MP BIRLA GROUP

Birla Corporation Limited
UNIT : BIRLA CEMENT WORKS
Madhavnagar, CHANDERIA,
CHITTORGARH - 312 021 (Rajasthan)
Tel. : 01472 - 256601 to 256608
Fax : 01472 - 256609

Reg. A.D.

BCW / SD / L-5 / 588
29.05.2023

To,
The Deputy Director General of Forests (C),
Ministry of Environment, Forest and Climate Change,
Integrated Regional Office, Jaipur, A – 209 & 218,
Aranya Bhawan, Mahatma Gandhi Road,
Jhalana Institutional Area, **Jaipur (Raj.) – 304002**

Sub. : Environment clearance compliance report of M/s Birla Cement Works, Limestone Mines, Chanderia.

Ref. : Environment Clearance no. J -11015 / 73 / 2014 – IA. II (M) dtd. 14.08.2020.

Sir,

Please find enclosed the Environment Clearance compliance report of our Birla Cement Limestone Mines (ML No.- 10/83) for the period – October, 2022 to March, 2023 for your kind perusal.

Soft copy of the same is also being sent on your email id: iro.jaipur-mefcc@gov.in.

Thanking you,

Yours faithfully,
For: Birla Cement Works

(Vinod Paliwal)
GM (Sustainable Development)

Enclosed: as above

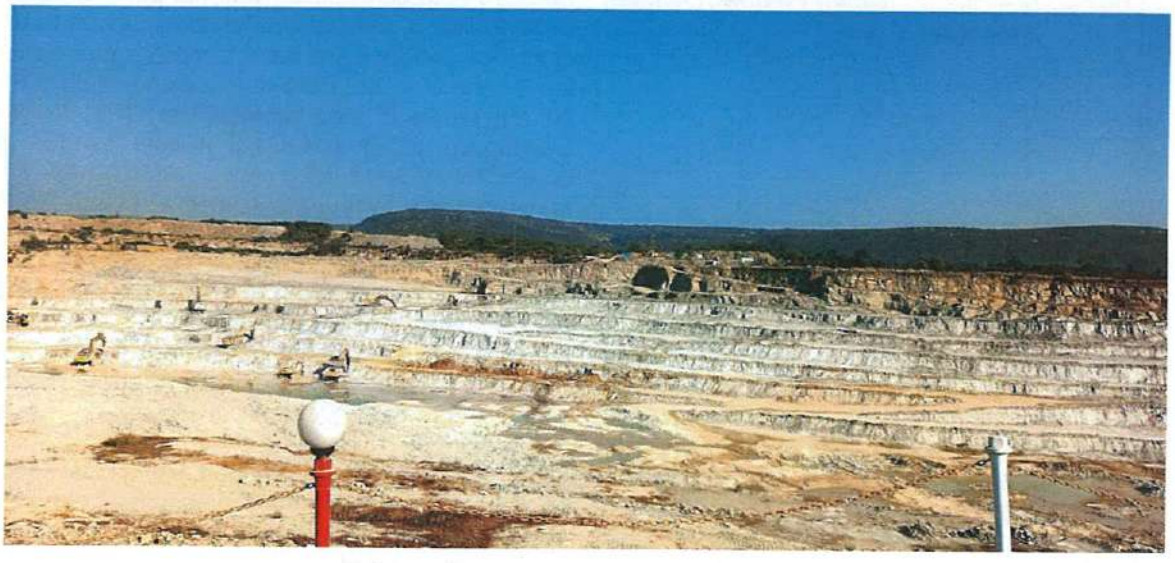
Cc to:
The Additional Director (Mining),
Govt. of India,
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran Bhavan, Jor Bagh Road,
New Delhi - 110 003

The Central Pollution Control Board,
Zonal office (Central),
E-5, Link Rd Number 3,
Ekant Park, Arera Colony,
Bhopal- 462 016 (M.P.)

The Member Secretary,
Rajasthan State Pollution Control Board,
4, Institutional Area,
Jhalana Doongari,
JAIPUR - (Raj) 302 004

May/Jun 2023

ENVIRONMENT CLEARANCE COMPLIANCE STATUS REPORT
PERIOD: OCTOBER 2022 TO MARCH 2023



Birla Cement Limestone Mines

(Unit of M/s. Birla Corporation Limited)

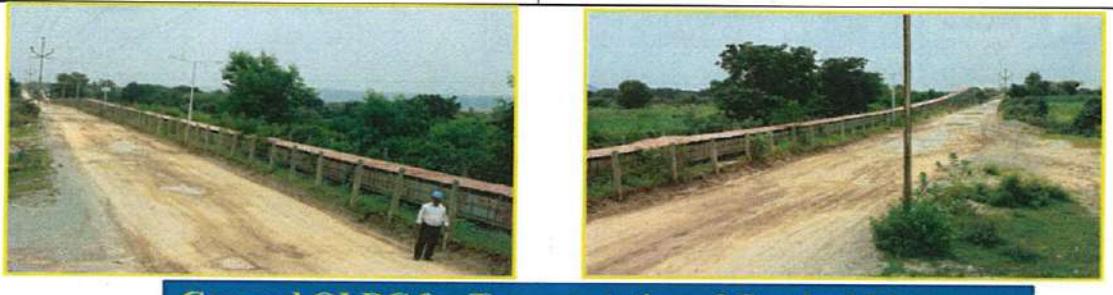
At Village: Bherda, Jai, Surjana & Nagri,

District: Chittorgarh (Raj.)

ENVIRONMENT CLEARANCE COMPLIANCE REPORT

Name & Location of the Mines	:	Birla Cement Limestone Mines (M/s Birla Corporation Limited) At Village: Bherda, Jai, Surjana & Nagri, PO: Semalpura, Teh & Distt: Chittorgarh (Raj.)
Mining Lease No.- and Area of ML	:	10/83, Area – 588.59 Hectares
Environmental Clearance Letter No.	:	J -11015 / 73 / 2014 – IA – II (M) dated 14.08.2020
Period of the Compliance Report	:	From 01st October 2022 To 31 March 2023

A.	Specific Conditions	Compliance Status
1)	The project proponent shall implement the recommendation of the Chief Wildlife warden in respect of wildlife conservation plan in respect of 4 species namely Peafowl, Leopard, Python and Indian Lizard.	Our proposal for the approval of NBWL (FP/RJ/MIN/665/2016) was sanctioned on 30th September 2020. After obtaining its final sanction, we are in the consultation with the office of Deputy Conservator of Forests-WL for the implementations of all the conditions and the recommendations as per the approval letter. Biodiversity Conservation Plan for our mines is also submitted to DFO (Wildlife) Chittorgarh. PCCF and Chief Wildlife Warden had asked for 4-point information, which has been presented through our reply dated 17 March 2023.
2)	Plantation shall be carried out as per the mining plan, both concurrent and closer phase reclamation, inter alia, including plantation with not less than 12 feet height native species all along the boundary of the mining lease shall be completed in the ensuing monsoon (Monsoon of 2020), record keeping, gap plantation and grassing as per the directions of the Hon'ble Supreme Court.	Intensive plantation work was carried out by us during 2020-21 and about 32,400 native species had been planted all along the mining lease boundary, out of which 29,900 saplings had been planted within mining lease in 12.53 hectares area and 2,500 saplings had been planted outside mining lease in 3.0 hectares. During 2021-22 monsoon period, 8,000 local species saplings planted along the mining lease boundary in the 5.6 hectares. For the year 2022-23, about 1320 saplings are planted. Details and Photographs of the same attached for reference, as **Annexure - 1**.
3)	As committed by the project proponent, Rs. 275 Lakhs shall be allocated towards Corporate Environment Responsibility (CER) for the commitments made on the issues raised in PH to be implemented in a period of three years and record for the same shall be maintained and audited and reported to the Regional Office of the Ministry along with the compliance reports.	We have allocated ₹ 275 lakhs for CER as per the commitments made by us on the issues raised in PH. Statement of CSR during the year 2022-23 is enclosed. **Annexure-2**

<table>
<tr><td>4)</td><td>Total excavation shall not be more than 6.660 Million TPA and corresponding ROM is 4.963 Million TPA including Crusher waste.</td><td>We would restrict to total excavation of 6.66 MTPA corresponding to ROM of 4.963 MTPA. The total excavation during April 2022 to March 202 is 3.99 million tons and ROM produced is 3.58 million tons including 0.0048 million tons crusher waste. During F.Y. 2022-23 limestone production is as below:-
<table>
<tr><th>Period</th><th>Production Limestone (million ton)</th></tr>
<tr><td>April 22 – March 23</td><td>3.5755</td></tr>
</table>
</td></tr>
<tr><td>5)</td><td>No blasting shall be carried without permission from the Hon'ble Supreme Court and abide the interim orders of the Hon'ble Court, Meanwhile, shall carry out the mechanical excavation of rocks without blasting with ripper attached to excavators, Surface Miner, Terminator& Rock Breaker etc.</td><td>Blasting operations being stopped and against the Order of Hon'ble High Court of Jodhpur, Rajasthan dated 25.5.2012, SLP is filed in Hon'ble Supreme Court and in an interim decision, on 29.7.2013 mechanical mining without use of explosives has been permitted, no blasting will be carried out prior to permission from the Hon'ble Supreme Court.</td></tr>
<tr><td>6)</td><td>No groundwater intersection shall be made without permission from the CGWA.</td><td>We are having the NOC of CGWA (No.-CGWA / NOC / MIN / ORIG / 2021 / 12308) for dewatering seepage and ground water from mining pits. Annexure 3.</td></tr>
<tr><td>7)</td><td>Total water requirement for project after expansion shall not be more than 1505 KLD, which shall be met from the mine sump water thus there shall be no ground water abstraction except for drinking.</td><td>The complete water requirement at present of the mining project is up to 500 KLD which is being met from the mine sump water only.</td></tr>
<tr><td>8)</td><td>As per the EIA Report, the limestone shall transport only through the overland conveyor system from the crusher to the cement plant.</td><td>Crushed limestone is being sent to our own Cement plant through covered over-land conveyor system and it will be continued.</td></tr>
<tr><td></td><td colspan="2"> 
Covered OLBC for Transportation of Crushed Limestone</td></tr>
<tr><td>9)</td><td>Effective dust control measures shall be taken at the crusher and transfer points along the conveying system.</td><td>Water spraying arrangement through nozzles has been provided at Hopper and Impactors, along conveyor belts and other material transfer points in the crusher. Dust suppression is done in crusher hopper and all material transfer points. Automatic dust suppression is in practice on loaded dumpers before unloading to crusher hopper.
Flexible rubber curtains have been provided to cover the hopper, which helps in arresting the dust generated during unloading of limestone at crusher hopper.
The crusher is housed in a specially designed chamber which prevents dispersal of dust in atmosphere. Dust extraction and collection system (BDC) is also installed. List of APCE installed is enclosed. Annexure-4</td></tr>
</table>

B.	Standard Conditions	Compliance Status
I.	**Statutory compliance :**	
1)	The EC granted to the project is strictly under the provisions of the EIA notification 2006 and its amendments. It does not tantamount / construe to approvals / consent / permissions, etc. required to be obtained under any other Acts / Rules / Subordinate legislations, etc., as may be applicable to the project.	Noted for compliance.
2)	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.	Noted
3)	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of2014 in matter of Common Cause versus Union of India & Ors.	Noted
4)	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013 / 57 / 2014 IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".	Noted
5)	A copy of EC letter will be marked to concerned Panchayat/local NGO etc. if any, from whom suggestion/representation has been received while processing the proposal.	Noted
6)	State Pollution Control Board / Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office / Tehsildar's Office for 30 days.	Noted
7)	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board / Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement maybe forwarded to the concerned MoEFCC Regional Office for compliance and record.	Complied with, EC granted by MoEF&CC has been published and widely circulated in newspapers, Dianik Bhasker and Rajasthan Patrika on 19.08.2020 and copy of the advertisement has been sent to MoEF&CC Regional office Lucknow vide letter no – BCW / Env / L-5 / 1014 dated 20.08.2020.

8)	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.	Noted
II.	**Air quality monitoring and preservation**	
9)	The Project Proponent shall install a minimum of 3(three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PC1/1, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.	We have already installed CAAQMS at mines. Monitoring work has also been carried out by MoEF&CC recognized laboratory and is performing ambient air quality monitoring at required intervals at 10 established locations. Ambient air quality monitoring is being carried out regularly and parameters are within the limits. Monitoring data enclosed as **Annexure-5.**

10)	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metaled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.	Water sprinkling is done regularly at loading and unloading points and transfer point to reduce fugitive emission. Water sprinkling with the help of mobile water tankers is being done on haul road and transport road to reduce dust emission. Two tankers are continuously deployed for dust suppression on haul roads around the crusher. Ambient air quality monitoring is done regularly and parameters are within the limits. Monitoring data enclosed as **Annexure - 5**



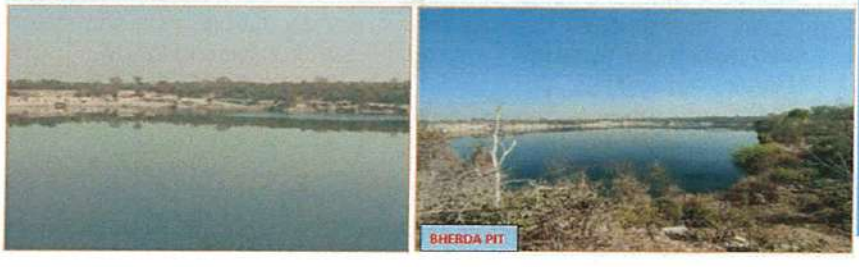

CONTROL OVER FUGITIVE DUST EMISSION AT CRUSHER CIRCUIT, BELT CONVEYOR & HAUL ROAD




III.	**Water quality monitoring and preservation**	
11)	In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area	We are having the NOC of CGWA **(No.- CGWA / NOC / MIN / ORIG / 2021 / 12308)** for dewatering seepage and ground water from mining pits. **Annexure 3**
12)	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug well located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.	Not applicable in our case as there is no springs and perennial nallahs flowing in and around the mine lease. Ground water is being monitored for the wells around the lease area by establishing a network. Four numbers piezometer wells have been installed for monitoring. Monitoring of water level from wells surrounding mining lease is done 4 times a year and chemical analysis of samples collected is also being carried out. **Annexure-6**

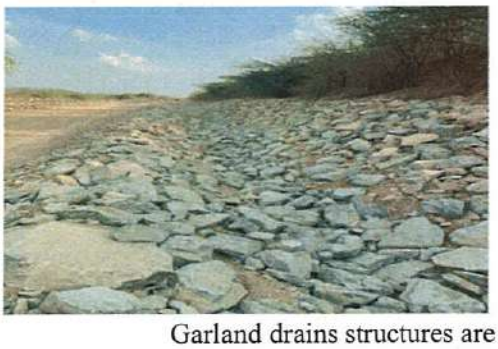
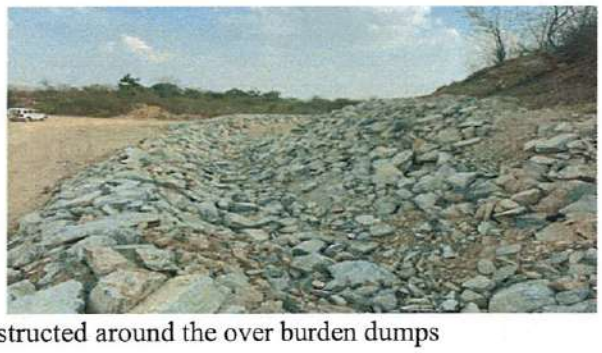
Ground water is being monitored for the wells around the lease area by establishing a network of four piezometer wells.

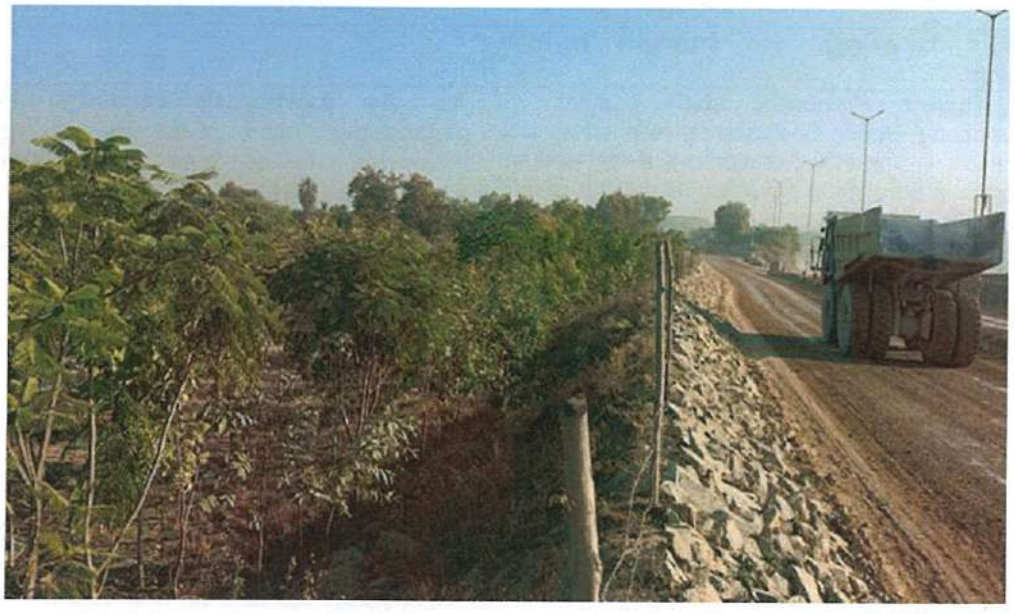
13)	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.	Regular monitoring of water quality and ground water level is being carried out. Ground water is being monitored of the wells around the lease area by establishing a network. Four numbers piezometer wells have been installed for monitoring. Monitoring of water level from wells surrounding mining lease is done 4 times a year **Annexure 7** and chemical analysis of samples collected is being carried out.
14)	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.	There is no springs and perennial nallahs existing and flowing in and around the mine lease. We are conducting regular monitoring of natural water course/ water resources and nallahs around the mine lease to ensure that no natural watercourse shall be obstructed due to any mining activity. Ground water is being monitored for the wells around the lease area by establishing a network. Monitoring is done 4 times a year and chemical analysis of samples collected is carried out. Four number of Piezometers also installed for ground water monitoring.
	 Digital Flow Meter Installed for water Consumption Monitoring at Crusher	

15)	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board at a suitable location near the main gate of the Company. The circular No 20012 / 1 / 2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.	No polluted water is being generated from the mines. The mine workshop is having zero discharge and there is no waste water generation from the mines hence treatment is not required. Oil and grease are regularly skimmed off and clean water is re-circulated.
	  ***Filter Cleaning Shed:*** **Filter cleaning shed is assembled departmentally in-house by the use of exhaust fan with assembly. The benefits are -** - ***Reduction of dust emission during cleaning of used air filter of HEMM at garage premises.***	
16)	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.	Rain water harvesting pit in around 18 hectares area is developed to store around 4.0 lac m^3 of water. Rain runoff water is being used in harvesting pits.
	RAINWATER HARVESTING   ***Rain water accumulated in Bherda pit was earlier used for drinking purposes within plant, colony and for industrial purposes within the cement plant, thermal power plant & mines. Since 1998 water is being drawn for Chittorgarh city from Bherda Mines.***	

17)	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.	There is no wastewater generated from mines. HEMM washing generates wastewater and to overcome this a system has been developed in which oil and grease are regularly skimmed off, and clean water is re-circulated. **Annexure – 8**
18)	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.	We are regularly conducting the Water auditing for the project area to reducing the consumption of water. We are taking technical consultancy of CII-Triveni Water Institute to carry out Water balancing & water auditing. CII studied our project area and prepared a final report on Water Audit.
IV.	**Noise monitoring and prevention**	
19)	The peak particle velocity at 500 m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.	We will comply it once the blasting activity will resume in our mining project. As per the restriction of Hon'ble Court, Blasting operations being stopped and against the Order of Hon'ble High Court of Jodhpur, Rajasthan dated 25.5.2012, SLP is filed in Hon'ble Supreme Court and in interim decision, on 29.7.2013 mechanical mining without use of explosives has been permitted, final decision is awaited.
20)	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.	We are continuously monitoring illumination and sound at night as per DGMS parameters to insure no disturbances to the habitants due to mining operations.
21)	The Project Proponent shall take measures for control of noise levels below 85 dB in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.	All necessary PPEs are made available along with regular training & awareness program on safety & health aspects. Noise level monitoring is also being conducted regularly. Regular maintenance of HEMM is being ensured for smooth working. Lubrication and maintenance are routine activities for all HEMM.

V.	**Mining plan**	
22)	The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.	Noted for compliance.
23)	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-a-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.	Noted for compliance.
VI.	**Land Reclamation**	
24)	The Overburden (O.B.) and waste generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.	Noted for compliance.
25)	The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.	Noted

26)	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.	Waste dumps are active, however we are covering slope portion of dumps with grass seeding where ultimate dumping is being carried out. We are also using sand bags on rain cuts to prevent soil erosion. Photograph of stabilized dumps and bund is enclosed. **Annexure- 9**
27)	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.	Catch drains and siltation ponds of appropriate size have been constructed to arrest silt and sediment which may flow from soil, OB and mineral dumps. Dumps are small in size; hence this problem is not acute. The drains are being regularly de-silted. Garland drain of appropriate size, gradient and length has been constructed along all dumps.
28)	Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.	Main dumps are rock dumps with associated clays. Dumps are small in dimensions and rain fall is less in this area, hence wash offs of dumps are not an acute problem. However, garland drain structures are constructed around overburden dumps to prevent storm runoff and sediment flow into surrounding water bodies.
	  Garland drains structures are constructed around the over burden dumps	
29)	The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation purpose.	In most of the lease area limestone is outcropping on surface and quantity of top soil is meager. However, whatever generating is being used directly at the lease boundary for plantation.

VII.	**Transportation**	
30)	The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. Should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.	Two water tankers of 15 KL capacity and one of 25 KL capacity are in operation and on each tanker pumps and rain guns have been provided for pressurized spray. Automatic dust suppression is in practice on loaded dumpers before unloading to crusher hopper. Dust suppression is done in crusher hopper and all material transfer points. Two tankers are continuously plying for dust suppression in each shift. Water spraying arrangement through nozzles has been provided at Hopper and Impactors, along conveyor belts and other material transfer points in the crusher and material conveying system to ensure that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. Bag filters are installed at crusher.
		
VIII.	**Green Belt**	
31)	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department / Agriculture Department / Rural development department / Tribal Welfare Department / Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.	We have already converted our old mining pit of Bherda in to a Water-Reservoir. In this pit up to 3rd bench rain water is being a filled. The total area of this pit is about 37.40 hectares out of which 16.4 hectares area is reclaimed and being used as Water-Reservoir. The collected rainwater is not only used for mining activities but also being supplied to Chittorgarh urban communities on a continuous basis.

32)	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should scrupulously guarded/ protected against felling and plantation of such trees should be promoted.	We have been permitted for mining on grazing land under Sec. 89 of Rajasthan Land Revenue Act, 1956 by the State Govt. vide order dated 5.7.1984 passed by Collector, Chittorgarh (Raj.) in Case. No.20/1983 and we are complying the conditions the said order.
33)	The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.	Our proposal for the approval of NBWL (FP/RJ/MIN/665/2016) is sanctioned on dated 30th September 2020. After getting its final sanction, we submitted Wildlife Conservation Plan are in the consultation with the office of Deputy Conservator of Forests-WL. PCCF and Chief Wildlife Warden had asked for 4-point information, which has been presented through our reply dated 17 March 2023.
IX.	**Public hearing and human health issues**	
34)	The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEFCC Regional Office and DGMS on half-yearly basis.	We are continuously conducing Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines and maintaining its record properly. Routine health checkup are being done by qualified medical officers for all the workmen. During calendar year 2023, examination for 68 persons engaged in mines working is carried out. This includes initial examination of 52 workers and periodical examination of 16 workers and staff. **Annexure- 10**
35)	The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anemia, Diarrhea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.	Unit is committed towards working for safe and healthy environment. Scheduled health assessment of every worker is being carried out. Company is undertaking Health Risk Assessment for various hazards. The hazards are identified as per the routine activities and sub activities. The Risk mitigation Measures are being undertaken as per the present risk matrix. External safety experts are available to further strengthen the system of zero harm across the company facilities.

36)	The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminum, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).	A dedicated occupational health center being operated with qualified MBBS doctors. Besides this, medical staff is present round the clock. Annual medical checkup is being done for all the workers' health records are being maintained. A team of medical experts from MP Birla Hospital organizes regular camps in the premises of company. The medical team collects samples of all staff and workers for various parameters and after testing, a report is prepared. Expert medical practitioners are advising the deviation found in any. **Annexure-10**
37)	The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEFCC annually along with details of the relief and compensation paid to workers having above indications.	Routine health checkup are being done by qualified medical officers for all the workmen. During calendar year 2023, examination for 68 persons engaged in mines working is carried out. This includes initial examination of 52 workers and periodical examination of 16 workers and staff. A team of medical experts from MP Birla Hospital organizes regular camps in the premises of company. The medical team collects samples of all staff and workers for various parameters and after testing, a report is prepared. Expert medical practitioners are advising the deviation found in any. **Annexure-10**  **Health Checkup Camp**

38)	The Project Proponent shall ensure that 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.	Workmen working in mining lease area are being using appropriate PPEs. The PPEs are provided as per DGMS rules. Adequate training-calendar exists and all workmen are have to undergone training.
39)	Project Proponent shall make provision for the housing for workers/labours or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.	The expansion is within the existing mining lease area and the workers which are working in mines are residing in the well-developed existing housing colony, The housing colony has 500 KLD STP for treatment of domestic water.
40)	The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.	The action plans has been prepared and concerns raised during public hearing are being implemented. Separate budget has been sanctioned from management. The progress of the same is being submitted on periodic basis.
X.	**Miscellaneous**	
41)	The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.	M/s. Compusence Automation, Ahmedabad prepared latest report of land use/land cover analysis for our mining lease Birla Cement Limestone Mine and its buffer zone by using remote sensing techniques, during December 2022. **Annexure-11**
42)	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Noted for compliance.
43)	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC &its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.	Six monthly compliance reports are being prepared and progress of the same is shared to RO, MoEF&CC and SPCB. Previous six monthly compliance submitted vide letter number BCW/Env./L-5/2636 dated 28 November 2022.
44)	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.	A full-fledged Environment management SD cell with a dedicated lab with qualified manpower headed by GM Environment for exist and are involved in the environment management at site. Four Environmental Scientist and Geologist are engaged in various environmental improvement plans and program at sites. **Annexure- 12**

45)	The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.	Noted
46)	The mining lease holders shall, after ceasing mining operations, undertake re-grossing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.	Noted

(Narendra Menaria)
Dy. Manager (Geology)

Annexure-1

BIRLA CEMENT WORKS LIMESTONE MENES
(Villages Bherda, Jai, Surjana and Nagri)

DETAILS OF PLANTATION AT MINES
Within ML and Outside ML

Sl. No.	Year	Within ML area	Outside ML area	Total	Survival %
1	Total Up To 2014-2015	90643	73547	164190	78%
2	2015-2016	2000	1000	3000	85%
3	2016-2017	2780	2250	5030	84%
4	2017-2018	1500	2600	4100	90%
5	2018-2019	1250	700	1950	91%
6	2019-2020	2250	640	2890	89%
7	2020-2021	29900	2500	32400	89%
8	2021-2022	6215	1785	8000	95%
9	2022-2023 Contd.	1320	-	1320	
	Total	**137858**	**85022**	**222880**	

Type of species Planted: -

Neem
Amaltash
Anwala
Pipal
Ratanjot
Shisham
Amrood
Katchanar
Billpatra
Akasia
Seethaphal
Bargad &
Other fruit bearing tree
Bar

Narendra Menaria
DGM (Geology)

Annexure 1

Plantation Activity of FY 2022-23

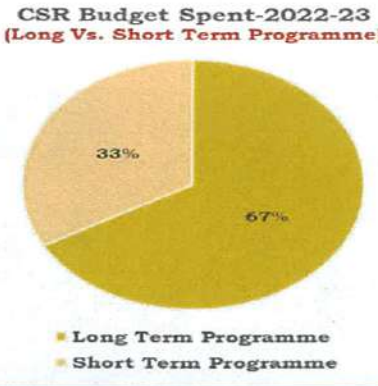
PLANTATION WITH DRIP IRRIGATION

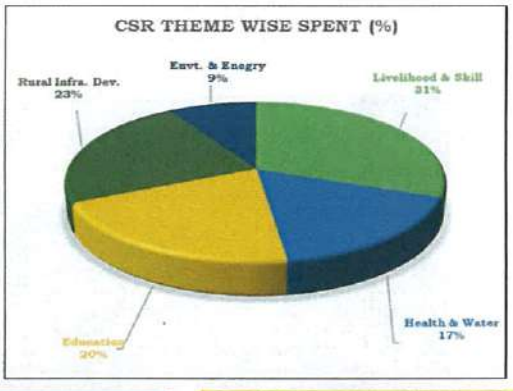
Annexure-2

CSR Budget & Expenditure: 2022-23

CSR Activities	CSR budget: 2022-23 (In Lacs)	Actual-YTD Till-March'23 (In Lacs)	Variance (In Lacs)
SAMIRIDDHI-Integrated Livelihood Project in watershed approach-1:	43.70	43.67	0.0
SAKSHAM-Skill Development Project Project-2	5.50	05.46	0.0
ANKURAM-Health & Nutrition Project-3:	11.40	11.44	0.0
Arogya-Health, Water & Sanitation	16.10	16.15	0.0
Shiksha Sarathi-Supplementary Education Project-4	4.00	03.98	0.0
Shiksha Sarathi-Education	28.50	28.84	+0.34
Rural Infra Development	36.80	37.07	+0.27
Harit-Urja: Environment & Renewal Energy	14.00	13.94	-0.07
Total	160.0	160.55	+0.54

Trend of CSR Spent: 2022-23





CSR Activities	Coverage in FY 2022-23 (Nos)
SAMIRIDDHI-Integrated Livelihood Project in watershed approach-1:	932
SAKSHAM-Skill Development Project Project-2	87
ANKURAM-Health & Nutrition Project-3:	1,374
Arogya-Health, Water & Sanitation	7,563
Shiksha Sarathi-Supplementary Education Project-4	80
Education	1,263
Rural Infra Development	3,519
Harit-Urja: Environment & Renewal Energy	1,071
Total	15,889

Annexure – 3

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)
NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	M/s Birla Corporation Limited		
Project Address:	M/s Birla Corporation Limited, Birla Cement Limestone Mine		
Village:	Jal	Block:	Chittaurgarh
District:	Chittorgarh	State:	Rajasthan
Pin Code:			
Communication Address:	M/s Birla Corporation Limited, Birla Cement Limestone Mine, Chittaurgarh, Chittorgarh, Rajasthan - 312001		
Address of CGWB Regional Office :	Central Ground Water Board Western Region, 6-a, Jhalana Doongri, Jaipur, Rajasthan - 302004		

1.	NOC No.:	CGWA/NOC/MIN/ORIG/2021/12308			
2.	Application No.:	21-4/9633/RJ/MIN/2018	3.	Category: (GWRE 2017)	Over Exploited
4.	Project Status:	Existing Project	5.	NOC Type:	New
6.	Valid from:	15/07/2021	7.	Valid up to:	14/07/2023

8. Ground Water Abstraction Permitted:

Fresh Water		Saline Water		Dewatering		Total	
m³/day	m³/year	m³/day	m³/year	m³/day	m³/year	m³/day	m³/year
0.00	0.00			757.00	249810.00		

9. Details of ground water abstraction /Dewatering structures

	Total Existing No.:4						Total Proposed No.:0					
	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Dewatering Structure*	0	0	0	0	4	0	0	0	0	0	0	0

*DW- Dug Well, DCB-Dug-cum-Bore Well, BW-Bore Well, TW-Tube Well, MP-Mine Pit,MPu-Mine Pumps

10.	Ground Water Abstraction/Restoration Charges paid (Rs.):	2498100.00

11.	Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism.	No. of Piezometers	Monitoring Mechanism		
			Manual	DWLR**	DWLR With Telemetry
	**DWLR - Digital Water Level Recorder	2	0	1	1

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed.

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011
Phone: (011) 23383563 Fax: 23382651, 23386743
Website: cgwa-noc.gov.in

पानी बचाएं - जीवन बचाएं
SAVE WATER - SAVE LIFE

Annexure 4

DETAILS OF AIR POLLUTION CONTROL EQUIPMENT (A.P.C.E)

Sr. No.	Section/ Location	APCE Installed	Total Numbers
1.	Mines	1. Water sprinklers 2. In-built water Injection system in drill machines 3. Hydraulic rock breakers & Splitters	4 4 11
2.	Crusher	Water spraying system	7
3.	OLBC	B.D.Cs (Bag Dust Collectors)	2
		Total number of A.P.C.E.	**28**

Annexure 5

Monthly Average Results of AAQM October, 2022 to March 2023

Birla Cement Limestone Mines (Villages - Bherda, Jai, Surjana and Nagri)

	S No.	Station	Month	Average Values in µg/m3			
				PM10	PM2.5	NOX	SO2
CORE ZONE	1	CA - 1	October, 2022	75	48	24	10
	2		November, 2022	78	50	23	11
	3		December, 2022	63	50	21	12
	4		January, 2023	78	55	20	11
	5		February, 2023	68	52	22	8
	6		March, 2023	83	41	24	9
	7	CA - 2	October, 2022	69	48	23	12
	8		November, 2022	63	46	23	11
	9		December, 2022	73	52	24	12
	10		January, 2023	81	48	28	11
	11		February, 2023	72	41	26	9
	12		March, 2023	85	50	29	9
	13	CA - 3	October, 2022	75	41	22	11
	14		November, 2022	65	43	25	10
	15		December, 2022	61	49	23	10
	16		January, 2023	78	44	26	8
	17		February, 2023	79	55	30	12
	18		March, 2023	91	53	30	12
	19	CA - 4	October, 2022	67	45	30	11
	20		November, 2022	82	47	24	11
	21		December, 2022	70	42	22	11
	22		January, 2023	84	43	27	11
	23		February, 2023	60	50	23	11
	24		March, 2023	86	48	22	10
	25	CA - 5	October, 2022	82	51	21	12
	26		November, 2022	75	44	24	11
	27		December, 2022	68	43	32	12
	28		January, 2023	72	52	28	12
	29		February, 2023	67	50	21	8
	30		March, 2023	69	53	25	11

Station Code	Location
CA - 1	Rampuria Water Pump
CA - 2	Surjana Pump
CA - 3	Near Crusher
CA - 4	Near Jai Temple
CA - 5	Pump House Bherda

Narendra Menaria
Dy. General Manager (Geology)

Monthly Average Results of AAQM October, 2022 to March 2023

Birla Cement Limestone Mines (Villages - Bherda, Jai, Surjana and Nagri)

	S No.	Station	Month	Average Values in µg/m3			
				PM10	PM2.5	NOX	SO2
BUFFER ZONE	1	BA - 1	October, 2022	84	49	24	12
	2		November, 2022	81	45	24	12
	3		December, 2022	61	48	24	9
	4		January, 2023	91	55	29	13
	5		February, 2023	73	42	27	10
	6		March, 2023	75	54	29	8
	7	BA - 2	October, 2022	82	48	28	10
	8		November, 2022	69	51	23	11
	9		December, 2022	72	44	24	10
	10		January, 2023	63	49	20	10
	11		February, 2023	67	44	29	9
	12		March, 2023	70	49	23	8
	13	BA - 3	October, 2022	74	47	23	12
	14		November, 2022	74	48	22	12
	15		December, 2022	73	47	25	12
	16		January, 2023	66	54	24	13
	17		February, 2023	81	45	25	12
	18		March, 2023	69	50	28	11
	19	BA - 4	October, 2022	82	49	22	10
	20		November, 2022	84	46	25	10
	21		December, 2022	78	49	22	9
	22		January, 2023	77	51	29	13
	23		February, 2023	79	52	21	11
	24		March, 2023	88	43	25	11
	25	BA - 5	October, 2022	71	50	24	10
	26		November, 2022	83	45	22	12
	27		December, 2022	81	48	24	10
	28		January, 2023	86	43	24	9
	29		February, 2023	66	40	25	9
	30		March, 2023	63	44	26	12

Station Code	Location
BA - 1	New Sanwaria Nagar
BA - 2	Moonga ka Kheda
BA - 3	Higher Sec. School Nagri
BA - 4	Sub Station OLBC
BA - 5	Director Bunglow

Narendra Menaria
Dy. General Manager (Geology)

AUTOMATIC WATER LEVEL RECORDER (AWLR) PIEZOMETER)

Annexure 6

Sample Reading of Each Station

Report Name		Complete day wise sensor report	
project Name		Birla Cement	
Location		Chittorgarh 1	
Device Name		Near mines Admin	
Date	Time	Near mines Admin	
		Reading(m)	Voltage(V)
01.10.2022	09:05:59	18.08	12.53
02.11.2022	07:37:39	17.06	10.73
04.12.2022	09:40:57	17.85	10.25
02.01.2023	11:37:07	18.55	10.85
03.02.2023	08:19:36	19.19	12.20
01.03.2023	10:20:42	20.50	9.20

Report Name		Complete day wise sensor report	
project Name		Birla Cement	
Location		Chittorgarh 2	
Device Name		Behind contractor camp	
Date	Time	Behind contractor camp	
		Reading(m)	Voltage(V)
9.10.2022	06:02:41	20.76	12.25
3.11.2022	12:24:15	23.40	12.17
1.12.2022	09:42:12	25.07	11.90
1.01.2023	09:01:04	27.28	11.03
3.02.2023	10:07:08	30.36	10.90
2.03.2023	12:16:38	33.02	12.48

Report Name		Complete day wise sensor report	
project Name		Birla Cement	
Location		Chittorgarh 3	
Device Name		Nagri pit	
Date	Time	Nagri pit	
		Reading(m)	Voltage(V)
02.10.2022	09:22:32	7.65	10.11
10.11.2022	16:18:46	9.60	11.35
01.12.2022	08:12:39	13.50	11.00
01.01.2023	10:16:58	15.20	8.47
02.02.2023	06:46:53	18.85	12.50
10.03.2023	08:59:55	18.91	12.43

Report Name		Complete day wise sensor report	
project Name		Birla Cement	
Location		Chittorgarh 4	
Device Name		Rampuriya subststion	
Date	Time	Rampuriya subststion	
		Reading(m)	Voltage(V)
02.10.2022	08:22:31	15.50	13.11
01.11.2022	10:18:50	16.38	13.38
11.12.2022	08:42:29	16.31	13.31
07.01.2023	09:30:06	14.72	13.30
08.02.2023	11:18:32	14.70	13.54
02.03.2023	10:16:21	15.00	13.62

CHEMICAL ANALYSIS OF GROUNDWATER SAMPLES FROM M.O.E.F. RECOGNISED LABORATORY

APEX Enviro Laboratory
(Unit of Apex Mintech Consultants)
NABL Accredited, OHSAS Certified & Recognized by MoEF&CC, GOI, Under Environment (Protection) Act, 1986 Vide F.No. 15018/16/2017-CPW
TC - 7531

Date-16/05/2022

TEST REPORT

Report No.	:	**W/5552**
Issued to	:	Birla Cement Works
Address	:	Madhavnagar, Chanderia, Chittorgarh-312021
Sampling Location	:	Well of Shri Prathviraj Kumar, Damdama
Date of Sample Collection	:	10/05/2022
Date of Receipt	:	10/05/2022
Date of Testing	:	11/05/2022 to 16/05/2022
Type of Sample	:	Well Water
Sample No.	:	Bw-01
Testing Protocol	:	Bureau of Indian Standard

RESULT

S. N.	Parameters	Observed Value	IS 10500: 2012		Test Methods
			Acceptable Limit	Permissible Limit	
1.	pH at 25°C	7.5	6.5-8.5	-	IS-3025(Part-11):1983(RA2002)
2.	Turbidity (NTU)	0.2	1	5	IS-3025(Part-10):1984(RA2002)
3.	Total Hardness ($CaCO_3$) (mg/l)	430	200	600	IS-3025(Part-21):1983(RA2009)
4.	Total dissolved solids (mg/l)	978	500	2000	IS-3025(Part-16):1984(RA2006)
5.	Calcium as Ca (mg/l)	104	75	200	IS-3025(Part-40):1991(RA2003)
6.	Magnesium as mg (mg/l)	40.8	30	100	IS-3025(Part-46):1994(RA2003)
7.	Alkalinity as $CaCO_3$ (mg/l)	405	200	600	IS-3025(Part-23):1986(RA2006)
8.	Sulphate as SO_4 (mg/l)	145	200	400	IS-3025(Part-24):1986(RA2003)
9.	Lead as Pb (mg/l)	<0.01	0.01	-	APHA(PP3.18to3.20)

Note-
1. The results listed refer only to the tested sample (s) & parameters (s). Endorsement of Product is neither inferred nor implied.
2. This report is not to be reproduced wholly or in part and cannot be used evidence in the court of law and should not be used in any advertising media without our special permission in writing.
3. The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Tested By

Apex Enviro Laboratory, 3, Dhebar Colony Near I.T.I. Pratapnagar, Udaipur (Raj.)

K. L Agrawal
(Technical Manager)

Pg 1 of 1

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APEX Enviro Laboratory

(Unit of Apex Mintech Consultants)

NABL Accredited, OHSAS Certified & Recognized by MoEF&CC, GOI,
Under Environment (Protection) Act, 1986 Vide F.No. 15018/16/2017-CPW

TC - 7531

Date-16/05/2022

TEST REPORT

Report No.	:	**W/5551**
Issued to	:	Birla Cement Works
Address	:	Madhavnagar, Chanderia, Chittorgarh-312021
Sampling Location	:	Well of Shri Kanhayia Lal Lodha, Manpura
Date of Sample Collection	:	10/05/2022
Date of Receipt	:	10/05/2022
Date of Testing	:	11/05/2022 to 16/05/2022
Type of Sample	:	Well Water
Sample No.	:	Bw-02
Testing Protocol	:	Bureau of Indian Standard

RESULT

S. N.	Parameters	Observed Value	IS 10500: 2012		Test Methods
			Acceptable Limit	Permissible Limit	
1.	pH at 25°C	7.4	6.5-8.5	-	IS-3025(Part-11):1983(RA2002)
2.	Turbidity (NTU)	0.1	1	5	IS-3025(Part-10):1984(RA2002)
3.	Total Hardness ($CaCO_3$) (mg/l)	570	200	600	IS-3025(Part-21):1983(RA2009)
4.	Total dissolved solids (mg/l)	910	500	2000	IS-3025(Part-16):1984(RA2006)
5.	Calcium as Ca (mg/l)	168	75	200	IS-3025(Part-40):1991(RA2003)
6.	Magnesium as mg (mg/l)	36	30	100	IS-3025(Part-46):1994(RA2003)
7.	Alkalinity as $CaCO_3$ (mg/l)	360	200	600	IS-3025(Part-23):1986(RA2006)
8.	Sulphate as SO_4 (mg/l)	190	200	400	IS-3025(Part-24):1986(RA2003)
9.	Lead as Pb (mg/l)	<0.01	0.01	-	APHA(PP3.18to3.20)

Note-

1. The results listed refer only to the tested sample (s) & parameters (s). Endorsement of Product is neither inferred nor implied.
2. This report is not to be reproduced wholly or in part and cannot be used evidence in the court of law and should not be used in any advertising media without our special permission in writing.
3. The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Tested By

Apex Enviro Laboratory 3, Dhebar Colony Near I.T.I. Pratapnagar, Udaipur (Raj.)

K. L Agrawal
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TC - 7531

Date-16/05/2022

TEST REPORT

Report No.	:	**W/5553**
Issued to	:	Birla Cement Works
Address	:	Madhavnagar, Chanderia, Chittorgarh-312021
Sampling Location	:	Well of Shri Shankar Lal Regar, Gopal nagar
Date of Sample Collection	:	10/05/2022
Date of Receipt	:	10/05/2022
Date of Testing	:	11/05/2022 to 16/05/2022
Type of Sample	:	Well Water
Sample No.	:	Bw-03
Testing Protocol	:	Bureau of Indian Standard

RESULT

S. N.	Parameters	Observed Value	IS 10500: 2012		Test Methods
			Acceptable Limit	Permissible Limit	
1.	pH at 25°C	7.65	6.5-8.5	-	IS-3025(Part-11):1983(RA2002)
2.	Turbidity (NTU)	0.3	1	5	IS-3025(Part-10):1984(RA2002)
3.	Total Hardness ($CaCO_3$) (mg/l)	550	200	600	IS-3025(Part-21):1983(RA2009)
4.	Total dissolved solids (mg/l)	940	500	2000	IS-3025(Part-16):1984(RA2006)
5.	Calcium as Ca (mg/l)	158	75	200	IS-3025(Part-40):1991(RA2003)
6.	Magnesium as mg (mg/l)	37.2	30	100	IS-3025(Part-46):1994(RA2003)
7.	Alkalinity as $CaCO_3$ (mg/l)	430	200	600	IS-3025(Part-23):1986(RA2006)
8.	Sulphate as SO_4 (mg/l)	139	200	400	IS-3025(Part-24):1986(RA2003)
9.	Lead as Pb (mg/l)	<0.01	0.01	-	APHA(PP3.18to3.20)

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Tested By

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TC - 7531

Date-16/05/2022

TEST REPORT

Report No.	:	**W/5555**
Issued to	:	Birla Cement Works
Address	:	Madhavnagar, Chanderia, Chittorgarh-312021
Sampling Location	:	Well of Shri Tulsa Ram Dangi, Achhora
Date of Sample Collection	:	10/05/2022
Date of Receipt	:	10/05/2022
Date of Testing	:	11/05/2022 to 16/05/2022
Type of Sample	:	Well Water
Sample No.	:	BW-04
Testing Protocol	:	Bureau of Indian Standard

RESULT

S. N.	Parameters	Observed Value	IS 10500: 2012		Test Methods
			Acceptable Limit	Permissible Limit	
1.	pH at 25°C	7.7	6.5-8.5	-	IS-3025(Part-11):1983(RA2002)
2.	Turbidity (NTU)	0.30	1	5	IS-3025(Part-10):1984(RA2002)
3.	Total Hardness ($CaCO_3$) (mg/l)	500	200	600	IS-3025(Part-21):1983(RA2009)
4.	Total dissolved solids (mg/l)	805	500	2000	IS-3025(Part-16):1984(RA2006)
5.	Calcium as Ca (mg/l)	112	75	200	IS-3025(Part-40):1991(RA2003)
6.	Magnesium as mg (mg/l)	52.8	30	100	IS-3025(Part-46):1994(RA2003)
7.	Alkalinity as $CaCO_3$ (mg/l)	410	200	600	IS-3025(Part-23):1986(RA2006)
8.	Sulphate as SO_4 (mg/l)	65	200	400	IS-3025(Part-24):1986(RA2003)
9.	Lead as Pb (mg/l)	<0.01	0.01	-	APHA(PP3.1Sto3.20)

Note-

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Tested By

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Washing PIT:

The oil water separator is specially designed to separate sludge & oil from dirty water. Enhanced Zero Water Discharge at washing point.

Oil and grease are regularly skimmed off and clean water is re-circulated.

Annexure- 9

Stone Pitching for Dumps and Bund Stabilization

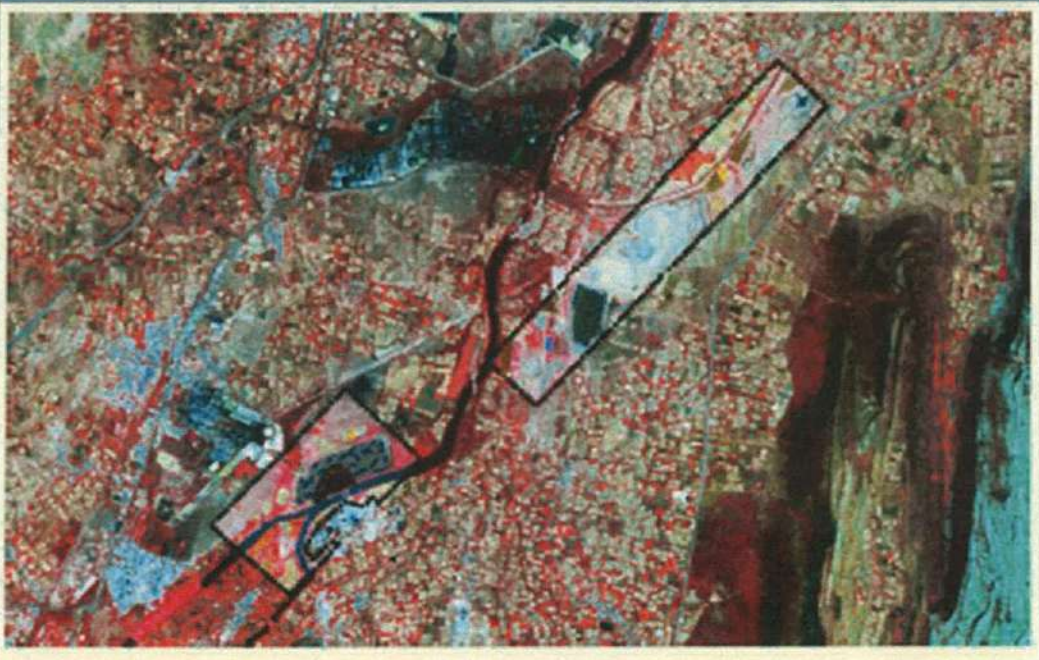
We have done dump Stabilization through proper benching system in our active dump area and Stone pitching along the haul road to prevent collapse.

Annexure-10

DETAILS OF MEDICAL EXAMINATION 2023				
	category	**Initial examination**	**Periodical Examination**	
	CONTRACTORS /A.M.C / F.M..C			
1	M/S APEKSHA ENGINEERS	12		
2	M/S SANWARIA STONE CARRIER	11		
3	M/S L&T	5	16	
4	M/S D.C.S	4		
5	M/S LIBHERR -1	14		
6	M/S LIBHERR-2	4		
7	M/S EPIROC	2		
	GRAND TOTAL	52	16	TOTAL -68

Annexure-11

Land Use / Land Cover Analysis for Mine Lease and Buffer Zones of Birla Cement Limestone Mine of Birla Corporation Ltd. using Remote Sensing Techniques.



Client :
Birla Corporation Limited
(Unit : Birla Cement Works)

Prepared By :
CompuSense Automation, Ahmedabad

December 2022

Annexure-12

Environment Management SD Cell