JSL/JP/2013/1621 To 1624 Date : 05.12.2013

To

The Secretary,
Ministry of Env.& Forest,
Paryavaran Bhawan,New Delhi.

Sub: **Half Yearly Report for Dhedwas Iron Ore, Copper and Associated Minerals Mine and Beneficiation Plant for the period from 1st April'13 to 30th September'13 (ML NO. 631/05)**

Sir,

The Six-monthly Report for the period from 1st April'13 to 30th September'13 is enclosed herewith for your record.

Thanking you,

Yours faithfully,
For JINDAL SAW LTD.

(Dr.R S Goyal)
President (Mines)
Authorised Signatory

Copy to :

1. Regional Office,MoEF, Kendriye Bhawan, 5th. Floor, Sector-H, Aliganj, Lucknow- 26024.
2. Zonal Office, Central Pollution Control Board, Sahkar Bhawan, 3rd. Floor, North TT Nagar, Bhopal-462003.
3. The Chairman, Rajasthan State Pollution Control Board, Institutional Area, Jhalana Doongri, Jaipur.

(1) Jaipur Office (2) Bhilwara Office

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: 1st April'13 to 30th September' 2013

Date: 29/11/13

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

i.	**A. Specific Conditions** 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.		**Compliance** 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.
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. 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. 3. Ground water recharge structure to be installed within six months with consultation with Regional Director, CGWB, Jaipur. 4. Photographs of recharge structures after completion to be furnished to The R.D, Jaipur under intimation to CGWA, New Delhi. 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		1. Ground water is being used only for domestic purpose through one tube well only. 2. Water meter has been installed in the tube well. Monitoring will be carried out from 1st Dec, 2013 every month. Ground water quality will be monitored in October and April every year. 3. We are in consultation with the Regional Director, CGWB, Jaipur and shall install the ground water recharge structure within six months. 4. Photographs will be furnished to The Regional Director, CGWB, Jaipur immediately after completion, under intimation to CGWA. 5. We are in consultation with the Regional Director, CGWB, Jaipur for location of sites for installation of piezometers and to draw ground water monitoring programme to be

	6. Ground water monitoring data shall be submitted to CGWB, Jaipur on regular basis at least once in a year. 7. The firm shall ensure proper recycling and reuse of waste water after adequate treatment. 8. Action taken in respect of S.No.1 to 7 shall be submitted to CGWA within one year period.		executed regularly. Piezometers shall be installed by the end of August, 2013. 6. The ground water data for S.No.2 & 5 shall be submitted every year in December to CGWB, Jaipur. 7. No waste water is generated in the process. Domestic waste water will be treated and used for plantation. 8. We will submit by Decemberr, 2013.
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.
v.	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 ponds shall be covered by synthetic liner (HDP) as approved. Construction of Tailing pond is likely to be completed by December, 2013.
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.		Top Soil is being stacked at earmarked sites. It is being used for plantation. Till now 16071 m^3 top soil was stored at the designated site out of which 265 m^3 has been used for plantation.
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		The OB generated from the mine is utilized for road making and levelling of other depressed ground within the lease area as required. When the regular OB will

	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.		be generated, it will be 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 will be 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		At present two external dumps of OB have been created. The stipulation has been complied with by constructing retaining

	should be based on the rain fall data.		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. The crusher has been installed. We have conducted AAQ measurements at 12 places in June'2013 & September'13 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 12.5 hectare area by the end of September,2013.
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 shall be implemented as approved by the Central Ground Water Authority.
xx.	Regular monitoring of ground water level		Monitoring of ground water quality has

	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.		been carried out of existing wells near the plant office and nearby villages at 13 places in June and September'13. The quality is noted to be within permissible limits. The copies of the Reports are enclosed as **Annexures – III & IV.** Since the mining has been started recently and the workings are 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 monitoring has been carried out as stipulated.
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. Construction of STP has been completed and treated water is available.
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 shall construct the ground water recharge structures by June 2014.
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		The stipulation is being complied with.

	tarpaulin and shall not be overloaded.		
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. By now 709 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 is under construction. No waste water is being generated during mining. The stipulation will be 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.
xxxii.	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. It will again be done in the year 2013.
xxxiii.	Provision shall be made for the housing of construction labour within the site with all		Construction workers are from nearby villages. After end of days work they go

	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.		back to their houses. Therefore, need for temporary structures have not arisen.
xxxiv.	The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM_{IO}) & 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. AAQ monitoring has been done in June'2013 and September'13. AAQ has been found to be within permissible limit. The Reports are enclosed as **Annexures –I & II**.
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,		Ambient air quality monitoring was carried out by external agency in June'13 and Sept. 2013. 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

	topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board		approved plan for monitoring the AAQ.
v.	Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) & 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 **Annexures-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. **During the Mines Safety Week, 2011, the mine was awarded a prize for control of dust.**
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-V & VI**). 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 shall be installed in the workshop which is under construction.
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 have been done. 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		The Cell has been set up under the control of a Senior Executive who reports directly to the Director.

	Head of the Organization.		
xi.	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. During the year 2012-13 on expenditure of Rs. 26.63 lacs was made for Environmental Protection Control measures and greenery development.
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 e-mail) 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 1st April 2013 to 30th Sept.2013 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		It has been done by RSPCB.

	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.		
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 30th Sept.'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

(Dr.R.S.Goyal)
President-Mines
Authorised Signatory.