Minutes of the 363rd meeting of the State Level Expert Appraisal Committee held on 03/01/2018 at Hotel German Palace, Opp. Narayani Hotel, Bhat, Gandhinagar

The 363rdmeeting of the State Level Expert Appraisal Committee (SEAC) was held on 03rd January,2018 at Geer Foundation, Sector 9,Indroda Park, Gandhinagar. Following members attended the meeting:

- Shri Dinesh Misra, Chairman, SEAC
- 2. Shri S. C. Srivastav, Vice Chairman, SEAC
- 3 Dr. V.K.Jain, Member, SEAC
- 4 Shri R. J. Shah, Member, SEAC
- 5 Shri A.K. Muley, Member, SEAC

Mining projects:

Sr. No	District	Ordinary Clay	Quartz	Ordinary Sand	Total
1	Patan	1	0	0	1
2	Vadodara	0	0	2	2
3	Dahod	0	1	0	1
	Total	1	1	2	4

1. ORDINARY CLAY MINING PROJECT, DIST: PATAN

Proposal No	Project Name	S NO	Village	Taluk a	District	Lease Area in Hectar e	Rate of mining	Nearest Habitation	Name of the river/ Mineral	Proposed Use
SIA/GJ/MI N/ 63164/201 7	Sai Bricks Compan Y	113/1 ,107	Bandhv ad	Radh anpur	Patan	5.9182 Ha New, Pvt Land	14,250 MTPA	Bandhvad: 1.22 Km	Ordinary Clay	Bricks/Con struction

Shri Mobbhai Amrabhai Rabari,PP along with their consultant represented the above proposal before the committee.

It was mentioned that above proposal does not include blasting and mineral will be removed through open cast mining. Proposal does not involve intersection of ground water table. Water will be procured through tanker. It was presented that arrangement of water sprinkling will be done during excavation and loading of mineral for transportation. No protected areas/Reserve Forest/Sanctuary exist within 10 Km radius of the proposed lease. Depth of mining will be restricted to 2 meter. A copy of approved mining plan is submitted along with application. Project details submitted by the Asst. geologist validates that there is no applicability of cluster situation to the above lease according to the EIA Notification 2006 amended on

01/07/2016. Mined out pit will be used as water reservoir for 5.00 Ha, back filling will be done for 0.24 Ha and plantation will be done in 0.41 Ha area leaving 0.98 Ha unused land. The above proposal falls under category B2 as per the amended EIA Notification 2016.

During meeting, PP was asked regarding use of fly ash, fuel and mitigation measures for emission due to use of solid fuel. PP mentioned that adequate air pollution control measures will be adopted with brick kiln having fixed chimney to comply GPCB/CPCB norms. Fuel proposed for the kiln is saw dust and coal.

Considering anticipated impacts of mining and mitigation measures proposed by the lease holder, committee unanimously decided to recommend the proposal for grant of environmental clearance to SEIAA for the above proposal, subject to the strict implementation of standard conditions for Non-Sand mining project approved during SEAC meeting held on 09/08/2017 along with conditions mentioned in Office Memorandum of MoEF&CC, New Delhi dated 24th June 2013 for ordinary earth as under

- 1. The activity associated with borrowing/excavation of 'brick earth' and 'ordinary earth' for purpose of brick manufacturing, construction of roads, embankments etc. shall not involve blasting.
- 2. The borrowing/excavation activity shall be restricted to a maximum depth of 2m below general ground level at the site.
- 3. The borrowing/excavation activity shall be restricted to 2 m above the ground water table at the site.
- 4. The borrowing/excavation activity shall not alter the natural drainage pattern of the area.
- 5. The borrowed/excavated pit shall be restored by the project proponent for useful purpose(s).
- 6. Appropriate fencing all around the borrowed/excavated pit shall be made to prevent any mishap.
- 7. Measures shall be taken to prevent dust emission by covering of borrowed/excavated earth during transportation.
- 8. Safeguards shall be adopted against health risks on account of breeding of vectors in the water bodies created due to borrowing/excavation of earth.
- 9. Workers / laborers shall be provided with facilities for drinking water and sanitation.
- 10. A berm shall be left from the boundary of adjoining field having a width equal to at least half the depth depth of proposed excavation.
- 11. A minimum distance of 15 m from any civil structure shall be kept from the periphery of any excavation area.

2. ORDINARY SAND, GRAVEL MINING PROJECT, DIST: VADODARA

Proposal No	Project Name	S NO	Villag e	Taluk a	District	Lease Area in Hectar	Rate of mining	Nearest Habitation	Name of the river/ Mineral	Proposed Use
						е				
SIA/GJ/MI N/ 70825/201 7	Shri Hari Enterpris e	In front of S NOs:5 76, 577, 578, 580, 589 on Mahi Nadi Patt vistar	Fajalp ur	Vado dara	Vadodara	5.30 Ha New	20,000 MTPA	Fajalpur: 770 meter	Mahi	Constructi on

Shri Zalak Savalia, representative of Project proponent with their consultant remained present before the committee and represented above proposal. He informed that mining operation is semi mechanized. Soil over burden if any will be used for refilling the excavated area as per the approved mine plan, excavated ordinary sand/gravel will be redeposited in monsoon every year and anticipated reserve will remain same. There is no applicability of CRZ Notification 2011. There is no bridge piers / water intake wells / irrigation structures within 500 m distance from boundary of above lease area. He explained that sand excavation will be done up to maximum 3 m depth. Mining will not intersect water table. Water sprinkling will be done during loading of material. Consumption of water is proposed to be 1 KLPD for domestic purpose and 5 KLPD for sprinkling purpose. Letter of the geologist showing permit in the name of applicant is submitted by the PP. Water will be sourced through tankers. Manpower requirement will be 10.All the transportation vehicles will be covered to avoid fugitive emission of fine particles. Plantation 0.2 Ha area will be carried out on riparian area/road sides. PP informed that setback distance of 61 meter will be maintained from the river bank to prevent bank erosion. It is noted that PP has submitted copies of approved mining plan, prefeasibility report including mitigation measures to curb pollution and details regarding non applicability of cluster formation for homogeneous minerals validated by the Geologist.

In project details, Geologist has validated that lease area is in dry river bed and there is no in-stream mining. It is further mentioned that cluster situation is not applicable to the proposed lease. The above proposal falls under category B2 as per the amendment of EIA Notification 2016 dated 15/01/2016. PP has submitted inspection report of sub divisional committee. PP informed that RS.1.10 lac will be spent for development of green belt.

Considering anticipated impacts of mining and mitigation measures proposed by the lease holder, committee unanimously decided to recommend the proposal for grant of environmental clearance to SEIAA for the above proposal, subject to the strict implementation of conditions mentioned in sustainable Sand mining management guideline 2016 published by MOEF&CC, New Delhi and standard conditions for Sand mining project approved during SEAC meeting held on 09/08/2017.

3	ORDINARY	CLAV	MINING P	ROJECT,DIST:	· VADODARA
J.	UNDINANI	CLAI		NOTECTIDIDE.	. IADUDANA

Proposal No	Project Name	S NO	Village	Taluk a	District	Lease Area in	Rate of mining	Nearest Habitation	Name of the river/ Mineral	Proposed Use
						Hectar e				
SIA/GJ/MI N/ 70627/201 7	Larsen and Turbo (L & T)	612 Paiki 5 to 11 on Mahi river Patt	Sherkhi	Vado dara	Vadodara	17.00 Ha New	20,000 MTPA	Sherkhi: 520 Meter	Mahi	Constructi on

Shri Zalak Savalia, representative of Project proponent with their consultant remained present before the committee and represented above proposal. He informed that mining operation is semi mechanized open cast method. There will be no mineral reject, hence stacking/dumping is not required. There is no applicability of CRZ Notification 2011. There is no bridge piers / water intake wells / irrigation structures within 500 m distance from boundary of above lease area. He explained that sand excavation will be done up to maximum 2 m depth. Mining will not intersect water table. Water sprinkling will be done during loading of material. Consumption of water is proposed to be 1 KLPD for domestic purpose and 3 KLPD for sprinkling purpose. Letter of the geologist showing permit in the name of applicant is submitted by the PP. Water will be sourced through tankers. Manpower requirement will be 10.All the transportation vehicles will be covered to avoid fugitive emission of fine particles. As per the approved mine plan, excavated ordinary clay will be re-deposited in monsoon every year and anticipated reserve will be almost same. Plantation will be carried out on approach road and nearby vicinity of the river bank.PP informed that setback distance of 80 meter will be maintained from the river bank to prevent bank erosion. It is noted that PP has submitted copies of approved mining plan, prefeasibility report including mitigation measures to curb pollution and details regarding non applicability of cluster formation for homogeneous minerals validated by the Geologist.

In project details, Geologist has validated that lease area is in dry river bed and there is no in-stream mining. It is further mentioned that cluster situation is not applicable to the proposed lease. The above proposal falls under category B2 as per the amendment of EIA Notification 2016 dated 15/01/2016.

During meeting PP was asked to mention pillars of the area proposed to be excavated for mining in total 17.00 Ha. PP was further suggested to submit map showing entire lease area of 17.00 Ha with demarcation of area intended for mining. The detail is submitted by the project proponent.

Considering anticipated impacts of mining and mitigation measures proposed by the lease holder, committee unanimously decided to recommend the proposal for grant of environmental clearance to SEIAA for the above proposal, subject to the strict implementation of conditions mentioned in sustainable Sand mining management

guideline 2016 published by MOEF&CC, New Delhi and standard conditions for Sand mining project approved during SEAC meeting held on 09/08/2017.

4. QUARTZ MINING PROJECT, DIST: DAHOD

Proposal No	Project Name	S NO	Village	Taluka	District	Lease Area in Hectare	Rate of mining	Nearest Habitation	Proposed Use
SIA/GJ/MIN/ 63733/2017	Videocon Industries Limited	58 Pai ki	Kankri dungra a	Limkhe da	Dahod	20.23 Ha New	82,591 MTPA	Kankridungri: 1.55km	Construction Industry for making blocks,slabs,tiles,ca rved artifacts

Shri Ranjeet Kumar, representative of the PP with their consultant represented the above proposal before the committee. PP informed that the proposed lease area is govt. land. There is no forest land is involved. It is semi mechanized open cast mining. Water consumption will be 6.0 KLPD and it will be resourced from private water supplier. It will be used for drinking, plantation and dust suppression purpose. Mining will be carried out by manual open cast method without drilling and blasting. Garland drain will be constructed around excavated pit area. All vehicles will be covered to prevent fugitive emission. There will be no intersection of ground water table. Water sprinkling will be done on regular basis to curb fugitive emission. Greenbelt will be developed as per the mining plan. There is no wild life sanctuary within 10 km from the proposed project. PP has submitted approved mine plan. At the end of life of mine, 10 Ha area will be used as water reservoir,0.3082 Ha area will be used for plantation and 09.9218 Ha area will be used for back filling.

During meeting, it was observed that distances of the nearest human habitation (Kankridungri), surrounding village (Limkheda) in project details are not compatible with that mentioned in presentation. PP was asked to submit production details from 2004. After presentation, committee unanimously decided to defer the proposal in one of the upcoming SEAC meeting after submission of the aforementioned details with correction.

MAJOR MINERAL PROPOSALS

1. Moraj Lime Stone Mines of M/S Sorath Minerals,(Lease Area: 16.1874 Ha), S NO: 87 P, Vill: Moraj, Ta: Veraval, Dist:GirSomnath.(Proposal NO: SIA/GJ/MIN/17299/ 2016).

Category of the Projects: 1(a)

 Terms of Reference (TOR) accorded to M/S Moraj Lime Stone Mines of M/S Sorath Minerals, (Lease Area: 16.1874 Ha), S NO: 87 P, Vill: Moraj, Ta: Veraval, Dist:Gir Somnath for enhancement in production from 1,00,000 MTPA to 10,00,000 MTPA of limestone mining on 17/11/2016.

- Public Hearing was conducted on 06/09/2017
- Final EIA report was submitted on 01/11/2017 prepared by Excel Enviro Tech, a NABET accredited consultant having certificate no TC-5892 valid up to 25 / 06/ 2019.

Project details:

Cost of the project: Rs. 50 Lakh,

Capital cost: Rs. 12.4 Lakh

Recurring cost: Rs. 21.72 Lakh/annum

Moraj Lime Stone Mines of M/S Sorath Minerals, (Lease Area: 16.1874 Ha), S NO: 87 P, Vill: Moraj, Ta: Veraval, Dist:GirSomnath have applied for expansion in Environmental Clearance for the lease Area: 16.1874 Ha.

Details of lease is as under:

Lease Order	MCR-1967 (S-77) 2490-chh dated 09.07.1968 for 20 years						
Lease Executed	06.01.1969 for a period of 20 years upto 05.01.1989						
Lease Renewed	MCR-1588(S-34)-490-CHH dated 24.11.1992 dated 24.11.1992 and MCR-1588(S-34)-490-CHH dated 28-06-2001						
Current Lease Status	Extended up to 31.03.2020 as per MMDR amendment Act 2015						
Lease Area	16.1874 Ha						
Environmental clearance	For existing capacity of 1,00,000 MTPA was granted by State Level Environment Impact Assessment Authority, Gujarat vide letter no. SEIAA/GUJ/EC/1(a)/146/2011 dated 09/08/2011.						
Present Proposal	Applied EC for Proposed Expansion of Capacity to 10,00,000 TPA. TOR granted by SEIAA/GUJ/TOR/1(a)/663/2016 dated 17/11/2016						
Proposed Capacity	10,00,000 MTPA for Limestone Capacity						
Mine Plan	Modified Mining Plan approved by IBM on 29.10.2016 for Plan Period from 2016-17 to 2019-20						

It is proposed to enhance the production from 1,00,000 MTPA to 10,00,000 MTPA from the existing lease area and there is no forest land involved. Method of mining will be open cast mining with drilling and blasting.

Details of surrounding entities of the Project site is as below:

Sr. No.	Particulars	Details
1.		Survey No. 87P, Moraj Village, Veraval Tehsil, District Gir Somnath, Gujarat Mine area (16.1874 Ha)
2.	Latitude/Longitude	Latitude: 20°59'10.74"N to 20°59'21.62"N Longitude:70°26'14.24"E to

		70°25'57.13"E
3.	Tanashaat Na	41 L/5
	Toposheet No Climatic Conditions	
4.	Climatic Conditions	Avg. Ambient air temp 10°C to 39.8°C, Avg. annual rainfall 724.1 mm, Source: IMD, Veraval
5.	Site elevation above MSL	121 to 126 m RL i.e. 55 and 56 AMSL
6.	Land use at the	Mine lease area is already being used for mining since 20.01.1969.
	proposed project site	
7.	Site topography	Flat topography with existing mine pits
8.	Nearest roadway	National Highway NH 51/NH 8D~8.27 Km, SW State Highway SH
		26~0.25 Km, S
9.	Nearest Railway Station	Veraval~11.22 Km, SW
10.	Nearest Railway line	Junagadh Somnath Railway Line. Under Bhavnagar railway Division of Western Railway Zone of Indian Railways.
11.	Nearest Air Port	Keshod~40.10 Km, NNW (Not in Operation) Rajkot~150.23 Km, N (In
		Operation)
12.	Nearest village/major	Moraj Village~ 0.93 km, SE, Veraval Town ~ 10.85 km, SW
	town	
13.	Hills/valleys	No major hills and valleys within 5 km radius
14.	Ecologically sensitive zone	Nil
15.	Reserved/ Protected	Gir Reserve Forest, 22.45 km, N
10.	forests	
16.	Historical/tourist places	None within 5 km radius area
17.	Nearest Industries	Other Limestone Minesare present within 10 km radius, Indian Rayon~11.61, SW
18.	Nearest water bodies	Umrethi Dam (on Hiran River). 4.42 Km, NE, Lachhadi Pond: 7.29
		km, NNE Hiran River, 3.73 Km, E, Somnath Sarovar, 9.98 km, SSW
		Hiran Canal Network occurs all within 10 Km radius.
19.	Seismic zone	Seismically, this area is categorized under Zone-III as per IS-1893 (Part-1)-2002. Hence, seismically the site is High Damage Risk Zone. With MSK scale of VII.

Waste generation will be in the form of top soil. About 2304 cu. m. soil will be generated during mine life. it will be stacked in mine lease area and will be used for spreading on the safety barrier for plantation. There is no overburden in mine lease area. All mined out rock is saleable. There is no stacking or disposal of overburden / waste rock is required. There is no proposal for use of land outside the mine lease area for OB dumps, etc. There are no R&R issues involved in the project. Since this is an case of existing mine

Details of land use plan is as below:

Category	Area	in Ha		
	Present	End of Plan Period		
Area Under Mining	1.94	8.32		
Storage of Top Soil	-	-		
Overburden/ Dump	-	-		
Mineral Storage	-	0.20		
Infrastructure (Workshop, administrative building etc.)	-	0.05		

Roads	0.20	0.20
Green belt	0.10	5.34
Sub Total	2.24	14.11
Area Unutilized	13.9474	2.0774
Total	16.1874	16.1874

The project does not fall under CRZ. Arabian Sea is 9.56 km, SW form mine lease area.

Total seven ambient air monitoring stations have been decided for monitoring air quality during the period December 2016 to February 2017 and results are as under.

Station code	Location	Description	PM10,	PM2.5,	SO ₂			
			$(\mu g/m^3)$	(μg/m ³)	(μg/m ³)	NO _x (μg/m ³)		
Date Of Mon	itoring		03/12/2016 to 25/02/2017					
		Minimum	51.00	28.27	10.94	16.10		
AAQ1	Core Zone i.e.	Maximum	80.90	41.60	14.77	27.70		
	Mine Site	Average	58.47	33.21	12.84	21.85		
		98th %tile	75.89	40.60	14.72	26.41		
		Minimum	50.40	28.10	7.92	15.60		
4402	Manai	Maximum	62.70	39.40	13.86	22.80		
AAQ2	Moraj	Average	55.85	33.22	11.57	19.66		
		98th %tile	61.87	39.12	13.69	22.34		
		Minimum	53.40	27.72	9.47	15.34		
A A O 2	I alazza wizza	Maximum	71.60	36.80	12.50	23.65		
AAQ 3	Ishwariya	Average	59.18	31.74	10.94	20.71		
		98th %tile	71.32	36.25	12.44	23.60		
	Malundha	Minimum	52.10	28.70	8.06	16.16		
A A O 4		Maximum	76.40	40.45	13.68	26.05		
AAQ 4		Average	58.23	35.18	11.27	19.47		
		98th %tile	73.64	40.36	13.58	24.33		
		Minimum	54.80	28.70	9.56	16.49		
4405	C	Maximum	77.00	36.93	14.82	24.20		
AAQ 5	Govindpara	Average	59.43	31.96	12.22	21.00		
		98th %tile	72.22	36.59	14.50	23.97		
		Minimum	56.00	29.06	9.91	18.68		
440.6	A1 1 ·	Maximum	75.00	37.08	14.71	25.40		
AAQ 6	Akalagir	Average	58.92	32.53	12.53	22.97		
		98th %tile	68.93	36.95	14.62	25.19		
		Minimum	53.80	28.90	10.81	17.99		
AAO 7	Wayaya 1	Maximum	79.90	40.88	14.46	25.55		
AAQ 7	Veraval	Average	59.25	34.85	12.90	22.84		
		98th %tile	74.84	40.66	14.40	25.36		
CPCB Standa	ard		100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)		

Air quality modelling was carried out for the stone mining project using AERMOD model. Predicted GLC for PM10 for all the stations due to proposed expansion in project are as below:

Receptor Code	Monitoring location	Max Baseline Conc. (μg/m)	Predicted GLC (µg/m)	Cumulative GLC (µg/m)
AAQ1	Core Zone (Mine Site)	80.90	4.3500	85.2500
AAQ2	Moraj	62.70	0.0151	62.7151
AAQ3	Ishvariya	71.60	0.0135	71.6135
AAQ4	Malundha	76.40	0.0938	76.4938
AAQ5	Govindpara	77.00	0.1047	77.1047
AAQ6	Akala Gir village	75.00	0.0183	75.0183
AAQ7	Veraval	79.90	0.0417	79.9417

Total water requirement for the project will be 53 KLD, which will be met from mine pit water and by tankers from nearby bore well. Drinking water will be supplied from bore well. Utilization of water will be as below:

S.	Particulars	Quantity	Source / Details
No.			
1	Dust Suppression	30	Mostly from mine pit water (when available) & water by tankers from nearby bore wells
2	Green Belt & Plantation	15	
3	Domestic Use	8	Borewell water (For domestic: Fulltime Employees 45 LPD while for contractor side 15 LPD considered as per NBC, 2005)
	Total	53	

The reservoir developed in mined out pit in 13.50 Ha area will act as an additional source of water to the nearby villagers. Harvest rain water in mining pits to the tune of 17686.35 m³/annum, which will be utilized for dust suppression and plantation purpose.

To curb erosion and siltation of water bodies located outside the mining area, measures like dense plantation within mining lease area and around safety zone, Construction of settling tank, garland drains around mine lease area connected to settling tank and stabilization of soil dump with grasses & leguminous plants will be taken.

The mining activities will not intersect ground water during life of mine as per plan period and Conceptual Plan

Hiran Canal passes through lease area safety barrier of 50 m will be kept from canal no working will be carried in 50 m safety zone from canal. There is no other seasonal stream or nallah flowing through the mining area.

Details of aforestation plan is as below

Year	No. of Sapling	Area(in Ha.)
1 Year	2128	1.068
nd Year	2128	1.068
rd 3 Year	2128	1.068
4 Year	2128	1.068
5 Year	2128	1.068
Total	10,640	5.34

Limestone will be transported in trucks covered with tarpaulin. 10 MT capacity trucks within a distance of 60 Km from mine site will be dispatched. About 339 trips of 10 tonne capacity trucks will be required for transportation of limestone. The material will be transported through NH while only small part of transportation will comprise of local or state highway which will be periodically maintained. No impact is envisaged on the existing traffic infrastructure due to the mining activities. There is no village habitation in or adjacent to the Moraj Limestone Mine. The nearest village habitation is located in Moraj village at 0.930 km SE.

The dust emissions and noise from the mining project will not cause any significant impact. The mine will be operated during day time. There will not be any disturbance to the normal traffic of the area. No significant impact is envisaged on the public health due to the project.

Budgetary provision to mitigate impact of mining on Public health

S. No.	Description of item	Capital Cost (Rs. in lakh)	Recurring cost (Rs. in lakh)
1	Air Pollution Control - Water sprinkling on haul road & plantation	5.00	2.00
2	Water Pollution Control (Settling tank, Garland Drains, etc.)	1.50	0.50
3	Environmental Monitoring	-	3.30
4	Green belt Development/ plantation within ML area (2128 saplings/year)	0.40	1.06
5	Rain Water Harvesting structures	2.50	0.80
6	Occupational Health & Safety Measures	3.00	1.20
7	Socio-economic welfare activities in nearby villages	-	9.86
	Sub Total	12.4	18.72
8	Maintenance of village road used for mineral transportation	-	3.00

Proposed budget for Socio Economic as pectg is as below:

No	Activity	Budget (Rs. in Lakh/Year)
1	Vocational training to interested youth	0.80
2	Financial assistance to Self Help Group of local women	0.70
3	Donation of school furniture, uniform, books, etc.	0.60
4	Medical health check up camps	1.60
5	Donation of blankets, mosquito nets	0.80
6	Donation for construction / maintenance of community buildings	3.50
7	Repair/ maintenance of village wells/ bore wells/ Deepening of existing ponds	0.80
8	Plantation	1.06

Total	9.86

Environmental management Plan with possible impact due to mining and its mitigation measures as are below:

Environmental Component	Project Activities	Impacts	Action Plan Proposed
Air Quality	Drilling and Blasting	Dust is generated during drilling and blasting operations	 Use of dust aprons on drilling equipment and adopting wet drilling methods. Avoiding blasting during adverse weather conditions. Use of controlled blasting practice Development of greenbelt.
	Extraction of limestone, Loading / unloading activities	Increase in dust levels in ambient air and SO ₂ /NOx concentration levels in ambient air due to vehicular emissions.	required for mining operations. • Periodic sprinkling of water on working
	Transportation of limestone	Increase in dust level due to dust generation and SO ₂ /NOx concentration levels in ambient air due to vehicular emissions.	 Periodic maintenance of transport vehicles.
	General equipment operations	Increased dust and SO ₂ /NOx concentrations in ambient air.	Regular maintenance of all equipment to minimize particulate matter and gaseous emissions from diesel engines.
	All activities	Excessive occupational exposures to airborne particulate matter.	 Provision of dust masks to workers exposed to dusty operations / areas.
Noise Levels and Ground Vibrations	Blasting	High impulsive noise levels, overpressure and ground vibrations impacts and noise related community annoyance	 vibrations. Charge per delay will be kept optimum. Muffle blasting will be carried out in area facing Moraj habitation. Blasting will be conducted during lunch (noon) time when no employees are present in mine working area.
	General activities including machine/ operations and transportation of limestone.	Increase in noise levels occupational hazard due to noise exposures and increase in ambient noise levels.	 Periodic maintenance of all mining machinery and transport vehicles Provision of effective silencers to all mine machinery Provision of ear plugs/ear muffs to workers exposed to high noise generating operations Development of thick plantation around mine lease boundary to act as a noise screen. Regular noise monitoring will be carried-out.

	Dewatering	Reduction in groundwater availability Deterioration in surface/ground water quality of receiving body.	 Surface run-off from mining area will be collected in settling tank / mine sump and will be used for dust suppression and plantation. There will be negligible impact of groundwater availability since the proposed working is above water table and during the proposed working the mine will not intersect water table. There will not be any process effluent discharge from the mine. Wing of Hiran Canal passes through lease area safety barrier of 50m will be kept from canal no working will be carried in 50m safety zone from canal. Domestic effluent will be discharged in septic tank and soak pit system. At conceptual stage, mined out pit will be converted into water reservoir, which will help in recharging ground water table and will be available to nearby villagers as an additional surface water body.
Water Resources and Quality	Water required in mine for dust suppression, plantation and domestic use.	Reduction in groundwater availability for domestic and for irrigation purposes.	 Surface run-off from mining area will be collected in settling tank / mine sump and will be used for dust suppression and plantation. Wing of Hiran Canal passes through lease area safety barrier of 50m will be kept from canal no working will be carried in 50m safety zone from canal. There will be negligible impact of groundwater availability since the proposed working is above water table and during the proposed working the mine will not intersect water table. Water for drinking and domestic use will be supplied by tanker from nearby village. At conceptual stage, mined out pit will be converted into water reservoir, which will help in recharging ground water table and will be available to nearby villagers as an additional surface water body. Rainwater harvesting structures will be constructed in nearby villages.
	Waste water generated from domestic usage at mine.	Deterioration in ground water and soil quality when discharged untreated for greenbelt development	There will not be any process effluent

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Hydrogeology and Drainage pattern	Mining activities	May impact regional hydrology and drainage pattern of the area.	 There will be negligible impact of regional hydrogeology since the proposed working is above water table and during the proposed working the mine will not intersect water table. However, at conceptual stage, mined out pit will be converted into water reservoir, which will help in recharging ground water table and will be available to nearby villagers as an additional surface water body. Rainwater harvesting structures will be constructed in nearby villages. Wing of Hiran Canal passes through lease area safety barrier of 50m will be kept from canal no working will be carried in 50m safety zone from canal.
Water Resources	Dewatering	Reduction in groundwater availability Deterioration in surface/ground water quality of receiving body.	 Surface run-off from mining area will be collected in settling tank / mine sump and will be used for dust suppression and plantation.
and Quality	Water required in mine for dust suppression, plantation and domestic use.	Reduction in groundwater availability for domestic and for irrigation purposes.	 Surface run-off from mining area will be collected in settling tank / mine sump and will be used for dust suppression and plantation. Wing of Hiran Canal passes through lease area safety barrier of 50m will be kept from canal no working will be carried in 50m safety zone from canal. There will be negligible impact of groundwater availability since the proposed working is above water table and during the proposed working the mine will not intersect water table. Water for drinking and domestic use will be supplied by tanker from nearby village. At conceptual stage, mined out pit will be converted into water reservoir, which will help in recharging ground water table and will be available to nearby villagers as an additional surface water body. Rainwater harvesting structures will be constructed in nearby villages.

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	Waste water generated from domestic usage at mine.	Deterioration in ground water and soil quality when discharged untreated for greenbelt development	 There will not be any process effluent discharge from the mine. Wing of Hiran Canal passes through lease area safety barrier of 50m will be kept from canal no working will be carried in 50m safety zone from canal. Rain water accumulated in mine pit will be discharged in nearby drainage after passing through settling pond. Domestic effluent will be discharged in septic tank and soak pit system.
Hydrogeology and Drainage pattern	Mining activities	May impact regional hydrology and drainage pattern of the area.	 There will be negligible impact of regional hydrogeology since the proposed working is above water table and during the proposed working the mine will not intersect water table. However, at conceptual stage, mined out pit will be converted into water reservoir, which will help in recharging ground water table and will be available to nearby villagers as an additional surface water body. Rainwater harvesting structures will be constructed in nearby villages. Wing of Hiran Canal passes through lease area safety barrier of 50m will be kept from canal no working will be carried in 50m safety zone from canal.
Land Use and Soil Characteristics	Mining operations.	Land use of the mine lease area will be changed. Impact due to settling of air borne dust on soil outside ML area. Land degradation due to disposal of solid wastes.	 Development of thick plantation around mine lease area, waste dump area and on undisturbed area. Adoption of adequate air pollution control measures to control dust emissions. At conceptual stage, mined out pit will be converted into water reservoir. Plantation will be developed on top benches of mined out pit. This will improve aesthetic view of the ML area.
Biological environment	Dust emission due to limestone mining activity in Moraj Limestone Mine.	Dust deposition on vegetation around periphery of ML area may reduce the crop productivity specifically within 500m from mine lease area.	 Development of thick green belt around mine lease boundary and plantation on undisturbed area, top benches of mined out area, waste dump area etc. using native flora species. Transport through covered trucks. Sprinkler
Environmental Pollution, Health, Safety	Overall Mining operation	Occupational health issues, Community disturbance, risk of accidents, etc	 Adoption of suitable pollution control measures in the mines Provision of pre-employment and periodic training on health and safety to all the workers in the mine Adoption of safe working practices Maintaining proper housekeeping at working places. Provision of necessary personal protective equipments to all mine workers Periodic maintenance of mine machinery and

			transport vehicles Display of warning signals at strategic locations.
Socio-economic Aspects	Mining operations	Increase in employment opportunities both direct and indirect thereby increasing economic status of people of the region.	 Increase in direct employment from 73 to 237 persons. Mostly local people will be employed in the mine. Mine management will carry out CSR activities in the nearby villages to improve socio-economic conditions of the villages. The Mine management will spend about Rs. 9.86 Lakhs annually on CSR to improve the basic facilities such as education, health and sanitation and communication etc. in the nearby villages.

There is no litigation pending against the project

OBSERVATION/DISCUSSION

Committee noted that PP has obtained CC&A of the GPCB and all aspects of water, air, noise and soil with possible impacts are adequately addressed in the environmental management plan with mitigation measures. No blasting is involved in this proposal.

It was deliberated that during study period from December 2016 to February 2017, ambient air quality parameters found within prescribed norms as per NAAQ 2009. During study period, noise level during daytime found exceeding from the standards prescribed by the CPCB. Surface water quality is found within permissible limit of drinking water standards. Overall Soil quality in the study area was found from poor to medium fertile with moderate productivity. Ambient air quality is found within prescribed NAAQ standards during study period.

It is noted that at the end of life of mine, 5.34 Ha area will be developed for plantation and green belt. The issues raised during public hearing were discussed at length. Major issues were regarding Risk to human health, CSR Activities, employment, greenbelt & tree plantation, Social aspects and Environment Health, Safety.

During presentation, referring to the public hearing minutes, committee asked PP to submit details of owner of the lease right from the grant date of09/07.1968 and amendments/correction made in the ownership of the lease thenafter till date with all supporting documents. It was further noted that TOR 13,14 and 18 are not adequately addressed for the Forest NOC and Schedule 1 species in mining lease area.

During presentation, it is mentioned that mining will intersect the water table to which committee asked PP to restrict mining depth so as to prevent intersection of the water table and asked PP to submit undertaking of not intersecting the water table at 35 m.

After deliberation, committee asked PP to submit the following

- (1) To readdress TOR No: 13,14,16,17and 18.
- (2) No objection certificate of the forest department for carrying out mining with reference to Schedule 1 species existence, movement in the mine lease area, study area
- (3) Letter from the forest department regarding location of the proposed lease area in ecosensitive zone/proposed eco-sensitive zone if not notified.

- (4) Undertaking regarding control of depth for mining regarding not intersecting water table with reference to the proposed production.
- (5) Submission of undertaking for not carrying out blasting and details of safety barrier to be maintained from Hiran Canal.
- (6) Action plan for the issues raised during Public Hearing including all the written complaints received after public hearing and current status of compliance.
- (7) Documents regarding current owner of mining lease and details of change of owners since grant of lease with supporting documents validated by competent authority.
- (8) Revised copy of EIA after incorporating correction of all the aforementioned queries.
- (9) Status of compliance regarding (i) Litigation pending before any court of law against the unit (ii) Action taken by the GPCB against the mining lease (iii)Compliance of EC from time to time including report of RO,MOEF&CC,Bhopal/GPCB for EC conditions (IV) details pf public complaints (if any) against the mining proposal.
 - 2. M/S. Malundha Lime stone Mine (R.J.Trivedi and Co.),Lesse:Shivam Mining, Lease Area: 37.23 Ha,S NO: 185/45, Vill: Malundha,Ta:Veraval,Dist: Gir Somnath for enhancement in production from 1,00,000 MTPA to 10,00,000 MTPA of limestone mining (Proposal NO:SIA/GJ/MIN/ 17513/2016).

Category of the Projects: 1(a)

- Terms of Reference (TOR) accorded to /S. Malundha Lime stone Mine (R.J.Trivedi and Co.),Lesse:Shivam Mining, Lease Area: 37.23 Ha,S NO: 185/45, Vill: Malundha,Ta:Veraval,Dist: Gir Somnath for enhancement in production from 1,00,000 MTPA to 10,00,000 MTPA of limestone mining on 18/02/2017.
- Public Hearing was conducted on 05/09/2017
- Final EIA report was submitted on 01/11/2017 prepared by Excel Enviro Tech, a NABET accredited consultant having certificate no TC-5892 valid up to 25 /06/ 2019.

Project details:

Cost of the project: Rs. 75 Lakh

Capital cost: Rs. 16.00 Lakh

Recurring cost: Rs. 28.96 Lakh/annum

The M/s. R. J. Trivedi & Co. have applied for expansion in Environmental Clearance is located in 37.23 Ha area survey No. 185/45, Malundha Village, Veraval Taluka, District Gir Somnath, Gujarat.

Surrounding entities of the projects are as below:

Sr.	Particulars	Details
No.		
1.	Project Location	Survey No. 185/45, Malundha Village, Veraval Taluka, District Gir Somnath, Gujarat Mine area (37.23 Ha)
2.	Latitude/Longitude	Latitude: 70°21'08.15"N to 70°22'33.72"N Longitude: 21°00'00.48"E to 21°00'39.86"E
3.	Toposheet No	41 L/5

4.	Climatic Conditions	Avg. Ambient air temp 10°C to 39.8°C Avg. annual rainfall 728.4 mm, Source: IMD, Veraval
5.	Site elevation above MSL	144 to 137m RL i.e. 44 to 38m MSL
6.	Land use at the proposed project site	Mine lease area is already being used for mining since 10.08.1975.
7.	Site topography	Flat topography with existing mine pits
8.	Nearest roadway	National Highway NH 51/NH 8D~7.03 Km, SW, State Highway SH 26~5.52 Km SE
9.	Nearest Railway Station	Adriroad Railway Station~3.82 Km, WSW, Veraval Railway Station~9.48 Km, S
10.	Nearest Railway line	JunagadhSomnath Railway Line. Under Bhavnagar railway Division of Western Railway Zone of Indian Railways.
11.	Nearest Air Port	Keshod~40.10 Km, NNW (Not in Operation), Rajkot~150.23 Km, N (In Operation)
12.	Nearest village/major town	Malundha Village: 0.83 km, SE, Veraval Town: 9.34 km, S
13.	Hills/valleys	No major hills and valleys within 10 km radius
14.	Ecologically sensitive zone	Nil
15.	Reserved/ Protected forests	Reserve Forest, 8.93 Km SW, Gir National Park, 21 km, NE
16.	Historical/tourist places	None within 5 km radius area
17.	Nearest Industries	Moraj Limestone Mine 6.21 Km, E, Santipara limestone Mine5.79 Km, WNW Other Limestone Mines are present within 10 km radius. Indian Rayon~9.51, SW
18.	Nearest water bodies	Umrethi Dam (on Hiran River). 9.79 Km, ENE, Lachhadi Pond: 6.62 km, NNW Hiran River: 9.5 km, E, Megal River: 9.0 km, WNW, Arabian Sea: 9.56 km, SW Hiran Canal Network occurs all within 10 Km radius
19.	Seismic zone	Seismically, this area is categorized under Zone-III as per IS-1893 (Part-1)-2002. Hence, seismically the site is High Damage Risk Zone. With MSK scale of VII.

The lease period is extended up to 07.08.2025 as per MMDR Amendment Act, 2015.

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Lease Order	MCR-1573(R-11)-406-CHHdated 24 April 1975 for 20 years.		
Lease Executed	08.08.1975 for a period of 20 years upto 07.08.1995		
Lease Renewed	Applied on 04.08.1994 for 20 years upto 07.08.2015.		
Current Lease Status	The lease period is extended up to 07.08.2025 as per MMDR Amendment Act, 2015		
Lease Area	37.23 Ha		
Environmental clearance	For existing capacity of 1,00,000 MTPA was granted by State Environment Impact Assessment Authority, Gujarat vide letter no. SEIAA/GUJ/EC/1(a)/147/2011 dated 09/08/2011.		

Present Proposal	Applied for EC for Proposed Expansion of Capacity to 10,00,000 TPA; TOR granted by SEIAA/GUJ/TOR/1(a)/81/2017 dated 18/02/2017
Proposed Capacity	10,00,000 MTPA for Limestone
Mine Plan	Modified Mining Plan approved by IBM on 29.09.2016 for Plan Period from 2016-17 to 2020-21.

There is no forest land involved. Safety aspect of the mine will comprise of (1) Safety plan shall be put into place as per DGMS Guidelines/ Circulars (2)Adequate supervision shall be maintained by qualified competent persons;(3)All machineries to be deployed in mines shall be checked before deployment by competent authority; (4)Regular checking of machines deployed shall be done. No unfit machine shall be deployed before the defect is rectified;(5)In case of unprecedented rainfall, machineries shall be withdrawn from lower benches temporarily and redeployed after dewatering in the lower benches again.(6)Water sprinklers shall be deployed in haul road. (7)Spraying with water on all working faces.(8)While drilling holes, drills with necessary dust extraction arrangement shall be used.(9) Periodic leveling of spoil dump surface.(10)Maintaining the engine and exhaust conditioners properly, so as to keep emission gases within limits and regular checking of exhaust and recording the same.(11)Provision of portable fire extinguishers.(12)Firefighting and first-aid provisions in the mines office and mining area; (13) Provisions of all the safety appliances such as safety boot, helmets, goggles etc. will be made available to the employees and regular check for their use;(14)Assembly points will be provided (15) Emergency organization shall be formed to deal with emergency during fire. The organization shall have names of responsible person along with their telephone numbers. Their duties shall be clearly specified and the persons shall be properly trained. Mock drills shall be held. (16)Drilling and blasting in quarry shall be done in accordance with the provisions of Mines Act, rules and regulations;(17)Adequate safety measures will be taken during blasting operations in the quarry so that men/machines are not affected;

Ground vibration due to blasting will be controlled by taking (1) Reducing the explosive charge per delay (2)Spacing and burden are to be optimized by the blasting engineer (3)Reducing the amount of explosive charged per blast (4)Adoption of controlled blasting by using suitable initiating sequence and delay.

Waste generation will be in the form of top soil. About 1785 cubic meter soil will generate will be used for spreading on the safety barrier for plantation. All mined out rock will be saleable. There is no stacking or disposal of overburden / waste rock is required.

Details of land use is as below

Category	Area in Ha		
	Present	End of Plan Period	
Area Under Mining	13.9590	8.92	
Storage of Top Soil	-	-	
Overburden/ Dump	-	-	
Mineral Storage	-	0.20	
Infrastructure (Workshop, administrative building etc.)	0.0185	0.05	
Roads	0.6291	0.20	

Green belt	0.10	10.16
Sub Total	14.7066	20.00
Area Unutilized	22.5234	17.2300
Total	37.23	37.23

There is no proposal for use of land outside the mine lease area for OB dumps, etc. There are no R&R issues involved in the project. Since this is an case of existing mine .Reserve forest is present at a distance of 8.93 Km SW. There is no Schedule I fauna observed in the study areaThe project does not fall under CRZ. Arabian Sea is 9.56 km, SW form mine lease area. There is no habitation in the mining lease area. There is no additional land required for the project. Hence R&R is not involved in the project.

For monitoring of ambient air quality, total seven stations have been decided based on upwind, downwind direction of the project. Sampling period is December 2016 to February 2017.

Station code	Location	Description	PM10, (μg/m3)	PM2.5, (μg/m3)	SO2 (μg/m3)	NOx (μg/m3)
Date of Monitoring			03	/12/2016 to	0 25/02/20	17
		Minimum	54.50	29.41	10.84	17.95
4.4.04	Core Zone	Maximum	83.60	42.40	17.47	25.51
AAQ1	i.e. Mine Site	Average	58.84	36.46	13.85	20.68
	Wille Site	98th %tile	80.98	42.31	17.00	24.24
		Minimum	52.10	28.70	8.06	16.16
4402	N/ - l	Maximum	76.40	40.45	13.68	26.05
AAQ2	Malundha	Average	58.23	35.18	11.27	19.47
		98th %tile	73.64	40.36	13.58	24.33
		Minimum	56.00	29.06	9.91	18.68
4400	Akalagir	Maximum	75.00	37.08	14.71	25.68
AAQ 3		Average	58.92	32.53	12.53	22.97
		98th %tile	68.93	36.95	14.62	25.19
	Dari	Minimum	54.90	25.83	8.80	14.85
4404		Maximum	73.00	36.80	12.80	23.16
AAQ 4		Average	59.36	31.24	10.71	19.96
		98th %tile	71.99	36.34	12.71	23.12
		Minimum	50.40	28.10	7.92	15.60
440 F	M :	Maximum	80.90	39.40	13.86	22.80
AAQ 5	Moraj	Average	56.69	33.22	11.57	19.66
		98th %tile	72.53	39.12	13.69	22.34
		Minimum	54.60	26.19	9.93	14.25
1100	C	Maximum	72.90	35.76	11.97	22.77
AAQ 6	Supasi	Average	58.52	31.15	11.11	19.61
		98th %tile	69.59	35.36	22.77	22.71
		Minimum	53.80	28.90	10.81	17.99
AAQ 7	Veraval	Maximum	79.90	40.88	14.46	25.55
		Average	59.25	34.85	12.90	22.84

		98th %tile	74.84	40.66	14.40	25.36
CF			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)

Air quality modelling was carried out for the stone mining project using AERMOD model. Predicted ground level concentration results are as below

Receptor	Monitoring	Max Baseline Conc.	Predicted ₂ GLC	Cumulative GLC
Code	location	(µg/m [°])	(µg/m [°])	(µg/m ̈)
AAQ1	Core Zone (Mine Site)	83.60	0.38126	83.9813
AAQ2	Malundha	76.40	0.2865	76.6865
AAQ3	Akalagir	75.00	0.0665	75.0665
AAQ4	Dari	73.00	0.0595	73.0595
AAQ5	Moraj	80.90	0.0029	80.9029
AAQ6	Supasi	72.90	0.0442	72.9442
AAQ7	Veraval	79.90	0.0165	79.9165

Total water requirement for the project will be 61 KLD, which will be met from mine pit water and by tankers from nearby bore well. Drinking water will be supplied from bore well. Details of water consumption is as below

S. No.	Particulars	Quantity	Source
1	Dust Suppression	33	Mine pit water (when available) & water by tankers from nearby bore wells
2	Green Belt & Plantation	20	Healby bore wells
3	Domestic Use	8	Bore well water (For domestic: Fulltime Employees 45 LPD while for contractor side 15 LPD considered as per NBC, 2005)
Total		61	

Rainwater harvesting will be facilitated and rain water collection in the mined out pits will be 40677.50 m³/Annum. This water will be utilized for dust suppression and plantation purpose. Possible Impact of ground water pollution will be sediment and suspended load due to erosion of overburden dump and siltation of the seasonal water bodies located outside the mining area.

To mitigate this, dense plantation within mining lease area and around safety zone will be made, Construction of settling tank, Garland drains around mine lease area connected to settling tank will be provided, development of green belt around mine lease area and grasses plantation to control soil erosion, Stabilization of soil dump with grasses & leguminous plants to control soil erosion will be made. The mining activities will not intersect ground water during life of mine as per plan period and Conceptual Plan. Hiran Canal passes through lease area safety barrier of 50 m will be kept from canal no working will be carried in 50 m safety zone from canal.

Year	No. of Sapling	Area(in Ha.)
1 Year	2732	1.20
2 Year	2732	1.12
3 Year	2732	1.12
4 Year	2732	1.12
5 Year	2732	1.12
6 Year	2732	1.12
7 Year	2732	1.12
8 Year	2732	1.12
9 Year	2724	1.12
Total	24,580	10.16

Trucks of 10/20 MT capacity within a distance of 60 Km from mine site will be used for transportation of mineral. About 339 trips will be made for transportation of limestone. Limestone will be transported in trucks covered with tarpaulin. No impact is envisaged on the existing traffic infrastructure due to the mining activities. The material will be transported through NH while only small part of transportation will be periodically maintained. Detailed Environmental Management Plan proposed by the PP is as below

Environmental Component	Project Activities	Impacts	Mitigation measures
Air Quality	Drilling and Blasting	Dust is generated during drilling and blasting operations	 Use of dust aprons on drilling equipment and adopting wet drilling methods. Avoiding blasting during adverse weather conditions. Use of controlled blasting practice Development of greenbelt.
	Extraction of limestone, Loading / unloading activities	Increase in dust levels in ambient air and SO ₂ /NOx concentration levels in ambient air due to vehicular emissions.	 Exposed area will be limited to the minimum required for mining operations. Periodic sprinkling of water on working faces, Regular preventive maintenance of mine machinery
	Transportation of limestone	Increase in dust level due to dust generation and SO ₂ /NOx concentration levels in ambient air due to vehicular emissions.	 Regular sprinkling of water on haul and access roads. Periodic maintenance of transport vehicles. Periodic maintenance of haul roads
	General equipment operations	Increased dust and SO ₂ /NOx concentrations in ambient air.	 Regular maintenance of all equipment to minimize particulate matter and gaseous emissions from diesel engines.
	All activities	Excessive occupational exposures to airborne particulate matter.	 Provision of dust masks to workers exposed to dusty operations / areas.

Noise Levels and Ground Vibrations	Blasting General	High impulsive noise levels, overpressure and ground vibrations impacts and noise related community annoyance	detonators will be carried out to minimize ground vibrations. Charge per delay will be kept optimum. Muffle blasting will be carried out in area facing Moraj habitation. Blasting will be conducted during lunch (noon) time when no employees are present in mine working area.
	activities including machine/ operations and transportation of limestone.	occupational hazard due to noise exposures and increase in ambient noise levels.	 Provision of effective silencers to all mine machinery Provision of ear plugs/ear muffs to workers exposed to high noise generating operations Development of thick plantation around mine lease boundary to act as a noise screen. Regular noise monitoring will be carried-out.
Water Resources and Quality	Dewatering	Reduction in groundwater availability Deterioration in surface/ground water quality of receiving body.	 Surface run-off from mining area will be collected in settling tank / mine sump and will be used for dust suppression and plantation. There will be negligible impact of groundwater availability since the proposed working is above water table and during the proposed working the mine will not intersect water table. There will not be any process effluent discharge from the mine. Wing of Hiran Canal passes through lease area safety barrier of 50m will be kept from canal no working will be carried in 50m safety zone from canal. Domestic effluent will be discharged in septic tank and soak pit system. At conceptual stage, mined out pit will be converted into water reservoir, which will help in recharging ground water table and will be available to nearby villagers as an additional surface water body.
		Reduction in groundwater availability for domestic and for irrigation purposes.	 Surface run-off from mining area will be collected in settling tank / mine sump and will be used for dust suppression and plantation. Wing of Hiran Canal passes through lease area safety barrier of 50m will be kept from canal no working will be carried in 50m safety zone from canal. There will be negligible impact of groundwater availability since the proposed working is above water table and during the proposed working the mine will not intersect water table. Water for drinking and domestic use will be supplied by tanker from nearby village.

	_	Deterioration in ground water and soil quality when discharged untreated for greenbelt development	 At conceptual stage, mined out pit will be converted into water reservoir, which will help in recharging ground water table and will be available to nearby villagers as an additional surface water body. Rainwater harvesting structures will be constructed in nearby villages. There will not be any process effluent discharge from the mine. Wing of Hiran Canal passes through lease area safety barrier of 50m will be kept from canal no working will be carried in 50m safety zone from canal. Rain water accumulated in mine pit will be discharged in nearby drainage after passing through settling pond. Domestic effluent will be discharged in septic tank and soak pit system.
Hydrogeology and Drainage pattern	Mining activities	May impact regional hydrology and drainage pattern of the area.	 There will be negligible impact of regional hydrogeology since the proposed working is above water table and during the proposed working the mine will not intersect water table. However, at conceptual stage, mined out pit will be converted into water reservoir, which will help in recharging ground water table and will be available to nearby villagers as an additional surface water body. Rainwater harvesting structures will be constructed in nearby villages. Wing of Hiran Canal passes through lease area safety barrier of 50m will be kept from canal no working will be carried in 50m safety zone from canal.
Landuse and Soil Characteristics	Mining operations.	Land use of the mine lease area will be changed. Impact due to settling of air borne dust on soil outside ML area. Land degradation due to disposal of solid wastes.	 Development of thick plantation around mine lease area, waste dump area and on undisturbed area. Adoption of adequate air pollution control measures to control dust emissions. At conceptual stage, mined out pit will be converted into water reservoir. Plantation will be developed on top benches of mined out pit. This will improve aesthetic view of the ML area.
Biological environment	Dust emission due to limestone mining activity in Moraj Limestone Mine.	Dust deposition on vegetation around periphery of ML area may reduce the crop productivity specifically within 500m from mine lease area.	 Development of thick green belt around mine lease boundary and plantation on undisturbed area, top benches of mined out area, waste dump area etc. using native flora species. Transport through covered trucks. Sprinkler will be installed at loading & unloading point; regular water sprinkling within the mining area and also on haulage road will be carried out. The waste material/OB dumps will be covered with shrubs and grasses plantation.

Environmental Pollution, Health, Safety	Overall Mining operation	Occupational health issues, Community disturbance, risk of accidents, etc	 Adoption of suitable pollution control measures in the mines Provision of pre-employment and periodic training on health and safety to all the workers in the mine Adoption of safe working practices Maintaining proper housekeeping at working places. Provision of necessary personal protective equipments to all mine workers Periodic maintenance of mine machinery and transport vehicles Display of warning signals at strategic locations.
Socio-economic Aspects	Mining operations	Increase in employment opportunities both direct and indirect thereby increasing economic status of people of the region.	

Budgetary provision for taking environmental mitigation measures

S. No.	Description of item	Capital Cost (Rs. in lakh)	Recurring cost (Rs. in lakh)
1	Air Pollution Control - Water sprinkling on haul road & plantation	8.00	4
2	Water Pollution Control (Settling tank, Garland Drains, etc.)	2.50	1
3	Environmental Monitoring	-	3.3
4	Green belt Development/ plantation within ML area (27) saplings/year)	32 -	1.36
5	Rain Water Harvesting structures	2.50	0.6
6	Occupational Health & Safety Measures	3.00	0.6
7	Socio-economic welfare activities in nearby villages	-	12.1
	Sub To	otal 16.00	22.96
8	Maintenance of village road used for mineral transportation	-	6
	To	otal 16.00	28.96

Budgetary allocation for socio economic development is as under

Sr. No.	Activity	Budget(Rs. in Lakh/Year)
1.	Vocational training to interested youth	1.5
2.	Financial assistance to Self Help Group of local women	2.0

3.	Donation of school furniture, uniform, books, etc.	1.0
4.	Medical health check up camps	1.2
5.	Donation of blankets, mosquito nets	0.7
6.	Donation for construction / maintenance of community buildings	3.5
7.	Repair/ maintenance of village wells/ bore wells/ Deepening of existing ponds	2.2
	Total	12.1

There is no litigation pending against the project.

OBSERVATION/DISCUSSION

Committee noted that PP has obtained CC&A of the GPCB and all aspects of water, air, noise and soil with possible impacts are adequately addressed in the environmental management plan with mitigation measures. It was deliberated that during study period from December 2016 to February 2017, ambient air quality parameters found within prescribed norms as per NAAQ 2009. During study period, noise level during day and night time was observed below the CPCB standards for industrial and residential area. Surface water is found suitable for propagation of wildlife and fisheries and domestic purpose. The Shallow groundwater in the area is generally alkaline The value of pH ranges from 7.40 to 7.71 which is suitable for domestic purpose. Soil at the site is sandy clay loam having moderate permeability and does not pose problem of either salinity or Solidicity. It is mentioned that at the end of life of mine, 10.16 Ha area will be developed for plantation and green belt..

The issues raised during public hearing were also considered.

Major issues were regarding disposal of waste water, Risk to human health, action taken by the GPCB against the PP, laying of Deep Sea Disposal Pipeline, CSR Activities, employment, impeding the natural drain, ETP Details and Water Consumption, greenbelt & tree plantation, readiness of the PP in case of emergency situation like fire, Social aspects, Rain water Harvesting and Environment Health, Safety.

The issues raised during public hearing were discussed at length. During public hearing, issues regarding disposal of waste water, human health, employment to locals and land losers, disturbance to the natural drainage pattern, air pollution and safety aspects.

After deliberation, committee asked PP to submit the following

- 1. To readdress TOR No: 13,14,16,17and 18.
- No objection certificate of the forest department for carrying out mining with reference to Schedule 1 species existence, movement in the mine lease area, study area.
- 3. Letter from the forest department regarding location of the proposed lease area in eco-sensitive zone/proposed eco-sensitive zone if not notified.
- 4. Submission of undertaking for not carrying out blasting, drilling and details of safety barrier to be maintained from Hiran Canal.
- 5. Action plan for the issues raised during Public Hearing including all the written complaints received after public hearing and current status of compliance.
- 6. Documents regarding current owner of mining lease and details of change of owners since grant of lease with supporting documents validated by competent authority.
- 7. Current renewal status of mining le
- 8. Revised copy of EIA after incorporating correction of all the aforementioned queries.

- 9. Distance of Malundha Primary School, Deda Primary School, Deda Secondary School, duly validated by the district geologist.
- 10. If above Schools fall within 500 meter, Mine plan shall be reapproved from the competent authority after leaving safety distance of 500 m from Schools and 50 m from the Canal with details of reduced mine area.
- 11. Impact of mining and mitigation measures to control air borne dust particles due to excavation work and its settlement to the water bodies/agriculture fields causing possible threat to the percolation.
- 12. Status of compliance regarding (i) Litigation pending before any court of law against the unit (ii) Action taken by the GPCB against the mining lease (iii)Compliance of EC from time to time including report of RO,MOEF&CC,Bhopal/GPCB for EC conditions (IV) details pf public complaints (if any) against the mining proposal.
- 3. M/S. Babarkot Limestone Area with Production capacity of 2,50,000 MTPA(ROM) of Limestone by unit: Narmada Cement-Jafrabad Works of M/S Ultratech Cement Limited located at S.No:217, 218, 219, 220,221 of village Babarkot, Tal: Jafrabad, Dist: Amreli,Gujarat (Mine Lease Area:14.2045 Ha), (Proposal NO:SIA/GJ/MIN/17237/2016).

Category of the Projects: 1(a)

- Terms of Reference (TOR) accorded to M/S Babarkot Limestone area with Production capacity of 2,50,000 MTPA(ROM) of Limestone by unit: Narmada Cement-Jafrabad Works of M/S Ultratech Cement Limited located at S.No:217, 218, 219, 220,221 of village Babarkot, Tal: Jafrabad, Dist: Amreli, Gujarat (Mine Lease Area:14.2045 Ha) on 17/11/2016.
- Public Hearing was conducted on 06/09/2017.
- Final EIA report was submitted on 24/10/2017 prepared by Kadam Environmental Consultant, a NABET accredited consultant having certificate no NABET/EIA/1619/RA 0042 valid upto 26/05/2019.

Status of the Project: New

Project details:

The lease area is located in Babarkot village in Jafarabad town.

Details of surrounding location with reference to the study area is as below

S. NO.	FEATURE	NAME	AREAL DISTANCE (KM)	DIRECTION
		T. DE: ()	0.40	SSW
1	Reserved forest land	Three RF in the study area	2.00	SE
			6.00	EAST
2	National park	None	-	-
3	Wildlife sanctuary	None	-	-
4	Water body	Dhartarvadi river	8.20	NE

		Raidi Nadi	7.50	NW
5	Creek	Jafarabad creek	2.50	W
6	Nearest railway station	Rajula	30.00	EAST
7	Airport	Bhavnagar	120.00	NE
	Highway	SH-34	2.27	NW
8	Highway	NE – 8E	30.00	EAST
9	Nearest village	Babarkot village	0.410	SOUTH

UltraTech Cement Limited has proposed Limestone mining project in order to meet the requirement of Limestone for their existing cement plant located in Jafarabad. Mine Lease is accorded to the PP by Industries and Mine department, Government of Gujarat vide letter NO MCR-1020-11-ML 739-CHH-1 dated 08-01-2017 for 50 years. Details of mine is as below

S.NO.	PARTICULARS	DETAILS
1.	Method of Mining	Fully Mechanized
		Opencast Method by Use of
		Eco-friendly Surface Miners Only.
		No Drilling Blasting are proposed
2.	Proposed Production	2,50,000 MTPA
3.	Mineable Reserve	0.82 Million Tones
4.	Life of Mine	5 years
5.	Bench Height	6 m
6.	Bench Width	15 m
7.	Elevation Range	10-24 m RL
8.	Ground Water Table	Pre-Monsoon- 7-15 m bgl
		Post Monsoon- 5-14 m bgl
9.	Ultimate Working Depth	0 m RL
10.	Ultimate Pit Slope angle	45°
11.	Number of Working Days	300
12.	Number of shifts per day	One (8 hrs) - General Shift
13	Manpower requirement	11
14.	Total waste generation	No Waste as such present and
	at the end of life of mine	all ROM to be used in Cement Plant.

This is new mine and it is not in operation. No underground mining is envisaged. General slope is towards south & west direction and rainwater flows along natural slope. Opencast mechanised method of mining is proposed by both Surface Miner and conventional Drilling Blasting.

Details of water bodies are as below

S. No.	Feature	Name	Arial Distance (km)	Direction
		Dhantarvadi River	8	NE
1	Water	Raidi Nadi	7.5	NW
	Body	Pond – Lunsapur village	4.5	NNE
2	Creek	Jafrabad Creek	2.0	W
3	Sea		2.2	S

Land use map of the study area is prepared delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features. There is no forest land involved in the mine lease. There is no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, within 10km of the mine lease area so any clearance is not applicable.

For the proposed mine, land use pattern is as below

S. No.	Land Use Category	Pre- Operational (Present)	Operational (At The End Of Four Years)	Post-Operational (At The End Of Lease Period/ Mine Life)
1	Overburden Sand Dump	Nil	0.82	Nil
2	Waste Dump	Nil	Nil	Nil
3	Excavation	0.24 (old pits)	7.41	12.015
4	Road, mine road etc.	Nil	0.26	0.26
5	Infrastructure (HT line)	Nil	Nil	Nil
6	Township Area	Nil	Nil	Nil
7	Natural Water Bodies	Nil	Nil	Nil
8	Mineral Storage (Sub- grade/mineral)	Nil	Nil	Nil
9	Undisturbed area	13.9645	5.7145*	1.9295*
10	Total	14.2045	14.2045	14.2045
11.	Backfilled area	Nil	Nil	1.5
12.	Plantation & Greenbelt	Nil	2.00	2.0

Mine does not fall in CRZ area. Mine lease area does not have any farm land. Baseline data for one season from October 2016 to December 2016 were collected for water quality, Air,

noise level, soil and flora and fauna. Water requirement for the project is 8.5 KLD. Water for domestic purpose will be sourced the existing facility in nearby mining lease, whereas water for dust suppression and greenbelt development will be sourced from water stored in pit in adjoining operative lease. There is no proposal of ground water abstraction in proposed project. Proposal does not involve blasting. The area will be covered with network of garland drains to divert the surface runoff following the topography to meet the garland drains in existence in the adjoining ML area and in turn will be collected at the rain water harvesting pond already in existence. Conceptually as proposed in the Mining Plan the mined out area of approx 12.015 Ha will be converted to water storage facilities.

Green belt will be developed by planting indigenous/native plant species. Since lease is new no plantation was done in past. Local species will be planted at the site and make sure that survival rate of planted species will be high

About 26 trips per day will be made due to proposed project; however these trips will be executed through the internal haul roads of mine and existing approach road through nearby lease leading to cement plant, as the proposed project is for supply of raw material to cement plant no additional traffic will be generated in public road.

Appropriate measures will be implemented for dust suppression (e.g. Water sprinkling). All vehicles will be certified for appropriate emission levels. Hoverer, additional plantation is proposed around the water body to mitigate / reduce impact due to dust deposition.

Workers of mine will be provided with portable rest shelter cum First Aid station with all the facilities on the site itself. Occupational Health impacts of the Project is studied by PP and appropriate preventive measures are proposed in the EMP. Details of pre-placement medical examination and periodical medical examination schedules are included in the EMP.

Public health implications of the Project and related activities for the population in the impact zone are evaluated with reference to the category of hazardous jobs to be assigned to various

No litigation is pending against the project.

Total seven monitoring station decided for studying the ambient air quality. Average readings indicate that, at all the stations, PM10, SO2, NOX are within the prescribed limits of CPCB for respective Category

	Location (CPCB Designation)	Parameters & Results				
Station code		Note: All units are in μg/Nm³. Figures in brackets indicate CPCB limits. Minimum Reportable Readings are 8 μg/Nm³ for SO ₂ , 10 μg/Nm3 for NO _X				
AA1	At Site	PM ₁₀ (100)	SO ₂ (80)	NO _x (80)		
	At Site	[24 Hours]	[24 Hours]	[24 Hours]		
	Maximum	98	12.2	19.7		
	Minimum	47	8.3	11.3		
	Average	81	9.7	15.7		
	98%tile	97	11.6	19.6		
AA2		Babarkot				
	Maximum	87	10.9	16.8		
	Minimum	42	8.0	10.0		

	Average	71	9.4	12.4	
	98%tile	86	10.7	16.8	
AA3		Ja	frabad		
	Maximum	93	10.9	20.4	
	Minimum	46	8.0	10.0	
	Average	71	9.5	13.7	
	98%tile	91	10.8	19.9	
AA4		V	andh and and a second		
	Maximum	76	10.8	17.6	
	Minimum	40	8.0	10.0	
	Average	61	9.4	13.1	
	98%tile	75	10.8	17.5	
AA5	Mitiyala				
	Maximum	84	10.3	16.8	
	Minimum	45	8.0	10.0	
	Average	64	9.2	12.1	
	98%tile	83	10.3	16.6	
AA6	Varahsvarup				
	Maximum	88	10.9	17.6	
	Minimum	41	8.1	10.0	
	Average	69	9.8	13.3	
	98%tile	88	10.9	17.5	
AA7	Narmada Cement				
	Maximum	98	10.9	17.8	
	Minimum	63	8.0	12.2	
	Average	83	9.2	14.3	
	98%tile	97	10.7	17.4	

Committee noted that as part of CSR following work is done by the PP

Focus Area		– 15(In Rs. Lacs)	2015 – 16 (In Rs. Lacs)		2016-17(In Rs. Lacs)	
	Ехр.	Beneficiaries	Ехр.	Beneficiaries	Ехр.	Beneficiaries
Education	6.41	5952	7.96	8622	10.00	8575

Health Care	3.93	15984	5.78	17348	13.94	7138
Sustainable Livelihood	8.68	9467	15.18	11111	15.55	21769
Infrastructure Development	18.53	11859	18.48	25344	4.93	11395
Social Issues	6.20	10912	5.03	984	8.12	3155
Total	43.75	54174	52.43	60407	52.54	52032

In addition to the expenses ,an amount of approximately 2.00 Lacs will be spent annually for the socio-economic development against the project.

Health check camps, education support, check dam repairing, bio gas plant, water conservation measures for the the villagers, provision of sanitation facility are the measures proposed to be taken up by the PP.

EMP for noise quality is as below:

- (1) Surface miner which reduce the quantum of machinery in operation, thereby helps in minimizing noise pollution will be deployed.
- (2) Equipment's meeting environmental Noise standards will be used.
- (3) All the HEMMs will be equipped with acoustic cabins for operators.
- (4) In order to reduce the effect of noise pollution, personal protective equipment like ear plugs, ear muffs will be provided to workers.
- (5) Scheduled & preventive maintenance of all the machinery will be carried out regularly.
- (6) Regular monitoring of ambient noise level is carried out.
- (7) Green belt will be developed along the mine lease, reclaimed area etc. to attenuate noise levels at the earliest

EMP for water is as below:

- 1. No waste water will be generated due to mining operation. There will be no intersection of ground water table due to mining as it will be done above water table.
- 2. The ground water table is at 7-15 m bgl in pre-monsoon and 05-14 m bgl in post-monsoon. Ultimate working depth is 0 mRL. Mining will be undertaken above MSL.
- 3. Adequate control measures will be adopted to check wash-off from soil erosion.
- 4. The measures to be adopted are:
- 5. Garland Drains will be provided all along the periphery of pits to prevent the water carrying the wash-offs entering the mine pit.

- 6. Drains will be provided in active mining areas to channelize rain water to the rainwater harvesting pond
- 7. The Wash off collected in garland drains will be allowed to in the RWH pond and comparatively clear water will be utilized for plantation purposes and for spray on haul roads to prevent the dust generation.
- 8. Periodical testing of mine water quality & level will be carried out.
- 9. Rainwater Harvesting ponds will be provided with injection wells for artificial recharge

EMP for soil quality is as below:

- 1. The waste material comprises of wind blown sand only which will be stacked temporarily at on non mineralized earmarked places.
- 2. The Above stacked materials will be used conceptually for backfilling of mined out pits partially and will be coved with plantation to reclaim and rehabilitate the area.
- 3. Action plant for the public hearing issues

S.No	Points of Concern	Action Plan
1	 No further Gauchar land available for cattle grazing. Compensation regarding land acquired 35 years ago Compensation against damage on crop due to company and against cattle food. Already acquired land falling within CRZ. Compensation demand as per new SARAT/ rate Information regarding filling of land tax by company 	 There is no Gauchar land involved in proposed project The land falling in the proposed project is purchased through mutual consent and legal procedure. Company has been solved the land issue with mutual consent Further if any issue regarding land will be addressed appropriately as per legal procedure. Some part of Land in existing mining lease is falling within CRZ, however no mining is being carried out in CRZ area. No land in proposed project fall in CRZ. Also all taxes and statutory payment are paid and shall be paid in future as per guideline.
2	 Information regarding waterbodies present within 10 Km from project. Information regarding land at conceptual stage and stock distance from 	 In proposed project, mining and bench designs shall be done as per approved mining plan. Detail regarding water bodies within 10 Kms of project site is incorporated in EIA report.

	village	
3	Regarding technical, educated and other people employment from local villages.	 There are more than 80 % of the employment from local and preference in employment shall be given to local people as per the eligibility criteria. Apart from apprenticeship which is already providing, Career guidance will be provided by experts arranged from company
4	Green belt development within and outside existing mining lease as per MoEF guideline Emission from Plant and Mines and dust from stock which is nearer to village. Adverse effect on crop, fruit trees and village due to pollution	 Plantation and green belt development shall be done from beginning of the mine and as per GPCB/CPCB guideline and part of the area will be reclaimed and rehabilitated after completion of mining. All the necessary and adequate precautions for environmental protection and controlling the emission is being taken and shall be practiced by company as per legal guideline to control the emission within norms. Also necessary steps for dust suppression at the source will be taken i.e. wet windrowing by the surface miner, water sprinkling on haul roads in the proposed project The Technical study will be carried through expert agency within 01 years to know impact of the mining on the crops and appropriate action will be taken if any recommendation is given.
5	Drinking water requirement in village	Drinking water is being provided to the village and will be continued in future.
		•
6	Ambulance and bus	Narmada Cement – Jafarabad

	facility requirement for Babarkot Scholarship to Babarkot student Treatment to cattle of villagers. Fodder distribution through CSR Facilities for school at Babarkot Water tank or AVEDO for drinking water for cattle Job fair demand from company for people. Admission of local students in company's school. Extension of company aid for the primary and secondary level school	Works (NCJW) is already performing CSR activities in the field of Education, Sustainable livelihood, Infrastructure development, healthcare of society, and social Empowerment. Company is already providing ambulance facilities to villagers up to nearby city hospitals on regular basis. However further to this company will arrange a meeting with village representatives within 06 months to finalise other requirements. • More than 85 % students in company school are from local and it will be continuing in future also. • We are providing 08 teachers into Primary school at Babarkot and any further request shall be discussed to support the school. Also school infrastructure requirements will
		be completed after discussing with Panchayat
7	 No consent on facts shown in EIA reports and baseline survey. Two public hearing of the same company are schedule at one place and concern regarding EC under category A or B. No Schedule-I species has been mentioned in EIA 	The EIA report has been prepared as per the EIA notification and through approved agency. The mentioned two projects are separate ML and the same has been granted by State Government after all necessary clearances. All the details regarding Schedule-I species is incorporated in EIA report.
8	Lion and peacock, sparrow schedule –I animals and migratory	A wildlife conservation plan was prepared and submitted for approval also incorporated in

	birds are residing in this area,	EIA report. The final approved measures shall be complied with.
9	 Land located at survey number 116 and 117 are under Government violation for revenue related matters and is under consideration of court Court case against many officers of company for false land registration Case on Sarpanch 	No litigation is pending against the project and/or land in which the Project is proposed. The land was purchased through legal and mutual understanding with sellers

Cost to be incurred for environment

S. No.	Head	Approximate recurring cost per annum (in Rs)	Basis for Cost Estimates
1	Air pollution monitoring	1,50,000/-	As it is a mining lease there are no stacks and hence no capital cost is proposed. Recurring cost would include cost of monitoring of ambient air environment at the mining lease and single locations season wise.
2	Water pollution control	80,000	There will be no waste water generation So the capital cost for water pollution control is also nil. While Project proponent will be monitoring well samples of surrounding village as envisaged in the approved Mining Plan.
3	Noise pollution control	35,000	Recurring cost includes monitoring cost of noise measurement at different locations. as envisaged in the approved Mining Plan
4	Environment monitoring and management	50,000	The recurring cost would be incurred on hiring of consultants as envisaged in the approved Mining Plan
5	Green belt	2,50,000	Cost include cost for plantation imcluding other costs like labor, soil filling dressing, irrigation etc will be extra)
	Total	5,65,000	

OBSERVATION/DISCUSSION

Committee noted that during study period from October 2016 to December 2016, ambient air quality parameters are within prescribed norms as per NAAQ 2009, noise level is observed within the limits as per CPCB standards. It is also noted that as per the EIA, there will be no mineral reject and overburden sand is the only waste about 50461 M3 up to completion of mining of entire mining area. No sub-grade limestone will be generated and hence no stacking is required.

After end of life of mine, 2.00 Ha area will be covered under plantation. Committee noted that as per the EIA, (1) Surface water is found suitable for propagation of wildlife and fisheries and domestic purpose (2) The Shallow groundwater in the area is generally alkaline The value of pH ranges from 7.40 to 7.71 which is suitable for domestic purpose (3) Soil at the site is sandy clay loam having moderate permeability and does not pose problem of either salinity or Sodicity

The issues raised during public hearing were considered. Major issues were regarding land acquisition issues, gauchar land, depth of mining, CSR related activities, employment to locals, damage to fauna residing in an area, fencing around the mined out pit, green belt development, proposed CSR fund, dusting due to mining in agriculture fields and reduction in crop production, provision of ambulance to the the villagers, compensation for the earlier acquired old mines, supply of water to the villagers, drinking water supply, health impact due to dusting and dusting from the existing stock yard of the company located near the village.

In context to the public hearing, grievances of affected people through letters were received from MS,SEIAA vide no: SEIAA/GUJ/GEN/928/2017 dated 27/10/2017,letter of Shri Chetan Vyas addressed to Chariman, SEAC dated 09/10/2017,letter of MS,GPCB addressed to MS,SEAC vide no GPCB/PH/2017-18/BHV-30/426868 dated 06/11/2017, and letter no: GPCB/PH/2017-18/BHV-31/426615 dated 02/11/2017.These letters were deliberated.

After deliberation, Committee decided to seek opinion from the Commissioner, Geology and Mining regarding whether mine lease areas of 14.2045 Ha and 49.8454 Ha are to be considered as an individual leases or to be an expansion of existing leases under the common ownership of Ultratech keeping neighboring and operating mine leases of 565.94 Ha on western side (Narmada Cement, Jafrabad works, Ultratech Cement Limited) and 953..325 Ha towards eastern sides (Gujarat Cement Works, Ultratech Cement Limited) in view.

Committee sought following details from the project proponent.

- (1) Approved conservation plan of Flora and fauna from the competent authority with appropriate budgetary provision for conservation of wild life.
- (2) To readdress TOR Nos:12,13,16.
- (3) No Objection Certificate of forest department regarding proposed operation of Mine lease considering mine lease location and movement of wild life in an area.
- (4) Correct declaration by the Head of accredited consultant organization with reference to the Mining lease for the area 14.2045 Ha.
- (5) Salinity ingress study including detailed impact of rain water harvesting due to the proposed mining to recede the salinity in ground water as per the approved post closure mine plan.
- (6) Undertaking for not carrying out intersection of ground water table and correction in final EIA report showing water table and proposed working depth.
- (7) Undertaking for not carrying out blasting for the proposed Mine lease operation.
- (8) Detailed action plan for all the issues raised during public hearing including complaints received in written form by the Project proponent.

After deliberation, It was unanimously decided by the committee to reconsider the proposal after submission of aforementioned details with submission of revised EIA incorporating aforementioned due changes and opinion from the Commissioner, Geology and Mining,

4. M/S. Babarkot Limestone Area with Production capacity of 2,50,000 MTPA(ROM) of Limestone by unit: Narmada Cement-Jafrabad Works of M/S Ultratech Cement Limited located at S.No:110/1, 111/1, 111/2, 112/1, 114, 119/1, 126/1, 101, 102/1, 102/2, 102/1/1, 105, village Babarkot, Tal: Jafrabad, Dist: Amreli, Gujarat (49.8454 Ha), (Proposal NO:SIA/GJ/MIN/17292/2016).

Category of the Projects: 1(a)

- Terms of Reference (TOR) accorded to M/S Babarkot Limestone area with Production capacity of 2,50,000 MTPA(ROM) of LImestone by unit: Narmada Cement-Jafrabad Works of M/S Ultratech Cement Limited located at S.No:217, 218, 219, 220,221 of village Babarkot, Tal: Jafrabad, Dist: Amreli, Gujarat (Mine Lease Area:14.2045 Ha) on 17/11/2016.
- Public Hearing was conducted on 05/09/2017
- Final EIA report was submitted on 24/10/2017 prepared by Kadam Environmental Consultant, a NABET accredited consultant having certificate no NABET/EIA/1619/RA 0042 valid up to 26/05/2019.

Status of the Project: New

Project details:

The lease area is located in Babarkot village in Jafarabad town. Surrounding entities of the project

S. NO.	FEATURE	NAME	AREAL DISTANCE (KM)	DIRECTION
1	National Park	None	-	-
2	Wild Life Sanctuary	None	-	-
3	Water Body	Dhantarvadi River	8 .00	NE
4	Nearest Railway Station	Rajula	30.00	East
5	Airport	Diu	55.00	West
6	Highway	SH-34	00.90	NW
7	Nearest Village	Mitiyala Village	00.51	NW
8	Creek	Jafrabad Creek	02.00	W
9	Reserved Forest	Four RF in study	00.70	SSW
9	Land	area	02.06	SE

	05.50	E	
	09.90	NE	

Mining details is as below:

S.	PARTICULARS	DETAILS
NO.		
1.	Method of Mining	Fully Mechanized Opencast Method by Use of conventional & Non-Conventional (Eco-friendly Surface Miners) methods.
2.	Proposed Production	0.25 MTPA
3.	Total Mineable Reserves	1.06 Million Tones
4.	Life of Mine	6 years
5.	Bench Height	6 m
6.	Bench Width	15 m
7.	Elevation Range	30-48 m RL
8.	Ground Water Table	Pre-Monsoon- 7-15 m bgl
		Post Monsoon- 5-14 m bgl
9.	Ultimate Working Depth	L
10.	Ultimate Pit Slope angle	
11.	Number of Working Days	300
12.	Number of shifts per day	One (8 hrs) - General Shift
13	Manpower requirement	18
14.	otal waste generation at the end of life of mine	No Waste as such present and all ROM to be used in Cement Plant. OB is Generally Windblown Sand

This is a new mine. No underground mining is envisaged. No Overburden will be dumped outside Mining lease area. There is no forest land involved in the mine lease area. There is no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors within 10km of the mine lease area. No Critically polluted area is located within 10 km of project site. Mine does not fall in CRZ.

Baseline data for one season from October to December 2016 were collected

Water requirement for the project is 15.5 KLD. Water for domestic purpose will be sourced from the Rain water harvesting structure in nearby mining lease. There is no proposal of ground water abstraction in proposed project. The area will be covered with network of garland drains to divert the surface runoff following the topography to meet the garland drains in existence in the adjoining ML area and in turn will be collected at the rain water harvesting pond already in existence. Conceptually as proposed in the Mining Plan the mined out area will be converted to water storage facilities.

No stream passes through the lease area. As per mining plan, the topographical elevation varies between 48m to 24 m above msl, working depth will be up to 0 m msl. As per the geohyrological study carried out in adjoining ML previously it is indicative that the ground water level is below mean sea level around the area of mine lease and plant. About 26 trips per day will be generated due to proposed project, however these trips will be transported through the internal haul roads of mine and existing approach road through nearby lease leading to cement plant, as the proposed project is for supply of raw material to cement plant. The workers of mine will be provided with portable rest shelter cum First Aid station with all the facilities on the site itself. Public health implications of the Project and related activities for the population in the impact zone are systematically evaluated with reference to the category of hazardous jobs to be assigned to various workers. There is neither perennial nor seasonal drainage system exists within the ML area, General slope towards south & west direction and rainwater flows along natural slope.

Details of water bodies from the proposed location

S. No.	Feature	Name	Arial Distance (km)	Direction
1	Water Body	Dhantarvadi River	8	NE
		Raidi Nadi	6.5	NW
		Pond – Lunsapur village	4.5	NNE
2	Creek	Jafrabad Creek	2.0	W
3	Sea		2.2	S

Details of land for the proposed mining is as below

S. No.	Land Use Category	Present Area In Ha
1	Overburden Sand Dump	Nil
2	Waste Dump	Nil
3	Excavation	0.165 (old pits)
4	Road, mine road etc.	Nil
5	Infrastructure (HT line)	1.8
6	Township Area	Nil
7	Natural Water Bodies	Nil
8	Mineral Storage (Sub-grade/mineral)	Nil
9	Undisturbed area	47.8804
10	Total	49.8454
11.	Backfilled area	Nil
12.	Plantation & Greenbelt	Nil

No underground mining is envisaged. The proposed mine is new, hence no blasting study is available however Project proponent had carried out blasting study in adjoining mine.

Following Safe guards will be adopted as are in practice in the nearby leases.(1) Surface Miner will be deployed for production near mine boundary (2) Conventional Mining through Controlled blasting practice will be adopted under supervision of competent persons (3)Wet drilling shall be practiced during drilling (4) Modern technique i.e. NONEL shall be in practice to control vibration and flying rocks, as adopted in existing mines (5) Blasting frequency shall be restricted to 2 to 3 a week and during the lunch / shift change hours.(6) Single hole delay technique will be adopted.(7)Required explosives will be stored in the licensed Magazine at the adjoining lease.(8) All precautions will be adopted while transporting explosives.(9) Vibration study shall be carried out periodically during mining course (10)All PPES will be provided to the workers (11) All applicable precautions will be taken to reduce the impact of blasting on environment

Proposed land use pattern is as follow;

S. No.	Land Use Category	Pre- Operational (Present)	Operational (At The End Of Four Years)	Post-Operational (At The End Of Lease Period/ Mine Life)
1	Overburden Sand Dump	Nil	1.10	Nil
2	Waste Dump	Nil	Nil	Nil
3	Excavation	0.165 (old pits)	6.055	34.70
4	Road, mine road etc.	Nil	0.50	0.50
5	Infrastructure (HT line)	1.8	1.8	1.8
6	Township Area	Nil	Nil	Nil
7	Natural Water Bodies	Nil	Nil	Nil
8	Mineral Storage (Sub-grade/mineral)	Nil	Nil	Nil
9	Undisturbed area	47.8804	40.3904	12.8454
10	Total	49.8454	49.8454	49.8454
11.	Backfilled area	Nil	Nil	2.50
12.	Plantation & Greenbelt	Nil	4.00	7.00

The ML area is generally devoid of large trees and have very poor vegetation cover.

Budget Allocation for Greenbelt within Project Site is as below:

Work or Activity	1st year	2nd year	3rd year	4th year	Budget (INR)
Plantation within Project Site will be carried out in four years. Totally 8000 saplings will be					
planted (Approx. Cost @ Rs. 250 per plant)					

Saplings Required	2,000	2,000	2,000	2,000	20,00,000/-
Amount	5,00,000	5,00,000	5,00,000	5,00,000	
Total Budget					20,00,000

Budget Allocation in Conservation Plan

	Conservation of flora				
S. No	Activities proposed	Amount in INR			
1	Plantation of shady, bushes and grasses species in Asiatic Lion/Leopard	10.0			
	habitation area (400 plants per year in the nearby villages outside the core zone in next 5 year @ Rs. 500 per plant including care andmainenance.				
2	Construction of 10 Nos water holes in habitation of Asiatic				
	Lion/Leopard/Indian Peafowl including water availability (@ 0.3 lacs per	3.0			
	hole)				
3	Awareness programme in local people for protection of Asiatic				
	Lion/Leopard/Indian Peafowl/ Olive Ridley Sea Turtle	2.0			
	(@ 40,000 per year for 5 years)				
	TOTAL	15.00			
	TOTAL	Lacs			

Details of socio economic status of study area is as below

S.No	Type of land	Area in ha	Area Purchased as per Mutual
			consent in ha
1	Government waste land	0.172	0
2	Grazing Land	Nil	Nil
3	Agriculture land	Nil	Nil
4	Others (private)	49.6734	45.7985
5	Total	49.8454	45.7985 (92%)

Total seven air monitoring stations are decided. AAQM monitored and results are as below

	Location	P	arameters & R	esults		
Station code	(CPCB Designation)	Note: All units are in μg/Nm3. Figures in brackets indicate CPCB limits. Minimum Reportable Readings are 8 μg/Nm3 for SO2, 10 μg/Nm3 for NOX				
AA1	At Site	PM10 (100) [24 Hours]	SO2 (80) [24 Hours]	NOX (80) [24 Hours]		
	Maximum	98	12.2	19.7		
	Minimum	47	8.3	11.3		
	Average	81	9.7	15.7		
	98%tile	97	11.6	19.6		
AA2	Babarkot	PM10 (100) [24 Hours]	SO2 (80) [24 Hours]	NOX (80) [24 Hours]		
	Maximum	87	10.9	16.8		
	Minimum	42	8.0	10.0		
	Average	71	9.4	12.4		
	98%tile	86	10.7	16.8		
AA3	Jafrabad	PM10 (100) [24 Hours]	SO2 (80) [24 Hours]	NOX (80) [24 Hours]		
	Maximum	93	10.9	20.4		
	Minimum	46	8.0	10.0		
	Average	71	9.5	13.7		
	98%tile	91	10.8	19.9		
AA4	Vandh	PM10 (100) [24 Hours]	SO2 (80) [24 Hours]	NOX (80) [24 Hours]		
	Maximum	76	10.8	17.6		
	Minimum	40	8.0	10.0		
		61	9.4			
	Average 98%tile	75	10.8	13.1 17.5		
AA5	Mitiyala	PM10 (100) [24 Hours]	SO2 (80) [24 Hours]	NOX (80) [24 Hours]		
	Maximum	84	10.3	16.8		
	Minimum	45	8.0	10.0		
	Average	64	9.2	12.1		
	98%tile	83	10.3	16.6		
AA6	Varahsvarup	PM10 (100)	SO2 (80)	NOX (80)		
, , , ,	- aranovarap	[24 Hours]	[24 Hours]	[24 Hours]		
	Maximum	88	10.9	17.6		
	Minimum	41	8.1	10.0		
	Average	69	9.8	13.3		
	98%tile	88	10.9	17.5		
AA7	Narmada Cement	PM10 (100) [24 Hours]	SO2 (80) [24 Hours]	NOX (80) [24 Hours]		

Maximum	98	10.9	17.8
Minimum	63	8.0	12.2
Average	83	9.2	14.3
98%tile	97	10.7	17.4

At all the stations, PM10, SO2, NOX are within the prescribed limits of CPCB for respective Category. Noise level during day time and night time was observed below the CPCB standards for industrial and residential area. Surface water is found suitable for propagation of wildlife and fisheries and domestic purpose. The Shallow groundwater in the area is generally alkaline The value of pH ranges from 7.40 to 7.71 which is suitable for domestic purpose. The pH was near neutral, indicating that soils do not pose a problem of either salinity or Sodicity. Soil at the site is sandy clay loam having moderate permeability and does not pose problem of either salinity or Solidicity.

Methodology of Water Conservation includes (1)Water management is mainly carried out through harvesting of rain water, monitoring of ground water drawl and supply at the drawl and supply lines, optimising of use of water, ground water recharging through recharge wells and mined out pits.(2)Rain Water Harvesting is done in Mine Sump created in completely mined-out area. (3)A network of drains / garland drain system, culverts and earthen check bunds have been made to guide surface run-off to this sump which have arrangement of injection wells for ground water recharge. Benefits of rain water harvesting are (1)Higher sweet water level during the pre and post monsoon seasons in the locality,(2)The harvesting structure aids in reducing the TDS level as well as salinity ingress of surrounding areas considerably from the years together (3)It helps in restoring the local water table and reduces the pressure on ground water,(4)The combined network system of Rain Water Harvesting and ground water recharging enhance sweet water level in the wells of surrounding villages (5)The management under its Corporate Social Responsibility undertaken commendable work for conservation of water and supply of drinking water in the nearby villages.

In addition to the efforts for optimum conservation of water in the mining pits and rain water harvesting ponds, the management under its Corporate Social Responsibility undertaken commendable work for conservation of water and supply of drinking water in the nearby villages

At the end of life of mine (conceptual stage) 34.7 ha area will be mined which will be used for rainwater harvesting by creating water reservoir. A network of drains / garland drains, culverts and earthen check bunds will be made to guide surface run-off water to this water reservoir, thus preventing this water from flowing into the sea.

As per mining plan working depth at conceptual stage is proposed upto 0 mRL using 6 m heigh benches.

As per the geohyrological study carried out in adjoining ML previously it is indicative that the ground water level is below mean sea level around the area of mine lease and plant, also long term trend of ground water levels shows marginal decline in the locality for more than last four decades, As per mining plan the working will be up to 0 m msl. Hence ground water table shall not play any adverse role against mining up to 0 msl at conceptual stage.

In case of encounter of ground water above 0 m msl mining will only be carried out after obtaining appropriate permission from CGWA.

In the proposed mining scheme, in next 4 years 8000 tree saplings will be planted in 4 ha area. To ensure the maximum rate of survival suitable plant species (as per CPCB guidelines) will be planted.

Year	No. of Saplings Required	Area in ha
1stYear	2000	1.0
2nd Year	2000	1.0
3rd Year	2000	1.0
4th Year	2000	1.0
Total	8000 tree saplings	4.0

Conceptual land use plan is as under

S. No.	Land Use Category	Pre- Operational (Present)	Operational (At The End Of Four Years)	Post-Operational (At The End Of Lease Period/ Mine Life)	
1	Overburden Sand Dump	Nil	1.10	Nil	
2	Waste Dump	Nil	Nil	Nil	
3	Excavation	0.165 (old pits)	6.055	34.70	
4	Road, mine road etc.	Road, mine road etc. Nil 0.50		0.50	
5	Infrastructure (HT line)	1.8	1.8	1.8	
6	Township Area	Nil	Nil	Nil	
7	Natural Water Bodies	Nil	Nil	Nil	
8	Mineral Storage (Sub- grade/mineral)	Nil	Nil	Nil	
9	Undisturbed area	47.8804	40.3904	12.8454	
10	Total	49.8454	49.8454	49.8454	
11.	Backfilled area	Nil	Nil	2.50	
12.	Plantation & Greenbelt	Nil	4.00	7.00	

Details of work done in CSR for last three years by the PP are as below

Focus Area	2014 – 15(In Rs. Lacs)			- 16 (In Rs. Lacs)	2016-17(In Rs. Lacs)		
	Ехр.	Beneficiaries	Ехр.	Beneficiaries	Exp.	Beneficiaries	
Education	6.41	5952	7.96	8622	10.00	8575	

Health Care	3.93	15984	5.78	17348	13.94	7138
Sustainable Livelihood	8.68	9467	15.18	11111	15.55	21769
Infrastructure Development	18.53	11859	18.48	25344	4.93	11395
Social Issues	6.20	10912	5.03	984	8.12	3155
Total	43.75	54174	52.43	60407	52.54	52032

EMP for Air Quality for the mine is (1)Limestone to be raised by Eco friendly Surface miner method & Controlled Blasting with delays will be carried out during mining process (2)Haul roads & loading area will be regularly sprayed with water to arrest dust from being airborne.(3)Proper maintenance (preventive as well as scheduled maintenance) of vehicles will be carried out regularly as done at present for minimization of generation of gaseous pollutants.(4)Personal Protective Equipments such as Safety helmets, Safety shoes, Ear plugs etc. will be provided to employees working in Mines.(5)Greenbelt along Mining lease periphery will be developed at the earliest.(6)Periodical air quality monitoring will be carried out.

S.	Points of Concern	Action Plan					
No.							
1	No further Gauchar land available for cattle	There is no Gauchar land involved in					
	grazing.	proposed project					
	Compensation regarding land acquired 35	The land falling in the proposed project is					
	years ago.	purchased through mutual consent and					
	Information regarding filling of land tax by	legal procedure and remaining land shall be					
	company	purchased in the same manner.					
	Already acquired land falling within CRZ.	Company has been resolving land issue if					
	Compensation against damage on crop due	any with mutual consent. Further if any					
	to company and against cattle food.	issue regarding land will be addressed					
		appropriately as per legal procedure.					

2	Mining up to ground water table	Mining is being carried out in existing lease as per approved documents only and it will be done in same manner for proposed lease also. Land falling within CRZ has been acquired through legal procedure only. Also all taxes and statutory payment are paid and shall be paid in future as per statutory guidelines. In the proposed project mining and bench designs will be done as per approved Mining Plan. No water table shall be intersected
3	Regarding technical, educated and other people employment from local villages.	There are more than 80 % of the employment from local and further preference in employment shall be given to local people as per the eligibility criteria for proposed project also. Apart from apprenticeship which is already provided, Career guidance shall be provided by experts arranged from company.
4	Green belt development within and outside existing mining lease as per CPCB / GPCB guideline. Emission from Plant and Mines and dust from stock which is nearer to village. Fencing around the excavated pit area. Measures to be taken for pollution in plant Adverse effect on crop and village due to pollution.	Plantation and green belt development shall be done from beginning of the mines as per GPCB/CPCB guideline and part of the area will be reclaimed and rehabilitated before completion of mining as per approved plan. All the necessary and adequate precautions for environmental protection and controlling of emissions within norms is being practiced by the company as per statutory guidelines. Also necessary steps for dust suppression at the source shall be taken i.e. wet drilling, wet windrowing by the surface miner, water sprinkling on haul roads in the proposed project. The Technical study will be carried through expert agency within 01 years to know impact of the mining on the crops and appropriate action will be taken if any recommendation is given. The boundary walls and fencing has been constructed as per statutory guideline within the mining lease for the safety of human and animals. The same shall be done in proposed project as per statutory guideline.

5 CC Road and drainage requirement in NCJW is already performing CSR activities in the field of Education, Sustainable Babarkot. Admission of local students in company's livelihood. Infrastructure development, healthcare social school. of society, and Extension of company aid for the primary Empowerment. Company is already and secondary level school. providing ambulance facilities to villagers to Permanent medical practitioner at Babarkot nearby city hospitals on regular basis. and ambulance facility for Babarkot, However further to this company will Balanivav and Kagwadar. arrange а meeting with village Anganwadi and road requirement at representatives within 06 months to discuss Balanivav. other requirements apart from requirements Only paver block has been installed in communicated by village panchayat. Anganwadi, there is no RCC road in the More than 85 % students in company village, there is no education facility and school are from local and it will be company has not provided any employment continued in future also. Committee formation regarding development We are providing 08 teachers into Primary school at Babarkot and any further request at Babarkot. Fodder distribution and regarding education shall be discussed to support the school. of poor children through CSR. Also school infrastructure requirements Extension of facilities regarding toilets and shall be completed as per discussion. drinking water. Drinking water is being provided to the RO plant requirement in village Babarkot village and will be continued in future. 6 No consent on facts shown in EIA reports The EIA report has been prepared as per the EIA notification and through approved and baseline survey. Two public hearing of the same company agency. The mentioned two projects are are scheduled at one place and concern separate ML and the same has been regarding EC under category A or B. granted by State Government after all No Schedule-I species has been mentioned necessary clearances. in EIA All the details regarding Schedule-I species is incorporated in EIA report. In addition to this suggestions came during PH were also incorporated. 8 Lion and peacock, sparrow schedule -I Wildlife conservation plan was prepared animals and migratory birds are residing in and for also submitted approval, this area, during mining and blasting and incorporated in EIA report. final movement of vehicle will damage their approved measures shall be complied residence, lion are entering in villages and strictly with. Maximum production shall be by Surface attacking their cattle. Adverse effect of blasting on shark and Miner. whale in the sea. Lion and Leopard and zarkah are there in area so they should be conserved Water tank for Sparrow and Lion 9 Demolition of temple by company. No litigation is pending against the project Land located at survey number 116 and 117 and/or land in which the Project is are under Government violation for revenue proposed. related matters and is under consideration of

	court Court case against many officers of company for false land registration Case on Sarpanch.	
10	Company has carried out many CSR activities such as provision of computer to primary school, leveling of ground, constructed shed, constructed check dam, planted tress Rs 3,15,000 has been received 3-4 month back from the company, Anganwadi is also repaired by the company	

EMP for Noise is (1)Surface miner which reduce the quantum of machinery in operation, thereby helps in minimizing noise pollution will be deployed (2)Controlled blasting with delay action detonators will be carried out in the Mining Lease area (3) Equipment's meeting environmental Noise standards will be used (4) NONEL/Shock tube will be used for blasting (5) All the HEMMs will be equipped with acoustic cabins for operators (6) In order to reduce the effect of noise pollution, personal protective equipment like ear plugs, ear muffs will be provided to workers (7) Scheduled & preventive maintenance of all the machinery is carried out regularly (8) Regular monitoring of ambient noise level is carried out (9) Green belt will be developed along the mine lease, reclaimed area etc. to attenuate noise levels at the earliest.

EMP for water is (1)No waste water will be generated due to mining operation (2)The ground water table is at 7-15 m bgl in pre-monsoon and 05-14 m bgl in post-monsoon. Ultimate working depth is 0 mRL. Mining will be undertaken above MSL (3)Adequate control measures will be adopted to check wash-off from soil erosion with provision of garland drains all along the periphery of pits to prevent the water carrying the wash-offs entering the mine pit. Drains will be provided in active mining areas to channelize rain water to the rainwater harvesting pond. The Wash off collected in garland drains will be allowed to in the RWH pond and comparatively clear water will be utilized for plantation purposes and for spray on haul roads to prevent the dust generation. Periodical testing of mine water quality & level will be carried out. Rainwater Harvesting ponds will be provided with injection wells for artificial recharge.

EMP for soil is (1)The waste material comprises of wind blown sand only which will be stacked temporarily at on non mineralized earmarked places (2)The Above stacked materials will be used conceptually for backfilling of mined out pits partially and will be coved with plantation to reclaim and rehabilitate the area.

Proposed CSR activities are (1)The CSR activities are taking up by the project proponent since the inception of Narmada Cement Jafrabad works, the company has established separate CSR cell to look after community development in the area. Number of activities are carried out by company in major Five Key Fields. (2) As per Corporate Social Responsibility Notification (Schedule VII, Company Act), the Company has earmarked sufficient funds for CSR activities in addition to the current expenses (3)In addition to the expenses ,an amount of approximately 5.00 Lacs will be spent annually for the socio-economic development against the project.

Action plan for the issues raised during Public Hearing

Total amount to be spent for environment

S. Head Approximate Basis for Cost Estimates recurring cost per

		annum (in Rs)	
1	Air pollution monitoring	3,50,000/-	As it is a mining lease there are no stacks and hence no capital cost is proposed. Recurring cost would include cost of monitoring of ambient air environment at the mining lease and single locations season wise.
2	Water pollution control	80,000	There will be no waste water generation So the capital cost for water pollution control is also nil. While Project proponent will be monitoring well samples of surrounding village as envisaged in the approved Mining Plan.
3	Noise pollution control	35,000	Recurring cost includes monitoring cost of noise measurement at different locations. as envisaged in the approved Mining Plan
4	Environment monitoring and management	50,000	The recurring cost would be incurred on hiring of consultants and payment of various statutory fees to regulatory agencies.
5	Ground vibration Study	1,50,000/-	The recurring cost would be incurred on hiring of consultants as envisaged in the approved Mining Plan
6	Green belt	5,00,000	Cost include cost for plantation imcluding other costs like labor, soil filling dressing, irrigation etc will be extra)
	Total	11,65,000	

OBSERVATION/DISCUSSION

Committee noted that all aspects of water, air, noise and soil with possible impacts are adequately addressed in the environmental management plan with mitigation measures. It was deliberated that during study period from October 2016 to December 2016, ambient air quality parameters found within prescribed norms as per NAAQ 2009. During study period, noise level during day and night time was observed below the CPCB standards for industrial and residential area. Surface water is found suitable for propagation of wildlife and fisheries and domestic purpose. The Shallow groundwater in the area is generally alkaline The value of pH ranges from 7.40 to 7.71 which is suitable for domestic purpose. Soil at the site is sandy clay loam having moderate permeability and does not pose problem of either salinity or Sodicity. It is mentioned that at the end of life of mine, 7.00 Ha area will be developed for plantation and green belt..

The issues raised during public hearing were also considered. Major issues were regarding CSR related activities, acquisition of land, depth of mining, employment to locals, damage to fauna residing in an area, fencing around the mined out pit, gauchar land, green belt development, proposed CSR fund, dusting due to mining in agriculture fields and reduction in crop production, provision of ambulance to the villagers, compensation for the earlier acquired

old mines, supply of water to the villagers, drinking water supply, health impact due to dusting and dusting from the existing stock yard of the company located near the village.

Vide the objection raised in the public hearing for ownership of S NO 110/1 and the matter is subjudice, pending before the honorable court of judicial magistrate, First Class, Amreli, committee asked PP for deletion of the said survey number from the proposal. It was decided to ask PP to resubmit the approved mine plan with revised EIA and mine lease area after deletion of survey number 110/1.

Letters recieved from MS,SEIAA vide no: SEIAA/GUJ/GEN/928/2017 dated 27/10/2017,letter of Shri Chetan Vyas addressed to Chariman, SEAC dated 09/10/2017,letter of MS,GPCB addressed to MS,SEAC vide no GPCB/PH/2017-18/BHV-30/426868 dated 06/11/2017, and letter no: GPCB/PH/2017-18/BHV-31/426615 dated 02/11/2017 were discussed and after deliberation

After deliberation, Committee decided for the proposed mine lease area to seek opinion from the Commissioner, Geology and Mining regarding whether mine lease areas of 14.2045 Ha and 49.8454 Ha are to be considered as an individual leases or to be an expansion of existing leases under the common ownership of Ultratech keeping neighboring and operating mine leases of 565.94 Ha on western side(Narmada Cement, Jafrabad works, Ultratech Cement Limited) and 953..325 Ha towards eastern sides (Gujarat Cement Works, Ultratech Cement Limited) in view.

Committee sought following details from the project proponent.

- (1) After deletion of S NO 110/1, approved mine plan for new mine lease area.
- (2) Approved conservation plan of Flora and fauna from the competent authority with appropriate budgetary provision for conservation of wild life.
- (3) To readdress TOR Nos:12,13,16.
- (4) No Objection Certificate of forest department regarding proposed operation of Mine lease considering mine lease location and movement of wild life in an area.
- (5) Correct declaration by the Head of accredited consultant organization with reference to the Mining lease for the area 14.2045 Ha.
- (6) Salinity ingress study including detailed impact of rain water harvesting due to the proposed mining to recede the salinity in ground water as per the approved post closure mine plan.
- (7) Undertaking for not carrying out intersection of ground water table and correction in final EIA report showing water table and proposed working depth.
- (8) Undertaking for not carrying out blasting for the proposed Mine lease operation.
- (9) Detailed action plan for all the issues raised during public hearing including complaints received in written form by the Project proponent.

After deliberation, It was unanimously decided by the committee to reconsider the proposal after submission of aforementioned details with submission of revised EIA incorporating aforementioned due changes and opinion from the Commissioner, Geology and Mining, Gandhinagar.

5. M/S Shri Yunus Abdul Habib Hamdani, on S NO: (Govt.) 189 Paiky, Village: Samarvav, Ta: Junagadh, Dist: Junagadh (Limestone Mine lease area: 04-90-00 Ha). (Proposal NO: SIA/GJ/MIN/20296/2017)

No.	Name	Village	Ta and Dist	Lease Area	Survey No.	Proposed Production	Nerarest Human Habitation distance

5	Shri Yunus Abdul Habib Hamdani	Samarvav	Junagadh	04-90- 00 Existing	Govt. Sr.No.189/P Paiky	50,000 MTPA	Devadi- 0.55 km	
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The project proponent has applied for their lime stone mine located at SNO:(Govt.) 189 Paiky, Village: Samarvav, Ta:Junagadh, Dist: Junagadh. The mine lease area is existing having area of 04-90-00 Ha and proposed rate of mining is 50,000 MTPA. There is no blasting. Mining will be done with hammer and excavator.

The proposal falls in project / activity no. 1(a) of the Schedule of the EIA Notification, 2006 and as the lease area is less than 50 Hectares, it falls under category B. During SEAC meeting held on 03/01/2018, technical presentation of the project included introduction & background of the company, Environment setting of project, location map of the project, nearest village and distance with reference to the sanctuary, mining details, mining method, environment management plan.

After detailed deliberation, it was unanimously decided by the committee to categorize this proposal under "B1" and recommend for grant of TOR to SEIAA as approved by the SEAC during meeting held on 09/08/2017 for the EIA study to be done considering 10 Km radius from the periphery of the mine lease area with validity mentioned therein.

The draft EIA report covering the above TOR shall be prepared and submitted to the GPCB for conducting the public hearing / consultation process as per the provisions of the EIA Notification, 2006. The project shall be appraised after submission of the final EIA report.

6. LIMESTONE MINING PROJECT, DIST: JUNAGADH

Propos al No.	Project Name	S N O	Villag e	Taluk a	District	Lease Area in	Rate of mining	Nearest Habitati on	Propos ed Use
						Hectar			
SIA/GJ/MI N/ 19468/ 2017	Somnat h Hydrate d Lime and Chemic al	49 P	Zadk a	Maliy a Hatin a	Junagadh(Gujar at)	10.00 Ha	4,27,36 9 MTPA	Zadka: 0. 500Km	Industri al use
	Industri es Pvt. Ltd,								

The above proposal is for limestone mining. Proposal has been accepted by SEIAA on 04/07/2017 and SEAC on 05/ 07/2017.PP has submitted letter dated 29/12/2017 stating withdrawal of their application. Hence, referring to the letter, committee unanimously decided to recommend for delisting of the proposal to SEIAA.

Meeting was concluded with thanks to the Chair.

Minutes approved by:

Name & Designation		Sign
1	Shri Dinesh Misra, Chairman, SEAC	
2	Shri S. C. Srivastav, Vice Chairman, SEAC	
3	Dr. V.K.Jain,Member,SEAC	
4	Shri R. J. Shah, Member, SEAC	
5	Shri A.K. Muley, Member, SEAC	