

A report on the status of compliances of various conditions stipulated in Environment Clearance granted by MOEF&CC vide EC letter no- J-11015/331/2008-IA.II (M) dated 22-10-2010

regarding

Expansion of Patansaongi Underground Coal Mine Project (0.25 MTPA to 0.30 MTPA and ML area of 410.00 Ha.) located in Village- Patansaongi, Tehsil-Saoner, District-Nagpur in Maharashtra State

for

the period from 01/04/2023 TO 30/09/2023 submitted in fulfilment of the compliance of EC Condition

Submitted by:
Office of the Sub Area Manager,
Silewara Sub Area,
Village-Silewara, Tehsil – Saoner,
District- Nagpur in Maharashtra State, India
M/s. Western Coalfields Limited, Nagpur

SN.	Statutory compliance	Compliance/ Status
i.	Regular monitoring of subsidence movement on the surface over and around the working area & impact on natural drainage, water bodies, vegetation, structure, roads and surrounding shall be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures shall be taken to avoid loss of life and material. Cracks shall be effectively plugged with ballast and clayey soil/suitable materials.	Complied. Mine is presently doing coal production through development. During development there is no subsidence. Depillaring is being done after taking due permission from DGMS During depillaring hydraulic sand stowing shall be done in which there is no possibility of any subsidence. However, monitoring of subsidence movements & necessary Control measures is being taken as per DGMS stipulations.
ii.	Mining shall be carried out as per statute as a safe distance from the river and nallah flowing within the lease boundary.	Complied. Mining is carried out as per statute as a safe distance from the river and nallah flowing within the lease boundary. (Annex-1, Undertaking)
iii.	High root density tree species shall be selected and planted over areas likely to be affected by subsidence.	Complied. 25000 nos. plantation done over 9.00 Ha. o land at Patansaongi mine.
iv.	Coal extraction including depillaring shall be carried out as per statute in areas where agricultural production is continuing, areas of habitation & water bodies, roads, etc.	Complied. Depillaring will be carried out as per statute, required.

v.	Subsidence shall be monitored closely and if subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement of the landowners.	Not applicable at present and PP is consented with condition if required. No subsidence has occurred so far.
vi.	Garland drains (size, gradient & length) around the safety areas such as mine shaft and low-lying areas 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 mines sites. Sump capacity shall also be provided adequate retention period to allow proper settling of silt material.	Complied. Since this is a U/G mine, so, no waste rock piling will be there. However, before starting depillaring, necessary measures like construction of garland drains etc. has been taken up as per DGMS stipulations.
vii.	Water sprinkling system shall be provided to check fugitive emission from loading operations, conveyor system, haulage roads, transfer points, etc. Major approach roads shall be black topped and properly maintained.	Complied. 10 nos. fixed sprinklers on coal transportation roads provided and maintained. Conveyor belts are covered by G.I. sheet to control fugitive dust. (Annex-2, Rain gun, Sprinkler photos)
/iii.	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 plant species in consultation with the local DFO/Agriculture Department.	Action is being taken for development of green belt around mine lease area, roads, etc. 25000 nos. Plants have already been planted on an area of 9.0 ha. Plantation has been carried out through State Forest Agency. The density per hectare is 2500 plants. (Annex-3, Plantation Photos)

EC Compliance Status report for Patansaongi Underground Coal Mine Project of M/s Western Coalfields trimited located in Village Patansaongi, Tehsil-Saoner, District Nagpur (Maharashtra). Page No_2/11

COLLERY MANAGERY

COLLERY MANAGERY

COLLERY MANAGERY

ix. Regular monitoring of ground water level and quality shall be carried out by, establishing network of existing wells and construction new Piezometers. The monitoring for quantity shall be done four times in a year - 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. The quality of groundwater shall be randomly got analyzed through laborites recognized under the EPA Rules 1986.

Complied.

The monitoring for quantity is being done four times in a year – pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Latest Ground water monitoring report attached.

(Annex-4, Ground Water Monitoring report)

The quality of groundwater has been randomly analyzed through laboratories recognized under the EPA Rules 1986.

(Annex-5, Third Party Analysis report)

Emails are regularly submitted to IRO, MOEF&CC, Nagpur through email with six monthly compliance status report.

(Annex-6, Email submissionof six-monthly compliance status report)

x. The company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring indicates a decline in water table. The project authorities should meet water requirement of nearby village (s) in case the village wells go dry due to dewatering of mine.

Complied.

No decline of ground water table has been observed till date. And a major portion of the water is being used for the sand stowing process.

Further, as and when required, the project will supplement the water requirement of nearby villagers.

Ground water monitoring report attached.
(Annex-4, Ground Water Monitoring report)

EC Compliance Status report for Patansaongi Underground Coal Mine Project of M/s Western Coalfields Limited located in Village Patansaongi, Tehsil-Saoner, District Nagpur (Maharashtra). Page No_3/11

COLLERY MANYA GERY MANYA PAGE NO. 11 COLLERY MANYA PAGE NO. 11 COLLERY MANYA PAGE NO. 11 COLLERY MANYA PAGE NO. 12 COLLERY MANYA P

хi	Besides 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 checkup 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.	Normally, Periodical Medical Examination is done each year @ of 20% of total employees in mine. This also covers contractual workers. In addition to this 10% of workers examined by NIMH trained doctors of Central Govt. Organization. We take remedial action on report of every such examination.
xii	Activities under CSR undertaken for the neighboring villages shall be for not less than Rs. 5 per tonne of coal and the progress made thereon shall be uploaded on the company annually on the company website	Complied. CSR activities are carried out in the periphery of 15.00 KM area of Patansaongi mine every year as per CSR norms. A list of the activities along with expenditure from past 10 years is displayed on Company's website. Project proponent has successfully displayed the CSR activities along with expenditure statement at company website (link-http://www.westerncoal.in/index1.php/StaticPage/147) since 2010-11 onwards. (Annex-7, CSR)
xiii.	A final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment and Forests within 5 years in advance of final mine closure for approval.	Complied. The mine has got balance life of around 21 years. Mine closure plan as per MOC guidelines has been prepared & duly approved by competent authority. The Escrow Account with CCO has been opened vide no 08973161002522 & deposited separately andhaving a balance of Rs.3239001.00 as on 31.03.2016 approval for the same got by WCL Board on dt. 28.01.2013. (Annex-8, Escrow Account Details)

EC Compliance Status report for Patansaongi Underground Coal Mine Project of M/s Western Coalfields Limited located in Village Patansaongi, Tehsil-Saoner, District Nagpur (Maharashtra). Page No_4/11

COLLERY MANAGER

PATANSAONOL MINE

PATANSAONOL MINE

i.	No change in mining technology and scope	Noted.
	of working shall be made without prior approval of the Ministry of Environment & Forests.	(Annex-9, Undertaking)
ii.	No change in calendar plan including quantum of mineral coal and waste shall be	Noted.
	made.	(Annex-10, Undertaking,)
iii.	Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring SPM, RSPM, SO2&Nox. Location of the	Complied. Four monitoring stations are established in consultation with SPCB. Ambient air quality
	stations shall be decided based on the meteorological data, topographical features and environmental and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, in SPM and RSPM etc. shall be carried out at least one in six months.	report enclosed from April 2023 to Septembe 2023. (Annex-11, Air monitoring report)
iv.	Data or ambient air quality (SPM, RSPM, SO2 &Nox and heavy metals such as Hg, As, Ni, Cr, etc.) shall 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. Random	Complied. Four monitoring stations are established in consultation with SPCB. Ambient air quality report along with heavy metal reports are enclosed from April 2023 to September 2023.
	verification of samples through analysis from independent laboratories recognized under the EP Rules, 1986 shall be furnished as part of the compliance report.	(Annex-11, Air monitoring report) (Annex-12, Heavy metals report)

EC Compliance Status report for Patansaongi Underground Coal Mine Project of M/s Western Coalfields Limited located in Village Patansaongi, Tehsil-Saoner, District Nagpur (Maharashtra). Page No_5/11

COLLERY MANAGER
PATANSAONOI MINE

v. Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operations of HEMM, etc. shall be provided with earplugs / muffs.

Complied.

This is a U/G mine & no heavy earth moving machines are employed for coal mining. Entire Operation for coal extraction is carried out below ground by machines i.e. SDLs, drills, haulages, conveyors etc. duly approved by DGMS. As such, the possibility of generation of high noise levels is very remote. However, haulage operators, Belt conveyor operators are provided with earmuffs etc. Noise monitoring is also carried out near w/shop premises. Results show that levels are within the permissible limits.

vi. Industrial wastewater (workshop and waste water from the mine) shall be properly collected, treated so as to confirm to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents. Mine water shall be treated to prescribed standards in case discharged outside the premises.

Complied.

Patansaongi being an underground mine, there is no provision of workshop to repair/wash HEMMs, thus eliminating possibility of generating oil & grease. Hence, provision of oil & grease trap has not been made. The mine water/strata water gets accumulated in mine sump, which allows significant settling of suspended particles Thereafter; mine water is pumped out on surface, which has been used for domestic purpose after filtration & major part is used for stowing purpose.

vii. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation the mineral shall be covered with tarpaulins and optimally loaded.

Complied.

Vehicles used for transporting the mineral are covered with tarpaulins and optimally loaded. Mainly coal transportation is done through aerial ropeway.

(Annex-13, Tarpaulin covered truck photo)

EC Compliance Status report for Patansaongi Underground Coal Mine Project of M/s Western Coalfields Limited located in Village Patansaongi, Tehsil-Saoner, District Nagpur (Maharashtra). Page No_6/11

COLUERY MANAGEK

PATANSAONGI MINE

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 Sate Pollution Control Board and data got analysis through a laboratory recognized under EP Rules, 1986

Complied.

CMPDIL has a well-equipped laboratory & they conduct monitoring & analysis of Air, Water and Noise for all mines of WCL including this mine. Ambient air quality report along with heavy metal reports are enclosed from October 2022 to March 2023.

(Annex-11, Air monitoring report) (Annex-12, Heavy metals report)

ix. 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 needed.

Complied.

Being a U/G mine, generation of dust is mainly limited to U/G face workings. The dust control measures are being taken as stipulated in Coal Mines Regulation. Proper training & re-training of workers are given as per Mines Vocational Training Rules. Periodic medical examination of workers is also done every five years.

x. 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.

Complied.

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.

At Area level – Area General Manager heads the Environment Department assisted by GM (Opm), &Area Nodal Officer (Environment) of Environment discipline.

EC Compliance Status report for Patansaongi Underground Coal Mine Project of M/s Western Coalfields Limited located in Village Patansaongi, Tehsil-Saoner, District Nagpur (Maharashtra). Page No_7/11

At Unit Level-Environment Management Cell is headed by Sub-Area Manager and assisted by Mine Manager, Project Nodal Officer (Env) at unit level. Organizational chart of the Company at link http://www.westerncoal.in/index1.php/Static Page/123 (Annex-14, Organizational Chart) xi. The funds earmarked for environmental Complied. protection measures shall be kept in separate account and shall not be diverted The funds earmarked for environment for other purpose. Year wise expenditure protection measures are kept in separate should be reported to the Ministry and its account and it is not used for any other Regional Office at Bhopal. purpose. Expenditure statement is shown in every six-monthly compliance report sent to MOEF&CC. (Annex-15, Undertaking) Capital Expenditure till 30/09/2023 is Rs. 17.34 lakhs. Revenue Expenditure till 30/09/2023 is Rs. 9.79 lakhs. A copy of the last three financial year environmental expenditure is attached. (Annex-16, Expenditure details) xii. The project authorities should advertise at Complied. least in two local newspapers widely circulated around the project, one of which Necessary advertisement was issued in the shall be in the vernacular language of the following newspapers: locality concerned within seven days of the clearance letter informing that the project THE HITWADA Dt.11.11.2010

EC Compliance Status report for Patansaongi Underground Coal Mine Project of M/s Western Coalfields Limited located in Village Patansaongi, Tehsil-Saoner, District Nagpur (Maharashtra) Page No. 8/11

	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 web site of the Ministry of Environment & Forests at http://envfor.nic.in.	2. LOKMAT, NAGPUR Dt. 11.11.2010. (Annex-17, Newspaper Photo)
xiii.	A copy of the environmental clearance letter shall be marked to concerned Panchayat/JillhaParishad/Municipal Corporation or Urban Local Body/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.	Complied. Copies of the clearance letter have already been handed over to concerned village Panchayats. No suggestion / representation has been received. A copy of the clearance letter also displayed on the company's website. (Annex-18, Copy of clearance letter)
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 Office, District Industry Center and Collector's Office/Tehsildar's Office for 30 days.	Complied. A copy of the clearance letter has already been sent to Regional Officer, MPCB, and Nagpur for the purpose and copy of EC has been uploaded on company website at link-http://www.westerncoal.in/index1.php/Static Page/154 (Annex-19, EC uploaded on WCL website)
xv.	The clearance letter 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 the public domain. The monitoring data of environmental quality parameters (air,	Complied. Copy of EC has been uploaded on company website at link-http://www.westerncoal.in/index1.php/Static Page/154 (Annex-19, EC uploaded on WCL website)

EC Compliance Status report for Patansaongi Underground Coal Mine Project of M/s Western Coalfields Limited located in Village Patansaongi, Tehsil-Saoner, District Nagpur (Maharashtra) Page No_9/11

COLLERY MANAGER
PATANSAONOI MINE

water, noise and soil) & critical pollutants such as SPM, RPM, SO2 and Nox (ambient and stack if any) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.

A copy of six-monthlyreport has also been uploaded. (Annex-20) at link-http://www.westerncoal.in/index1.php/Static Page/155.

Monitoring report for environmental attributes are available at company website link-

http://www.westerncoal.in/index1.php/Static Page/153

(Annex-20, Monitoring reports uploaded on WCL website)

xvi. 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.

Complied.

EIA and EMP have already submitted. Monitoring Data sheet and status of implementation of EC compliance conditions is being sent half-yearly to IRO MOEF&CC, Nagpur.

(Annex-6, Email submission of six-monthly compliance status report)

xvii.

The environmental statement for each financial year ending 31st March in form-V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rule, 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

Complied.

The Environmental Statement for each financial year is filled online in Form-V before 30th September of each year for onward submission to Maharashtra Pollution Control Board. Acknowledge receipt for the Environmental Statement for FY 22-23 is attached.

EC Compliance Status report for Patansaongi Underground Coal Mine Project of M/s Western Coalfields Limited located in Village Patansaongi, Tehsil-Saoner, District Nagpur (Maharashtra). Page No_10/11

respective Regional Officers of the MOEF by E-mail.

(Annex-21, Environmental Statement)

The audit statement is also uploaded on company website at link-http://www.westerncoal.in/index1.php/Static Page/265

(Annex-22, Environment Statement uploaded on WCL website).

Orly

(Ajit Halder)

Dy. GM (Min)/Sub Area Manager,

Silewara Sub Area

Nagpur Area WCL

उप क्षेत्रीय प्रवधक Sub Area Manager सिलेवाडा उप क्षेत्र Snewara Sub Area (Gauray Pandey),
Manager (Min)/Colliery Manager,
Patansaongi UG Mine, Silewara Sub Area,
WCL, Nagpur Area

COLLIERY MANAGER
PATANSAONGI MINE