General Report

Sl No.	Conditions	Completed	Remark	Suggestion from consultant desk	Action Taken	Timeline	Updates By
1	If the proponent fails to start operation of the project but substantial physical progress has been made then a renewal of this consent shall be sought by the proponent.	Not Compliance	test remark		live test taken	6 days	omc
2	Adequate effluent treatment facilities are to be provided such that the quality of sewage and trade effluent satisfies the standards as prescribed under EP Rule or as prescribed by the central.	Partially Compliance	test remark	test suggest	test taken	16 days	consultancy
3	All emission from the industry as well as the ambient Air Quality and noise are to conform to the standards as laid down under EP Rule/ Centre Pollution Control Board/ State Pollution Control Board of otherwise stipulated in the special conditions.	Not Compliance	its marked	test complaince	test taken	14 days	omc

4	Adequate method of disposal of solid waste is to be adopted to avoid environmental pollution.	Not Compliance	its completed	test complaince	test taken	15 days	omc
5	The industry is to be comply to the provisions of EP Act, 1986 and the rule made there under with their amendments from time to time such as the hazardous chemical/ manufacture, storage and import rule,1989 etc. The industry is also to company to the provisions of public Liability insurance Act, 1991, if applicable.	Not Compliance	live reply remark	live suggestion reply	live action	15 days	omc

6	The industry is to apply for grant of consent to operate under section 25/26 of water (Prevention & Control of pollution) Act, 1974 7 Air (Prevention & Control of pollution) Act, 1981 (if coming under air pollution control area) at least 3(three) months before the commercial production and obtain Consent to operate.							
7	The consent to establish is subject to statutory and other clearance from Govt. of Odisha and /or Govt. of India as and when applicable.							

8	This consent to establish is valid for the product, Quality manufacturing process and Raw materials as mentioned above & for a period of five years from the date of issue of this letter, provided commencement of production of the proposed project has not taken place in the meantime.							

Special Report

Sl No.	Conditions	Completed	Remark	Suggestion from consultant desk	Action Taken	Timeline	Updated By	
1	This is a special conditioon 2. need to check the soil quality.							
2	The mine shall comply conditions stipulated in the Environmental Clearance issued vide letter no. J-11015/407/2008- IA.II (M), MoEF, Govt. of India.							
3	A bank guarantee, commensurate with the production level will be taken by the board for continuous satisfactory environmental compliance							

	environmental compliance of the mine during the period for which consent to operate is granted as and where required.							
4	The mine shall obtain forest clearance under forest (conservation) Act, 1980 if there is involvement of forest land in the mining lease area.							
5	The tailings generated from the COB Plant shall be disposed as per final technical report prepared by the department of Civil Engineering, IIS, Banglore on 8 th August, 2009.							
6	The production will be achieved through following equipment & machineries.							

7	No change in mining technology and scope of working shall made without prior approval of the Board.							
8	Top soil should be stacked properly with proper slope at earmarked site (s) with Adequate measures and shall be used for reclamation and rehabilitation of mined out areas.							
	Concurrent back-filling should be started from the fourth year of operation							

9	fourth year of operation. Monitoring and management of rehabilitation areas should continue until the vegetation becomes self-substaining. Compliance status should be submitted to the Ministry of Environment & Forests with a copy to the Board on yearly basis.							

10	Reclamation progremme along with the post closure plan is to be submitted within 06 months from the date of issue of this order. Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper							

	setting of silt material.							
11	Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data. The detail section shall be worked out and submitted to the Board.							
12	At stockpile and loaded point area, COB Plant area, a net work of drains with concreat bottom shall be constructed at a depth of 1.5 meter below the lowest level on the sites paralle to the stockpile area with interconnected box culverts. The sloping of surface shall be given inward to the stockpile so that surface water will only infiltrate in to the drain.							

13	Surface run-off contaminated with cr +6 from all sources including tailing pond area shall be routed through ETP to meet prescribed standard of SS-50 mg/I and cr +6 of 0.1 mg/I before discharge into natural stream/water courses during monsoon.							
	Regular monitoring of ground water level and quality should be done four times a year in pre-monsoon (April/May), Monsoon(August), Post-							

14	monsoon (November) and winter (January) seasons. Data thus collected should be submitted to the Board quarterly. Following heavy metals need to be monitored at least once during post monsoon period whose values shall not exceed as per following standard. I. Cd II. Cr+6 III. Copper IV. Lead V. Mercury VI. Nickel VII. Zinc							
15	Domestic effluent shall be discharged to soak pit via septic tank constructed as per BIS specification.							
16	Wastewater (workshop, wastewater from check dams or any other discharge leaving lease boundary of the mine) should be properly collected, treated so as to conform the prescribed standard i.e pH=6-9.0, SS=50 mg/l, & O&G=5 mg/l Cr +6 = 0.1 mg/l as amended from time to time. Oil and grease trap should be installed before discharge of effluents from workshop.							

17	Mine drainage water shall be treated in a full fiedged effluent treatment plant and and disposed of after conforming to the standard prescribed by the Board i.e pH=6- -9.0, Total SS=50 mg/I, & O&G=5 mg/I and Cr +6 = 0.1 mg/I.							
18	The mine shall provide adequate tailing pond with life period of minimum 10 years for disposal of tailing. The bottom and inner side of the embankment shall be adequately compacted and have an impervious HDPE liner of a list 1.5 mm thickness to prevent any ground water contamination.							
19	The mine shall provide adequate free board in tailing pond to prevent overflow of surface run-off during rainy season.							
20	The mine shall explore possibility of reuse of tailing in tile and brick making.							
21	Drill should be wet operated or dust extractors and controlled blasting should be practices.							
	Six ambient air quality monitoring station for 24 hours operation should be established in the core zone as well as in the buffer zone for RPM.SPM,SO2 NO X and CO monitoring							

22	X and CO monitoring, location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultancy with the State Pollution Control Board.							
23	Data on ambient air quality (PM10,PM2.5,SPM,SO 2 NO X and CO) should be regularly submitted to the State Pollution Control Board once in six months.							
24	Adequate measures to control fugitive emission shall be taken during loaded and transportation of minerals, haul roads, drilling, excavation, ore stack pile and truck loading areas.							

25	The Mine shall provided dry fog as well as bag filters in the crushing and screening and other potential dust generating points COB Plant to control fugitive emission.							
26	The speed of dumpers/ Trucks on haul roads shall be controlled as increased speed increases.							
	Drilling operation need to be conducted as per the recommendations of the manufacturer using sharp							

27	manufacturer using sharp drill bits. Applying sufficient thrust on the drill bit and providing dust hood at the mouth of drill hole collar to prevent the generation of dust to be air-borne.							
28	Pre-wetting of blasting site shall be practiced.							
29	Optimized blasting methods shall be practiced i.e matching the explosive to the drilling pattern, rock characteristics and proper stemming of the holes.Site specific drilling partern ,optimum charging of explosives, adequate stemming and introduction of delays shall be practiced.							
30	During transportation of ore by trucks through public roads, the truck shall be properly covered with tarpaulin sheets/leak proof coverings and shall ply at safe speed.							
	Dust suppression on mine haul roads, active OB dumps and mine working benches shall be done by spraying water through water sprinkling along with chemical binders/ wetting agents at frequent interval in order to reduce water							

31	consumption and to improve retention and re-absorption capacity of water. The additive chemicals should not have any adverse impact at the mine HEMM maintenance shop, other service centers and approach roads from mines to raw material handling & product handling area to prevent the generation of dust to be air borne.							
32	Regular collection of spilled over raw material from haul roads shall be practiced to prevent the generation of dust due to movement of dumpers /truck.							

33	A green belt of a adequate width and density preferably with local species along the periphery of the mine shall be raised so as to provide protection against particulates and noise. It must be ensured that the least 33% of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come. It is advised that they may engage professionals							

	in this field for creation and maintance of the green belt. An action plan for this purpose shall be prepared and shall be submitted accordingly.							
34	Noise is best abated at source by selecting right machinery and equipment by proper mounting of equipment by providing noise insulating encloses or padding as far as possible.							
35	Noise barriers shall be constructed between sources and effected areas (thick belt of trees around mine boundaries, waste dumps, hill and mountainous land forms can act as such barrier).							

36	Adequate measures shall be taken for control of noise levels in the work environment of mine area so that noise levels at the boundary line of M.L. area shall not exceed 75 dB(A) during day time (6 AM to 10 AM) and 70 dB(A) during night time (10 PM to 6 AM).							
37	The waste dumps shall be located away from the natural nails, rivers in the area and on an impervious & non-mineralized area to							

	minimize the water pollution.							
38	The OB/waste dumps shall be properly dressed benched stopped at low angel with terracing and bamboo barricades in the slopes making retaining walls stone barriers at the toe of the dumps gully plugging etc. To prevent the solid erosion during monsoon, besides establishing vegetation on dump top as well as its slope surface. In difficult cases, hydro-seedling technique or use of geo-tiles mat embedded with seeds shall be adopted.							

39	The completed out slope of the waste dumps should not exceed 37 degrees from horizontal to avoid excessive erosion and easy vegetation.							
40	Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.							
	A separate environmental management cell with							

41	management cell with suitable qualified personal should be set up under the control of a Senior Executive, who will report directly to the head of the organization.							
42	All efforts shall be taken to protect the existing water bodies in the surrounding. A All efforts shall be taken to protect the existing water bodies in the surrounding. A definite plan in this regard shall be submitted to the Board within 06 month from the date of issue of this order.							

43	The Consent to establish is granted subject to grant of explosive License from competent Authority. The valid Explosive License must be submitted to this Board while applying for consent to operate to this Board.							
44	The Board may impose further conditions or modify the conditions stipulated in this order during installation and/or at the time of obtaining consent to operate and							

	may revoke this clearance in case the stipulated conditions are not implemented.							
45	The above conditions will be enforced, inter-allia, under the provisions of the water (prevention& Control of Pollution) Act 1974 and Air(Prevention & Control of Prevention) Act. 1981 and Environment (Protection) Act, 1986 and the public Liability Insurance Act, 1991 along with their amendments and rule.							

46	The mine has to seek environmental clearance as per the EIA notification or as recommended by EAC/SEAC. However, commencement of mining activity for proposed expansion shall be done after obtaining environmental clearance or as recommended by EIAA/SEIAA.							

Additional Report

Sl No.	Conditions	Completed	Remark	Suggestion from consultant desk	Action Taken	Timeline