

**M/s SHIVA CEMENT LIMITED**  
**P/25, CIVIL TOWNSHIP, PO. ROURKELA, DIST. SUNDARGARH (ODISHA), PIN – 769004**

**COMPLIANCE STATUS OF ORDER/JUDGMENT OF HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI**  
**VIDE ITS ORDER/JUDGMENT DATED 4<sup>th</sup> MARCH 2014 IN APPLICATION NO. 287 OF 2013**  
**IN FAVOUR OF OUR KHATKURBAHAL LIMESTONE & DOLOMITE MINES,**  
**VILLAGE : KHATKURBAHAL, PO/TEHSIL. KUTRA, DIST. SUNDARGARH (ODISHA)**

**Half Yearly Compliance for the period from October 2015 to March 2016**

Sl. No.	<i>Specific Conditions</i>	<b>Compliance</b>
(i)	Environmental Clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.	NA
(ii)	The project proponent shall obtain Consent to Establish and Consent to Operate from the Odisha State Pollution Control Board and effectively implement all the conditions stipulated therein.	Consent to operate order No. 4685/IND-I-CON-1904, Dt.18.03.2015. Valid upto 31.03.2016.
(iii)	Appropriate mitigative measures shall be taken to prevent pollution of the Sankh River in consultation with the State Pollution Control Board.	NA
	<i>General Conditions</i>	<b>Compliance</b>
(i)	The Project proponent shall ensure that no natural water course and/or water resources are obstructed due to any mining operations. Adequate measures shall be taken for protection of the 1 <sup>st</sup> order and 2 <sup>nd</sup> order streams, if any emanating/passing through the mine lease during the course of mining operation.	NA

(ii)	The top soil, if any shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.	Done as required
(iii)	The overburden (OB) generated during the mining operation shall be temporarily stacked at earmarked dump site (s) only for the purpose of backfilling. Monitoring and management of the rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar on six monthly basis.	Done as required
(iv)	<p>Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, temporary OB and mineral dumps to arrest flow of silt and sediment directly into the Sankh River and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after the monsoon and maintained properly.</p> <p>Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and temporary over burden dumps to prevent runoff water and flow of sediments directly into the Sankh river other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.</p>	Done as required
(v)	Dimension of the retaining wall at the toe of the temporary OB dumps and the OB benches within the mine to check run-off and siltation should be based on the rain fall data.	Done as required

(vi)	Plantation shall be raised in a 7.5 m wide green belt in the safety zone around the mining lease backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO / Agriculture Department. The density of the tree should be around 1000 plants per ha. Green belt shall be developed all along the mine lease area in a phased manner and shall be completed with the first five years.	Done as required
(vii)	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as around crushing and screening plant, loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Done as required
(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.	Done as required
(ix)	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring (at least four times in a year pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season) shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Bhubaneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the ground water table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.	Done as required (annex-1)
(x)	The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water required for the project	Permission Letter No. 21-4(304)/CGWA/SER/2011-166, Dated-14.02.2011 from Central Ground Water Authority, Quantity of 798 m <sup>3</sup> /day from mine pit and one borewell.

(xi)	Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.	Done as required
(xii)	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.	Done as required
(xiii)	Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	Done as required
(xiv)	Drills shall either be operated with dust extractors or equipped with water injection system.	Equipped with dust extractors.
(xv)	Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	NA
(xvi)	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.	NA
(xvii)	Pre-placement medical examination and periodical medical examination of the worker engage in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	Done as required
(xviii)	Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. the housing may be in the form of temporary structures to be removed after the completion of the project.	Done as required

(xix)	The critical parameters such as SPM, RSPM (Particulate matter with size less than 10 micron i.e., PM10), NO <sub>x</sub> in the ambient air within the impact zone, peak particle velocity at 300 m distance or within the nearest habitation whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a displayed board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the Ministry <a href="http://www.envfor.nic.in">www.envfor.nic.in</a> shall also be referred in this regard for its compliance.	Done as required(Annex-2)
(xx)	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment and Forests 5 years in advance of final mine closure for approval.	NA
(xxi)	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and Forests.	-----
(xxii)	No change in the calendar plan including excavation, quantum of mineral and waste should be made.	Done as required
(xxiii)	Conservation measures for protection of flora and fauna in the core and buffer zone should be drawn up in consultation with the local forest and wildlife department and effectively implemented.	Done as required
(xxiv)	Four ambient air quality – monitoring stations should be established in the core zone as well as in the buffer zone should for RSPM, SPM, SO <sub>2</sub> an NO <sub>x</sub> 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.	Done as required (Annex-2)
(xxv)	Data on ambient air quality (RSPM, SPM, SO <sub>2</sub> and NO <sub>x</sub> ) should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Bhubaneswar and the State Pollution Control Board/Central Pollution Control Board once in six months.	Done as required (Annex-2)

(xxvi)	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	Done as required
(xxvii)	Measures should be taken for control of noise level below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs.	Done as required
(xxviii)	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 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	Done as required
(xxix)	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.	Done as required
(xxx)	Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Done as required
(xxxi)	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 Organisation.	Done as required
(xxxii)	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Bhubaneswar.	Done as required
(xxxiii)	The Project authorities should inform to the Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	N. A.
(xxxiv)	The Regional Office of the Ministry located at Bhubaneswar 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.	Done as required

(xxxv)	The project proponent shall submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environmental and Forests, its Regional Office Bhubaneswar, the respective Zonal Office of CPCB and the SPCB. The proponent shall upload the status of compliance of the EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Bhubaneswar, the respective Zonal Office of CPCB and the SPCB.	Done as required
(xxxvi)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Done as required
(xxxvii)	The State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and the Collector's office / Tehsildar's Office for 30 days.	Done as required
(xxxviii)	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC condition and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Bhubaneswar by e-mail.	Done as required
(xxxix)	The project authorities should advertise at least in two local news papers 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 website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy of the same should be forwarded to the Regional Office of this Ministry located Bhubaneswar".	Done as required

**For M/s. SHIVA CEMENT LIMITED  
G.M. (Works)**

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