

MCW / EMD /12 / 2017/453

November 27, 2017

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 **April 2017 to September 2017** of M/s Ambuja Cements Ltd. (Unit: Maratha Cement Works, Upparwahi), Chandrapur (Maharashtra)

Ref: 1. EC NO J- 11011/292/2006 – IA – II (I), Dtd. 03.11.2006
2. EC No. J-11016/11/2004 – IA – II (M), Dtd. 06.01.2005
3. EC No. J-11015/399/2006 – IA – II (M), Dtd.29.06.2007
4. EC No. J-11015/400/2006 – IA – II (M), Dtd.29.06.2007

Dear Sir,

This has with reference to the above referred ECs & the subject matter; we are submitting herewith six monthly compliance report (for the Period of April 2017 to September 2017) for the various conditions stipulated vide above referred EC for our Cement plant, CPP & Mines.

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, 4th Floor,
Matunga Scheme, Road No.8
Opp. Sion Circle, Sion East
Mumbai – 400 022
3. Regional Officer,
Maharashtra Pollution Control Board,
Udyog Bhawan, 1st Floor
Railway Station Road,
Chandrapur – 442401 (M.S.)

Table of Content

Sr. No.	Details
1	Compliance status of EC NO J- 11011/292/2006 – IA – II (I), Dtd. 03.11.2006
2	Compliance status of EC No. J-11016/11/2004 – IA – II (M), Dtd. 06.01.2005
3	Compliance status of EC No. J-11015/399/2006 – IA – II (M), Dtd.29.06.2007
4	Compliance status of EC No. J-11015/400/2006 – IA – II (M), Dtd.29.06.2007
5	Six Monthly Average Values of Stack Emission Monitoring (Annexure1a)
6	CEMS Details (Annexure1b)
7	Six Monthly Average Values of Ambient Air Quality (Annexure1c)
8	Monthly Values of Noise Level Monitoring (Annexure1d)
9	Photographs of Pollution Control Equipments installed (Annexure 2)
10	Details of Pollution Control Equipments installed (Annexure 2a)
11	On Line Stack Monitoring with PM Concentration Details for last six months (Annexure 3)
12	Summary of Results of Fugitive Emission Monitoring for the period from September 2015 to March 2016 (Annexure 3a)
13	Photographs of closed storage sheds and closed conveying systems (Annexure 4)
14	Details of water withdrawal from Pagadiguddam dam for last six months (Annexure 5)
15	Details of SWRP and ETP (Annexure 6)
16	Photographs of CEMS and CAAQMS installed (Annexure 7)
17	Status of Compliance of Charter on Corporate Responsibility for Environmental Protection - Cement Industry (Annexure 8)
18	Details of Plantation (Annexure 9)
19	Photographs of Landscaping and Horticulture (Annexure 9a)
20	Details of Rainwater Harvesting (Annexure 10)
21	Details of Waste used in Kiln (Annexure 11)
22	Photographs of Top soil Conservation and over-burden dump site stabilization (Annexure 12)
23	Photographs of Garland drains constructed around dumps/ Plantation around ML area and Dust extraction systems in Drilling machine (Annexure 13)
24	Photographs of fugitive emission control systems/Water sprinkling systems (Annexure 14)
25	A copy of Water quality and Water level measurement report (Annexure 15)
26	Details of Activities carried out by Ambuja Cement Foundation (Annexure 16)

COMPLIANCE STATUS OF MoEFCC EC CONDITIONS OF

4.75 MTPA CEMENT PLANT AND 70 MW CAPTIVE POWER PLANT (CPP)

Period from 01.04.2017 to 30.09.2017

(ECNO J – 11011/292/2006 – IA – II (I), Dtd. 03.11.2006)

Sr. No.	Condition	Status/Report
1.0	This has reference to your letter no. nil dated 18 th August, 2006 along with EIA/EMP/DMP report seeking environmental clearance for the above mentioned project under the EIA Notification, 1994 and further clarification submitted vide letters dated 21 st September 2006 and 12 th October, 2006. The Ministry of Environment and Forests has examined your application. It is noted that the proposal is for environmental clearance for the expansion of Cement Plant (2.85 to 4.75 MTPA), Clinker Production (2.40 to 2.85 MTPA) and Captive Power Plant (to 70 MW) at UpparWahi, Chandrapur, Maharastra by M/s Maratha Cement Works Ltd. Limestone will be sourced from Maratha captive limestone mines and Sonapura-Thurta limestone mine. The coal will be sourced from Western Coalfields.	Noted. Present capacity of the plant is as follows Clinker - 2.85 MTPA, Cement - 4.75 MTPA Power - 70 MW, AFR Feeding System (Non Hazardous Waste Co-Processing) – 65C Tons/day and Coal Blending System – 25C Tons/Hour.
2.0	ESP to cooler and cement mill and bag house to raw mill and kiln will be provided to limit gaseous emissions to 50 mg/nm ³ . Closed shed will be provided for storage of limestone, coal, Laterite, gypsum etc. to control fugitive emissions. Total fresh water requirement from Pagadiguddam Reservoir will be 7,100 m ³ /d. No wastewater will be generated from cement plant. The waste water from captive power plant and domestic activities will be treated in ETP and SWRP respectively and reused for dust suppression. No waste water will be released outside the premises. No solid waste will be disposed off outside the plant premises. The fly ash will be used for the manufacture of PPC. Bottom ash will be used in the raw mill and for land filling. Organic sludge will be used for plantation.	To control gaseous emissions Bag house ESP and bag filters have been provided to all major equipments / systems i.e. Kiln & Raw Mill, Cooler, Power Plant, Coal Mill and Cement mill (Photographs are enclosed in Annexure - 2). Monthly average emission value for last six months is enclosed as Annexure - 3 for your ready reference. We have provided separate Closed shed for storage of limestone, coal, laterite and gypsum. Photographs are enclosed in Annexure - 4 for your ready reference. We are withdrawing water from Pagadiguddam dam & it is well below the consented quantity i.e. 7100 M ³ /day. Day average quantity of water withdrawn from pagadiguddam dam for last six month is enclosed as Annexure - 5 . No waste water is generated from Cement Plant. Waste water generated from CPP is treated in ETP and Domestic waste water is

		treated in SWRP (Photographs are enclosed in Annexure - 6). Treated water is recycled back in the process. We are not disposing any solid waste outside the premises. The fly ash generated is completely used in cement manufacturing and organic sludge generated from SWRP is used as manure for plantation.
3.0	Public hearing meeting was held on 18 th April, 2006. "Consent to establish" has been accorded by the Maharashtra Pollution Control Board vide letter No. BO/RO(P&P)/EICC-567 dated 20 th July, 2006. Total cost of the project is Rs. 265.00 Crores.	Noted
4.0	The Ministry of Environment and Forests hereby accords environmental clearance to above project under EIA Notification dated 14th September, 2006 subject to strict compliance of the following conditions:	Noted
A	Special Condition	
i	The Gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the Maharashtra State Pollution Control Board. At no time, particulate emissions from the cement plant including kiln, coal mill, cement mill, cooler and captive power plant (CPP) shall exceed the 50 mg/Nm ³ . Continuous online monitors for particulate emission, SO ₂ and NO _x in Raw / kiln mill, clinker cooler, coal mill, cement mill etc. shall be provided and shall make necessary arrangements for submission of on-line real time emission data to CPCB website. NO _x burners shall be installed to control NO _x emissions. Interlocking facility shall be provided between pollution control equipment and the process operation so that in the event of the pollution control equipment not working, the respective unit (s) is shut down immediately.	<p>We are maintaining the gaseous and particulate emission from our various units well below the standards prescribed by Maharashtra State Pollution Control Board. Our emission level is maintained below 30 mg/Nm³. Average emission value of all stacks of last six months is enclosed as Annexure - 1a. We have installed continuous online monitor for Particulate matter emission for all stacks, SO₂ and NO_x in Raw Mill/Kiln and CPP and are connected to following website:</p> <ol style="list-style-type: none"> 1. http://mpcb.glensserver.com/MPCB/graph.html 2. http://cpcb.chemtrols.com <p>We have also installed Continuous emission monitoring system at Clinker cooler, Coal mill, Cement mills & Power plant etc (Photographs are enclosed in Annexure - 7). List of type of continuous online monitor installed at various stacks is enclosed as Annexure - 1b. Process interlocking is in place so that in the event of the Pollution control equipment not working the respective unit is shut down immediately.</p>
ii	Ambient Air Quality including ambient Noise level shall not exceed the standards stipulated under EPA or by the State authorities. An ambient air quality monitoring station shall be set up in North - West direction along with other ambient air quality monitoring station in other directions in consultation with Maharashtra Pollution Control Board. Monitoring of ambient air quality shall be carried out	Our Ambient Air quality and Ambient Noise level is well below the standards. We have installed one Ambient Air quality monitoring station in North west direction. Apart from that we have also installed four AAQ station in other direction. Ambient Air Quality is being continuously monitored and the monthly reports of the same are being

	regularly in consultation with MPCB and on-line data for air emissions shall be transferred to the CPCB and MPCB regularly. The instruments used for ambient air quality monitoring shall be calibrated time to time.	regularly submitted to MPCB. Copy of the same is enclosed as Annexure – 1c . We have installed three nos. of continuous ambient air monitoring station in consultation with MPCB. Real time data linking has been connected with the following website; 1. http://mpcb.glensserver.com/MPCB/graph.html 2. http://cpcb.chemtrols.com 3. http://www.envsaindia.com/cpcb/industry.php Photographs of the CAAQMS are enclosed as Annexure – 7 . We have awarded AMC to third party. Calibration and preventive maintenance of the system are ensured regularly.
iii	The company shall install adequate dust collection and extraction system to control fugitive dust emission at coal and Lime stone unloading points at all the transfer points. Closed shed will be provided for storage of lime stone, coal laterite, gypsum etc. to control fugitive emission. Fugitive emission from raw material handling area, cement mill, packing area and coal yard shall also be controlled.	We have installed 78 Nos. of bag filters including bag house fitted with Fiber Glass Fabric at Kiln & VRM, ESP and Bag filters have been provided at all process units and at transfer points and dust suppression system have been provided at Limestone & Coal handling system. All the belt conveyors and raw material sheds are fully covered by GI & Aluminum sheets. Please refer Annexure - 4 . We are monitoring the fugitive emission regularly at transfer points and storage areas. The monitoring reports are attached as Annexure – 3a . To control the fugitive emission all the internal roads have been concreted and regular sweeping is carried out by deploying Road Sweepers. We are having 06 No's of Road Sweeping Machines.
iv	Electrostatic Precipitators (ESP) shall be installed in coal mill, Clinker cooler, cement mill, and captive power plant to control air emissions. Bag house in raw mill and kiln, bag filters at clinker pre-grinding stations packers and silos shall be provided. The dust collected from the Pollution Control Equipments shall be recycled back in to the process. Storage of raw material viz. lime stone, coal clinker shall be closed roof sheds covered stockpiles. Water sprinkling arrangement should be made in the raw material stock yard and cement bag loading areas.	We have installed pollution control system like ESP at clinker cooler and Captive power plant boilers, Bag filters at coal mill, cement mill, packers and Kiln and raw mill (Annexure - 2). The dust collected from the Pollution Control Equipments is being recycled back into the process. We have also covered raw material and product storages; all raw materials are being conveyed by closed belt conveyor system along with water spraying system wherever necessary. Please refer Annexure – 4 . Fly ash collected in ESP at CPP is recycled back fully and used in cement making.

v	Total water requirement from Pagadiguddam Reservoir shall not exceed 7100M ³ /day as per the agreement signed with the state govt. The waste water from CPP and domestic activities shall be treated in Effluent Treatment Plant (ETP) and Sewage Water Reclamation Plant (SWRP) respectively and recycled/reused in cement plant for make up in captive power plant (CPP) for cooling, dust suppression, other plant related activities and green belt development. No waste water will be released outside the premises. Zero discharge shall be strictly adopted	Total water withdrawal from Pagadiguddam dam is less than 7100 M ³ /day. The details of water withdrawn in last six month are enclosed as Annexure - 5 . No waste water is generated from Cement Plant. Waste water generated from CPP is treated in ETP and Domestic waste water is treated in SWRP. Treated water is recycled back in the process. We have installed sewage treatment plant having capacity of 1000 m ³ and Effluent treatment plant of capacity 550 m ³ . The treated water from both the plant is being used in process for cooling purpose. Zero water discharge condition is maintained always.
vi	Solid waste generated shall be 100 % recycled and reutilized in the process itself and no solid waste shall be disposed off outside the plant premises. The fly ash generated will be used for the manufacture of PPC. Bottom ash shall be used in the raw mill and used for land filling. Treated STP sludge shall be used for green belt development waste oil sludge shall be reused in the plant and finally burnet in the kiln or sold to authorized recycler / re-processors.	We are not disposing any solid waste outside the premises. The dust collected from the Pollution Control Equipments is being recycled back into the process. The fly ash generated is completely used in cement manufacturing and organic sludge generated from SWRP is used as manure for plantation. We are recycling the fly ash and bed ash in the cement manufacturing process. STP sludge is used as manure in gardening and the oil sludge is disposed off by selling it to the authorized recycler/by burning in the Kiln.
vii	The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environment Protection (CERP) and SPM concentrations below the prescribed standard & shall be maintained in kiln, coal mill, and clinker cooler. All the major stacks shall be provided with continuous emission monitoring for particulate matter.	Complied. Details are in Annexure – 8 Opacity meters have been installed at all major stacks and are maintained & calibrated regularly.
viii	As proposed in EIA/EMP, green belt shall be developed in 52.12 ha. Out of total 121.41 ha. As per the CPCB guidelines in consultation with local DFO.	We have done extensive tree plantation programme. Since inception of the cement plant, till date 526665 Trees have been planted, in plant, colony and mines area. In the Year 2017 around 19343 Trees have been planted in plant, colony and mines area. Plantation details are given in Annexure – 9
ix	The company must harvest surface as well as rainwater from the roof tops of the building proposed in the expansion project and storm water drains to recharge the ground water and use the same water for the various activities of the projects to conserve fresh water.	Rain water is being harvested in two harvesting pits having capacities of approx. 34500 M ³ and 28000 M ³ and used for gardening and in process for cooling, around 1500 m ³ through rooftop rainwater harvesting is used for ground water recharge. Photographs are enclosed in Annexure - 10

x	As proposed efforts shall be made to use municipal / agricultural /other wastes in the power plant in multi – fuel boiler.	Presently we are co-processing as per CPCE guidelines Non-hazardous wastes as per CTO given by MPCB to us vide CTO no Format 1.0/BO/CAC-Cell/EIC No:-CH-1701-15, 1759-15, 1780-15 /CAC/CAC- 2752 dated: 24.02.2016 for co-processing of 650 Tons/day of Non-hazardous Wastes through AFR Co-processing Facility in our Kiln. Details of Waste used for last six months enclosed as an Annexure – 11								
xi	No expansion work at site shall be undertaken without obtaining prior permission from the state Forest Department, Govt. of Maharashtra regarding impact of the existing cement plant on the Manikgarh Reserve Forest and anticipated impacts due to proposed expansion.	Agreed.								
B	General Condition									
i	The project authorities must strictly adhere to the stipulation made by the Maharashtra State Pollution Control Board (MPCB) and the state Government.	Being complied.								
ii	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Agreed, We will not carry out any further expansion or modification in the plant without prior approval of the Ministry of Environment Forests & Climate Change								
iii	Adequate number of influent and effluent quality monitoring stations shall be set up. Regular monitoring shall be carried out for relevant parameters.	We have installed Camera and Flow meter for effluent monitoring as per CPCB guidelines. All the treated water is recycled back in the process and zero discharge is maintained always.								
iv	The project proponent shall also comply with all the Environment protection measures and safeguards recommended in the EIA/EMP report.	We are complying with all the Environment protection measures and safeguards recommended in the EIA/EMP report. The details for Environment protection measures and safeguards as per EIA/EMP are enclosed as Annexure - 16								
v	As proposed in the EIA/ EMP, Rs. 21.75 Crores and Rs. 1.39 Crores/annum earmarked to meet the capital cost and recurring cost/annum for the environment protection measures shall be used judiciously to implement the conditions stipulated by the Ministry of Environment and Forest as well as state government. The funds so provided shall not be diverted for any other purpose.	Noted and being Complied. The year- wise expenses for last 3 years are as follows: <table><tr><td>Year</td><td>Expenses (Rs. Lacs.)</td></tr><tr><td>2014-15</td><td>258.00</td></tr><tr><td>2015-16</td><td>283.00</td></tr><tr><td>2016-17</td><td>309.00</td></tr></table>	Year	Expenses (Rs. Lacs.)	2014-15	258.00	2015-16	283.00	2016-17	309.00
Year	Expenses (Rs. Lacs.)									
2014-15	258.00									
2015-16	283.00									
2016-17	309.00									
vi	The implementation of the project vis –a vis environment action plan shall be monitored by Ministry of Regional office at Bhopal/ Central Pollution Board. A six Monthly compliance status report shall be submitted to monitoring agencies.	Agreed. Six monthly compliance reports are regularly submitted to MoEFCC and CPCB. Last report submitted on 22.05.2017.								

vii	The project proponent should advertise in at least two local newspapers widely circulated in the region – around the project, one of which shall be in the vernacular language of the locally concerned informing that the project has been accorded environment clearance by the Ministry and copy of the clearance letter are available with the Maharashtra Pollution Control Board/Committee and may also be seen at website of the Ministry and Forests at http://envfor.nic.in . The advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Ministry's Regional office at Bhopal.	Complied.
viii	The project Authorities shall inform the regional office as well as the ministry the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development works.	Complied, The project has been financed through the internal accruals and the same has been approved on April 2007.
5.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted.
6.0	The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.	Noted.
7.0	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, Hazardous Waste (Management & Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 alongwith their amendments and rules.	Noted.

**COMPLIANCE STATUS OF MoEFCC EC CONDITIONS OF
0.5 MILLION TON / ANNUM LIME STONE MINES**

Period from 01.04.2017 to 30.09.2017

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

Sr. No.	Condition	Status/Report
A.	Special Condition	
(i)	Top soil shall be concurrently used for green belt development.	Stacked top soil is being used for greenbelt development and overburden stabilization. The details are enclosed as Annexure – 12
(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 Annexure – 13 . 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.
(iii)	Drills should be wet operated or with dust extractors and controlled blasting should be practiced.	MCW is having ROC F9 drill machine which has inbuilt dust extractor system. Photographs are attached as an Annexure -13
(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 Annexure - 2
(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 338436 trees have been planted in the total mining lease area. The density of plantation is 2548 plant/Ha. The details are enclosed as Annexure – 9, 12 &13 . The fugitive dust emission from all the sources are maintained and recorded properly.
(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 th	The excavated pit converted into water reservoir. The details are enclosed as Annexure

	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.	– 10. The capacity of reservoir is 760000 M ³
(vii)	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new piezometers 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 MoEF. A copy of latest report submitted enclosed as Annexure - 15
(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. General Condition		
(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 SO ₂ . Location of the ambient air quality stations should be decided based on 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.	AAQMS established in the core zone and regular monitoring being done. The details are enclosed as Annexure – 1c
(iv)	Data on environmental quality should be regularly submitted to the Ministry including its Regional	Complied with. The details are enclosed as Annexure – 1a, 1c, 1d and 3

	office at Bhopal and the State Pollution Control Board / Central Pollution Control Board once in six months.	
(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. The details are enclosed as Annexure – 13 & 14
(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 Annexure – 9 & 13 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.
(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. Photographs are enclosed as Annexure – 6 .
(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 taken, if required.	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 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.

(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.
(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 http://envfor.nic.in .	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.

**COMPLIANCE STATUS OF MoEFCC EC CONDITIONS OF
1.5 MILLION TON / ANNUM LIME STONE MINES**

Period from 01.04.2017 to 30.09.2017

(EC No. J-11015/399/2006 – IA – I I (M), 29.06.2007)

Sr. No.	Condition	Status/Report
A.	Special Condition	
i.	Topsoil, should be stacked properly with proper slope at ear marked site (s) with adequate measures and should be used for reclamation and rehabilitation of mined out area.	Stacked top soil is being used for greenbelt development and overburden stabilization. The details are enclosed as Annexure - 12
ii.	External OB dumps and other wastes should be stacked at earmarked sites only and should not be kept active for long period till its use for backfilling. Toe walls around the waste dumps shall be made to ensure and to prevent erosion and surface runoff. The total height of the dumps shall not exceed 30 m, each stage should preferably be of 10 m. Overall slope of the dump shall not exceed 28°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests on six monthly basis.	External OB dumps and other wastes are stacked properly and OB dumps are vegetated to prevent erosion and surface runoff. The details are enclosed as Annexure – 12 . Toe walls around the waste dumps have been made to ensure and to prevent erosion and surface runoff. The total height of the dumps is less than 30 m, each stage is of 10 m. Overall slope of the dump is less than 28°. The OB dumps have been scientifically vegetated with suitable native species to prevent erosion and surface run off.
iii.	Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine working. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after monsoon and maintained properly.	Catch drains and siltation ponds constructed and the collected water used for watering mine roads and green belt development. The details are enclosed as Annexure - 13

iv.	Garland drain (size, gradient and length) shall be constructed for both mine pit and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.	Garland drain of appropriate size and capacity has been constructed along with Siltation pit all along the periphery of the mines. Photographs attached in Annexure - 13
v.	Plantation shall be raised in 107.39 ha of area along the mine lease area including OB dumps which will be reclaimed by green belt / afforestation in consultation with the local DFO / Agriculture Department around mine lease area etc. The density of the trees should be around 2500 plants per ha.	Complied with, Limestone mine is surrounded with other existing mining leases. Till date Around 338436 trees have been planted in the total mining lease area. The density of plantation is 2548 plant/Ha. The details are enclosed as Annexure – 9,12 & 13
vi.	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.	MCW has developed rain water harvesting pits of capacity around 760000 m ³ for ground water augmentation. The details are enclosed as Annexure - 10
vii.	Drilling and blasting shall be by dust extractors and wet drilling.	MCW is using ROC F9 drill machine which has inbuilt dust extractor system. The details are enclosed as Annexure - 13
viii.	The existing water bodies to be created during the course of mining may be utilized to develop pisciculture by organizing fishermen cooperative society with the land losers and specially the poor section of the people as members of such society with initial financial assistance in the form of share money and managerial assistance so that the members themselves can run the affairs of the society in due course. The project proponent shall arrange marketing tie up so that the society gets fair price of their product and the profits are equitably shared by the members of the society as regular source of income.	At present pisciculture in the Mining area is dangerous and it is avoided due to safety reasons. Water bodies have been developed for Rain Water harvesting. After abandoned of mines pisciculture will be considered.

ix.	During post project monitoring, particle size of RSPM and composition of particulate matter should be monitored	Ambient air quality regularly monitored and report submitted to statutory authority.
x.	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new peizometers during the mining operation. The monitoring should be carried out two times in a year - pre- monsoon (April-May), post-monsoon (November) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director Central Ground water Board.	Groundwater level and quality regularly monitored and report submitted to CGWB and MoEF. A copy of report enclosed as Annexure – 15
xi.	Existing ecological status of the project area shall be conserved and protected. The project proponent should take all possible precautionary measures during mining operation for conservation and protection of endangered fauna (Schedule-I), if any, spotted in the project area. Action plans for the same shall be prepared in consultation with wildlife department along with allocation of funds for this purpose and shall be submitted to R.O of the Ministry at Bhopal.	All necessary measures are being taken as per EIA/EMP and as per EC conditions for protection of ecological status of the mining area to take care during mining operations.
xii.	Permission from the competent authority should be obtained for drawl of ground water if any, required for the project.	Permission obtained from competent authority for withdrawals of ground water. We have been accorded water drawl permission from CGWB vide permission no. CGWA/IND/Proj/2015-68-R dated 14.05.2015 which is valid upto 14.05.2018.
xiii.	Suitable rainwater harvesting measures on long-term basis shall be planned and implemented in consultation with Regional Director, CGWB.	MCW has developed rain water harvesting pits of capacity around 760000 m ³ for ground water augmentation (Photographs attached as Annexure 10)
xiv.	The study report of socioeconomic profile including the cropping pattern for 38 villages in buffer zone shall be submitted within one year from the date of issue of environmental clearance and submitted to the Ministry of Environment & Forests.	Noted and Complied.

xv.	Sewage treatment plant should be installed for the colony. ETP should also be provided for workshop and mineral separation plant wastewater.	We have installed two no's of STP in colony, each of 500 m ³ /d capacity and treated water is used in plant for cooling purpose. ETP also installed for mines workshop and treated water is recycled back again. The details are enclosed as Annexure – 6 .
xvi.	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.	Noted and will be Complied with.
B. <u>General Conditions</u>		
i.	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.	Agreed
ii.	No change in the calendar plan including excavation, quantum of mineral limestone ore and waste shall be made.	Noted and being Complied.
iii.	Conservation measures for protection of flora and fauna in the core & buffer zone shall be drawn up in consultation with the local forests and wildlife department.	All necessary measures are being taken for protection of ecological status of the mining area as per the EIA & EMP.
iv.	Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, SPM, SO ₂ , NO _x 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.	AAQMS established with approval of MPCB and regular monitoring being done. The details are enclosed as Annexure -1c
v.	Data on ambient air quality (RPM, SPM, SO ₂ , NO _x) should be regularly submitted to the Ministry including its Regional office located at Bhopal and the State Pollution Control Board / Central Pollution Control Board once in six months.	Ambient Air Quality data submitted at regular intervals to the MPCB & Ministry. The details are enclosed as Annexure -1c

vi.	Fugitive dust emissions from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.	To control fugitive emission we are using Drill machine with inbuilt dust extraction system. Regular water spraying on haul roads and crusher hopper to control the fugitive dust. The details are enclosed as Annexure – 13 & 14
vii.	Measures shall be taken for control of noise levels in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with ear plugs / muffs.	We have done massive plantation around the Mine areas. The details are enclosed as Annexure – 9 & 13 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.
viii.	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 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	Only small quantity of water is generated from mine workshop which is recycled back again in the system after treatment in the ETP. Photographs are enclosed as Annexure – 6 .
ix.	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.	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.
x.	Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Occupational health surveillance of all employees and workers is being done at regular intervals as per the guidelines and records are maintained.
xi.	A separate environmental management cell with suitable qualified personnel shall 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.
xii.	The project authorities shall 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 2007.
xiii.	The funds earmarked for environmental	Noted and being Complied.

	protection measures shall be kept in separate account and should not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bhopal.	
xiv.	The project authorities shall 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 2007.
xv.	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.	Noted.
xvi.	A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.	Complied off.
xvii.	State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/Tehsildar's Office for 30 days.	Complied off.
xviii.	The project authorities should advertise at least in two local newspapers 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 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 shall be forwarded to the Regional Office of this Ministry located Bhopal.	Complied off.
5.	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of	Noted.

	environment protection.	
6.	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted.
7.	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.

**COMPLIANCE STATUS OF MoEFCC EC CONDITIONS OF
2.0 MILLION TON / ANNUM LIME STONE MINES AND 0.2 TON /ANNUM SHALE**

Period from 01.04.2017 to 30.09.2017

(EC No. J-11015/400/2006 – IA – II (M), 29.06.2007)

Sr. No.	Condition	Status/Report
A.	Special Condition	
i.	Topsoil, should be stacked properly with proper slope at ear marked site (s) with adequate measures and should be used for reclamation and rehabilitation of mined out area.	Stacked top soil is being used for greenbelt development and overburden stabilization. The details are enclosed as Annexure - 12
ii.	External OB dumps and other wastes should be stacked at earmarked sites only and should not be kept active for long period till its use for backfilling. Toe walls around the waste dumps shall be made to ensure and to prevent erosion and surface runoff. The total height of the dumps shall not exceed 30 m, each stage should preferably be of 10 m. Overall slope of the dump shall not exceed 28°.The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment &Forests on six monthly basis.	External OB dumps and other wastes are stacked properly and OB dumps are vegetated to prevent erosion and surface runoff. The details are enclosed as Annexure – 12 . Toe walls around the waste dumps have been made to ensure and to prevent erosion and surface runoff. The total height of the dumps is less than 30 m, each stage is of 10 m. Overall slope of the dump is less than 28°.The OB dumps have been scientifically vegetated with suitable native species to prevent erosion and surface run off.
iii.	Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine working. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after monsoon and maintained properly.	Catch drains and siltation ponds constructed and the collected water used for watering mine roads and green belt development. The details are enclosed as Annexure - 13
iv.	Garland drain (size, gradient and length) shall be constructed for both mine pit and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.	Garland drain of appropriate size and capacity has been constructed along with Siltation pit all along the periphery of the mines. Photographs attached in Annexure – 13 .

v.	Plantation shall be raised in 226.84ha of area along the mine lease area including OB dumps which will be reclaimed by green belt / afforestation in consultation with the local DFO / Agriculture Department around mine lease area etc. The density of the trees should be around 2500 plants per ha.	Complied with, Limestone mine is surrounded with other existing mining leases. Till date Around 338436 trees have been planted in the total mining lease area. The density of plantation is 2548 plant/Ha. The details are enclosed as Annexure – 9,12 &13.
vi.	Conservation plan for engendered fauna, if any in consultation with State Forest Department/CWLW for implementation.	We have consulted State Forest department & there is no engendered fauna in this area.
vii.	Measures shall be taken to provide chain linked fencing around the mine lease to safe guard from any injury to the wildlife.	Noted and Compiled with.
viii.	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.	MCW has developed rain water harvesting pits of capacity around 760000 m ³ for ground water augmentation. The details are enclosed as Annexure - 10
ix.	Drilling and blasting shall be by dust extractors and wet drilling.	MCW is using ROC F9 drill machine which has inbuilt dust extractor system.
x.	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new peizometers during the mining operation. The monitoring should be carried out two times in a year - pre-monsoon (April-May), post-monsoon (November) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director Central Ground water Board.	Groundwater level and quality regularly monitored and report submitted to CGWB and MoEF. A copy of latest report submitted enclosed as Annexure - 15
xi.	Existing ecological status of the project area shall be conserved and protected. The project proponent should take all possible precautionary measures during mining operation for conservation and protection of endangered fauna (Schedule-I), if any, spotted in the project area. Action plans for the same shall be prepared in consultation with wildlife department along with allocation of funds for this purpose and shall be submitted to R.O of the Ministry at Bhopal	All necessary measures are being taken for protection of ecological status of the mining area as per the EIA & EMP. We have been confirmed by forest department & there is no endangered fauna & flora (Schedule -I) in the project area.
xii.	Permission from the competent authority should be obtained for drawl of ground water if any, required for the project.	Permission obtained from competent authority for withdrawals of ground water. We have been accorded water drawl permission from CGWB vide permission no. CGWA/IND/Proj/2015-68-R dated 14.05.2015 which is valid upto 14.05.2018.

xiii.	Suitable rainwater harvesting measures on long-term basis shall be planned and implemented in consultation with Regional Director, CGWB.	MCW has developed rain water harvesting pits of capacity around 760000 m ³ for ground water augmentation. The details are enclosed as Annexure – 10
xiv.	Sewage treatment plant should be installed for the colony. ETP should also be provided for workshop and mineral separation plant wastewater.	We have installed two no's of STP in colony, each of 500 m ³ /d capacity and treated water is used in plant for cooling purpose. ETP also installed for mines workshop and treated water is recycled back again. The details are enclosed as Annexure – 6.
xv.	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.	Noted.
B. General Condition		
i.	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.	Noted.
ii.	No change in the calendar plan including excavation, quantum of mineral limestone ore and waste shall be made.	Noted.
iii.	Conservation measures for protection of flora and Fauna in the core & buffer zone shall be drawn up in consultation with the local forest and wildlife department.	All necessary measures are being taken for protection of ecological status of the mining area as per the EIA/EMP.
iv.	Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, SPM, 502, 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.	AAQMS established with approval of MPCB and regular monitoring being done and reports are submitted regularly to MPCB.
v.	Data on ambient air quality (RPM, SPM, 502, NOx) should be regularly submitted to the Ministry including its Regional office located at Bhopal and the State Pollution Control Board / Central Pollution Control Board once in six months.	Ambient Air Quality data submitted at regular intervals to the MPCB & Ministry. The details are enclosed as Annexure – 1c
vi.	Fugitive dust emissions from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.	To control fugitive emission we are using Drill machine with inbuilt dust extraction system. Regular water spraying on haul roads and crusher hopper to control the fugitive dust. The details are enclosed as Annexure – 13

vii.	Measures shall be taken for control of noise levels in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with earplugs / muffs.	We have done massive plantation around the Mine areas. The details are enclosed as Annexure – 9 & 13 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.
viii.	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 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	Only small quantity of water is generated from mine workshop which is recycled back again after the treatment through ETP. The details are enclosed as Annexure – 6 .
ix.	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.	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.
x.	Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed	Occupational health surveillance of all employees and workers is being done at regular intervals as per the guidelines & records are maintained.
xi.	A separate environmental management cell with suitable qualified personnel shall 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.
xii.	The project authorities shall 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 2007.
xiii.	The funds earmarked for environmental protection measures shall be kept in separate account and should not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bhopal.	Noted and Complied.
xiv.	The project authorities shall 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 2007.
xv.	The Regional Office of this Ministry located at	Noted

	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.	
xvi.	A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.	Complied off.
xvii.	State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/Tehsildar's Office for 30 days.	Complied off.
xviii.	The project authorities should advertise at least in two local newspapers 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 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 shall be forwarded to the Regional Office of this Ministry located Bhopal.	Complied off.
5.	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Noted.
6.	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted.
7.	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.

Ambuja Cements Ltd.

(Unit: - Maratha Cement Works Upparwahi)

Air Quality Monitoring Results**For Captive Limestones Mines, Cement Plant and Captive Power Plant****Six Monthly Average Values of Stack Emission Monitoring**(From 1st April - 2017 To 30th September - 2017)

Sr.No.	Stack Attached to	Stack Height (m)	Velocity (m/sec)	Particulate Matter (mg/Nm ³)
1	L.S. Crusher B/F	30	6.24	14.25
2	Raw Mill & Kiln Out let (GBH)	100	12.51	12.82
3	Coal Mill B/F	62	6.66	18.79
4	Cooler ESP	62	10.21	18.34
5	Cement Mill B/F -1	35	5.26	17.48
6	Cement Mill B/F -2	35	5.93	18.88
7	Cement Mill B/F -3	35	6.17	18.32
8	Cement Mill B/F -4	35	6.03	19.05
9	Cement Mill B/F -5	35	6.83	15.90
10	Packing Plant B/F 1	30	7.36	16.77
11	Packing Plant B/F 2	30	7.22	17.70
12	Packing Plant B/F 3	30	6.18	18.38
13	Packing Plant B/F 4	30	5.66	17.08
14	Packing Plant B/F 5	30	5.61	16.79
15	Thermal Power Plant -1	70	8.12	21.50
16	Thermal Power Plant -4	70	5.92	19.21
17	Thermal Power Plant -5	70	7.41	19.50

Note :- All the Values are Monthly Average Values.

Ambuja Cements Ltd.
(Unit: - Maratha Cement Works, Upparwahi)
CEMS Details

SL.NO.	Stack Attached to	Status of CMS	Type of CMS	Type of Pollutants
1	L.S. Crusher B/F	Installed	Tribo electrode	Dust
2	Raw Mill & Kiln out let (GBH)	Installed	Opacity Meter & SO _x , NO _x Analyzer	Dust/SO ₂ /NO _x
3	Coal Mill B/F	Installed	Opacity Meter	Dust
4	Cooler ESP	Installed	Opacity Meter	Dust
5	Cement Mill B/F - 1	Installed	Opacity Meter	Dust
6	Cement Mill B/F - 2	Installed	Opacity Meter	Dust
7	Cement Mill B/F - 3	Installed	Opacity Meter	Dust
8	Cement Mill B/F - 4	Installed	Opacity Meter	Dust
9	Cement Mill B/F - 5	Installed	Opacity Meter	Dust
10	Packing Plant B/F - 1	Installed	Tribo electrode	Dust
11	Packing Plant B/F - 2	Installed	Tribo electrode	Dust
12	Packing Plant B/F - 3	Installed	Tribo electrode	Dust
13	Packing Plant B/F - 4	Installed	Tribo electrode	Dust
14	Packing Plant B/F - 5	Installed	Tribo electrode	Dust
15	Packing Plant B/F - 6	Installed	Tribo electrode	Dust
16	Coal Crusher I	Installed	Tribo electrode	Dust
17	Coal Crusher II	Installed	Tribo electrode	Dust
18	Boiler - 1 ESP	Installed	Opacity Meter & SO _x , NO _x Analyzer	Dust/SO ₂ /NO _x
19	Boiler - 2 ESP	Installed	Opacity Meter & SO _x , NO _x Analyzer	Dust/SO ₂ /NO _x
20	Boiler - 3 ESP	Installed	Opacity Meter & SO _x , NO _x Analyzer	Dust/SO ₂ /NO _x
21	Boiler - 4 ESP	Installed	Opacity Meter & SO _x , NO _x Analyzer	Dust/SO ₂ /NO _x
22	Boiler - 5 ESP	Installed	Opacity Meter & SO _x , NO _x Analyzer	Dust/SO ₂ /NO _x

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 1st April 2017 To 30th September 2017)**

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 ₂	NO _x
1	House (L- Type)	0.5	E	17.80	48.74	8.13	19.62
2	Guest House (Near Bachelor Accommodation)	0.5	SE	24.96	55.03	10.11	26.66
3	L.S. Crusher	0.1	W	24.64	54.54	9.42	25.29
4	Near magazine Section	1.5	SW	18.47	47.71	7.21	18.35
5	Near Water Pond	2	NW	17.15	46.77	6.45	16.86

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 1st April 2017 To 30th September 2017)

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
Apr-17	58.7	56.2	55.6	54.7	57.2	56.4	57.5	55.2	58.6	55.3
May-17	62.5	60.4	59.5	58.6	59.5	58.6	64.9	61.5	65.0	61.5
Jun-17	63.9	60.8	57.2	52.5	68.7	65.7	64.9	59.5	66.2	60.5
Jul-17	60.4	59.7	51.4	50.7	68.2	67.4	59.4	58.2	54.9	53.5
Aug-17	57.5	55.2	50.4	49.4	68.8	67.5	58.4	57.3	51.5	50.7
Sep-17	54.7	50.5	49.7	47.5	68.2	67.4	53.7	52.4	47.5	47.0

Note: - All the Values are Monthly Average Values.

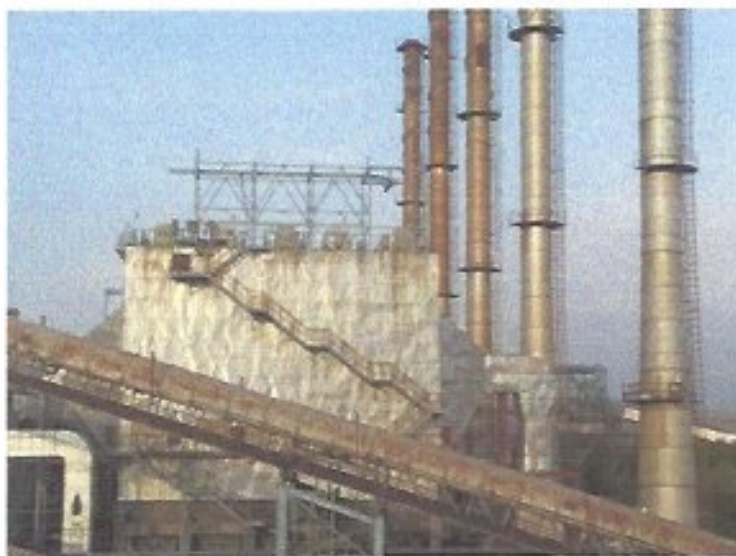
Air Pollution Control Equipments



Kiln & raw mill GBH



Cooler ESP



CPP ESP



Bag Filter

Ambuja Cements Ltd.
(Unit: - Maratha Cement Works Upparwahi)

We have installed appropriate air pollution control equipment attached to stacks for controlling of air pollution. The list of the major Air Pollution Control Equipments installed is given below,

SL.NO.	Stack Attached to	Installed Pollution Control Equipments
1	L. S. Crusher B/F	Bag Filter
2	Raw Mill & Kiln out let (GBH)	Glass bag House
3	Coal Mill B/F	Bag Filter
4	Cooler ESP	Electrostatic Precipitator
5	Cement Mill B/F - 1	Bag Filter
6	Cement Mill B/F - 2	Bag Filter
7	Cement Mill B/F - 3	Bag Filter
8	Cement Mill B/F - 4	Bag Filter
9	Cement Mill B/F - 5	Bag Filter
10	Packing Plant B/F - 1	Bag Filter
11	Packing Plant B/F - 2	Bag Filter
12	Packing Plant B/F - 3	Bag Filter
13	Packing Plant B/F - 4	Bag Filter
14	Packing Plant B/F - 5	Bag Filter
15	Packing Plant B/F - 6	Bag Filter
16	Primary Coal Crusher	Bag Filter
17	Secondary Coal Crusher	Bag Filter
18	Boiler - 1 ESP	Electrostatic Precipitator
19	Boiler - 2 ESP	Electrostatic Precipitator
20	Boiler - 3 ESP	Electrostatic Precipitator
21	Boiler - 4 ESP	Electrostatic Precipitator
22	Boiler - 5 ESP	Electrostatic Precipitator

Ambuja Cements Ltd.
 (Unit: - Maratha Cement Works Upparwahi)
On Line Stack Monitoring with PM Concentration Details
 (From 1st April 2017 To 30th September 2017)

SL.NO.	Stack Attach to	Stack Height (mts)	Type of Continuous Monitoring	Particulate matter (mg/Nm ³)
1	L.S.Crusher B/F	30	Tribo electrode	12.7
2	Raw Mill & Kiln Outlet (GBH)	100	Opacity Meter & SOx , NOx Analyzer	17.2
3	Coal Mill B/F	62	Opacity Meter	18.2
4	Cooler ESP	62	Opacity Meter	17.0
5	Cement Mill B/F -1	35	Opacity Meter	10.6
6	Cement Mill B/F -2	35	Opacity Meter	11.2
7	Cement Mill B/F - 3	35	Opacity Meter	14.2
8	Cement Mill B/F - 4	35	Opacity Meter	13.0
9	Cement Mill B/F - 5	35	Opacity Meter	13.0
10	Packing Plant B/F 1	30	Tribo electrode	8.5
11	Packing Plant B/F 2	30	Tribo electrode	14.1
12	Packing Plant B/F 3	30	Tribo electrode	14.3
13	Packing Plant B/F 4	30	Tribo electrode	11.7
14	Packing Plant B/F 5	30	Tribo electrode	11.6
15	Packing Plant B/F 6	30	Tribo electrode	12.9
16	*Thermal Power Plant -1	70	Opacity Meter & SOx , NOx Analyzer	10.4
17	Thermal Power Plant -2	70	Opacity Meter & SOx , NOx Analyzer	12.2
18	Thermal Power Plant -3	70	Opacity Meter & SOx , NOx Analyzer	11.0
19	Thermal Power Plant -4	70	Opacity Meter & SOx , NOx Analyzer	17.6
20	Thermal Power Plant -5	70	Opacity Meter & SOx , NOx Analyzer	16.6

Note: - All the values are Monthly Average Values

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

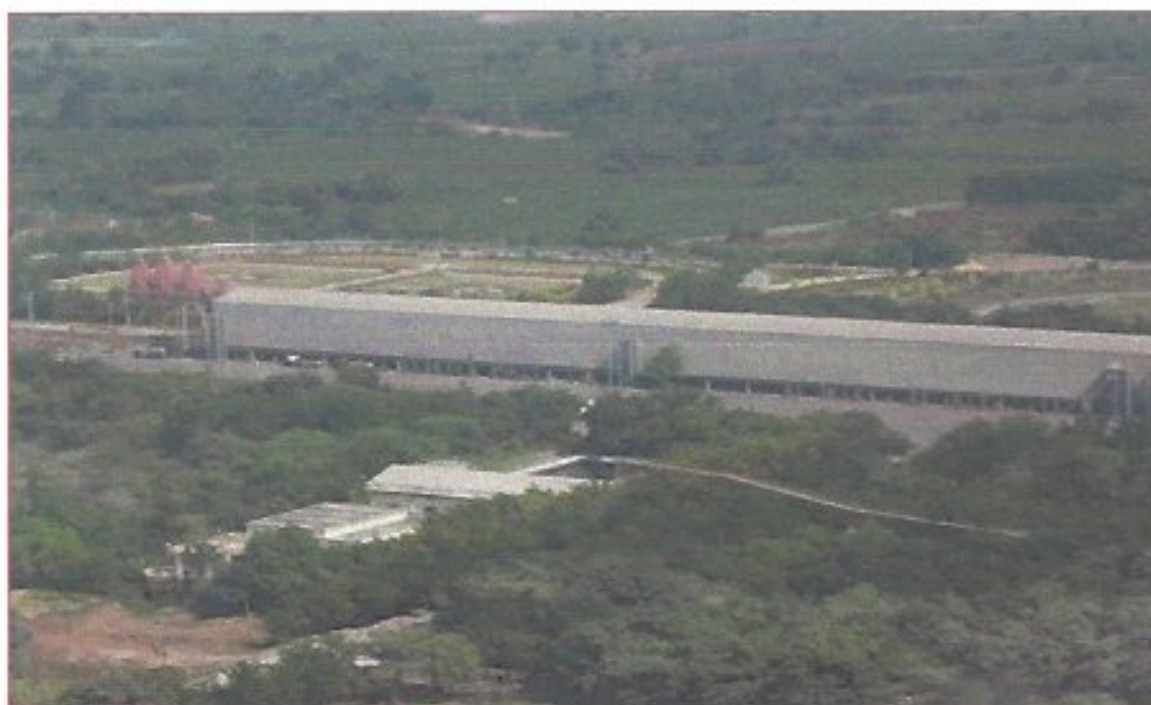
Six Monthly Average Values of Fugitive Emission Monitoring
 (From April - 2017 To September - 2017)

Sr.NO.	Location	SPM in ($\mu\text{g}/\text{M}^3$)	CPCB Standard ($\mu\text{g}/\text{M}^3$)
1	Limestone stockpile area	1177	5000
2	Near Cement Mill Area	2264	
3	Near Packing Plant	2881	
4	Near Fly Ash Silo	1338	
5	Near Kiln Area	807	
6	Near Clinker Silo area	1474	
7	Coal yard area	1003	2000
8	Near CHP area	824	
9	Coal Mill area	808	

Note :- All the Values are Monthly Average Values.

Closed Storage Sheds

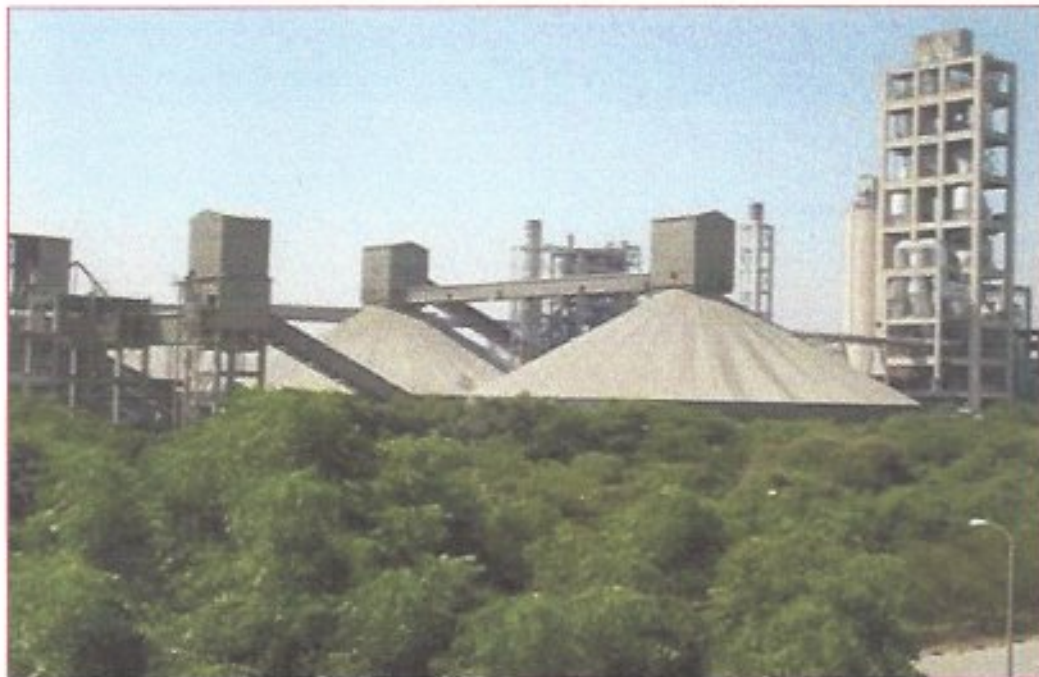
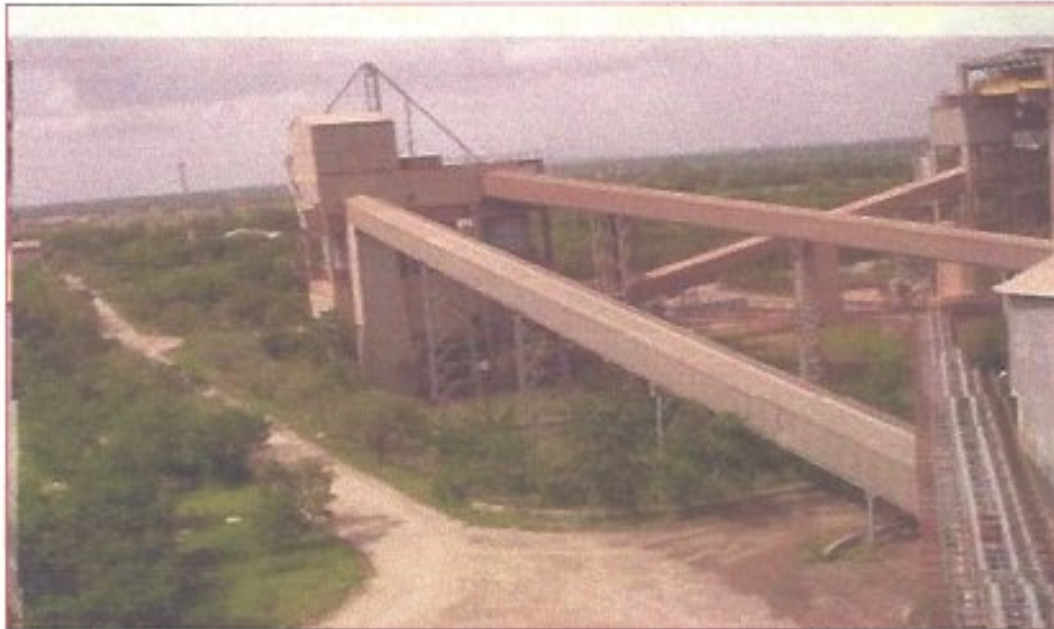
Limestone, Coal, Laterite, Gypsum storage area has been provided fully covered big sheds (with GI sheet) to prevent the fugitive dust during the material handling. Pneumatic conveying system used for transporting fly ash from Captive Thermal Power Plant and is utilized in Cement manufacturing.



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

Closed Conveying Systems

MCW has two fully covered stock piles having capacity of 1 Lac MT each for clinker storage to prevent fugitive emission. All belt conveyors galleries are fully covered by GI /Al. sheets to prevent the wind erosions.



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

Details of Water Intake from Pagadiguddam Reservoir
(Approved Intake Quantity 7100 CUM/D)

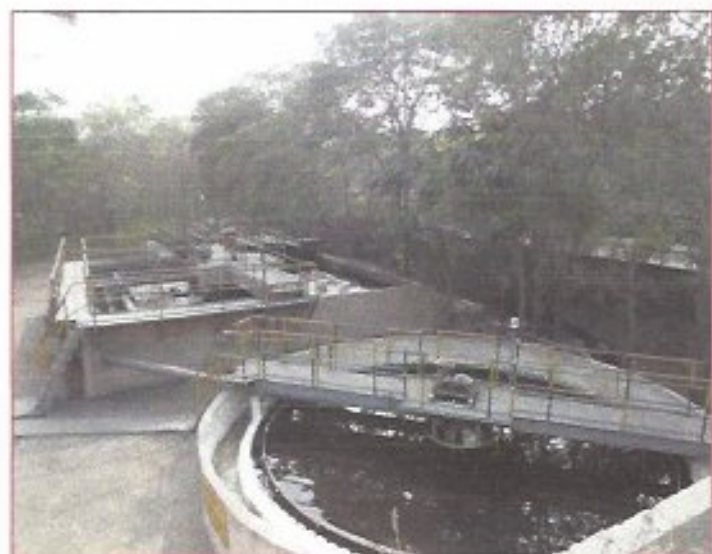
Month	Actual Intake Average/Day (CUM)
Apr-17	5075
May-17	5265
Jun-17	5364
Jul-17	3586
Aug-17	3895
Scp-17	2416

Note:

We are also utilizing the rain water collected in Rain water harvesting pit developed inside plant premises, Hence the water intake from the Pagadiguddam Reservoir is less.

Sewage Water Reclamation Plant

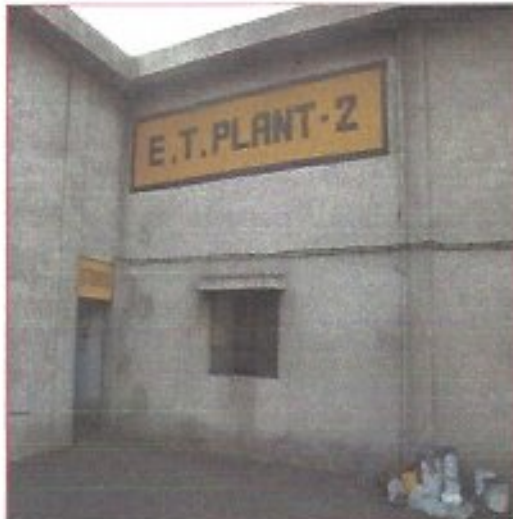
We have installed SWRP (Sewage water recirculation plant) with concept of treating & 100% recycling of domestic sewage water. It is a regular practice at ACL to recycle 100% treated water for process usage. It reduces the burden on water supplying agencies and indicates our environmental commitment.



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

Effluent Treatment Plant

We have installed ETP (Effluent Treatment plant) for treatment of DM plant waste water. It is a regular practice at ACL to recycle 100% treated water for cooling in the cement mill. 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.



Continuous Emission Monitoring Systems

We have installed advanced Online Continuous emission monitoring instrument at Kiln main stack to assess the emission level of various pollutants like Dust, SO₂ & NO_x having cost of around Rs.1.50 Crores , Also We have installed three CAAQMS stations



Ambuja Cements Ltd.
(Unit: - Maratha Cement Works Upparwahi)

Annexure - 8

**Status of Compliance of Charter on Corporate Responsibility for Environmental
Protection - Cement Industry**

Sr. No.	Condition	Status/Report
1.	Cement Plants, which are not complying with notified standards, shall do the following to meet the standards; Augmentation of existing Air Pollution Control Devices - by July 2003 Replacement of existing Air Pollution Control Devices - by July 2004	<ul style="list-style-type: none"> We are complying with the standards prescribed by MoEF and MPCB
2.	Cement Plants located in critically polluted or urban areas (including 5 km distance outside urban boundary) will meet 100 mg/Nm ³ limit or particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm ³ .	<ul style="list-style-type: none"> Our plant is not located in critically polluted or urban area The emission from stacks is below 30 mg/Nm³. Emission records of stacks enclosed as Annexure - 1a
3.	The new cement kilns to be accorded NOC/Environmental Clearance w.e.f 01.04.2003 will meet the limit of 50 mg/Nm ³ for particulate matter emissions.	<ul style="list-style-type: none"> The emission from kilns is below 30 mg/Nm³. Emission records of Kiln enclosed as Annexure - 1a
4.	CPCB will evolve load based standards by December 2003.	<ul style="list-style-type: none"> Noted
5.	CPCB and NCBM will evolve SO ₂ and NO _x emission standards by June 2004.	<ul style="list-style-type: none"> Noted
6.	The Cement industries will control fugitive emissions from all the raw material and products storage and transfer points by December 2003. However, the feasibility for the control of fugitive emissions from limestone and coal storage areas will be decided by the National Task Force (NTF). The NTF shall submit its recommendations within three months.	<ul style="list-style-type: none"> Fugitive emissions are controlled through covered shed storage of raw materials and products, use of closed conveyors and good housekeeping practices including employment of road sweeping machines for cleaning roads, water sprinkling and plantation. Please refer Annexure -4
7.	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum cokes as fuel in cement kiln by July 2003.	<ul style="list-style-type: none"> Noted.
8.	After performance evaluation of various	<ul style="list-style-type: none"> We have installed continuous emission

Ambuja Cements Ltd.
(Unit: - Maratha Cement Works Upparwahi)

	types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operations/ sections for installation of continuous monitoring equipment. The industry will install the continuous monitoring systems (CMS) by December 2003	monitoring systems at all stacks (22 nos.) in plant for continuous measuring of PM emission. We have linked our CEMS real time stack emission data to the MPCB & CPCB website. Please refer Annexure – 1b
9.	Tripping in kiln ESP to be minimized by July 2003 as per the recommendations of NTF.	<ul style="list-style-type: none"> Glass Bag house have been provided in Kiln ESP, therefore there is no possibility of tripping in case of Bag House.
10.	Industries will submit the target date to enhance the utilization of waste material by April, 2003.	<ul style="list-style-type: none"> There is no waste generation from Cement Plant. The Fly ash generated from CPP is completely utilized in Cement manufacturing.
11.	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	<ul style="list-style-type: none"> Noted, however we are co-processing Non-hazardous wastes as per CTO given by MPCB to us vide CTO no. Format 1.0/BO/CAC-Cell/EIC No:- CH-1701-15, 1759-15, 1780-15 /CAC/CAC- 2752 dated: 24.02.2016 for co-processing of 650 Tons/day of Non-hazardous Wastes.
12.	Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003.	<ul style="list-style-type: none"> Cogeneration is not feasible in Cement Plant, however We have our own Captive Power Plant.

Tree Plantation details as on SEPT. 2017

Sr. No.	Location	YEAR OF PLANTATION								Total plantation	Area in Ha.
		Upto 2010	2011	2012	2013	2014	2015	2016	2017		
1	Plant	45738	124	1010	500	225				47597	16.25
	Infilling		150	26	500		316		673	1665	
2	Colony	42350		1648	1400	4500	242			50140	19.076
	Infilling	850	320		100					1270	
3	Mines	254489	12715	10000	10500	12600	9000	6500	15632	331436	132.82
	Infilling	10000	8500		1000	2000	800		400	22700	
	Jatropha plantation	7000								7000	
4	App. Road / transportnagar	3565							63	3628	6 km
5	Avenue plantation	2870	1000	1500	1200					6570	5 KM
	Infilling		450							450	
6	Other plantation in villages	6060	31067	4264	441		302	9500	2575	54209	20.65
	Total plantation Nos.	372,922	54,326	18,448	15,641	19,325	10,660	16,000	19,343	526,665	

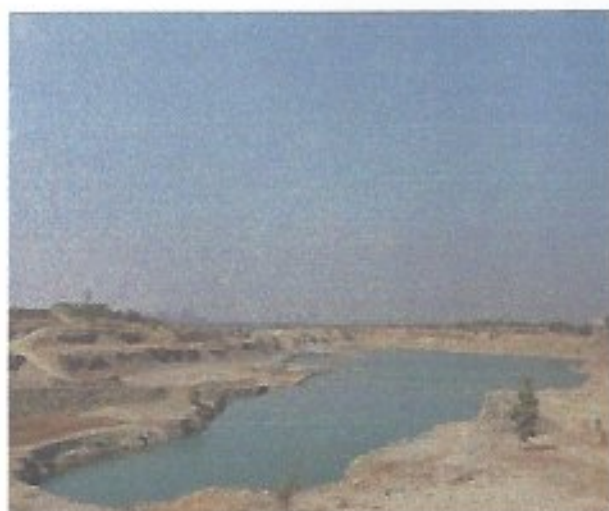
Landscaping/ Horticulture

Besides taking all State-of-Art pollution control technologies for combating pollution at source, MCW has also taken large scale bio-diversified afforestation and horticulture activities. MCW is undertaking mass tree plantation every year. Company has till now planted more than 5.0 lac trees saplings with above 80% survival rate.



Rainwater Harvesting

We are using excavated mines pit for rainwater storage. We have increased our rainwater harvesting capacity around 7.6 lacs M3, 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 m³ respectively. We have also done rooftop water harvesting in colony area having rainwater harvesting potential around 1550 m³.



Ambuja Cements Limited
(Unit: Maratha Cement Works)

Waste (AFR) Co-processed in Kiln

Sr. No.	Name of Waste	Unit	Quantity (April 2017 To September 2017)
1	Trade Rejects	MT	2392
2	Plastic Waste	MT	6087
3	Self Generated plastic	MT	1240
4	Palm Product	MT	61
5	Soybean Husk	MT	29
6	Rice Husk	MT	2312
7	Bamboo Dust	MT	14
8	Wood Waste	MT	721
9	Eucalyptus Wood Bark	MT	1047
10	RDF	MT	1806
11	Cotton Stem	MT	1529
Total		MT	17237

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.



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

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.



MCW/EMD/19/2017/450

November 25, 2017

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

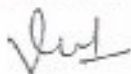
1. EC NO J-11015/399/2006-IA II(M) dtd 29.06.2007
2. EC NO J-11015/400/2006-IA II(M) dtd 29.06.2007
3. EC NO J-11016/11/2004-IA II(M) dtd 06.01.2005

Dear Sir,

Please find enclosed herewith the Ground Water Level & Water Quality report of surrounding area of the Maratha Lime stone mine for the Post-monsoon season (November 2017). 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 110066

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

Ground water Level Measurement Report Nov-17

Sr. No.	Name of village	Location / Landmark of well	Location Code	Water Level (In Meter)
1	Panchgaon	Near Barikrao Atram House (Common Well)	VDW1	2.1
2	Bhendwi (Gereguda)	Sheikh Rajjak agricultural land (Personal well)	VDW2	3.3
3	Hirapur	Near Jaitu Meshram House (Common Well)	VDW3	2.8
4	Sonapur	Near Gram Panchayat (Common Well)	VDW4	8.5
5	Pandharpaoni	Near Laxshman Pendorer House (Common Well)	VDW5	9.1
6	Chandanwahi	Near Nanji Darekar House (Common Well)	VDW6	3.9
7	Pimpalgaon	Near Wasant Lohe (Private Well)	VDW7	6.5
8	Thutra	Near Bobade's House (Private Well)	VDW8	5.7
9	Upparwahi	Near Santosh Hanumante House (Common Well)	VDW9	6.0
10	Mangi (Big)	Near Mata Temple (Common Well)	VDW10	8.9
11	Mangi	Sawkar Well	VDW11	8.1
12	Hardona (Khurd)	Near Ramesh Zade house	VDW12	11.2
13	Gadchandur	Near Premchand Borkar House (Common Well)	VDW13	12.2

Jul

Ambuja Cements Limited
(Unit :- Maratha Cement Works)

Summary of Water Analysis Report of Surrounding Village
Nov-17

Sr. No	Parameter	Unit	Pachgaon Village	Bhendol Village	Hirapur Village	Sonapur Village	Pandharpur Village	Chandarnath Village	Mangal (Bijl) Village	Mangal (Kh) Village	Hardona Village	Pimpalgaoon Village	Thutra Village	Upparwahi Village	Gadchandur
1	pH @25°C		7.90	7.65	7.73	7.70	8.38	7.87	7.66	8.14	7.94	8.17	7.79	8.02	7.76
2	Total Dissolved Solids, mg/l	mg/lit	294.00	363.00	327.00	416.00	267.00	372.00	392.00	317.00	381.00	293.00	361.00	312.00	437.00
3	Chloride (as Cl) mg/l	mg/lit	15.20	150.11	122.51	26.60	61.26	46.60	46.90	51.69	27.49	29.42	28.43	41.86	32.48
4	Fluoride (as F) mg/l	mg/lit	0.56	0.32	0.18	0.74	0.66	0.38	0.21	0.26	0.47	0.43	0.42	0.32	0.64
5	Iron (as Fe) mg/l	mg/lit	0.26	0.19	0.13	0.22	0.15	0.19	0.15	0.17	0.29	0.16	0.14	0.18	0.16
6	Sulphate (as SO4) mg/l	mg/lit	37.94	21.46	42.89	43.68	51.93	21.49	21.57	17.21	41.71	23.57	21.37	8.27	21.39
7	Total Alkalinity (as CaCO3) mg/l	mg/lit	76.20	132.00	259.20	321.60	177.60	355.20	357.60	379.20	141.68	139.71	173.94	169.27	151.69
8	Total Hardness (as CaCO3) mg/l	mg/lit	153.82	212.87	561.76	291.34	303.95	366.52	397.44	414.72	281.76	162.48	242.80	181.11	176.58

Jm

Six Monthly Progress Report on ACF CSR Work (April'17 to Sept. '17)

Introduction:

ACF is working in 216 villages of three blocks of Chandrapur district mainly on Natural Resource Management, Agro based Livelihood, Skill Development, Women Empowerment,

1. Health Program

At present Health program operates in 66 villages across the 3 blocks namely Korpana, Rajura and Jiwati. Keeping approach of Integrated Health Program.

The program in the community is spearheaded by Sakhi's. Sakhi's are volunteer health workers in the community, who are trained to providing the curative and preventive health care services to the community. At present no. of 60 Sakhi's associated with us and reaching out to 7793 house-holds by covering population 3658. The health program aims to provide compressive health care services to the community as well as bring the awareness in knowledge and practices about health and sanitation amongst community.

The following table shows the coverage of villages and population of Health program:

Blocks	Number of villages	House holds	Total covered population
Rajura	21	2324	10623
Korpana	24	4347	19414
Jiwati	21	1122	6052
Total	66	7793	36589

Curative Health Services: This service has been providing through the Mobile Van, Weekly dispensary, community clinic, Patient treated by Sakhi's and organizing specialty health camps. Covered total no. of 7619 patients from reporting period.



Apart from curative health services seen following impacts on community:

Outcomes:

Community saved Rs. 1523800 approximately by using the primary health care services of mobile van and weekly dispensary in 12 core villages and pagdiguddam area. Through the Community health clinic Saved Rs. 42152 by community members. Community has received doorstep primary health

care services and saved man days.

Home Base Neo natal Care: This program is focusing on the issues of maternal and child health with aims to reduce the mother & child mortality rate. During the reporting period provided following services under HBNC program:

Conducted total no. of 8 ANC Check-up camp's and covered no. of 97 ANC mothers, Conducted no. of 6 of Post Natal check-up camps and covered no. of 214 (Child 187 & mothers 27) especially for those area, where the lack of



Ambuja Cement Foundation (ACF)

access the government health facilities. Conducted Health education session for 114 ANC mothers, delivery conducted by Sakhi's 46 & 10 high risk cases identified by Sakhi's 12.

Outcomes:

Apart from Home based neonatal care program seen the changes in knowledge and practices in mostly tribal community, increased the percentage of institutional deliveries during six month reporting period done no. of 39 (85%) institutional deliveries in tribal belt. The Arogya Sakhi's have been creating continuous awareness about maternal and child health issues through the health education and home visit.

Total Sanitation: The 2011 census of Chandrapur district revealed an alarming picture. Almost 54% of the households in the district practiced open defecation. Before two years scenario of sanitation were only 48% coverage of toilets in 26 villages. The aims to make villages open defecation free by improving the sanitation and hygienic practices within community ACF adopted the CLTS (Community led for Total Sanitation) method by creating the natural leaders, who will play the crucial role in



village development. VDC is one of them to setting great example by taking ownership to overcome the issues of village development.

During the Reporting period organized one capacity building training of CBOs (PRI members, VDC members, SHGs members) done one Stakeholder meeting at SEDI hall collaboration with Geocycle department. There were 34 participants (26 PRI members & 9 ACF staff) Discussed about waste garbage management in village, Geocycle approach, source of energy. Second cluster level stakeholder meeting at ACF office. There were total participants - 50 stakeholders in 17 villages. Discussed the following points with stakeholders. 1) Panchayat Raj system 2) Role of Village level institute 3) Integration work with ACF, Village & Government. There were 40 GP members participated. Organized various awareness program like "World Hand wash day", "World Toilet day", "Gram Swachata Abhiyan" on 2nd October 2017 through the rally, Internal exposure visit, T.V. show, poster show & Pathnatya, home visit viz. Total no. of 171 awareness program organized and participants 3646 at village level.

Out Comes: Constructed 420 (Sanitation focus village 279 & Non Sanitation focus village 141) toilets through the mobilization and made 2 villages 100 Percent open defecation free (ODF) namely Kukudsath & Piparda villages & above 95 % toilets construction works has been done in Hirapur, Pimpalgaon & Kusal. No. of 1 villages namely Upparwahi installed the water purifier in village for safe drinking purpose. After verification of **SMART village** through the government our two villages Kukudsath & Mangi buj has received first prize each village Rs. 10 Lakh in block.



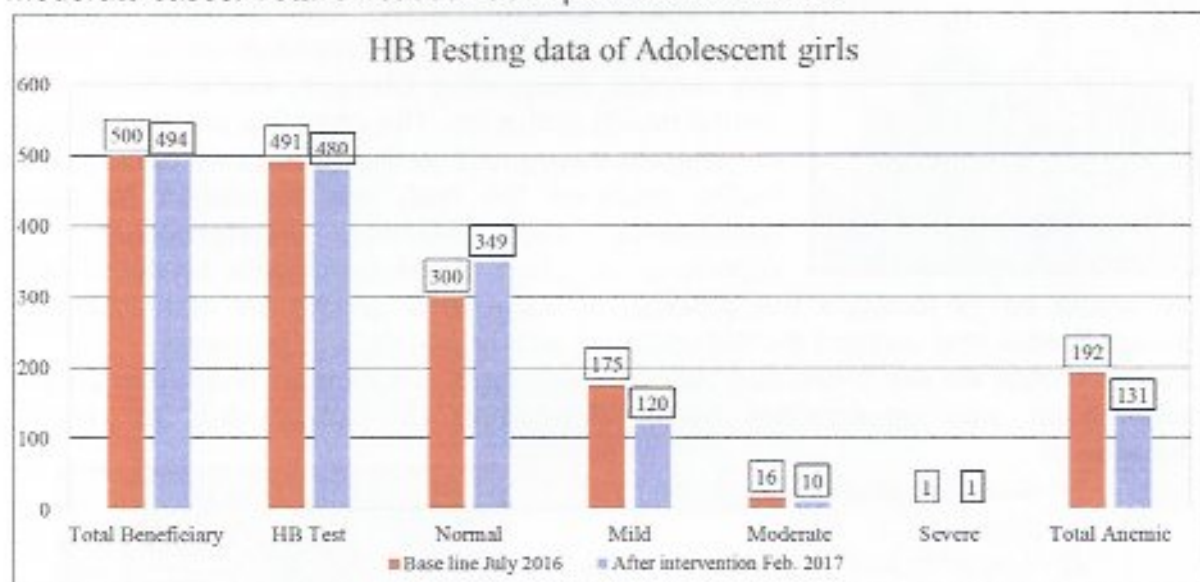
"Sant Gadgebaba Gram Swachatta Abhiyan" Block level first prize Rs. 1 Lakh has received Kukudsath village.

Anaemia Control Program: The aims to reduce the percentage of anaemia amongst pregnant mothers, lactating mother and adolescent girls through nutritional intervention and early detection of anemia. HB testing is major screening tools to identify the anemia amongst adolescent girls. Tested HB no. of 492 beneficiaries and find out anemia in 192 beneficiaries means 39.02% of anemia. To combat the anemia organized no. of 77 awareness session on Nutrition that was focused on iron rich contain in intake food, which is locally available, organized no. of 18 treatment camp's to provide the medical treatment to 192 anaemic beneficiaries. After intervention tested HB no of 480 beneficiaries and find our anemia in 131 beneficiaries mean 27.29 % of anemia.



Out Comes:

Increase no of 49 normal cases, reduced no of 55 mild cases, reduced no of 6 moderate cases. Total 61 cases has improved level of HB.



Adolescent "Life Skill & Sex Education Program: The aims to provide the appropriate knowledge on life skill and reproductive health to build the confidence



about life and its challenges to minimize the certain risk in life by delivering the module of reproductive health and life skill approach to the teen agers and creating the cadre of peer educators. Last six month PEER educators & health workers organized 197 village level group meetings. Peer Educators gathering at ACF office. There were total participant - 160 (Two school & village level Peer Educators). Build capacity among carrier guidance & life skill through the resource person,

Out Comes: The group of peer educators conducting the session at school level & village level with adolescent and sharing the knowledge about life skill & reproductive health. Improved presentation skills.

Child Development Program: This program emphasized on physical and mental growth of 0 to 3 year children. By using the tools of playing, communication, growth monitoring and graphical analysis to find out the delays in physical, mental and socio cultural areas of development in 0 to 3 years children. Ummeed organization based at Mumbai have been providing the technical assistance to carry out the child development program effectively.

Done no. of 1003 home visit by Sakhi's, Filled growth monitoring formats of 182 children, Find out the physical and sociological delays in no. of 27 children.

Non Communicable Disease:

ACF has conducted a baseline study on NCD at four locations (Chandrapur, Bhatapara, Darlaghat and Roorkee) and designed the strategy to implement a community based program on NCD. The major emphasis is on community awareness and education, facilitating screening early diagnosis and treatment, and improving utilization of NCD health services.



The NCDs to be covered are diabetes, cardiac problems, cancer with more emphasis on oral, breast and cervical, Respiratory Disease, women health and mental health problems. The objective of the project is to generate awareness in the community about these NCDs, motivate the high risk population for early identification and treatment simultaneously with improving utilization of existing health services. ACF

role would be to facilitate the process of awareness generation and education through Sakhis and connect the beneficiaries with health service providers.

Last six month we are organized various awareness programme under this project collaboration with government health department & Rotary club of Hirai , Chandrapur.

- 1) Base line study through the third party
- 2) Capacity building training of Sakhi (Diabetes & Hypertension)
- 3) PAP testing & Mammography camp
- 4) Oral Screening camps
- 5) Village Mapping & Resource mapping
- 6) Awareness session, poster show, screening camps



Total Populations	Above 30 Y population	Total no of Diabetes patients	Total No of BP patients
29288	14412	413	845

Non Communicable Disease:

Under Non communicable disease we are conducting various awareness programme

Tuberculosis: last six month we conducted meeting with district Tuberculosis Officers meeting with block level Tuberculosis department.

Capacity building training of Sakhis: 01
Observing world Tuberculosis Day

Total positive tuberculosis patients: 27
CAT I: 20 CAT II: 04 MDR: 03



HIV/AIDS Awareness:

Total 12 Programme organized in villages through the Sakhi & Women Empowerment department. HIV/AIDS awareness session, rally etc. There were 273 participants

Done one programme at Transportnagar collaboration with SEDI organized rally, street play awareness session, rangoli & poster competition etc. Total participants-300 (Trakers, SEDI students, ACF staff & instructors)

2. WOMEN EMPOWERMENT PROGRAM

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, Social & political level is the major objective of our program. As per our objective we have work with SHG 1499 women members as a financial literacy, bank linkages for free from money lenders, work for gender balance in community, work for political level, strengthen the gram sabha & increase women participation in women gram sabha . As of April 2017 to Sept. 2017, ACF, Chandrapur work with 126 Self Help Groups, encompassing 1499 women in 32 villages with a collective saving base of Rs.74,44000 complementing and supplementing the family incomes substantially . Expert local bodies like banks, village GPs, Government agencies (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 LID & SBI Branch , Gadchandur , SBI Bank work for customer service point (CSP) .

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. Our SHGs have engaged in enterprises like *Sewaya making*, goatry, vegetable cultivation, Dalmil, Beauty parlar, paper plate making, Pickles making & others like canteen, Mess, Dress design, Ladies cloth canter, Masala making, bags making & Zunka bhakar Kendra, 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 like motivation to house hold for construction of toilets & its use, village cleaning drive & safe drinking water.

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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 105 SHGs has joined with monthly Rs. 200 saving and now total 9 lacks total saving.

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.30 lacks. (2014-15 Rs.10.00, 2015-16 Rs.10.00 & during 2016-17 10.00) .From received amount total 480(91 +259+130=480) toilets constructed and 8 was under in progress.

Program components:

Activity	From April 2017 to Sept.2017		Cumulative (April 17 to Sept.2017)	
	No. of activities	Total Participant s	No. of activities	Total Participan ts
Awareness sessions for new SHGs	17	678	17	678
Concept training for new SHG	03	142	03	142
Leadership Training	02	45	02	45
Gener Sensitization Training -2				
Exposure visit for SHG members	01	14	01	14
Social activities through the SHGs	05	478	05	478
Entrepreneurship Promotion (EP)				
Development of SHGs (Federation meeting)	14	550	14	550
Development of SHGs (Cluster level meetings)	02	220	2	220

- **Training & workshop:** Month of April 2017 to Sept.2017 ACF has organized 2 types of training like Leadership development and Concept of SHG for new formed SHGs . In the training we have covered many types of subjects like leadership development, Schemes of government agencies and Banks . In 2 trainings total 187 SHG women have participated.
- **Exposure visit of SHG & federation members:** In Month of April 2016 to Sept 17 ACF has organized exposure visit at Pombhurna , Mahila Aarthik Vikas Kendra & C.M.R.C. total 14 SHG & federation women have participated. After the exposure visit they highly motivated for doing the social development activities & they ready for increase IGA activities.
- **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,

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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 .

- Capacity Building of SHGs & Federation:** In every month from April to Sept. 2017 , 14 mass level federation meeting and 2 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. 2017 total 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 construction work at Pimpalgaon, Isapur, Baleguda, Piparda & Hardonakhu., Manoliguda,Village . From April 2016 to Sept. 2017 total





- 480 toilets constructed through the SHG under Gruh Finance Ltd. & good things is
 - all the toilets under in use .
- **Outcomes:** 1) A major achievement is total 32 villages 1499 women are doing work together .2) They know what is our responsibility at SHG & Federation level & Village institutional(GP) level . 3) Majority of women have involved Darubandi abhiyan, Sanitation abhiyan & girls education. 4) Total saving Rs. 74,44000 from women & all the women members have use self fund for self need and our 80 % of the members have free from money lenders . 5) Women are involved in all types of designs like seed & fertilizers, Child education specially girls education & also they involved in village level construction work like CC Road , *Smasanbhum* , Community Center , Bus stop etc. 6) Out of 126 SHGs, only 60% SHG are getting the loan from bank because of self-corpus . 7) 80% women H.H. have stopped taking the loan from money lenders. 8) A big achievements is Ekata women federation, no.of 105 SHGs have joined with federation for particular purpose & objective . 9) Federation is capable to provide 6 type of services to SHGs. 10) Month of April 2016 to Sept.2017 , our 6 women have received *Kranti Kanaya Puraskar* , *Recognized by Chandrapur ZilaDarubandi Parishad&Mrs.ParomitaGosami ,Yalgar* .

3. SKILL DEVELOPMENT PROGRAM: AITC (SEDI)

Ambuja Industrial Training Center (AITC) started in 2008 for imparting employable skill to the local youth under Skill & Entrepreneurship Development Institute (SEDI) initiative of Ambuja Cement Foundation. Our main objective is to impart skills to the rural youths to generate sustainable livelihood. AITC is having courses for two years duration like Fitter and Electrician and one year course welder affiliated with NCVT. The certificate courses like Electrical Assistance and Carpenter are affiliated with State Council of Vocation Training .SEDI catering short duration courses like Industrial Electrician, Computer Hardware & Networking, Basic Electrical , Home appliances repairing ,Basic Turning & Fabrication.

Coverage Area:- Our coverage area of ACF location are basically Gadchandur, Rajura, Korpana, Jiwti& Chandrapur block. This is the area where rural community faces major challenges related to land alienation, poverty & indebtedness, health & Nutrition, education, poor infrastructure and Vocational Training.

Process

- Ensuring placement linkages
- Need assessment
- Community mobilisation
- Networking for curriculum, trainer and guest faculty, on the job training etc.
- Assessment and Certification
- Follow up and hand holding support

Value Addition

- Functional English Training
- Basic Computer Training
- Life Skills Training
- First Aid Training
- OH & Safety Training are part of every Training Program
- Mock drills for safety.

Courses in ITI mode

- Fitter- Duration-24 Months
- Electrical- Duration-24 Months
- Welder- Duration-12 Months

Short Duration courses

- Assistant Electrician - Duration- 3 Months
- Fitter Fabrication- Duration-3 Months
- Manual Metal Arc welding Training Duration -3 Months
- Basic Nursing – Duration- 6 Months
- Assistant Mason – 2 Months
- Certification of Existing Mason - RPL (PMKVY)
- Soft Skill – 6 months
- Microfinance Executive

**Highlights of the SEDI- AITC**

- SEDI discovering spark of entrepreneurship in trainees & motivating till date 25% of the trainees are self employed
- Institute catering Industrial demand driven Long Duration Vocational Training as well as Short Duration Certificate courses
- Compulsory Life Skills Training, Spoken English as well as Computer Education for all Trainees and main focus on OH and safety
- Focus on Quality with value added Education
- Institute developing skills with facilitating placement & 81% trainees are placed
- Specially concentrating overall Personality Development through various extracurricular activities

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- Developing leadership for ownership of the institute in Trainees through Trainee Leaders through involvement in various committees
- Encouraging girls for male dominated courses

Networking Partners & Funding Agencies.

- DRDA (Training under NRLM)



- NABARD
- Tribal Department
- NSDC



- ADOR Welding
- BARTI



- Gruha Finance



- NBCFDC
- **High Demand in Market- Placement Opportunities**
- Nursing Assistants are in high demand in private Hospitals, Nursing Homes, Clinics & Dispensaries
- Scope to become Asha Health Worker in Govt. Scheme
- Knowledgeable Health Messenger at village level

**Physical Progress Course wise – April to Sept .2017**

S.N.	Course	Under Training	Trained – From April – Sept.2017	Placed
1	Fitter Trade	16	42	27
2	Welder Trade	20	20	05
3	Electrical Trade	42	42	36
4	Assistant Electrician (Electrical Sector)	20	19	10
6	Assistant Manual Metal Arc Welding	19	48	25
7	Bed Side Attendant	50	49	34
8	Mason RPL Certified	0	629	629
	Total	167	849	766

ACTIVITIES :**SAFETY AMBASEDERS MEETING****External Assessment of Welding trade****TRAINEES PERFORMING PRACTICAL****Oath taking program GDA trainees****PMKVY RPL Training:**

NEW INITIATIVE

- Regular monitoring of safety aspects.
- It was also decided that each day one of trainee delivers the motivational speech in prayer class.
- Each New trainee go through safety induction program through Safety
- Periodic review of safety committee Free Training by Mobilizing external Funding

The way to make SEDI High tech

1. New Courses
2. Digital Class Room
3. Counselling Centre
4. Placement Cell for trainees

4. QUALITY EDUCATION Program***TEACHING-LEARNING PROCESSES ACF doing***

- Right to Education Act- section on education quality (Right of Children to Free and Compulsory Education)

Approach of quality education programme:

Under School Support Programme, Ambuja Cement Foundation has introduced the Z.P. Teacher and SMC member for improving the Academic quality of learning's & creating a beautiful environment in schools through joyful activities & effective pedagogy. Teacher and SMC member make learning more joyful and let children understand the logic behind concepts; we introduced Learning's with quality education and making children capable of becoming responsible, productive and useful members of society. Knowledge skills and attitudes are built through learning experiences and opportunities created for learners in school. It is in the classroom that learners can analyse and evaluate their experiences

What was the need identified (why do we implement the program)

- ✓ Lack of Learning environment
- ✓ Lack of Infrastructures and Basic Amenities
- ✓ 1.5 % students out of School as per district dropout rate
- ✓ Lack of Exposure among teachers SMDC, students.
- ✓ Lack of community participation/parents involve.

Coverage

- ✚ 30 Govt. Primary & Upp. Primary Z.P. Schools in Three Block like Korpana , Rajura and Jiwati
- ✚ 37 Anganwadi Programme how to learn pr-primary education and development the ISO standard Anganwadi.

Authentication

Every year MoU (Memorandum of Understanding) signed between CEO, Z. P.Chandrapur, EO Elementary Education, Govt. of Maharashtra & Programme Manager Ambuja Cement Foundation, Chandrapur as well as collaboration with NGOs like ROTARY Club, Excellency management system, Nagpur for ISO certify agency

Programme Objectives

- Ensuring the holistic development of child there is a clear consensus on the need for a clearly defined, balanced and holistic education agenda regardless of the structure the future post-2017 development framework may take.
- To improve the quality Education for all 30 Z.P. Schools
- Creating joyful and healthy environment in School.
- Universalizing quality education.
- Implemented ISO standard in Z.P. schools

To improve learning environment in pry primary & primary, Upp. Primary schools through provision of infrastructures support, improved teaching aid, engaging local youth and sensitizing communities though technological support so as to ensure quality education to children and develop the sustainable model.

Outcomes:

1. Developing the habits for optimum utilization of the resources and exploring from environment.
2. Community has taken the interest in functioning if the School and Anganwadi
3. Functioning open libraries and creativity corners established in 30 Z.P. Schools.
4. Teachers are now motivated and executed all activities in a better manner regularly and community appreciating this process.
5. Awareness on sanitation activities and practices in schools
6. Improvement in teaching learning Methodologies.
7. Students continue summer & Winter Co-curriculum activities.
8. Community involvement in the whole learning process.
9. Developed hidden capacity and skills of the children by creating healthy environment in Z.P. schools



Six Month Activity completed:

1. ISO school Pimpalgaon and Kukudsath school painted a digital class for creative learning Govt .contributing Rs. 20,000 schools
2. Rotary collaboration 07 teachers were selected after an evaluation process and were felicitated by offering certificate –
 - ✚ The teachers were from Pimpalgaon HM Mr. Bonde,
 - ✚ Hardona (Khu) Teachers Mr. Aavande Technology Software of TML in state level master person

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- ✚ Kargaon (Khu) Mr. Panghate were Maths resource person in state level
 - ✚ Lakamapur & Gopalpur Mrs. karuna Gavande and Mr. Prashant Kore were creative learning in school ,
 - ✚ Asan (BU) Mr. Ajay Banda his creation of Green school and village develop Rotary President were present as the Chief Guest.30 schools teachers and SMC members
3. The second year ISO schools of surveillance audit of schools GOPALPUR ,BHENDVI, LAKHMAPUR, PIMPALGAON had completed on 25.11.2016.Mr. Rajesh Damle shall be the auditor allocated for surveillance audits of schools from MAX ACERNA MANAGEMENT SYSYSTEMS PVT LTD, Mumbai.
 4. In the month of Jan. 17 the 7 ISO certify e.i.(Upparwahi, karwa, Dhunki, Sonapur, Asan (Bu), Chandanwahi, Hardona (Khu) completed to ISO parameters
 5. Collaboration with women and child development department 13 Anganwadi ISO certified to provide better education facilities to children with the help of local communities to operate them as centers of learning.
 - 4 Collaboration with Rotary club Scientific Garden & Rose garden in 10 ISO and 1 for Rose garden in schools.
 - 5 Collaboration with Rotary club and community contribution installation of water purifier in Mangi (Bu) Z.P. school, Pimpalgaon Z.P. school , Bhendvi Z.P. school , Asan Bu. Z.P. schools
 - 6 Training of Anganwadi Sevika for Anganwadi Kit On 15th Sept. 16 participants of 20 Anganwadi Sevika of 02 Block

2. BaLA Painting at Schools:

The initiatives BaLA (Building as Learning Aid) was started in the 19 schools during Sept. 16 to March 17. The major goal of ACF Programme is universal enrolment of all children in the age group of 6-14 , retention in school and provide quality education. In order to make the school environment more pleasant, reduce dropout, minimize absenteeism and increase activity based learning, the new initiative BaLA support of teachers and schools

Major objectives:

- To design the whole school campus including school building in such a way that children could have opportunity to learn trough playing.
- Attract children towards school by making the whole campus a child friendly one.
- Promote activity based learning process, and increase peer learning opportunities.
- Beautification of campus by making the whole school a learning tool.

Target Group:

- Children
- Teachers

Achievements:

- Attendance has increased
- School campus has been changed to a playground even after school hour
- Minimum level of learning standard improved among the children.

This initiative will then directly impact the lives of over 19 schools and Anganwadi of 1500 Children between the ages of 3 to years to 14 years.

3. SMC formation and workshop:-

A new SMC was formed at 30 schools and old president and villagers, GP members was present meeting of parents, The maximum number of women members in these committees could cross the 70-80 or 100% women. Women members can guide and inspire teachers on how to attract children towards education and **04 SMC member are 100% women's SMC at Gopalpur Z.P. School, Korpana Block, Hardona (BU), Sonapur Rajura Block and Kargaon (Khu) Jiwati Block SMC** has a pivotal role in maximizing physical and human resources through strong linkages with parents, teachers, students, individuals and institutions and other key stakeholders involved in the school were aware of their roles as facilitators and supporters of the school

4. Teachers workshop: - Science workshop for 30 Z.P. school teachers of 3rd to 8th stud class Science & Language subject on Nov. 2016 The workshop 35 participated of teachers, ext. officer, kandra prumuk in three blocks.

The workshop for ISO awareness: - HM and teachers regarding, capacity building of quality education by ISO parameters by Mr. Nitin Vidya ISO consultant Nagpur.

Target Group:

- HM
- Teachers

Objective of workshop:

- Objective of the Self Learning Material & Teaching Learning Material on science maximum schools have only two teachers & four class in primary schools this is the situation of MGML.
- Introducing the activity based learning through active learning methodology in replacement of conventional type teaching learning methodology.
- Classroom Management in Multi Grade Multi Level Situation.
- Learning with fun in Math's and Logic (Math's, Language (English), Logic
- Develop Teaching learning material and use

6. **Winter Camp: (Chalo Aaj Milakar naya kal banaya)** : collaboration with Rotary club and education department on 23rd and 24th Dec. 16 at ACF office participated of school 16 of 150 students. They learn how to handle color, how to draw basic forms, we like to get them involve and inspire them to draw and paint by their own way, so that there creative talent. They can also continue at their places by their own way. The wall has been provided by Ambuja Cement foundation office and children have paint the wall by their own way.

- ✚ Let the children's gets aware about Art happening and how it can be a career for the students who are interested in Fine Art.
- ✚ Let them have an exposure about traditional art painting which is an traditional tribal art of Maharashtra
- ✚ The panting contest will inspired them to think and paint their ideas with their own way.
- ✚ How to handle space, forms and color
- ✚ The presentation will give them an exposure about happening about art, how to approach art, how people are taking it as a career.
- ✚ Wall painting will get them involved in a group activity.
- ✚ The wall painting will be a great visual event which you all can witnessed every day.
- ✚ It will have more visibility and impact than the craft work will have.

👉 Children will enjoy the event

2. Balmela programme for Z.P. school at Dhanakdavi 02 schools also participated in the Balmela and 05 teachers present

7. Sports & Cultural events:-

1. Sports & Cultural events organized at Upparwahi Z.P. school on 14th to 16th Nov. 16 participated of events 25 Z.P. schools of 1500 students and 30 teachers

8. **Exposure visit at International schools** :- Pimpalgaon HM Mr. Bonde exposure visit at International school at Singapur on 28th to 5th Feb. 17 Education department all school teachers internal exposure visit at ACF ISO schools @ ISO school Pimpalgaon , ISO school Gopalpur, ISO school Asan (bu), ISO school Chandanwahi , ISO school Thutra last week 20th at 25th Feb. 17 Observations :- Creative learning environment, Documentation, Quality , Systematic approach of work , Infrastructure maintained, Quality teaching by using TLM, Teachers positive attitude,

- The objective of the project is to improve the quality of education being imparted in the Govt. Elementary schools and to develop a model of international level in Z.P. schools that could be replicated in other schools.
- Internal exposure visit Saleguda Z.P. school, Thutra Z.P. school , Mangi Bu), Chandanwahi Upp. Primary Z.P. school , Hardona Khu. Asan Bu. Gereguda Z.P. school , Kawadgondi school at ISO school Pimpalgaon 2nd and 3rd week of March 17
- Ambuja Cement Foundation planned the internal exposure visit for all 30 schools of teacher, SMC members at ISO Z.P. School Pimpalgaon, Asan Bu, Gopalpur, Thutra – In reference of Effective Classroom processes

Objective of the Exposure Visit:-

- To aware on ISO school background
- To observed the teaching learning methodology.
- To enhance the capacity of teacher and SMC member environment building.
- To aware another schools about quality in education.
- The capacity of teacher and SMC member on pedagogical issues.
- Role of School management committee.

Career guidance programme:-

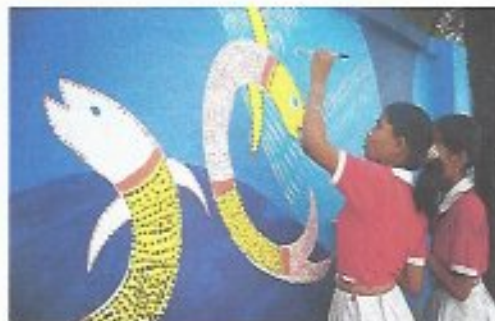
- At Upparwahi Z.P. school on 27th Jan 17 Mangi (Bu), Hardona (Bu) school participated in the programme and Chandanwahi school on 18th Jan. 17
- Career guidance programme at Asan Bu. By CAPT Organization Z.P. school on 20th Feb. 17 participated 30 Village Youths .

Other activity:-

- Pimpalgaon ISO school & Gopalpur ISO school and Asan (Bu) ISO school community contribution Rs.31000 & purchase Tablets & software support for Rotary club Governal collaboration
- For the occasion Gandhi Jayanti Rally , awarness , Essay competition , poster competition was conducted in 25 schools for the topic " Swachta Apnao, Desh Bachao" for the students

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- In Pimpalgaon school students Navodava classess started on 24th Oct. 16 to 6th Nov.
- With CEO " THINK TANK " committee meeting on 15th 16 A' grade schools evaluation in dist. Girls Horsemint committee form in all schools
- Met-day- mill quality sports activity , requirement of teachers workshop , co-curriculum activity foe students states of Jiwati school
- Swacha Bharat Mission BRAND AMBASATER visited 18 villages at Korpana Block
- CEO visited at Gopalpur school and Anganwadi on 15th Oct. 2016
- With Rotary Collaboration - Rotary club providing Bicycles for the girls students in our villages We have needy students were identified by the teachers of School SMC members and 61 girls list ready and submitted the proposal for bicycles to the beneficiaries.
- Swacha Bharat mission BA meeting with BDO at Panchayat samati korpana on 28th Oct. 16



- Training and installation fire extinguishers for ISO Anganwadi -15 and Schools - 06
- The occasion of Children day programme celebrate at 15 Z.P. school schools in Rajura , Korpana, block
- Meeting with rotary club regarding Mammography bus for women cancer test and tablets and Sanitation for Z.P. schools on 10th & 21th Jan 17
- Meeting and visit at Pimpalgaon school of BO on 15th Jan 17
- Meeting and visit at Pimpalgaon school of EO, Ext. officers BO Bhandara on 20Th 17
- Education Department visited ar Asan (Bu), Chandanwahi school on 27th Feb.17
- Meeting with CEO and education Dept. regarding digital school on 15th Feb.2017

5. Agro based livelihood program

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 government organisations, 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:

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- A. Better Cotton Initiative (BCI)
- B. Better crop management initiative (BCMI)
- C. Horticulture Development (HTD)
- D. Livestock Development (LSD)
- E. Institute of Farmer Collectives (IFC)
- F. Promotion of crop Insurance (PIA)

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 2017 ACF- Chandrapur covering 22009 farmers with 591 learning groups in 216 Villages of Rajura, Jiwati and Korpana 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
Villages	11	5	14	26	46	90	90	216
Farmer	304	483	1241	1980	4055	8224	8801	22009
Area (Ha.)	246.50	1207.80	2529	4675.6	10932	21959	22761	48200

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.
- 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) Horticulture Development (HTD):-

In the vision of farmer long time sustainability ACF introduce fruits crop plantation as well as improved packages of practices of vegetable growing which is recommended by concern agriculture university. Most of the vegetable grower nursery prepared by traditionally from last 2 year we promote and demonstrate low cost shade net nursery.

Objectives of HTD:-

- To develop sustainable source of livelihood through fruits crop plantation.
- Provide and aware about improved package of practices of vegetable growing.
- Engagement of whole family member in their own farm.
- Establish market and other needful linkages within farmer and buyer.
- Promote low cost nursery for getting healthy and quality seedlings.

D) Livestock Development (LSD)

We have been organizing livestock management 19 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 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.

F) Promotion of Agriculture insurance (PIA):-

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In agriculture always a risk during sowing to harvesting and farmer under threat of natural calamities. Govt. provides various schemes for crop insurance but farmer not aware about it. From this year ACF initiated Awareness campaign for various schemes of insurance.

Objectives of PIA:-

- To provide insurance coverage and financial support to the farmer in the event of Natural calamities, pest and diseases.
- To help stabilize farm incomes, particularly in disaster years.

Output of capacity building and farmers support activities from April to Sept.

17

Sr. No.	Particulars	No. of activities	No. of Beneficiaries
A	Better Cotton Initiative		
1	Staff Training	05	12
2	Field Facilitator Training (EV) & CRP	20	140
4	Training of Lead Farmer	10	591
5	Farmer Training on agronomical Aspect including one Agri expo	1696	19413
6	Women Training	51	789
7	Worker Training	10	147
B	Better Crop Management Initiative		
1	Farmer Training	30	376
2	Field day	1	74
3	Organised demonstration	240	240
C	Horticulture Development		
1	Promotion of low cost Nursery	2	2
D	Livestock Development		
1	Artificial Insemination	0	0
2	Promotion of Breeding Buck	0	0
3	Exposure Visit	0	0
E	Institute of farmer Collectives		
1	Formation and capacity building of ADC	0	0

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2	Establishment of farmer Self Help Group	0	0
3	BOD meeting	2	13
F	Promotion of Agriculture insurance		
1	Awareness campaign	216 Villages covered	
2	Link with PMFBY (Awareness Programme conducted with the collaboration with Agriculture dept., Indian Agricultural Insurance Company Limited & Common service Center)	02	183

Snapshot of the ABLP

**6. Water Resource Management program**

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 37 check dam construction done by ACF Chandrapur in two taluka namely Rajura and Korpana and 27 village involved in water resource management program. Local institute like water user group was formed in village for planning and monitoring of work about for water resource development, judicious utilization of water and recharge of ground water from rain water

harvesting structure creation and soil and water conservation activity. From the Construction of recharge structures like check dam most of families benefitted from this activity like they got irrigation facility to their farm and easily available water for bore well and open well in ground.

From last three year ACF Chandrapur will contribute JalyuktShivar Campaign of Maharashtra govt. Work done in Jalyuktshivar campaign repairing and de-silting of CNBs structures at Charli and Manoli village in Rajura block. 13 structures are repairing and De-silting.

5.1 Watershed activity :

This year we Completed watershed activity like farm bunding in Markagondi & Jambuldhara village which is situated near Pakadiguddam dam this village is 100% tribal. Upto Oct 17 we completed 84 ha farm bunding. The main purpose of this activity was reduce the soil erosion and increase the moisture and increase the crop yield.

This work is also contributing the Jalyuktshivar campaign of Maharashtra government. Farmers gives the 16% community contribution to the VDC against of farm bunding in their farm.

5.2 Farm pond :

We have constructed 03 farm pond in tribal village at kargaon village. Main purpose of this farm pond is water harvesting and ground water recharge. The farmers get water from this farm pond and irrigate their land. Main crop of this area is cotton but this farmers turn their cropping pattern and they are growing vegetables and other crop in small area of our land.

5.3 Community participation of planning in water resource development:

We have formed the community groups like water user groups in various villages and they are work on water resource development in their village also they contribute the work for the village development with Village development committee.

5.4 Awareness tool:-

Meetings: - For the success of the soil and water conservation program regular meetings and trainings provided to beneficiary farmers and villagers. Old and new farmers groups were covered in the training for their orientation and consistency. Training provided important knowledge and skill inputs to the farmers and is essential for success of the program.

In this meetings guided on how to stop the soil erosion and how water conservation in our farm and various types of structures for soil and water conservation and recharge structure. Importance of soil and water conservation and also impact from this.

5.5 Community well :

In this year ACF constructed community well at Kargaon village for three farmers. This 3 farmers are irrigating their 16 acr land jointly through this well. In Kargaon village no any water source for irrigation hence total land is rain fed. But this year ACF initiated a group well for irrigation at a time to 3 farmers. Also these farmers are growing vegetables from community well.

5.6 Repairing and De-silting of existing check dam :

This year we excavate the silt from 6 check dam in Mangi, Saleguda, Upparwahi and Hirapur village. Because of this activity 2250 Cum water

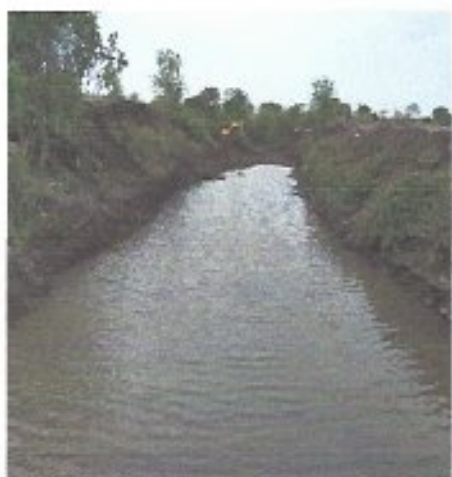
harvesting increased and total 84 ha land under this check dam for irrigation purpose.

5.7 Drinking water facility :

This year we are supporting for three village to drinking water support like installation of hand pump and bore well. In Saleguda and Sonurli village we install hand pump and in Upparwahi village. Total Beneficiary from drinking water support 170 Household

5.8 Work done in six month

Sr No	Work description	No of structure	Village
1	Repairing and de-silting of check dam	06	Mangi-02, Saleguda-01, Upparwahi-02, Hirapur-01,
2	Construction of Farm Pond	03	Kargaon
3	Watershed activity (Farm bunding)	84 ha	Markagondi & Jambuldhara
4	Drinking water support (Bore well & Hand pump)	03	Sonurli, Upparwahi & Saleguda
5	Community well	1	Kargon



Existing Check dam de-silting at Saleguda village



Community well at Kargaon



Farm Bunding at Markagondi village



Farm pond at Kargaon village

Ambuja Cement Foundation (ACF)