

**REGD. A/D**

**ACL/EMD/F-16/2017/**

**29.11.2017**

**The Director (s),**  
Ministry of Environment & Forest (MoEF),  
Regional Office, Western Region,  
"Kendriya Paryavaran Bhavan"  
Link Road No.3, Ravi Shankar Nagar,  
Bhopal – 462016 (M.P.)

**Sub.:** Six Monthly Compliance Status Report of Environmental Clearance of Vadnagar Limestone Mines (S.No.44)

**Ref.:** Environmental Clearance Order No. J-11015/336/2007-IA-II (M) dated 14.01.09

Sir,

We are pleased to submit herewith half yearly compliance status report (i.e. for the period of April'17 to September'17) of Environmental Clearance Order No. J-11015/336/2007-IA-II(M) granted by MoEF to **Vadnagar Limestone Mining Project (S.No.44)** of Ambuja Cements Ltd., located at village - Vadnagar, Taluka - Kodinar, District – Gir Somnath (Gujarat). We are also enclosing here with CD containing soft copy of the same.

In case of further clarification/information require, we shall be please to provide the same.

Thanking you,

Yours faithfully,  
For **Ambuja Cements Ltd.**

**Dr. Anand Rai**  
**Head-Environment**

Encl.: As above.

Copy to:

- 1) Central Pollution Control Board  
Privesh Bhavan, Atmajyoti Ashram Rd,  
Opp. VMC Ward Office No. 10, Subhanpura,  
Vadodara – 390023 (Gujarat)

2) Member Secretary,  
Gujarat Pollution Control Board,  
Paryavaran Bhavan, Sector-10-A, Gandhinagar-382010

3) Regional Officer  
Gujarat Pollution Control Board,  
Opp. Saint Anne's Church Station Road,  
Junagadh.

## MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS

Ministry of Environment & Forests  
Regional Office (W), Bhopal  
Monitoring Report  
Part-I

### DATA SHEET

Date: 29.11.2017

- 01 Project type : Open Cast (Limestone & Marl) Mining
- 02 Name of the project : Vadnagar Limestone Mining Project (S.No 44 Lease)
- 03 Clearance letter(s) / OM no. and date : J-11015/336/2007.1A.II (M),  
Dated 14.01.2009
- 04 Location :
- a) District(s) : Gir Somnath
- b) State(s) : Gujarat
- c) Latitude : 20° 51' 08" - 20° 52' 02"N
- d) Longitude : 70° 42' 08" - 70° 42' 56"E
- 05 Address for correspondence :
- a) Address of concerned Project Chief Engineer (with pincode & telephone / telex / fax numbers). : Sh. Arun Kumar Sharma  
Sr. Vice President ( Mines ),  
Ambuja Cements Ltd  
PO :Ambujanagar , Taluka - Kodinar  
District : Gir Somnath (Gujarat)  
Pin. : 362715  
Tel: 02795-237011  
Fax: 02795 - 220328/232032
- b) Address of Executive Project Engineer / Manager (with pincode / fax numbers). : Sh. Rajesh Chaubey  
DGM (Mines)  
Ambuja Cements Ltd  
PO Ambujanagar-362715  
Taluka Kodinar,  
District: Gir Somnath (Gujarat).  
Tel: 02795-232064  
Fax: 02795-232032/232028
- 06 Salient features
- a) of the project : Vadnagar Limestone Mining Lease (Survey

- : No. 44) is located at a distance of about 4 Kms from the Cement Plants at Ambujanagar.
- b) of the environmental management plans :
- ❖ Mining operations would not involve drilling & blasting. Limestone excavation is being carried out by Surface Miner supported by ripper dozer.
  - ❖ Regular monitoring of Environmental parameters is being undertaken as per the norms of MoEF and IBM.
  - ❖ Preventive maintenance of deployed HEMM is undertaken regularly.
  - ❖ Dust suppression by water sprinkling on haul roads and in working area.
  - ❖ Afforestation / Green belt development along haul road and lease periphery.
  - ❖ Mined-out areas will be converted to pasture land, plantation and water reservoir.
  - ❖ Rural Development and Socio-economic activities will be undertaken in the project buffer zone area.
- 07 Break up of the project area.
- a) Submergence area (forest & non-forest) : Nil
- b) Others : 108.97 ha  
(Government Waste Land)
- 08 Break up of the project affected population with enumeration of those losing houses / dwelling units only agricultural land only, both dwelling units & agricultural land & landless labourers / artisan. :
- a) SC, ST / Adivasis : Not applicable

- b) Others : Not applicable  
(Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures if a survey is carried out give details & year of survey)
- 09 Financial details : Limestone raised from the mining lease area will partially supplement the requirements of existing cement units. As it is a captive mine for the Cement Plant, no separate project costing was prepared.
- Project cost as originally planned and subsequent revised estimates and the year of price reference.
- a) Allocation made for environmental management plans with item wise and year wise break-up. : **Capital Investment**
- Please refer **Annexure IX**
- Recurring Expenditure per year**
- |                                 |   |                       |
|---------------------------------|---|-----------------------|
| Plantation                      | - | 3.00 Lakhs            |
| Environmental Monitoring        | - | 1.00 Lakhs            |
| Pollution Control               | - | 5.00 Lakhs            |
| Rural Development               | - | 10.0 Lakhs            |
| <b>Total / Year (Recurring)</b> |   | <b>Rs.19.00 Lakhs</b> |
- b) Benefit cost ratio / Internal rate of return and the year of assessment. : No separate assessment made, as it is an integral part of the raw material source for the cement plants at Ambujanagar.
- c) Whether (c) includes the cost of environmental management as shown in the above. : Yes
- d) Actual expenditure incurred on the project so far. : 5.0 Crore
- e) Actual expenditure incurred on the environmental management plans so far. : 5.64 Crore
- 10 Forest land requirement. :

- a) The status of approval for diversion of forest land for non-forestry use : The project area does not comprise of any forest land.
- b) The status of clearing felling : Not applicable.
- c) The status of compensatory afforestation, if any : Not applicable.
- d) Comments on the viability & sustainability of compensatory afforestation programme in the light of actual field experience so far. : Not applicable.
- 11 The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information. : The project does not involve felling of trees.
- 12 Status of construction
- a) Date of commencement (Actual and / or **planned**) : Existing project.
- b) Date of completion (Actual and / or **planned**). : Not applicable.
- 13 Reasons for the delay if the project is yet to start. : Not applicable.
- 14 Dates of site visits :
- a) The dates on which the project was monitored by the Regional Office on previous occasions, if any. : 12.10.10 to 13.10.10 by Dr. A. Mehrotra Regional Office, Bhopal
- b) Date of site visit for this monitoring report : 12.10.10 to 13.10.10  
:

- 15 Details of correspondence with project authorities for obtaining action plans / information on status of compliance to safeguards other than the routine letters for logistic support for site visits) : Half yearly compliance status report is being regularly submitted and last submission was on 30.05.2017 vide letter no.ACL/EMD/F-16/2017.

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**Compliance Status of Environment Clearance issued to Vadnagar  
Limestone Mining Project (S.No.44)  
Vide MoEF Letter No: J-11015/336/2007IA-II (M) dated 14.01.2009**

S No.	Condition	Compliance Status
<b>(A). Specific Conditions :</b>		
i	The project proponent shall obtain fresh Consent to Establish from the Gujarat Pollution Control Board for capacity of 1.5 million TPA of limestone and 1.15 million TPA of marl and effectively implement all the conditions stipulated therein.	<ul style="list-style-type: none"> <li>• Complied. Fresh Consent to establish has been obtained from Gujarat Pollution Control Board vide letter no. GPCB/ID-29258/CCA/JNG-547/20162 dated 01.08.2012.</li> </ul>
ii	The project proponent shall not carry out pumping of groundwater.	<ul style="list-style-type: none"> <li>• No pumping of ground water is being taken place.</li> </ul>
iii	The project proponent shall practice suitable rainwater harvesting measures on long term basis and work out a detailed scheme for rainwater harvesting in consultation with the Central Ground water Authority and submit a copy of the same to the Ministry of Environment and Forests and its Regional Office, Bhopal.	<ul style="list-style-type: none"> <li>• Water conservation measures to augment ground water resources in the area are being done by Ambuja Cement Foundation (ACF). A report about ACF &amp; community development work done by ACF in surrounding areas is enclosed as <b>Annexure I</b>.</li> </ul>
iv	The project proponent shall effectively implement the conditions made by the Chief Wildlife Warden and Principal Chief Conservator of Forests, Gandhinagar vide their letter No.WLP/301/32/A/3097-98/2007-08 dated 17.03.2008 restraining use of explosives, maintenance of clean environment (air, water and land) and regular spray of water in mining area and on transport road to keep air pollution under control and provision of a green belt of 25 m around the mine area.	<ul style="list-style-type: none"> <li>• Explosive is not being used at any phase of mining operation. Mining is being done by environment friendly surface mining technology. Regular maintenance of mining area is being done to keep mines environment clean. Regular sprinkling of water is being done to prevent fugitive dusting in mines area and on transport roads. Green belt development is being done and is an ongoing process.</li> </ul>
v	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations.	<ul style="list-style-type: none"> <li>• Point noted. At no stage of mining natural water course will be obstructed by mining activity</li> </ul>
vi	Top soil, if any, shall be concurrently used for mine reclamation, plantation and green belt development.	<ul style="list-style-type: none"> <li>• As this is renewed lease, no top soil will be generated during mining operation. If any, shall be used for mines reclamation and plantation &amp; green belt development.</li> </ul>
vii	Catch drains and siltation ponds of appropriate size should be constructed for the working pit to arrest flow of silt and sediment directly into the rivers and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be	<ul style="list-style-type: none"> <li>• To collect surface run-off and arrest silt and sediment flow from the soil &amp; mineral stacks, drain along with settling pond is constructed along the toe of the stacks, ultimately drain water will be collected into mined out pits. The drains are properly maintained and collected water is utilized</li> </ul>



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	regularly desilted particularly after the monsoon and maintained properly. Garland drain (size, gradient and length) shall be constructed for the mine pit to prevent run off of water and flow of sediments directly into the rivers and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.	for watering the mine area, roads, green belt development etc.
viii	The void left unfilled in an area of 56.0 ha shall be converted in to water body. The higher benches of excavated void/mining pit shall be terraced and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.	<ul style="list-style-type: none"> <li>• Total Open mine area is 88.22 Ha</li> <li>• On higher benches plantation has been done and slope of higher benches are made gentler for easy accessibility by local people. Mined out area will be converted into water body.</li> <li>• Peripheral fencing with bella stone is provided along excavated area. Total 8406 meter brick wall, 6501 meter barbed wire and 7971 meter earthen bunds fencing have been done.</li> </ul>
ix	Dimension of the retaining wall at the toe of over burden benches within the mine to check run-off and siltation should be based on the rain fall data.	<ul style="list-style-type: none"> <li>• No overburden benches. Hence not applicable.</li> </ul>
x	Plantation shall be raised in an area of 54.5 ha including a 7.5m wide statutory barrier all around the mining lease, reclaimed and rehabilitated areas, around water body, roads etc. and in an area of 3.7 ha. Outside the mine lease by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 1500 trees per hectare.	<ul style="list-style-type: none"> <li>• Till September 2017, 8.2664 ha area is covered under plantation and green belt development. Details of greenbelt/reclamation are enclosed as <b>Annexure –II (A) &amp; II(B)</b></li> </ul>
xi	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution	<ul style="list-style-type: none"> <li>• Environment friendly Surface Miner machine is being used for mining. Surface miner has been provided with inbuilt facility of water sprinkling to suppress dust generated during mining.</li> <li>• On all haul roads regular water sprinkling is being done by water tankers. Photograph is enclosed as <b>Annexure XI.</b></li> </ul>

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	Control Board in this regard.	<ul style="list-style-type: none"> <li>Ambient Air Quality at identified locations is being carried out regularly. AAQ monitoring report is enclosed as <b>Annexure VII.</b></li> </ul>
xii	The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	<ul style="list-style-type: none"> <li>Rainwater harvesting measures to augment ground water resources in the area has been done by Ambuja Cement Foundation (ACF).</li> <li>Details of water harvesting work &amp; community development work done by ACF in surrounding area is enclosed as <b>Annexure - I.</b></li> </ul>
xiii	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year, pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office, Bhopal, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted and ingress of saline water is taking place due to the mining activity, necessary corrective measures shall be carried out.	<ul style="list-style-type: none"> <li>Regular monitoring of ground water level and quality is being carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers. Ground water level and water quality monitoring report are enclosed as <b>Annexure-III.</b> Preliminary study on ground water in Vadnagar limestone mine (S.No.44) &amp; its buffer zone has been conducted by Ground Water and Mineral Investigation Consultancy Centre (P) Ltd, Jaipur. Copy of report has been already submitted to MoEF vide our submission on 25.12.2010 vide letter no. ACL/EMD/F-16/2010/55924.</li> </ul>
xiv	Appropriate mitigative measures shall be taken to prevent pollution of the Shingoda River and the Shom River in consultation with the State Pollution Control Board.	<ul style="list-style-type: none"> <li>Point noted.  Shingoda river is located in buffer zone of mines at 2.2 Km from mine lease boundary and Somat river is located at beyond 2.0 Km from mine lease boundary. There will be no discharge to Shingoda &amp; Somat river.</li> </ul>
xv	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral from mine face to the conveyor. The vehicles shall be covered with a tarpaulin and shall not be overloaded.	<ul style="list-style-type: none"> <li>Vehicular emissions are being checked &amp; monitored regularly. Detail of P.U.C certificate by Omkar driving school &amp; P.U.C center (Approved by Government of Gujarat) is enclosed as <b>Annexure XII.</b></li> <li>All vehicles used for transportation of raw materials are being covered properly.</li> </ul>
xvi	Drilling and blasting operation shall not be	<ul style="list-style-type: none"> <li>Mining is being done using fully</li> </ul>

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	carried out.	mechanized Surface Miner Machine.
xvii	Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	<ul style="list-style-type: none"> <li>• Crusher is provided with high efficient dust extraction system i.e. Bag Filter.</li> <li>• Bag filters are being regularly maintained and operated.</li> </ul>
xviii	Consent to operate shall be obtained from the State Pollution Control Board prior to start of enhanced production from the mine.	<ul style="list-style-type: none"> <li>• Fresh Consent to Operate have been obtained from Gujarat Pollution Control Board vide letter No. GPCB/CCA/JNG-547/ID-29258/122850 dated 30.08.2012.</li> </ul>
xix	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and the wastewater generated during mining operation.	<ul style="list-style-type: none"> <li>• Sewage treatment plant has already been installed &amp; operational at Ambujanagar. For the waste water generated from workshop, Oil and grease trap has been provided. No waste water generation during mining.</li> </ul>
xx	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	<ul style="list-style-type: none"> <li>• Pre-placement medical examination and periodical medical examination of the worker engaged is being regularly carried out by team of doctors at our Occupational Health Centre.</li> </ul>
xxi	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project	<ul style="list-style-type: none"> <li>• All the required infrastructures are in place.</li> </ul>
xxii	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely lion if any, peacock etc. spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measures brought out in the wildlife conservation plan so prepared specific to the project site shall be effectively	<ul style="list-style-type: none"> <li>• All the precautionary measures as per submitted action plan are being under taken. Copy of wildlife conservation plan has been submitted to MoEF vide our submission dated 25.12.2010 vide letter no. ACL/EMD/F-16/2010/55924.</li> </ul>

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	implemented. A copy of action plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Bhopal.	
xxiii	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval	<ul style="list-style-type: none"> <li>Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment &amp; Forests 5 years in advance of final mine closure for approval.</li> </ul>
<b>(B) General Conditions</b>		
i	No change in technology and scope of working should be made without prior approval of the MoEF	<ul style="list-style-type: none"> <li>We are following the same mining practices through state of art Surface Miner as proposed. In case of any change in the mining technology and scope of working, we will take prior approval from Ministry of Environment, Forest &amp; Climate Change.</li> </ul>
ii	No change in the calendar plan including excavation, quantum of limestone, waste/ OB dumps should be made	<ul style="list-style-type: none"> <li>Point noted &amp; being complied.</li> </ul>
iii	4 Ambient Air Quality monitoring stations should be established in the core zone as well as buffer zone for RSPM,SPM, SO <sub>2</sub> & Nox monitoring. Location of the stations should be decided based on meteorological data, topographical features and environmentally and ecologically sensitive target and frequency of monitoring should be undertaken with the SPCB	<ul style="list-style-type: none"> <li>Four ambient air quality monitoring locations have been identified as directed and are being monitored as per CPCB/SPCB guidelines. Ambient air quality monitoring reports are enclosed as <b>Annexure - VII.</b></li> </ul>
iv	Data on environmental quality should be regularly submitted to the Ministry including its regional office at Bhopal and SPCB / CPCB once in six months	<ul style="list-style-type: none"> <li>Point Noted &amp; being complied. Our last submission was on 30.05.2017 vide letter no.ACL/EMD/F-16/2017.</li> </ul>
v	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	<ul style="list-style-type: none"> <li>Environment friendly Surface Miner machine is being used for mining. Surface miner has been provided with inbuilt facility of water sprinkling to suppress dust generated during mining.</li> <li>On all haul roads regular water sprinkling is being done by tractor mounted water tankers.</li> </ul>
vi	Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM etc should be provided with ear plugs / muffs	<ul style="list-style-type: none"> <li>All the workers working in high noise areas are being provided with ear plug/ear muffs. Regular ambient noise monitoring as well as HEMM noise monitoring is being carried out. Ambient noise monitoring as well as HEMM noise monitoring reports are enclosed as <b>Annexure - V &amp; VI.</b></li> </ul>

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**Vide MoEF Letter No: J-11015/336/2007IA-II (M) dated 14.01.2009**

vii	Industrial waste water (workshop and waste water from mine) should be properly collected, treated so as to confirm to the standards prescribed under GSR 422(E) dated 19.05.1993 & 31.12.1993 or as amended from time to time. Oil and grease trap should be installed before discharge of work shop effluents.	<ul style="list-style-type: none"> <li>Point noted and complied. Oil and grease trap has been installed at workshop for treatment of waste water before discharge of any work shop effluents. Regular monitoring is carried out by GPCB approved third party (M/s Royal Environment Auditing and Consultancy services, Rajkot) report is enclosed as <b>Annexure-VIII.</b></li> </ul>
viii	Personnel working in dusty areas should wear protective respirator devices and they should also be provided with adequate training and information and safety & health aspects. Occupational health surveillance program of the workers should be under taken periodically to observe any contraction due to exposure to dust and take corrective measures if needed	<ul style="list-style-type: none"> <li>Dust Masks, Safety Shoes, Safety Goggles &amp; Helmet are provided to each &amp; every personnel working in the mine area. Periodic Health check up is being done for personnel working in mines area. Work area monitoring for air borne dust is carried out regularly on monthly basis, monitoring results are enclosed as <b>Annexure IV.</b></li> </ul>
ix	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	<ul style="list-style-type: none"> <li>Environment Management Division (EMD) has already been set up with suitable qualified personnel. Head of environmental management cell directly reports to the Unit Head (Jt. President) of the organization. EMD organization chart is enclosed as <b>Annexure X.</b></li> </ul>
x	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bhopal.	<ul style="list-style-type: none"> <li>Point noted. Details of capital and recurring expenditure for environmental protection measures are enclosed as <b>Annexure IX.</b></li> </ul>
xi	The project authorities should inform to the regional office located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work	<ul style="list-style-type: none"> <li>Point noted</li> </ul>
xii	The regional office of this Ministry located at Bhopal shall monitor compliance of the stipulated environmental conditions. The project authority should extend full cooperation to the officer(s) of the regional offices by furnishing the requisite data / information / monitoring reports	<ul style="list-style-type: none"> <li>Point noted. Full support and co-operation is being extended during the visit of officers from Ministry of Environment &amp; Forest, CPCB as well as GPCB. Project was monitored by Dr. A. Mehrotra (Regional Office, Bhopal) during 12.10.10 to 13.10.10</li> </ul>

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xiv	The project proponent shall submit six monthly report on the status of compliance of stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office, Bhopal, the respective Zonal Office of Central Pollution Control Board , the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of the Ministry of Environment and Forests, Bhopal, the respective Zonal Office of the Central Pollution Control Board and the State Pollution Control Board.	<ul style="list-style-type: none"> <li>• Half yearly compliance status report is being regularly submitted and last submission was on 30.05.2017 vide letter no.ACL/EMD/F-16/2017.</li> </ul>
xv	A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.	<ul style="list-style-type: none"> <li>• A copy of clearance letter has been marked to concern.</li> </ul>
xvi	State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/Tehsildar's Office for 30 days.	<ul style="list-style-type: none"> <li>• GPCB is the concern authority for the same.</li> </ul>
xvii	The project authorities should advertise atleast in two local news papers widely circulated around the project one of which shall be in the vernacular language of the locality concerned within 7 days of issuance of the clearance letter informing that the project has been accorded EC and a copy of the clearance letter is available with the SPCB and may also be seen at the website of MoEF at <a href="http://www.envfor.nic.in">www.envfor.nic.in</a>	<ul style="list-style-type: none"> <li>• Advertisement was published in two local news papers. Copy of advertisement has been submitted to MoEF on 25.12.2010 vide letter no. ACL/EMD/F16/2010/55924.</li> </ul>

**Ambuja Cement Foundation - Ambujanagar**

Annexure-I

**Details for programme wise expenditure for the year April 2017 to Sept. 2017**

							(Rs. In lakhs)
Sr.No	Programme	ACF - ACL	*Funds received through Government	** Funds from other Donors / Donor Agencies	***People's Contribution	****Direct Funding to Communities	Total Exp.
	<b>GUJARAT - Kodinar</b>						-
1	Water Resource Mangement & Drinking Water Projects						
	a. Water Resource Devlopment	33.55					33.55
	B .Drinking Water Programme	6.28	4.17		64.84	95.76	171.05
	C. Salinity Prevention (KVY III)	7.47		34.49	32.97	43.33	118.26
2	Agriculture Development( Farm Forestry &Afforesation)	7.03	3.08		31.70	47.48	89.29
3	BCI	1.65		33.43	15.98	27.63	78.69
4	Krishi Vigyan Kendra (KVK) - Agriculture	0.18	52.77				52.95
5	Health & Sanitation	3.38			2.84	2.76	8.98
6	Women / Youth Development	3.46					3.46
7	Skill and Enterprunership Development Programme	31.39	10.40				41.79
8	Integrated Community Development Programme	73.21					73.21
9	Co-ordination & Administration Expenses	47.07					47.07
10	Capital Expenditure						0.00
	<b>TOTAL</b>	<b>214.67</b>	<b>70.42</b>	<b>67.92</b>	<b>148.33</b>	<b>216.96</b>	<b>718.30</b>

## ANNEXURE II(A)

<b>Vadnagar MINES Greenbelt &amp; Plantation Details till September 2017</b>				
Total Lease Area (in ha)	Opened up Area (in Ha)	Planted Area (in Ha)	Pasture land (in Ha)	Water Body (in Ha)
108.97	88.2296	8.2664	12.1889	0





**Saplings planted in reclaimed area**





**Saplings planted in reclaimed area**





**Existing green belt in mines area**





**Existing green belt near haul roads**



## Ground Water Quality Report of Gujarat Ambuja Limestone Mines-S.NO. 44

May-17

S.N.	Laboratory Ref.No.	IS 10500:2012 (S.R)		Well Water						
		Desirable	Permissible	W8	W9	W10	W11	W13	pizometer 1	pizometer-2
	Source			W8	W9	W10	W11	W13	pizometer 1	pizometer-2
	Village			VADNAGAR	VADNAGAR	VADNAGAR	VADNAGAR	VADNAGAR	VADNAGAR	VADNAGAR
	Taluka			KODINAR	KODINAR	KODINAR	KODINAR	KODINAR	KODINAR	KODINAR
	District			GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH
1	Color Hazen Units	5	15	P.Nil	P.Nil	P.Nil	P.Nil	P.Nil	P.Nil	P.Nil
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Turbidity NTU	1	5	0.50	0.53	0.41	0.43	0.20	0.22	2.20
4	Dissolved Solids mg/l	500	2000	380	424	372	350	310	444	896
5	pH	6.5 to 8.5	No Relaxation	8.1	8.13	8.15	8.21	8.30	8.20	8.29
6	Total Hardness (as CaCO <sub>3</sub> ) mg/l	200	600	160	188	160	120	128	160	472
7	Calcium (as Ca) mg/l	75	200	32	38	32	24	26	32	94
8	Magnesium (as Mg) mg/l	30	100	19	23	19	15	15	19	58
9	Chlorides (as Cl) mg/l	250	1000	88	72	80	96	56	96	200
10	Sulphates (as SO <sub>4</sub> ) mg/l	200	400	26	31	26	20	21	26	76
11	Nitrates (as NO <sub>3</sub> ) mg/l	45	No Relaxation	0.42	75	43.7	4.2	19.5	81.0	26.2
12	Fluorides (as F) mg/l	1	1.5	1.3	0.8	1.02	2.03	1.40	1.00	0.84
13	Alkalinity (as CaCO <sub>3</sub> ) mg/l	200	600	200	140	124	160	164	172	200

## Ground Water Quality Report of Gujarat Ambuja Limestone Mines-S.NO. 44

Sep-17

S.N.	Laboratory Ref.No.	IS 10500:2012 (S.R)		Well Water						
		Desirable	Permissible	W8	W9	W10	W11	W13	pizometer 1	pizometer-2
	Source			W8	W9	W10	W11	W13	pizometer 1	pizometer-2
	Village			VADNAGAR	VADNAGAR	VADNAGAR	VADNAGAR	VADNAGAR	VADNAGAR	VADNAGAR
	Taluka			KODINAR	KODINAR	KODINAR	KODINAR	KODINAR	KODINAR	KODINAR
	District			GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH
1	Color Hazen Units	5	15	P.Nil	P.Nil	P.Nil	P.Nil	P.Nil	P.Nil	P.Nil
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Turbidity NTU	1	5	0.45	0.56	0.46	0.38	0.28	0.32	1.32
4	Dissolved Solids mg/l	500	2000	386	426	386	368	332	460	832
5	pH	6.5 to 8.5	No Relaxation	8.12	8.16	8.19	8.18	8.24	8.14	8.21
6	Total Hardness (as CaCO <sub>3</sub> ) mg/l	200	600	164	184	168	124	124	164	420
7	Calcium (as Ca) mg/l	75	200	33	38	34	25	25	33	84
8	Magnesium (as Mg) mg/l	30	100	20	22	20	15	15	20	51
9	Chlorides (as Cl) mg/l	250	1000	92	76	84	100	64	100	196
10	Sulphates (as SO <sub>4</sub> ) mg/l	200	400	27	30	27	20	20	27	68
11	Nitrates (as NO <sub>3</sub> ) mg/l	45	No Relaxation	1.1	76.1	42.6	5.06	20.4	79.1	28.1
12	Fluorides (as F) mg/l	1	1.5	1.26	0.74	0.98	1.98	1.32	0.92	0.80
13	Alkalinity (as CaCO <sub>3</sub> ) mg/l	200	600	196	148	132	168	172	180	208

## Air Borne Dust Survey - Vadnagar Mines (S.No.44) April 2017 - September 2017

<i>Machine : Surface Miner</i>				<i>Machine : Dozer</i>				<i>Machine : Loader</i>			
Date	Period	Location	RSPM (mg/m3)	Date	Period	Location	RSPM (mg/m3)	Date	Period	Location	RSPM (mg/m3)
13-Apr-17	14:00 - 22:00	Inside Cabin	0.37	14-Apr-17	14:00 - 22:00	Inside Cabin	0.33	15-Apr-17	14:00 - 22:00	Inside Cabin	0.32
5-May-17	06:00 - 14:00		0.36	6-May-17	06:00 - 14:00		0.34	8-May-17	06:00 - 14:00		0.31
6-Jun-17	14:00 - 22:00		0.34	7-Jun-17	14:00 - 22:00		0.32	8-Jun-17	14:00 - 22:00		0.3
6-Jul-17	06:00 - 14:00		0.33	7-Jul-17	06:00 - 14:00		0.34	8-Jul-17	06:00 - 14:00		0.31
5-Aug-17	14:00 - 22:00		0.31	7-Aug-17	14:00 - 22:00		0.3	8-Aug-17	14:00 - 22:00		0.28
7-Sep-17	06:00 - 14:00		0.34	8-Sep-17	06:00 - 14:00		0.32	9-Sep-17	06:00 - 14:00		0.3

## Annexure V

Ambient Noise Level Monitoring - Vadnagar Mines (S.No.44) April 2017 - September 2017										
Month	Noise Levels in dB(A)									
	Near Surface Miner		Haul road		mines offices		develpara village		Icchhved Village	
	Leq (Day)	Leq (Night)	Leq (Day)	Leq (Night)	Leq (Day)	Leq (Night)	Leq (Day)	Leq (Night)	Leq (Day)	Leq (Night)
<b>Apr-17</b>	69	66	67	62	63	59	54	49	48	42
<b>May-17</b>	71	67	68	63	61	58	53	48	47	41
<b>Jun-17</b>	72	68	66	61	64	59	55	49	46	40
<b>Jul-17</b>	70	66	65	62	63	58	52	47	49	45
<b>Aug-17</b>	69	65	66	63	61	57	51	46	48	44
<b>Sep-17</b>	68	64	65	61	60	56	53	48	49	45

**Annexure VI**

<b>Noise Level of HEMM - Vadnagar Mines (S.No.44) April 2017 - September 2017</b>									
<i>Machine</i>	<i>Surface Miner</i>			<i>Loader</i>			<i>Dozer</i>		
<b>Month</b>	<b>Conditions</b>	<b>Noise Levels (dB)</b>		<b>Conditions</b>	<b>Noise Levels (dB)</b>		<b>Conditions</b>	<b>Noise Levels (dB)</b>	
		<b>At 5m. distance</b>	<b>At 10m. distance</b>		<b>At 5m. distance</b>	<b>At 10m. distance</b>		<b>At 5m. distance</b>	<b>At 10m. distance</b>
		<b>Leq</b>	<b>Leq</b>		<b>Leq</b>	<b>Leq</b>		<b>Leq</b>	<b>Leq</b>
<b>Apr-17</b>	While mining	72	66	While loading to tipper	71	67	While dozing the material	74	69
<b>May-17</b>	While mining	74	68	While loading to tipper	73	66	While dozing the material	72	67
<b>Jun-17</b>	While mining	71	66	While loading to tipper	72	67	While dozing the material	73	68
<b>Jul-17</b>	While mining	73	69	While loading to tipper	71	66	While dozing the material	72	67
<b>Aug-17</b>	While mining	70	65	While loading to tipper	69	64	While dozing the material	68	63
<b>Sep-17</b>	While mining	72	67	While loading to tipper	70	65	While dozing the material	69	64



**Ambient Air Quality Monitoring Results**  
**( April 2017 - September 2017 )**

Month	Average Ambient Air Quality Monitoring Resultsn																			
	Working place					D-Block Crusher					Devalpara Village					Inchhavad Village				
	PM2.5 (µg/m3)	PM10 (µg/m3)	SO2 (µg/m3)	NOx (µg/m3)	CO (mg/m3)	PM2.5 (µg/m3)	PM10 (µg/m3)	SO2 (µg/m3)	NOx (µg/m3)	CO (mg/m3)	PM2.5 (µg/m3)	PM10 (µg/m3)	SO2 (µg/m3)	NOx (µg/m3)	CO (mg/m3)	PM2.5 (µg/m3)	PM10 (µg/m3)	SO2 (µg/m3)	NOx (µg/m3)	CO (mg/m3)
Apr 2017	32.00	58.00	11.40	16.20	BDL	35.00	60.00	11.10	15.80	BDL	24.00	38.00	12.80	16.90	BDL	27.00	40.00	12.50	17.10	BDL
	32.00	60.00	11.60	15.60	BDL	36.00	67.00	10.90	14.80	BDL	27.00	53.00	11.80	15.40	BDL	22.00	45.00	12.30	16.20	BDL
May 2017	30.00	56.00	10.90	15.70	BDL	33.00	58.00	11.60	16.30	BDL	22.00	35.00	12.30	16.10	BDL	25.00	38.00	11.90	15.30	BDL
	30.00	57.00	12.40	15.30	BDL	34.00	64.00	11.70	14.90	BDL	25.00	50.00	10.90	14.30	BDL	20.00	42.00	11.30	15.50	BDL
June 2017	32.00	59.00	11.30	13.50	BDL	30.00	56.00	9.70	12.90	BDL	24.00	37.00	10.80	13.20	BDL	22.00	34.00	11.50	14.50	BDL
	32.00	59.00	11.60	16.20	BDL	31.00	66.00	12.40	15.90	BDL	27.00	53.00	12.80	16.40	BDL	22.00	45.00	10.70	15.20	BDL
July 2017	30.00	56.00	10.90	14.50	BDL	28.00	52.00	11.30	15.10	BDL	22.00	34.00	10.60	13.90	BDL	20.00	32.00	10.80	14.20	BDL
	30.00	57.00	11.20	15.80	BDL	33.00	64.00	12.50	16.20	BDL	29.00	55.00	12.30	15.40	BDL	24.00	48.00	11.90	16.10	BDL
Aug. 2017	28.00	54.00	11.50	15.30	BDL	26.00	50.00	12.40	16.80	BDL	21.00	32.00	10.30	15.10	BDL	18.00	30.00	11.70	16.20	BDL
	28.00	55.00	10.90	15.60	BDL	31.00	62.00	11.40	16.40	BDL	27.00	52.00	12.20	16.80	BDL	22.00	46.00	11.70	15.20	BDL
Sept. 2017	31.00	58.00	10.90	14.70	BDL	28.00	53.00	12.30	16.40	BDL	22.00	35.00	11.60	14.90	BDL	20.00	32.00	12.80	15.80	BDL
	30.00	58.00	11.40	15.30	BDL	33.00	64.00	12.80	16.80	BDL	29.00	54.00	10.90	14.90	BDL	24.00	49.00	11.50	15.50	BDL
<b>Minimum</b>	28.00	54	10.9	13.5	0	26	50	9.7	12.9	0	21	32	10.3	13.2	0	18	30	10.7	14.2	0
<b>Maximum</b>	32	60	12.4	16.2	0	36	67	12.8	16.8	0	29	55	12.8	16.9	0	27	49	12.8	17.1	0
<b>Average</b>	30.42	57.25	11.33	15.31	#DIV/0!	31.50	59.67	11.68	15.69	#DIV/0!	24.92	44.00	11.61	15.28	#DIV/0!	22.17	40.08	11.72	15.57	#DIV/0!





# Royal

## Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s. Bal Adalat, Gondal Road, RAJKOT - 360 002.

Ph.: +91 281 2360695 ■ E-mail : royalservice@live.com ■ admin@royalconsultancy.com

### TEST REPORT (WASTE WATER)

Test Report No : 230/08/2017-18

Date : 02/09/2017

Work Order No : 280631810

Job Card No. : AMBUJA-P/2017-18/06

Name & Address of Customer : Ambuja Cements Limited,  
P.O. Ambujanagar - 362 715.  
Taluka : Kodinar, District : Gir-Somnath.

Attention : **Mr. Anand Rai**

Date of Sample Receipt : 05/08/2017

Date & Time of Sampling : 05 / 08 / 2017 at 15.25 Hrs.

Lab ID : W/17-18/08/040

Date of Testing : 07th to 11th August 2017

Sample Type : Waste Water

Description of Sample Packing : Glass Bottle

Type of Sampling : Grab

Quantity of Sample : 2 Ltr.

Description : Treated Raw Water

Sample Collected by : Mr. Jaydeep Purohit

Sampling Method : IS 3025 : Part 1

Location of Sample : **Treated Water - Workshop**

Sr. No.	Parameters	Unit	Permissible Limits as per GPCB	Results	Test Method
01.	pH	---	---	7.62	IS 3025 : Part 11
02.	Total Dissolved Solid	mg/l	---	271	IS 3025 : Part 16
03.	Total Suspended Solids	mg/l	---	30	IS 3025 : Part 17
04.	Dissolved Oxygen	mg/l	---	5.2	IS 3025 : Part 38
05.	Oil & Grease	mg/l	---	6.5	IS 3025 : Part 39
06.	BOD (3 days at 27 c)	mg/l	---	23	IS 3025 : Part 44
07.	COD	mg/l	---	17	APHA : 5220 C
08.	Residual Chlorine	mg/l	---	---	IS 3025 : Part 26

*Digvijay*  
Authorized Signatory  
Digvijay Jadeja

*Jaydeep*  
Analyst

\* End of Report \*

1. This test report (FMT-TP-SRV-010) shall not be reproduced except in full, without written approval from the Royal Environment Auditing & Consultancy Service
2. The results relate only to the item tested.

Doc. No. FMT-TP-SRV-014 / Issue No. 01 / Issue Date : 01-01-2012 / Ammd No. 03 / Ammd Date : 23 08 14

Page 1 of 1



**(A) Capital Investment for Environmental Monitoring :**

(1) Monitoring Equipments	: 37.08 Lakh
(2) Environmental Laboratory	: 10.00 Lakh
(3) Others (Monitoring Van & DG sets)	: 10.00 Lakh

---

**Total : Rs. 57.08 Lakh****(B) Recurring expenditure for the period of April'17 to September'17 :**

(1) Green belt development & dust suppression	: 21.57 Lakh
(2) Manpower cost*	: 15.15 Lakh
(3) House Keeping	: 1.10 Lakh
(4) Other Env. Protection (Environmental Monitoring)	: 0.51 Lakh
(5) Environmental Awareness*	: 0.95 Lakh

---

**Total : Rs. 39.28 Lakh**

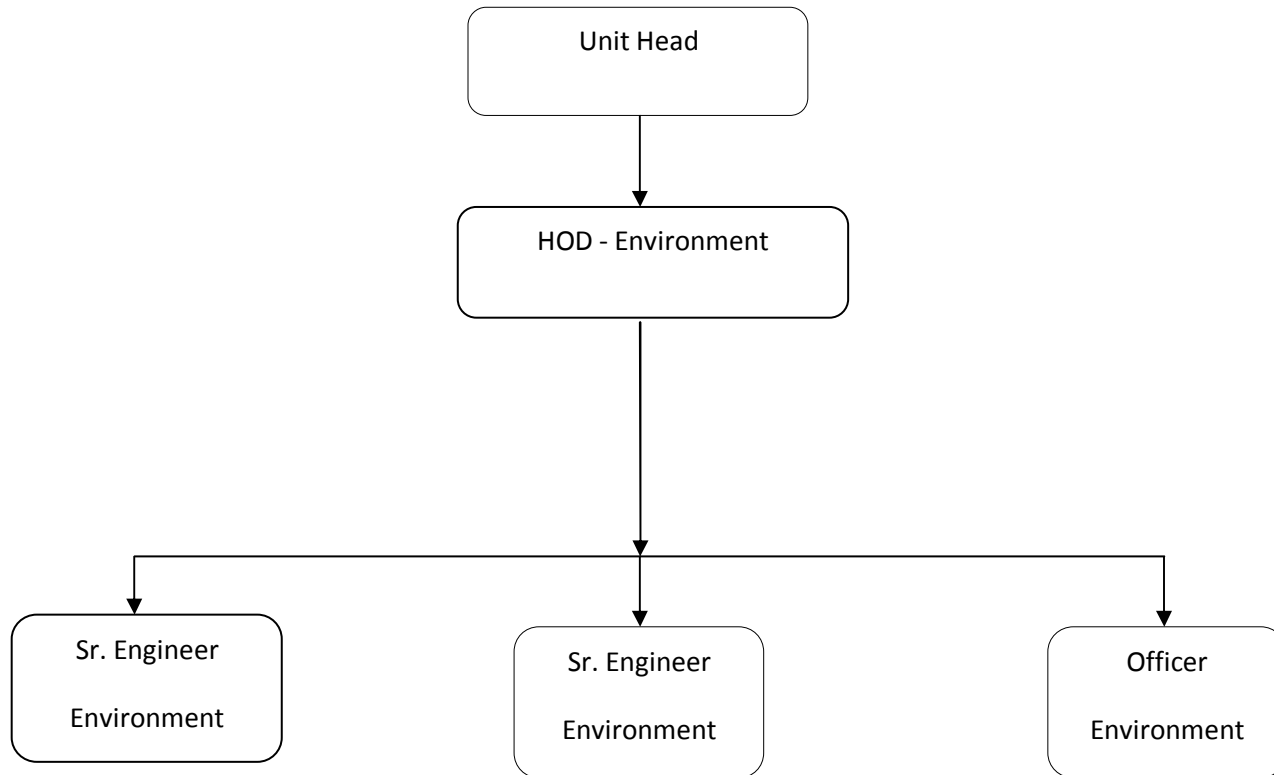
\*Expenditures common for all the plants & mines.

**C) Community Development expenditure by Ambuja: Rs. 718.30 Lakh Cement Foundation\*\***

\*\* Community development expenditure is common for all plant & mines at Ambujanagar for the period of April'17 to September'17. Programme Wise Expenditure Details is as below:


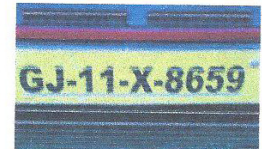
Ambuja Cement Foundation - Ambujanagar							
Details for programme wise expenditure for the year April 2017 to Sept. 2017							
							(Rs. In lakhs)
Sr.No	Programme	ACF - ACL	*Funds received through Government	** Funds from other Donors / Donor Agencies	***People's Contribution	****Direct Funding to Communities	Total Exp.
	<b>GUJARAT - Kodinar</b>						-
1	Water Resource Mangement & Drinking Water Projects						
	a. Water Resource Development	33.55					33.55
	B .Drinking Water Programme	6.28	4.17		64.84	95.76	171.05
	C. Salinity Prevention (KVY III)	7.47		34.49	32.97	43.33	118.26
2	Agriculture Development( Farm Forestry &Afforesation)	7.03	3.08		31.70	47.48	89.29
3	BCI	1.65		33.43	15.98	27.63	78.69
4	Krishi Vigyan Kendra (KVK) - Agriculture	0.18	52.77				52.95
5	Health & Sanitation	3.38			2.84	2.76	8.98
6	Women / Youth Development	3.46					3.46
7	Skill and Enterprunership Development Programme	31.39	10.40				41.79
8	Integrated Community Development Programme	73.21					73.21
9	Co-ordination & Administration Expenses	47.07					47.07
10	Capital Expenditure						0.00
	<b>TOTAL</b>	<b>214.67</b>	<b>70.42</b>	<b>67.92</b>	<b>148.33</b>	<b>216.96</b>	<b>718.30</b>



# Annexure X [ORGANISATION CHART]





**Regular Water Sprinkling is being done on haul roads in S No. 44 Mines**

POLLUTION UNDER CONTROL CERTIFICATE								
(Approved by motor Vehicle Department Government of Gujarat)								
OMKAR DRIVING SCHOOL & P.U.C. CENTER								
5, Bharati Complex, Giriraj Society Main Road, Nr. Bus Station, JUNAGADH. M. 98242 27309								
PUCC No.	D085000248	It is certified that this vehicle conforms to the emission level standards Prescribed under rules 115(2) of the Central Motor Vehicles Rules, 1989	Opacity (%)	Kval (l/m)	Idle RPM	Max. RPM	Oil Temp (°C)	
Vehicle No.	GJ-11-X-8659		2	03.7	0.08	861	1630	065
Make	VOLVO		2	01.5	0.03	863	1457	065
Model	TIPPER		4	01.7	0.03	431	1260	065
Category	6W		4	01.5	0.04	858	1350	065
Mfg. Year	08/Nov/2005		Avg.	02.1	0.05			PASS
Fuel	DIESEL							
Date	Oct 23, 2017							
Time	03:45							
Valid Up To	Apr 22, 2018							
આ પી.યુ.સી. સર્ટી પુરૂ થવાની છેલ્લી તારીખ.....		 Authorized Signature		 Authorized Center Code : 85/D/2005			<b>રીન્યુ કરવાનું સરનામું : ઝંકાર ડ્રાઇવિંગ સ્કૂલ &amp; પી.યુ.સી. સેન્ટર</b> પ-ભારતી કોમ્પ્લેક્ષ, ગીરીરાજ સોસાયટી મેઈન રોડ, બસ સ્ટેશન પાસે, જૂનાગઢ. મો. ૯૮૨૪૨ ૨૭૩૦૯	

POLLUTION UNDER CONTROL CERTIFICATE								
(Approved by motor Vehicle Department Government of Gujarat)								
OMKAR DRIVING SCHOOL & P.U.C. CENTER								
5, Bharati Complex, Giriraj Society Main Road, Nr. Bus Station, JUNAGADH. M. 98242 27309								
PUCC No.	D085003576	It is certified that this vehicle conforms to the emission level standards Prescribed under rules 115(2) of the Central Motor Vehicles Rules, 1989	Opacity (%)	Kval (l/m)	Idle RPM	Max. RPM	Oil Temp (°C)	
Vehicle No.	GJ-11-Y-5136		2	02.7	0.06	1425	1874	060
Make	TATA		2	03.0	0.07	1352	1652	060
Model	TIPER		4	03.2	0.07	1251	1874	060
Category	6W		4	03.4	0.08	1352	1570	060
Mfg. Year	09/Jan/2008		Avg.	03.1	0.07			PASS
Fuel	DIESEL							
Date	Oct 23, 2017							
Time	03:45							
Valid Up To	Apr 22, 2018							
આ પી.યુ.સી. સર્ટી પુરૂ થવાની છેલ્લી તારીખ.....		 Authorized Signature		 Authorized Center Code : 85/D/2005			<b>રીન્યુ કરવાનું સરનામું : ઝંકાર ડ્રાઇવિંગ સ્કૂલ &amp; પી.યુ.સી. સેન્ટર</b> પ-ભારતી કોમ્પ્લેક્ષ, ગીરીરાજ સોસાયટી મેઈન રોડ, બસ સ્ટેશન પાસે, જૂનાગઢ. મો. ૯૮૨૪૨ ૨૭૩૦૯	