### **PAUNI II EXPANSION OC**

## Amendment in EC ref no:J-11015/80/2016-IA.II(M) dated 01/12/2020

S.no	Condition	Compliance
i	PP shall implement off pit conveyor	Noted. CHP hasn't been constructed yet. Mobile
	system i.e. from Coal Handling Plant to	crusher has been provided. Coal Handling Plant
	railway siding with silo loading facility in	(CHP) will be constructed for the crushing of
	3 years (i.e. 2023).	coal. Work of construction of CHP at Pauni II
		Expansion OC is in estimation stage. Coal is sent
		to Mobile crusher and CHP at Gouri I&II OC
		through tarpaulin covered trucks.

## EC ref no:J-11015/80/2016-IA.II(M) dated 13/03/2020

S. no	Condition	Compliance
i	subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc  day  day  day  conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc  day  day  conditions strictly within certain time bound so that the mining operations will be environmentally sustainable/viable etc  g  day  day  conditions strictly within certain time bound so that the mining operations will be environmentally sustainable/viable etc	Summary of some important EC/CTO conditions
		Consent to operate under Air &Water Act is granted for additional capacity 3.25 MTPA up to 31.03.2023 vide consent no. FORMAT 1.0/CAC/UAN no. 0000135348/CR 2211000391
		dated 04/11/2022 Copy of same is enclosed. CGWA NOC for abstraction of groundwater has been obtained which is valid from 30/09/2019 to 29/09/2021. Further renewal application is been submitted and under final stage of approval. Copy of same is enclosed.
		Sedimentation tank is provided for treatment of mine water discharge and ETP of capacity 150 KLD is provided. Dust suppression measures like mobile water tankers, rain guns are provided at dust generating sources.
		Till date, 1,21,000 nos. of plantation has been already done in and around the project area. In addition to this, 5000 nos. of plantation is under process, which is likely to be completed before Dec'2022.
		Rooftop Rain water harvesting system has been provided at Manager office.
		At project, CAAQMS system is already set up at Pauni II Expansion OC project for Continuous

			air quality monitoring in a Photos of same is enclosed		
ii	All the partially complied condition observed by Ministry's Regional Office in certified compliance report dated 5th December, 2019 shall be completed in 3 years.	observed certified	compliance report dated 5	ffice in th December,	
iii	PP shall implement in-pit belt conveyor system in next 3 years from the issue of this letter.	EC ame	ndition has been changed/andment ref no:J-11015/80/	-	
V	native trees with broad leaves along the periphery of the mine to prevent the effect of air pollution in 3 years of the issue of this letter. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer  Plantation Plant		25000 nos of plantation in approximately 10.0 Ha on plain land near External OB dump has been carried out in July 2017.  Plantation of 31000 nos along mine boundary of Pauni II expansion OC with Sakhari village completed in 20-21.  Plantation of 20000 nos. is carried out in FY 21-22.  In addition to the same, 45,000 nos. of plantation is already done in the project area in fy 2022-23 till date and remaining 5000 will be completed upto Dec 2022.  Afforestation land use as per EMP at the end of mine life is as below:		
		Sr no.	Location	Plantation (Ha)	
		1	External OB dump	214.57	
		2	Top soil Dump	35.4	
		3	Land reclaimed after re- handling of Top soil	58.93	
		4	Excavation	107.00	
		5	Roads	0.50	
		6	Built up area	3.00	
		7	Undisturbed area	350.00	
V	The Project Proponent shall comply with all The mine has started its operation in FY 16-17 the statutory requirements and judgment of and at present is in its 7 <sup>th</sup> year of operation. The Hon'ble Supreme Court dated the 2nd life of mine is 10 yrs. The progress of mining August 2017 in Writ Petition (Civil) No. activities are being carried out as per approved				

	114 of 2014 in the matter of Common Cause versus Union of India and Ors. State		n details are a	s follows:
	Government shall ensure that the entire compensation levied, if any, for illegal	Year	Production (MTPA)	EC Capacity (MTPA)
	mining paid by the Project Proponent	2016-17	0.51	0.60
	through their respective Department in	2017-18	0.306	0.60
	strict compliance of judgment of Hon'ble Supreme Court dated the 21R August 2017	2018-19	0.599	0.60
	in Writ Petition (Civil) No. 114 of 2014 in	2019-20	2.105	3.25
	the matter of Common Cause versus Union	2020-21	2.8	3.25
	of India and Ors.	2021-22	3.249	3.25
		As per the above de the coal production, the mine.		
vi	Central Ground Water Authority (CGWA) in case of intersecting the Ground water	CGWA NOC for abs been obtained which 29/09/2021.Further is submitted to CGWA approval. Copy of sa	is valid from renewal appli A, and under	30/09/2019 to cation is been final stage of
vii	remedial/preventive measures taken	dust masks. Periodi- workers are carried purpose of detectir hearing impairment. Every worker in the up to the age of 45 at 50 years are subj- examination at two a Area Hospital in V bedded hospital with Infrastructure avail Spirometry instradiometer, X-ray apparatus, Eco frien	cal health che out once in a cocupation occupation mine is examined the worker jected to perform a half year VCL Ballarper qualified docupation occupation occupation occupation ent has been occupation of the purpose of the purpose occupation	neck-up of mine 5 years with the nal diseases & nined in 5 years who are above eriodic medical resinterval. The area is a 25 ctors. The Hospital are CG machine, Blood testing retc. At present, anal diseases and in recorded. The see, malaria and

viii	Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-1 1013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".	mitigation under the habitation wherein mine least surround No.Z110	on measures as per the guine title 'Impact of mining ns-issues related to the nanchabitations and villages as use areas or habitations and led by the mine lease 13/5712014- IA.I1 (M) da	deline specific g activities on nining projects are the part of nd villages are se area' OM
ix	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population.  Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights! masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.	oriented disturbar inside i maintain Sound le under monitori 2022 is	away from the village a nee to the villagers due in the mine. Illumination ed as per guidelines of evel during both day and repermissible limits. In ng report for period April enclosed. Also, Illumina	nd there is no to the lighting in mine is f CMR 2017. hight are found this regard, 1 2022 to Sept
X	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, 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. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.	existing of 2016. and faun No migr zones. A Copy of	flora and fauna in post m No endangered, endemic s a found in both core and b atory fauna found in both of s such no conservation pl	species of flora uffer zones.
xi	Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has	will be a Afforest	and will be complied. After as per EMP. The station land use as per EMP is as below:	
	directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance	Sr no.	Location	Plantation (Ha)
	and the mining plan to the effect that the	1	External OB dump	214.57
	mining lease holders shall, after ceasing mining operations, undertake re-grassing	2	Top soil Dump	35.4
	the mining area and any other area which may have been disturbed due to their		Land reclaimed after re- handling of Top soil	58.93

	mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at		Excavation	107.00
		_	Roads	0.50
		6	Built up area	3.00
	the cost of the mining lease holders/Project Proponent".	7	Undisturbed area	350.00
	The implementation report of the above said condition shall be sent to the Regional Office of the Ministry			·
xii	PP shall not divert proposed nallah till it justifies the reason of diversion	water c plan, th Nallah, and due	ent there is no diver ourses. However as p ere is a provision in fu which will be carried permission/ approval y/ department of state	per approved mining ature for diversion of out with justification from the concerned
xiii	PP shall ensure regular water supply to the nearest villages.	Expans: based pressure ensured recharg	water from Sedimentation OC is sent to portion requirement after a filter and availability throughout the yearing the ground wading areas of the mine	nd at Sakhari Village r treatment through y of water in pond is and it also helps in ater levels in the
xiv	CTE/CTO for the project shall be obtained from the SPCB as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q- 16017/38/2018-CPA dated 24th October, 2019 while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.	Comple Consergranted 31.03.2 UAN n		Air &Water Act is ity 3.25 MTPA up to FORMAT 1.0/CAC/211000391
xv	The green belt of at least 5-10 m width shall be developed in more than 40% of the total project area, mainly along the periphery of mine boundary, in downward wind direction, and along road sides etc. Selection of plant species shall be as per	on plain carried Plantat Pauni	n land near External out in July 2017. ion of 31000 nos alor II expansion OC w	OB dump has been ng mine boundary of

	the CPCB guidelines in consultation with the State Forest Department.	In addition is already	n to the same, 45,000 nos. of plantation done in the project area in fy 2022-23 nd remaining 5000 will be completed
xvi	In addition, the project proponent shall develop greenbelt outside the plant premises such as avenue plantation, plantation in vacant areas, social forestry etc.	on plain lancarried out Plantation Pauni II ex completed Plantation 22. In addition is already of till date and upto Dec 2 Distribution villages ou plantation( Gouri, Ball years are a Year 2018-19 2019-20 2020-21	of 20000 nos. is carried out in FY 21- to the same, 45,000 nos. of plantation done in the project area in fy 2022-23 d remaining 5000 will be completed 022. n of plants has been done in nearby tside leasehold area for Sasti, Babapur, Rampur, Dhoptala, larpur Nagar Parishad) details for last 2 as follows:  Distribution (nos)  14000  20000  3600
		2021-22	1000
xvii	Monitoring of compliance of EC conditions may be submitted with third party audit every year.	20 and the was submi	report of NEERI on EC compliance tted to MOEFCC. Survey was also 20-21. Copy of same is enclosed.
xviii	The percentage the CER may/se atleast 2 times the amount given in the OM dated 1st May, 2018 recommended by the EAC and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	As per the OM dated 01/05/2018, 0.75% of additional capital investment will be reappropriated form other heads in Project Report against Corporate Environment Responsibility.	
xix	Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.	place at va	mitigation measures have been put in rious dust generating sources to control other fugitive emissions. The details of

		existing systems are as follows: 10 nos of rain guns installed at coal stock. 8 nos rainguns installed at weighbridge. Portable sprinklers with flexible pipes are provided at coal stock yard for dust suppression. 1 hired mobile water tankers of capacity 4 KL are in operation along with 2 no. departmental of 9 KL and 28 KL each. Plantation of 31000 nos along mine boundary of Pauni II expansion OC with Sakhari village completed in 20-21. Plantation of 20000 nos. is carried out in FY 21-22. In addition to the same, 45,000 nos. of plantation is already done in the project area in FY 2022-23 till date and remaining 5000 will be completed upto Dec 2022.
XX	Transportation of materials by rail/conveyor belt, wherever feasible.	80 % (approx.) of coal produced from the Pauni II Expansion OC is dispatched through rail mode. Only 20% of coal is dispatched via road.
xxi	A detailed water harvesting plan may be submitted by the project proponent	Roof top rain water harvesting system has been completed for Manager Office of Pauni II Expansion OC. Excess mine water from Sedimentation tank after treatment through pressure filter is used to recharge pond at Sakhari village. In addition to the same, work is awarded for new sedimentation pond at project.
		Exiting manpower is accommodated in Sasti township where 1 MLD STP is in operation. Septic tanks are in place for the domestic waste water in offices. STP will be constructed based on requirement in future.
		NEERI has conducted the third party in FY2019-20 and the report of NEERI on EC compliance was submitted to MOEFCC. Survry was also done in 2021-22.

# Environmental Clearance No.J/11015/80/2016/IA.II (M) Dated: 28.03.2019

Sr.N	Conditions	Compliance
01	The project proponent shall collect and analyze one season data for environmental parameters and submit for consideration of the EAC before st 31 December, 2019.	
02	The project proponent shall obtain Consent to establish from State Pollution Control Boards for the proposed peak capacity of 3.25 MTPA prior to commencement of the increased production.	Complied.  Consent to operate under Air &Water Act is granted for additional capacity 3.25 MTPA up to 31.03.2023 vide consent no. FORMAT 1.0/CAC/UAN no. 0000135348/CR 2211000391dated 04/11/2022 Copy of same is enclosed.
03	Transportation of coal from coal face to coal heap shall be carried out by trucks. Further coal transportation from coal heap to coal handling plant shall be through covered trucks.	Complied. Transportation of coal from coal face to coal heap is carried out by trucks. Coal transportation from coal heap to coal handling plant at Gouri is done through tarpaulin covered trucks.
04	To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided by mist type sprinklers.	The mine has started its operation in FY 16-17. In the last FY 20-21 it has produced only 1.571 MTPA upto December against the EC of 3.25 MTPA. CHP hasn't been constructed yet. Mobile crusher has been provided. Adequate dust suppression arrangement will be put into operation once it comes up. At present coal from Pauni II Expansion OC is crushed in Gouri I&II(A) OC CHP premises. Dust suppression measures at Gouri are 3 nos departmental mobile tankers with capacity 28 KL each and 1 no. hired tanker with capacity 12 KL. 9 nos of sprinklers are installed at CHP in Gouri I&II(A) OC . Dust suppression measures at Pauni II Expansion OC are 10 nos of rain guns installed at coal stock. 8 nos rainguns installed at weighbridge. Portable sprinklers with flexible pipes are provided at coal stock yard for dust suppression. Work awarded for Additionally, Trolley mounted or fixed mist/fogger system and Truck mounted fogger system is proposed at project in FY 2022-23. As on date, 1 hired mobile water tankers of capacities 4 KL and 2 no. contractual 28 KL and 9 KL of capacity are in operation.

	1				
05	Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers.  Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangements, wind barrier wall and vertical greenery system, greenbelt, dust suppression arrangement at railway siding, etc.	place at control du last FY 2 against production appropriate details of nos of rarainguns sprinklers coal stock awarded installed mobile wand 2 not a stock and 2 not a stock and 2 not a stock awarded installed mobile wand 2 not a stock awarde	mitigation measure various dust generated and other fugit. 0-21 it has product the EC of 3.22 on goes up, existing tely augmented of existing systems in guns installed installed at we saw the flexible pick yard for dust for Additional 10 at coal stock in Frater tankers of capacity of the contractual 28 are in operation.	nerating sive emission ced only 25 MTPA.  In measure of strengthes are as for at coal storight in the strength of the strength of the strength of the strength in the strength	ources to ons. In the 2.8 MTPA As the es will be ened. The ollows: 10 ock. 8 nos Portable rovided at on. Work runs to be 2. 1 hired KL each
06	The company shall obtain approval of CGWA for use of groundwater for mining operations for its enhanced capacity of 3.25 MTPA.	CGWA NOC for abstraction of groundwa has been obtained which is valid from 30/09/2019 to 29/09/2021. Further renew application is been submitted to CGWA, a under final stage of approval. Copy of same enclosed.		d from renewal WA, and	
07	Continuous monitoring of occupational safety and other health hazards, and the corrective action needed to be ensured	Initial medical examination (IME) is do every worker. Moreover regular checkups through periodical mexamination (PME) of all the workmen of 5 years as per the statue and workers above years of age once in a year is conducted the works are being carried out with safety measures and awareness is being of among employees for safety and to avoid accidents.		medical en once in above 55 ucted. All th all the ng created avoid any	
			IME and PME ven below:	done at	ьанагриг
		Year	IME (in nos.)	PME (in	nos.)
			Acheived		Acheived
		2021	953	1220	1425
		2022	857	1220	1216
		Details of	f IME and PME given below:		
		Year	IME (in nos.)	PME (in	nos.)
			Acheived	· · · · · · · · · · · · · · · · · · ·	Acheived
		2021	369	12	55
		2022	222	12	50
					1

sources of surface water, abandoned	The entire demand viz. for dust suppression, plantation, washing etc. is met from the
sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single	There is no utilization of surface water in mine. The entire demand viz. for dust suppression, plantation, washing etc. is met from the pumped out mine water.
the final boundary in the downwind direction of the project site shall be developed to mitigate the dust pollution.	25,000 nos of plantation in approximately 10.0 Ha on plain land near External OB dump has been carried out in July 2017.  Plantation of 31000 nos along mine boundary of Pauni II expansion OC with Sakhari village completed in 20-21.  Plantation of 20000 nos. is carried out in FY 21-22.  In addition to the same, 45,000 nos. of plantation is already done in the project area in FY 2022-23 till date and remaining 5000 will be completed upto Dec 2022.
To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.	Agreed. Medical camp has been conducted at Sasti village on 12/07/2019. In FY 2020-21, 2021-22 and FY 2022-23, regular medical camps are also conducted at Area Hospital for all nearby villages in Ballarpur area. CSR clinic is provided at area hospital which attends 150 persons (avg) per month from different villages surrounding mines of Ballarpur Area.
Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	Agreed. Mobile repairing training programme from/ 19/02/2019 to 19/03/2019(25 nos. participants) Beautician course from 03/03/2019 to 31/03/2019 (25 nos. participants), was organized for local communities in 2018-19 with an expenditure of 2.82 lakhs. Tailoring Programme for 25 nos. participants has been completed.
	To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.  Thick green belt of adequate width at the final boundary in the downwind direction of the project site shall be developed to mitigate the dust pollution.

01	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there under as applicable.	Mining operations are being carried out and continue to be carried out as per provisions of Mines act 1952 and no deviation is being made during operations. Copy of the blasting study and slope stability study enclosed
02	No change in mining method, calendar programme and scope of working shall be made without obtaining prior approval of the Ministry of Environment, Forest and Climate change.	
03	Mining shall be carried out as per approved mining plan including Mine Closure Plan, abiding by mining laws related to coal mining and the relevant circulars issued by DGMS.	Mining operations is being carried as per mining plan by abiding all the mining rules and DGMS guidelines issued time to time and will continue to be carried out accordingly. Copy of the blasting study and slope stability study enclosed
04	No mining shall be carried out in the forest land without obtaining FC as per Forest (conservation) Act, 1980 and also adhering to the scheduled Tribes and other traditional forest dwellers (Recognition of forest rights) Act, 2006 read with provisions of the Indian Forest Act, 1927.	Agreed.
В	LAND RECLAMATION AND WATER CONSERVATION	
1	Digital survey of entire lease hold area/core zone using satellite remote sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50000 scale shall be submitted to MoEF&C/Regional Office.	Digital survey of entire lease hold area/core zone using satellite remote sensing survey is carried out once in three years. Last survey has been done in 2019. The copy of report is attached. The same is submitted to RO, MOEFCC along with six monthly report.
2	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operation, considering the presence of river/ rivulet/ pond/ lake etc. shall be prepared and implemented by the project proponent. The surface	The embankment all along the periphery of quarry 3 m above H.F.L and 30 m width provided. At present there is no diversion of any surface water courses. However as per approved mining plan, there is a provision in future for diversion of Nallah, which will be carried out with due permission/approval from

drainage plan and or any diversion of natural water courses shall be as per approved mining plan/EIA/EMP report and with due approval of the concerned state/GoI authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per permission of DGMS.

the concerned authority / department of state government in order to prevent the danger of inundation from surface water inrush, protective embankment has been constructed as per the permission of DGMS and the dimensions are as below:

Length: 1580m Height: 3 m above H.F.L. Top Width:

30 m

Bottom Width: 36 m

The final mine void depth should be preferably be as per the approved Mine Closure Plan, and in case exceeds 40 m adequate engineering intervention shall be provided for sustenance of aquatic life. The remaining area shall be backfilled and covered with thick and alive topsoil. Post mining land shall be rendered usable for agriculture / forestry purposes and shall be handed over to the respective state government as specified in guidelines for preparing of Mine Closure Plan issued by the

Ministry of Coal dated 27 August 2009 and subsequent amendments.

The mine has started its operation in FY 16-17 and at present is in its 6<sup>th</sup> year of operation. The life of mine is 10 yrs. The progress of mining activities are being carried out as per approve mining plan. The Mine Closure Plan is an integral part of approve Mining Plan. The post mining land use will be as per approved reports. The final mine void depth which will be reached after the end of mine will be appropriately addressed. As per the approved plan the post mining scenario shows 107 Ha as backfilled area against total excavated area of 273.79 Ha. The backfilled area is propose to be converted to afforested area. The land after completion of all closure activities and reimbursement of corpus deposited appropriate action for handing over the land will be taken. A mine closure plan was approved by the WCL Board along with opening of a corpus fund / account was opened at the Oriental Bank of Commerce, Jaripataka Branch, Nagpur.

The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the during mining / post mining land use pattern, which is an integral plan of approved mining plan and EIA/EMP submitted to the Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MoEF&C on six monthly basis.

The excavation, external OB dumping, plantation etc. are being carried as per the approved Mining Plan in conformity with the submitted Mining land use plans & EIA –EMP submitted to MOEF&CC.

Six monthly EC compliance report is regularly submitted to Ministry of Environment, Forest Climate Change/Regional Office, Nagpur which comprises data sheet with data excavated area, backfilling, external OB dump including top soil & afforestation data.

5 The top soil shall temporarily be stored at earmarked sites only and shall not be kept un utilized for long. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be established with native grass species to prevent erosion and surface runoff. The other OB dump shall be vegetated with native flora species. The excavated area shall be backfilled and afforested inline with approved mine closure plan. Monitoring and management of rehabilitated areas shall be continued until the vegetation becomes self sustaining. Compliance status shall be submitted to the MoEF&C on six monthly basis.

The top soil is being dumped temporarily at earmarked site and this soil will be used for blanketing backfilled area as well as external OB dump, in accordance with mine closure plan / approved Mining Plan.

It has been stacked at separate dump with proper slope at the earmarked site and will be used for reclamation of mined out area in future.

Year wise breakup is as follows: 2016-17 – 1.18  $Mm^3$  $2017-18-0.60 \text{ Mm}^3$  $2018-19-0.491 \text{ Mm}^3$ 

2019-20 - 2.114 Mm3  $2020-21-3.910 \text{ Mm}^3$ 

 $2021-22-4.473 \text{ Mm}^3$ 

#### C EMISSIONS, EFFLUENTS, and WASTE DISPOSAL

1 Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective controls measures such as regular water/mist sprinkling/raingun etc shall be in critical areas prone to air pollution such as haul roads. loading/unloading and transfer points, fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that ambient air quality parameters shall confirm with norms prescribed by

Coal transportation is done through tarpaulin covered trucks. 10 nos of rain guns installed at coal stock. 8 nos rainguns installed at weighbridge. Additional 10 nos rainguns to be installed at coal stock in FY 2021-22. 1 hired mobile water tankers of capacities 4 KL and 2 no. contractual of 28 KL and 9 KL of capacity are in operation. Ambient air quality is being monitored on fortnightly basis by CMPDIL and reports are being sent to Maharashtra Pollution Control Board.

### Central/State Pollution Control Board.

2 of width not less than 7.5 m shall be developed all along the been carried out in July 2017. Mine Lease area in a phased manner. The greenbelt comprising of mix of native species shall be developed all along the major approach / coal transportation roads.

Greenbelt consisting of 3-tier plantation 25000 nos of plantation in approximately 10.0 Ha on plain land near External OB dump has

Plantation of 31000 nos along mine boundary of Pauni II expansion OC with Sakhari village completed in 20-21.

Plantation of 20000 nos. is carried out in FY 21-22.

		In addition to the same, 45,000 nos. of plantation is already done in the project area in FY 2022-23 till date and remaining 5000 will be completed upto Dec 2022.
	Transportation of coal shall be carried out as per the provisions and routes proposed in approved mining plan.  Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a bypass road, it should be constructed so that the impact of sound, dust and accidents could be appropriate mitigated.	
	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining PUC certificate from authorized pollution testing centre.	Complied. Only vehicles with valid PUC are being allowed for coal transportation.
5	Coal Stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression systems. Belt conveyors shall be fully covered to avoid air borne dust. Side cladding all along the gantry shall be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.	Drills are being wet operated. Coal stock pile / yard are provided with 10 nos of rain guns. 8 nos rainguns installed at weighbridge. Work awarded for Additional 10 nos rainguns. 1 hired mobile water tankers of capacities 4 KL each and 2 no. contractual 28 KL and 9KL of capacity are in operation.
6	Coal handling plant shall be operated with effective control measures viz. Bag filters / water or mist sprinkling systems to check fugitive dust emissions from crushing operations, conveyor system transfer points etc.	dust suppression arrangement will be put into operation once it comes up. At present coal from Pauni II Expansion OC is crushed

		Regarding Fugitive dust monitoring, it is submitted that as per CMR 123 of 1957, 8 hour weighted work zone standard for fugitive emission is 3000 µg/m <sup>3</sup> . At present coal from Pauni II Expansion OC is crushed in Gouri I&II(A) OC CHP premises. Fugitive dust monitoring is carried out at; CHP (Gouri I&II (A) OC) Weighbridge (Gouri I&II (A) OC)
7	shall not be used for mining operations. Rainwater harvesting shall be	No groundwater, other than pumped water from mine is being used for meeting the industrial demand viz. dust suppression, plantation, etc. No groundwater is used for extraction of coal and or excavation of OB / soil. Out of 1095.52 Ha, only 273.79 Ha is in use for excavation, 244.9 OB dumping, 10 Ha for embankment and infrastructure which comes to 48.25% total land. The remaining land of 566.83 Ha is still untouched and serving as ground water recharge structures The level of ground water in the wells in the buffer zone is being
		Monitored continuously round the year at quarterly interval. As per the results there are such adverse effects on ground water levels. Further Roof top rain water harvesting system provided at Manager office. In addition a pond at Sakhari village which is fed with excess mine pumped out water after sedimentation and pressure filter which also serves as ground water recharge structure.
	Catch drains and siltation pounds of appropriate size should be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into river and water bodies. Further dump material shall be compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. Sump capacity should also provide adequate retention periods to allow proper settling of silt materials. The water so collected in the sump shall be utilized for dust separation measures and green belt development. Dimension of the retaining wall at the toe of the dumps and OB	Complied. Catch drains / garland drains of appropriate sizes have been constructed around the OB dump and quarry to arrest flow of silt and sediments into natural water course. These catch drains /garland drains are desilted / relaid before onset of every

benches within the mine to check run-off and siltation should be based on rainfall data. Plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.

all the material to the mine sump. Further, OB dumps are also compacted and water from top is guided to the toe finally to the catch drains. The water thus collected in the sump gets adequate retention time to allow proper setting of suspended materials. The supernatant water is pumped out on surface & fed into one no of surface sedimentation tank of size 38.40 m x

23.40 m x 1.55 m for secondary treatment. treated water from surface sedimentation tank used for watering the mine area & green belt development. The excess water from sedimentation tank is being diverted to pond at sakhari village after treatment through Pressure Filter which acts as groundwater recharge structure. The catch drains are de-silted before onset of every monsoon. The OB dump is within the acquired land and native species will be planted once dump attain he final shape and height.

Industrial waste water from CHP, workshop and waste water from the mine should be properly collected, treated so as to conform to the standards prescribed under EPA 1986 and the rules made there under or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluent.

At present as already indicated, CHP is yet to be constructed. The effluent in this mine comes from workshop and mine. For treatment of workshop effluent, 150 KLD treatment plan has already been put in place. The plant has inbuilt Oil and Grease trap with Oil skimmer and for effective treatment a clarrifloculator. For treatment of mine water, it may be noted that strata seepage water coming down the cross drainage finally gets accumulated in the mine sump made at the floor of the seam. The water gets its first stage settlement at the mine sump having a capacity of

54.73 Million Gallons. Subsequently, supernatant water is pumped out and fed into surface sedimentation tank of size 38.40 m x 23.40 m x 1.55 m which gives 2nd stage settlement. The quality of effluent is monitored every fortnight. The monitoring results for period of 01.04.2022 to 30.09.2022 is enclosed.

10	Adequate groundwater recharge measures shall be taken up for augmentation of groundwater. The project authorities shall meet the water requirements of nearby villages in case the village wells goes dry due to dewatering of mine.	In this regard, action point no. 7 may also rain water harvesting Manager office. The out on surface & fed sedimentation tank of the sedimentation t	be referred system pr mine wate into one no f size 38.40	d. Roof top ovided at r is pumped o of surface 0 m x 23.40 m
		x 1.55 m for seconda water from surface se for watering the mine development. The ex sedimentation tank is at sakhari village afte Pressure Filter which water recharge struct	edimentation edime	on tank used reen belt from erted to pond at through
D	ILLUMINATION, NOISE & VIBRATIONS			
1	Adequate illumination shall be ensured in all mine locations as per DGMS standards and monitored weekly. The report of same be submitted in this ministry and RO on a six monthly basis.	Agreed. Illumination as per new CMR guid report for September	delines. Ill	umination
2		Agreed. Adequate recontrol of Noise polin blasting and drilling of HEMM, etc. a plugs/muffs. Regular training and retraining conducted in vocation area.  Details of VTC tr	lution. Wo ng operati re provid awareness ng of wo onal train ainings c	orkers engaged ons, operation led with ear s programs for rkers are also ing center of arried out at
	accessories be monitored.	Ballarpur Area is give		
		Year	Target	TC Training Acheived
		2021-22	680	592
		2022-23 (upto Sept 2022)	680	440
		Details of VTC traini	ngs carrie	d out <b>at Pauni</b>

		II project,	, Ballarp	ur Area is	s given be	elow:
		Veg	Year		VTC Trainii	
				Target		neived
		2021-22		40	31	
		2022-23 Sept 2022	(upto 2)	40	40	
3	Controlled blasting techniques shall be practiced in order to mitigate ground vibrations and	Complied practiced done. Cop stability s	as per Doy of the	GMS per blasting	mission a	nd study
	fly rock as per the guidelines prescribed by the DGMS.					
4	The noise levels shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six monthly basis.	Agreed, b are being location. 7 01.04.202	monitore The mon	ed fortnig itoring re	ghtly at twesults for p	o period of
E	OCCUPATIONAL HEALTH & SAFETY					
1	Proponent shall undertake an Occupational Health Survey for initial and Regular Periodical medical examination of the workers engaged in the Project and maintain records accordingly as per the Mines Rules, 1955 and DGMS Circulars. Besides being regular periodic checkup, 20% of the workers identified from workforce engaged in active mining operations shall be subjected to health checkup for occupation disease and impairment, if any.	Personal very with dust of mine we years with occupation Every work years - up are above medical eximterval.  Area Hosp bedded he At present occupation impairment Details of Area is given.	masks. For orkers and the purpose and disease to the age 50 years a xamination pital in Vospital. It, since to all disease and that he important in the purpose and disease and the purpose and the purpos	Periodical re carried pose of d ases & he mine is ge of 45; to are subjute on at two VCL Ball opening not ases and other recorded PME of the with the carried PME of the carried pose of the carried part of the c	I health chell out once etecting aring impose examine the worke ected to pose and a half arpur Are osuch or hearing ded.	airment. d in 5 rs who eriodic lf years a is a 25
		Year	IME (ii		PME (in	•
		2021	Acheive	d	Target	Acheived
		2021	953		1220	1425
		Details of <b>project</b> is	given be	low:		
		Year	IME (i		PME (ir	nos.)
			Acheive	d	Target	Acheived
		2021	369		12	55

		2022	222	12	50
2	Personnel (including outsourcing employee) 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.	Personnel employee protective	working ( ) in dusty a c respirator	including outs areas provided y devices and g the work.	sourcing I with
3	Skill training as per safety norms specified by DGMS shall be provided to all workman including the outsourcing employee to ensure high safety standards in mine.	specified workmen	by DGMS	per safety nor are provided a contractual an ed below:	to all
F	ECOSYSTEM & BIODIVERSITY CONSERVATION				
1	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, 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.	existing f period of species of and buffe in both co	lora and far 2016. No e f flora and r zones. No ore and buf ion plan is	onducted by Cuna in post mondangered, enfauna found in migratory fafer zones. As a required. Cop	onsoon indemic in both core una found such no
G	PUBLIC HEARING, R&R, AND CSR ACTIVITIES				
1	Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing. Landoustees should be compensated as per the norms laid out R&R Policy of the Company or the National R&R Policy or R&R Policy of the State Government, as applicable.	public head Land outs employm persons as will be ad	aring are besees has beseet has been than been than been the per R&R	ues raised dureing properly ing compensation given to all policy. All the time to time future.	addressed. ted and the eligible e guidelines
2	economic development in and around the mine in every financial year, in pursuance of its Corporate Social Responsibility Policy under Section	policy unde for the CSR the average three immed Rs 2.00 per	r Companion will be allowed profit of the contract of Connection of Conn	ied as per the es Act, 2013, ocated based of the Comparding financial coal Productioner is higher.	The fund on 2% of my for the years or

3	The project proponent shall follow the mitigation measures provided in Office Memorandum No.Z- 11013/57/2014-IA.I1 (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".	The project proponent is adhering to the mitigation measures as per the guideline specific under the title 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area' OM No.Z11013/5712014-IA.I1 (M) dated 29th October, 2014.
4	The Project Proponent shall make necessary alternative arrangements, where required, in consultation with the State Government to provide alternate areas for livestock grazing, if	There is no acquisition of grazing land, as such not applicable.
	any. In this context, Project Proponent should implement the directions of the Hon'ble Supreme Court with regard to acquiring grazing land.	
Н	CORPORATE ENVIRONMENT RESPONSIBILITY	
1	The Company should have a well laid down Environment Policy approved by the Board of Directors. The Environment Policy should prescribe for standard operating process/procedures to bring into focus any infringements /deviation/violation of the environmental or forest norms/conditions. To have proper checks and balances, the Company should have a well laid down system of reporting of non-compliance's/violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large.	

2	The project proponent shall comply with the provisions contained in this st ministry's OM dated 1 May, 2018, as applicable, regarding Corporate Environment Responsibility.	Noted.
3	Administrative Order of the company to deal with environmental issues and for ensuring compliance with the	The hierarchical system of the company for dealing with environmental issues exist at corporate level & area level. It has been uploaded on WCL website, linked as http://www.westerncoal.in/?q=node/431
4	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will	There exists a three tier environment management set up in WCL as detailed below:  At HQ, WCL- The cell is headed by GM (Env) reporting to Director Technical. The team comprises of multi-disciplinary trained executives.
	report directly to the Head of the Organization	At Area level – Area General Manager heads the Environment Department assisted by GM (oprn), ANO(Environment), & 1 Assistant manager of Environment discipline.  At Unit Level - Environment Management Cell is headed by Sub-Area Manager and assisted by Mine Manager, Project Nodal Officer (Env) at unit level.
5	Action plan for implementing EMF conditions shall be prepared and duly approved by competent authority. The year wise funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry and its Regional Office alon with six monthly compliance report.	Being complied. The funds earmarked for environment protection measures are kept in separate account and it is not used for any other purpose. Expenditure statement is shown in every six monthly compliance report sent to MoEF&CC.
6	Self-environment audit shall be conducted annually. Even three year	Self internal environmental audit system has been setup in the company recently. At Area level, a multi disciplinary committee has been constituted by order of competent authority to review the compliance status every month through a formatted checklist. Inter-area inspection to review compliance status is being done on quarterly basis. Mechanism for internal monitoring of EC

		compliance is enclosed.
I	STATUTORY OBLIGATIONS	
1	Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, NGT	Noted
	and any other Court of Law, if any, as may be applicable to this project.	
2	This Environmental Clearance is subject to obtaining requisite wildlife if applicable from the Standing Committee of National Board for Wildlife.	1
3	The Project Proponent shall obtain Consent to Establish and Consent to Establish/ Operate under the Air Act, 1981 and the Water Act,1974 from the concerned State Pollution Control Board.	Complied.  Consent to operate under Air &Water Act is granted for additional capacity 3.25 MTPA up to 31.03.2023 vide consent no. FORMAT 1.0/CAC/UAN no. 0000135348/CR 2211000391dated 04/11/2022 Copy of same is enclosed.
4	The Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA). Application to CGWA for abstraction of groundwater for enhanced production capacity of 3.25 MTPA is in advanced stage of approval.	CGWA NOC for abstraction of groundwater has been obtained which is valid from 30/09/2019 to 29/09/2021. Further renewal application is been submitted and under final stage of approval. Copy of same is enclosed.
J	MONITORING OF PROJECT	

1	Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM10, PM2.5, SO2 and NOx monitoring. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board Online AAQ monitoring stations may also be installed in addition to regular monitoring stations as per the requirement and/or in consultation with SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc.	Four ambient air quality monitoring station covering core as well as buffer BP OA-1 zone are established as follows 2 Mine Office – Pauni II OC  BP <sub>2</sub> OA-2- Substation – Pauni II OC BP OA-3- Sakhari  2 Village BPOA -4 – Workshop Pouni OC The stations have been fixed considering the meteorological data, topographical features etc. The monitoring is carried out with due prior intimation to MPCB. Monitoring data is being submitted to MOEF &CC & MPCB regularly. The monitoring results for period of 01.04.2022 to 30.09.2022 is enclosed
	carried out at least once in six months.	
2	The ambient air quality monitoring in the core zone shall be carried out to ensure the coal industry standard notified under GSR 742 (E) Dated 25.09.2000 an as amended from time to time by CPCB. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr, etc. shall be regularly reported to the ministry regional office and to the CPCB/SPCB.	The monitoring results for period of 01.04.2022 to 30.09.2022 is attached
3	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the coal industry standards of GSR 742 (E) Dated 25.09.2000 and as amended from time to time by CPCB.	The effluent discharge are monitored as per GSR 742(E). The monitoring results for period of 01.04.2022 to 30.09.2022 attached

The monitoring data shall be uploaded on the company website and displayed at the project site at a suitable location. The circular no.J- 20012/1/2006/.1A.11(M) Dated 27.05.2009 issued by MoEF&CC shall also be referred in this regard for compliance.	Monitoring data is being regularly uploaded at WCL official website <a href="www.westerncoal.in">www.westerncoal.in</a> and also displayed at the project site i.e Entrance of Sub Area Manager's Office.
and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing	The groundwater level monitoring is being carried out by CMPDIL, 4 times a year in pre-monsoon (May), Monsoon (August), Post-monsoon (November) and Winter (January) seasons and for quality once in a year. The monitoring report is regularly sent to Regional Officer, CGWB Nagpur with a copy to MoEF&CC & CPCB. Copy of latest ground water monitoring report is enclosed.
Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to MoEF&CC / Regional Office.	Upstream and downstream samples were collected from Sakhari and Lendi Nallah by CMPDI in March 21.
	Nagpur.

8	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information / monitoring reports.	Agreed. Full cooperation shall be provided to the officers of Regional Office.
K	MISCELLANEOUS	
1	Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.	Agreed, will be complied. Energy consumption of mine for last 2 years is as below: 2017-18 – 1.55 Lakh KWh 2018-19 – 10.19 Lakh Kwh 2019-20 – 9.5 lakh KWH
		Energy consumption in year 2017-18 was very low as mine was not operational for almost 8 months due to land compensation issues.
		Further 60 KWh Solar power plant has been set up at AGM office of Ballarpur Area to promote use of renewable energy sources.
2	The project authorities shall inform to the Regional Office regarding commencement of the mining operations.	Agreed, with the submission of Six monthly report, the details of commencement of project given to RO, MOEF&CC.
3	A copy of Environment clearance letter will be marked to concern Panchayat. A copy of the same shall also be sent to the concerned pollution control board, Regional office, District Industry Centre and Collector's office/ Tehsildar Office for 30 days.	Complied.
4	The EC shall be uploaded on the company's website. The, compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain.	Agreed, a copy of EC has been uploaded on company website. A copy of six monthly has also been uploaded.

5		Advertised in two news papers Mahavidarbha Hindi – 17.03.2020 Chandrapur Samachar – 17.03.2020. Attached as Annexure R.
6	financial year ending 31 March in Form-V is mandated to be submitted by the PP for	The audit statement is also uploaded on company website. The Environmental Statement for each financial year is filled in Form-V before 30th september of each year. Environmental Statement for FY 2021-22 attached as <b>Annexure S</b> .
	Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the Company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEF & CC by e-mail.	
7	The above conditions will be enforced inter alia under the provision of the water Act, 1974 and Air Act, 1981, Environment protection act, 1981 and the public liability act,1991 along with their amendments and their rules and any other order passed by Hon'ble Supreme Court of India /High courts and any other court of law to the subject matter.	Noted.

5.	The proponent shall abide by all the commitments and recommendations made in the EIA EMP report and also that during presentation to EAC. All the commitments made on the issues raised during Public hearing shall also be implemented in letter and spirit.	
6.	The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The ministry or any other competent authority may stipulate any further condition for environmental protection.	
7.	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of NGT Act, 2010.	Does not pertain to the project.
8	The coal company/project proponent shall be liable to pay	Noted.
	the compensation against the illegal mining, if any, and as raised by the respective State government at any point of time, in terms of the orders dated 2/08/2017 of Hon'ble Supreme court in WP (Civil) no. 114/2014 in the matter of Common cause Vs Union of India and others.	
9.	The concerned state government shall ensure mining operation to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of judgment of Hon'ble Supreme court	

This EC shall not be operational till such time the project proponent complies with the above said judgment, as applicable, and other statutory requirements.
This issues in supersession of the earlier RC granted by the Ministry vide letter dtd: 02/02/2006.