

REGD. A/D

ACL/EMD/F-16/2017/ 72/

30.05.2017

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.: Half Yearly Compliance Report of Environmental Clearance of RKBA Limestone

Mines.

Ref.: Environmental Clearance Order No. J-11015/221/2008-IA.II (M) dated 04.03.11

Sir,

We are pleased to submit herewith half yearly compliance status report (i.e. for the period of October'16 to March'17) of Environmental Clearance Order No. J11015/221/2008-IA.II(M) dated 04.03.2011 granted by MoEF to Rampara , Kukaras , Bhetali & Anandapara (**RKBA**) Limestone Mines, located at village — Rampara, Kukras, Bhetali, Anandapara , Taluka — Veraval & Sutrapada, District — Gir Somnath (Gujarat).

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 Head-Environment

Encl.: As above.

Copy to:

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

Regd. Office:

PO: Ambujanagar - 362 715, Tal: Kodinar, Dist.: Gir Somnath (Gujarat)

> Phone: (02795) 221137, 232365, 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 Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10-A, Gandhinagar-382010
 Regional Officer,

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: 30.05.2017

01 Project type: : Mining

River valley/ Mining/Industry/ Thermal/ Nuclear/ other

specify

Open Cast (Limestone)

02 Name of the project : Rampara-Kukras- Bhetali and Anandpara

Limestone Mining Project

03 Clearance letter(s) / OM no. : J-11015/221/2008-IA.II (M),

and date Dated 04.03.2011

04 Location :

a) District(s) : Gir Somnath

b) State(s) : Gujarat

c) Latitude : 20° 56' - 20° 58' N

d) Longitude : $70^{\circ} 31' - 70^{\circ} 34' E$

05 Address for correspondence :

a) Address of concerned : Sh. Harendra dayal

Project Chief Engineer (with : DGM (Mines)
pin code & telephone / teley : Ambuja Cements Ltd.

pin code & telephone / telex : Ambuja Cements Ltd. PO Ambujanagar-362715,

Taluka - Kodinar,
District – Gir Somnath
Tel: 02795-232064

Tel: 02/95-232064

Fax: 02795 - 220328/232032

b) Address of Executive
Project Engineer / Manager

(with pincode / fax

numbers.

: Sh. Harendra dayal DGM (Mines)

Ambuja Cements Ltd.

PO Ambujanagar-362715,

Taluka - Kodinar, District – Gir Somnath Tel: 02795-232064

Fax: 02795 - 220328/232032

06 Salient features

a) of the project :

- b) of the environmental management plans
- : Ambuja Cements Ltd. has established cement manufacturing plant at Ambujanagar in Kodinar Taluka of Gir Somnath District. Limestone is the main raw materials for the cement plants, which is being exploited from company's own captive mines i.e. Rampara, Kukras, Bhetali & Anandpara Limestone Mine.

RKBA is located at a distance of about 30 kms in NW direction with respect to cement plant. The rated capacity of the limestone at present is 2.0 MTPA.

- : Mining operations would not involve drilling & blasting. Limestone excavation is being carried out by environment friendly Surface Miner supported by ripper dozer.
 - Regular monitoring of environmental parameters is undertaken as per the norms of MoEF and IBM and same will be followed.
 - Preventive maintenance of deployed HEMM is being undertaken regularly and same will be continued.
 - Dust suppression by water sprinkling on haul roads is being done regularly in working area and same will be continued.
 - Afforestation / Green belt development is being carried out concurrently along haul road, lease periphery and matured area as well as outside lease also (i.e. surrounding Mines office)
 - Mined-out areas will be converted to pasture land & into 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

: 310.3290 ha (Government waste land, Gauchar land & Private 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 laborers/artisan.

: Project does not require any rehabilitation or evacuation of permanent settlements as 87% of land is in our possession.

a) SC, ST / Adivasis

b) Others

: Not applicable: 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

- a) Project cost as originally planned and subsequent revised estimates and the year of price reference.
- Allocation made for environmental management plans with item wise and year wise break-up.

: Project Cost: Rs. 900 Lakhs
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.

Capital Investment

Capital investment for

environment protection 57.08 Lakhs

measures

Recurring Expenditure per year

Plantation (reclamation & 10.0 Lakhs - Existing rehabilitation - (1.75lacsproposed/year)

Environmental - (3.0 Lakhs Existing (3 lacs proposed/year)

Pollution Control - 2.0 Lakhs Existing (2lacsproposed/year

Occupational health - 3.0Lakhs Existing

 3.0Lakhs Existing (3lacsproposed/year

Total / Year (Recurring)

Rs.18 Lakhs (Éxisting) Rs 9.75 lacs proposed per year)

3

Budget allocation for Wildlife conservation (in Lacs)

Development of plantation 22 (Capital) around mine pits 1.75 (Recurring) Awareness programs & 0 (Capital) community workshops 5.0 (Recurring) Supply of Anti poaching kits and 10 (Capital) training 2 (Recurring) Vegetative propagation and 0 (Capital) restoration of plants in natural 2.0 (Recurring)

habitat in surrounding villages

Nature Conservation volunteers 6 (Capital) (6 nos) 6(Recurring) **TOTAL** 38 (Capital) 16.75 (Recurring)

c) Benefit cost (BC) ratio / Internal rate of return (IRR) 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.

d) Whether (c) includes the cost of environmental management as shown in the above.

: Yes

e) Actual expenditure incurred : Rs. 11.59 Crores on the project so far.

f) Actual expenditure incurred on the environmental management plans so far.

: Rs. 5.56 Crores

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.

Not applicable

c) The status of compensatory afforestation (CA), if any : Not applicable.

d) Comments on the viability & sustainability of CA (compensatory

: Not applicable.

afforestation) programme in the light of actual field experience so far.

11 The status of clear felling in non-forest areas (such as submergence area or reservoir, approach roads), if any with quantitative information required.

The status of clear felling in: The project does not involve felling of **non-forest areas** (such as trees.

12 Status of construction (Actual & or planned)

a) Date of commencement (Actual and / or planned) \cdot 4.10.2005

b) Date of completion (Actual and / or planned).

: Not applicable. As it is an ongoing captive mining Project for cement plant. (Mines life is approximate 8 to 10 years based on reserves)

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 28.11.2016 vide letter no.ACL/EMD/F-16/2016

S No.	Condition	Compliance Status
(A). Sp	ecific Conditions :	
I	The project proponent shall obtain Consent to Establish and Consent to Operate from the Gujarat Pollution Control Board and effectively implement all the conditions stipulated therein.	Consent to establish & Consent to operate has already been obtained from Gujarat Pollution Control Board vide letter no. GPCB/ID17276/CTE/CCA-JNG/30(2)/71073 dated 28 January 2011 & letter no. GPCB/CCA-JNG-(30)3/ID-17276/87008 dated 19.07.2011 respectively. All the conditions stipulated therein are being effectively implemented. Copy of Consent to establish & Consent to operate has been submitted to MoEF vide our submission dated 30.12.2011 vide letter no.ACL/EMD/F-16/2011/62788.
II	The environmental clearance is subject to approval of the State Land use Department, Government of Gujarat for diversion of agricultural land for non-agricultural use.	 Necessary approval is being obtained from State Land use Department, Government of Gujarat for diversion of agricultural land for non-agricultural use. Details of land converted in to non-agriculture land has been already submitted to MoEF vide our letter no. ACL/EMD/F-16/2011/136/59025 dated 28.06.2011
III	Necessary prior permission from the Competent Authority as may be applicable for use of grazing land for mining purpose shall be obtained,	 Necessary prior permission as applicable has already been obtained from the Competent Authority. Village Panchayat has already given resolution for grazing land. Whereas Industries & Mines dept. Govt. of Gujarat has also granted Mines Lease Order. Copy of Lease Grant Order has been already submitted to MoEF vide our submission dated 30.12.2011 vide letter no.ACL/EMD/F-16/2011/62788
IV	The project proponent shall develop fodder plots in the non-mineralized area in lieu of use of grazing land.	Point noted and is being complied. After mining limestone in the mineralized area, part of mined out area is being converted in to pasture land/grazing land. Till March'17 24.9456 Ha. Area has been converted in to pasture land.

V	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. The first order streams and the seasonal nallahs, if any originating from the mining lease area shall be protected.	•	Natural watercourse and/or water resources is not being obstructed due to any mining operations.
VI	The mining operations shall be so carried out by adjusting the working schedule in different seasons in such a manner, that the working will be restricted to above water table without resorting to any pumping of groundwater. In case of working below the ground water table, prior approval of the Ministry of Environment and Forests and the Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.	•	Point noted and Mining is being carried out above ground water table.
VII	The proponent shall carry out long term studies on salinity and water levels in and around existing mining areas and the new proposed sites and submit report to this Ministry and Central Ground Water Authority within a period of 6 months.	•	Ground Water & Mineral Investigation Consultancy Centre Pvt. Ltd. (GWMICC), Jaipur has been engaged for the monitoring of ground water quality & Impact of limestone mining and salinity ingression status around RKBA Limestone Mines and around ACL Plants and Mines in Gir Somnath District. A report on the same has been already submitted to MoEF vide our submission dated 21.05.11 vide letter no. ACL/EMD/F-16/2011 & also on 28.06.2011 vide letter no. ACL/EMD/F-16/2011/136/59025.
VIII	The top soil shall be concurrently used for mine reclamation, plantation and green belt development.	•	Point noted and being complied. Top soil concurrently used for developing the Pasture land. The top soil being stacked separately in the ear marked site with appropriate measures. Top Soil is stored systematically. Road side bunds are made from poor grade material and Top soil is used in order to improve growth of planted species and to increase survival rate.
IX	Out of the total excavated area of 268.22ha, an area of 270.47ha shall be converted into pasture land/demo farm/plantation. There shall be no external dump(s). Monitoring and	•	Details of greenbelt/reclamation are enclosed as Annexure – 1(A) & 1(B). Compliance status is being submitted to the Ministry of Environment & Forest and its regional office located at Bhopal

continu	ement of rehabilated areas shall e until the vegetation becomes staining. Compliance status shall	on six monthly basis.
be su Enviror	ubmitted to the Ministry of ment & Forest and its regional ocated at Bhopal on six monthly	
X The vo shall be higher pit shall to state higher easy as the wa	id left unfilled in an area of 9.6ha e converted into water body. The benches of excavated void/mining I be terraced and plantation done bilize the slopes. The slope of benches shall be made gentler for accessibility by local people to use ter body. Peripheral fencing shall ed out along the excavated area.	Total Open mine area is 150.9843Ha On higher benches, plantation has been done and slope of higher benches will be made gentler as the mining progress. Details of greenbelt/reclamation are enclosed as Annexure – 1(A) & (B). Peripheral fencing work is going on along the excavated area. Total 243 meter brick wall, 17855 meter barbed wire and 17249 meter earthen bund fencing has been done.
approparound and minand see fields a collected the minand see fields a collected the minand shall be temporary preventing sedime fields a capacition 50% sa sudden and minand minand material construition of the construition of	d drain (size, gradient and length) e constructed for the mine pit and ary soil and mineral dump(s) to run off of water and flow of the directly into the agricultural and the water bodies and sumply should be designed keeping aftety margin over and above peak rainfall (based on 50 years data) aximum discharge in the area ag the mine site. Sump capacity also provide adequate retention to allow proper settling of silt I. Sedimentation pits shall be cted at the corners of the garland and desilted at regular intervals.	To collect surface run-off and arrest silt and sediment flow from the soil & mineral stacks, drain along with settling pond is constructed along the toe of the stacks, ultimately drain water will be collected into mined out pit. The drains are properly maintained and collected water is utilized for watering the mine area, roads, green belt development etc.
of temp	ion of the retaining wall at the toe corary soil and mineral dumps to run-off and siltation should be	Retaining wall has already been provided on the periphery of top soil storage area in order to prevent from

	based on the rain fall data.		run-off.
XIII	Green belt shall be raised in an area of 21.58ha including a 7.5m wide statutory barrier all around the mining lease, roads etc, by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2000 trees per hectare. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.	•	Till March 2017, 11.8471 ha. area is covered under plantation and green belt development. Remaining area will also be covered under plantation as per approved mining plan. Details of greenbelt/reclamation are enclosed as Annexure – 1(A)&(B)
XIV	Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high level of particulate matter such as around loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	•	Water tankers have been deployed for regular sprinkling of water on haul roads to prevent fugitive dusting in mines area. Photographs are enclosed as Annexure 10 . Air quality monitoring is being done regularly for the parameters prescribed by the Central Pollution Control Board. Surface miner is having an inbuilt water spraying mechanism on the faces to suppress the dust particles.
XV	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.	•	Water conservation measures to augment ground water resources in the area are being done by our Ambuja Cement Foundation (ACF). ACF & community development work done by ACF in surrounding areas is enclosed as Annexure 2 .
XVI	Regular monitoring of ground water level and quality shall be carried out within the mine lease and in the surrounding area (up to 5 km of the mine lease) by establishing a network of groundwater monitoring stations (existing wells and installing new piezometers) during the mining operation in consultation with Central Groundwater Authority / Ground Water Board and groundwater table shall be monitored and records maintained. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent	•	Ground water level & quality monitoring is being done regularly by establishing a network of groundwater monitoring stations (existing wells and installing new piezometers). Report is submitted to MoEF regional office Bhopal on six monthly basis. Ground water level & quality monitoring report is enclosed as Annexure-3.

	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 salinity		
	ingress in groundwater is observed due to		
	the mining activity, necessary corrective		
	safeguard measures shall be taken in		
	consultation with the Central Ground		
20.00	Water Authority.		
XVII	The project proponent shall obtain necessary prior permission of the competent authorities for drawl of	•	No withdrawal of ground water is being done. Water requirement for drinking is being met from private purchase.
	requisite quantity of water (surface water and ground water), if any, required for the project.		Whereas water requirement for dust suppression and greenbelt development is being met from
			harvested rain water in mined out pit.
XVIII	The project proponent shall practice	•	Water conservation measures to
	suitable rainwater harvesting measures		augment ground water resources in the
	on long term basis and work out a		area are being done by our Ambuja
	detailed scheme for rainwater harvesting in consultation with the Central		Cement Foundation (ACF). Details of
	Groundwater Authority and submit a copy		water harvesting work done by ACF in and around area are enclosed as
	of the same to the Ministry of		Annexure - 2.
	Environment and Forests and its Regional	•	Ground Water & Mineral Investigation
	Office, Bhopal.		Consultancy Centre Pvt. Ltd.
			(GWMICC), Jaipur has been engaged
			for the monitoring of ground water
			quality & Impact of limestone mining
			and salinity ingression status around
			RKBA Limestone Mines and around
			ACL Plant. A report on the same has been already submitted to MoEF vide
			our submission dated 21.05.11 vide
			letter no. ACL/EMD/F-16/2011 & also
			on 28.06.2011 vide letter no.
			ACL/EMD/F-16/2011/136/59025.
XIX	Vehicular emissions shall be kept under	•	Vehicular emissions are being checked
	control and regularly monitored.		& monitored regularly. Detail of P.U.C
	Measures shall be taken for maintenance		certificate by Omkar driving school &
	of vehicles used in mining operations and in transportation of mineral. The mineral		P.U.C center (Approved by
	transportation shall be carried out through		Government of Gujarat) is enclosed as Annexure 11.
	the covered trucks only and the vehicles		AIIIIOAUIO III
	carrying the mineral shall not be		
	overloaded.		
XX	Drilling and blasting operation shall not be	•	Blast free eco-friendly machine i.e.

VVI	Carried out.		Surface Miner is used for excavating the limestone. The noise levels are kept well within the permissible limits by system of condition monitoring of the equipment and well planned maintenance system.
XXI	Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and physiography of the area and report submitted to the Ministry of Environment and Forests and its Regional Office located at Bhopal.	•	Digital processing of the entire lease area using remote sensing technique is being carried out regularly once in three years, we have engaged Compusense Automation, Ahmadabad for digital processing of entire lease area. Report has been prepared and will be submitted to MoEF as soon as possible.
XXII	Land oustees and land losers/affected people should be rehabilitated as per the National Policy on Resettlement and Rehabilitation of project Affected Families (NPRR)/State Government norms.	•	Not applicable.
XXIII	Mineral handling area shall be provided with the 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	•	Not applicable.
XXIV	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.	•	There is no residential colony at mine site. However, township is located at Ambujanagar, where 1500 m3/day capacity Sewage Treatment Plant is established. At workshop baffle type oil & grease separation system has been provided, treated water from oil & grease separation system is being used for plantation/greenbelt development.
XXV	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.		Pre-placement medical examination and periodical medical examination of the workers engaged in the project is being carried out regularly and record is maintained.
XXVI	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	•	All Workers stay at existing colony and transportation facility provided for attending the duties. All necessary infrastructures facilities are being provided.

	legalthagens and the star Third		
	health care, creche etc. The housing may		
	be in the form of temporary structures to		
	be removed after the completion of the		
2000	project.		
XXVII	The critical parameters such as RSPM (Particulate matter with size less than 10 um i.e., PM10), NOX in the ambient air within the impact zone, shall be monitored periodically, Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006~IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.	•	Air quality monitoring and water quality monitoring is being done regularly and report is submitted to GPCB & MoEF. Results of Air & Water quality monitoring is being uploaded on the website of the company as well as displayed on a display board at the project site near mines office. The AAQ monitoring results for the period October'16 to March'17 for SPM, RSPM, CO, SO2 and NOx are enclosed as Annexure-4 .
XXVIII	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval,	•	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
B. Gen	eral conditions		
(i)	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	•	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 & Climate Change.
(ii)	No change in the calendar plan including excavation, quantum of mineral limestone and waste should be made.	•	Point Noted
(iii)	Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest and wildlife department and effectively implemented.	•	"Status of Biodiversity (Flora & Fauna) in core and buffer zone areas of RKBA Limestone Mine Lease (310.32ha) study area is prepared by Gujarat Institute of Desert Ecology-Kutchh" and the same has been submitted to the office of the PCCF and the concurrence is obtained. Report

			already submitted to MoEF vide letter no. ACL/EMD/F16/2010/55293 dated 25.12.2010.
(iv)	Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Participate matter with size less than 10 micron i.e., PM10) and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	•	Six ambient air quality-monitoring stations have been established in the core zone as well as in the buffer zone. The locations of the monitoring stations are decided in consultation with GPCB and renowned consultant Sh B Padmanabh Murthy, Professor of JNU and former Director of IMD Met-Dept on 5th and 6th Jan 2008. Ambient air quality is being monitored regularly and report is being regularly submitted to GPCB & MoEF. The AAQ monitoring results for the period October'16 to March'17 for SPM, RSPM, CO, SO2 and NOx are enclosed as Annexure-4 .
(v)	Data on ambient air quality RSPM (Particulate matter with size less than 10 micron i.e., PM10) & NOx should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Bhopal and the State Pollution Control Board / Central Pollution Control Board once in six months.	•	Ambient air quality is being monitored regularly and report is being regularly submitted to GPCB & MoEF. Last submission was on 28.11.2016 vide letter no.ACL/EMD/F-16/2016/.
(vi)	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.	•	Water tankers have been deployed for regular sprinkling of water on haul roads to prevent fugitive dusting in mines area. Air quality monitoring is being done regularly and conform the norms prescribed by the Gujarat Pollution Control Board.
(vii)	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.	•	Blast free eco-friendly machine i.e. Surface Miner is used for excavating the limestone. The noise levels are kept well within the permissible limits by system of condition monitoring of the equipment and well planned maintenance system. Ambient noise monitoring as well as HEMM noise monitoring report is enclosed as Annexure 5 & 6.
(viii)	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed	•	'No waste water generation from Mines' only negligible amount of waste water is generated from workshop, which is being treated at baffle type oil

	under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.		and grease separation system and treated water is being used for plantation/greenbelt development.
(ix)	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	•	Dust Masks, Safety Shoes, Safety Goggles & Helmet are provided to each & 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 Annexure 7 .
(x)	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.	•	A well established Environmental Management Division (EMD) with suitable qualified personnel is in place. Head of environmental management cell directly report to the Works Head of the organization. EMD organization chart is enclosed as Annexure 8 .
(xi)	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 of Environment and Forests and its Regional Office located at Bhopal,	•	Details of capital and recurring expenditure for environmental protection measures are enclosed as Annexure 9.
(xii)	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.	•	Informed vide letter 16.07.2005 and first compliance report was submitted on 26.07.2006.
(xiii)	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	•	Point noted and being complied. Full support and co-operation is being extended during the visit of officers from Ministry of Environment & Forest, CPCB as well as GPCB
(xiv)	The project proponent shall submit six monthly reports on the status of compliance of the 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	•	Half yearly compliance status report is being regularly submitted to MoEF Bhopal & Central Pollution Control Board. Last submission was on 28.11.2016 vide letter no.ACL/EMD/F-16/2016.

	Designed Office Discord the manageration		, , , , , , , , , , , , , , , , , , , ,
	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 Central Pollution Control Board and the State Pollution Control Board.		
(xv)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	•	A copy of clearance letter has been sent to Panchayat, Zila Parisad / Municipal Corporation, Urban Local Body as applicable.
(xvi)	The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/Tehsildar's Office for 30 days.	•	GPCB is the concern authority for the same.
(xvii)	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Bhopal by email.	•	Environmental statement is being regularly submitted to concern authority for each financial year. Last Environment Statement submitted on 28.09.2016 vide letter no. ACL/EMD/F22/2016.
(xviii)	The project authorities should advertise at least in two local newspapers of the District or State in the project is located and widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded	•	Point noted and complied.

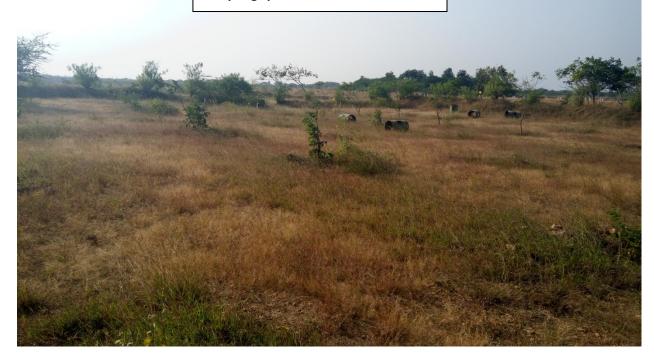
	environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhopal.		
7	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	•	Point noted
8	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.	•	This Condition is not related to Project Proponent. However, all the conditions mentioned in the EC are being complied
9	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control Of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Gujarat and any other Court of Law relating to the subject matter.	•	All stipulations under Water (Prevention and Control of pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment Protection Act, 1986, Hazardous waste Rules, 1989 are being complied. Hazardous waste being stored at designated place and collection and transportation is being done by state pollution control board authorized recyclers for recycling purpose

ANNEXURE 1 (A)

RKBA N	RKBA MINES Greenbelt & Plantation Details till March 2017							
Total Lease Area (in ha)	Opened up Area (in Ha)	Planted Area (in Ha)	Pasture land (in Ha)	Water Body (in Ha)				
310.3290	150.9843	11.8471	24.9456	0				



Saplings planted on reclaimed area







Development of reclaimed area for fodder plots

Ambuja Cement Foundation - Ambujanagar Details for programme wise expenditure from Oct. 2016 to march 2017

Annexure-2

							(Rs. In lakhs)
Sr.No	Programme	Funds from ACF Resources	*Funds received through Government	** Funds 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 Devlopment	32.77	-	7.89	-	-	40.66
	B .Drinking Water Programme	5.69	-	12.59	12.50	51.05	81.83
	c. Salinity Prevention (KVY III)	11.28	-	43.90	66.82	59.10	181.10
2	Agriculture Development(Farm Forestry & Afforesation)	5.28	-	5.89	33.60	49.09	93.86
3	Better Cotton Initiative (BCI)	3.17	-	29.83	92.76	7.31	133.07
4	Krishi Vigyan Kendra (KVK)	10.49	99.46	-	-	-	109.95
5	Health & Sanitation Programme	15.00	-	4.34	114.69	187.32	321.35
6	Skill and Enterprunership Development Programme	66.86	-	20.68	15.72	-	103.26
7	Village Knowledge Centre & Anganwadi exp	1.25	-	-	-	-	1.25
8	Women / Youth Development & Others	6.79	-	-	-	-	6.79
9	Integrated Community Development Programme	99.03	-	-	-	-	99.03
10	Co-ordination & Administration Expenses	42.15	-	-	-	-	42.15
11	Capital Expenditure	3.49	-	-	-	-	3.49
	TOTAL	303.25	99.46	125.12	336.09	353.87	1,217.79

Sep-16

Ground Water Quality Report of RKBA Mines (Sept-2016)

UU	V 10		arouna t	rater Gaar	ty ricport o		ics (Ocpt 20	10)		
S.N.	Ref.No.		0:2012 (S.R)			Well	Water			Piezometers
		Desirable	Permissible				1			
	Source			W3	W7	W8	W9	W10	W13	piezometer 1
	Village			RAMPARA	RAMPARA	RAMPARA	RAMPARA	RAMPARA	RAMPARA	RKBA Mines
	Taluka			VERAVAL	VERAVAL	VERAVAL	VERAVAL	VERAVAL	VERAVAL	VERAVAL
	District			GIR-SOMNATH	GIR-SOMNATH	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.	C.L.	C.L.
- 2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Turbidity NTU	1	5		0.52	1.47		0.52	2.01	1.19
4	Dissolved Solids mg/l	500	2000		598	882		544	1252	568
į	pH	6.5 to 8.5	No Relaxation		8.07	8.01		8.1	7.88	8.46
(Total Hardness (as CaCO3) mg/l	200	600		300	360		252	480	312
7	Calcium (as Ca mg/l	75	200		43	72		54	96	69
8	Magnessium (as Mg) mg/l	30	100		48	44		28	58	34
Ç	Chlorides (as CI) mg/l	250	1000		112	260		116	400	104
10	Sulphates (as SO4) mg/l	200	400		60	72		50	96	62
11	Nitrates (as NO3) mg/l	45	No Relaxation		41.5	37.6		44.6	42.8	15.6
12	Fluorides (as F) mg/l	1	1.5		0.72	0.37		0.87	0.57	0.85
13	Alkalinity (as CaCO3) mg/l	200	600		120	116		112	132	184
>>	Water level in mtr. from ground level									

Ambient Air Quality Monitoring Results (october 2016 - march 2017)

													Am	bient Air	Quality M	onitoring	Results	5												
Month		Wo	rking Pl	ace			м	ines Offi	ce			Kul	caras Vill	age			Anan	dapara V	/illage			Bh	etali Vill	age			Rar	npara Vill	age	
	PM2.5	PM10	S02	NOx	со	PM2.5	PM10	S02	NOx	со	PM2.5	PM10	502	NOx	со	PM2.5	PM10	SO2	NOx	со	PM2.5	PM10	S02	NOx	со	PM 2.5	PM 10	SO2	NOx	со
Unit >	(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)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)	(μg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)
Oct. 2016	29.00	60.00	10.90	14.70	BDL	35.00	66.00	11.60	15.80	BDL	26.00	52.00	12.20	16.10	BDL	27.00	48.00	12.10	16.20	BDL	30.00	52.00	11.60	15.60	BDL	25.00	43.00	10.80	15.00	BDL
	35.00	63.00	12.50	15.30	BDL	32.00	60.00	11.60	15.10	BDL	29.00	49.00	12.00	16.20	BDL	30.00	55.00	12.30	16.10	BDL	28.00	49.00	11.70	15.60	BDL	25.00	47.00	11.20	15.20	BDL
Nov.2016	26.00	55.00	11.40	15.10	BDL	33.00	62.00	12.50	16.70	BDL	28.00	58.00	10.90	14.80	BDL	29.00	47.00	11.30	15.70	BDL	32.00	55.00	12.60	16.10	BDL	26.00	45.00	11.50	15.20	BDL
	33.00	66.00	11.40	15.20	BDL	35.00	62.00	12.70	16.20	BDL	31.00	52.00	12.30	15.80	BDL	32.00	58.00	11.50	15.30	BDL	30.00	53.00	10.70	14.80	BDL	27.00	49.00	11.10	15.60	BDL
Dec.2016	28.00	53.00	11.60	15.40	BDL	32.00	60.00	12.80	16.90	BDL	26.00	56.00	11.20	15.10	BDL	27.00	49.00	11.60	15.90	BDL	30.00	52.00	12.80	16.30	BDL	24.00	43.00	11.70	15.40	BDL
	31.00	64.00	11.80	15.60	BDL	33.00	59.00	12.50	16.40	BDL	28.00	55.00	11.40	15.20	BDL	30.00	55.00	10.90	14.80	BDL	27.00	50.00	11.60	15.20	BDL	25.00	46.00	12.30	15.70	BDL
Jan. 2017	30.00	56.00	12.40	15.80	BDL	28.00	59.00	11.90	15.30	BDL	24.00	50.00	12.10	16.10	BDL	25.00	46.00	10.40	14.70	BDL	28.00	50.00	11.70	15.20	BDL	26.00	42.00	10.90	14.90	BDL
	29.00	61.00	10.90	14.30	BDL	31.00	57.00	11.60	15.60	BDL	26.00	53.00	12.20	16.20	BDL	28.00	51.00	11.40	15.10	BDL	25.00	46.00	11.90	16.30	BDL	22.00	44.00	12.50	16.80	BDL
Feb. 2017	28.00	52.00	12.10	15.30	BDL	25.00	56.00	11.60	14.90	BDL	22.00	47.00	12.40	15.80	BDL	27.00	49.00	10.90	15.10	BDL	30.00	53.00	11.90	14.90	BDL	29.00	47.00	12.30	16.20	BDL
	26.00	58.00	11.40	15.20	BDL	30.00	55.00	12.70	16.60	BDL	28.00	52.00	11.90	15.50	BDL	26.00	48.00	11.80	14.90	BDL	22.00	44.00	12.50	15.70	BDL	20.00	41.00	12.20	16.20	BDL
March 2017	28.00	53.00	11.90	15.90	BDL	26.00	50.00	13.20	16.30	BDL	23.00	45.00	12.40	15.20	BDL	25.00	46.00	11.50	15.30	BDL	28.00	50.00	12.40	16.20	BDL	26.00	48.00	12.70	16.80	BDL
	28.00	56.00	12.50	15.90	BDL	32.00	61.00	11.90	14.80	BDL	30.00	57.00	12.20	16.20	BDL	28.00	50.00	11.90	15.30	BDL	26.00	47.00	11.40	14.70	BDL	22.00	43.00	12.10	15.80	BDL
Minimum	26.00	52.00	10.90	14.30	0.00	25.00	50.00	11.60	14.80	0.00	22.00	45.00	10.90	14.80	0.00	25.00	46.00	10.40	14.70	0.00	22.00	44.00	10.70	14.70	0.00	20.00	41.00	10.80	14.90	0.00
Maximum	35.00	66.00	12.50	15.90	0.00	35.00	66.00	13.20	16.90	0.00	31.00	58.00	12.40	16.20	0.00	32.00	58.00	12.30	16.20	0.00	32.00	55.00	12.80	16.30	0.00	29.00	49.00	12.70	16.80	0.00
Average	29.25	58.08	11.73	15.31	#DIV/0!	31.00	58.92	12.22	15.88	#####	26.75	52.17	11.93	15.68	#DIV/0!	27.83	50.17	11.47	15.37	####	28.00	50.08	11.90	15.55	####	24.75	44.83	11.78	15.73	####

Annexure - 5
Ambient Noise Level Monitoring - RKBA Limestone Mines (october 2016 - march 2017)

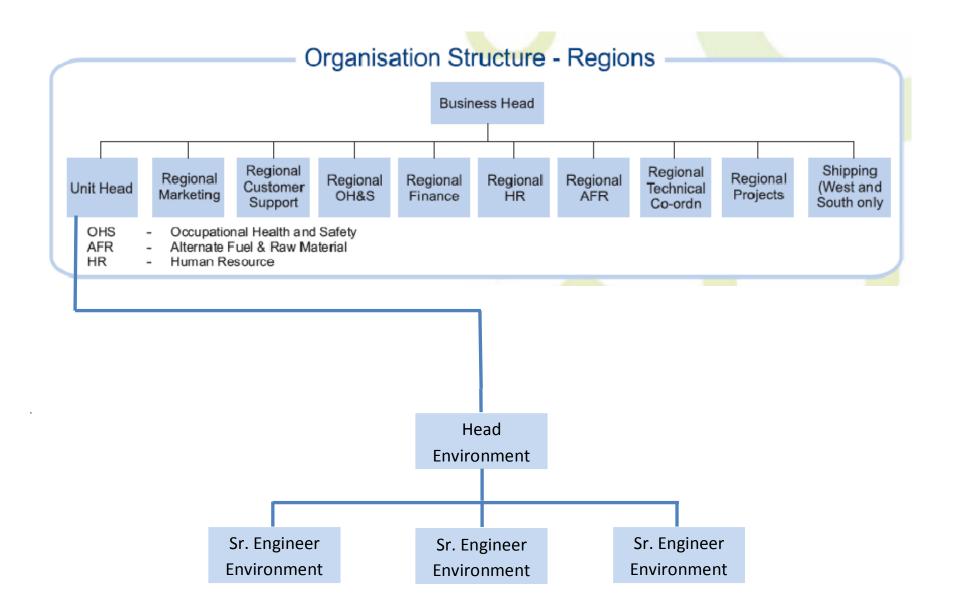
Month							Noise Lev	els in dB(A	7)					
MOTILII	Near Surf	ace Miner	Haul	road	Mines	Office	Rampar	a Village	Kukara	s Village	Bhetali	Village	Anandap	ara Village
	Leq (Day)	Leq (Night)												
Oct-16	69	64	65	60	61	57	49	46	52	48	50	46	50	45
Nov-16	65	62	69	63	60	57	49	45	49	46	50	47	49	47
Dec-16	65	60	68	62	59	55	48	41	48	42	47	42	48	45
Jan-17	70	65	65	58	59	53	49	43	49	44	49	47	50	47
Feb-17	68	62	67	61	61	55	50	46	48	43	50	46	49	44
Mar-17	69	65	66	63	62	57	52	47	46	42	49	44	48	42

Noise Level of HEMM - RKBA Limestone Mines (October 2016 - March 2017)

Machine		Surfaec Miner			Loader		Dozer				
Month	Conditions	Noise Levels (dB)		Conditions	Noise Le	evels (dB)	Conditions	Noise Levels (dB)			
IVIOTILIT	Conditions	At 5m. distance	At 10m. distance	Conditions	At 5m. distance	At 10m. distance	Conditions	At 5m. distance	At 10m. distance		
		Leq	Leq		Leq	Leq		Leq	Leq		
Oct-16	While dozing the material	71	68	While loading to tipper	70	67	While mining	70	65		
Nov-16	While dozing the material	72	69	While loading to tipper	75	71	While mining	73	69		
Dec-16	While dozing the material	69	63	While loading to tipper	69	62	While mining	71	69		
Jan-17	While dozing the material	73	69	While loading to tipper	73	68	While mining	77	68		
Feb-17	While dozing the material	71	67	While loading to tipper	75	70	While mining	70	67		
Mar-17	While dozing the material	69	65	While loading to tipper	73	68	While mining	69	65		

Annexure - 7
Air Borne Dust Survey - RKBA Limestone Mines (October 2016 - march 2017)

	Machine : S	urface Miner			Machine	e : Dozer			Machine	: Loader	
Date	Period	Location	RSPM (mg/m3)	Date	Period	Location	RSPM (mg/m3)	Date	Period	Location	RSPM (mg/m3)
3-Oct-16	06:00 - 14:00	_	0.35	4-Oct-16	06:00 - 14:00	_	0.33	5-Oct-16	06:00 - 14:00	_	0.38
3-Nov-16	06:00 - 14:00	abi	0.31	4-Nov-16	06:00 - 14:00	abin	0.28	5-Nov-16	06:00 - 14:00	Cabi	0.29
5-Dec-16	06:00 - 14:00	e C	0.35	6-Dec-16	06:00 - 14:00	Se	0.3	7-Dec-16	06:00 - 14:00	a)	0.27
2-Jan-17	06:00 - 14:00	sid	0.34	3-Jan-17	06:00 - 14:00	sid	0.29	4-Jan-17	06:00 - 14:00	sid	0.32
2-Feb-17	06:00 - 14:00	_ <u>=</u>	0.32	3-Feb-17	06:00 - 14:00	=	0.28	4-Feb-17	06:00 - 14:00	_ =	0.31
4-Mar-17	06:00 - 14:00		0.33	6-Mar-17	06:00 - 14:00	1	0.27	7-Mar-17	06:00 - 14:00	1	0.3



Annexure 9

EXPENDITURE INCURRED ON THE ENVIRONMENTAL MANAGEMENT PLANS

(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 October'16 to March'17:

(1) Green belt development & dust suppression : 22.53 Lakh

(2) Manpower Cost* : 15.93 Lakh

(3) Operation & maintenance cost of road sweeping : 0.97 Lakh

Machine

(4) Other Env. Protection (Environmental Monitoring) : 1.04 Lakh

(5) Environment Awareness* : 0.09 Lakh

Total: Rs. 40.56 Lakh

^{*}Expenditures common for all the plant & mines.

EXPENDITURE INCURRED ON THE ENVIRONMENTAL MANAGEMENT PLANS

(C) Community Development expenditure by Ambuja: Rs. 1217.79 lakh Cement Foundation**

** Community development expenditure is common for all plant & mines at Ambujanagar. Programme wise Expenditure Details is as below:

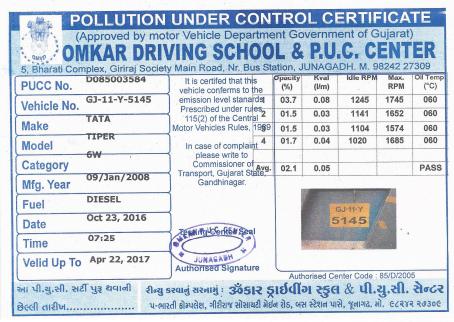
	Ambuj	a Cement Found	ation - Ambuja	nagar			
	Details for program	me wise expendi	ture from Oct.	2016 to march	2017		
							(Rs. In lakhs)
Sr.No	Programme	Funds from ACF Resources	*Funds received through Government	** Funds from other Donors / Donor Agencies	***People's Contribution	****Direct Funding to Communities	Total Exp.
	GUJARAT - Kodinar						
1	Water Resource Mangement & Drinking Water Projects						
	a. Water Resource Devlopment	32.77	-	7.89	-	-	40.66
	B .Drinking Water Programme	5.69	-	12.59	12.50	51.05	81.83
	c. Salinity Prevention (KVY III)	11.28	-	43.90	66.82	59.10	181.10
2	Agriculture Development(Farm Forestry & Afforesation)	5.28	-	5.89	33.60	49.09	93.86
3	Better Cotton Initiative (BCI)	3.17	-	29.83	92.76	7.31	133.07
4	Krishi Vigyan Kendra (KVK)	10.49	99.46	-	-	-	109.95
5	Health & Sanitation Programme	15.00	-	4.34	114.69	187.32	321.35
6	Skill and Enterprunership Development Programme	66.86	-	20.68	15.72	-	103.26
7	Village Knowledge Centre & Anganwadi exp	1.25	-	-	-	-	1.25
8	Women / Youth Development & Others	6.79	-	-	-	-	6.79
9	Integrated Community Development Programme	99.03	-	-	-	-	99.03
10	Co-ordination & Administration Expenses	42.15	-	-	-	-	42.15
11	Capital Expenditure	3.49	-	-	-	-	3.49
	TOTAL	303.25	99.46	125.12	336.09	353.87	1,217.79

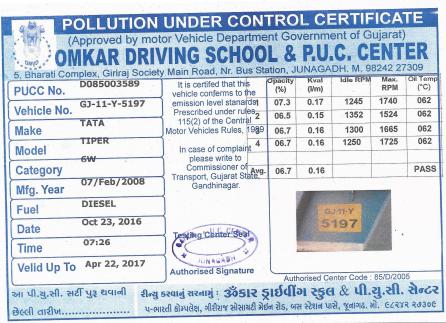
Annexure - 10



Regular water sprinkling is being done on haul roads at RKBA Mines Area

Annexure 11





Annexure 11



(Approved by mot	UNDER CON for Vehicle Department VING SCHOO	ent Go	P.U	ent of G	ujarat ENT	ER
5, Bharati Complex, Giriraj Societ	y Main Road, Nr. Bus St	Opacity	Kval	Idle RPM	Mak	On Leuk
PUCC No.	vehicle conferms to the	(%)	(l/m)		RPM	(°C)
Vehicle No. GJ-11-Y-5149	emission level stanards	01.8	0.04	1542	1745	060
TATA	Prescribed under rules 115(2) of the Central 2	01.4	0.03	1320	1652	060
Make	Motor Vehicles Rules, 1989	01.4	0.03	1241	1625	060
TIPER	In case of complaint 4	01.4	0.03	1420	1652	060
Model 6W	please write to					
Category	Commissioner of Avg.	01.5	0.03			PASS
Mfg. Year 09/Jan/2008	Transport, Gujarat State, Gandhinagar.		or one			
Fuel DIESEL					_	
Date Oct 23, 2016	Testing Cerker Sea		Kent	1. y. 5149	•	
Time 07:26				- 434		
Velid Up To Apr 22, 2017	Authorised Signature	Aut	horised Co	enter Code :	85/D/200	05
ખા પી.ચુ.સી. સર્ટી પુરૂ થવાની રાજ્ય	કરવાનું સરનામું : 3ં0512 ડ્	हाही वी	al 256	1 & ul.	ય.સી.	सेन्दर