

JSPL/ EMD/ EC/ LSM/ O-M/ 2018

14.05.2018

To,

Ministry of Environment and Forests, Climate Change
Regional Office (WCZ), Ground Floor
East Wing, New Secretariat Building,
Civil Line,
Nagpur-440001

Sub: Implementation of condition stipulated in Environmental Clearance of Limestone Mines

Dear Sir,

Please find enclosed herewith six monthly compliance status of conditions stipulated in Environment Clearance (EC letter No. J-11015/ 29/ 2010-IA.II.(M) dated 02.09.2013) for the period October 2017 to March 2018 of Godadih Mahal No. 2 Limestone Mine located at Village Godadih, District Bilaspur, Chhattisgarh.

We hope you will find it in order.

Thanking you

Yours faithfully,
For Jindal Steel & Power Limited



Sanjay Shrivastava
Head - Godadih Limestone Mining Project

- CC:
1. Ministry of Environment & Forest, New Delhi.
 2. Central Pollution Control Board, New Delhi.
 3. Central Pollution Control Board, Bhopal.
 4. Chhattisgarh Environment Conservation Board, Raipur
 5. Regional Office, CLCB Bilaspur (C.G.)

Jindal Steel & Power Limited

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COMPLIANCE STATUS OF CONDITIONS STIPULATED IN ENVIRONMENT CLEARANCE FOR GODADIH MAHAL NO. 2 LIMESTONE MINES OF M/S JINDAL STEEL & POWER, LOCATED AT VILLAGE GODADIH MAHAL NO.2, TEHSIL MASTURI, DISTRICT BILASPUR, CHHATTISGARH (ML AREA: 121.69 HA; CAP. 1.54 MTPA [ROM]) VIDE LETTER NO. J-11015/ 29/ 2010-IA.II (M) DATED 02.09.2013

A. Specific conditions:

SN	Condition	Compliance status
i.	The project proponent shall obtain consent to establish and consent to operate from the Chhattisgarh Environment Conservation Board and effectively implement all the conditions stipulated therein.	Consent to Establish has been granted by the Chhattisgarh Environment Conservation Board, Raipur vide their letter No.6647/TS/CECB/2018 Naya Raipur dated 22.02.2018. Consent to Operate will be obtained before start of the mining operations. Implementation of all the conditions stipulated therein will be done effectively.
ii.	Production from the mine shall not exceed 1.54 Million TPA (ROM) at any point of time.	Production will not exceed 1.54 Million TPA (ROM).
iii.	Land losers and landless agricultural labours shall be compensated as per Model R&R Policy of Chhattisgarh, 2007 and its amendment at the earliest.	Appropriate compensation will be given to land losers and landless agricultural labours as per R&R Policy.
iv.	The water supply to the affected population/users shall be ensured.	Water supply to the affected population/users shall be ensured.
v.	Additional grazing land outside ML area shall be identified prior to start of mining activities for proper fodder cultivation and irrigation support for high yield feed product.	The grazing land outside ML area has been identified and cultivation of fodder will be done accordingly.
vi.	The Wild Life Conservation Plan for Schedule-1 animals should be in place for implementation before start of mining activity.	Wild life conservation plan will be in place for implementation before start of mining activity.
vii.	The top soil shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The top soil shall be used for land reclamation and plantation.	The top solid will be utilized in plantation and afforestation purpose.
viii.	Garland drains, catch drains, check dams and siltation ponds of appropriate size shall be constructed around the mine working, soil and mineral dumps to prevent run-off of water and flow of sediments. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after the monsoon, and maintained properly.	Garland drain, catch drains and ponds will be created and the collected water will be utilized for plantation, sprinkling on haul roads etc.
ix.	Dimension of the retaining wall at the toe of the OB benches within the mine to check run-off and siltation should be based on the rainfall data.	Retaining wall at toe of OB benches shall be constructed based on rainfall data.
x.	A 15 meter wide greenbelt on Soradih village side including a 7.5 meter wide greenbelt all	Green belt will be developed as per direction and plantation plan. Peripheral

	around the mining lease, reclaimed and rehabilitated areas, around water body, roads etc. by planting the native species in consultation with the local DFO/ Agriculture Department shall be raised in a phased manner and shall be completed within first five years. The ultimate area to be planted/ afforested shall not be less than 37.23 ha. The density of the trees should be around 2000 plants per ha.	green belt will be developed around mine pit.
xi.	The project authority shall implement suitable conservation measures including suitable rain water harvesting measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	Rainwater harvesting practices will be implemented to recharge groundwater level in the consultation with the Regional Director, Central Ground Water Board, Raipur (C.G.).
xii.	Groundwater table shall be monitored regularly and it shall be ensured that there is no depletion of groundwater in the area. Necessary groundwater recharging structures shall be built.	Regular monitoring of groundwater table will be done and recharging structures will be created as per requirement.
xiii.	Regular monitoring of groundwater level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operations. 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 State Ground Water Board/ Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment & Forests and its Regional Office, Bhopal, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.	Groundwater level monitoring will be done as per schedule and reports will be submitted as directed.
xiv.	The mineral transportation up to railway siding shall be by road and thereafter, it will be by rail only.	Mineral transportation from mine to railway siding will be done in dumpers and thereafter it will be done by rail.
xv.	Vehicular emission shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicle used in mining operations and in transportation of mineral within the lease up to the stockyard. The mineral transportation within the mine lease shall be carried out through the covered	All precautions will be undertaken to prevent fugitive emission and vehicular pollution during transportation. PUC of vehicles engaged in mining operation and transportation will be done time to time.

	trucks only and the vehicles carrying the mineral shall not be overloaded. The mineral transportation outside the mine lease shall be carried out through the tarpaulin covered trucks/ closed trucks only and the vehicle carrying the mineral shall not be overloaded. There shall be no spillage of mineral enroute up the delivery point.	
xvi.	Soon after commencement of blasting operations in the mine, studies shall be undertaken to set out the pattern of controlled blasting (Muffled blasting where needed), to be practiced when the mining operations approach sensitive areas like the village.	Appropriate studies and steps would be undertaken to minimize the impact of blasting on nearby areas.
xvii.	The optimum charge for blasting shall be determined based on vibration study. Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	Blasting would be performed strictly as per guideline specified under regulations. Blasting would be carried out only in day time. Study would be conducted to minimize hazards due to fly rocks and boulders.
xviii.	Drills shall be either be operated with dust extractors or equipped with water injection system.	Drill equipment shall be operated with appropriate dust control systems.
xix.	Use of rock breaker from the nearby habitation up to 75 meter inward to mining area complying with DGMS guidelines shall be done.	Guidelines of DGMS will be followed.
xx.	Regular monitoring of vibration and its impact, if any, in the close by villages shall be carried out and if at any stage any damage is felt on the village buildings/ structure, necessary corrective measures should be taken in this regard immediately.	Vibration monitoring would be done at regular intervals and corrective measures would be implemented to prevent any adverse impact.
xxi.	Mineral handling area shall be provided with 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.	Efficient dust extraction system will be provided at material handling area. Water sprinkling on haul roads, benches, near office etc. will be provided. Dust suppression system (water sprinkling) will be arranged on the roads used for transportation, loading and unloading points and temporary stock piles.
xxii.	ETP shall also be provided for the workshop and wastewater generated during the mining operation.	Workshop effluent will be treated in oil-water separator.
xxiii.	Mineralogical compositing of the dust to asses the silica content in the dust particles and particle size analysis shall be carried out periodically and records maintained. Personnel exposure of monitoring for dust	Analysis of dust will be done and records will be maintained.

	shall also be carried out for the workers.	
xxiv.	Occupational health care shall be carried out at the company under the charge of an officer of adequate seniority who is the qualified person in occupational health. Occupational health and safety measures for the workers including identification of work related health hazard, training of malaria eradication, HIV and health effect on exposure to mineral dust etc. shall be carried out. The company shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring of exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted followed by follow-up action wherever required.	Occupational health care centre will be established before start the mining operation and regular health check will be carried out. Awareness campaign and health impact assessment will be conducted at prescribed intervals. Periodic review of health related measures will be undertaken.
xxv.	The company shall stress upon the preventive aspects of occupational health. Pre-placement medical examination of the workers engaged 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.	Steps would be taken to stress upon preventive aspects of occupational health. Pre-placement medical check-up for workers engaged in the project activities would be done and records maintained.
xxvi.	Provision 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, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Suitable facilities will be provided to the workers during construction phase.
xxvii.	The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e. PM10) and NOx in the ambient air within the impact zone, peak particle velocity at 300 M distance or within the nearest habitation, whichever is closer shall also 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 display board at the project site at a suitable location near the main gate of the	All prescribed ambient air quality and effluent quality parameters along with peak particle velocity will be monitored as per guideline and reports will be submitted at periodic intervals. Data will be displayed in website as well as at mine's main gate.

	company in public domain. The Circular No. J20012/ 1/ 2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment & Forests, which is available on the website of the Ministry www.envfor.nic.in shall be referred in this regard for the compliance.	
xxviii.	A final Mine closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & forests 5 years in advance of final mine closure for approval.	Final mine closure plan along with details of Corpus fund will be submitted to MoEF within the stipulated period.

B. General conditions:

SN	Condition	Compliance status
i.	No change in mining technology and scope of working should made without prior approval of the Ministry of Environment & Forests.	There will be no change in mining technology and scope of working.
ii.	No change in the calendar plan including excavation, quantum of mineral limestone and waste should be made.	There will be no change in calendar plan including excavation, quantum of mineral limestone and waste.
iii.	At least four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10 micron i.e. PM10) and NOx 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.	Four permanent ambient air quality monitoring stations will be established and monitoring will be carried out as per direction of the Board.
iv.	Data on ambient air quality [RSPM (Particulate matter with size less than 10 micron i.e. PM10) and NOx] should be regularly submitted to the Ministry including its Regional Office located at Bhopal and the State Pollution Control Board/ Central Pollution Control Board once in six months.	Ambient air quality monitoring report will be submitted at regular intervals.
v.	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.	Water spraying system at source, haul roads, near office, benches etc. will be provided. Dust suppression system (water sprinkling) will be arranged on the roads used for transportation, loading and unloading points and temporary stock piles.
vi.	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.	Appropriate noise control measures will be adopted and earplugs will be provided to the workers working at high noise areas.
vii.	Industrial wastewater (work shop and	Workshop effluent will be treated in oil-

	wastewater from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluent.	water separator.
viii.	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. 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.	Appropriate dust protective devices will be given to workers. Occupational health campaigns will be conducted time to time and suitable steps will be taken based on routine monitoring and observations.
ix.	A separate environment management cell with suitable qualified personnel should be setup under the control of a senior executive, who will report directly to the head of the organization.	Separate environment management cell will be set up.
x.	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.	Separate funds will be made available for environment management activities.
xi.	The project authorities should inform to the Regional Office located at Bhopal regarding date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.	Date of financial closure and start of land development work would be informed to Regional Office, Bhopal.
xii.	The Regional Office of the Ministry 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.	Full cooperation would be extended to the statutory bodies.
xiii.	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment & Forests, its Regional Office Bhopal, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data	Compliance report will be submitted at prescribed intervals.

	on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Officer of the Ministry of Environment & forests, Bhopal, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.	
xiv.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ 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.	Already submitted.
xv.	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.	--
xvi.	The project authorities should advertise at least in two local newspapers of the district or state in which project is located and widely circulated one of which shall be in 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 & forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhopal.	Already done.
xvii.	The environmental statement for each financial year ending 31 st 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 environmental clearance conditions and shall also be sent to the respective Regional Office of the Ministry of Environment & Forests, Bhopal by e-mail.	Environmental Statement will be submitted before stipulated time period.