# Sasti U/G MINE

# Environmental Clearance No.J-11015/316/2006/IA.II(M)

Date: 21.03.2007

#### Compliance of Conditions

## A) Specific Conditions

Sr.	Conditions	Compliance
No.		Compilation
1)	Mining shall be carried out as per statuette at a safe distance from the wardha river flowing Adjacent to the lease boundary.	The mining is carried out as per statute at a safe distance from wardha river. All mine entries are 3 m above HFL and 2.0 KM away from Wardha River.
Ii)	Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads, and surroundings should be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures should be taken to avoid loss of life and material. Cracks should beeffectively plugged with ballast and clayey soil/ suitable material.	Depillaring is carried out as per permission from DGMS. Regular monitoring of subsidence movement on the surface over and around the working area is being done. As underground mining is being carried out in conjunction with hydraulic sand stowing as such no damage to surface land is anticipated.
Iii)	Garland drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas shall be constructed and sump capacityshould be designed keeping 50% safety margin over an above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. Sump capacity should also provide adequate retention period to allow proper settling of silt material.	Garland drains are provided and maintained. The rain water flows through these drains to Nalla. The size of drain is @ 1.00 x 1.00 mtr.
Iv)	High efficiency bag filters/ water sprinkling system should be provided to check fugitive emissions	Water sprinkling system is provided at CHP and at transfer points. Coal from

V)	from CHP, crushing operations, conveyor system, haulage roads, transfer points, etc.  Drills should be wet operated only.	U/G working is brought to surface through belt. No crushing is done on surface; as such fugitive emission is about NIL. Hence bag filters are not required.  Drilling in U/G working is carried out by DGMS approved hand held drilling machine & as per provision of coal mines Regulation 1957. Regular dust suppression measures are taken in U/G working as per provision of CMR 1957.
vi)	Controlled blasting should be practiced with use of delay detonators.	Not applicable, because blasting is carried strictly as per provision of CMR 1957.
vii)	A progressive afforestation plan shall be prepared and implemented over the mine lease area and shall include areas under green belt development, areas along roads, infrastructure, along ML boundary and township outside the lease area etc by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per Ha.	A total plantation of 12500 nos done till date in Sasti UG Mine.
viii)	No groundwater shall be used for the project actives prior approval of the CGWA/CGWB shall be taken for used of groundwater.	Strata seepage water gets accumulated in mine sump at the dip most point. This water is pumped out on surface working & is recycled mostly for sand stowing purpose.  Application for approval of CGWA for ground water abstraction made on 06/03/2017. Application no: 21-4/831/MH/MIN/2017. Fees for abstraction has been paid. Hard copy of CGWA NOC is awaited. CGWA apllication and fees receipt Attached.
ix)	Regular monitoring of groundwater level quality should be carried out by establishing a network of	The ground water level data is being monitored regularly by CMPDIL.  Monitoring data attached.

	existing wells and construction of new piezometers. The monitoring for quantity should be done four times a year in pre-monsoon (may), monsoon (August),post monsoon (November) and winter(January) seasons and for quality in May Data thus collected should be submitted to the Ministry of Environment Forests and to the Central pollution Control Board quarterly within one month of monitoring.	
x)	The company shall put up artificial groundwater recharge measures for augmentation of ground water resource. The project authorities should meet water requirement of nearby villages(s) in case the village wells go dry due to dewatering of mine.	The nearby villages have no shortage of water. However regular supply of water is ensured in case of scarcity.
xii)	Sewage treatment plant should be installed in the exiting colony. ETP should also be provided for workshop and CHP wastewater.	There is combined satellite Township at Sasti-Dhoptala township. 1 MLD DETP is existing for the combined township.
xiii)	Beside carrying out regular periodic health check up of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check up for occupational diseases and hearing impairment, if any, through an agency such as NIOH, Ahmadabad within a period of one year and the results reported to this Ministry and to DGMS.	Periodical health check up of mine workers are carried out once in five years with the purpose of detecting and keeping records of diseases.
xiv)	Digital processing of the entire lease area using remote sensing technique should be done regularly once in 3 years for monitoring land use pattern and report submitted to MOEF and its Regional office at	Digital processing of entire lease area is being carried out by CMPDIL.

	Bhopal.	
xv)	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.	Complied. Balance amount in the escrow account as on 31/03/2022 is 10.71 crores.
xvi)	Consent to Operate shall be obtained before starting mining operations.	The consent to operate mine has been granted till 31/03/2022 for production capacity of 0.36 MTPA. Mine has discontinued its production since January 2022.

## **B. GENERAL CONDITIONS**

i	No change in mining technology & scope of working should be made without prior approval of the Ministry of Environment & Forest.	No change in mining technology and scope of working will be made without prior approval of the Ministry of Environment and forests.
ii	No change in calendar plan including excavation quantum of minerals coal & waste should be made.	Noted.
iii	Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone of SPM,RPM,SO2and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the state pollution Control Board.	<ol> <li>Monitoring of Ambient Air quality is being done by CMPDIL</li> <li>AAQ monitoring stations have already been established in consultation with &amp; approval of MPCB Chandrapur. The stations being</li> <li>SAM office DSA BSUA-1</li> <li>Sasti Colony BSUA-2</li> <li>Sasti Village BSUA-3</li> <li>Manager office DOC - BSUA-4.</li> </ol>
iv	Data on ambient air quality (SPM, RSPM, SO2 and NOx) should be regularly submitted to the Ministry including its Regional office at Bhopal and to the State Pollution Control Board and the Central Pollution Control Board once in six months.	The monitoring reports on quarterly basis are submitted to MOFF and MPCB Chandrapur as per directives.  Monitoring reports for the period 01.04.2022 to 30.09.2022 enclosed.
V	Adequate measures should be taken for control of noise levels below 85	Regular monitoring through CMPDIL is being done on fortnightly basis and results are within

	dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc should be provided with earplugs/muffs.	limits. Workers exposed to high noise level are provided with ear plugs/muffs.
vi	Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated so as to conform to the standard prescribed under GSR 422 (E) dated 19 the May 1993 and 31 December or as amended from time to time before discharge .Oil and grease trap should be installed before discharge of workshop effluents.	There is no workshop for this mine as it is a underground mine. Used oil collected is being reused for lubricating tubewheels.
vii	Vehicular emissions should be kept under control and regularly monitored. Vehicles used for transporting the mineral and stowing sand should be covered with tarpaulins and optionally loaded.	Vehicles used for transporting the mineral and stowing sand are covered with tarpaulins and optionally loaded.
viii	Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State pollution Control Board and data got analyzed through a laboratory recognized under EP Rules, 1986.	CMPDIL Laboratory exists at Nagpur, which monitors all the mines of WCL.
ix	Personal 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 programmed of the workers should be undertaken periodically to observe any contractions due to exposure to dust & to take corrective measures if needed.	Protective respiratory devices are provided to workmen exposed to dust area. Workers are also regularly given training on safety and health aspects at VTC (This is the statuary requirement under mines safety Act) Periodical medical examination of every workers is being done is every five years in our area Hospital to detect any disease so that appropriate action can be taken up at project level.
X	A separate environmental	At HQ, WCL- The cell is headed by GM(Env)

Xi The funds earmarked for environmental protection measures protection measures are kept in sep	is assisted by t level,
should kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to this Ministry and its regional Office at Bhopal.  and it is not used for any other purpose. Expenditure statements are shown in monthly compliance reports sent to	nental parate account pose, in every six
Xii The project authorities Should advertise at least in two local newspapers widely circulated around the project ,one of which shall be in the vernacular language of the locality concerned within seven days of 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 may also be seen at the website of the ministry of Environment & Forests at http://envfor.nic.in	
Xiii A copy of the environment clearance letter shall be marked to concerned panchayat /Zillah parishad, municipal corporation or Urban Local Body and local NGO, if any from whom any suggestion /representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on the company's website.  Xiv A copy of the clearance letter shall	

	be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Officer, District Industry Center and collector's Office / Tehsildar Office for 30 days.	Agreed
Xv	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Officer of the MOEF, the respective Zonal offices of CPCB and the SPCB. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once in every six months so as to bring the same in the public domain. The monitoring data of environmental quality parameters (air, water, noise, and soil) shall also be displayed at the entrance of the project premises and mines office and incorporate office and on the company's website.	Agreed.
Xvi	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. the project authorities should extend full co-operation to the officer(s) of the Regional Office by furnishing the requisite data/information/ monitoring reports.	Agreed upon.
xvii	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V is mandated to be submitted by the project proponent tot the concerned state pollution Control Board as prescribed under the Environment (protection) Rules,1986, as amended	Agreed. Environment Statement for the year 2021-22 has been submitted via EC MPCB portal before 30/09/2022. Attached.

	subsequently, shall also be uploaded	
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	on the company website along with	
	the status of compliance of EC	
	conditions and shall be sent to the	
	respective Regional Offices of the	
	MOEF by E-mail.	
3	The ministry or any other competent	
	authority may stipulate any further	Agreed
	condition for environmental	
	protection.	
4	Failure to comply with any of the	
	conditions above may result in	Agreed
	withdrawal of this clearance and	
	attract the provisions of the	
	Environment (protection ACT),	
	1986.	
5	The above condition will be enforced	Agreed
	inter-alia the provisions of the water	
	(prevention Control of pollution) Act	
	1974, the Air (prevention & Control	
	of pollution) Act, 1981, the	
	Environment (protection) Act, 1986	
	and the public Liability Insurance	
	Act, 1991 along with their	
	amendments and Rules. The	
	proponent shall ensure to undertake	
	and	
	provide for the costs incurred for	
	taking up remedial measures in case	
	of soil contamination, contamination	
	of ground water and surface water,	
	and occupational and other diseases	
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