

# Ambuja Cement

Regd./ Ad.

MCW / EMD /12 / 2019/ 52

May 28, 2019

To,  
Ministry of Environment & Forest & CC  
Regional Office (WCZ), Ground Floor  
East Wing, New Secretariat Building,  
Civil Line, Nagpur-440001

Kind Attn: - **Additional Director**

Sub : Submission of Half yearly monitoring report for the period of **October 2018 to March 2019** of M/s Ambuja Cements Ltd. (Unit: Maratha Cement Works, Upparwahi), Chandrapur (Maharashtra)

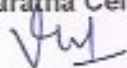
Ref: **EC No. J-11016/11/2004 – IA – II (M), Dtd. 06.01.2005**

Dear Sir,

This has with reference to the above referred EC & the subject matter; we are submitting herewith six monthly compliance report (for the Period of October 2018 to March 2019) for the various conditions stipulated vide above referred EC for our Captive Limestone Mine (ML- III)

We hope that you will find this information in order please.

For, Ambuja Cements Ltd.  
(Unit- Maratha Cement Works)

  
(Dr. Vinod Mishra)  
Dy. General Manager –Environment

Encl :- a/a

- CC: 1. Central Pollution Control Board  
Parivesh Bhawan,  
Opp. VMC Ward Office No. 10,  
Subhanpura, Vadodara  
Gujarat-390 023
2. The Member Secretary  
Maharashtra Pollution Control Board  
Kalpataru Points, 4<sup>th</sup> Floor,  
Matunga Scheme, Road No.8  
Opp. Sion Circle, Sion East  
Mumbai – 400 022
3. Regional Officer,  
Maharashtra Pollution Control Board,  
Udyog Bhawan, 1<sup>st</sup> Floor  
Railway Station Road,  
Chandrapur – 442401 (M.S.)

**Ambuja Cements Ltd.**

(Unit : Maratha Cement Works)

At & Po – Upparwahi – 442 908, Taluka – Korpana, Distt – Chandrapur (M. S.)

Tel. : 07173 – 240015-20. Fax : 07173 – 240008 – 9

Regd. Office : P. O. Ambujanagar – 362 715, Taluka – Kodinar, Distt – Gir Somnath (Gujarat)

CIN No: L26942GJ1981PLC004717 Website : [www.ambujacement.com](http://www.ambujacement.com)

### Table of Content (ML- III)

Sr. No.	Details
1	Compliance status of EC No. J-11016/11/2004 – IA – II (M), Dtd.06.01.2005
2	Photographs of Top soil Conservation and over-burden dump site stabilization (Annexure 1)
3	Photographs of Garland drains constructed around dumps/ Plantation around ML area and Dust extraction systems in Drilling machine (Annexure 2)
4	Details of Peripheral bunds, Check dams, Siltation ponds & Garland drains (Annexure 3)
5	Details of Plantation (Annexure 4)
6	Details of Rainwater Harvesting (Annexure 5)
7	Details of Activities carried out by Ambuja Cement Foundation (Annexure 6)
8	A copy of Water quality and Water level measurement report (Annexure 7)
9	Details of SWRP and ETP (Annexure 8)
10	Six Monthly Average Values of Ambient Air Quality (Annexure 9)
11	Photographs of fugitive emission control systems/Water sprinkling systems (Annexure 10)
12	Summary of Results of Fugitive Emission Monitoring (Annexure 11)
13	Monthly Values of Noise Level Monitoring (Annexure 12)
14	Photographs of Pollution Control Equipments installed (Annexure 13)
15	Technical Details of ESP & Bag House (Annexure 14)
16	Six Monthly Average Values of Stack Emission Monitoring (Annexure 15)



**COMPLIANCE STATUS OF MoEFCC EC CONDITIONS OF  
0.5 MILLION TON / ANNUM LIME STONE MINES (ML- III)**

**Period from 01.10.2018 to 31.03.2019**

**(EC No. J-11016/11/2004 – IA – I I (M), 06.01.2005)**

Sr. No.	Condition	Status/Report
<b>A.</b>	<b>Special Condition</b>	
(i)	Top soil shall be concurrently used for green belt development.	Stacked top soil is being used for greenbelt development and overburden stabilization. For the period from 01.10.2018 to 31.03.2019 4330 m <sup>3</sup> of Top soil has been generated & utilized for greenbelt & till date 99408 m <sup>3</sup> of Top soil generated & utilized for green belt development. The details are enclosed as <b>Annexure – 1.</b>
(ii)	Peripheral bunds, check dams and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from the mining operations. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted and maintained. Garland drain (size, gradient and length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall 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.	Complying. The Photographs are attached as <b>Annexure – 2.</b> Peripheral bunds, Checkdams and siltation ponds of appropriate size have been constructed to arrest silt & sediment flow from mining operations. The drains are desilted prior to the monsoon. The details of Peripheral bunds, Check dams, Siltation ponds & Garland drains are enclosed as <b>Annexure – 3.</b>
(iii)	Drills should be wet operated or with dust extractors and controlled blasting should be practiced.	We have 3 nos of Atlas Copco drill machines which are fitted not only with wet drilling system but dust extractor also. We are doing controlled blasting by using nonel as Down the Hole as well as trunk line delay connectors. Photographs are attached as an <b>Annexure -2.</b>
(iv)	Crusher should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, haulage roads, transfer points, etc	The existing crusher is having high efficiency bag filter and automatic dust suppression system at dump hopper. The details are enclosed as <b>Annexure – 13.</b> The details of Bag filters enclosed as <b>Annexure – 14.</b>



(v)	Plantation should also be raised along the roads, dump sites, etc covering an area of 10.90 ha. This includes a wide green belt along the periphery of the ML area, non mineralized area and along road side within the lease area by planting native plant species in consultation with local DFO / Agriculture Department. At least 2500 plant species/ha should be planted.	Complied with, Limestone mine is surrounded with other existing mining leases. Till date Around 355736 trees have been planted in the total mining lease area. The density of plantation is 2546 plant/Ha. The details are enclosed as <b>Annexure – 4, 1 &amp; 2.</b>
(vi)	The excavated pit of an area of 17.73 ha shall be converted into an artificial water reservoir. Water harvesting measures shall commence from the 11 <sup>th</sup> year of mining operations. The higher benches of the void shall be terraced and plantation done to stabilize the slopes. Peripherals fencing shall be done along the excavated area.	The excavated pit of an area of 17.73 ha shall be converted into an artificial water reservoir as per the conceptual plan at the end of mine life. The details of rain water harvesting enclosed as <b>Annexure – 5</b> & details of CSR work carried out by ACF enclosed as <b>Annexure – 6.</b>
(vii)	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new peizometers at suitable locations in project area. The frequency of monitoring should be minimum four times a year – January, pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) seasons for ground water level and in May for quality. Data generated from ground water regime monitoring will be submitted to CGWB, Regional Office on an annual basis.	Groundwater level and quality is regularly monitored and report submitted to CGWB and MoEFCC. A copy of latest report submitted enclosed as <b>Annexure – 7.</b>
(viii)	A detailed mine closure plan should be submitted to MOEF five years in advance for approval.	Noted and will be Complied off.
(ix)	A Consent to operate should be obtained from the SPCB before commencing production	Consent to Operate obtained from MPCB Vide letter No. Format 1.0/BO/CAC-Cell/EIC No.CH-15/CAC- 10176 dated 07.10.2016 Valid upto 31.03.2021.
<b>B. <u>General Condition</u></b>		
(i)	No change in technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	Agreed.
(ii)	No change in the calendar plan including excavation, quantum of limestone, waste/OB dumps should be made.	Noted and being Complied.
(iii)	Four ambient air quality monitoring stations should be established in the core zone as well as buffer zone for SPM, RPM, NOX and SO2. Location of the ambient air quality stations should be decided based on	AAQMS established in the core zone and regular monitoring being done. The details are enclosed as <b>Annexure – 9.</b>



	meteorological data, topographical features and environmentally and ecologically sensitive targets and the frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	
(iv)	Data on environmental quality should be regularly submitted to the Ministry including its Regional office at Bhopal and the State Pollution Control Board / Central Pollution Control Board once in six months.	Complied with. The details are enclosed as <b>Annexure – 15, 9 and 12</b> . Last report submitted on 27.11.2018.
(v)	Adequate measures for control of fugitive emissions should be undertaken such as water spraying arrangements on haul roads, loading and unloading points and transportation of minerals, etc. Fugitive dust emissions from all sources should be regularly monitored and data recorded properly.	To control fugitive emissions we are using Drill machine with inbuilt dust extraction system. Regular water spraying on haul roads and crusher hopper to control the fugitive dust. We have also provided permanent water sprinklers on mines roads. The details are enclosed as <b>Annexure – 2 &amp; 10</b> . The fugitive emission monitoring report is enclosed as <b>Annexure – 11</b> .
(vi)	Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations. Operation of HEMM, etc. should be provided with ear plugs / muffs.	We have done massive plantation around the Mine areas. The details are enclosed as <b>Annexure – 4 &amp; 2</b> . Regular checking and maintenance carried out for all the heavy mines machineries. We have adopted state of the art blasting technology to control ground level vibration & noise. Necessary PPE's e.g ear plug/muffs have been provided to the persons working in the area. The ambient noise monitoring report enclosed as <b>Annexure – 12</b> .
(vii)	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed 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 effluents from the Workshop.	Only small quantity of water is generated from mine workshop which is recycled back again in the system after treatment in the ETP. No discharge from the system. Photographs are enclosed as <b>Annexure – 8</b> .
(viii)	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 programme of the workers should be undertaken periodically and corrective measures	Safety & Environment departments are imparting training program on regular basis to all the workers for the appropriate use of PPE's. PPE's have been provided to all workmen. Occupational health surveillance programme of the workers are undertaken



	taken, if required.	periodically and corrective measures taken as per requirement.								
(ix)	The data on environmental quality should be collected and analyzed either through an in-house environmental laboratory established with adequate number and type of pollution monitoring and analysis equipment or got analyzed through an approved laboratory under the Environment (Protection) Rules, 1986 in consultation with the State Pollution Control Board.	We have deployed competent team for monitoring and sampling of data and analysis reports are submitted to MPCB/MoEFCC regularly. Also we have deployed MoEFCC NABL accredited 3 <sup>rd</sup> party to carry out the monitoring regularly.								
(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.	We have established Environment Management Department (EMD) having multi-disciplinary team of professionals and technical staff with vast experience headed by Dy. General Manager - Environment who reports directly to the Plant head.								
(xi)	The funds earmarked for environmental protection measures should be kept in separate account and not diverted for any other purpose. Year wise expenditure shall be reported to the Ministry of Environment & Forests.	Noted and being Complied. The year- wise expenses for last 3 years are as follows: <table><tr><th>Year</th><th>Expenses (Rs. Lacs)</th></tr><tr><td>2015-16</td><td>283.00</td></tr><tr><td>2016-17</td><td>309.00</td></tr><tr><td>2017-18</td><td>226.93</td></tr></table> <i>*Expenses inclusive of Cement Plant, CPP &amp; Mines</i>	Year	Expenses (Rs. Lacs)	2015-16	283.00	2016-17	309.00	2017-18	226.93
Year	Expenses (Rs. Lacs)									
2015-16	283.00									
2016-17	309.00									
2017-18	226.93									
(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.	Complied, The project has been financed through the internal accruals and the same has been approved on April 2004.								
(xiii)	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated environmental conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	Noted.								
(xiv)	A copy of the clearance letter should be marked to concerned Panchayat / local NGO, if any, from whom any suggestion / representation has been received while processing the proposal.	Complied with.								
(xv)	The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's /Tehsildar's Office for 30 days.	Noted.								

(xvi)	The project authorities should advertise at least in two local newspapers 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 environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at web site of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> .	Complied with.
3.	The Ministry or any other competent authority may stipulate any further additional condition for environmental protection.	Noted.
4.	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance.	Noted.
5.	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.	Noted.



**Top soil Conservation And Over burden dump site stabilization**

Top soil of mine out area collected stacked for further utilization of topsoil for slope stabilization.



Special Initiatives has been taken for top soil conservation and over burden dump stabilization. Overburden dump of limestone mines has been vegetated by covering with topsoil and tree plantation. The overburden dump has been covered with coconut fibre blanket which helps to bind the soil for plantation.



Before



After

**Dump Stabilization activity under process**



**Stabilized Dump slope**



MCW is having ROC F9 drill machine which has inbuilt dust extractor system



Drilling machine with in built Dust extraction system



Garland drain constructed around dumps



Plantation around ML area

## Details of Peripheral bunds, Check dams, Siltation ponds &amp; Garland drains

As on 31<sup>st</sup> March 2019

ML - I (Capacity - 1.5 MTPA Limestone) 579.91Ha.			
Bund(Berm)	6253.00M		
	Garland drain in meter	Siltation tank	
		L*W*H	
South Teenguda side	208		
Top soil Dump Dewara	818	30*10*2.50	300.00 sq. meter, 750.00 cub meter
Teenguda dump	2024	70*25*4.50	2569.00 sq. meter, 11560.50 cub. Meter
Top soil Near teenguda dump	719	25*20*2.00	500.00 sq. meter, 1000.00 cub. Meter
Total	3769		
Construction of retaining wall	40.00 meter	40*1*1	

ML - II (Capacity - 2.0 MTPA Limestone & 0.2 MTPA Shale) 880.31Ha.			
Bund(Berm)	7865.00M		
	Garland drain in meter	Siltation tank	
Lakhmapur	930		
Near crusher dump	651		
Near ANFO top soil	440	20*15*2.00	300.00 sq. meter, 600.00 cub. Meter
Near ANFO Waste dump	497	24*15*1.80	360.00 sq. meter, 648.00 cub. Meter
Waste dump towards north side	1035	28*13*2.00	364.00 sq. meter, 728.00 cub. Meter
		20*10*2.00	200.00 sq. meter, 400.00 cub. meter
Sub grade dump north side	1016	20*12*2.00	240.00 sq. meter, 480.00 cub. meter
Total	4569		
Construction of retaining wall	100.00 meter	100*1*1	

ML - III (Capacity 0.56 MTPA Limestone) 49.00Ha.			
Bund(Berm)	1243.00M		

Combined details of three lease as on 31<sup>st</sup> March 2019

Bund(Berm)	15361.00 meter
Siltation tank	8 Nos.
Garland drain	8338.00 meter



## Tree Plantation details as on March 2019

Sr. No.	Location	YEAR OF PLANTATION							Total plantation	Area in Ha.
		Upto 2012	2013	2014	2015	2016	2017	2018		
1	Plant	46872	500	225	0	0	0	0	47597	16.25
	Infilling	176	500		316		673	0	1685	
2	Colony	43998	1400	4500	242	0	0	0	50140	19.076
	Infilling	1170	100						1270	
3	Mines	277204	10500	12600	9000	6500	15632	17300	348736	
	Infilling	18500	1000	2000	800		400	2000	24700	139.74
	Jatropha plantation	7000							7000	
4	App. Road / transportnagar	3585					63	570	4198	7 km
		0							0	
5	Avenue plantation	5370	1200			0	0	0	6570	5 KM
	Infilling	450							450	
6	Other plantation in villages	41391	441		302	9500	2575	2300	56509	21.57
	Total plantation Nos.	445696	15,641	19,325	10,660	16,000	19,343	22,170	5,48,835	

**Rainwater Harvesting**

We are using excavated mines pit for rainwater storage. We have increased our rainwater harvesting capacity around 714838 M<sup>3</sup>, which is being used in plant for various purposes. We have made rainwater harvesting pits in plant premises and in colony area having capacity of 36000 and 27840 m<sup>3</sup> respectively. We have also done rooftop water harvesting in colony area having rainwater harvesting potential around 1550 m<sup>3</sup>.





Ambuja Cement Foundation (ACF)  
**SIX MONTHLY PROGRESS REPORT ON ACF CSR WORK**  
**(OCTOBER 2018 TO MARCH 2019)**

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### **Agro based livelihood program ( ABLP)**

ACF is working extensively in the area of agro-based livelihood generation among rural communities in Chandrapur district of Maharashtra. Our work bridges the gap between technology and farming, empowering farmers to adopt practices that are both sustainable and profitable in the long run. Our work has found support through partnership with various likeminded organisations, BCI, NABARD. We also collaborate with CICR-Nagpur and encourage scientists to share their knowledge and best practices with the community.

ACF's agro-based livelihood programme is implemented through following approach:

- A. Better Cotton Initiative (BCI)
- B. Better crop management initiative (BCMI)
- C. Aquaculture (Fisheries)
- D. Livestock Development (LSD)
- E. Institute of Farmer Collectives (IFC)

**Ambuja Cement Foundation (ACF)****A. Better Cotton Initiative (BCI):**

ACF, Chandrapur working with BCI project since 2009 in adjoining village of Maratha Cement Work, from the year 2012-13 extend area of BCI under BCFT program for 5 year, current year under BCI GIF 2018-19 ACF- Chandrapur covering 49238 farmers with 1399 learning groups in 441 Villages of Rajura, Jiwati, Korpana, Bhadrawati, Chimur, Chandrapur and Warora Blocks of Chandrapur district.

**Year wise expansion of the program:**

Year	2010-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	Plan 18-19
Villages	11	5	14	26	46	90	90	216	441
Farmer	304	483	1241	1980	4055	8224	8801	22009	49238
Area (Ha.)	246.50	1207.80	2529	4675.6	10932	21959	22761	48200	107267

**Objectives:**

- To demonstrate the inherent benefits of Better Cotton production, particularly the financial profitability for farmers.
- To reduce the impact of fertilizer and pesticide use on human and environmental health.
- To improve soil health and biodiversity.
- To promote Decent Work for farming communities and cotton farm workers.
- To facilitate global knowledge exchange on more sustainable cotton production.
- To increase the traceability along the cotton supply chain.

**B) Better crop Management Initiative (BCMI):-**

The project area has cotton based cropping pattern along with cotton farmer are growing soybean, wheat and pulses as well as paddy is slightly growing by farmers in the few villages. The issues observed in need assessment regarding cultivation of secondary crops like soybean, wheat, paddy and pulses are gradual decline of yield, varietal and seed replacement rate is very low, Lack of adoption of improved cultivation practices mainly in secondary crops, middleman exploitation in marketing due to no market linkages, and cotton based cropping pattern resulted low crop diversification in the area. Considering with mentioned issues ACF, Chandrapur decided to work on ICM within the following Objectives.

**Objectives of BCMI:-**

- To enhance the productivity of secondary crops of area (Soybean, wheat and pulses)
- To increase adoption of diversified cropping pattern.



#### Ambuja Cement Foundation (ACF)

- To facilitate government's schemes under ICM.
- To reduce the cultivation cost by introducing cost reduction technologies
- To promote judicious use of water
- Establish market and other needful linkages
- 

#### C) Aquaculture (Fisheries)

In the vision of farmer long time sustainability ACF introduced Aquaculture (Fisheries cultivation) as well as improved practices of aquaculture which is recommended by concern fisheries department.

#### Objectives of Aquaculture:-

- To develop sustainable source of livelihood through fisheries cultivation.
- Provide and aware about improved practices of aquaculture.
- Engagement of other family member in their own farm.
- Establish market and other needful linkages within farmer and buyer.

#### D) Livestock Development (LSD):-

We have been organizing livestock management 26 villages providing support for Primary treatments for the animals in the villages as well as specialty camps for is being organized in collaboration with Animal husbandry Dept. Under these camps many activities are performed such as vaccination, health check up, treatment, Infertility, De-worming, castration, and Artificial Insemination etc.

#### E) Institute of Farmer Collectives:-

Ambuja Cement Foundation (ACF) works closely with farmers through Agro based Livelihoods Programme. This closeness has helped ACF to deeply understand the problems faced by farmers in this region. Problems can be summarized into unavailability of agricultural credit, inadequate and untimely supply & poor quality of agri-inputs, lack of scientific and technological knowhow regarding different agricultural practices and lack of remunerative prices for agricultural produce. This has led to the formation of *Gadchandur*

*Farmer Producer Company Limited (GFPCl)*. GFPCl had established an Agri-Mall which is a one stop shop to provide quality agro-inputs to farmers at reasonable rate as well as perform the role of 'One Window' service provider for all the needs of farmers and tap the potential of rural markets by developing several agribusiness activities.

For that purpose to create sustainable model of farmer collectives ACF formed 46 *krishi Vikas samittee* in 46 villages and this year we initiate farmer self help group for saving their own money and

**Ambuja Cement Foundation (ACF)**

all groups linked with GFPCL to diminishing the dependency of agri shop owner and village level moneylenders.

**Objective of IFC:-**

- Federate farmer in groups and make independent.
- To diminishing the dependency of moneylender.
- Collective purchasing of agri input as well as selling.
- Link with GFPCL.

**Output of capacity building and farmers support activities from Oct-18 to March 19**

Sr. No.	Particulars	No. of activities	No. of Beneficiaries
<b>A</b>	<b>Better Cotton Initiative</b>		
1	Staff Training	06	11
2	Field Facilitator Training	36	81
4	Training of Lead Farmer	12	1120
5	Farmer Training on agronomical Aspect including one Agri expo	2798	31000
6	Women Training & Women farmers melava	235	8206
7	Worker Training	190	3200
<b>B</b>	<b>Better Crop Management Initiative</b>		
1	Farmer Training	70	900
2	Field day	20	1900
3	Organised demonstration	469	469
<b>C</b>	<b>Aquaculture (Fisheries)</b>		
1	Promotion of Fisheries	1	22
<b>D</b>	<b>Livestock Development</b>		
1	Animal Health camp	1	386



## Ambuja Cement Foundation (ACF)

2	Promotion of Breeding Buck	0	0
3	Exposure Visit	1	22
E	Institute of farmer Collectives		
1	BOD meeting	7	10

## Snapshot of the ABLP



## Ambuja Cement Foundation (ACF)

**Water Resource Management program – Oct 2018 to March 2019**

In this year water resource management program done for mainly increasing ground water table and irrigation purpose but also work for drinking water purpose. Various types of water recharge structure work under this program like Check dam construction, Repairing and renovation of Check dam, Watershed activity like Farm pond, Farm bunding, Water absorption trench, loose boulder structures etc. Total 1230 People benefited from this program.

**1. Watershed activity :**

- Repairing of 3 CNB at Warzadi and Baleguda village.
- Nalla Deepening and widening 600 mtr
- Farm Bunding at Sonapur Gp Including Saleguda & Baleguda village – 160 ha
- Water Storage Capacity – 11200 Cum
- Area Under irrigation – 22.5 ha

**2. Drinking water facility :**

- Providing borewell at Kukudsath village
- House hold benefitted – 150 HHs

**3. Micro irrigation :**

ACF working on micro irrigation like sprinkler and drip. ACF support to farmers to installation of sprinkler and drip on the contribution of only 30% on sprinkler and 10% on drip by the ACF. This year 15 farmers are benefitted to Sprinkler installation.

**4. Integrated water resource management program :**

IWRM run with the Government of Maharashtra and done the work in last six month like farm bunding, Constriction of Check dam 3 no, Nalla Deepening and widening 3 km etc. After the completion we complete the billing procedure and follow up to the government for 55 % Share received. Rs 28 lakh amount received from the government of Maharashtra.





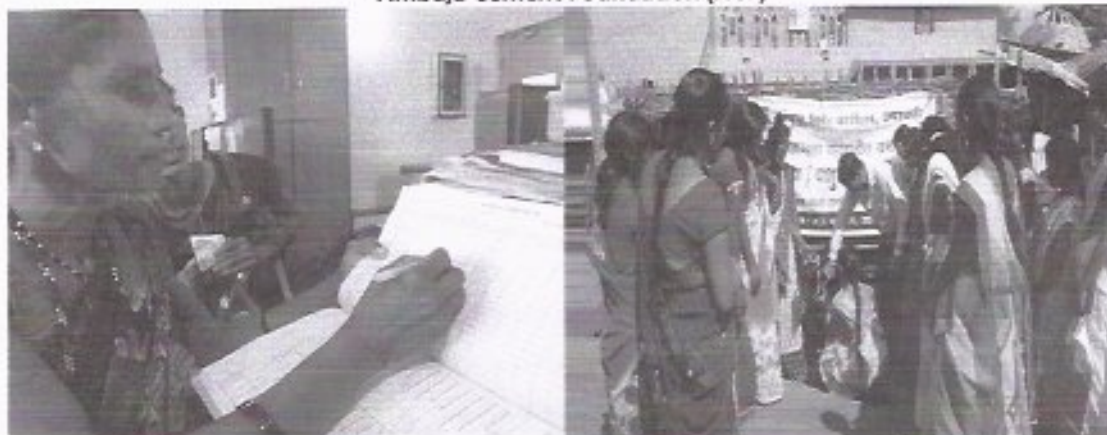
### Ambuja Cement Foundation (ACF)

#### Women Empowerment Programme – Oct. 2018 to March 2019

Our women empowerment is one of the key initiatives of our women empowerment program. Empowering women through financial independence, growth of women education, growth of economic, Women and sanitation, Safe & scare life, Social & political level is the major objective of our program. As per our objective we have work with 159 women SHGs and we have doing the work with total 1806 women members as a financial literacy, bank linkages for free from money lenders, work for gender balance in community, work for political level as like women Gramsabha and women Sarpanch and member of panchayat Samitee, strengthen the gram sabha & increase women participation in women gram sabha. As of April to March 2019, ACF, Chandrapur work with 159 Self Help Groups, encompassing 1806 women in 45 villages with a collective saving base of Rs.95.20 complementing and supplementing the family incomes substantially. Continually we have done the work with Expert local bodies like banks, village GPs, Government agencies, NABARD (Panchayat Samiti, Zila Parishad, and Other non-government agencies) are help with to ensure long term sustainability of SHG's. Presently ACF run this program is own level but most of other organizations has participated for help to women SHG & federation. Exam Vidharbha Co-operative Marketing Federation, Nagpur (Sub branch Chandrapur), Indian Potash Ltd, Led Bank of India Chandrapur & SBI Branch, Gadchandur, SBI Bank work for customer service point (CSP), Bank of India, Upparwahi & Wansadi for high bank linkages.



### Ambuja Cement Foundation (ACF)



The main activity of the SHGs is thrift and credit and as per need of SHG members. The SHGs are then trained in different vocations & linked with the banks to start micro enterprises either in group or individually based on their interest. After receiving the bank loan SHG members starting the own IG activities. In the month of Dec.2018, our 5 SHG members have started own business from Pradhan Mantri Mudra loan schemes. Our SHGs have engaged in enterprises like Goat Farming , Herbal medicine, *Sewaya making*, goatry, vegetable cultivation, Poultry units, Dalmil, Beauty parlar, paper plate making, Pickles making & others like canteen, Mess, Dress design, Ladies cloth canter, Masala making, bags making & Zunka bhakar Kendra, Mid-Day-Mil to School and Anganwadi etc. As earning and contributing members of the family they are now active player in family decisions, responsible inter loaning bodies and operating village institution in the development of their villages. Most of the SHGs have involved in village sanitation work under **the Community Led Sanitation project support from Gruh Finance Ltd.** Under the project our SHGs are engage in various activities as like motivation to house hold for construction of toilets & its use , village cleaning drive & safe drinking water.

In women empowerment program, ACF has promoted Ekata women federation for sustainability view. Ekata women federation has formed by ACF under society act 1960 in year 2009. When federation has formed only 13 SHGs joined with federation but now total 120 SHGs has joined with monthly Rs. 200 saving and now total 13.17 lacks total saving. Under the saving habits federation has promoted many types of support services for SHGs as like quality seed and fertilizers, Market analysis for SHG products, Loan for higher education and housekeeping, Loan for toilets construction

Work with Gruh Finance Ltd. Ahmedabad: A big support for construction of toilets from Gruh Finance Ltd. To Ekata women federation total amount of Rs.32 lacks. (2014-15 Rs.10.00, 2015-16 Rs.10.00 , during 2016-17 10.00 & 2018-19 -Rs.2 lacks) .From received amount total 513 (91 +259+130+ 46=526) toilets constructed and 22 was under in progress.

#### Program components:



## Ambuja Cement Foundation (ACF)

Activity	Sub Total ( April to Sept. 2018 )		Cumulative ( Sept 2018 to March 2019 )		Cumulative ( April 2018 to March 2019 )	
	No. of activities	Total Participants	No. of activities	Total Participants	No. of activities	Total Participants
New SHGs	11 New SHGs has formed	148	16	187	27	335
Awariness sessions for new SHGs	13	442	58	1176	71	1618
Concept training for new SHG	7	222	10	213	17	435
Leadership Training	2	63	6	67	8	130
Gener Sensitization Training -2	2	59	4	112	6	171
Panchayat Raj awareness session (Hardona khu. Pimpalgaon & Piparda )	1	89	4	110	5	199
Internal Exposure visit for toilet construction work SHG members	2	48	2	65	4	113
Social activities through the SHGs	3	56	14	248	17	304
Entrepreneurship Promotion ( EP)	2	29	2	44	4	73
Development of SHGs ( Federation meeting )	16	1128	28	1650	44	2778
Development of SHGs (Cluster level meetings)	3	58	3	66	6	124

- Capacity Building through the training and workshop : Objective :**
  - 1) To build the capacity of village level literate and illiterate women and their families
  - 2) Established linkages with bank and other microfinance institute for free form money lenders and increase their financial status
  - 3) Increase their confidence for livelihood promotion
  - 4) Established linkages with Block and District level for strong networking with government department.
  - 5) Maintain proper books and Accounts

**Ambuja Cement Foundation (ACF)**

for financial literacy 6) Women Pressure group for development and stop the illegal habits .7) To build the leadership quality and design making power. 8) Work for social aspects.

- **Livelihood Promotion : Objective :** 1) Women involvement in On farm and Non-farm activities for increase financial status 2) Linkages with banks for Pradhan Mantri Mudra loan 3) SHG loan 4) ICICI loan for house repairing and construction . 5) Business plan and start the small entrepreneur 6) Linkages with Bank under Pradhan Mantri Mudra Loan schemes 7) Risk assessment and development plan.
- **Pashusakhi Project : Objective** 1) Livestock development and IGA promotion 2) Goat management and treatment for livelihood promotion 3) Support for farming 4) Lifestyle management 5) Increase livelihood status 6) Established small entrepreneur 7) Decreases the Mortality of Goatry and Poultry 8) Awareness among the villages or Pashupalak regarding Nutrition Food , Clean Water & Vaccine .
- **Eshakti Project under NABARD: Objective:** 1) Proper data entry and book keeping 2) Easy bank loan process 3) Good networking with NABARD and government agencies . 4) SHG members join to Social security ( PMJJY , PMSJY, APY).
- **Haqdarshak Project : Objective :** 1) Increase awareness about government schemes 2) System of beneficiary form submission Project Objectives and Scope of Work
- Identification and training of 25 Haqdarshaks in Chandrapur, Maharashtra.
- Training and capacity building of the identified members of Foundation to guide the Haqdarshak and monitor their performance.
- Daily planning, training of Haqdarshak and monitoring of the plan
- Updation of the scheme information as per revision in the scheme guidelines announced by the government.
- Regular backend and platform maintenance support by HESPL.
- Details about activities since February 2018.
- Training content was focused on the mobile app usage, capacity building on specific schemes (as per community demand), filling application forms by themselves, increased number of application targets to be achieved month on month, tracking of application status, documenting benefits received and proof collection
- Haqdarshaks (HD) have been identified to master the application process and details of a particular scheme and then handhold other HDs ensuring collective learning and sharing.



#### Ambuja Cement Foundation (ACF)

- HDs were empowered and encourage in helping citizens and Gram Panchayats (GPs) in registering for different drives launched by the government from time to time. Some examples: registration for Animal husbandry scheme, ration card update drive etc.
- Along with it attempts were made to connect HDs with SHG members, federations, village-level Organizations, VLCs by conducting numerous meetings. In this phase efforts were also made to convert previous screenings to applications by reaching out to citizens;
- Results of these efforts are clearly visible in terms of number of screenings, number of applications, number of benefits received and number of village-level meetings conducted;
- A system of organizing HD meeting every fortnight was institutionalized. This helped in systematic planning of work and its review on a regular basis;
- Local ACF teams were all informed and updated about the work in the HESPL project. Fortnightly work plans were charted out in consultation with ACF team-nominated executives, team leader and other members for their inputs;
- MIS coordinators of ACF were trained to handle HESPL's OPSCO portal for tracking operation status and extracting relevant information to assess impact and progress;
- Continuous to and fro communication with HDs was ensured via channels like WhatSapp



## Ambuja Cement Foundation (ACF)



- Plantation & Safety awareness program:** ACF did not do the work with women for only financial sustainability but also do the work with social development & responsibilities of our society. SHG women have participated in plantation work, Safety related work at village level. They know very well this is for what? 'Safe & health life' Under social activities SHGs has involved many types of social program and they organized Savitribai Fule jayanti, Makarsankranti Programs & safety awareness program . The impact is 74 SHG members have purches Helmet for her husband and continues homering for use of safety kit on farm practice and use helmet when they drive.
- Ekata Women Federation :** In every month from April to Sept. 2018 , 16 mass level federation meeting and 11 cluster level meetings organized by ACF at cluster level & most of SHG leaders have participated in meeting for taken the designee & development work at village level . From April to Sept. 2018total 16 meetings held on ACF. In the meeting SHGs & Federation members have participated with their village women & they decided strategy of work, process of loaning, identified the IG activities at group or individual level. Women also discussed about construction of toilets for better women & her family life. Now SHG women have involved in toilets



### Ambuja Cement Foundation (ACF)

construction work at Pimpalgaon, Isapur, Baleguda, Piparda & Hardonakhu, Manoliguda, Saleguda, Hirapur & Piparda village. Though the federation 5 types of support services provided to SHGs as like small loan for basic needs, loan for toilet construction under Gruh Finance Ltd., Seed and Fertilizers for stop the money lender issue and federation can do the work for girls education and social issues.



MCW/EMD/19/2019/49

May 27, 2019

To,

Ministry of Environment & Forest & CC  
Regional Office (WCZ), Ground Floor  
East Wing, New Secretariat Building,  
Civil Line, Nagpur-440001

**Sub: Submission of Ground Water Level & Quality report**

**Ref: As per specific Condition of the following EC**

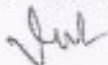
1. EC NO J-11015/399/2006-IA II(M) dtd 29.06.2007
2. EC NO J-11015/400/2006-IA II(M) dtd 29.06.2007
3. EC NO J-11016/11/2004-IA II(M) dtd 06.01.2005

Dear Sir,

Please find enclosed herewith the Pre monsoon season (May 2019) Ground Water Level & Quality data of surrounding area of Maratha Lime stone mines. This is as per the specific condition no (x) of above referred EC no 1 & 2 & (vii) of EC no 3.

We hope that you will find this information in order please.

For, Ambuja Cements Ltd.  
(Unit: Maratha Cement Works.)



(Dr. Vinod Mishra)  
Dy. General Manager (Environment)

CC: Member Secretary,  
Central Ground Water Authority,  
West Block 2, Wing 3 (Ground Floor),  
R K Puram, Sector 1,  
New Delhi 110086

Regional Director  
Central Ground Water Board  
N.S. Building, Civil Lines,  
Nagpur-440001 (Maharashtra)

Ambuja Cements Ltd.  
(Unit: Maratha Cement Works)  
At & Po - Upperwahi - 442 908, Taluka - Korpana, Distt - Chandrapur (M. S.)  
Tel. : 07173 - 240015-20, Fax : 07173 - 240008 - 9  
Regd. Office : P. O. Ambujanagar - 382 715, Taluka - Kodinar, Distt - Gir Somnath (Gujarat)  
CIN No: L26942GJ1981PLC004717 Website : [www.ambujacement.com](http://www.ambujacement.com)



## Ground water Level Measurement Report

May 2019 (Pre-monsoon)

Sr. No.	Name of village	Location / Landmark of well	Location Code	Water Level ( In Meter)
1	Panchgaon	Near Barikrao Atram House (Common Well)	VDW1	3.1
2	Bhendwi (Gereguda)	Sheikh Rajjak agricultural land (Personal well)	VDW2	5.3
3	Hirapur	Near Jaitu Meshram House (Common Well)	VDW3	3.1
4	Sonapur	Near Gram Panchayat (Common Well)	VDW4	11.9
5	Pandharpaoni	Near Laxshman Pendorer House (Common Well)	VDW5	12.6
6	Chandanwahi	Near Nanji Darekar House (Common Well)	VDW6	4.6
7	Pimpalgaon	Near Wasant Lohe (Private Well)	VDW7	8.2
8	Thutra	Near Bobade's House (Private Well)	VDW8	8.3
9	Upparwahi	Near Santosh Hanumante House (Common Well)	VDW9	5.5
10	Mangi (Big)	Near Mata Temple (Common Well)	VDW10	8.2
11	Mangi	Sawkar Well	VDW11	9.0
12	Hardona (Khurd)	Near Ramesh Zade house	VDW12	10.5
13	Gadchandur	Near Premchand Borkar House (Common Well)	VDW13	11.7

## Piezometer well water Level Measurement Report

May 2019 (Pre-monsoon)

Sr. No.	Location	Co-ordinates ( Latitude & Longitude)	Location Code	Water Level ( In Meter)
1	Thutra	19.720990 N, 79.192074 E	PZ-1	4.1
2	Mines Site Office	19.705503 N, 79.212236 E	PZ-2	10.7
3	Magzine area	19.697453 N, 79.208725 E	PZ-3	20.3



Ambuja Cements Limited  
( Unit :- Maratha Cement Works)

Summary of Drinking Water Analysis Report of Surrounding Village  
May-19

Sr. No	Parameter	Unit	Calcium	Magnesium	Chloride	Fluoride	Hardness (CaCO <sub>3</sub> )	Iron	Lead	Copper	Thiocy	Upper	Mang (Bp)	Mang (Bp)	Hardness (CaCO <sub>3</sub> )	Gerhard
1	pH		8.13	8.01	7.88	7.76	7.34	7.54	7.52	7.72	7.91	7.40	7.90	7.75	7.64	
2	Total Dissolved solid	mg/l	870.00	556.00	726.00	602.00	606.00	880.00	550.00	552.00	504.00	612.00	482.00	542.00	282.00	
3	Total Alkalinity	mg/l	422.20	266.70	484.10	315.00	312.50	309.40	262.25	197.40	294.00	368.50	287.70	319.20	142.80	
4	Iron	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
5	Fluoride	mg/l	0.45	1.78	1.09	1.31	0.50	0.30	0.45	1.36	0.64	0.30	1.97	1.32	0.39	
6	Chloride	mg/l	119.04	28.88	66.34	37.28	78.70	78.87	35.68	82.81	36.23	68.31	40.37	33.12	16.58	
7	Total Hardness	mg/l	325.50	344.40	489.30	408.50	317.10	344.40	423.87	368.50	303.30	354.80	262.00	300.00	199.50	
8	Sulphate	mg/l	36.80	9.72	31.58	22.88	51.18	38.93	54.32	30.45	55.07	35.63	25.82	28.15	44.70	

**Sewage Water Reclamation Plant**

We have installed SWRP (Sewage water recirculation plant) with concept of treating & 100% recycling of domestic sewage water. It is a regular practice at ACL to recycle 100% treated water for process usage. It reduces the burden on water supplying agencies and indicates our environmental commitment.





Ambuja Cements Ltd.,  
(Unit: Maratha Cement Works)

**Effluent Treatment Plant at Mines Workshop**

We have installed ETP (Effluent Treatment plant) for treatment of Mines workshop waste water. The treated water is recycled back into the system.



**Ambuja Cements Ltd.**  
 (Unit: - Maratha Cement Works, Upparwahi)  
**Air Quality Monitoring Results**  
**For Captive Limestone Mines, Cement Plant and Captive Power Plant**  
**Six Monthly Average Values of Ambient Air Quality**  
 (From 1<sup>st</sup> October 2018 To 31<sup>st</sup> March 2019)

Sr. No.	Location	Distance From Plant (km)	Direction w.r.t. Plant site	Ambient Air Quality Results ( $\mu\text{g}/\text{m}^3$ )			
				PM2.5	PM10	SO <sub>2</sub>	NO <sub>x</sub>
1	House ( L- Type)	0.5	E	18.93	51.71	6.63	18.35
2	Guest House (Near Bachelor Accommodation)	0.5	SE	25.19	51.98	10.05	25.07
3	L.S. Crusher	0.1	W	29.09	56.32	10.10	26.95
4	Near magazine Section	1.5	SW	18.54	48.30	7.05	18.73
5	Near Water Pond	2	NW	17.59	47.02	6.40	16.62

Note: - All the values are Monthly Average Values.



### Water Sprinkling System

Water tankers have been engaged for sprinkling water to control the fugitive dust at Mines Haul roads. MCW has installed automatic dust suppression system at limestone & coal dump hoppers, stacker reclaimers, and at coal handling systems.



Ambuja Cements Ltd.,  
(Unit: Maratha Cement Works)

New Water Tanker with Sprinkling System for Dust Suppression in Haul Roads, It uses 10% water less than conventional water tankers. Dumper converted into Water Sprinklers with fogging arrangement.





**Ambuja Cements Ltd.**  
 (Unit: - Maratha Cement Works Upparwahi)  
**Fugitive Emission Monitoring Results**

**Six Monthly Average Values of Fugitive Emission Monitoring**  
 (From October - 2018 To March - 2019)

Sr.NO.	Location	SPM in ( $\mu\text{g}/\text{M}^3$ )	CPCB Standard ( $\mu\text{g}/\text{M}^3$ )
1	Limestone stockpile area	1060	5000
2	Near Mines Site Office	885	
3	Mines Haul Road	1994	
4	Near Limestone Crusher	1190	

Note :- All the Values are Monthly Average Values.

**Ambuja Cements Ltd.**

(Unit: - Maratha Cement Works Upparwahi)

**Noise Level Monitoring Results****For Capacity Lime Stone Mines, Cement Plant and Captive Power Plant****Monthly Values of Noise Level Monitoring**(From 1<sup>st</sup> October 2018 To 31<sup>st</sup> March 2019)

Name of Location	Near Water Pond		Near Magazine Area		Near Crusher		Along Roadside		Colony Area	
Month	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
Oct-18	50.4	49.7	47.0	46.3	70.1	68.2	51.6	50.2	43.7	42.2
Nov-18	57.3	55.1	55.9	54.2	57.3	56.6	56.1	54.4	59	54.1
Dec-18	56.8	55.4	55.2	54.7	58.9	57.6	55.7	54.2	57.4	55.6
Jan-19	57.3	56.3	54.8	53.5	59.4	58.2	56.5	55.5	56.6	55.4
Feb-19	57.9	56.6	55.2	53.7	59.6	57.8	56.1	55.0	56.1	55.3
Mar-19	56.7	56.2	55.3	53.0	59.4	57.9	55.7	54.8	56.3	55.7

Note: - All the Values are Monthly Average Values.



Air Pollution Control Equipments



Bag Filter

## Technical Specification of the Air Pollution Control Equipment

Sr. No	Details	Crusher
1	Material of Construction of Stack	MS Sheet
2	Stack attached to	B/F
3	Stack height	
a.	Round or Rectangular	Round
b.	Above the ground level ( mt )	28 m
4	Stack top	
a.	Round or Rectangular	Round
b.	Inside dimension of the stack at top	1.5 m
5	Gas quantity M3/hr	90,000
6	Flue gas temperature deg.cel	50
7	Exit velocity of the gas m/sec	14.12
8	Dust load gm/ m3	60
9	Dust emission mg/Nm3, Design	<30
10	Design pressure mm Wg	500
11	Max flange to flange pressure drop mm	150
12	Air to cloth ratio m3/min/m2	1.4
13	Size of bags mm x mm dia x height	149 x 3650
14	Total no. of bags	612
15	Type of Cloth	Polyester Needle Felt
16	Permeability at 20 mm Wg lt / min / cm2	120-160
17	Filtration area m2	1046.52
18	Max. allowable temperature °C	130



**Ambuja Cements Ltd.**  
(Unit: - Maratha Cement Works Upparwahi)  
**Air Quality Monitoring Results**

**Six Monthly Average Values of Stack Emission Monitoring**  
(From 1<sup>st</sup> October - 2018 To 31<sup>st</sup> March - 2019)

Sr.No.	Stack Attached to	Stack Height (m)	Velocity (m/sec)	Particulate Matter (mg/Nm <sup>3</sup> )
1	L.S. Crusher B/F	30	7.22	13.51

Note :- Values are Monthly Average Values.