

WESTERN COALFIELDS LIMITED

(A MINIRATNA COMPANY)

ENVIRONMENTAL COMPLIANCE REPORT OF
UMRED OPENCAST PROJECT

UMRED SUBAREA

UMRED AREA

Compliance of Environmental Clearance conditions in respect of Umrer OC Project of WCL,
Umrer Area

Ref: MOEF Environment Clearance Letter No. **J-11015/86/2005-IA.II (M) dated 20/05/05**

Specific Conditions:

S.No	Compliance Conditions	Status
1	Topsoil should be stacked properly with proper slope at earmarked site(s) and should not be kept active and shall be used for reclamation and development of green belt.	<p>Top soil excavated till date has been spread over OB dump sites for plantation purpose.</p> <p>For reclamation of these OB dumps 3,06,600 nos. of saplings were planted covering an area of approx. 122.64 ha.</p>
2	OB should be stacked at earmarked external OB dumped site(s) only and shall be of a maximum height of 60 M only and consist of 2 benches of 30 M each. The ultimate slope of the dump shall not be greater than 28 degree. The re-handling of OB for back filling will begin at the end of decoaling. Monitoring and management of rehabilitated dump sites should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forest and its Regional Office located at Bhopal on yearly basis	<p>OB is stacked at designated external OB dump sites and the dumps are constructed as per the specified norms stipulated by DGMS.</p> <p>The height of external dumps is 30 meters in single stage and the ultimate slopes of the dumps are not greater than 28 degree.</p> <p>Presently the OB is being backfilled in the decoaled area of the mine.</p> <p>For reclamation of these OB dumps 3,06,600 nos. of saplings were planted covering an area of approx. 122.64 ha.</p>
3	<p>Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilized for watering the mine area, roads, green belt development, etc. The drains shall be regularly desilted and maintained properly.</p> <p>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 shall also provide adequate retention period to allow proper settling of silt material.</p>	<p>Catch drains are constructed around periphery of the OB dumps (top width 2 m, bottom width 1 m & height 1 m) to arrest silt and sediment flows from the respective dump sites. In addition to this, garland drains of size (top width 2.5 m, bottom width 1.5 m & height 1.5 m) are constructed around the periphery of the mine area. The catch drains/ garland drains mentioned above are regularly desilted before every monsoon and maintained properly.</p> <p>In case of OB benches in the quarry, cross drainage are provided which carries silt and sediments into the main sump made at the floor which accumulates all the silt and acts as first stage settling pond. The capacity of sumps are as follows:</p> <ul style="list-style-type: none"> • Central quarry sump = 91.92 Million gallons capacity (115 ha). • Eastern quarry sump = 137.17 Million gallons capacity (176.52 ha). <p>The water is then be pumped out onto the surface and is collected into sedimentation tank for final settling. The size of the sedimentation tank is 30 m X 8 m X 2.5 m. The clear water from surface sedimentation tank is used for dust</p>

		suppression, green belt development etc.
4	Dimension of retaining wall at the toe of the dumps and OB benches within the mine to check runoff and siltation should be based on the rainfall data	In addition to catch drains and garland drains, stone walls (made of boulders) have been constructed along the toe of the dumps for stabilization. On date, all the OB dumps are reclaimed biologically and the vegetation has become self-sustained. Chances of siltation & sediment flows are very less.
5	The embankment constructed for the part of mine lease boundary, which is located along Amb river should be of sufficient height over the HFL and width to protect the mine from inundation from the peak flow from river.	The HFL of Amb river is 274.68 meters at railway bridge and 270.63 meters at PWD bridge above mean sea level. The height of the embankment provided along the Amb river to protect the mine along its boundary has been kept 6.00 meters above the HFL of the river. The width of embankment has been kept 30.00 m which is sufficient to protect the mine from inundation from peak flow of the river.
6	Pumps of adequate numbers and capacity should be provided which drain the mine water even during the maximum rainfall.	There are six numbers of pumps having pumping capacity of 5000 GPM at Eastern Sector and 5000 GPM at Western Sector. All pumps mentioned above are sufficient to drain the mine water even during the maximum rainfall.
7	Drill should be wet operated or with dust extractors.	Drills have wet drilling arrangement.
8	Controlled blasting should be practiced with the use of delay detonators and only during daytime. The mitigate measures control of ground vibrations and to arrest the fly rocks and boulders should be implemented.	Controlled blasting techniques with use of delay detonators are being practiced during day time to control the ground vibration and to arrest the fly rocks. Controlled blasting technique as permitted by DGMS is adapted.
9	Plantation shall cover external OB dumps, along ML boundary on embankment, workshop, roads, CHP, township outside the lease area by planting native plants species in consultation with the local DFO/Agriculture department. The density of the trees should be around 2500 plants per hectare.	Till date plantation work has been done in an area of 231.00 ha covering external OB dumps, mine lease boundary, embankment, workshop, roads, township etc. by planting native species. Plantation has been done in consultation with the local DFO/Agriculture department. The density of trees has been maintained at around 2500 plants per hectare.
10	A progressive mine closure Plan shall be implemented. Back filling of the mined out area covering a total of 395 ha. leaving a void of 15 ha. shall commence in the quarried decoaled area (void) and reclaimed.	Mine closure plan approved by WCL Board is being implemented. Backfilling is being done as per the approved Mine Closure Plan. The backfilled quarry after reaching ground level will be reclaimed with plantation in consultation with State Forest Department. Density of the plants will be maintained at around 2500 plants per ha. The proposed water body of 15 ha of decoaled void will be gently sloped and upper benches will be terraced and stabilized with plantation.
11	Regular monitoring of ground water level and quality shall be carried out by establishing a	Regular monitoring of ground water level & quality is being carried out four times a year (May, August,

	network of existing wells and construction of new piezometers. The monitoring for quantity shall 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 shall be submitted to the Ministry of Environment, Forest & Climatic Change and to the Central Pollution Control Board, Regional Office quarterly within one month of monitoring.	<p>November and January) by establishing a network of bore wells on regular basis and the same is being practiced in all operating mines and reports are being submitted to CGWA/CGWB, MOEF & CC, CPCB, MPCB.</p> <p>The depth of water level below ground level in surrounding villages is as follows:</p> <table border="1"> <thead> <tr> <th colspan="3">Depth of Water Level (m bgl)</th> </tr> <tr> <th>Month</th> <th>Min.</th> <th>Max.</th> </tr> </thead> <tbody> <tr> <td>May'17</td> <td>2.2</td> <td>10.4</td> </tr> <tr> <td>Aug'17</td> <td>0.42</td> <td>7.73</td> </tr> <tr> <td>Nov'17</td> <td>1.0</td> <td>10.2</td> </tr> <tr> <td>Jan'18</td> <td>2.1</td> <td>11.4</td> </tr> </tbody> </table>	Depth of Water Level (m bgl)			Month	Min.	Max.	May'17	2.2	10.4	Aug'17	0.42	7.73	Nov'17	1.0	10.2	Jan'18	2.1	11.4
Depth of Water Level (m bgl)																				
Month	Min.	Max.																		
May'17	2.2	10.4																		
Aug'17	0.42	7.73																		
Nov'17	1.0	10.2																		
Jan'18	2.1	11.4																		
12	The company shall put up artificial ground water recharge measures for augmentation of ground water resources. The project authority should meet water requirement of nearby villages in case village well go dry due to dewatering of the mine.	<p>Till date, based on routine monitoring of groundwater there is no reported negative impact on the surrounding area ground water levels.</p> <p>However if there is any water shortage in future it will be supplemented by necessary arrangement.</p> <p>After reclamation of the mined out area, remaining void area will serve as water recharging structure.</p>																		
13	Sewage treatment plant should be installed in the existing colony. ETP should also be provided for workshop and CHP wastewater.	<p>The domestic sewage disposal arrangement of 0.3 MLD capacity using Phytoid technology is in final stage of completion and will be completed by July'18.</p> <p>Effluent Treatment Plant (ETP) with O&G trap of 150 KLD capacity exists and functioning properly to treat the effluent generated from workshop.</p>																		
14	The requisite clearance from the State Land Use Board shall be obtained for diversion of agriculture land for more agriculture purpose.	For this project land was acquired mostly under LA Act in the year 1962-63 under N.C.D.C.																		
15	Digital processing of entire lease area using remote sensing technique shall be done regularly once in three years for monitoring land use pattern and report submitted to MOEF and its Regional office.	Digital processing of the entire lease area using Remote sensing technique is done regularly once in 3 years and the same is submitted to RO, MoEF&CC on regular basis.																		
16	A final mine closure plan along with the details of Corpus Fund should be submitted to Ministry of Environment & Forest, five years in advance of final mine closure for approval.	Escrow Account has been opened in the Oriental Bank of Commerce, WCL Building, Jaripatka, Nagpur 440014 vide A/c no. 08973161007404. Progressive Balance including interest in the Escrow a/c as on 31/03/18 is Rs.99,31,24,853.00.																		

General Conditions:

S.No	Compliance Condition	Status																																							
1	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment, Forests & Climatic Change.	No change in mining technology and scope of working will be made without prior approval of MOEF & CC.																																							
2	No change in calendar plan including Excavation, quantum of mineral coal and waste should be made.	No change in the calendar plan including excavation, quantum of mineral coal and waste will be made.																																							
3	<p>Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RPM, SPM, SO₂, NO_x monitoring.</p> <p>Location of the station should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with State Pollution Control Board.</p>	<p>Four nos. of ambient air quality monitoring stations has been established in consultation with MPCB Officials. considering meteorological data, Topographical features and environmentally and ecologically sensitive targets which are as follows:</p> <ul style="list-style-type: none"> • Colony • Kanwa Village • Near Workshop • Umrer Manager Office <table border="1" data-bbox="850 1024 1385 1514"> <thead> <tr> <th rowspan="2">Parameters</th> <th colspan="3">Concentration (24 hourly values in µg/m³)</th> </tr> <tr> <th>Permissible limit</th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td rowspan="2">SPM</td> <td>200</td> <td>33</td> <td>175</td> </tr> <tr> <td>600</td> <td>44</td> <td>443</td> </tr> <tr> <td rowspan="2">PM₁₀</td> <td>100</td> <td>26</td> <td>101</td> </tr> <tr> <td>300</td> <td>22</td> <td>241</td> </tr> <tr> <td>PM_{2.5}</td> <td>60</td> <td>10</td> <td>58</td> </tr> <tr> <td rowspan="2">NO_x</td> <td>80</td> <td>4</td> <td>16</td> </tr> <tr> <td>120</td> <td>4</td> <td>15</td> </tr> <tr> <td rowspan="2">SO_x</td> <td>80</td> <td>7</td> <td>24</td> </tr> <tr> <td>120</td> <td>7</td> <td>24</td> </tr> </tbody> </table>	Parameters	Concentration (24 hourly values in µg/m ³)			Permissible limit	Min	Max	SPM	200	33	175	600	44	443	PM ₁₀	100	26	101	300	22	241	PM _{2.5}	60	10	58	NO _x	80	4	16	120	4	15	SO _x	80	7	24	120	7	24
Parameters	Concentration (24 hourly values in µg/m ³)																																								
	Permissible limit	Min	Max																																						
SPM	200	33	175																																						
	600	44	443																																						
PM ₁₀	100	26	101																																						
	300	22	241																																						
PM _{2.5}	60	10	58																																						
NO _x	80	4	16																																						
	120	4	15																																						
SO _x	80	7	24																																						
	120	7	24																																						
4	Data on ambient air quality (RPM, SPM, SO ₂ , NO _x) should be regularly submitted to the Ministry including its Regional Office at Bhopal and the SPCB/CPCB once in six months.	Environment monitoring reports are being sent to the Ministry including its Regional Office located at Nagpur and MPCB on regular basis and are uploaded on the company's website also.																																							

5	<p>Fugitive dust emissions from all the sources should be controlled regularly monitored and data recorded properly. Water spraying arrangements on haul roads, wagon loading; dump trucks (loading & unloading) points should be provided and properly maintained.</p>	<p>Fugitive dust emissions from all the dust generating sources are controlled by Fixed Water Sprinklers along weigh bridge, approach road & coal transportation road. Rain Guns are provided in railway siding and coal transportation road. All transfer points of conveyor belts at CHP are provided with sprinkling nozzles to prevent the dust formation during loading of coal in wagons.</p> <p>In addition to fixed water sprinklers & rain guns, Mobile Water Sprinklers are used in all three shifts for dust suppression at approach roads, haul roads, coal transportation roads and coal stock yard. The Fugitive dust is also monitored regularly and is kept under control.</p> <p>Details of Air pollution control measures installed:</p> <ul style="list-style-type: none"> • 42 nos. fixed sprinklers installed along coal transportation road, railway siding and CHP • 3 No of mobile sprinklers of 28 KL capacity are in operation. <p>Two nos. of fugitive dust monitoring stations has been established in construction with MPCB officials, which are as follows.</p> <ul style="list-style-type: none"> • Weigh bridge • CHP <table border="1" data-bbox="852 972 1317 1255"> <thead> <tr> <th rowspan="2">Parameters</th> <th colspan="2">Concentration (24 hourly values in $\mu\text{g}/\text{m}^3$)</th> </tr> <tr> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>SPM</td> <td>438</td> <td>1051</td> </tr> <tr> <td>PM₁₀</td> <td>391</td> <td>674</td> </tr> <tr> <td>PM_{2.5}</td> <td colspan="2">148</td> </tr> </tbody> </table>	Parameters	Concentration (24 hourly values in $\mu\text{g}/\text{m}^3$)		Min	Max	SPM	438	1051	PM ₁₀	391	674	PM _{2.5}	148								
Parameters	Concentration (24 hourly values in $\mu\text{g}/\text{m}^3$)																						
	Min	Max																					
SPM	438	1051																					
PM ₁₀	391	674																					
PM _{2.5}	148																						
6	<p>Adequate measures should be taken-up for control of noise levels below 85 dB (A) in the work environment. Workers engaged in blasting & drilling operations, operations of HEMM etc., should be provided with ear plugs/muffs.</p>	<p>Noise pollution control measures are being implemented. Personnel working in operating mines are being provided with PPE like Ear plugs/ muffs.</p> <p>Two nos. of noise level monitoring stations has been established in construction with MPCB officials , which are as follows</p> <ul style="list-style-type: none"> • CHP • Colony <table border="1" data-bbox="873 1598 1474 1864"> <thead> <tr> <th rowspan="2">Time</th> <th colspan="3">Noise level in dB(A)</th> </tr> <tr> <th>Permissible limit</th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Day time</td> <td>75</td> <td>55.7</td> <td>63.2</td> </tr> <tr> <td>70</td> <td>48.2</td> <td>59.7</td> </tr> <tr> <td rowspan="2">Night time</td> <td>55</td> <td>42.7</td> <td>50.6</td> </tr> <tr> <td>45</td> <td>40.3</td> <td>43.9</td> </tr> </tbody> </table>	Time	Noise level in dB(A)			Permissible limit	Min	Max	Day time	75	55.7	63.2	70	48.2	59.7	Night time	55	42.7	50.6	45	40.3	43.9
Time	Noise level in dB(A)																						
	Permissible limit	Min	Max																				
Day time	75	55.7	63.2																				
	70	48.2	59.7																				
Night time	55	42.7	50.6																				
	45	40.3	43.9																				
7	<p>Industrial waste water (workshop and waste water from the mine) shall be</p>	<p>The pumped out water from the mine is treated in the sedimentation pond of dimensions 30m X 8m X 2.50 m. The</p>																					

	<p>properly collected and treated so as to conform to the standards including for heavy metals before discharge prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.</p>	<p>effluent from workshop is treated in ETP (capacity: 150 KLD) with zero-discharge and oil & grease trap. The quality of mine pumped out water is monitored fortnightly and adequate measures will be taken (if need arises) to maintain the quality of water within permissible limits.</p> <p>Two nos. of water quality monitoring stations has been established in construction with MPCB officials , which are as follows:</p> <ul style="list-style-type: none"> • Mine water discharge • ETP (Workshop) <table border="1" data-bbox="776 537 1414 814"> <thead> <tr> <th rowspan="2">Parameters</th> <th colspan="3">Concentration (mg/L)</th> </tr> <tr> <th>Permissible Limit</th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>5.5-9.0</td> <td>7.02</td> <td>8.83</td> </tr> <tr> <td>COD</td> <td>250</td> <td>24</td> <td>40</td> </tr> <tr> <td>TSS</td> <td>100</td> <td>22</td> <td>84</td> </tr> <tr> <td>O & G</td> <td>10</td> <td colspan="2"><2</td> </tr> </tbody> </table>	Parameters	Concentration (mg/L)			Permissible Limit	Min	Max	pH	5.5-9.0	7.02	8.83	COD	250	24	40	TSS	100	22	84	O & G	10	<2	
Parameters	Concentration (mg/L)																								
	Permissible Limit	Min	Max																						
pH	5.5-9.0	7.02	8.83																						
COD	250	24	40																						
TSS	100	22	84																						
O & G	10	<2																							
8	<p>Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting of the mineral shall be covered with tarpaulins and optimally loaded.</p>	<p>As per the present practice, the PUC certificate are obtained for all light, passenger vehicles, transportation vehicles and the same will be continued.</p> <p>All the vehicles transporting coal are properly covered with tarpaulin and are loaded within permissible limit.</p>																							
9	<p>Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the SPCB.</p>	<p>At present the entire monitoring of mines of WCL is done by CMPDIL is an NABL accredited Environmental Laboratory with state art of lab facilities, manned by qualified and trained engineers.</p>																							
10	<p>Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if need.</p>	<p>The persons working in core mining areas are provided with protective gears like dust masks and goggles.</p> <p>As per statute, the personnel working in mine are provided training / retraining / refresher training under vocational Training Rule in the Vocational Training Center at area level which also impart training on safety and health aspects.</p> <p>For surveillance of occupation health among workers, periodic medical examination is done for every employee once in three years as per statute.</p>																							
11	<p>A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.</p>	<p>The Environmental Management cell at corporate level is headed by GM (Environment) and assisted by a multidisciplinary team of qualified and trained engineers under the control of Director (Tech.). At Area level, the cell is headed by Area General Manager, Umrer Area, assisted by Area Nodal Officer (Environment) Umrer Area. At Project level, it is headed by Sub-Area Manager, Umrer Sub Area and assisted by Nodal Officer (Environment) of the project.</p>																							

12	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditures should be reported to this Ministry and its Regional Office located at Bhopal.	<p>The funds have been earmarked for environmental protection measures are kept in separate account and are not being diverted for any other purposes. Expenditure incurred on environmental protection measures is Rs. 2,76,18,071.00 (Approx.)</p> <table border="1" data-bbox="781 352 1474 806"> <thead> <tr> <th>Work done</th> <th>Expenditure (Rs.)</th> </tr> </thead> <tbody> <tr> <td>Sedimentation tank</td> <td>15,00,000.00</td> </tr> <tr> <td>Effluent treatment plant</td> <td></td> </tr> <tr> <td>Sewage treatment plant</td> <td>1,08,34,322.00</td> </tr> <tr> <td>Fixed sprinklers at Workshop</td> <td>7,00,000.00</td> </tr> <tr> <td>Fixed sprinklers at Railway Siding</td> <td>10,00,000.00</td> </tr> <tr> <td>Fixed sprinklers at Extended Railway Siding</td> <td>57,24,994.00</td> </tr> <tr> <td>Fixed Sprinklers at Dozer Section</td> <td>5,28,000.00</td> </tr> <tr> <td>Water Sprinkling system at CHP</td> <td>7,00,000.00</td> </tr> <tr> <td>Automatic Tyre wash System</td> <td>49,49,080.00</td> </tr> <tr> <td>Mist spray arrangement at CHP</td> <td>16,81,675.00</td> </tr> <tr> <td>Total</td> <td>2,76,18,071.00</td> </tr> </tbody> </table>	Work done	Expenditure (Rs.)	Sedimentation tank	15,00,000.00	Effluent treatment plant		Sewage treatment plant	1,08,34,322.00	Fixed sprinklers at Workshop	7,00,000.00	Fixed sprinklers at Railway Siding	10,00,000.00	Fixed sprinklers at Extended Railway Siding	57,24,994.00	Fixed Sprinklers at Dozer Section	5,28,000.00	Water Sprinkling system at CHP	7,00,000.00	Automatic Tyre wash System	49,49,080.00	Mist spray arrangement at CHP	16,81,675.00	Total	2,76,18,071.00
Work done	Expenditure (Rs.)																									
Sedimentation tank	15,00,000.00																									
Effluent treatment plant																										
Sewage treatment plant	1,08,34,322.00																									
Fixed sprinklers at Workshop	7,00,000.00																									
Fixed sprinklers at Railway Siding	10,00,000.00																									
Fixed sprinklers at Extended Railway Siding	57,24,994.00																									
Fixed Sprinklers at Dozer Section	5,28,000.00																									
Water Sprinkling system at CHP	7,00,000.00																									
Automatic Tyre wash System	49,49,080.00																									
Mist spray arrangement at CHP	16,81,675.00																									
Total	2,76,18,071.00																									
13	The Regional office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information / monitoring reports.	Noted.																								
14	A copy of the environmental clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.	The same had been done.(Copy enclosed)																								
15	State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/ Tehsildar's Office for 30 days.	Does not pertain to the project.																								
16	The project authorities shall 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 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 may also be seen at the website of the Ministry of Environment, Forest & Climatic Change at http://	The same had been done but as the EC was obtained long back in the year of 2005 the publication record could not be traced. Hence republication in the newspaper is done. (Copy enclosed)																								

	envfor.nic.in.	
--	----------------	--

Monitoring the Implementation of Environmental Safeguards
Ministry of Environment, Forest & Climatic Change
Western Region, Regional Office, Nagpur

MONITORING REPORT
DATA SHEET

Name of the Project: Umrer OC Project, WCL

S.n.	Particulars	Details
1.	Project type: River- valley/ Mining/ Industry/ Thermal/ Nuclear/Other	Mining (Coal)
2.	Name of the project	Umrer Open Cast Coal Mine Project
3.	Clearance letter (s)/OM No. & dated	MOEF OM No. J-11015/82/2005/IA-II-(M) dated 20/05/05 (For 3.5 MTPA)
4.	Location: a) Village b) Tehsil c) District d) State e) Location Latitude/Longitude	Wayagaon/Ghoturli, Umrer Nagpur Maharashtra 20° 50' 45" and 20° 50' 45" N 79° 16' 18" and 79° 16' 18" E
5.	Address for correspondence: a) Address of the Concerned Project Chief Engineer (with Pin Code & telephone/ telex/ fax numbers) b) Address of Executive Project Engineer/ Manager (with Pin Code/fax numbers)	Sub Area Manager, Umrer Sub Area P.O.- Umrer Project, Tahsil- Umrer, Dist: Nagpur (MS) Pin No.- 441204 Phone: 07116 -247395 Fax :07116 247374 Manager, C/o Sub Area Manager, Umrer Sub Area P.O.- Umrer Project, Tahsil- Umrer, Dist: Nagpur (MS) Pin No.- 441204 Phone: 07116 -247395 Fax :07116 247374
6.	Salient features of the Environmental Management Plan	<u>Environmental Pollution Control Measures:</u> <i>Air/Dust pollution Control Measures:</i> Biological reclamation of OB dumps, Plantation along haul road, service road, OB dump, vacant land, township, industrial complex, Green belt around CHP, mobile and fixed water sprinkling on road, CHP, coal stock yard, workshop etc. Maintenance of HEMMs and transport vehicles. <i>Water Pollution Control Measures:</i> Sedimentation pond for mine water Treatment, workshop ETP for industrial effluent treatment, Domestic sewage disposal arrangement for the township.

		<p>Noise Pollution Control Measures: Maintenance of HEMMs & Transport Vehicles. Development of green belt in between industrial complex & residential area, noise, absorbing pads for noise generating machines, ear plugs & helmets to the workers, noise cabins to the HEMM operators.</p> <p>Control of ground water depletion: The water shortage in the village if any, the influence area is supplemented by supply of water by outside source or from to mine water after treatment. Regular well water monitoring in nearby villages is being carried out quarterly as per MOEF's guidelines.</p> <p>Disaster Management Plan: Diversion of rainwater falling within the project area from quarry area by providing garland drains and collection towards low lying area. Sufficient space has been left between proposed quarry boundary and nallah to construct flood protection embankment, if required. Controlled blasting technique has to be practiced to minimized fly off rocks and ground vibration and keep them within safe limits.</p>
7.	Breakup of the project area	Total Mine Lease Area = 944.65 ha a) Agriculture land = 870.90 ha b) Govt. Land = 73.75
8.	Breakup of the project affected population with enumeration of those losing houses/dwelling units only and agricultural land & landless laborers/artisans: a) SC, ST/Adivasi b) Others c) (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is carried out give details & year of survey).	Not Applicable Not Applicable
9.	Financial details: a) Project cost as originally planned and Subsequent revised estimates and the year of price reference.	25.48 crore at the year 1962 93.04 crore at the year 1971
	b) Environmental Management Plan cost.	N.A.
	c) Benefit cost ratio/Internal rate of Return	-----
	d) Weather (c) includes the cost of environmental management as shown in the above.	N.A.
	e) Actual Expenditure incurred on project so far.	Capital cost Rs.186.85 Crore as on April'17

	Actual Expenditure incurred on Environmental Management Plan so far.	2.76 Crore
10.	Forest land requirement	
	a) The status of approval for diversion of forest land for non-forestry use	The project does not have any forest land.
	b) The status of clearing felling	Not applicable.
	c) The status of Compensatory, if any Afforestation	Not applicable.
	d) Comments on the viability & sustainability of CA program in the light of actual field experience so far	Not applicable.
11.	Status of construction (Actual/ planned)	
	a) Date of commencement	14/04/63
	b) Date of completion	Not Applicable.
12.	Reasons for delay if the project is yet to start.	Not applicable.
13.	Dates of site visits:	
	a) The dates on which the project was monitored by the Regional Office on previous occasions, if any.	N.A.
	b) Date of site visit for this monitoring report.	N.A.
14.	Details of correspondence with project authorities for obtaining action plans/ information on status of compliance to safeguards other than the routine letters for logistic support for site visits)	No correspondence received from MoEF&CC
	The first monitoring report may contain the details of all the letters issued so far at the later reports may cover only the letters issued subsequently.	N.A.
15.	Is there any court case pending?	Nil

Nodal Officer (Env)
Umrer Sub Area

Manager
Umrer OC Mine

Sub Area Manager
Umrer Sub Area