

Ref: JAL/ EC/ MoEF/ 2014-15/ 57412  
May 20, 2014

→ **Director,  
Ministry of Environment & Forest (Regional Office)  
Govt. of India,  
Kendriya Paryavaran Bhawan  
Link Road No. 3, E-5 Ravi Shankar Nagar  
Bhopal – 462016**

**Sub: Submission of Six Monthly Environmental Compliance Report.**

Dear Sir,

Please find enclosed herewith the six monthly Environmental Compliance report for the period of **October 2013 to March 2014** of following mines are as:

- Degrahat Devmau Daldal Lime Stone Mine (ML area - 816.519 ha) EC reference nos. - J-11015/354/2006 – IA.II (M) Dated May 28, 2008.
- Bela Devmau Daldal Lime Stone Mine (ML area - 355.51 ha) EC reference nos. - J-11015/353/2006 – IA.II (M) Dated May 28, 2008.
- Chormari Degrahat Lime Stone Mine (ML area - 102.983 ha) EC reference nos. - J-11015/578/2007-IA.II (M) Dated. 23-03-2009 & Amendment letter dated-17/09/2010.

Thanking You

Yours Faithfully  
For Jaiprakash Associates Limited

  
(G.V. Bhat)  
Sr. President (Tech.)

CC to:

1) Zonal Office - For kind information please.

Central Pollution Control Board  
III<sup>rd</sup> Floor, Sahkar Bhawan,  
North T.T. Nagar,  
Bhopal – (M.P.) 462016

2) Member Secretary - For kind information please.

Madhya Pradesh pollution Control Board  
Paryavaran Parisar, E – 5, Arera Colony  
Bhopal (M.P.) 462016

3) Regional Officer - For kind information please.

Madhya Pradesh pollution Control Board,  
Satna House No. 318, Gali No. 5 Dhawari, Satna (M.P.)

23/5/14  
S. G. D. Sharma

**Status of compliance as on 31<sup>st</sup> March - 2014 (Period: October -2013 to March - 2014) to the conditions stipulated in the Environmental Clearance granted by MoEF vide letter No. J-11015/354/2006 – IA.II (M) MoEF Dated May 28, 2008 to Degarhat-Devmaudaldal Limestone Mine of M/s Jaiprakash Associates Limited for Mining Lease area of 816.519 ha. & Production capacity – 1.0 MTPA at village(s) Degarhat and Devmaudaldal, Tehsil: Kotar, District: Satna (M.P.)**

**A. Specific conditions**

<b>Condition No.</b>	<b>Conditions</b>	<b>Status</b>
(i)	The project proponent shall obtain consent to establish from the Madhya Pradesh Control Board and effectively implement all the conditions stipulated therein.	Consent to establish has already been obtained vide letter No. 6994/TS/Mine/MPPCB/ 2008 dtd. 21.08.2008 from MPPCB, Bhopal.
(ii)	The environmental clearance is subject to approval of the State Land use Department, Govt. of Madhya Pradesh for diversion of agricultural land for non agricultural use.	Land has already been approved for mining activities by the State Government of Madhya Pradesh for Mining lease area of 816.519 ha.
(iii)	The mining operations shall be restricted to above ground water table and should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment and Forests and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.	As per the hydro – geological study ground water table is 271 mRL, whereas mining will be done upto 275 mRL. So there is no possibility of intersection of ground water till end of mine life.
(iv)	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations.	No natural water course/resources will be obstructed due to mining activities.
(v)	The top soil if any shall temporarily be stored at ear marked site(s) only and it should not be kept unutilized for a period more than 3 years. The top soil shall be used for land reclamation and plantation.	Topsoil 10200 Cum. (October – 13 to March 2014) is being stacked properly at earmarked site with proper slope & is being used for green belt development.
(vi)	The overburden generated during the initial years due to mining operation shall temporarily be stacked at earmarked dump site(s) only and thereafter concurrently backfilled. Backfilling shall start from the 6 <sup>th</sup> year onwards and there shall be no external over burden dump after the 10 <sup>th</sup> year. The backfilled area of 289 ha shall be reclaimed and rehabilitated by plantation. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the	Generated OB will be stored temporarily at earmarked dump site. Backfilling will be started from 6 <sup>th</sup> year onwards after mining activity started.

	Ministry of Environment & Forests and its Regional Office located at Bhopal on six monthly basis.	
(vii)	The void left unfilled in an area of 153 ha shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.	Noted and shall be complied with.
(viii)	<p>Catch drains and siltation ponds of appropriate size shall be constructed along the working pit, soil, mineral and temporary OB dumps to prevent run off water and flow of sediments directly into the 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 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 run off of water and flow of sediments directly into the 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>	<p>Catch drains &amp; siltation ponds will be constructed &amp; maintained accordingly. Water collected will be used for water spraying on roads &amp; green belt development &amp; plant purpose.</p> <p>Garland drains, settling tanks, check dams of appropriate size will be constructed. Adequate sump capacity will be constructed to taking care of safety margin of heavy rain fall.</p>
(ix)	Dimensions of the retaining wall at the toe of temporary dumps and OB benches within the mine to check run-off and siltation should be based on the rain fall data.	The retaining wall at the toe of temporary waste dumps will be constructed all around the dump with adequate capacity garland drain for collection of run-off water in mine sump.
(x)	Plantation shall be raised in an area of 309.5 ha including a 7.5 m wide green belt in the safety zone around the mining lease in an area of 12.13 ha by planting the native species around ML area, backfilled and reclaimed area, around water body and benches of excavated pit, roads etc. in consultation with the local DFO/agriculture Department. The density of the trees should be around 2000 plants per ha.	Request sent to DFO and Agriculture department vide letter no 2517 dated 09.09.2010 to provide the details & availability of native species for plantation in safety zone areas.
(xi)	The project proponent shall develop fodder plots in the non-mineralized area in lieu of use of grazing land.	Noted and Agreed
(xii)	Effective safeguard measures such as regular water sprinkling	Regular water sprinkling is being done on haul road. Mine

	shall be carried out in critical areas prone to air pollution and having high levels of SPM and RPM such as haul road, loading and unloading point and transfer points. It should be ensured the Ambient Air Quality parameters conform to the norms prescribed by the central Pollution Control Board in this regard.	development as well as haulage road preparation under progress.
(xiii)	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.	No ground water will be intersected during mining operations. However suitable conservation measures will be implemented to augment ground water resources in the area.
(xiv)	Regular monitoring of water quality upstream and downstream of kariari Nallah shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment and Forests, its Regional Office, Bhopal, Central Ground Water Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.	Regular monitoring of water quality upstream & down stream of Kariyari river will be carried out.
(xv)	Regular monitoring of ground water level and quality should be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out four times in a year pre monsoon (April-May), monsoon (August), Post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment and Forests and its Regional Office, Bhopal, Central Ground Water Authority and Regional Director, Central Ground Water Board.	Regular monitoring of ground water level is under progress & its quality is being carried out and reports are submitted periodically to Regional office CGWB. The last report is submitted vide our latter no. JRP/EC/CGWB/2014-15 dated 19.05.2014. Ground water Quality Report is Attached as <b>Annexure-I</b> .
(xvi)	Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.	Request sent to Regional Director, Central Ground Water Board vide letter no. 2515 dated 09.09.2010 for guidance taking necessary measures over rain water harvesting. Reply is awaited. A meeting will also be conducted with Regional Director CGWB on this issue.
(xvii)	Appropriate mitigative measures should be taken to prevent pollution of Tamas River and Simrawal Nadi in consultation with the State Pollution Control Board.	Request letter sent to State Pollution Control Board & Regional Office to suggest appropriate mitigation measures to prevent pollution of both rivers. Reply is awaited. A meeting will also be conducted with MPPCB Satna. Both the two rivers are far away from our lease area & no significant impact observed due to our activity.
(xviii)	Mineral handling plant should be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also	Suitable & sufficient capacity dust control arrangement will be provided at loading, unloading & all transfer points.

	have efficient dust control arrangements. These should be properly maintained and operated.	
(xix)	Vehicular emissions should 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 vehicles should be covered with a tarpaulin and shall not be overloaded.	All measures as stipulated are being adopted to control the vehicular emission during transportation.
(xx)	Blasting operation should be carried out only during the daytime. Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	Controlled blasting will be carried out to minimize the ground vibrations and to arrest fly rock. Blasting shall be carried out only during day time within fixed interval.
(xxi)	Drill shall either be operated with dust extractors or equipped with water injection system.	Drills will be equipped with water injection system.
(xxii)	Consent to operate should be obtained from the State Pollution Control Board prior to start of production from the mine.	Consent to operate has already been granted by MPPCB vide letter No. 3028/TS/Mine.MPPCB/2009 Dtd. 09.04.2009 and Valid up to One year from the start date of Production.
(xxiii)	Sewage treatment plant should be installed for the colony.ETP should also be provided for workshop and wastewater generated during mining operation.	Sewage treatment plant already exists in township of cement plant. A centralized Auto workshop is established at our plant site equipped with oil & grease trap for treatment of waste.
(xxiv)	Digital Processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bhopal.	Study has been carried out by external agency and report is already submitted to the MoEF, CPCB & MPPCB vide our letter no. JAL/EC/MoEF/2013 – 14 /5108 dated 20.05.2013.
(xxv)	The project authorities should undertake sample survey to generate data on pre-project community health status within a radius of 1 km from proposed mine.	Noted and agreed
(xxvi)	Land oustees and land losers/affected people should be compensated and rehabilitated as per the National Policy on Resettlement and Rehabilitation of project affected families (NPRR), 2003.	Land oustees and land losers/affected people compensated and rehabilitated as per the National Policy on Resettlement and Rehabilitation of project affected families (NPRR), 2003.
(xxvii)	The project proponent should take all precautionary measures during mining operation for conservation and protection of endangered fauna such as Macaca mulatto, Presbytis entellus, common peafowl etc. spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds	Request sent to wild life and forest department vide letter no. 2515 dated 09.09.2010 to guide for preparation of action plan for conservation of flora and fauna spotted in the area.

	for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. Copy of action plan may be submitted to the Ministry and its Regional Office within 3 months.	
(xxviii)	A final Mine Closure Plan along with details of Corpus Funds should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	Noted and Agreed

## **B. General Conditions**

<b>Condition No.</b>	<b>Conditions</b>	<b>Status</b>
(i)	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	Noted and Agreed
(ii)	No change in the calendar plan including excavation, quantum of mineral limestone and waste should be made.	Noted and Agreed
(iii)	Periodic monitoring of ambient air quality should be carried out for RPM, SPM, SO <sub>2</sub> and NO <sub>x</sub> . Location of the monitoring 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. The data so collected should be regularly submitted to the Ministry including its Regional Office located at Bhopal and State Pollution Control Board/Central Pollution Control Board once in six months.	The observed Ambient Air quality in Core zone and buffer zone are enclosed as <b>Annexure – II (a) &amp; II (b)</b> .
(iv)	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc should be provided with ear plugs/muffs.	Noted and Agreed
(v)	Industrial waste water (workshop and waste water from the mine should be properly collected, Treated so as to conform to be 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 traps should be installed before discharge of workshop effluents.	A centralized auto workshop exist at Naubasta Lime Stone Mines workshop, all major HEME are serviced and maintained. An oil trap installed at Naubasta workshop which meets the standards. The filtered water is used for haulage road water spraying.
(vi)	Personal working in dusty areas should wear protective	All necessary PPEs are provided during Mine development work,

	respiratory devices and they should also be provided with adequate training and information on safety and health aspects. 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.	under OHS Program all workers are examined periodically & corrective/ necessary measures are being taken.			
(vii)	The project authorities should inform to the regional office located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	<table border="0"> <tr> <td>Date of financial closure.</td> <td rowspan="2">} Land development work started on 01.06.2009. Production is yet to be started.</td> </tr> <tr> <td>Date of land development work.</td> </tr> </table>	Date of financial closure.	} Land development work started on 01.06.2009. Production is yet to be started.	Date of land development work.
Date of financial closure.	} Land development work started on 01.06.2009. Production is yet to be started.				
Date of land development work.					
(viii)	A separate environmental management cell with suitable qualified personnel should be set up under the control of a senior executive, who will report directly to the Head of the Organization.	A well equipped separate environment cell with qualified personnel has already been set up for looking after environment studies and monitoring. Organizational chart is enclosed as <b>Annexure-III.</b>			
(ix)	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 and its regional Office located at Bhopal.	Funds for environmental protection measures for the Period: October 2013 – March 2014 has been allocated for management plan implementation is enclosed as <b>Annexure – IV.</b>			
(x)	The Regional office of this ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	Noted and Agreed			
(xi)	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment & Forests, its Regional Office, Bhopal, Central Pollution Control Board and State Pollution Control Board.	Complied, six monthly report is submitted vide our letter no. JAL/EC/MoEF/2013-14/5668 dated. 20.11.2013.			
(xii)	A copy of clearance letter will be marked to the concerned panchayat /local NGO, if any, from whom suggestion/representation, if any was received while processing the proposal.	EC letter copy hand over to Panchayat and receipt is taken.			
(xiii)	State Pollution Control Board should display a copy of the clearance letter at the regional office, District industry Centre and Collector's Office/Tehsildaars's office for 30 days.	Noted and Agreed.			
(xiv)	The project authorities should advertise at least in two local news papers widely circulated, one of which shall be in the	EC information was published in Dainik Jagran, Navbharat, Deshbandhu local papers. News paper cutting is already			

	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 Forest 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 the Ministry located at Bhopal.	submitted.
3	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Noted and Agreed
4	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of environment (protection) act, 1986	Noted and Agreed
5	The above conditions will be enforced inter-alia under the provisions of the water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the environment (protection) Act, 1986 and the public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the hon'ble Supreme Court of India/High Court of Madhya Pradesh and any other court of Law relating to the subject matter.	Noted and Agreed
6	Any appeal against this environmental clearance shall lie with the national environment appellate authority, if preferred within a period of 30 days as prescribed under section level of the National Environment Appellate Act, 1997	Noted and Agreed



**DEGARHAT-DEVMAU DALDAL LIME STONE MINE**

(A UNIT OF JAIPRAKASH ASSOCIATE LIMITED)

GROUND WATER ANALYSIS REPORT ( BORE WELL)

PERIOD : October , 2013 - March , 2014

S. No.	Parameter	UNIT	Location			
			Near Chormari	Near Ragauli	Near Daldal	Near Atrauli
1	Colour	Hazen	1	<1	1	<1
2	pH	,--	7.1	7.3	7.2	7.4
3	Calcium	mg/l	41	48	39	40
4	Magnesium	mg/l	23	21	26	30
5	Sodium	mg/l	28	38	23	29
6	Fluoride	mg/l	0.12	0.11	0.15	0.16
7	Nitrate	mg/l	14	18	11	17
8	Sulphate	mg/l	31	39	40	43
9	Chloride	mg/l	30	39	36	33
10	Total Hardness	mg/l	423	462	415	532
11	TDS	mg/l	580	650	578	712

**Annexure- II (a)**

**DEGARHAT- DEVMAU DALDAL LIME STONE MINE**

(A Unit of Jaiprakash Associates Limited)

**AVERAGE SIX MONTHLY AMBIENT AIR QUALITY MONITORING REPORT**

Period: October , 2013 - March , 2014

**CORE ZONE**

<b>LOCATION</b>	<b>PM<sub>2.5</sub> (mg/m<sup>3</sup>)</b>	<b>PM<sub>10</sub> (mg/m<sup>3</sup>)</b>	<b>SO<sub>2</sub> (mg/m<sup>3</sup>)</b>	<b>NO<sub>x</sub> (mg/m<sup>3</sup>)</b>	<b>CO (mg/m<sup>3</sup>)</b>
NEAR OVER BURDEN LOADING AREA	24	35	5	11	105
NEAR OVER BURDEN UNLOADING AREA	26	40	8	12	97
NEAR EXCAVATION SITE	25	39	7	13	89
NEAR HAULAGE ROAD	23	38	6	11	102

Annexure- II (b)

## DEGARHAT- DEV MAUDALDAL LIME STONE MINE

(A Unit of Jaiprakash Associates Limited)

### AVERAGE SIX MONTHLY AMBIENT AIR QUALITY MONITORING REPORT

Period: October , 2013 - March , 2014

#### BUFFER ZONE

LOCATION	PM <sub>2.5</sub> (mg/m <sup>3</sup> )	PM <sub>10</sub> (mg/m <sup>3</sup> )	SO <sub>2</sub> (mg/m <sup>3</sup> )	NO <sub>x</sub> (mg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )
NEAR CHORMARI	15	30	4	9	71
NEAR RAGALI	17	28	3	11	65
NEAR ATRAULI	16	29	5	10	61
NEAR DALDAL	18	27	4	8	59