

ईस्टर्न कोलफील्ड्स लिमिटेड

(कोल इंडिया लिमिटेड का एक अंग)

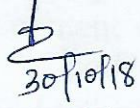
EASTERN COALFIELDS LIMITED

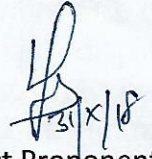
(A subsidiary of Coal India Limited)

OFFICE OF THE AGENT, MOHANPUR OCP, SALANPUR AREA

UNDERTAKING

Information provided in the half yearly EC compliance report for the period April 2018 to September 2018 in respect of the Mohanpur OCP is true to the best of my knowledge:

SL. NO.	NAME OF THE MINE	NAME OF THE MANAGER	SIGNATURE OF THE MANAGER
1	Mohanpur OCP	A. K. RAI	 30/10/18


31/10/18

Agent/ Project Proponent
Mohanpur OCP

(SIGNATURE WITH SEAL)
Chief Manager (W) Agent
Mohanpur Colliery
Salanpur Area, E.C.Ltd

EASTERN COALFIELDS LIMITED
HALF YEARLY EC COMPLIANCE REPORT
H/Y ENDING SEPTEMBER, 2018
MOHANPUR– OPENCAST, SALANPUR AREA
J11015/1128/2007-IA. II(M) dt. 10-12-2009 (EC No.)

A	Specific Conditions	
S. No.	Environmental Clearance Conditions (Specific)	Compliance Status
i.	R&R for the expansion project for the village Pahargaon involving 34 PAFs shall be completed within agreed time frame and all pending R&R of existing project shall be completed within a year.	R&R of 34 PAFs have been done.
ii.	Activities under CSR shall include extending medical facilities, supply of drinking water, improving and maintaining the local road in good condition to the local communities in the 14 villages located within 5km of the project area and improving the road infrastructure and maintenance in and around the project area. The total provision made for CSR shall be not less than Rs 10 per tonne of coal. The details of yearly activities undertaken under CSR and expenditure incurred shall be displayed and regularly updated on the company's website.	Health facilities, Drinking water supply, PCC Road network development etc has been done in the core zone of the project area. As per the revised CSR policy of Coal India Ltd, 2% of the average profit of preceding 3 years is the norms for CSR expenditure in the entire ECL command areas. The CSR activities is displayed on company's website. The link is given below: http://easterncoal.gov.in/socialresp.html
iii.	Topsoil, if any, shall be stacked properly with proper slope at earmarked site(s) and shall not be kept active and shall be used within a year of its generation for reclamation and development of green belt.	Top soil is stacked on the top of OB site. It is stacked with a number of benches of around 28 degrees slope. Work Order has been issued to WBWDCL for 12 Ha plantation in FY 2018-19 for utilization of top soil and green belt development.
iv.	No external OB dump shall be created for the expansion project. The entire 26.44 Mm3 of OB generated over the balance life of the mine shall be backfilled. The existing OB dump of 10 ha area for the existing project shall be biologically reclaimed using a mix of native species. The ultimate slope of the dump shall not exceed 28 degree. Monitoring and management of reclaimed dumpsite shall continue until the vegetation in all the dumps becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional office located at Bhubaneshwar on a	OB removed during mining is being used for back filling. Work Order has been issued for 12 Ha plantation in FY 2018-19 on the stable OB dump area. The plantation shall be done by West Bengal Wasteland Development Corporation Limited which will biologically reclaim the dump site using a mix of native species.

	yearly basis.	
v.	<p>Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilised 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>Garland drains are present and the drains are cleared of debris before start of monsoon season as a part of our annual monsoon preparation program.</p> <p>Moreover, the pumped out mine water is passed through siltation tank followed by a pressure filter of 5000 GPH capacity catering to the water demands of nearby Amdiha and Mohanpur villages.</p>
vi.	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.	Garland drains are present to channelize the run-off during rainfalls and are de-silted every pre-monsoon.
vii.	Drills shall be wet operated only.	Drills are attached with water sprinkling arrangements for wet operation.
viii.	Controlled blasting shall be practiced with use of delay detonators and only between 12 Noon and 2 PM to minimise the impact of blasting on the nearby habitations. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.	Blasting is being done only in controlled manner with proper delay detonators. The blasting is scheduled only around 2.00pm. The siren alert system is also practiced for safety purposes. Suitable measures are being taken to control ground vibration and prevent generation of fly rocks and boulders. Vibration study is conducted by CMPDI as per requirement from time to time.
ix.	Water sprinkling system (mist spray type) to check fugitive emissions from crushing operations, conveyor system/ropeway, haulage roads, transfer points, etc. shall be installed and operated effectively at all times of operation.	Mobile water sprinklers have been provided for dust suppression at haul roads and coal transportation roads. Mist spray system is installed at crusher located at railway siding. Fixed water sprinklers are also installed at railway siding covering the whole length. The concentration of Particulate matter is within permissible limit. Copy of Ambient Air Quality Monitoring Report enclosed.
x.	An area not less than 85.41 ha shall be brought under afforestation which includes reclaimed topsoil dump (1 ha), external OB dump (20 ha), backfilled area (42 ha), along ML boundary, along roads & infrastructure, green belt (12 ha), danger zone, and vacant area (10.41 ha) within the lease (10.41 ha) and within the township by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.	<p>Tree plantation is being carried out in phased manner. 1200 nos. species like Neem, Sishu, etc are planted over plain land of 3 Ha land by West Bengal Wasteland Development Corporation Limited(WBWDCL),Govt. of West Bengal.</p> <p>Work order for another 12 Ha plantation in FY 2018-19 has been issued to WBWDCL, Govt. of West Bengal.</p>
xi.	A Progressive Mine Closure Plan shall be implemented by reclamation of quarry area of 91	The mine closure plan of Mohanpur OCP has been approved by company's competent

	ha of which 42 ha shall be backfilled and afforested by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. The balance 49 ha of decoaled void, which is being converted into a water reservoir, shall be gently sloped along the upper benches, terraced and reclaimed with plantation. The outer periphery of the water body shall be fenced.	authority in December'13. Progressive backfilling is being done as per approved Mine Closure Plan. Work order for 12 Ha plantation in FY 2018-19 has been issued to WBWDCL, Govt. of West Bengal.
xii.	The company shall not use groundwater for the mining operations.	Ground water is not being used for mining operations. Only mine water discharge is being utilized.
xiii.	ETP of adequate capacity for the expansion project shall also be provided for workshop and CHP wastewater.	Effluent from the workshop's HEMM washing platform is passed through Oil and grease trap and the final discharged water conform to the effluent standards. Monitoring report enclosed.
xiv.	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 check up for occupational diseases and hearing impairment, if any, through an agency such as NIOH, Ahmedabad within a period of two years and the results reported to this Ministry and to DGMS.	Periodic Medical Examination (PME) of each and every worker is done as per DGMS guidelines. Workers have undergone PME tests and no one identified with notified diseases. If any occupational diseases found then they will be sent for health check up at Regional Hospital Salanpur at Kalla/ referred to specialized agency/institution within the District/State.
xv.	For monitoring land use pattern and for post mining land use, a time series of landuse maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bhubaneswar.	Changes in the land use pattern are being monitored by satellite surveillance based on satellite imagery at every three years interval. Previous satellite imagery was done in the year 2016 and the next will be done in the year 2019.
xvi.	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted for approval to the Ministry of Environment & Forests RO, Bhubaneswar within 6 months of grant of this clearance letter.	The mine closure plan Mohanpur OCP has been approved by company's competent authority in December'13. The same is also communicated to the Ministry of Environment & Forests RO, Bhubaneswar.
B	General Conditions	
S. No.	Environmental Clearance Conditions (General)	Compliance Status
i.	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	No change has been made in the methodology of working and the scope of working.
ii.	No change in the calendar plan including excavation, quantum of mineral coal and waste shall be made.	No change in the calendar plan has been made.
iii.	Four ambient air quality monitoring stations shall be established in the core zone as well as in the	Regular Environmental monitoring is being carried out on quarterly basis by CMPDI,RI-1,

	buffer zone for monitoring the ambient air quality parameters. 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. In addition, heavy metals such as Hg, Pb, Cd, As, etc from the SPM/RSPM shall be monitored at least twice in a year. The data thereon recorded properly.	Asansol. Monitoring stations have been located in accordance with the direction of the wind. Location of station changes in summer and winter season according to the direction of wind and monitoring is done as per the condition meeting the norms at upstream and downwind direction. Monitoring report enclosed
iv.	Water spraying arrangement on haul roads, wagon loading, dump trucks (loading and unloading) points shall be provided and properly maintained.	Mobile water sprinklers have been provided for dust suppression at haul roads and coal transportation roads. The concentration of Particulate matter is within permissible limit. Copy of Ambient Air Quality Monitoring Report enclosed.
v.	Data on ambient air quality and heavy metals such as Hg, Pb, Cr, As, etc)) shall be regularly submitted to the Ministry including its Regional Office at Bhubaneshwar and to the State Pollution Control Board and the Central Pollution Control Board once in six months.	Ambient air quality being monitored quarterly and analysis report is being submitted once in six month to the Ministry, Regional Office at Bhubaneshwar and to the State Pollution Control Board and the Central Pollution Control Board. Copy of Ambient Air Quality Monitoring Report enclosed.
vi.	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.	Workers on pertinent activity are always being equipped with ear plugs/muffs.
vii.	Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, treated so as to conform 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 discharge water is collected in a settling tank which after settling discharged into the natural environment conforming to the effluent standards. Partly it passes through the pressure filter (capacity- 5000 GPH) for treatment and it is being utilized for domestic purposes. Most of the mine water is used for industrial purposes like HEMM washing, Haul road sprinkling, etc. we are aiming to attain zero water discharge by using all the water for internal purposes.
viii.	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.	Vehicles are checked for vehicle emission certificate for proper emission standards. Vehicles used for transporting coal are optimally loaded and covered with tarpaulin.
ix.	The environmental quality parameters shall be got analysed from a recognised environmental laboratory or shall be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.	Environmental Laboratory with latest equipment has been established at CMPDI, RI – I, Asansol. This lab is equipped with Atomic Absorption Spectrophotometer, weather monitoring system, BOD incubator, Photometer and other necessary equipment's. Quarterly monitoring report of Air, Water, and Noise& Groundwater level is prepared at above laboratory and sent to West Bengal pollution control Board with Environmental Statement (Form-V) & by Six

		monthly compliance reports to the MoEF regional office Bhubaneswar.
x.	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.	Protective wears are being supplied and used by workmen judiciously. Occupational health surveillance i. e. Periodic Health Examination (PME) is being done as per norms.
xi.	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.	A separate environmental management cell at Company HQ, headed by GM (Env), along with some executives has been set up. For management at mine level a cell is also functional headed by Nodal Officer (A senior level Executive) Environment, who reports to Area General Manger with unit nodal officer at mine level. GM (Env) and Area General Manager reports directly to Director (Technical) of the company. A well equipped laboratory has been set up at Regional Institute-I, CPMDIL, a sister concern of Coal India Limited.
xii.	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office at Bhubaneshwar.	The funds earmarked for environment protection measures are not diverted for other purpose.
xiii.	A copy of the clearance letter shall be marked to concerned Panchayat, Zila Parishad, Municipal Corporation/Urban Local Body, local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. The clearance letter shall also be displayed on the company's website.	Complied.
xiv.	A copy of the clearance letter shall also be sent to the Regional Office of the MOEF, the respective zonal offices of the CPCB and the SPCB. The concerned State Pollution Control Board shall display a copy of the clearance letter on their website. Copies shall also be displayed at District Industry Centre and Collector's Office/Tehsildar's Office for 30 days. A copy of the clearance letter may also be seen at the website of the Ministry of Environment & Forests at http://envfor.nic.in/ .	Copy of the clearance letter is available on the website of the Ministry of Environment & Forests at http://envfor.nic.in/ .
xv.	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	After receiving the EC letter, the same had been published in the Anandabazar Patrika and Telegraph within a week.

	environmental clearance.	
xvi.	A copy of the EC letter shall be uploaded on the company's website. The compliance status of environmental clearance conditions shall also be uploaded by the project authorities in their website so as to bring the same in the public domain and regularly updated at least once every six months. The monitoring data on environmental quality parameters such as air, water, noise and soil or critical sectoral parameters indicated for the project shall also be displayed at the entrance of the project premises and mines office and in corporate office and also regularly uploaded on the company's website.	<p>Website link for compliance letter and environmental monitoring reports:</p> <p>http://easterncoal.gov.in/notices/environment.html</p> <p>EC letter uploaded on company's website:</p> <p>http://www.easterncoal.gov.in/notices/cancel04022015.pdf</p>
xvii.	The project proponents shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data (both by hard copies and by E-mail) to the respective Regional Office of MOEF, respective Zonal Office of the CPCB and SPCB.	The six monthly compliance report is regularly communicated to MOEF, respective Zonal Office in Bhubaneswar. The present report is the compliance report from April 2018 to September 2018.
xviii.	The Regional Office of this Ministry located at Bhubaneshwar shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.	The project is always ready to co-operate with the Ministry whenever required.
xix.	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 and its subsequent amendments shall also be put on the company's website.	It is being complied with.

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FOR COMPANY USE ONLY RESTRICTED

The information given in this report is not to be communicated either directly or indirectly to the press or to any person not holding an official position in the CIL / GOVERNMENT.

**ENVIRONMENTAL MONITORING REPORT
OF
MOHANPUR OC PROJECT
(FOR THE MONTH OF AUGUST, 2018)
(SALANPUR AREA)**

Eastern Coalfields Limited



**Regional Institute-1
Asansol (WB)**

ENVIRONMENT MONITORING REPORT FOR MOHANPUR OC PROJECT

(For the Month of August, 2018)

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CHAPTER - I INTRODUCTION

1.0 The environmental monitoring has been carried out as per conditions laid down by MOEF&CC while granting environmental clearance to different projects. CMPDI has trained manpower and well equipped laboratory to carry out monitoring, analysis and R&D work in the field of environment.

Reports have prepared for submission to MoEFCC & SPCB and other statutory authorities.



CHAPTER-II

AMBIENT AIR QUALITY MONITORING

2.1 Location of sampling station and their rationale:

2.1.1 Ambient Air Quality Sampling Locations

I. Industrial Area Monitoring Location

i) Workshop of Mohanpur OCP (15A1): Industrial Area

The sampler was placed at Kalidaspur Colliery Integrated Building. This station was selected to assess the ambient air quality of Industrial area in the core zone where mining activities are in progress.

ii) Bonjemahari Railway Siding (15A4) : Industrial Area

The sampler was placed at GM Office of Kalidaspur Project. This station was selected to assess the ambient air quality of Industrial area in the core zone where mining activities are in progress.

II. Residential Area Monitoring Location

iii) Agent's Banglow (15A2): Residential Area

The sampler was placed at Kalidaspur Residential Colony Quarter. This station was selected to assess the ambient air quality of Residential Area in the core zone of Kalidaspur project.

iv) Salanpur Area Store (15A3): Residential Area

The sampler was placed at CISP Camp office. This site was selected to assess the present ambient air quality status in residential area of core zone.

2.2 Methodology of sampling and analysis

Parameters chosen for assessment of ambient air quality were Particulate Matter (PM₁₀), Fine Particulate Matter (PM_{2.5}), Sulphur Di-oxide (SO₂) and Nitrogen Oxides (NO_x). Respirable Dust Sampler (RDS) & Fine Dust Sampler (FDS) were used for sampling of PM₁₀ & gaseous pollutants and PM_{2.5} respectively. The samples were analysed in Environmental Laboratory of CMPDI, RI-I, Asansol.

2.3 Results & Interpretations

The results of Ambient Air Quality are presented in tabular form along with for each monitoring station. Sampling stations have been chosen keeping in view predominant wind direction and have been classified as Permanent, Pre monsoon (April – September) & Post monsoon (October – March) air sampling stations. The interpretations of different parameters are given below:

2.3.1 Ambient air quality

Particulate Matter (PM₁₀)

In Industrial area varies from 88.7 to 89.8 $\mu\text{g}/\text{m}^3$ & in Residential area from 80.4 to 81.5 $\mu\text{g}/\text{m}^3$.

Fine Particulate Matter (PM_{2.5})

In Industrial area from 32.4 to 32.7 $\mu\text{g}/\text{m}^3$ & in Residential area from 29.5 to 30.1 $\mu\text{g}/\text{m}^3$

Sulphur Dioxide (SO₂):

In Industrial area below 10 $\mu\text{g}/\text{m}^3$ & in Residential area below 10 $\mu\text{g}/\text{m}^3$.

Oxides of Nitrogen (NO_x):

In Industrial area varies from 132.2 to 13.5 $\mu\text{g}/\text{m}^3$ & in Residential area from 12.8 to 13.3 $\mu\text{g}/\text{m}^3$.

AMBIENT AIR QUALITY DATA

Name of the Company: **Eastern Coalfield Limited**

Year : **2018**

Name of the Project : **Mohanpur, Salanpur Area**

Month : **August.**

Industrial Area

1st fortnight

Station Code	Station Name	Date of Sampling	Parameters			
			PM ₁₀	PM _{2.5}	SO ₂	NO _x
15A1	Workshop of Mohanpur OCP	13-Aug-18	88.7	32.4	<10.0	13.2
15A4	Bonjemahari Railway Siding	13-Aug-18	89.8	32.7	<10.0	13.5

2nd fortnight

Station Code	Station Name	Date of Sampling	Parameters			
			PM ₁₀	PM _{2.5}	SO ₂	NO _x
15A1	Workshop of Mohanpur OCP	24-Aug-18	87.5	31.6	<10.0	12.7
15A4	Bonjemahari Railway Siding	24-Aug-18	89.3	31.9	<10.0	13.3

Residential Area

1st fortnight

Station Code	Station Name	Date of Sampling	Parameters			
			PM ₁₀	PM _{2.5}	SO ₂	NO _x
15A2	Agent's Banglow	13-Aug-18	81.5	30.1	<10.0	13.3
15A3	Salanpur Area Store	13-Aug-18	80.4	29.5	<10.0	12.8

2nd fortnight

Station Code	Station Name	Date of Sampling	Parameters			
			PM ₁₀	PM _{2.5}	SO ₂	NO _x
15A2	Agent's Banglow	24-Aug-18	81.2	29.8	<10.0	13.0
15A3	Salanpur Area Store	24-Aug-18	79.6	28.7	<10.0	12.2

National Ambient Air Quality Standards (NAAQS)

National Ambient Air Quality Standards (NAAQS) for industrial, residential and rural areas for 24 hours samples:

Pollutant	PM ₁₀	PM _{2.5}	SO ₂	NO _x
Concentration	100.0	60.0	80.0	80.0

➤ All values are expressed in microgram per cubic meter.

CHAPTER – III**WATER QUALITY MONITORING****3.1 Location of sampling sites and their rationale****i) Mine discharge water of Mohanpur OC Project (15MW1)**

This location has been selected to monitor the discharge quality of Mine effluent use for sparkling water on road in mine area and nearby public road where coal transport activities are in progress. Remaining effluent discharge in natural stream after sedimentation tank.

3.2 Methodology of sampling and analysis

Water samples were collected as per standard practice. The effluent samples were collected and analysed for five parameters on fortnightly basis and all parameters on Half-yearly basis. The Ground water samples were collected and analysed for all parameters on annually basis. Parameters like pH and Free Residual Chlorine were analysed on-site while collecting the samples. There after the samples were preserved and analysed at the field laboratory located at RI-I Office campus.

3.3 Results & Interpretations

The results are given in tabular form along with the applicable standards. Results are compared with General Standards for Discharge of Effluent (Schedule VI) in case of effluent/mine water sample and compared with IS.10500: 2012 in case of drinking water sample. Results show that most of the parameters are within the permissible limits.

Mohanpur OC Project

CMPDI

WATER QUALITY DATA (Effluent Water)

Name of the Company: **Eastern Coalfield Limited**Year : **2018.**Name of the Project : **Mohanpur, Salanpur Area**Month: **August.**Name of the Stations & Code : **1. 14MW1- Mine discharge water of Mohanpur**

First Fortnight data

Sl. No.	Parameters	Sampling station & sampling date	General Standards for Discharge of Effluent (Schedule VI)	Method of Detection	Detection Limit
		15MW1 6-Aug-18			
1	pH	7.41	5.5 - 9.0	Electrometric	0.01
2	TSS	20	100 (Max)	Gravimetric Method	5.0
3	TDS	800	Not specified	Gravimetric Method	1.0
4	Oil & Grease	<2.0	10 (Max)	Partition Gravimetric	2.0
5	COD	24	250 (Max)	Closed Reflux	4.0

Second Fortnight data

Sl. No.	Parameters	Sampling station & sampling date	General Standards for Discharge of Effluent (Schedule VI)	Method of Detection	Detection Limit
		15MW1 24-Aug-18			
1	pH	7.58	5.5 - 9.0	Electrometric	0.01
2	TSS	16	100 (Max)	Gravimetric Method	5.0
3	TDS	826	Not specified	Gravimetric Method	1.0
4	Oil & Grease	<2.0	10 (Max)	Partition Gravimetric	2.0
5	COD	20	250 (Max)	Closed Reflux	4.0

All values are expressed in mg/L unless specified.

Well water level for the month of August, 2018

Sl. No.	Station Code	Location of Dug well	Date of measurement	Water level (in Meters) Below Ground Level
1	15GWL1	Dugwell at Mohanpur Village	10-Aug-18	1.10
2	15GWL2	Dugwell at Amdiha Village	10-Aug-18	5.60
3	15GWL3	Dugwell at Amdiha More Village	10-Aug-18	2.65
4	15GWL4	Dugwell at Amdiha Primary School	10-Aug-18	6.80
5	15GWL5	Dugwell at Baliapur Kalimandir	10-Aug-18	1.50

CHAPTER - IV

NOISE LEVEL QUALITY MONITORING

4.1 Location of sampling sites and their rationale

- i) **Workshop of Mohanpur OCP (15N1)**
Noise level meter placed at Workshop to assess the impact of noise level in workshop office where workshop activity are in progress.
- ii) **Agent's Banglow (15N2)**
Noise level meter placed at Agent's Banglow to assess the noise level in colony area.
- iii) **Salanpur Area Store (15N3)**
Noise level meter placed at Salanpur area store to assess the noise level in store office.
- iv) **Bonjemahari Railway Siding (15N4)**
Noise level meter placed at Bonjemahari Railway Siding to assess the noise level in siding where road transport for coal transport is in progress.

4.2 Methodology of sampling and analysis

Noise level monitoring is being carried out on quarterly basis. Noise level measurements were taken in form of 'Leq' using Integrated Data Logging Sound Level Meter (Make: RION, Model: NL-52). Noise levels were measured for about one hour. Noise levels were measured in Decibels, 'A' weighted average, i.e. dB(A).

4.3 Results & Interpretations

Ambient noise levels were recorded during day time only. The observed values were compared with standards prescribed in NAAQS, 2009 in respect of noise for Industrial, Commercial and residential areas. The observed values at all the monitoring locations are found to be within permissible limits. The monitored values are presented in tabular form along with the applicable standard permissible limits.

Mohanpur OC Project

CMPDI

NOISE LEVEL DATA

Name of the Company: **Eastern Coalfield Limited**

Year : **2018.**

Name of the Project: **Mohanpur, Salanpur Area**

Month. : **August.**

Name of the Stations & Code : 1. 15N1- Workshop of Mohanpur
2. 15N2- Agent's Banglow
3. 15N3- Salanpur Area Store
4. 15N4- Bonjemahari Rly Siding

Sl. No.	Station Code	Station Name	Measurement Details			Permissible Limit of Noise level in dB(A)
			Date	Duration (In Hrs.)	Noise level dB(A) Leq	
1	15N1	Workshop of Mohanpur OCP	13-Aug-18	11.00 to 12.00	67.3	75
2	15N2	Agent's Banglow	13-Aug-18	8.00 to 9.00	58.7	75
3	15N3	Salanpur Area Store	13-Aug-18	9.30 to 10.30	66.4	75
4	15N4	Bonjemahari Railway Siding	13-Aug-18	12.30 to 13.30	60.8	75

National Ambient Air Quality Standards (NAAQS) in respect of noise for Industrial, commercial and residential areas.

Station Category	Limits for noise (Leq dB (A))	
	Day Time: 6.00 AM to 10.00 PM	Night Time: 10.00 PM to 6.00 AM.
Industrial	75.0	70.0
Commercial	65.0	55.0
Residential	55.0	45.0