proposal do not fall within the 'No Go Zones'/'Not recommended mining areas' (ii) the project is enlisted at serial no. 79 to 84 in list of existing leases on page no. 54 & 55 of the approved DSR of Vadodara District; (iii) the rate of Replenishment for Ordinary Sand is 100% for Narmada river as mentioned in approved DSR.
- Declaration regarding the pending Hon Court matters/ Hon NGT matter brief contention if any and the latest status thereof .
- PP has allocated Rs. 3,00,000/- as Capital cost and Rs 50,000/- as Recurring cost for the Environment Management Plan.
- **EMP Table:**

Sr. No	Activity	Budget Allocation in Lacs. (capital)	Budget Allocation in Lacs. (Recurring)
1.	Overburden and removal and its management	Not Applicable because the proposed project is ordinary sand	
2.	Air pollution/ dust mitigation/water sprinkling measures	RS.15,000	RS.5,000

3.	Disposal of semi-solid cutting and seizing waste	Not Applicable because the proposed project is ordinary sand	
4.	Removal of debris which is not required for back filing	Not Applicable For The Proposed Project Of River Bed Sand Mining	
5.	Blasting related safeguard expenses	Not Applicable For The Proposed Project Of River Bed Sand Mining	
6.	Noise pollution control measures	RS. 25,000	RS. 10,000
7.	Approach roads to mining and treatment site	It will be include in final EIA/EMP report	
8.	Control of fugitive emission during loading and unloading, transportation	RS. 15,000	RS.5,000
9.	Post closure restoration and reclamation (back filing, levelling, caution boards) including regressing and plantation etc./utilizing the void for rainwater storage and harvest reservoir	Not Applicable because the proposed project is ordinary sand	
10.	Fencing to prevent loss of wildlife and human movement	It will be include in final EIA/EMP report	
11.	Cost of laboratory analysis if any	---	---
12.	Cost of compliance of commitment during public hearing	It will be include in final EIA/EMP report	
13.	Environment monitoring	RS. 1,50,000	RS. 20,000
14.	Safety and health of workers/public	RS. 95,000	RS. 10,000
	<b>Total (2+6+8+13+14)</b>	Rs. 3,00,000	Rs. 50,000
15.	CER activities	RS. 3,00,000	---
	<b>Total</b>	<b>Rs. 6,00,000</b>	<b>RS. 50,000</b>
	<b>Grand Total (Rs. 6,00,000+ 50,000) = Rs.6,50,000/-</b>		
	<b>Total for 06 Blocks=(06*6,00,000=36, 00,000)+(6*50,000=3,00,000)=39,00,000/-</b>		

• CER Table

Sr. No.	Activities in Barkal Village	Total (in Rs.)			
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total
1	Total of 40 Solar panel with capacity 100 Watt (Price Rs.4000) with lamp On the Roof top Of Primary School Varkhad in the Varkhad village to support Smart Classroom and Electricity availability for bright future of children.	Installation Cost: 1,60,000	Up keeping Maitainence Cost: 40,000		<b>2,00,000/-</b>
2	Total of 15 Solar panel with capacity 75 Watt (Price Rs.3600) with lamp On the Roof top Of Terrace of Gram panchayat/ Office with Consultation of Gram Panchayat Barkal.	Installation Cost: 54,000/-	Up keeping Maitainence Cost: 46,000/-		<b>1,00,000</b>
	<b>Total</b>	<b>2,14,000/-</b>	<b>86,000/-</b>		<b>3,00,000/-</b>
	<b>Total For 6 Block = 3,00,000*6 = 18,00 000/-</b>				

**Any other Project specific and relevant details (including lease extension application etc)**

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 District Survey Report (ordinary sand & gravel) of Vadodara District approved by SEIAA.

2. EMP prepared in EIA report should have budgetary allocation for each lease holder and individual lease holder will be solo responsibility for the compliance of the same.
3. The overall supervision and compliance of TOR including resolution of issues affecting the compliance of TOR shall be done through District Geologist and combined common
4. Compliance report of individual lease holder shall be submitted in half yearly compliancereport on Parivesh 2.0 portal.
5. 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 areafor approval.
6. District geologist shall ensure that mining is restricted upto the depth of 0.60 meter asmentioned in approved Mining Plan.
7. At the time of start of mining activity proponent shall ensure that it has credible and validlease documents of Grant of LOI or lease.
8. 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 theGujarat Building and Other Construction Workers Welfare Board before starting mining activity.
9. Overburden, waste rock, debris and non-saleable minerals generated during mining operation shallbe stored and disposed of in environmentally sound manner.
10. 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 inthe Notification issued by MoEF&CC dated 25.01.2018 vide GSR 94(E).
11. PP shall take all the measures after post closure/ working of mine, measures to be adopted as perthe OM of MoEF&CC dated 16.01.2020.
12. In the event, District Survey Report (sand & gravel) is modified which affect the proposedmining project site, project proponent shall not be allowed to claim equity or pleadlegitimate expectation.
13. The final judgment/directives passed by any Hon. Court of law including Hon. National Green Tribunal, forDSR and related matters (if any) from time to time and that/those pending before Hon. Court (s) of law, shall bebinding to the project proponent/lease holder.
14. Total no. of working days for mining shall be 260 days.
15. Rate of Mining shall be restricted up to the depth of 1 m or the water table, whichever is less.
16. 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.
17. Community Health Centre for the entire cluster shall be facilitated on permanent basis through a corpus of clust members.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.
23. Vide letter of MOEF&CC dtd 07.07.2020, EIA, EMP submitted shall have Plagiarism report complying all the conditions mentioned therein.
24. 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.

25. 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.
26. All advanced methods for controlling dust emissions and safety of workers and passersby and neighborhood, should be on feelingly addressed in the EIA.
27. 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.

**CC to :**

- i. Commissioner of Geology and Mining, Block No. : 15, Dr. Jivraj Mehta Bhavan, Old Sachivalay, Gandhinagar..... for information and necessary action please.
- ii. The Member Secretary, SEAC, C/o. GPCB, "Paryavaran Bhavan"; Sector 10-A; Gandhinagar.... for information please.

