

O/C (EMD)

# Ambuja Cement

REGD. A/D

77103/8

ACL/EMD/F-16/2015/ 514

24.11.2015

**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'15 to September'15) 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,

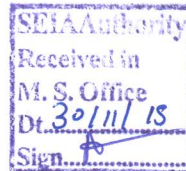
For **Ambuja Cements Ltd.**

  
**Dr. Anand K. Rai**  
**HOD (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



**Regd. Office :**

PO : Ambujanagar - 362 715, Tal : Kodinar,  
Dist. : Gir Somnath (Gujarat)  
Phone : (02795) 221137, 232009,  
Fax : (02795) 220328, 232032

**Ambuja Cements Limited**

(Unit : Ambujanagar)

CIN No. : L26942GJ1981PLC004717  
www.ambujacement.com

**Corporate Office:**

Elegant Business Park,  
MIDC Cross road 'B'  
Off Andheri - Kurla Road, Andheri (E),  
Mumbai - 400 059. Phone : (022) 4066700

- 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: 24.11.2015

- 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 : Shri Dinkar Dashora  
Project Chief Engineer (with : GM (Mines)  
pincode & telephone / telex : Ambuja Cements Ltd.  
/ fax numbers). PO : Ambujanagar , Taluka - Kodinar  
District : Gir Somnath (Gujarat)  
Pin : 362715  
Tel: -02795-237011  
Fax: 02795 - 220328/232032
- b) Address of Executive : Shri Rajesh Chaubey  
Project Engineer / Manager : Manager (Mines)  
(with pincode / fax : Ambuja Cements Ltd  
numbers. 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	<ul style="list-style-type: none"> <li>❖ Mining operations would not involve drilling &amp; blasting. Limestone excavation is being carried out by Surface Miner supported by ripper dozer.</li> <li>❖ Regular monitoring of Environmental parameters is being undertaken as per the norms of MoEF and IBM.</li> <li>❖ Preventive maintenance of deployed HEMM is undertaken regularly.</li> <li>❖ Dust suppression by water sprinkling on haul roads and in working area.</li> <li>❖ Afforestation / Green belt development along haul road and lease periphery.</li> <li>❖ Mined-out areas will be converted to pasture land, plantation and water reservoir.</li> <li>❖ Rural Development and Socio-economic activities will be undertaken in the project buffer zone area.</li> </ul>
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.

- 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

**Total / Year (Recurring) Rs.19.00 Lakhs**

- 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. : 3.86 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 27.05.2015 vide letter no.ACL/EMD/F-16/2015.

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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>Point noted and being complied.</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 glimpse 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 in which 47.29 Ha area is converted in to water body, water is being harvested during monsoon season.</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 6906 meter brick wall and 4931 meter barbed wire peripheral fencing has 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 2015, 6.99 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	<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.</li> </ul>

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	the norms prescribed by the Central Pollution Control Board in this regard.	<p>Photograph is enclosed as <b>Annexure XI.</b></p> <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></li> </ul> <p>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.</p>
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.</li> </ul> <p>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.</p>
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 12.</b></li> <li>All vehicles used for transportation of raw materials are being covered properly.</li> </ul>

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

xvi	Drilling and blasting operation shall not be carried out.	<ul style="list-style-type: none"> <li>• Mining is being done using fully mechanized Surface Miner Machine.</li> </ul>
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	<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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Limestone Mining Project (S.No.44)  
Vide MoEF Letter No: J-11015/336/2007IA-II (M) dated 14.01.2009**

	specific to the project site shall be effectively 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>Point Noted &amp; will be complied.</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>Point noted.</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.</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 27.05.2015 vide letter no.ACL/EMD/F-16/2015.</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>
vii	Industrial waste water (workshop and waste water from mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19.05.1993 & 31.12.1993 or as	<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</li> </ul>

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Limestone Mining Project (S.No.44)**

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

	amended from time to time. Oil and grease trap should be installed before discharge of work shop effluents.	out by GPCB approved third party (M/s Royal Environment Auditing and Consultancy services, Rajkot) report is enclosed as <b>Annexure-VIII</b> .
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>Environmental 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>
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	<ul style="list-style-type: none"> <li>Half yearly compliance status report is being regularly submitted and last submission was on 27.05.2015 vide letter no.ACL/EMD/F-16/2015.</li> </ul>

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

	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.	
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**  
**Details for programme wise expenditure from April 2015 to September 2015**

(Rs. In lakhs)

Sr.No	Programme	Funds from ACF Resources	*Funds received through Government	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	23.60	-	-	-	-	23.60
	B .Drinking Water Programme	17.82	28.60	11.53	76.24	54.98	189.17
	c. Salinity Prevention (KVV III)	8.33	-	49.50	54.42	75.01	187.26
2	Agriculture Development( Farm Forestry & Afforesation)	23.09	-	8.72	39.34	105.71	176.86
3	Better Cotton Initiative (BCI)	3.13	-	9.14	-	-	12.27
4	Krishi Vigyan Kendra (KVK)	0.75	49.05	-	-	-	49.80
5	Health & Sanitation Programme	5.10	-	-	6.82	-	11.92
6	Skill and Enterprunership Development Programme	21.86	11.97	0.24	4.84	-	38.91
7	Village Knowledge Centre & Anganwadi exp	0.68	-	-	-	-	0.68
8	Women / Youth Development & Others	1.72	-	-	-	-	1.72
9	Integrated Community Development Programme	68.68	-	-	-	-	68.68
10	Co-ordination & Administration Expenses	37.57	-	-	-	-	37.57
11	Capital Expenditure	0.65	-	-	-	-	0.65
	<b>TOTAL</b>	<b>212.98</b>	<b>89.62</b>	<b>79.13</b>	<b>181.66</b>	<b>235.70</b>	<b>799.09</b>





## ANNEXURE II(A)

<b>Vadnagar MINES Greenbelt &amp; Plantation Details till September 2015</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	88.22	6.99	12.18	47.29



**Saplings planted in reclaimed area**







**Existing green belt in mines area**







**Existing green belt near haul roads**



### Annexure III

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

Apr'-2015

S.N.	Ref.No.	IS 10500:2012 (S.R)		Well Water		
		Desirable	Permissible			
	Source			W10	W11	pizometr-2
	Village			VADNAGAR	VADNAGAR	VADNAGAR
	Taluka			KODINAR	KODINAR	KODINAR
	District			GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH
1	Color Hazen Units	5	25	C.L.	C.L.	C.L.
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Turbidity NTU	1	5	0.32	0.67	0.39
4	Dissolved Solids mg/l	500	2000	774	738	1154
5	pH	6.5 to 8.5	No Relaxation	8.41	8.05	8.24
6	Total Hardness (as CaCO3) mg/l	200	600	360	340	520
7	Calcium (as Ca) mg/l	75	200	72	68	104
8	Magnessium (as Mg) mg/l	30	100	44	41	63
9	Chlorides (as Cl) mg/l	250	1000	200	208	328
10	Sulphates (as SO4) mg/l	200	400	58	55	84
11	Nitrates (as NO3) mg/l	45	No Relaxation	35.0	9.7	36.3
12	Fluorides (as F) mg/l	1	1.5	1.07	1.27	1.12
13	Alkalinity (as CaCO3) mg/l	200	600	240	236	220
»	Water level in mtr. from ground level	---	---			

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

Aug'-2015

S.N.	Ref.No.	IS 10500:2012 (S.R)		Well Water				
		Desirable	Permissible					
	Source			W8	W9	W10	W11	pizometr-2
	Village			VADNAGAR	VADNAGAR	VADNAGAR	VADNAGAR	VADNAGAR
	Taluka			KODINAR	KODINAR	KODINAR	KODINAR	KODINAR
	District			GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH	GIR-SOMNATH
1	Color Hazen Units	5	25	C.L.	C.L.	C.L.	C.L.	C.L.
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Turbidity NTU	1	5	0.8	0.49	0.84	0.60	1.18
4	Dissolved Solids mg/l	500	2000	408	1248	842	496	716
5	pH	6.5 to 8.5	No Relaxation	8.3	8.11	8.12	8.22	8.27
6	Total Hardness (as CaCO3) mg/l	200	600	208	512	416	304	348
7	Calcium (as Ca) mg/l	75	200	42	102	83	61	70
8	Magnessium (as Mg) mg/l	30	100	25	62	51	37	43
9	Chlorides (as Cl) mg/l	250	1000	80	392	200	328	180
10	Sulphates (as SO4) mg/l	200	400	34	82	68	50	57
11	Nitrates (as NO3) mg/l	45	No Relaxation	25.7	44.2	37.3	27.9	20.0
12	Fluorides (as F) mg/l	1	1.5	0.56	1.19	1.12	1.02	1.28
13	Alkalinity (as CaCO3) mg/l	200	600	176	236	276	148	148
»	Water level in mtr. from ground level	---	---					

## Air Borne Dust Survey - Vadnagar Mines (S.No.44) April-2015 to September-2015

<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-15	0600 - 1400	Inside Cabin	0.27	14-Apr-15	0600 - 1400	Inside Cabin	0.3	15-Apr-15	0600 - 1400	Inside Cabin	0.22
11-May-15	0600 - 1400		0.29	12-May-15	0600 - 1400		0.33	13-May-15	0600 - 1400		0.25
11-Jun-15	0600 - 1400		0.36	12-Jun-15	0600 - 1400		0.32	13-Jun-15	0600 - 1400		0.34
9-Jul-15	0600 - 1400		0.37	10-Jul-15	0600 - 1400		0.33	11-Jul-15	0600 - 1400		0.4
10-Aug-15	0600 - 1400		0.37	11-Aug-15	0600 - 1400		0.32	12-Aug-15	0600 - 1400		0.34
10-Sep-15	0600 - 1400		0.38	11-Sep-15	0600 - 1400		0.32	12-Sep-15	0600 - 1400		0.3



## Annexure V

Ambient Noise Level Monitoring - Vadnagar Mines (S.No.44) April-15 to September-15

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)
Apr-15	70	67	70	66	60	58	47	38	49	40
May-15	71	64	68	63	60	55	49	36	47	36
Jun-15	67	63	69	61	59	53	48	37	48	38
Jul-15	69	65	67	64	62	48	46	38	49	37
Aug-15	70	64	64	57	61	56	49	38	49	35
Sep-15	68	63	69	56	57	53	46	37	50	35

## Annexure VI

## Noise Level of HEMM - Vадnagar Mines (S.No.44) April-2015 to September - 2015

<i>Machine</i>	<i>Surface Miner</i>			<i>Loader</i>			<i>Dozer</i>		
Month	Conditions	Noise Levels (dB)		Conditions	Noise Levels (dB)		Conditions	Noise Levels (dB)	
		At 5m. distance	At 10m. distance		At 5m. distance	At 10m. distance		At 5m. distance	At 10m. distance
		Leq	Leq		Leq	Leq		Leq	Leq
Apr-15	While mining	74	73	While loading to tipper	77	71	While dozing the material	76	73
May-15	While mining	73	70	While loading to tipper	77	72	While dozing the material	74	71
Jun-15	While mining	76	72	While loading to tipper	72	70	While dozing the material	74	71
Jul-15	While mining	78	73	While loading to tipper	74	70	While dozing the material	75	68
Aug-15	While mining	72	67	While loading to tipper	76	71	While dozing the material	72	69
Sep-15	While mining	73	69	While loading to tipper	76	71	While dozing the material	72	70

**Ambient Air Quality Monitoring Results**  
**(April 2015 to September 2015)**

Month	Average Ambient Air Quality Monitoring Results																			
	Working place					D-Block Crusher					Devalpara Village					Inchhavad Village				
	PM2.5	PM10	SO2	NOx	CO	PM2.5	PM10	SO2	NOx	CO	PM2.5	PM10	SO2	NOx	CO	PM2.5	PM10	SO2	NOx	CO
	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)
Apr 2015	35.00	50.00	11.40	15.20	B.D.L	40.00	62.00	11.10	14.80	B.D.L	29.00	45.00	12.60	14.50	B.D.L	32.00	55.00	12.00	15.70	B.D.L
	36.00	50.00	11.50	14.30	B.D.L	49.00	61.00	12.80	15.60	B.D.L	26.00	37.00	11.30	15.40	B.D.L	33.00	46.00	11.70	16.10	B.D.L
May 2015	32.00	45.00	12.20	14.90	B.D.L	38.00	55.00	11.60	13.60	B.D.L	26.00	41.00	11.30	12.90	B.D.L	28.00	43.00	12.70	14.20	B.D.L
	34.00	47.00	11.40	15.60	B.D.L	40.00	57.00	12.50	14.30	B.D.L	28.00	43.00	11.80	14.70	B.D.L	32.00	46.00	12.30	15.20	B.D.L
June 2015	29.00	47.00	11.50	14.80	B.D.L	36.00	56.00	12.30	15.20	B.D.L	28.00	43.00	12.70	14.10	B.D.L	26.00	45.00	10.90	15.50	B.D.L
	32.00	51.00	12.50	14.90	B.D.L	37.00	65.00	12.80	15.80	B.D.L	30.00	45.00	11.40	15.60	B.D.L	27.00	43.00	11.70	14.50	B.D.L
July 2015	27.00	44.00	12.30	15.70	B.D.L	34.00	55.00	11.70	16.30	B.D.L	30.00	47.00	10.90	14.30	B.D.L	32.00	50.00	12.80	15.50	B.D.L
	29.00	47.00	11.30	16.30	B.D.L	37.00	62.00	12.40	15.80	B.D.L	34.00	50.00	11.50	15.40	B.D.L	27.00	45.00	10.80	14.70	B.D.L
Aug. 2015	26.00	48.00	11.50	14.90	B.D.L	32.00	51.00	12.60	16.10	B.D.L	34.00	43.00	11.90	15.50	B.D.L	29.00	50.00	10.80	14.70	B.D.L
	33.00	52.00	12.30	15.40	B.D.L	35.00	67.00	11.60	14.80	B.D.L	30.00	56.00	11.90	14.30	B.D.L	29.00	48.00	12.10	15.00	B.D.L
Sept. 2015	24.00	52.00	12.50	15.70	B.D.L	33.00	59.00	11.80	14.90	B.D.L	30.00	47.00	12.30	15.50	B.D.L	27.00	54.00	11.40	16.20	B.D.L
	31.00	55.00	11.70	16.70	B.D.L	33.00	70.00	12.60	15.90	B.D.L	32.00	58.00	13.20	14.80	B.D.L	26.00	50.00	11.90	14.50	B.D.L
Minimum	24	44	11.3	14.3	0	32	51	11.1	13.6	0	26	37	10.9	12.9	0	26	43	10.8	14.2	0
Maximum	36	55	12.5	16.7	0	49	70	12.8	16.3	0	34	58	13.2	15.6	0	33	55	12.8	16.2	0
Average	30.67	49.00	11.84	15.37	#DIV/0!	37.00	60.00	12.15	15.26	#DIV/0!	29.75	46.25	11.90	14.75	#DIV/0!	29.00	47.92	11.76	15.15	#DIV/0!
Std. Deviation	3.73	3.22	0.47	0.68	#DIV/0!	4.61	5.56	0.56	0.81	#DIV/0!	2.63	6.00	0.68	0.80	#DIV/0!	2.59	3.96	0.69	0.66	#DIV/0!



# Royal

## Environment Auditing & Consultancy Service

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

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

### TEST REPORT (WASTE WATER)

Test Report No : 329/09/2015-16

Date : 03/10/2015

Work Order No : 2800524612

Job Card No. : AMBUJA-P/2015-16/06

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 : 04/09/2015

Date & Time of Sampling : 04 / 09 / 2015 at 11.35 Hrs.

Lab ID : W/15-16/09/020

Date of Testing : 08th to 12th September 2015

Sample Type : Waste Water

Description of Sample Packing : Glass Bottle

Type of Sampling : Grab

Quantity of Sample : 2 Ltr.

Description : Treated Raw Water

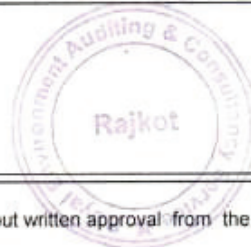
Sample Collected by : Mr. Jaydeep Purohit

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	---	---	7.75	IS 3025 : Part 11
02.	Total Dissolved Solid	mg/l	---	432	IS 3025 : Part 16
03.	Total Suspended Solids	mg/l	---	33	IS 3025 : Part 17
04.	Dissolved Oxygen	mg/l	---	5.2	IS 3025 : Part 38
05.	Oil & Grease	mg/l	---	6.7	IS 3025 : Part 39
06.	BOD (3 days at 27 c)	mg/l	---	15	IS 3025 : Part 44
07.	COD	mg/l	---	23	APHA : 5220 C
08.	Residual Chlorine	mg/l	---	---	IS 3025 : Part 26

*Digvijay*  
Authorized Signatory  
Digvijay J. Deja



*Jay*  
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 : 23-03-14

**(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'15 to September'15 :**

(1) Green belt development & dust suppression	: 19.39 Lakh
(2) Manpower cost*	: 11.42 Lakh
(3) House Keeping	: 0.72 Lakh
(4) Other Env. Protection (Environmental Monitoring)	: 0.52 Lakh
(5) Environmental Awareness*	: 0.50 Lakh

---

**Total : Rs. 32.55 Lakh**

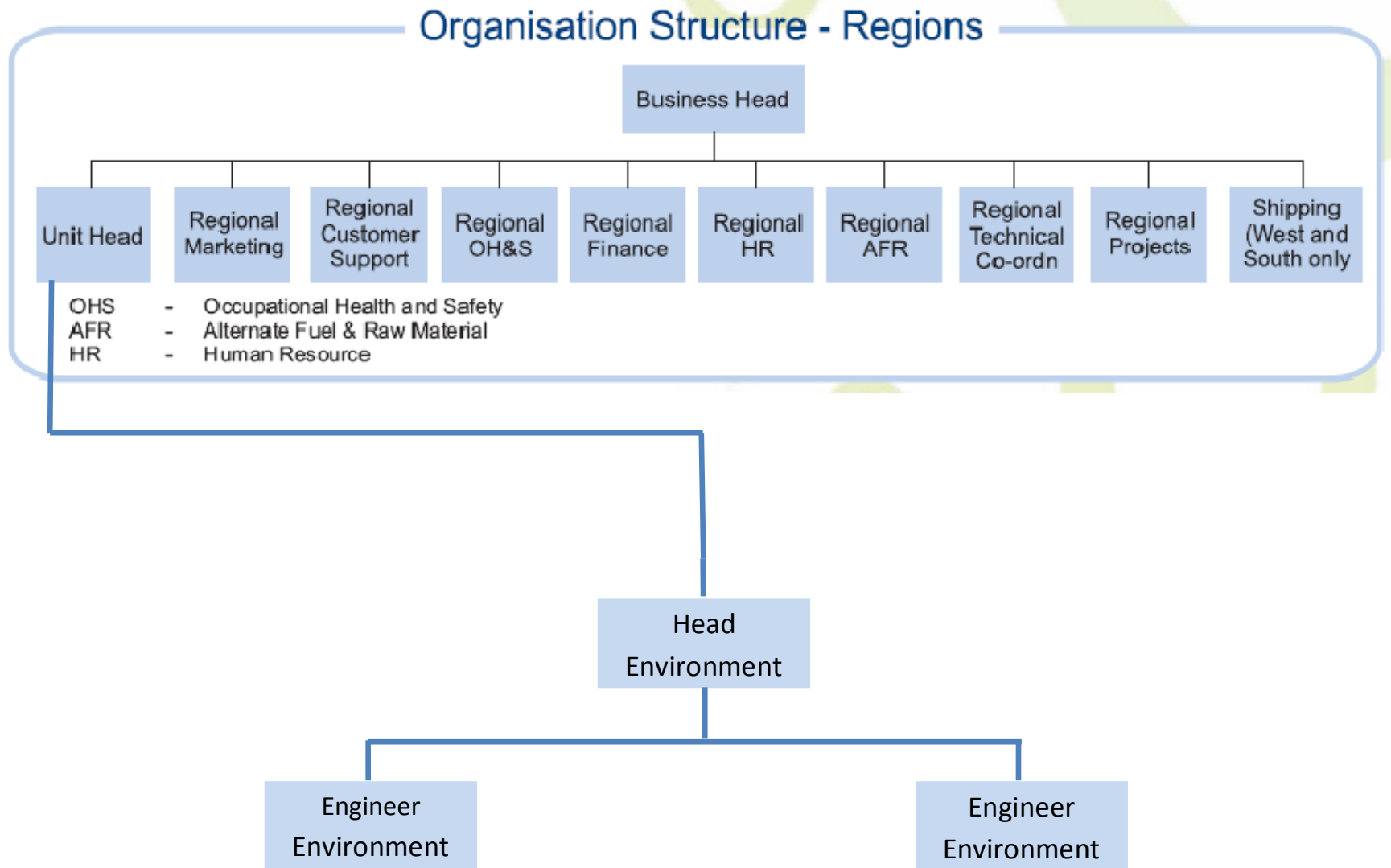
\*Expenditures common for all the plants & mines.

**C) Community Development expenditure by Ambuja: Rs. 07.99 Crore  
Cement Foundation\*\***

\*\* Community development expenditure is common for all plant & mines at Ambujanagar for the period of April'2015 to September'15. Programme Wise Expenditure Details is as below:

Ambuja Cement Foundation - Ambujanagar							
Details for programme wise expenditure from April 2015 to September 2015							
							(Rs. In lakhs)
Sr.No	Programme	Funds from ACF Resources	*Funds received through Government	from other Donors / Donor Agencies	***People's Contribution	****Direct Funding to Communities	Total Exp.
	GUJARAT - Kodinar						
1	Water Resource Mangement & Drinking Water Projects						
	a. Water Resource Development	23.60	-	-	-	-	23.60
	B .Drinking Water Programme	17.82	28.60	11.53	76.24	54.98	189.17
	c. Salinity Prevention (KVY III)	8.33	-	49.50	54.42	75.01	187.26
2	Agriculture Development( Farm Forestry & Afforestation)	23.09	-	8.72	39.34	105.71	176.86
3	Better Cotton Initiative (BCI)	3.13	-	9.14	-	-	12.27
4	Krishi Vigyan Kendra (KVK)	0.75	49.05	-	-	-	49.80
5	Health & Sanitation Programme	5.10	-	-	6.82	-	11.92
6	Skill and Enterprunership Development Programme	21.86	11.97	0.24	4.84	-	38.91
7	Village Knowledge Centre & Anganwadi exp	0.68	-	-	-	-	0.68
8	Women / Youth Development & Others	1.72	-	-	-	-	1.72
9	Integrated Community Development Programme	68.68	-	-	-	-	68.68
10	Co-ordination & Administration Expenses	37.57	-	-	-	-	37.57
11	Capital Expenditure	0.65	-	-	-	-	0.65
	<b>TOTAL</b>	<b>212.98</b>	<b>89.62</b>	<b>79.13</b>	<b>181.66</b>	<b>235.70</b>	<b>799.09</b>

## Annexure X [ORGANISATION CHART]







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





(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

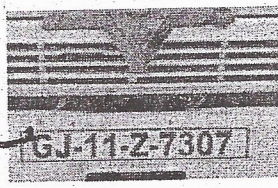
P.U.C. No.	D085004145
Vehicle No.	GJ-11-Z-7307
Make	AMW
Model	TIPER
Category	6W
Mfg. Year	24 December
Fuel	DIESEL
Date	Oct 23, 2015
Time	19:01
Valid Up To	Apr 22, 2016

It is certified that this vehicle conforms to the emission level standards Prescribed under rules 115(2) of the Central Motor Vehicles Rules, 1989

In case of complaint please write to Commissioner of Transport, Gujarat State, Gandhinagar.

Opacity (%)	Kval (l/m)	Idle RPM	Max. RPM	Oil Temp (°C)
08.2	0.19	1254	1547	062
02.0	0.06	1452	1254	062
02.0	0.05	1258	1958	062
02.1	0.05	1547	1968	062
Avg. 01.2	0.15			PASS

OMKAR P.U.C. CENTER  
Testing Center Seal  
Authorised Signature



Authorised Center Code : 85/D/2005

આ પી.યુ.સી. સર્ટી પુરૂ થવાની રીન્યુ કરવાનું સરનામું : ડૉક્ટર ડ્રાઇવિંગ સ્કૂલ & પી.યુ.સી. સેન્ટર  
છેલ્લી તારીખ..... પ-ભારતી કોમ્પ્લેક્સ, ગીરીરાજ સોસાયટી મેઈન રોડ, બસ સ્ટેશન પાસે, જૂનાગઢ, મો. ૯૮૨૪૨ ૨૭૩૦૯

AW: 57



## 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

P.U.C. No.	D085004146
Vehicle No.	GJ-11-Z-7308
Make	AMW
Model	TIPER
Category	6W
Mfg. Year	24 December
Fuel	DIESEL
Date	Oct 23, 2015
Time	19:01
Valid Up To	Apr 22, 2016

It is certified that this vehicle conforms to the emission level standards Prescribed under rules 115(2) of the Central Motor Vehicles Rules, 1989

In case of complaint please write to Commissioner of Transport, Gujarat State, Gandhinagar.

Opacity (%)	Kval (l/m)	Idle RPM	Max. RPM	Oil Temp (°C)
08.2	0.19	1254	1547	062
02.0	0.06	1452	1254	062
02.0	0.05	1258	1958	062
01.2	0.05	1547	1968	062
Avg. 01.2	0.15			PASS

OMKAR P.U.C. CENTER  
Testing Center Seal  
Authorised Signature



Authorised Center Code : 85/D/2005

આ પી.યુ.સી. સર્ટી પુરૂ થવાની રીન્યુ કરવાનું સરનામું : ડૉક્ટર ડ્રાઇવિંગ સ્કૂલ & પી.યુ.સી. સેન્ટર  
છેલ્લી તારીખ..... પ-ભારતી કોમ્પ્લેક્સ, ગીરીરાજ સોસાયટી મેઈન રોડ, બસ સ્ટેશન પાસે, જૂનાગઢ, મો. ૯૮૨૪૨ ૨૭૩૦૯

AW: 58