JINDAL

JINDAL SAW LTD.

Date: 29.11.2014

Ref: JSL/BHL/Mines/ 056

To,

The Secretary,
Ministry of Environment & Forest,
Government of India, Paryavaran Bhawan,
Lodhi Road, New Delhi

Sub: Half Yearly compliance of conditions of environment clearance of Dhedwas Iron Ore, Copper and Associated Minerals Mine and Beneficiation Plant (ML No. 631/05) located near Village Dhedwas/ Pur, Tehsil & Distt. Bhilwara (Rajasthan).

Ref: Environment Clearance letter No. J-11015/176/2009-IA-II (M) dated 09.08.2010

Dear Sir,

In reference to the above subject matter and referred letter, we are submitting herewith the point wise compliance of conditions of the above environment clearance for the period from 1st April 2014 to 30th September 2014.

This is for your kind information please.

Thanking you,

Yours faithfully,
For: Jindal Saw Ltd.

Dinesh Patil
Agent –Dhedwas Iron Ore Mine

Encl: a/a

Copy to:

1. Regional Office, MOEF, Kendriya Bhawan, 5th Floor, Sector-H, Lucknow- 226024 (U.P.)
2. Zonal Office, Central Pollution Control Board (CPCB), Sahkar Bhawan, 3rd Floor, North TT Nagar, Bhopal-462003 (M.P.)
3. The Chairman, Rajasthan State Pollution Control Board, 4 Institutional Area, Jhalana Doongri, Jaipur-302004 (Rajasthan)

Araji No. 9697/6711, Near Tiranga Hills, Village- Pur, Tehsil & Distt- Bhilwara - 311802, Rajasthan Phone/Fax No. : +91 (1482) 248417
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CIN: L27104UP1984PLC023979

Dhedwas Iron Ore, Copper and Associated Minerals Mine (ML No. 631/05)

Six monthly Reports on Status of Compliance of Stipulated Condition

(Lease Deed was executed on 08th Dec.'10)

Period of Report: 01 Apr' 2014 to 30th Sep' 2014

Date: 29/11/2014

The Consent to Operate was granted on 6th June'11

	Specific Conditions	Compliance Status
i.	The project proponent shall obtain Consent to Establish and Consent to Operate from the Rajasthan State Pollution Control Board and effectively implement all the conditions stipulated therein.	a. The Consent to Establish was granted by RSPCB on 16.12.10. b. The Consent to Operate the Mine was granted by RSPCB on 06th June'11 and renewed on 29 Oct 2014.
ii.	Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India in Contempt Petition (C) 412/2004 in IA No. 833 in Writ Petition (C)No. 202 of 1995, as may be applicable to this project.	We shall abide by the final outcome of Hon'ble Supreme Court of India as may be applicable to this Project.
iii.	All the conditions stipulated by the Central Ground Water Authority while according NOC vide letter No.21-4(439/WR/CGWA/2010-795 dated 14.05.2010 shall be effectively implemented.	
	1. Ground water abstraction only for domestic use and limited to 12m^3/day.	1. Ground water is being used only for domestic purpose.
	2. Tube well to be fitted with water meter. Monitoring at least once/month. Ground. Water quality to be monitored in Pre-monsoon and Post-monsoon periods.	2. Water meter has been installed in the tube well. Monitoring is being carried out every month from 1st Dec, 2013. Ground water quality is being monitored during October and April every year.
	3. Ground water recharge structure to be installed within six months with consultation with Regional Director, CGWB, Jaipur.	3. We are in consultation with the Regional Director, CGWB, Jaipur and shall install the ground water recharge structure at the earliest.
	4. Photographs of recharge structures after completion to be furnished to The R.D, Jaipur under intimation to CGWA, New Delhi.	4. Photographs will be furnished to The Regional Director, CGWB, and Jaipur immediately after completion, under intimation to CGWA.
	5. Piezometers shall be installed at suitable locations and ground water regime monitoring programme in and around the project area shall be executed regularly in consultation with the Regional Director, CGWB, Jaipur	5. Piezometer installation job has been completed as per CGWB recommendation and routine monitoring is under practice.
	6. Ground water monitoring data shall be submitted to CGWB, Jaipur on regular basis at least once in a year.	6. The ground water data for S.No.2 & 5 enclosed herewith **Annexure – III & IV.**
	7. The firm shall ensure proper recycling and reuse of waste water after adequate treatment.	7. No waste water is generated in the process. Domestic water generated from office toilets is directly discharged through soak pit/septic tank.
	8. Action taken in respect of S.No.1 to 7 shall be submitted to CGWA within one year period.	8. The same will be submitted by Jan'15.

iv.	The environmental clearance is subject to approval of the State Land use Department, Government of Rajasthan for diversion of agricultural land for non-agricultural use.		The application has been submitted on 08.02.08 to the State Govt. The matter is under consideration of the State Govt. Pending the approval, no mining activity will be conducted in the agricultural land.
	Necessary prior permission from the Competent Authority as may be applicable for use of grazing land for mining purpose shall be obtained.		NOC for grazing land has been obtained vide Letter No. 3445 dated 30.07.10 of Distt. Collector, Bhilwara.
vi.	The project proponent shall develop fodder plots in the non-mineralised area in lieu of use of grazing land.		Work is confined within Government waste/barren land. We shall develop fodder plots in non-mineralised area in lieu of use of grazing land.
vii.	The tailing ponds shall be provided with HDP lining		Construction of tailing pond is in progress. The bottom and the inner sides of the tailing pond has been covered by synthetic liner (HDP).
viii	The top soil shall temporarily be stored at earmarked site(s) only and it should not be kept un-utilized for long. The topsoil shall be used for land reclamation and plantation.		Till now 16071 m^3 top soil was stored and at designated site and same being used for plantation purpose. No top soil was generated from the mines during compliance period from 1 Apr' 2014 to 30 Sep' 2014.
ix.	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. Adequate measures shall be taken for protection of the first order and second order seasonal nallahs emanating/passing through the mine lease and also the right main canal of the Meja dam passing through the mine lease during the course of mining operation.		No first order nallah exists within the lease area. The second order seasonal nallah lies far away from the mine workings and will not be obstructed. The right main canal of the Meja Dam passing through lease area is being protected by leaving adequately wide barrier between the working and the Canal.
x.	The over burden generated during the mining operation shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and its phase-wise stabilization shall be carried out. There shall be four external over burden dumps. The maximum height of the dumps shall be maintained to 30m having three terraces of 10m each so that the overall slope of the dump shall be maintained to 27°. The over burden dump shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Lucknow on six monthly basis.		The OB generated from the mine is utilized for road making and levelling of other depressed ground within the lease area as required. OB is being stacked only at earmarked places. Compliance status is submitted to the Ministry of Environment and Forest and its Regional Office at Lucknow on six monthly basis. We assure that all conditions will be complied with, overall slope of the waste dump is being maintained at 27 degree and mature dumps will be vegetated.

xi.	Catch drains and siltation ponds of appropriate size shall be constructed around the mineral and over burden dumps to prevent run off of water and flow of sediments directly into the agricultural fields, the Kothari River, first order and second order seasonal nallahs, canal, the Meja dam, the Meja Talav, the Mandai Talav and other water bodies. The water so collected should 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 drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed around the mineral and over burden dumps to prevent run off of water and flow of sediments directly into the agricultural fields, the Kothari River, first order and second order seasonal nallahs, canal, the Meja dam, the Meja Talav, the Mandal Talav and 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 shall be constructed at the corners of the garland drains and desilted at regular intervals.		The. Catch drains have already been made around the stockyard. Siltation ponds of appropriate size has also been constructed and water will be utilized for watering the mine area, roads, green belt development etc. and drains will be regularly desilted, particularly after the monsoon and maintained properly. Garland drains, check dams and settling tanks have been constructed.
xii.	Dimension of the retaining wall at the toe of the OB dump(s) and the OB benches within the mine to check run-off and siltation should be based on the rain fall data.		At present two external dumps of OB have been created. The stipulation has been complied with by constructing retaining wall to check run off.
xiii.	The water recovery and spill way system shall be so designed that the natural water resources are not affected and that no spill water goes into the nearby Kothari River and other water bodies.		There is no spillage of water. Water recovery is through settling tank. Natural water resources are not affected.
xiv.	The project proponent shall carry out conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.		Water is being sprayed on ore stacks to suppress the dust before handling the same.
xv.	The effluent from the ore beneficiation plant shall be treated to conform to the prescribed standards and the tailings slurry shall be transported through a closed pipeline to the tailing dam.		No effluent is being discharged from the beneficiation plant. The tailing slurry shall be transported through a closed pipeline to the tailing dam.
xvi.	The decanted water from the tailing ponds shall be re-circulated and there should be zero discharge from the tailing ponds. Acid mine water, if any, shall be neutralized and reused within the plant.		The decanted water from the tailing pond is being re-circulated and there is no discharge from tailing pond.

xvii.	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as crusher zone, loading and unloading point and all transfer points during handling of the ore. Extensive water sprinkling shall be carried out on 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.		The stipulation is being complied with to contain the Ambient Air Quality parameters within the norms prescribed by the Central Pollution Control Board in this regard. We have conducted AAQ measurements at 6 places in Jun' 2014 & Sep' 2014 and noticed that the AAQ is within permissible limits. The Reports are enclosed as **Annexure – I & II.**
xviii.	Plantation shall be raised in an area of 491.388ha including a 7.5m wide green belt in the safety zone around the mining lease, over burden dumps, around beneficiation plant, around tailing ponds, roads etc. by planting the native species in consultation with the local DFO/ Agriculture Department. The density of the trees should be around 1500 plants per ha.		Stage-wise plantation programme has been raised. During first 5 years, plantation will be done in 10 Hectares area every year. Plantation has already been started and we have raised plantation over 15.5 hectare area by the end of Sep., 2014.
xix.	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.		The ground water recharge measures for augmenting the ground water resources of the area is being implemented as approved by the Central Ground Water Authority.
xx.	Regular monitoring of ground water level and quality shall be carried out in and around the project area (mine lease, beneficiation plant and tailing ponds) by establishing a network of existing wells and installing new piezometers during the 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 Lucknow, 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.		Monitoring of ground water level & quality has been carried out of existing peizowells near the plant office and mining lease area of 6 locations in June and Sep'14. The copies of the Reports are enclosed as **Annexures – III & IV.** Since the mining has been above the ground level, the ground water has not been affected.
xxi.	The groundwater and surface water in and around the mine including tailing ponds shall be regularly monitored at strategic locations for heavy metals. The monitoring stations shall be established in consultation with the Regional Director, Central Ground Water Board and the State Pollution Control Board.		Regular ground and Surface water quality monitoring is being carried out in and around the mining lease area including tailing pond. The water quality monitoring reports of June and Sep'14 are enclosed as **Annexure – V & VI.**

xxii.	Appropriate mitigative measures shall be taken to prevent pollution of the Kothari River in consultation with the State Pollution Control Board.		There is no discharge of water from the mine. Kothari river is not being polluted due to mining activities.
xxiii.	Water requirement of the project shall be met from the treated sewage only. No water shall be drawn from the Kothari Dam.		Water requirement for the Project is being met from the treated sewage water except 12m^3 /day for drinking/domestic use as permitted by CGWA. No water is being drawn from Kothari Dam.
xxiv.	Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.		We are in consultation with the Central Ground Water Board in this regard and as per their advice we have start construction of ground water recharge structures.
xxv.	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operation and in transportation of mineral. The vehicles carrying the mineral shall be covered with a tarpaulin and shall not be overloaded.		The stipulation is being complied with.
xxvi.	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.		Installation of adequate number of high efficiency dust extraction system including water sprinkling has been completed. Loading and Unloading system also have efficient dust control arrangements.
xxvii.	The project authorities should undertake sample survey to generate data on pre-project community health status within a radius of 1 km from the proposed project.		The Pre-project community health status within a radius of 1.0 km from the proposed project site has been conducted and submitted to Rajasthan State Pollution Control Board along with the application for grant of Consent to Operate. The Board has granted the Consent to Operate on 06th June'11.
xxviii.	Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if. needed. Health records of the workers shall be maintained.		Occupational health surveillance programme of the workers has been undertaken periodically as required under Mines Rules, 1955. No contraction has been detected. Health records of the workers have been maintained.
xxix.	Pre-placement medical examination and periodical 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.		Pre-placement medical examination of workers is being carried out as required under Mines Rules, 1955. During Compliance period 2058 workers have been examined by Competent Medical Officer. Schedule of Health examination has been drawn and is followed.
xxx.	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and the wastewater generated during mining operation.		No colony has been constructed as yet. The workshop has been constructed. No waste water is being generated during mining. The stipulation is being complied with.

xxxi.	The R&R of the project affected people shall be carried out as per the NPRR. The plan shall be prepared within three months in consultation with State Government and a copy submitted.		No person will be displaced from their house or village, therefore, there will be no need for resettlement and rehabilitation as mining will be done at places far away from the habitated areas.
xx	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 MOEF and its Regional Office located at Lucknow.		Digital processing of the entire lease area using remote sensing technique has already been done and submitted with EIA & EMP report. Second digital processing was carried by M/s Armenge Engineering & Management Consultant Pvt. Ltd. Jaipur in 14.04.2013.
xxiii.	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.		Construction workers are from nearby villages. After end of days work they go back to their houses. Therefore, need for temporary structures have not arisen.
xxiv.	The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM_{10}) & NOx in the ambient air within the impact zone, peak particle velocity at 300m 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 display 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 website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.		The Instructions contained in circular No. J-20012/12006-IA.II (M) dated 27.05.09 issued by MOEF has been noted and is being complied with. As per circular fortnightly AAQ monitoring is under practice in mine lease area. The monitoring reports are enclosed as **Annexure – VII**
xxxv.	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.		The Final Mine Closure Plan shall be submitted as per rules.
B. General Condition :			
i.	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.		No change will be made in mining technology and scope of working without prior approval of MOEF.
ii.	No change in the calendar plan including excavation, quantum of mineral iron ore and waste should be made.		No change will be made in the calendar plan.

iii.	Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest and wildlife department.		The stipulation shall be complied with.
iv.	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 10micron i.e., PMIO) & 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		Ambient air quality monitoring was carried out by external agency in Jun' 2014 & Sep' 2014 and noticed that the AAQ is within permissible limits. The Reports are enclosed as **Annexure – I & II.** Four ambient air quality monitoring stations in each of Core zone and Buffer zone have been established as per approved plan for monitoring the AAQ.
v.	Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM_{IO}) & NOx should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Lucknow and the State Pollution Control Board / Central Pollution Control Board once in six months.		The Reports are enclosed as **Annexure- I & II.** The reports are submitted o MOEF and its Regional Office located at Lucknow, RSPCB and CPCB.
vi.	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.		The fugitive dust emissions from all the sources are being controlled regularly. Regular water spraying arrangement on haul roads, loading and unloading and transfer points has been made and maintained properly.
vii.	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.		Proper measures are being taken for control of noise in the work environment area. The monitoring reports are enclosed as (**Annexure-VIII**). Proper PPE are provided to the workers engaged in the operations.
viii	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 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.		No industrial waste water is generated till date. Proper arrangement will be made to collect the waste water whenever it will be generated. Grease trap has been installed in the workshop.
ix.	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.		Proper compliance is being done. Pre-employment Medical Tests examination is under practiced. It will be repeated periodically to observe any contractions due to exposure of dust.

x.	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.		The Cell has been set up under the control of a Senior Executive who reports directly to the Director.
	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 Lucknow.		Separate Fund has been earmarked for environment protection measures.
xii.	The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.		The date of financial closure of the company is 31st March of every year. The final approval of the Project as Consent to Operate has been given by RSPCB on 6th June'11. The land development was started from 15.06.11.
xiii.	The Regional Office of this Ministry located at Lucknow 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.		The instruction has been noted. The Regional Officer, Lucknow has been provided with all the information asked by them.
xiv.	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 email) to the Ministry of Environment and Forests, its Regional Office Lucknow, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance 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, Lucknow, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.		The Compliance Report for the period from 01 Apr' 2014 to 30th Sep' 2014 is enclosed herewith.
xv.	A copy of the 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.		The copy of the Clearance letter has been sent to all concerned and it has been put on the website of the Company on 23rd. Sept. 2010.
xvi.	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.		It has been done by RSPCB.

xvii.	The environmental statement for each financial year ending 31st 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 Regional Office of the Ministry of Environment and Forests, Lucknow by e-mail.		It was submitted within the stipulated time on 22th Sept.'14 for the year 2012-13.
xviii.	The project authorities should advertise at least in two local newspapers 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 web site of the Ministry of Environment and Forests at **http://envfor.nic.in** and a copy of the same should be forwarded to the Regional Office of this Ministry located at Lucknow.		It has been advertised in three Newspapers, namely The Hindu, Rajasthan Patrika and Dainik Bhaskar on 13.08.10. The copies have been forwarded to the Regional Office, MOEF, Lucknow vide our letter No. 923 dated 24.09.10

Dinesh Chandra Patil
Agent- Dhedwas Iron Ore Mine