Half Yearly Compliance for the period October 2013 to March 2014 on compliance to the conditions stipulated in the Environmental Clearance letter no. J_11015/206/012-IA. II (M), dated 19th November 2013 of MoEF, GOI in respect of Sanindpur Iron & Bauxite Mine of M/s Rungta Sons (P) Limited located in Sundergarh district of Odisha

Specific conditions	Compliance
(i) The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Odisha and effectively implement all the conditions stipulated' therein.	Conditions stipulated by SPCB in their Consent to establish has been implemented. Consent to operate has been granted by the Board.
(ii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.	There is no National Park/Wild life sanctuary or / tiger reserve is located within 10 KM radius of the mine.
(iii) No mining activities are allowed in forest area for which the FC is not available.	Total forest land involved in the mine of 68.135 has been diverted.
(iv) As per the guidelines issued by the Forest Conservation Division in this Ministry vide F. No. 11-362/2012-FC dated 1st February, 2013 the project proponent shall seek and obtain approval under the forest (Conservation) Act, 1980 for diversion of the entire forest land located within the mining lease on or before 31st January 2015, failing which the mining lease area will be reduced to the non forest area plus the forest area for which the project proponent has been able to obtain the FC at the end of this time period. In the case of reduction in mine lease area, the project proponent will need to get a revised mining plan approved from the Competent Authority for reduced area and enter into a new mining lease as per reduced lease area. The EC will be construed to be available for the mining lease area as per the revised mining lease deed.	The mine has 68.135 ha of forest land. Stage –II forest clearance has been accorded by the MoEF for the entire forest land (52.742 ha of forest land vide letter no 8-135/2003-FC, dt.19.06.2006 & 15.393 ha of forest land vide letter no 8-135/2003-FC(vol) dt. 24.10.2013.
(v) The. Project proponent shall obtain prior approval of the competent authorities for drawl of requisite quantity of surface water and ground water for the project before commencing the mining activity.	Water withdrawal permission has already obtained from The Executive Engineer, Sundergarh of Irrigation Department. Water withdrawal permission has already obtained from CGWA vide letter No. 21-4(201) /CGWA/ SER /2009- 1253 Dated- 11.12.2009.
(vi) Lease area is near Sona river therefore PP shall ensure the mitigative measures to protect the Sona river.	All mitigative measures such as garland drain, retaining wall & settling tank has been provided around the dump. Mine run off from other place partly diverted to the existing quarries and rain water harvesting tank made at strategic point. The sona river is away from the mine

	lease. No run off from the mine meets the sona river.
(vii) Green barrier (five stratified rows) should be raised on the boundary of' ML area towards Sona river.	Green belt all along the mine lease boundary has been developed.
(viii) 10-15% of. Plantation/ green belt should be of endemic/endangered species, if present in lease area.	This condition has been complied.
(ix) Traffic density on the route of mineral transportation shall be regularly monitored and report shall be submitted along with compliance report.	This condition is being complied. Detail traffic density will be submitted to the MoEF.
(x) As part of ambient air quality monitoring during operational phase of the project, the air samples shall also be analyzed for their mineralogical composition and records maintained.	Ten locations have been selected for both core as well as buffer zone of the ML area in consultation with the State Pollution Control Board. The Data On Ambient Air Quality & mineralogical composition is analysed and given in Annexure-III.
(xi) Mineral handling plant 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.	Mineral handling plants have been provided with dry fog system. Static water sprinkling arrangement has been made on the haul road. Rest places are sprinkled by mobile water tankers.
(xii) Effective safeguard measures such as conditioning of ore with water, regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, loading and unloading point and transfer points. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Static water sprinkling system has been installed inside the mine area over 2.65 km length. Besides Four nos. of Water tankers of capacity 2x18 KL, 1x12 KL & 1x6 KL have been engaged for fugitive dust suppression on remaining haul road and outside mine area, loading & unloading points, transfer points including active waste dump site.
(xiii) The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	Four Rainwater harvesting pits of total capacity 25000 M3 have been constructed for augmentation of ground water resources.
(xiv) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezo meters during the mining 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 Bhubaneswar, the Central Ground Water Authority and the Regional Director,	Monitoring of ground water level is being carried out in four seasons and the water quality is also being tested. The monitoring report is enclosed at Annexure-I. This is being submitted to the Ministry on six monthly basis.

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.	
(xv) The project proponent shall ensure that no natural watercourse and/ or water resources shall be obstructed due to any mining operations.	There is no natural water course present in the lease area.
(xvi) The project. Proponent shall regularly monitor the flow rate of the Karo and Sona River flowing adjacent to the mine lease and maintain the records.	This condition is being complied.
(xvii) The reclaimed and rehabilitated area shall be afforested. 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 Bhubaneswar on six monthly - basis.	The mining quarries are active and not mature for reclamation. However dead end of the dumps are being stabilised with plantation.
(xviii) Dimension of the retaining wall at the toe of temporary over burden dumps and OB benches within the mine to check run-off and siltation shall be based on the rain fall data.	Boulder retaining wall of dimension (1.5 m height and 1.5 m width) has been constructed. A total 2113 m long boulder retaining wall has been constructed around the dumps.
(xix) Plantation shall be raised in an area of 86.141 Ha. including a 7.5m wide green belt in the safety zone around the mining lease, back filled and reclaimed area, around the higher benches of excavated void to be converted in to water body, roads etc. by planting the native species in consultation with the local DFO/ Agriculture Department. The density of the trees should be around 2500 plants per Ha.	No plantation has been done during the reporting period of December 2013 to March 2014. Plantation shall be carried out in forthcoming monsoon.
(xx) Effective safeguard measures such as regular water sprinkling 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 shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Regular water sprinkling is carried over the length of 2.65 km by installation of Static water sprinkling system inside the mine area. Besides Four nos. of Water tankers of capacity 2x18 KL, 1x12 KL & 1x6 KL have been engaged for fugitive dust suppression on remaining haul road and outside mine area, loading & unloading points, transfer points including active waste dump site.
(xxi) Process water discharge and/ or any waste water shall be properly treated to meet the prescribed standards before reuse/discharge. The runoff from temporary OB dumps and other surface run off shall be analyzed for iron and in case its concentration is found higher than the permissible limit, the waste water should be treated before discharge / reuse.	There is no process waste water generation. Run off from the OB is collected in settling tanks and other areas are partly diverted to the mining pits and rain water harvesting ponds. There is no discharge from these water collection systems.
(xxii) The decanted water from the beneficiation plant and slime/ tailing pond shall be re-circulated within the mine and there shall be zero discharge from the mine.	Benificiation plant has not yet been installed.

(xxiii) Regular monitoring of the flow rate of the springs and perennial nallahs shall be carried out and records maintained.	This condition shall be complied.
(xxiv) Regular monitoring of water quality, upstream and downstream of Sona and Karo River shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment and Forests, its Regional Office, Bhubaneswar, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.	Monitoring of water quality up stream & downstream of Sona river and Karo river is being carried out. The monitoring results are being sent to the Regional Office of the MoEF and the concerned offices. The latest report is enclosed at Annexure-II.
(xxv) The project proponent shall obtain necessary prior permission of the competent authorities for drawl or requisite quantity of surface water for the project. Ground water shall not be used for the mining operations.	Surface Water withdrawal permission has already obtained from The Executive Engineer, Sundergarh of Irrigation Department. Also permission has already obtained for ground Water withdrawal from CGWA vide letter No. 21-4(201) /CGWA/ SER /2009- 1253 Dated-11.12.2009. Ground water is only used for domestic purposes.
(xxvi) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.	A feasibility report for rain water harvesting has been approved by the CGWB. Rain Water Harvesting Structures of total capacity of 25000M^3 have been constructed which collect & store the mine water for day to day utilization.
(xxvii) Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral from mine face to the beneficiation plant. The vehicles shall be covered with a tarpaulin and shall not be overloaded.	Vehicular emission is being regularly monitored & kept under control. Vehicles are maintained outside mining lease area. The trucks carrying minerals from the mine to different destinations are covered with tarpaulin. Overloading of vehicles is strictly monitored & restricted.
(xxviii) Sewage treatment plant shall be installed for the colony. ETP shall also be provided for workshop and wastewater generated during mining operation.	There is a small mine camp. So waste water generated from this camp is treated through scientifically designed soak pit & settling tank. No waste water generation takes place by the mining process. There is no vehicle maintenance work shop within the lease area.
(xxix) Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bhubaneswar.	This condition has been complied.
(xxx) 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	Initial / Periodical Medical Examination is being conducted regularly for all employees including workers engaged in the project.

workers should be drawn and followed accordingly.	Corrective and preventive actions are taken in case of a person found to be abnormal The various parameters that are covered under IME and PME are blood test, sugar level test, urine test, blood pressure, chest x-ray, eye refraction test, audiometric test, chest measurement, height/weight measurement, night blindness/ color blindness test, nervous system test, abdomen test, locomotor system, hernia, hydrocele, ECG, lung function test etc.
(xxxi) Implementation of Action plan on issues raised during Public Hearing.	The action plan is being implemented. The latest status is given in Annexure - V.
(xxxii) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna 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 for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measures brought out in the Wildlife Conservation Pan so prepared specific to the project site shall be effectively implemented. A copy of action plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar.	Site specific conservation plan has been approved by competent authority (PCCF Wildlife & Chief Wildlife Warden, Odisha). We have already deposited the fund for implementation of Site Specific Conservation Plan & Regional wildlife Conservation Plan with the Forest Department.
(xxxiii) 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.	This condition shall be complied.
B. General Conditions	
(i) No change in Iron Ore Processing/ Beneficiation technology and scope of working should be made without. prior approval of the Ministry of Environment & Forests.	There is no change in technology as mentioned in the EIA/EMP report. Due approval will be taken prior to change in the technology.
(ii) No change in the calendar plan including Processing/ Beneficiation of mineral iron ore and waste should be made.	The production of ore including quantum solid waste generation has not been changed is as per the approved IBM/EC condition. NO benification plant has been installed yet.
(iii) At least four ambient air quality-monitoring stations should be established in the core zone as well as in (he buffer zone for RSPM (Particulate matter with size less than 10 micron i.e., PM_{10}) and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and	Data collected for the quarter ending December 2013 & March 2014 is annexed as Annexure III. This is being submitted to the MOEF & SPCB.

environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. The data so recorded should be regularly submitted to the Ministry including its Regional office located at Bhubaneswar and the State Pollution Control Board / Central Pollution Control Board once in six months.	
(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.	Workers engaged in noise prone area has been provided with ear plug/muffs. The noise level is monitored quarterly and the values are below 85 dB (A). The noise level data for the quarter ending December 2013 & March 2014 is enclosed as Annexure-IV.
(v) There will be zero waste water discharge from the plant.	This condition shall be complied.
(vi) 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.	Personal Protective Equipment (PPE) such as respiratory device, nose mark, ear plugs, hamlet, hand globes, shoes are provided to the employee.
(vii) 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.	Mobile health checking is being done regularly for occupational health surveillance. Apart from this specialized checking is being carried out at Utkal Poly Clinic, Bhubaneswar. No such health problems have been detected which can be related to occupational exposure. Person working in the dusty area wear protective devices.
(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 separate Environment Management cell has already been constituted.
(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 Bhubaneswar.	The expense incurred on this account is enclosed as Annexure VI.
(x) The project authorities should inform to the Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	All information will be submitted to Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project.
(xi) The Regional Office of this Ministry located at Bhubaneswar 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 *I* information *I* monitoring reports.	Full cooperation will be provided to inspecting officers during monitoring of compliance conditions.
(xii) The project proponent shall submit six monthly reports on the status of compliance of the stipulated	Six monthly reports are being submitted regularly to Regional Office of the MoEF and concerned offices

environmental clearance clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment arid Forests, its Regional Office Bhubaneswar, 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 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, Bhubaneswar, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.	and the report is being up loaded in our company's website.
(xiii) 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.	Clearance letter has already been displayed in concerned Panchayat.
(xiv) 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 had been displayed by the State Pollution Control Board.
(xv) The environmental statement for each financial year ending 31at 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 and Forests, Bhubaneswar by e-mail.	The environmental statement in form-V is being submitted to the State Pollution Control Board, Regional office of Ministry of Environment and Forest & also being displayed at the website of the company, along with six monthly EC Reports.
(xvi) The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and 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 Bhubaneswar.	The EC was advertised in news papers namely Business standard 22 November 2013 and the Odia daily The Samaja on 22 November 2013.

Annexure - I

Ground water Level measured through using Piezometer Sanindpur Iron & Bauxite mine

(mRL of the Bore well = 627 m)

Month	Piezometric head from the ground level (in meter)
Oct 2013	29.7
December 2013	32.02
January 2014	32.64
February 2014	33.16
March 2014	33.58

Annexure -I –cont.

Ground Water Quality Report

Period October - December 2013						
Sl. No.	Parameters	Tube well near Sanindpur School	Tube well near Sanindpur village	Bore well -3 near magazine	Dug well from Santosh Barik House	Dug well near mine office
1	Colour in hazen unit	<5	<5	<5	<5	<5
2	Odour	Un-objectionable	Un-objectionable	Un-objectionable	Un-objectionable	Un-objectionable
3	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity NTU	4.9	3.2	4.4	2.8	1.9
5	pH Value	6.41	7.08	5.58	6.11	5.77
6	Temperature ^{0}C	26.8	27.3	24.7	26.4	27.4
7	Total Hardness (as $CaCO_3$) mg/l	79.13	40.53	11.58	13.51	27.02
8	Iron (as Fe) mg/l	0.13	0.1870	0.2955	0.2502	0.3241
9	Chlorides (as Cl) mg/l	22.81	7.88	4.92	18.72	10.34
11	Total dissolved solids mg/l	120	72	22	60	72
12	Electrical Conductivity S/cm	201	109.1	37.45	107	116.2
13	Calcium (as Ca) mg/l	20.072	10.81	2.316	4.63	8.49
14	Magnesium (as Mg) mg/l	7.034	3.28	1.407	0.47	1.41
15	Copper (as Cu) mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
16	Manganese (as Mn) mg/l	0.06	0.1942	0.0801	0.2957	0.1572
17	Sulphate (as SO_4) mg/l	<0.10	8.2284	<0.10	6.6017	5.4014
18	Total Nitrate (as NO_3) mg/l	6.3102	1.3760	2.5294	4.4435	<0.90
19	Fluoride (as F) mg/l	<0.10	<0.10	<0.10	<0.10	<0.10
20	Cadmium (as Cd) mg/l	<0.002	<0.002	<0.002	<0.002	<0.002
21	Cyanide (as CN) mg/l	ND	ND	ND	ND	ND
22	Lead (as Pb) mg/l	<0.01	<0.01	<0.01	0.0139	<0.01
23	Arsenic (as As) mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
24	Mercury (as Hg) mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
25	Selenium (as Se) mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
26	Nickel (as Ni)	<0.01	<0.01	<0.01	<0.01	<0.01
27	Zinc (as Zn) mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
28	Total Chromium (as Cr) mg/l	ND	ND	ND	ND	ND
29	Total Alkalinity (as $CaCO_3$) mg/l	64	40	08	08	28
30	Acidity mg/l	14	06	21	04	54
31	Aluminum (as Al) mg/l	ND	ND	ND	ND	ND
32	Boron (as B) mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
34	Sodium (as Na) mg/l	15.8	10.8	3.5	8.5	11.5
35	Potassium (as K) mg/l	9.6	3.2	1.3	4.4	4.3
36	Total Bacterial Count nos/100ml	Absent	Absent	Absent	Absent	Absent
37	E Coli nos/100ml	Absent	Absent	Absent	Absent	Absent
38	S enteritidis nos/100ml	Absent	Absent	Absent	Absent	Absent

Annexure -I –cont.

Ground Water Quality Report

Period January – March 2014						
Sl. No.	Parameters	Tube well near Sanindpur School	Tube well near Sanindpur village	Bore well -3 near magazine	Dug well from Santosh Barik House	Dug well near mine office
1	Colour in hazen unit	< 5	< 5	<5	<5	< 5
2	Odour	Agreeable	Agreeable	Un-objectionable	Agreeable	Agreeable
3	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity NTU	1.1	4.0	0.6	0.8	2.9
5	pH Value	6.95	6.52	6.6	6.58	6.53
6	Temperature ^{0}C	24.8	24.8	25.5	25.0	25.2
7	Total Hardness(as$CaCO_3$) mg/l	85.36	20.82	24.98	89.53	68.71
8	Iron (as Fe) mg/l	0.06	0.0632	0.2943	0.0862	0.1682
9	Chlorides(as Cl) mg/l	22.32	3.80	3.80	19.00	3.32
10	Residual Free Chlorine mg/l	0.4316	< 0.01	0.0572	0.3542	0.3210
11	Total dissolved solids mg/l	163	36	33	136	96
12	Electrical Conductivity S/cm	244	56.4	52.4	216	149.9
13	Calcium (as Ca) mg/l	25.82	6.66	5.83	25.82	23.32
14	Magnesium (as Mg) mg/l	5.06	1.01	2.53	6.07	2.53
15	Copper (as Cu) mg/l	< 0.01	< 0.01	<0.01	< 0.01	< 0.01
16	Manganese (as Mn) mg/l	0.04	0.0204	0.2614	0.0742	0.1032
17	Sulphate(as SO_4) mg/l	<0.10	0.2364	0.5175	7.6643	0.3652
18	Total Nitrate (as NO_3) mg/l	5.4256	< 0.90	<0.90	4.1206	< 0.90
19	Fluoride (as F) mg/l	0.10	0.1362	<0.10	0.1844	0.1082
20	Cadmium (as Cd) mg/l	< 0.002	< 0.002	<0.002	< 0.002	< 0.002
21	Cyanide (as CN) mg/l	< 0.002	< 0.002	<0.002	< 0.002	< 0.002
22	Lead (as Pb) mg/l	< 0.01	< 0.01	<0.01	0.0139	< 0.01
23	Arsenic (as As) mg/l	< .0.001	<0.0	<0.001	< 0.001	< 0.001
24	Mercury (as Hg) mg/l	< 0.001	< 0.001	<0.001	< 0.001	< 0.001
25	Selenium (as Se) mg/l	< 0.01	< 0.01	<0.01	< 0.01	< 0.01
26	Nickel (as Ni) mg/l	<0.01	< 0.01	<0.01	< 0.01	< 0.01
27	Zinc (as Zn) mg/l	< 0.01	< 0.01	<0.01	< 0.01	< 0.01
28	Total Chromium (as Cr) mg/l	ND	ND	ND	ND	ND
29	Total Alkalinity (as $CaCO_3$) mg/l	76	18	12	70	60
30	Acidity mg/l	20	12	16	18	24
31	Aluminum (as Al) mg/l	<'0.01	< 0.01	<0.01	< 0.01	< 0.01
32	Boron (as B) mg/l	< 0.05	< 0.05	<0.05	< 0.05	< 0.05
34	Sodium (as Na) mg/l	15.9	4.2	4.6	10.2	8.5
35	Potassium (as K) mg/l	8.1	2.4	3.8	6.1	4.4
36	Total Bacterial Count nos/ 100 ml	Absent	Absent	Absent	Absent	Absent
37	E Coli nos /100ml	Absent	Absent	Absent	Absent	Absent
38	S enteritidis nos /100ml	Absent	Absent	Absent	Absent	Absent

Annexure - II

Monitoring Report of Karo River

Location:-Karo River		Period: October to December – 2013		Period January to March - 2014	
Sl. No.	Parameters	Up Stream	Down Stream	Up Stream	Down Stream
1	Colour in hazen unit	<1.0	<1.0	<1.0	<1.0
2.	Total Suspended Solids mg/l	48.0	50.0	44.0	48.0
3	Dissolved solids mg/l	280	210	325.0	190.0
4	Dissolved Oxygen	7.2	6.8	6.0	5.9
5	pH value	7.1	7.0	7.2	7.1
6	Temperature ^{0}C	25.5	25.5	30.5	30.5
9	COD mg/l	16.0	20.0	16.0	24.0
10	Arsenic (as As) mg/l	<0.005	<0.005	<0.005	<0.005
11	Mercury (as Hg) mg/l	<0.001	<0.001	<0.001	<0.001
12	Lead (as Pb) mg/l	<0.01	<0.01	<0.01	<0.01
13	Cadmium (as Cd) mg/l	<0.001	<0.001	<0.001	<0.001
14	Hex. Chromium (as Cr^{+6}) mg/l	<0.02	<0.02	<0.02	<0.02
15	BOD (3 days at 27^{o}C) mg/l	1.0	1.0	1.0	1.0
16	Copper (as Cu) mg/l	<0.02	<0.02	<0.02	<0.02
17	Zinc (as Zn) mg/l	<0.02	<0.02	<0.02	<0.02
18	Selenium (as Se) mg/l	--	--	--	--
19	Nickel (as Ni) mg/l	<0.05	<0.05	<0.05	<0.05
20	Iron (as Fe) mg/l	0.38	0.32	0.42	0.41
21	Cyanide (as CN) mg/l	N.T	N.T	N.T	N.T
22	Chloride (as Cl) mg/l	16.0	18.0	14.0	18.0
23	Fluoride (as F) mg/l	0.6	0.6	0.7	0.7
24	Dissolved Phosphate (as P) mg/l	0.80	0.40	0.6	0.8
25	Sulphate (as SO_4) mg/l	3.2	2.4	5.53	7.04
27	Pesticides	Nil	Nil	Nil	Nil
28	Phenolic Compounds mg/l	ND	ND	ND	ND
29	Total Nitrate (as NO_3) mg/l	0.8	1.0	1.2	0.8
30	Manganese (as Mn) mg/l	<0.02	<0.02	<0.02	<0.02

Annexure - II Cont……

Water quality of Sona River

Location:- Sona Nadi		Period: October to December - 2013		Period: January to March - 2014	
Sl. No.	Parameters	Up Stream	Down Stream	Up Stream	Down Stream
1	Colour in hazen unit	<5	<5	<5	<5
2	Odour	Odourless	Odourless	Odourless	Odourless
3	Total Suspended Solids mg/l	5.0	7.5	3.0	2.5
4	pH value	6.63	6.66	7.03	7.03
5	Temperature ^{0}C	23.5	24.8	22.5	22.2
11	BOD (3 days at 27^0 C) mg/l	01	01	01	01
12	COD mg/l	4	4	4	4
13	Lead (as Pb) mg/l	<0.01	<0.01	<0.01	<0.01
14	Cadmium (as Cd) mg/l	<0.01	<0.01	<0.01	<0.01
16	Total Chromium (as Cr) mg/l	<0.01	<0.01	<0.01	<0.01
17	Copper (as Cu) mg/l	<0.01	<0.01	<0.01	<0.01
18	Zinc (as Zn) mg/l	<0.01	<0.01	<0.01	<0.01
19	Nickel (as Ni) mg/l	<0.01	<0.01	<0.01	<0.01
20	Cyanide (as CN) mg/l	<0.002	<0.002	<0.002	<0.002
21	Fluoride (as F) mg/l	0.10	0.10	0.11	0.11
22	Dissolved Phosphate (as P) mg/l	<0.01	<0.01	<0.01	<0.01
24	Phenolic Compounds (as C_6H_5OH) mg/l	ND	ND	ND	ND
25	Manganese (as Mn) mg/l	0.04	0.06	0.06	0.45
26	Iron (as Fe) mg/l	0.36	0.37	0.32	0.33
27	Arsenic (as As) mg/l	<0.001	<0.001	<0.001	<0.001
28	Mercury (as Hg) mg/l	<0.001	<0.001	<0.001	<0.001
29	Selenium (as Se) mg/l	<0.001	<0.001	<0.01	<0.01
30	Total Nitrate (as NO_3) mg/l	0.07	0.02	0.03	0.03

Annexure - III.

Monitoring of AAQ & Particulate Matter for quarter ending December 2013 (8 hourly monitored data)

All parameters are expressed in μ gm/m^3

(Core Zone)

Station Name	$PM_{2.5}$	PM_{10}	SO_2	NO_X	CO Hourly average
Mine office	19	59	<3	11	<0.1

All parameters are expressed in μ gm/m^3

(At a distance of 25m from source)

Station Name	Particulate Matter
Downwind of Working Pit	202
Downwind of Mobile Crusher Plant	115
Down Wind of OB Dump	189
Down Wind of Haulage Road	391

As per MoEF Notification New Delhi, 4th October, 2010 [GSR 809 (E)],

(Buffer Zone)

Station Name	$PM_{2.5}$	PM_{10}	SO_2	NO_X	CO Hourly average
Village Oraghat	11	29	<3	10	<0.1
Village Malda	10	33	<3	11	<0.1
Village Sanindpur	12	41	<3	08	<0.1
Village Pureibahal	11	31	<3	07	<0.1
Village Teherai	19	57	<3	11	<0.1

Monitoring of AAQ & Particulate Matter for quarter ending March 2014
(8 hourly monitored data)
All parameters are expressed in μ gm/m^3

(Core Zone)

Station Name	$PM_{2.5}$	PM_{10}	SO_2	NO_X	CO Hourly average
Mine office	19	53	07	29	< 0.1

All parameters are expressed in μ gm/m^3

(At a distance of 25m from source)

Station Name	Particulate Matter
Downwind of Working Pit	1037
Downwind of Mobile Crusher Plant	1026
Down Wind of OB Dump	915
Down Wind of Haulage Road	972

As per MoEF Notification New Delhi, 4th October, 2010 [GSR 809 (E)],

(8 hourly monitored data)

(Buffer Zone)

Station Name	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO Hourly average
Village Oraghat	37	13	08	25	< 0.1
Village Malda	38	13	05	08	< 0.1
Village Sanindpur	39	16	06	12	< 0.1
Village Pureibahal	62	21	06	44	< 0.1
Village Teherai	36	14	11	13	< 0.1

Annexure-IV

Noise Quality Report

October - December 2013

Location	Leq dB (A)	Lmax dB (A)	Lmin dB (A)
Drill Machine	79.5	81.5	77.7
Excavator Operator Cabin	71.6	73.5	68.8
Loader Operator Cabin	71.4	73.3	69.7
Dumper Operator Cabin	60.1	62.5	56.8

Location	Leq Day Time dB(A)	Leq Night Time dB(A)	Lmax dB(A)	Lmin dB(A)
Mines Office	56.1	45.7	63.8	35.2
Mine Camp	54.8	38.3	60.5	35.8
New Crusher Plant	73.1	70.4	74.9	69.8
Village Pureibahal	49.7	37.0	54.2	35.5
Village Sanindpur	48.1	36.8	54.2	33.8
Village Teharai	53.7	37.7	59.7	35.2

January - March 2014

Location	Leq dB (A)	Lmax dB (A)	Lmin dB (A)
Drill Machine	88.8	90.1	87.2
Excavator Operator Cabin	80.2	81.3	78.3
Loader Operator Cabin	79.6	80.6	78.2
Dumper Operator Cabin	80.5	81.7	79.4

Location	Leq Day Time dB (A)	Leq Night Time dB (A)	Lmax dB (A)	Lmin dB (A)
New Scree Plant - 3	81.2	79.3	84.8	73.8
New Scree Plant - 4	75.3	73.7	78.3	73.2
New Scree Plant - 5	82.4	80.5	84.6	79.2
Village Pureibahal	53.9	43.2	58.9	36.4
Village Sanindpur	48.8	39.1	54.8	37.2
Village Teharai	49.6	39.1	57.8	36.5

Annexure -V

Sanindpur & Bauxite Mine M/s. Rungta Sons Pvt. Ltd.

Time bound action plan of public hearing with financial allocations

Sl. No. (A)	Issue Raised (B)	Action Taken (C)	Amount spend/proposed (Rs) Approx. (D)	Remarks (E)	Remarks-2
1.	Plantation	Plantation has already done in various parks of the mine this has been carried out regularly in future too. Fruit bearing plants have been distributed among villagers regularly	7,50,000/- will be spent annually	This is a regular activity	
2.	Dust Suppression	Static sprinkling system has already been installed in 2.65 km length of the mine. Water tankers have been engaged for village roads. Atomised spray systems have been installed at all discharging points of mobile crushing and screening units to mitigate dust emission.	Approx ₹ 60 lacs has already been spent on the account. A sum of ₹ 10-15 lacs will be spent annually on this account.	-do-	
3.	Local Employment	Expansion will generate direct employment for 350 persons out of which 92% local people will get employment.			
4.	Manual mining facility	Company will implement manual mining facility for providing the job opportunity to the poor uneducated village as per requirement			
5.	Road infrastructure facility from Kolmong to Koira	Concrete road will be constructed from Kolmong to Koira in association with mining entrepreneurs of the area	₹ 3.0 Crore will be borne by the company.	Work will be started after obtaining EC for proposed production	
6.	Health care facility with provision of Dispensary at Oraghat	Dispensary is operational.	Dispensary cost - ₹ 10 lacs Doctor's salary - ₹ 12 lacs - P A Pharmacist salary - ₹ 3.0 lacs - P A Ambulance - ₹ 3.0 lacs - P A Medicine - ₹ 2.0 lacs - P A	Dispensary is available with Doctor, Pharmacist, Nurse and ambulance with medicines.	Continuing with the same
7.	Provision of School Bus	School bus will be provided by the company.	₹ 5 lacs will be spent	Within six months	Provided it' is continued
8.	Provision of Girl's education	Adequate awareness campaign will be started for promoting girl/women's educations among nearby villages	₹ 750,000 will be spent on this head	Work will be started within three	Time to time we has been organized

				months.	the awareness programs, beside that we have also constructed school buildings, boundary walls, toilet blocks etc form promoting education.
9.	One teacher at Bada-Indupur village school	One teacher will be provided to Bada-Indupur village school.	₹ 50,000/annum will be spent		We are continuing with the same we are also provide one more teacher in Sanindpur UP school.
					The total cost is Rs.72000/ annum.
10.	Bore well at Bada-Indupur and other villages	More bore wells will be provided in Bada-Indupur and other villages.	Rs. ₹14.0 lacs will be spent for the same	Locations will be selected with consultation of villagers.	Digging of Bore well has been completed in Bada Indpur. Others Bore well projects in progress.
11.	Renovation of village pond		₹ 3.0 lacs	Work will be started after discussion with villagers.	
12.	Provision of BSNL tower	Mobile tower by BSNL has already been erected and construction of BTS room completed. It will be commissioned after installation of BTS instruments by BSNL.	Land has been provided by us. BTS room has been constructed by us - ₹2.3 lacs. Electric connection will be given by us.	Erection of BSNL tower has been done by BSNL and they	BSNL Tower is already been installed.

				will install BTS instrument s. We are doing follow up for commissio ning the same soon.	

Annexure -VI

Expenditure incurred in Environmental Protection

Sl. No.	Head of Expenditure	Amount in `
1.	Plantation & post plantation care	2,69,500.00
2.	Dump terracing	40,000.00
3.	Construction of Garland Drain	9,000.00
4.	Greenery development in dump area (Coir mat)	4,04,496.00
5.	Water sprinkling through tankers, Sprinkling through fixed water sprinkling system, Dry Fogging system in crusher & screen plant.	25,12,073.82
6.	Environment monitoring (air, water, noise)	69,400.00
7.	Cleanliness of mine camp area	60,000.00
	Total:	**33,64,469.82**