

JAYPEE HIMACHAL CEMENT PLANT - BAGA (ARKI) SOLAN (H.P)

COMPLIANCE STATUS (PERIOD: OCT 2011 TO MARCH 2012) OF THE CONDITIONS LAID DOWN IN EC BY MOEF NEW DELHI, VIDE THEIR LETTER F. NO. J-11011/26/2006-IA II (I) DATED 18-05-06

A. SPECIFIC CONDITIONS

SR. NO.	CONDITIONS STIPULATED	ACTION TAKEN / COMPLIANCE STATUS
I	The gaseous (SOx, NOx, CO & HC) and particulate matter emission from various units shall conform to the standard prescribed by the State Pollution Control Board.	Plant is operational w.e.f. 24.02.2010, for which 'Consent to Operate' has been obtained from the HP SPCB on 29.01.2010. Since then, stack emissions have been monitored regularly and results are conformed to the norms of SPCB. Report on particulate emission is enclosed herewith as Annexure 1 .
	Continuous emission monitoring facilities shall be provided and emission levels shall be less than 50 mg/Nm3 after installation of Pollution control equipments. Continuous on-line real time emission data shall be made available to CPCB/SPCB website.	The pollution control equipments, conforming to the required specification i.e. 50 mg/Nm3, have been installed. Continuous monitoring facilities i.e. opacity meters have been installed at all the major stacks for particulate matter and on-line real time data has been made available to the CPCB / SPCB website for further scientific analysis as well as for Public domain.
	Nox burner shall be installed to control Nox emission and shall be within the permissible limits.	Highly efficient burner i.e. Pyroject Burner, based on latest technology, to control the Nox emission, has been installed at Kiln firing inlet.
	Inter-locking facility shall be provided between pollution control equipments and the process operation so that in the event of the pollution control equipments not working, the respective unit(s) is shut down automatically.	Required Interlocking facility with Plant operation has been provided and is being controlled by the Process Operating Data System. In the event of the pollution control equipments not working, the respective unit (s) shall shut down automatically. Latest generation DCS system has been installed. In this regard, timely compliance has been submitted to MoEF and SPCB.
II	Ambient Air Quality including Ambient Noise levels shall be monitored at different locations including fence of the sanctuaries and must not exceed the standards stipulated under EPA or by the State Authorities.	Has been complied with (There is no Sanctuary in the close vicinity of the Project area). 7 Nos. of manual AAQM stations besides two real time / continuous AAQM stations have been installed at different locations prescribed by SPCB and monitoring has since been done. Report on AAQM is enclosed as Annexure 2 . Ambient Noise levels at the boundary line of our Unit has also been monitored and the results are within the norms. Report is enclosed as Annexure 3 .

	Monitoring of Ambient Air Quality and stacks emission shall be carried out regularly in consultation with HPSEP & PCB and report submitted to Board quarterly and to the Ministry's Regional Office at Chandigarh half yearly. Continuous stack monitoring instrument shall be installed.	Periodic reports on Ambient Air Quality and stack monitoring are being regularly submitted to Board and the Ministry's Regional Office at Chandigarh as per the prescribed intervals. Besides this, HP SPCB is also monitoring the ambient air quality and stack emissions on regular intervals, latest on 18.02.2012. Results of the monitoring are within norms. As stated above, for continuous monitoring of particulate emissions from all the major stack, opacity meters have been installed.
III	The Company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points.	Adequate measures have been incorporated in the design of the Plant to control the fugitive dust emission. Dust collection and extraction system incorporating Bag House / Bag Filters have already been installed and are working efficiently.
	Fugitive emission from raw material storage yards, loading and unloading operation, material transfer points shall be controlled by providing bag filters and water sprinkling system etc. to control fugitive emission.	Fugitive emission from raw material storage yards, loading and unloading operation is being controlled by water sprinkling and bag filters have also been installed at all the material transfer points.
	Electrostatic Precipitator (ESP) to Clinker Cooler and Bag House to Raw Mill / Kiln, Coal Mill, Cement Mill and bag filter to Limestone weight feeder, Silos (Clinker, Cement, Raw material storage, Raw meal blending) and Packing machine etc. shall be provided.	For Clinker Cooler, ESP has been installed and for Raw Mill / Kiln, Coal Mill and Cement Mill, Bag Houses are installed. Bag Filters have also been provided to Packing machine and limestone weight feeder. Clinker, Cement & Raw Meal Blending Silos have been so made (closed RCC structures) to avoid any fugitive emissions during operation.
	Closed clinker silo/ Pile system shall be provided.	For clinker storage, closed RCC Silo of adequate capacity has been constructed. For clinker transportation, closed pan conveyor belt has been provided.
	Automatic dust cleaning system for removing dust from floors, cement roads inside the plant to avoid dispersion of dust, water sprinkling arrangement in raw material stock yards and cement bag loading areas etc. shall be provided to control the fugitive emissions.	Water sprinkling arrangement to avoid the dust emission from raw material storage yards, internal / approach roads inside the project area has been provided. Automatic dust cleaning machines / vacuum cleaners (2 No's) for removing the dust from floors and cement roads inside the plant have been deputed on job and are operational since June' 2010.

IV	Total water requirement shall not exceed 3000 m ³ /day as per limit stipulated by Govt. of H.P. No effluent shall be discharged from the process outside the premises and all the treated waste water shall be utilized for green belt development and other plant related activities. Domestic waste water generated from the colony shall be treated in sewage treatment plant. 'Zero' discharge shall be strictly adopted.	Our water consumption is within the prescribed limit. Water consumption per day has not exceeded the figure of 2500 m ³ /day during the last six months. 'Water Consumption-Table' for the financial year 2011 - 12 is enclosed herewith as 'Annexure 4' showing average per day water consumption of 1423 M ³ / Day. Our Plant is based on dry process technology. No effluent from process is being discharged outside the premises and all the treated waste water is being utilized for green belt development and water sprinkling for dust suppression. Domestic waste water generated from the Colony is being treated in sewage treatment plant. 4 Nos of STP have been installed and are treating domestic waste water resulting from our residential complexes namely Baga Bhavan, Basant Kunj, Panali Camp and Neri Township. The treated water conforms to the prescribed standards. STP's treated waste water quality parameters are provided at Annexure-5 . The treated waste water from STPs has been used for water sprinkling for dust suppression and green belt development. The STP sludge is used as manure for green belt development.
V	Suitable steps shall be taken to avoid traffic congestion. Use of closed trucks to transport coal, fly ash, gypsum and 17 km long road from project site to National Highway shall be constructed.	In order to avoid traffic congestion, existing PWD road (17 km) between Baga (Plant area) and Jabbal (NH 88) has been widened to N.H. standard. Black topping / graveling of patches damaged during previous Monsoons is being done. Concrete pavement of the road where ever required has also been done for about 4 Kms stretch. For the transport of raw material / finished products, job has been assigned to local transport societies and compulsory use of 'tarpaulin' for trucks has been incorporated at clause no. 2.5 of the agreement executed with the transporters. Time to time directions are being issued to the transporters to comply with the above condition in order to ensure that maximum no. of trucks are covered with tarpaulin.
V Cont.	Due to enhanced movement of the trucks and expansion of the project and other cement industries in the same region, the industry may consider feasibility of setting up of the conveyor belt transportation system for the raw material as well as final product to decongest the traffic in the Hill region in collaboration with the Central Road Research Institute, New Delhi.	The matter is under consideration before HP State Government for constructing the alternate roads to reduce the congestion of traffic on hilly roads.

VI	The company shall harvest surface as well as rainwater from the roof tops of the buildings proposed in the expansion project.	Roof top rain water harvesting shall be done in accordance with the plan submitted to the SPCB. All the buildings within our Plant & Township area have been constructed with rain water harvesting roof tops & drains. Rain water from the roof tops shall be diverted into storm water collecting channels on the ground which are under construction within our Plant & Township area. Water so collected shall be utilized to recharge the ground water.
	Storm water drains to recharge the ground water and use the same water for the various activities of the Project to conserve fresh water.	Storm water channels are being constructed within the Plant and Township area to catch the rain water and under ground water recharge system of adequate design is being made at suitable locations to recharge the underground water. However, to conserve the fresh water, treated waste water is being properly utilized for green belt development / horticultural activities and for the sprinkling purpose within our Project area.
VII	Green belt shall be developed in and around the project in 55 ha land (33%) as per the CPCB guidelines in consultation with the local DFO.	Efforts in this direction are being made in consultation with DFO Kunihar / CF Bilaspur. Green belt development programme has been taken up within our Project area. Till date, survival of 14076 trees and 46,800 plants of bio-engineering species has been achieved so far @ 70%. Details are provided at ' Annexure C ' which also shows greenbelt development plan for the next two years.
	Plantation shall also be done along the road side between Baga-Jabbal, Baga-Kandhar and any other new road proposed in collaboration with the State Forest Department due to regular plying of trucks on these roads.	Shall be complied with after the road work / concrete pavement is completed on Baga Jabbal PWD road in collaboration with the State Forest department through PWD Deptt. Plantation along this road shall be done only after the improvement of this road being done by the State PWD department for which Rs. 12 Lacs have been provided by the Company.
VIII	Solid waste generated especially cement dust collected from various pollution control devices shall be 100% recycled and reutilized in the process. Treated STP sludge shall be used for green belt development.	Clinker dust generated from the Plant is being 100% recycled after its collection through Bag filters etc. Dust collected in PC equipments is being recycled back in the process. Treated STP sludge is being used for green belt development.
	Scrapped automobiles batteries and waste oil shall be sold to authorized recycler/reprocess or.	Scrapped automobile batteries are being returned back to the Suppliers for recycling purpose. Used / waste oil is being sold to the registered recycler.
	Solid waste generated from colony and STP will be disposed after segregating the waste into bio-degradable and non bio-degradable.	Domestic solid waste from the colony after segregating it into biodegradable & non bio-degradable components and sludge from the STPs is being disposed off properly by utilizing it in Horticultural activity within our township area.

	As proposed an Incinerator shall be installed for disposing off bio- degradable waste and non bio-degradable waste shall be used for land filling at identified area.	Incinerators of suitable sizes have been installed within our Plant and Township areas for disposing off non bio-degradable waste and residue is being used for land filling at identified location within our Project area. Bio-degradable waste will be used for Bio-composting and will be used as manure for green belt development.
IX	Rehabilitation and Resettlement Plan shall be implemented as per R&R policy of the state Govt. in a time bound manner and report submitted to the Ministry.	Rehabilitation & Resettlement of Project affected families is being done as per the approved R & R Plan of State Govt. Due grants @ 11.00 Lacs per family have been deposited with LAC Arki for disbursement amongst the affected families. A detailed note / latest compliance status of R & R Plan of Project affected families has been submitted to the Regional Office of MoEF at Chandigarh vide our letter dated 04.10.2011. Any further progress in the matter shall be intimated to the office of MoEF at Chandigarh.
	As proposed, a 30 bed hospital shall be constructed at Baga for the Medical examination for all the workers /employees and Medical facilities shall be open to all the person in the nearby surrounding villages.	Shall be Complied with. A mobile Medical Van equipped with X-ray facility and two Ambulances have already been put into service and is providing health care facilities for the surrounding villages. Also 175 Medical Camps has been organized, till date since 2005, in the surrounding areas, distributing medicines on free of cost basis. Now, construction of 30 bedded Hospital building within our Township area is almost completed and as of now required infrastructure & equipments are being procured. Details of the medical staff and facilities currently available at our site is enclosed herewith as ' Annexure -6 '.
X	The company shall undertake eco-development measures including community welfare measures in the project area.	Eco-development measures, i.e. Soil & Water Conservation and Wildlife Protection, are being taken up in co-ordination with the State Forest Department / DFO Kunihar for which due funds of Rs. 1.34 Crores and Rs. 54.12 Lacs, respectively, have been deposited with the Forest Department. Steps are being undertaken to develop / landscape a 9000 M ² of area for its environment and aesthetic value at 'Mahavir Kunj' within our Project area. Community welfare activities are being taken up in co-ordination with the District authorities. However, steps at present are being undertaken for the quality enhancement in the field of Education, Health, Drinking water and in the creation of durable Community / Public assets. Details are enclosed as ' Annexure 7 '.
XI	The company shall follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP) especially all the major stacks shall be provided with continuous emission monitoring for particulate matter.	All the major stacks have been provided with continuous monitoring facility for particulate matter. Plant design incorporates emission levels below 50 mg/Nm ³ . Compliance report w.r.t. 'Charter on Corporate Responsibilities for Environment protection' (CREP) has been submitted to Ministry at its Regional Office at Chandigarh and other concerned authorities vide our letter dated 22.08.2010. Copy of the same is enclosed herewith as ' Annexure 8 '.

XII	Since the proposed plant is located in the vicinity of wildlife sanctuary, no construction and / or operational work at site shall be undertaken without obtaining prior permission from the Chief Wildlife Warden, Govt. of H.P.	The NOC from Chief Wildlife Warden, Govt. of H.P. has since been obtained at the time of getting the forest land diversion approval and have been submitted to MoEF, New Delhi along with duly approved Wildlife Management Plan of Rs. 54.12 Lacs. Due funds have since been deposited with the Wildlife department for its execution.
XIII	Limestone shall be sourced from the 347.2655 Hac Baga-Bhalag limestone mine located in Tehsil Arki, District Solan, H.P. and proposal has been submitted to the Ministry for Environmental Clearance. No construction / operation work of any kind shall be undertaken at the site without obtaining prior environmental clearance for limestone mining from the Ministry.	The MOEF New Delhi has granted Environmental Clearance for the Mining area vide letter F. NO. J-11015/11/2006-1A.11 (M) dated 07.09.2006.
XIV	In - Principal approval for the 104.6846 Hac forest land for the cement plant 239.509 Hac for the mining of limestone has been accorded by the Ministry of Environment & Forest vide letter No. 8-17/2005 and 8-72/2005 -FC dated 26th December, 2005 respectively. No construction /Operation work of any kind shall be undertaken at the site without obtaining prior clearance for the forest land to be used.	Final approval has been accorded by MOEF New Delhi for diversion of forest land, 104.6846 Hac for Plant Area and 239.509 Hac for Mining area vide letter F.No.8.17/2005.PC dated 29th May, 2006 and letter F.No.8-72/2005-FC dated 2nd June 2006, respectively.

B. GENERAL CONDITIONS

Sr. NO	CONDITIONS STIPULATED	ACTION TAKEN /IMPLEMENTATION SCHEDULE
I	The Project authority must adhere to the stipulations made by H.P. State Environment Protection & Pollution control Board (HPSE&PCB) and State Government.	Sate Pollution Control Board has issued 'Consent to Operate' for the Plant (2.05 MTPA clinker production) vide their letter dated 29.01.2010. Compliance reports in favour of conditions stipulated by SPCB in their consent letter are being regularly submitted, latest on 14.02.2012.
ii	No further expansion or modification of the Plant shall be carried out without prior approval of the Ministry.	Shall be strictly adhered to.
iii	At least four Ambient Air Quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO ₂ and No _x are anticipated in consultation with the HPSEP& PCB.	7 Nos. of manual Ambient Air Quality monitoring stations besides two real time / continuous AAQM stations have been installed at the locations prescribed by SPCB.

	Data on Ambient Air Quality and stack emission shall be regularly submitted to this Ministry including it's Regional office at Chandigarh and HPSEP & PCB once in six months.	The data on Ambient Air Quality and Stack emission is being periodically furnished to Ministry at its Regional office at Chandigarh and HPSEP & PCB once in six months. Reports on monitored data with statistical analysis have already been enclosed as Annexure '2' and Annexure '1' as above.
iv	Industrial waste water shall be properly collected treated so as conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December ,1993 or as amended from time to time. The treated waste water should be utilized for plantation purpose.	The plant is based on dry process technology and there shall not be any waste water generation from the process. However, the quality of the treated waste water from all the STPs is being analyzed regularly for the parameters prescribed by SPCB and is well within the prescribed norms. Report on treated waste water quality has been enclosed above as Annexure 5 as mentioned above. Quality of effluent is also being regularly checked by the HP SPCB Parwanoo. As stated above, treated waste water is being utilized for green belt development/ Horticultural activities and for sprinkling purpose.
v	The overall noise levels in and around the Plant area shall be kept well within the standards (85 (db) A) by providing noise control measures including accoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (protection) Act, 1986 rules ,1989 viz 75 dBA (day time)and 70 dBA (night time). Compliance to all the standards for DG sets for noise shall be ensured and accoustic enclosures around DG sets shall be provided.	Is being complied with. Report on ambient noise levels monitored in and around the project area has been enclosed above as Annexure 3 . DG sets are acoustically enclosed. Noise levels near DG sets are well within the prescribed limits and are enclosed herewith as ' Annexure 9 '.
vi	Proper house keeping and adequate occupational health programmes must be taken up. All the person working in sensitive areas shall wear protective covers. Occupational Health surveillance programmes shall be done on a regular basis and records maintained. The program must include lung function and sputum analysis test once in six month.	A committee has been constituted to monitor the Safety and Occupational health aspects, which meets periodically to enhance the safety and occupational health awareness amongst the workers. Occupational health check-ups are being carried out on regular basis. Lung function and sputum analysis test shall be done once in a six month with the operation of 30 bedded hospital under construction within our Township area. Occupational health check-up details of the employees / workers at our Jaypee Himachal Cement Plant & Captive Limestone Mine at Baga - Bhalag are enclosed herewith for the financial year 2011-12 as Annexure '10' .
vii	The Project Proponent shall also comply with all the environmental protection measures and safeguards recommended in the Rapid and Comprehensive EIA/EMP.	Is being complied with.

viii	A Separate environmental management cell with full fledged laboratory facilities to carry out various management monitoring functions shall be set up under the control of Senior Executive.	A separate Environment Management Cell with full fledged laboratory has been established within our Plant to carry out the various environment management monitoring functions under the control of a Senior Executive (General Manager). Constitution of 'Environment Managment Cell' has already been submitted to the northern office of Ministry at Chandigarh vide our letter dated 17.12.2011. Copy of the same is enclosed herewith as ' Annexure 11 '.
ix	As proposed in EIA/EMP, Rs. 112.67 crores and Rs. 3.8 crores earmarked towards capital cost and recurring cost/ annum for environmental pollution control measures shall be used exclusively to implement the conditions stipulated by the Ministry of Environment and Forest as well as the State Government. A time bound actions plan along with the implementation schedules for all the conditions stipulated herein shall be submitted to Ministry , HPSEP&PCB and CPCB. The funds so provided shall not be diverted for any other purposes.	The funds proposed in the EIA / EMP are exclusively earmarked towards capital cost and recurring cost. The environmental pollution control equipments have already been installed and are in operation. The funds so provided shall not be diverted for any other purpose and are being utilized exclusively to implement the conditions stipulated by MoEF and SPCB and as proposed in EIA / EMP. The details of expenditure and recurring / non recurring cost per annum for environment pollution control measures are provided at Annexure-B .
x	The Regional office of this Ministry at Chandigarh / Central Pollution Control Board/ HPSEP&PCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data alongwith statistical interpretation shall be submitted to them regularly.	Is being complied with. A six monthly compliance report and monitored data alongwith statistical interpretations, due in the first week of April'2012, is being submitted herewith vide our letter dated 06.04.2012.
xi	The Project Authority 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 commencing the land development work.	Financial closures on 14th of January, 2006 and land development work commenced on October, 2006.
xii	The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the HPSEP&PCB/ committee and may also be seen at website of Ministry of Environment and forest at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter at least in two local news papers that are widely circulated in the region of which one shall be in the vernacular language of the locally concerned and a copy of the same be forwarded to the Regional Office.	Has been complied with. The advertisement for clearance granted by MOEF New Delhi has been published in two local News papers on Dated 25-05-2006. Copies of the same stands submitted to the Regional Office of MOEF at Chandigarh.