

**COMPLIANCE OF RECOMMENDATIONS BY THE EXPERT COMMITTEE FOR
PROPOSED CEMENT PLANT AT DARLAGHAT AND RELATED MINING ACTIVITIES**

Annexure I

Sr.No.	STIPULATION	IMPLEMENTATIONS
12.1	Plant Site	The Plant site was selected by a committee of members as per the guidelines issued by the MOEF, New Delhi, at Vill. Suli, Darlaghat, Distt. Solan (H.P) 171102
12.1.1	Storage of Raw Material	<p>a.) Limestone is conveyed from Kashlog Limestone Mines through 2.8 kms. long OVER LAND BELT CONVEYOR (OLBC) which is entirely covered and each transfer point of which from Crusher at Mines to Stacker at Plant is equipped with a bag filter.</p> <p>b.) Limestone is being stored in a completely covered yard and stacked & reclaimed through an automatic operation.</p> <p>Additives for raw mix are stored inside the covered yard and fed through mechanical means.</p> <p>c.) Coal is being stored in a completely covered yard and stacked by Stacker (equipped with B/F) and reclaimed through Reclaimer.</p> <p>d.) Clinker is stored in the covered stockyards, equipped with B/Fs.</p> <p>e.) Fly-ash is stored in the RCC Silo equipped with tippler for unloading of trucks and has a pneumatic conveying system to Cement Mill.</p> <p>f.) Gypsum and Iron Ore are stored in covered yards.</p> <p>g.) Cement storage is in silo(s) equipped with bag filters.</p> <p>h.) All the material transfer points are equipped with B/Fs.</p>
12.1.2	<p>Proper designed green belt should be provided in and around the plant Site.</p> <ul style="list-style-type: none"> Special attention should be given to plantation along the roadside. 	<p>a.) A Nursery was setup on 15th July, 1992 with an annual capacity of 20,000 with qualified staff from forestry and horticulture.</p> <p>b.) Plantation work is in progress. Approximately 1645 numbers of plants and cuttings have been planted in and around the factory and mines area from October -13 to March 14.</p>
12.1.3	Supply of Water	<p>a.) Necessary Permission for water supply has been obtained from the concerned authority to lift water from Pazeena Khud.</p> <p>b.) Clearance for Forestland has been obtained from MoEF.</p>
	<ul style="list-style-type: none"> Sprinkling of water 	a.) Currently there is no construction at Plant.

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	<p>during construction Phase.</p> <ul style="list-style-type: none"> • Provision of water to the adjoining Villages 	<p>However, we are spraying water on mine haulage road during mining activities to control fugitive emissions.</p> <p>b.) Water connection has been provided to the adjoining villages. A total number of 14 villages have been benefited with water supply Scheme.</p>
12.1.4	Link Roads	All the required funds had been paid to P.W.D for widening of existing roads from Darlaghat to Factory site by State P.W.D at the cost of promoters and the work has been finished.
	<ul style="list-style-type: none"> • Provision of Parking lot at the plant site 	<p>Two areas for the parking lot have been developed for the parking of the trucks inside and out side the factory area.</p>  <p align="center">Concreted truck yard outside the factory gate.</p>
12.1.5	Architectural Drawings.	Wherever, possible ACL has taken care to utilize natural lighting while designing and construction of Buildings and colony .
12.1.6	Buffer Zone	<p>Government of Himachal Pradesh, Industries Department vide notification dated 19th February, 2002 (Registered No. HP/13/SML/2001) was satisfied that it is necessary in public interest to do so. Therefore, the Governor of Himachal Pradesh directed that no case of highly polluting or hazardous industry will be processed/allowed to be set-up in the buffer zone between the cement plant of M/S Ambuja Cements Ltd. and the outer periphery of re-organized Darlaghat Wildlife Sanctuary by the Government of Himachal Pradesh except the second unit/expansion project of M/S Ambuja Cements Ltd.</p> <p>The area of buffer zone was also specified.</p>
12.1.7	Use of Renewable Sources of Energy.	<p>Four Solar streetlights have been installed.</p> 

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		The wind power energy generation at Darlaghat is not feasible as maximum wind speed is 28 Km./Hr. and the frequency is approximately 2% - 4% of a year.
12.1.8	Layout of the Plant	Natural drainage system has been provided and retaining walls have been made on the both sides of the plant boundary wherever necessary to prevent soil erosion. Slope protection has been taken care by means of plantation.
12.2	Mining Area	
12.2.1	Mining Plan	The mining plan is approved by IBM Dehradun and is valid upto 31 st March 2017. The implementation of mining plan is reviewed by different state government authorities from time to time.
12.2.2 & 12.2.3	Water Management & Water Quality	<p>a.) 33 check dams, 3 check filters have already been provided surrounding to mines area for water quality management. Except these retaining walls and Surface drains etc. are also constructed.</p> <p>b.) The water quality of Gyana Khud (A rivulet passing near by Mining Area) is tested periodically at our own laboratory and results are submitted to State Pollution Control Board on monthly basis. No deviation has been observed so far in the water quality parameters.</p>  <p align="center">V notch at Gyana Khad</p>
12.2.4	Dust Control	<p>a.) Advanced blasting technique such as use of NTD, are practiced to avoid dust generation and fly rock during the time of blasting.</p> <p>b.) Automatic water spraying system has been provided at crusher hopper to arrest fugitive dust generated during the unloading of Dumpers.</p> <p>c.) Water is continuously sprayed at haulage roads throughout the working hours with the help of water tankers.</p>

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		 <p>Automatic water sprinkler at crusher hopper</p>
12.2.5	Management of Over Burden	<p>No over burden is generated from mining. Required funds had been deposited with the H.P. Forest department for compensatory plantation in lieu of the existed Chil plantation.</p>
12.2.6	Solid waste Management	<p>There is a very less quantity of topsoil available in mining area. However, the topsoil removed during mining operation is kept separate and is used for plantation purpose.</p>  <p>Topsoil stacked separately for reclamation and rehabilitation</p>
12.2.7	Blasting Techniques	<p>a.) Use of IKON digital energy control system has been started to blast in critical areas. This system is more precise and accurate and generates less ground vibrations, fly rock and give better fragmentation.</p> <p>b.) Advanced controlled blasting technique is practiced such as use of NTD, optimum quantity of blasting material are practiced to avoid dust generation, fly rock, noise level and ground vibration because of the activity.</p> <p>c.) Secondary blasting is avoided by use of Hydraulic rock breaker.</p>  <p>Rock Cutter</p>

Solid waste

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12.2.8	Barrier/Blasting wall	Retaining walls have been made to control possible rolling stone problem all along the haul road between villages and Mining Lease area.
12.2.9	Baseline Data	Base line data was collected and submitted by means of EIA/EMP report to MoEF and HPSPCB.
12.2.10	Soil Conservation Measures	<p>a.) 33 check dams, 3 check filters are provided surrounding to mines area for water quality management. Apart from this, retaining walls are also constructed. For the design of the check dams/check filters a study was also done through Roorkee University and recommendations are implemented.</p>  <p align="center">Check dams</p> <p>b.) Plantation along the ML area is in progress by planting mostly local species. Also area which are in non-mineralized zone and along the haul road / near mines office etc. are taken up for plantation purpose.</p>

Water

Plantation