

स्टील् अथॉरिटी ऑफ़ इंडिया लिमिटेड STEEL AUTHORITY OF INDIA LIMITED कोलियरीज डिवीज़न, चासनाला COLLIERIES DIVISION, CHASNALLA

Date: 31.05.2018

Ref: GIM | TASRA | 18 | 56

To,
The Additional Director(s),
El Division,
Ministry of Environment, Forest and Climate Change,
Paryavaran Bhawan, CGO Complex, Lodhi Road,
New Delhi - 110003

Sub: Six Monthly Status of Compliance to the Conditions stipulated in the EC granted by MoEF and Climate Change of Pit Head Coking Coal Washery of 3.5 MTPA (EC granted vide letter no. J-11015/365/2009-IA.II(M) pt dated 30th March 2017) for the period ending 31st March 2018.

Dear Sir.

Please find enclosed herewith the updated six monthly compliance report for the period ending 31st March 2018 with respect to the conditions stipulated in the Environmental Clearance granted by Ministry of Environment, Forest and Climate Change, New Delhi vide letter no. J-11015/365/2009-IA.II(M) pt dated 30th March 2017 for the Pit Head Coking Coal Washery of 3.5 MTPA of M/s Steel Authority of India Limited for your kind perusal.

Hard Copy and Soft Copy of the report is enclosed.

Thanking you,

As above.

Cc:

Encl:

 The Additional Director(s)
 Ministry of Environment Forest and Climate Change Regional Office, Bunglow No. A-2, Shyamali Colony, Doranda - 834002, Ranchi (Jharkhand)

The Member Secretary
 Central Pollution Control Board,
 Parivesh Bhawan, CBD-cum-Office Complex,
 East Arjun Nagar, Delhi - 110032

The Member Secretary
 Jharkhand State Pollution Control Board,
 H.E.C. Dhurwa , Ranchi - 834004 (Jharkhand)

Yours taithfully

GM (Tasra)

 J.S.P.C.B Regional Office,

Dhanbad (Jharkhand)

Ref:

Date:-

# Status of Compliance to the Condition stipulated in the Environmental Clearance granted by MoEF for Pit Head Coking Coal Washery (3.5 MTPA) for the period of October-2017 to March-2018 (EC granted vide Reference No. J-11015/365/2009-IA.II(M) pt. dated 30<sup>th</sup> March, 2017

## A. Specific Conditions:-

Condt. No.	Conditions Imposed	Status on March 2018		
1	The Technology for washery shall be as per the project report submitted and presented to the Expert Appraisal Committee.	We will follow the desired technolog for washery as per the project report submitted to EAC, MOEF&CC.		
2	The Technology so chosen for the washery should confirm to 'Zero Liquid Discharge'.	The technology for washery confirms the concept of 'Zero Liquid Discharge' and will also follow the same technology.		
3	Long Distance Belt Conveyor (LDBC) system for transportation of raw coal from Tasra Coal Pit to the proposed washery covering a length of 2 Km with water sprinkling arrangement at all transfer points, shall be installed	Transportation of Raw Coal from proposed Coal Handling Plant (CHP) will be done through Long Distance Belt Conveyor (LDBC) system, covering a length of 2 Km with water sprinkling arrangements installed at all transfer points.  The raw coal from the Tasra Pit will be moved through Haul Road upto CHP as per EIA of Tasra Coal Mine, and then from there it will be moved to proposed washery through LDBC as per EIA of Pit Head Coking Coal Washery. The same has been communicated to MoEF and Climate Change for modification as per our letter no. GM/TASRA/41 dated 20.05.2017. (Attached as Annexure – 1)		
4	Thick green belt of 35-45 m width to be provided around the washery to mitigate/check the dust pollution. A 3-tire avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads.	the vacant areas, storage yards, loading/transfer points and also along internal/main approach roads.		
5	Transport of washed coals and middlings shall be ensured by rail with wagon loading through silo.	As specified, the two product of the proposed washery i.e. Washed Coa (Clean Coal) and the Secondary Product will be transported by rail with wagor loading through Silo.		



6	Disposal of washery rejects shall be in accordance with the extant policy and guidelines, and environment friendly.	According to the technology of the proposed washery only two products will be generated i.e. Clean Coal and Secondary Product. No rejects will be generated during the operation.
7	Waste Water shall be effectively treated and recycled completely, either for washery or maintenance of green belt around the plant.	The generated waste water will be effectively treated and recycled completely for reuse in washery operation through establishment of ETP and treated water will be used for maintenance of green belt around the plant.
8	The assurances given during the Public Hearing and as per the Action Plan formulated by the project proponent should be implemented.	The assurances given during the Public Hearing is being implemented in phased manner as per the Action Plan formulated.
9	Hoppers of the coal crushing unit and washery shall be fitted with high efficiency bag filters or mist spray water sprinkling system and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.	Hoppers of the coal crushing unit and washery will be fitted with high efficiency bag filters or mist spray water sprinkling system and will operate effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
10	All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned with mechanical sweepers.	All approach roads will be black topped and internal roads will be concreted. The roads will be regularly cleaned with mechanical sweepers.
11	Records of quantum and ash content of raw coal being washed, and clean coal and coal rejects produced from every batch of washing shall be maintained and details thereof be made available to Ministry whenever directed.	All the records will be maintained properly and will be made available to Ministry whenever directed.
12	No groundwater shall be used for the Plant Operations. Any additional water requirement envisaged shall be obtained by recycle/reuse of treated effluent and from rainwater harvesting measures.	No ground water will be used for the Plant Operation. The treated mine water from Tasra OCP will be used as the major water source for plant operation. Any additional water requirement will be obtained by recycle/reuse of treated effluent and from rainwater harvesting measures. Surplus (if any) Mining water from



		Chasnalla Colliery will also be diverted
		for use in proposed Washery.
13	Socio-economic and welfare measures for the local communities for the adjoining villages shall be implemented under CSR. Activities under CSR activities to be undertaken for the adjoining villages shall be identified in consultation with the local authorities, the details of status of implementation of CSR and expenditure there on which should be annually updated on the company website.	Noted.  We will abide by the said condition.
14	Heavy metal content in raw coal, and washed coal shall be analyzed once in a year and records maintained thereof.	vve vviii dalae ay are ear.

## B. General Conditions:-

		Status on March 2018
Condt. No.	Conditions Imposed	We will abide by the said condition and
1	No change in technology and scope of working shall be made without prior approval of the Ministry of Environment, Forests and Climate Change.	there will be no change in the technology and scope of working. If any the same will be intimated to your good office.
2	Data on ambient air quality (PM10, PM 25, SO2 and NOX) and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly submitted to Regional Office of the Ministry and to the State Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognized under the EPA rules, 1986 shall be furnished as part of compliance report once in a year.	
3	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in noisy areas like crushers, pumps, conveyors, bath, cyclones etc shall be provided with ear plugs/muffs.	like crushers, pumps, conveyors, bath, cyclones etc. will be provided with ear plugs/muffs.
4	Industrial waste water shall be properly collected and treated in sedimentation ponds and treated water shall be recycled in washing circuit and other usages. No effluent shall be discharge to surface water bodies.	treated and recycled completely for reuse in washery. Operation and



		surface water bodies.
5	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.	Vehicular emissions will be kept under control and regularly monitored. Vehicles used for transporting the mineral will be covered with tarpaulins and optimally loaded.
6	Monitoring of effluent quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analyzed through a laboratory recognized under EPA Rules, 1986.	Presently the project is not in operation, however when operation gets started, Monitoring of effluent quality parameters will be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analyzed through a laboratory recognized under EPA Rules, 1986.
7	Personnel (Departmental, Outsourced and casual if any) 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.	Personnel working in dusty areas will be provided with protective respiratory devices and adequate training and information on safety and health aspects will be imparted to them.
8	Occupational Health Surveillance Programme of all workers (Departmental, Outsourced and casual if any) shall be undertaken periodically to observe any ill effect due to exposure to dust and to take corrective measures, if needed and records maintained thereof. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by the company while outsourcing.	The project is carrying out the occupational health surveillance program of the employees engaged in the mines. The same practice is proposed to be followed in the Coal Washery, when it come under operation.
9	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.	Separate Environmental Management Department has been set up and headed by Asst. General Manager, who reports directly to the Head of the Mine. In addition to this, SAIL is having a separate Corporate Environment Management Division (EMD) at Kolkata under the control of Executive Director, who facilitates in environmental management of all SAIL units.

	The fullus carriarited for	We are abiding the said condition.
	protection measures shall not be diverted for	
10	other purpose. Year-wise expenditure shall be	
	reported to this Ministry and its concerned	
	Regional Office.	Al Lorentiad
	The project authorities shall advertise at least in	Already Complied
	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	
11	informing that the project has been accorded	
	environmental clearance and a copy of the	
	clearance letter is available with the State	
	Pollution control Board and may also be seen at	
	the website of the Ministry of Environment,	
	Forests & Climate Change at http://envfor.nic.in.	Alexander Complied
	A copy of the environmental clearance letter	Already Complied
	shall be marked to concern Panchayat/ Zila	
	Parishad, Municipal Corporation or Urban local	
12	body and local NGO, if any, from whom any	
12	suggestion/representation has been received	
	while processing the proposal. A copy of the	
	clearance letter shall also be displayed on	
	company's website.	Already Complied
	An Electronic copy of the environmental	Alleady Complica
	clearance letter shall be forwarded to State	
13	Pollution Control Board, Regional Office of the	
13	Ministry, District Industry Sector and Collector's	
	Office/Tehsildar's Office for its display in public	
	domain for 30 days.	Noted
	The clearance letter shall be uploaded on the	Noted
	company's website. The compliance status of	
	The Subulated Citylioninistics.	
	conditions shall also be uploaded by the project	
	authorities on their website and updated at	
14	least once every six months so as to bring the	
	same in public domain. The monitoring data of	
	environmental quality parameter (air, water,	
	noise and soil) and critical pollutant such as	
	PM10, PM25, SO2 and NO (ambient) and critical	
	sectoral parameters shall also be displayed at	
	the entrance of the project premises.  The project proponent shall submit six monthly	We are abiding the said condition.
15	The project proponent shall submit six monthly	-



		T
	compliance reports on status of compliance of the stipulated environmental clearance	
	conditions (both in hard copy and in e-mail) to	
	the respective Regional Office of the Ministry	
	and the SPCB.	
16	The Regional Office of this Ministry located in	We will extend all our cooperation
	the Region shall monitor compliance of the	during any such inspections by the
	stipulated conditions. The Project authorities	Authority.
	shall extend full cooperation to the office(s) of	
	the Regional Office by furnishing the requisite	
	data/information/monitoring reports.	
17	The environmental statement for each financial	Noted.
	year ending 31 March in Form —V is mandated	
	to be submitted by the project proponent for	
	the concerned State Pollution Control Board as	
	prescribed under the 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.	





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Date: 20/5/2017

Ref.No. Gm/TASRA/41

To,
The Secretary,
Ministry of Environment, Forest and Climate Change,
Indira Paryavaran Bhawan,
Jorbagh Road, Aliganj
New Delhi-110003

Kind Attention: Director, IA - II (Coal Mining) Division,

Sub.: Pit Head Coking Coal Washery of 3.5 MTPA of M/s Steel Authority of India Limited. in an area of 20 ha located in Tasra Coal Block of Jharia Coalfields, District Dhanbad, Jharkhand – Environmental Clearance reg..

Ref.: No. J-11015/365/2009-IA II(M) pt, dated 30.03.2017

Sir,

At the outset we thank you for granting Environmental Clearance of Pit Head Coking Coal Washery of 3.5 MTPA of M/s Steel Authority of India Limited over an area of 20 ha located in Tasra Coal Block of Jharia Coalfields, District Dhanbad, Jharkhand.

In this regard, it is submitted that MoEF granted Environmental Clearance vide No. J-11015/122.2007-IA.II(M) dated 13.10.2009 for Tasra Coal Mining Project (4MTPA) of M/s Steel Authority of India Limited stipulating a condition {Specific Condition (ii)} for obtaining Environmental Clearance for Coal Washery of 3.5 MTPA capacity. Accordingly, application for the same was made and Environmental Clearance has been granted for Pit Head Coal Washery of 3.5 MTPA vide No. J-11015/365/2009-IA II(M) pt, dated 30.03.2017. Copy of the above stated Environmental Clearances granted by MoEFCC for the Tasra Coal Mining Project and Coal Washery are collectively enclosed at Annexure – 1 for ready reference.

In this regard, as per the envisaged plan it was originally envisaged that ROM coal produced from Tasra Block will be transported by dumpers to Coal Handling Plant (CHP) of Tasra Block this has been indicated in Chapter II of the approved EIA/EMP Report at para no. 2.7.3 (page no. 38), wherein it is clearly mentioned that the Coal will be transported upto the receiving pit through the haul road along southern limb of the pit. Copy of the relevant page (Page – 38) from EIA Report is placed at Annexure – 2.

Contd.. p/2



स्टील अथॉरिटी ऑफ़ इंडिया लिमिटेड STEEL AUTHORITY OF INDIA LIMITED कोलियरीज डिवीजन, चासनाला COLLIERIES DIVISION, CHASNALLA

2 -

Further in page 47 para 2.9.1 it is mentioned that ROM coal produced in Tasra Block will be crushed down to 75 mm in the proposed CHP and stored in a 5000 t bunker at CHP end. Crushed -75 mm raw coal will be reclaimed and conveyed to truck loading hoppers located at CHP end for onward transportation by 20/35t tipping trucks to raw coal receiving pit at washery end. Copy of the relevant page (Page - 47) from EIA Report is placed at Annexure - 3.

However, in order to minimize the dust load on the region, as directed by EAC, MoEFCC while presenting the proposal for Coal Washery, it was agreed upon that the crushed coal from CHP would be transported to the proposed washery through Long Distance Belt Conveyor System (LDBC) covering a length of 2 Km. The same was communicated while clarifying the observation of EAC vide our letter No GM/25-PC/134 dated 05.09.16. Accordingly, installation of LDBC for transportation of coal from Tasra Coal Pit to proposed washery covering a length of 2 km has been stipulated in the EC grant order of Coal Washery as a specific condition {A(iii) }.

We would like to bring your kind attention to the preamble of the EC granted for Coal Washery vide order No. J-11015/365/2009-IA II(M) pt, dated 30.03.2017 at Transportation: Coal transportation in pit by covered conveyor from in pit to pit head coal handling plant, Surface to siding by covered conveyor belt to Pre-Weigh Bin and loading at siding by rail". This is in contradiction to the plan envisaged and approved for transportation of coal from mine pit to Coal Handling Plant as per the EC grant order No J-11015/122.2007-IA.II(M) dated 13.10.2009 of Tasra Coal Mining Project (4MTPA).

It is therefore, requested to issue suitable correction in para 3(xii) of the EC grant order of Coal Washery (3.5 MTPA) dated 30.03.2017 may be corrected as ""3(xii) Transportation: Coal transportation in pit, from in pit to coal handling plant through haul road, coal handling plant to coal washery by covered conveyor belt to Pre-Weigh Bin and loading at siding by rail" in line with the EC grant order of the Tasra Coal Mining Pit (4 MTPA).

Thanking you,

Yours faithfully,

Asir Proli-General Manager (C&T)

Encl.: As stated above.

Collieries Division, Chasnalla, Dhanbad, Jharkhand-828135, Telephone: +91-326-2385-001, 2385-002; Fax: +91-2385-003, email: gmchasnalla@gmail.com, website: www.sail.co.in कोलियरीज डिवीज़न, चासनाला, धनवाद, झारखण्ड-828135,दूरभाष: +91-326-2385-001, 2385-002; फैक्स: +91-2385-003, ईमेल: gmchasnalla@gmail.com, वेबसाइट: www.sail.co.in







ISO 9001/14001/OHSAS 18001 Acc. No.- M31112041N

## **Environmental Monitoring, Testing and Services**

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email: etslab2012@gmail.com | Website: www.etslab.asia

Ph.: 9811736063, 9911516076

**24.0 HOURS** 

### TEST REPORT

TEST REPORT NO: ETS/46B-22/10/2017

**DATE OF REPORT :28-10-2017** 

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S. STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

Date of Sampling

23-10-2017

**Analysis Start Date** 

26-10-2017

Analysis End Date

27-10-2017

**Duration Of Sampling** 

23-10-2017

Sample ID No Sampling Done By 46B-22/10

ETS STAFF

Sampling Location

CHIPABAD, AAQ-CWBZ1

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

Weather Condition

CLEAR

Ambient Temperature

24-10-2017

: 31.0 °C

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	74.2	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	µg/m³	41.5	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	h8/m,	18.0	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Carbon Monoxide (CO)	mg/m³	0.75	For 8 Hrs.=02 / For 1 Hrs.=04	IS: 5182 (Part-10)
5.	Nitrogen Dioxide (NO2)	h8/W <sub>3</sub>	28.0	For 24 Hrs.=80	IS: 5182 (Part-6)
6,	Lead (Pb)	μg/m³	N.D.	For 24 Hrs.=1.0	IS: 5182 (Part-22)
7.	Ozone (O3)	μg/m³	24.0	For 8 Hrs.=100/ For 1 Hrs.=180	IS: 5182 (Part-9)
8.	Ammonia (NH3)	µg/m³	NIL	For 24 Hrs.=400	Indophenol Blue Method
9.	Benzo (a) Pyrine (BaP)	ng/m³	N.D.	For Annual=01	IS: 5182 (Part-12)
10.	Nickel (Ni)	ng/m³	N.D.	For Annual=20	IS: 5182 (Part-22)
11.	Benzene (C6H6)	μg/m³	1.35	For 24 Hrs.=5	IS: 5182 (Part-11)
12.	Arsenic (As)	ng/m³	N.D.	For Annual=06	IS: 5182 (Part-22)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

H SERVICES

Format no ETS /LAB/TR-01 Issue No 04 dt 01/06/2016 Rev No 03 dt 01/06/2016

For EnvironTech Services

AUTHORIZED SIGNATORY Md. Humraj

Dy. Quality manager

### Note:-

- 1. This test report shall not be used in any advertising media or as evidence in the court of Law without prior written permission of the laboratory.
- 2. The samples received shall be destroyed after one month from the date of test report issued. 3. The results indicated only refer to the tested samples and listed applicable parameters.
- 4. Our liability is limited to invoice value only.



An Environmental Analytical Laboratory



ISO 9001/14001/OHSAS 18001 Acc. No.- M31112041N

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email: etslab2012@gmail.com | Website: www.etslab.asia

Ph.: 9811736063, 9911516076

### TEST REPORT

TEST REPORT NO: ETS/46B-23/10/2017

**DATE OF REPORT: 28-10-2017** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

23-10-2017

**Analysis Start Date** 

26-10-2017

Analysis End Date

27-10-2017

**Duration Of Sampling** 

23-10-2017

24-10-2017

24 0 HOURS

Sample ID No

46B-23/10

Sampling Done By

ETS STAFF

Sampling Location

SANTHLDIH, AAQ-CWBZ2

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

Weather Condition

CLEAR

**Ambient Temperature** 

: 32.0 °C

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	71.5	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	µg/m³	34,3	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	ha/m <sub>3</sub>	18.2	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Carbon Monoxide (CO)	mg/m <sup>3</sup>	0.68	For 8 Hrs.=02 / For 1 Hrs.=04	IS: 5182 (Part-10)
5.	Nitrogen Dioxide (NO2)	μg/m³	24.2	For 24 Hrs.=80	IS: 5182 (Part-6)
6.	Lead (Pb)	µg/m³	N.D.	For 24 Hrs.=1.0	IS: 5182 (Part-22)
7.	Ozone (O3)	µg/m³	28.0	For 8 Hrs.=100/ For 1 Hrs.=180	IS: 5182 (Part-9)
8.	Ammonia (NH3)	µg/m³	NIL	For 24 Hrs.=400	Indophenol Blue Method
9.	Benzo (a) Pyrine (BaP)	ng/m³	N.D.	For Annual=01	IS: 5182 (Part-12)
10.	Nickel (Ni)	ng/m³	N.D.	For Annual=20	IS: 5182 (Part-22)
11.	Benzene (C6H6)	µg/m³	1.54	For 24 Hrs.=5	IS: 5182 (Part-11)
12.	Arsenic (As)	ng/m <sup>3</sup>	N.D.	For Annual=06	IS: 5182 (Part-22)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1



CH SERVICES

For EnvironTech Services

ZED SIGNATORY Md. Humraj

Dy. Quality manager

Format no ETS /LAB/TR-01 Issue No 04 dt 01/06/2016 Rev No 03 dt 01/06/2016

Note:-

1. This test report shall not be used in any advertising media or as evidence in the court of Law without prior written permission of the laboratory.

2. The samples received shall be destroyed after one month from the date of test report issued.

3. The results indicated only refer to the tested samples and listed applicable parameters.



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Acc. No.- M31112041N

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| Ph.: 9811736063, 9911516076

**24.0 HOURS** 

email: etslab2012@gmail.com | Website: www.etslab.asia TEST REPORT

TEST REPORT NO: ETS/46B-20/10/2017

**DATE OF REPORT :28-10-2017** 

AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

19-10-2017

**Analysis Start Date** 

22-10-2017

Analysis End Date

23-10-2017

**Duration Of Sampling** 

19-10-2017 To

Sample ID No

46B-20/10

Sampling Done By

ETS STAFF

Sampling Location

SUDAMDIH, AAQ-CWCZ3

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

Weather Condition

CLEAR

**Ambient Temperature** 

20-10-2017

: 30.0

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	μg/m³	78.2	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	μg/m³	44.1	For 24 Hrs,=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	17.5	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Carbon Monoxide (CO)	mg/m <sup>3</sup>	0.58	For 8 Hrs.=02 / For 1 Hrs.=04	IS: 5182 (Part-10)
5.	Nitrogen Dioxide (NO2)	μg/m³	25.2	For 24 Hrs.=80	IS: 5182 (Part-6)
6.	Lead (Pb)	µg/m³	N.D.	For 24 Hrs.=1.0	IS: 5182 (Part-22)
7.	Ozone (O3)	μg/m³	38.0	For 8 Hrs.=100/ For 1 Hrs.=180	IS: 5182 (Part-9)
8.	Ammonia (NH3)	μg/m³	NIL	For 24 Hrs.=400	Indophenol Blue Method
9.	Benzo (a) Pyrine (BaP)	ng/m³	N.D.	For Annual=01	IS: 5182 (Part-12)
10.	Nickel (Ni)	ng/m³	N.D.	For Annual=20	IS: 5182 (Part-22)
11.	Benzene (C6H6)	µg/m³	1.55	For 24 Hrs.=5	IS: 5182 (Part-11)
12.	Arsenic (As)	ng/m³	N.D.	For Annual=06	IS: 5182 (Part-22)

\*\*\*\*End of Test Report\*\*\*

Page 1 of 1

H SERVICES

For Enviro-Tech, Services

Dy. Quality manager

Format no ETS /LAB/TR-01 Issue No 04 dt 01/06/2016 Rev No 03 dt 01/06/2016

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An Environmental Analytical Laboratory



ISO 9001/14001/OHSAS 18001

Acc. No. - M31112041N



**Environmental Monitoring, Testing and Services** 

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G-232, M.G. Road Industrial Area, Hapur-Ghaziabad. (U.P.)-201015

TEST REPORT

TEST REPORT NO: ETS/46B-21/10/2017

email: etslab2012@gmail.com | Website: www.etslab.asia

**DATE OF REPORT :28-10-2017** 

AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

Date of Sampling

19-10-2017

**Analysis Start Date** 

22-10-2017

Analysis End Date

23-10-2017

**Duration Of Sampling** 

19-10-2017

24.0 HOURS

Ph.: 9811736063, 9911516076

Sample ID No

46B-21/10

Sampling Done By

ETS STAFF

Sampling Location

RANGMATI, AAQ-CWCZ4

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height Weather Condition

: 3.5 mtr. : CLEAR

(From Ground)

Ambient Temperature

20-10-2017

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	73.5	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	µg/m³	38.0	For 24 Hrs.=60	Gravimetric Method
Э.	Sulphur Dioxide (SO2)	µg/m³	15.0	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Carbon Monoxide (CO)	mg/m³	0.68	For 8 Hrs.=02 / For 1 Hrs.=04	IS: 5182 (Part-10)
5.	Nitrogen Dioxide (NO2)	μg/m³	26.5	For 24 Hrs.=80	IS: 5182 (Part-6)
6.	Lead (Pb)	µg/m³	N.D.	For 24 Hrs.=1.0	IS: 5182 (Part-22)
7.	Ozone (O3)	hã/m²	26.5	For 8 Hrs.=100/ For 1 Hrs.=180	IS: 5182 (Part-9)
8.	Ammonia (NH3)	µg/m³	NIL	For 24 Hrs.=400	Indophenol Blue Method
9.	Benzo (a) Pyrine (BaP)	ng/m³	N.D.	For Annual=01	IS: 5182 (Part-12)
10.	Nickel (Ni)	ng/m³	N.D.	For Annual=20	IS: 5182 (Part-22)
11.	Benzene (C6H6)	µg/m³	1,35	For 24 Hrs.=5	IS: 5182 (Part-11)
12.	Arsenic (As)	ng/m³	N.D.	For Annual=06	IS: 5182 (Part-22)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

H SERVICES

Format no ETS /LAB/TR-01 issue No 04 dt 01/06/2016 Rev No 03 dt 01/06/2016

For Enviro-Tech Services

UTHORIZED SIGNATORY Md. Humraj

Dy. Quality manager

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An Environmental Analytical Laboratory



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Ph.: 9811736063, 9911516076 email: etslab2012@gmail.com | Website: www.etslab.asia

### TEST REPORT

TEST REPORT NO: ETS/46B-18/10/2017

**DATE OF REPORT: 28-10-2017** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

Date of Sampling

16-10-2017

**Analysis Start Date** 

19-10-2017

**Analysis End Date** 

20-10-2017

**Duration Of Sampling** 

16-10-2017

Sample ID No

46B-18/10

Sampling Done By

Sampling Location

ETS STAFF PROPOSED SITE, AAQ-CWCZ1

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

: 3.5 mtr.

(From Ground)

17-10-2017

24.0 HOURS

er Condition	: CLEAR		Ambient Temperature	: 28.0 °C
Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
Particulate Matter (PM10)	ha/w,	91.5	For 24 Hrs.=100	IS: 5182 (Part-23)
Particulate Matter (PM2.5)	µg/m²	49,4	For 24 Hrs.=60	Gravimetric Method
Sulphur Dioxide (602)	µg/m³	15.0	For 24 Hrs.=80	IS: 5182 (Part-2)
Carbon Monoxide (CO)	mg/m <sup>3</sup>	0.58	For 8 Hrs.=02 / For 1 Hrs.=04	IS: 5182 (Part-10)
Nitrogen Dioxide (NO2)	µg/m³	22.4	For 24 Hrs.=80	IS: 5182 (Part-6)
Lead (Pb)	μg/m³	N.D.	For 24 Hrs.=1.0	IS: 5182 (Part-22)
Ozone (O3)	µg/m³	22.3	For 8 Hrs.=100/ For 1 Hrs.=180	IS: 5182 (Part-9)
Ammonia (NH3)	µg/m³	NIL	For 24 Hrs.=400	Indophenol Blue Method
Benzo (a) Pyrine (BaP)	ng/m³	N.D.	For Annual=01	IS: 5182 (Part-12)
Nickel (Ni)	ng/m³	N.D.	For Annual=20	IS: 5182 (Part-22)
Benzene (C6H6)	µg/m³	1.22	For 24 Hrs.=5	IS: 5182 (Part-11)
Arsenic (As)	ng/m³	N.D.	For Annual=06	IS: 5182 (Part-22)
	Test Parameters  Particulate Matter (PM10)  Particulate Matter (PM2 5)  Sulphur Dioxide (SO2)  Carbon Monoxide (CO)  Nitrogen Dioxide (NO2)  Lead (Pb)  Ozone (O3)  Ammonia (NH3)  Benzo (a) Pyrine (BaP)  Nickel (Ni)  Benzene (C6H6)	Test Parameters Unit  Particulate Matter (PM10)	Test Parameters         Unit         Result           Particulate Matter (PM10)         μg/m³         91.5           Particulate Matter (PM2.5)         μg/m³         49.4           Sulphur Dioxide (SO2)         μg/m³         15.0           Carbon Monoxide (CO)         mg/m³         0.58           Nitrogen Dioxide (NO2)         μg/m³         22.4           Lead (Pb)         μg/m³         N.D.           Ozone (O3)         μg/m³         NIL           Ammonia (NH3)         μg/m³         N.D.           Benzo (a) Pyrine (BaP)         ng/m³         N.D.           Nickel (Ni)         ng/m³         N.D.           Benzene (C6H6)         μg/m³         1.22	Test Parameters

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

H SERVICES

Format no ETS /LAB/TR-01 Issue No 04 dt 01/06/2016 Rev No 03 dt 01/06/2016

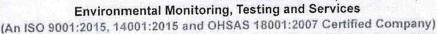
For Enviro-Tech Services

Dy. Quality manager

### Note:-

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Ph.: 9811736063, 9911516076



TEST REPORT NO: ETS/46B-19/10/2017

email: etslab2012@gmail.com | Website: www.etslab.asia

**DATE OF REPORT :28-10-2017** 

JAS-ANZ

ISO 9001/14001/OHSAS 18001

Acc. No.- M31112041N

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

16-10-2017

**Analysis Start Date** 

19-10-2017

Analysis End Date

20-10-2017

**Duration Of Sampling** 

16-10-2017

17-10-2017

24 0 HOURS

Sample ID No

46B-19/10

Sampling Done By

ETS STAFF

Sampling Location

Sampling Method

DIGWADIH, AAQ-CWCZ2 ETS/STP/AIR-01

Sampling Machine Placed At Height

: 3.5 mtr.

(From Ground)

Weather Condition

CLEAR

Ambient Temperature

: 28.0

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	75.2	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	µg/m³	43.4	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	17.2	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Carbon Monoxide (CO)	mg/m³	0.65	For 8 Hrs.=02 / For 1 Hrs.=04	IS: 5182 (Part-10)
5.	Nitrogen Dioxide (NO2)	μg/m³	23.0	For 24 Hrs.=80	IS: 5182 (Part-6)
6.	Lead (Pb)	μg/m³	N.D.	For 24 Hrs.=1.0	IS: 5182 (Part-22)
7.	Ozone (O3)	µg/m³	28.0	For 8 Hrs.=100/ For 1 Hrs.=180	IS: 5182 (Part-9)
8.	Ammonia (NH3)	µg/m³	NIL	For 24 Hrs.=400	Indophenol Blue Method
9.	Benzo (a) Pyrine (BaP)	ng/m³	N.D.	For Annual=01	IS: 5182 (Part-12)
10.	Nickel (Ni)	ng/m³	N.D.	For Annual=20	IS: 5182 (Part-22)
11.	Benzene (C6H6)	µg/m <sup>⊲</sup>	1.25	For 24 Hrs.=5	IS: 5182 (Part-11)
12.	Arsenic (As)	ng/m³	N.D.	For Annual=06	IS: 5182 (Part-22)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

ECH SERVICES

For Enviro-Tech Services

AUTHORIZED SIGNATORY Md. Humraj

Dy. Quality manager

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An Environmental Analytical Laboratory



Acc. No.- M31112041N

Environmental Monitoring, Testing and Services

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email: etslab2012@gmail.com | Website: www.etslab.asia

I Ph.: 9811736063, 9911516076

**24.0 HOURS** 

### TEST REPORT

TEST REPORT NO: ETS/46B-14/10/2017

**DATE OF REPORT :25-10-2017** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

To

**Date of Sampling** 

05-10-2017

**Analysis Start Date** 

09-10-2017

**Analysis End Date** 

10-10-2017

**Duration Of Sampling** 

05-10-2017

Sample ID No

46B-14/10

Sampling Done By

**ETS STAFF** 

Sampling Location

SUDAMDIH, AAQ-CWCZ3

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

Weather Condition

CLEAR

**Ambient Temperature** 

06-10-2017

. 27.0 °C

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	74.7	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	ha/w <sub>3</sub>	42.4	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	18.0	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	23.5	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*

Page 1 of 1

**TECH SERVICES** 

Format no ETS /LAB/TR-01 | Issue No 04 dt 01/06/2016 | Rev No 03 dt 01/06/2016

For Enviro-Tech Services AUTHORIZED SIGNATORY

Md. Humral Dy. Quality manager

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An Environmental Analytical Laboratory

Ph.: 9811736063, 9911516076

JAS-ANZ

ISO 9001/14001/OHSAS 18001 Acc. No.- M31112041N

Environmental Monitoring, Testing and Services

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G-232, M.G. Road Industrial Area, Hapur-Ghaziabad. (U.P.)-201015

TEST REPORT

TEST REPORT NO: ETS/46B-15/10/2017

DATE OF REPORT :25-10-2017

AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

 PIT HEAD COKING COAL WASHERY OF 3.5 MTPA M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

Date of Sampling

05-10-2017

email: etslab2012@gmail.com | Website: www.etslab.asia

**Analysis Start Date** 

09-10-2017

Analysis End Date

10-10-2017

**Duration Of Sampling** 

03-10-2017

7 To

04-10-2017 24.0 HOURS

Ambient Temperature

Sample ID No

: 46B-15/10

Sampling Done By

: ETS STAFF

Sampling Location

RANGMATI, AAQ-CWCZ4

Sampling Method

: ETS/STP/AIR-01

Sampling Machine Placed At Height Weather Condition

3.5 mtr.

(From Ground)

: 27.0 °C

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	71.4	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	ha/w <sub>3</sub>	39.5	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	16.5	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	24.0	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

FOR HINDING TECH SERVICES

For Enviro-Tech Services

AUTHORIZED SIGNATORY

Note:

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Ph.: 9811736063, 9911516076 email: etslab2012@gmail.com | Website: www.etslab.asia

### **TEST REPORT**

TEST REPORT NO: ETS/46B-17/10/2017

**DATE OF REPORT :25-10-2017** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

09-10-2017 **Date of Sampling** 12-10-2017 Analysis Start Date 13-10-2017 **Analysis End Date** 

**24.0 HOURS** 09-10-2017 To 10-10-2017 **Duration Of Sampling** 

46B-17/10 Sample ID No ETS STAFF Sampling Done By

SANTHLDIH, AAQ-CWBZ2 Sampling Location

ETS/STP/AIR-01 Sampling Method

Sampling Machine Placed At Height 3.5 mtr. (From Ground)

- 27.0 °C Ambient Temperature CLEAR Weather Condition

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	69.8	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	µg/m³	36.2	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	16.0	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	23.2	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

CH SERVICES

AUTHORIZED SIGNATORY Dy. Quality manager

For Enviro-Tech Services

Format no ETS /LAB/TR-01 | Issue No 04 dt 01/06/2016 | Rev No 03 dt 01/06/2016

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Ph.: 9811736063, 9911516076 email: etslab2012@gmail.com | Website: www.etslab.asia

### **TEST REPORT**

TEST REPORT NO: ETS/46B-13/10/2017

**DATE OF REPORT :25-10-2017** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

Date of Sampling

03-10-2017

**Analysis Start Date** 

06-10-2017

**Analysis End Date** 

07-10-2017

**Duration Of Sampling** 

03-10-2017

Sample ID No

46B-13/10

Sampling Done By

**ETS STAFF** 

Sampling Location

DIGWADIH, AAQ-CWCZ2

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

Weather Condition

CLEAR

Ambient Temperature

04-10-2017

**24.0 HOURS** 

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	74.3	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	μg/m³	41.2	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	16.5	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	ha/w <sub>3</sub>	21.7	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*

Page 1 of 1

ECH SERVICES

Format no ETS /LAB/TR-01 | Issue No 04 dt 01/06/2016 | Rev No 03 dt 01/06/2016

For Enviro-Tech Services

**AUTHORIZEDISIGNATORY** 

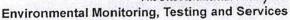
Dy. Quality manager

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email: etslab2012@gmail.com | Website: www.etslab.asia

Ph.: 9811736063, 9911516076

**24.0 HOURS** 

### **TEST REPORT**

TEST REPORT NO: ETS/46B-12/10/2017

DATE OF REPORT :25-10-2017

JAS-ANZ

ISO 9001/14001/OHSAS 18001

Acc. No.- M31112041N

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

Date of Sampling

03-10-2017

**Analysis Start Date** 

06-10-2017

Analysis End Date

07-10-2017

**Duration Of Sampling** 

03-10-2017

Sample ID No

46B-12/10

Sampling Done By

**ETS STAFF** 

Sampling Location

PROPOSED SITE, AAQ-CWCZ1

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground) Ambient Temperature

04-10-2017

: 27.0 °C

CLEAR

Specification/Limit **Test Method Test Parameters** Unit Result S. No. (as Per CPCB) IS: 5182 (Part-23) For 24 Hrs.=100 1. Particulate Matter (PM10) µg/m³ 893 Gravimetric Method For 24 Hrs.=60 2 Particulate Matter (PM2.5) µg/m³ 48.0 For 24 Hrs.=80 IS: 5182 (Part-2) µg/m³ Sulphur Dioxide (SO2) 3 14.0 For 24 Hrs.=80 IS: 5182 (Part-6) Nitrogen Dioxide (NO2) µg/m<sup>3</sup> 4 20.2

\*\*\*\*End of Test Report\*\*\*

For Enviro-Tech States

Page 1 of 1

**ECH SERVICES** 

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An Environmental Analytical Laboratory



ISO 9001/14001/OHSAS 18001 Acc. No.- M31112041N

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email: etslab2012@gmail.com | Website: www.etslab.asia Ph.: 9811736063, 9911516076

### **TEST REPORT**

TEST REPORT NO: ETS/46B-16/10/2017

**DATE OF REPORT: 25-10-2017** 

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S. STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

To

**Date of Sampling** 

: 09-10-2017

**Analysis Start Date** 

: 12-10-2017

Analysis End Date

: 13-10-2017

**Duration Of Sampling** 

: 09-10-2017

Sample ID No

: 46B-16/10

Sampling Done By

: ETS STAFF

Sampling Location

: CHIPABAD, AAQ-CWBZ1

Sampling Method

Weather Condition

: ETS/STP/AIR-01

Sampling Machine Placed At Height

: 3.5 mtr. (From Ground) : CLEAR

Ambient Temperature

10-10-2017

24 0 HOURS

: 27.0 °C

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	70.2	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	µg/m³	39.0	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	17.4	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	25.2	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

**ECH SERVICES** 

For Enviro-Tech Services

AUTHORIZED SIGNATORY

Dy. Quality manager

1. This test report shall not be used in any advertising media or as evidence in the court of Law without prior written permission of the laboratory.

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Acc. No. - M31112041N

**Environmental Monitoring, Testing and Services** 

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G-232, M.G. Road Industrial Area, Hapur-Ghaziabad. (U.P.)-201015

email: etslab2012@gmail.com | Website: www.etslab.asia Ph.: 9811736063, 9911516076 TEST REPORT

TEST REPORT NO: ETS/58-36/11/2017

**DATE OF REPORT :25-11-2017** 

AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

Date of Sampling

03-11-2017

**Analysis Start Date** 

06-11-2017

**Analysis End Date** 

07-11-2017

**Duration Of Sampling** 

03-11-2017

Sample ID No

58-36/11

Sampling Done By

ETS STAFF

Sampling Location

DIGWADIH, AAQ-CWCZ2

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

: 3.5 mtr.

(From Ground)

Weather Condition

: CLEAR

**Ambient Temperature** 

04-11-2017

**24.0 HOURS** 

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1,	Particulate Matter (PM10)	μg/m³	84.3	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	µg/m³	44.2	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	14.5	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	23.7	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*

TECH SERVICES

Page 1 of 1

Dy. Quality manager

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l Ph.: 9811736063, 9911516076 email: etslab2012@gmail.com | Website: www.etslab.asia

## TEST REPORT

TEST REPORT NO: ETS/58-35/11/2017

**DATE OF REPORT :25-11-2017** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer : PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

Date of Sampling

03-11-2017

Analysis Start Date

06-11-2017

Analysis End Date **Duration Of Sampling**  : 07-11-2017

03-11-2017

04-11-2017

24.0 HOURS

Sample ID No

58-35/11

Sampling Done By

ETS STAFF

Sampling Location

PROPOSED SITE, AAQ-CWCZ1

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

Weather Condition

: CLEAR

**Ambient Temperature** 

: 24.0 °C

Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
Profesion Matter (PM10)	ua/m³	81.2	For 24 Hrs.=100	IS: 5182 (Part-23)
	ug/m³		For 24 Hrs.=60	Gravimetric Method
			For 24 Hrs.=80	IS: 5182 (Part-2)
			For 24 Hrs.=80	IS; 5182 (Part-6)
	Particulate Matter (PM10) Particulate Matter (PM2.5) Sulphur Dioxide (SO2) Nitrogen Dioxide (NO2)	Particulate Matter (PM10) µg/m³  Particulate Matter (PM2.5) µg/m³  Sulphur Dioxide (SO2) µg/m³	Particulate Matter (PM10)         μg/m³         81.2           Particulate Matter (PM2.5)         μg/m³         44.3           Sulphur Dioxide (SO2)         μg/m³         15.0	Test Parameters         Unit         Result         (as Per CPCB)           Particulate Matter (PM10)         μg/m³         81.2         For 24 Hrs.=100           Particulate Matter (PM2.5)         μg/m³         44.3         For 24 Hrs.=60           Sulphur Dioxide (SO2)         μg/m³         15.0         For 24 Hrs.=80

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

ECH SERVICES

For Envirage AUTHORIZED SIGNATORY

Format no ETS /LAB/TR-01 Issue No 04 dt 01/06/2016 Rev No 03 dt 01/06/2016

Md. Humrai Dy. Quality manager

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G-232, M.G. Road Industrial Area, Hapur-Ghaziabad. (U.P.)-201015 email: etslab2012@gmail.com | Website: www.etslab.asia | Ph.: 9811736063, 9911516076

## **TEST REPORT**

TEST REPORT NO : ETS/58-40/11/2017

DATE OF REPORT :25-11-2017

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

Date of Sampling

13-11-2017

**Analysis Start Date** 

15-11-2017

Analysis End Date

17-11-2017

**Duration Of Sampling** 

12 14 0017

13-11-2017

Sample ID No

58-40/11

Sampling Done By

ETS STAFF

Sampling Location

SANTHLDIH, AAQ-CWBZ2

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

Weather Condition

CLEAR

Ambient Temperature

14-11-2017

**24.0 HOURS** 

240 00

s. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	78.3	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	µg/m³	39.5	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	ha/w <sub>3</sub>	17.2	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	25.0	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

FOR ENVIRONE CH

CH SERVICES

For Environ Tool Services

AUTHORIZED SIGNATORY

Md. Humraj Dy. Quality manager

### Note:-

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email: etslab2012@gmail.com | Website: www.etslab.asia I Ph.: 9811736063, 9911516076

### TEST REPORT

TEST REPORT NO: ETS/58-39/11/2017

**DATE OF REPORT: 25-11-2017** 

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

13-11-2017

**Analysis Start Date** 

15-11-2017

**Analysis End Date Duration Of Sampling**  17-11-2017

13-11-2017

14-11-2017

**24.0 HOURS** 

Sample ID No

58-39/11

Sampling Done By

**ETS STAFF** 

Sampling Location

CHIPABAD, AAQ-CWBZ1

Sampling Method

ETS/STP/AIR-01

µg/m<sup>3</sup>

Sampling Machine Placed At Height

3.5 mtr.

(From Ground) **Ambient Temperature** 

For 24 Hrs.=80

: 24.0 °C

Weather Condition

4.

Nitrogen Dioxide (NO2)

CLEAR

Specification/Limit **Test Method Test Parameters** Unit Result S. No. (as Per CPCB) Particulate Maiter (PM10) μg/m<sup>3</sup> For 24 Hrs.=100 IS: 5182 (Part-23) 1 72.2 For 24 Hrs.=60 Gravimetric Method 2 Particulate Matter (PM2.5) µg/m 35.2 IS: 5182 (Part-2) Sulphur Dioxide (SO2) For 24 Hrs.=80 3. µg/m³ 144 IS: 5182 (Part-6)

23 2

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

ECH SERVICES

For Enviro-Fech Services

AUTHORIZED SIGNATORY Md. Humraj

Dy. Quality manager

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24 0 HOURS

ISO 9001/14001/OHSAS 18001 Acc. No.- M31112041N

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### TEST REPORT

TEST REPORT NO: ETS/58-38/11/2017

**DATE OF REPORT: 25-11-2017** 

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

Date of Sampling : 07-11-2017 **Analysis Start Date** 09-11-2017

**Analysis End Date** 10-11-2017

**Duration Of Sampling** 07-11-2017 08-11-2017

Sample ID No 58-38/11 Sampling Done By **ETS STAFF** 

Sampling Location RANGMATI, AAQ-CWCZ4

Sampling Method ETS/STP/AIR-01

Sampling Machine Placed At Height 3.5 mtr. (From Ground)

Weather Condition CLEAR **Ambient Temperature** 

Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
Particulate Matter (PM10)	hg/w <sub>3</sub>	75.4	For 24 Hrs.=100	IS: 5182 (Part-23)
Particulate Matter (PM2.5)	µg/m³	40.5	For 24 Hrs.=60	Gravimetric Method
Sulphur Dioxide (SO2)	µg/m³	15.5	For 24 Hrs.=80	IS: 5182 (Part-2)
Nitrogen Dioxide (NO2)	µg/m³	25.0	For 24 Hrs.=80	IS: 5182 (Part-6)
	Particulate Matter (PM10) Particulate Matter (PM2.5) Sulphur Dioxide (SO2)	Particulate Matter (PM10)         μg/m³           Particulate Matter (PM2.5)         μg/m³           Sulphur Dioxide (SO2)         μg/m³	Particulate Matter (PM10)         μg/m³         75.4           Particulate Matter (PM2.5)         μg/m³         40.5           Sulphur Dioxide (SO2)         μg/m³         15.5	Test Parameters         Unit         Result         (as Per CPCB)           Particulate Matter (PM10)         μg/m³         75.4         For 24 Hrs.=100           Particulate Matter (PM2.5)         μg/m³         40.5         For 24 Hrs.=60           Sulphur Dioxide (SO2)         μg/m³         15.5         For 24 Hrs.=80

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

SERVICES

For Enviro-Tech-Services AUTHORIZED SIGNATORY

Md. Hum Dy. Quality manager

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email: etslab2012@gmail.com | Website: www.etslab.asia

Ph.: 9811736063, 9911516076

**24.0 HOURS** 

### TEST REPORT

TEST REPORT NO : ETS/58-37/11/2017

**DATE OF REPORT :25-11-2017** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

Date of Sampling

07-11-2017

**Analysis Start Date** 

09-11-2017

Analysis End Date

10-11-2017

**Duration Of Sampling** 

07-11-2017

Sample ID No

58-37/11

Sampling Done By

**ETS STAFF** 

Sampling Location

SUDAMDIH, AAQ-CWCZ3

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

08-11-2017

Weather Condition

CLEAR

**Ambient Temperature** 

: 24.0 °C

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
	Particulate Matter (PM10)	ug/m³	77.7	For 24 Hrs.=100	IS: 5182 (Part-23)
2	Particulate Matter (PM2.5)	µg/m³	47.4	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	17.0	For 24 Hrs.=80	IS: 5182 (Part-2)
	Nitrogen Diaxide (NO2)	µg/m³	25.5	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

CH SERVICES

Format no ETS /LAB/TR-01 Issue No 04 dt 01/06/2016 Rev No 03 dt 01/06/2016

For Enviro-Tech Services

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G-232, M.G. Road Industrial Area, Hapur-Ghaziabad. (U.P.)-201015

email: etslab2012@gmail.com | Website: www.etslab.asia

Ph.: 9811736063, 9911516076

**24.0 HOURS** 

### TEST REPORT

TEST REPORT NO: ETS/118-16/11/2017

**DATE OF REPORT: 25-12-2017** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

Date of Sampling

: 14-12-2017

**Analysis Start Date** 

: 16-12-2017

**Analysis End Date** 

18-12-2017

**Duration Of Sampling** 

14-12-2017

Sample ID No

118-16/12

Sampling Done By

ETS STAFF

Sampling Location

Sampling Method

SANTHLDIH, AAQ-CWBZ2

Sampling Machine Placed At Height

ETS/STP/AIR-01

3.5 mtr.

(From Ground)

Weather Condition

: CLEAR

**Ambient Temperature** 

15-12-2017

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	na/w,	72.3	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	pg/m <sup>3</sup>	42.5	For 24 Hrs.=60	Gravimetric Method
3,	Sulphur Dioxide (SO2)	µg/m³	15.2	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	24.0	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

ECH SERVICES

For Enviro-Tech Services

D SIGNATORY Md. Humraj

Dy. Quality manager

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Format no ETS /LAB/TR-01 | Issue No 04 dt 01/06/2016 | Rev No 03 dt 01/06/2016

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email: etslab2012@gmail.com | Website: www.etslab.asia

Ph.: 9811736063, 9911516076

**24.0 HOURS** 

## TEST REPORT

TEST REPORT NO : ETS/118-13/11/2017

DATE OF REPORT :25-12-2017

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

Date of Sampling

08-12-2017

Analysis Start Date

10-12-2017

Analysis End Date

11-12-2017

**Duration Of Sampling** 

08-12-2017

Sample ID No

118-13/12

Sampling Done By

ETS STAFF

Sampling Location

SUDAMDIH, AAQ-CWCZ3

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

09-12-2017

Weather Condition

CLEAR

Ambient Temperature

: 24.0 °C

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
		μg/m³	79.7	For 24 Hrs.=100	IS: 5182 (Part-23)
1:	Particulate Matter (PM10)	ug/m³	44.4	For 24 Hrs.=60	Gravimetric Method
2	Particulate Matter (PM2.5)	hā/w <sub>3</sub>		For 24 Hrs.=80	IS: 5182 (Part-2)
3.	Sulphur Dioxide (SO2)		16.0	For 24 Hrs.=80	IS: 5182 (Part-6)
4.	Nitrogen Dioxide (NO2)	µg/m³	24.5		****End of Teet Report**

\*\*\*\*End of Test Report\*\*\*

CH SERVICES

Page 1 of 1

For Enviro-Tech Services

AUTHORIZED SIGNATORY

Md. Humrai Dy. Quality manager

Format no ETS /LAB/TR-01 | Issue No 04 dt 01/06/2016 | Rev No 03 dt 01/06/2016

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TEST REPORT

TEST REPORT NO: ETS/118-12/12/2017

DATE OF REPORT :25-12-2017

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

04-12-2017

**Analysis Start Date** 

07-12-2017

**Analysis End Date** 

08-12-2017

**Duration Of Sampling** 

04-12-2017

**24.0 HOURS** 

Sample ID No

118-12/12

Sampling Done By

ETS STAFF

Sampling Location

DIGWADIH, AAQ-CWCZ2

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

05-12-2017

Weather Condition

: CLEAR

**Ambient Temperature** 

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	84.3	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	µg/m <sup>3</sup>	44.2	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	14.5	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	23.7	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

ECH SERVICES

Md. Humraj

Dy. Quality manager

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email: etslab2012@gmail.com | Website: www.etslab.asia Ph.: 9811736063, 9911516076

### TEST REPORT

TEST REPORT NO: ETS/118-14/12/2017

**DATE OF REPORT :25-12-2017** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S. STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

08-12-2017

**Analysis Start Date** 

10-12-2017

**Analysis End Date** 

11-12-2017

**Duration Of Sampling** 

08-12-2017

Sample ID No

118-14/12

Sampling Done By

ETS STAFF

Sampling Location

RANGMATI, AAQ-CWCZ4

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

Weather Condition

. CLEAR

**Ambient Temperature** 

ng-12-2017

: 24.0 °C

**24.0 HOURS** 

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1	Particulate Matter (PM10)	µg/m³	85.4	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	μg/m³	45,5	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	16.5	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	27.0	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*

Page 1 of 1

ECH SERVICES

AUTHORIZED SIGNATORY

Md. Humraj Dy. Quality manager

### Note:-

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G-232, M.G. Road Industrial Area, Hapur-Ghaziabad. (U.P.)-201015

email: etslab2012@gmail.com | Website: www.etslab.asia | Ph.: 9811736063, 9911516076

### TEST REPORT

TEST REPORT NO: ETS/118-15/12/2017

**DATE OF REPORT :25-12-2017** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

Date of Sampling

14-12-2017

**Analysis Start Date** 

16-12-2017

**Analysis End Date** 

18-12-2017

**Duration Of Sampling** 

14-12-2017

15-12-2017

**24.0 HOURS** 

Sample ID No

118-15/12

Sampling Done By

ETS STAFF

Sampling Location

CHIPABAD, AAQ-CWBZ1

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

Weather Condition

: 3.5 mtr. : CLEAR

(From Ground) **Ambient Temperature** 

: 24.0 °C

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	77.2	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	μg/m³	34.2	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	15.4	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	ha/w,	25.2	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

TECH SERVICES

AUTHORIZED SIGNATORY

Md. Humrai Dy. Quality manager

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TEST REPORT

TEST REPORT NO: ETS/118-16/11/2017

**DATE OF REPORT :25-12-2017** 

AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

14-12-2017

**Analysis Start Date** 

16-12-2017

**Analysis End Date** 

18-12-2017

**Duration Of Sampling** 

14-12-2017

Sample ID No

118-16/12

Sampling Done By

**ETS STAFF** 

Sampling Location

SANTHLDIH, AAQ-CWBZ2

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground) **Ambient Temperature** 

15-12-2017

**24.0 HOURS** 

: 24.0 °C

Weather Condition

: CLEAR

Specification/Limit **Test Method** Result **Test Parameters** Unit S. No. (as Per CPCB) IS: 5182 (Part-23) For 24 Hrs.=100 Particulate Matter (PM10) ug/m³ 72.3 1. Gravimetric Method Particulate Matter (PM2.5) For 24 Hrs.=60 2 µg/m³ 42.5 For 24 Hrs.=80 IS: 5182 (Part-2) Sulphur Dioxide (SO2) μg/m<sup>3</sup> 15.2 3. IS: 5182 (Part-6) For 24 Hrs.=80 ug/m<sup>3</sup> Nitrogen Dioxide (NO2) 4 24.0

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

*TECH SERVICES* 

For Enviro Dech-Services

THORIZED SIGNATORY Md. Hur 📑

Dy. Quality manager

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email: etslab2012@gmail.com | Website: www.etslab.asia I Ph.: 9811736063, 9911516076

**24.0 HOURS** 

### **TEST REPORT**

TEST REPORT NO: ETS/279-7/01/2018

**DATE OF REPORT :24-01-2018** 

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

To

**Date of Sampling** 

: 05-01-2018

**Analysis Start Date** 

: 09-01-2018

Analysis End Date

10-01-2018

**Duration Of Sampling** 

05-01-2018

Sample ID No

279-7/01

Sampling Done By

ETS STAFF

Sampling Location

SUDAMDIH, AAQ-CWCZ3

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height Weather Condition

3.5 mtr. CLEAR

(From Ground)

06-01-2018

Weather Condition		: CLEAR		Ambient Temperature	; 24.0 °C	
S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method	
1.	Particulate Matter (PM10)	hg/m³	72.7	For 24 Hrs.=100	IS: 5182 (Part-23)	
2.	Particulate Matter (PM2.5)	µg/m³	45.4	For 24 Hrs.=60	Gravimetric Method	
3.	Sulphur Dioxide (SO2)	µg/m³	16.0	For 24 Hrs.=80	IS: 5182 (Part-2)	
4.	Nitrogen Dioxide (NO2)	µg/m³	23.5	For 24 Hrs.=80	IS: 5182 (Part-6)	

\*\*\*\*End of Test Report\*\*\*\*

**ERVICES** 

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For Enviro-Tech Sen 35

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Ph.: 9811736063, 9911516076

**24.0 HOURS** 

## TEST REPORT

TEST REPORT NO: ETS/279-10/01/2018

**DATE OF REPORT : 24-01-2018** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

: 09-01-2018

**Analysis Start Date** 

: 12-01-2018

: 13-01-2018

Analysis End Date

**Duration Of Sampling** 

09-01-2018

279-10/01

Sampling Done By

Sample ID No

: ETS STAFF

Sampling Location

: SANTHLDIH, AAQ-CWBZ2

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

10-01-2018

Weather Condition

CLEAR

Ambient Temperature

24.0

Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
Partici rate Matter (PM10)	no, m	72.8	For 24 Hrs.=100	IS: 5182 (Part-23)
	µg/m°	38.2	For 24 Hrs.=60	Gravimetric Method
	µg/m³	15.0	For 24 Hrs.=80	IS; 5182 (Part-2)
	µg/m³	22.2	For 24 Hrs.=80	IS: 5182 (Part-6)
	Particulate Matter (PM10) Particulate Matter (PM2.5) Sulphur Dioxide (SO2) Nitrogen Dioxide (NO2)	Particulate Matter (PM10) µg/m³ Particulate Matter (PM2.5) µg/m³ Sulphur Dioxide (SO2) µg/m³	Particulate Matter (PM10)         µg/m³         72.8           Particulate Matter (PM2.5)         µg/m³         38.2           Sulphur Dioxide (SO2)         µg/m³         15.0	Test Parameters         Unit         Result         (as Per CPCB)           Particulate Matter (PM10)         μg/m³         72.8         For 24 Hrs.=100           Particulate Matter (PM2.5)         μg/m³         38.2         For 24 Hrs.=60           Sulphur Dioxide (SO2)         μg/m³         15.0         For 24 Hrs.=80

\*\*\*\*End of Test Report\*\*

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Page 1 of 1

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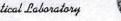
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email: etslab2012@gmail.com | Website: www.etslab.asia

Ph.: 9811736063, 9911516076

### TEST REPORT

TEST REPORT NO: ETS/279-9/01/2018

**DATE OF REPORT :24-01-2018** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

09-01-2018

**Analysis Start Date** 

12-01-2018

Analysis End Date

13-01-2018

**Duration Of Sampling** 

09-01-2018

10-01-2018 **24.0 HOURS** 

Sample ID No

279-9/01

Sampling Done By

ETS STAFF

Sampling Location

: CHIPABAD, AAQ-CWBZ1

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

: 3.5 mtr.

(From Ground)

Weather Condition

CLEAR

Ambient Temperature

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
1.	Particulate Matter (PM10)	µg/m³	78.2	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	µg/m³	38.0	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	μg/m³	16.4	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	24.2	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

ECH SERVICES

For Enviro-Tech Services

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Ph.: 9811736063, 9911516076 email: etslab2012@gmail.com | Website: www.etslab.asia

## TEST REPORT

TEST REPORT NO: ETS/279-8/01/2018

**DATE OF REPORT :24-01-2018** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

05-01-2018

**Analysis Start Date** 

09-01-2018

**Analysis End Date** 

10-01-2018

**Duration Of Sampling** 

03-01-2018

04-01-2018

24.0 HOURS

Sample ID No

279-8/01

Sampling Done By

ETS STAFF

Sampling Location

RANGMATI, AAQ-CWCZ4

Sampling Method

ETS/STP/AIR-01

Sampling Machine Placed At Height

3.5 mtr.

(From Ground)

Weather Condition

CLEAR

Ambient Temperature

: 24.0 °C

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
	Particulate Matter (PM10)	us/m²	77.9	For 24 Hrs =100	IS: 5182 (Part-23)
0374194744 70 FF 1977	Particulate Matter (PM2.5)	ua/m³	35.5	For 24 Hrs =60	Gravimetric Method
2.		ua/m³	18.5	For 24 Hrs.=80	IS: 5182 (Part-2)
3.	Sulphur Dioxide (SO2)	µg/m³	23.0	For 24 Hrs.=80	IS: 5182 (Part-6)
4.	Nitrogen Dioxide (NO2)	Pa	23.0		****End of Test Report**

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

For Enviro-Tech Services

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at no ETS /LAB/TR-01 Issue No 04 dt 01/06/2016 Rev No 03 dt 01/06/2016

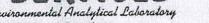
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email: etslab2012@gmail.com | Website: www.etslab.asia

I Ph.: 9811736063, 9911516076

**24.0 HOURS** 

## **TEST REPORT**

TEST REPORT NO: ETS/279-6/01/2018

DATE OF REPORT :24-01-2018

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED,

DHANBAD, JHARKHAND, INIDA

**Date of Sampling** 

: 03-01-2018

**Analysis Start Date** 

: 06-01-2018

**Analysis End Date** 

: 07-01-2018

**Duration Of Sampling** 

: 03-01-2018 To

Bample ID No

: 279-6/01

Sampling Done By

: ETS STAFF

Sampling Location

: DIGWADIH, AAQ-CWCZ2

Sampling Method

: ETS/STP/AIR-01

Sampling Machine Placed At Height

: 3.5 mtr.

(From Ground)

04-01-2018

r Condition :	CLEAR		Ambient Temperature	: 24.0 °C
Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
Particulate Matter (PM10)	pg/m²	76.3	For 24 Hrs.=100	IS: 5182 (Part-23)
Particulate Matter (PM2.5)	h3/m²	40.2	For 24 Hrs.=60	Gravimetric Method
Sulphur Dioxide (SO2)	µg/m³	15.5	For 24 Hrs.=80	IS: 5182 (Part-2)
Nitrogen Dioxide (NO2)	µg/m³	20,7	For 24 Hrs.=80	IS: 5182 (Part-6)
	Particulate Matter (PM10) Particulate Matter (PM2.5) Sulphur Dioxide (SO2)	Test Parameters Unit  Particulate Matter (PM10)	Test Parameters  Unit Result  Particulate Matter (PM10)  Particulate Matter (PM2.5)  Particulate Matter (PM2.5)  Sulphur Dioxide (SO2)  µg/m³  40.2  15.5	Test Parameters

\*\*\*\*End of Test Report\*\*\*\*

Page 1 of 1

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24.0 HOURS

### TEST REPORT

TEST REPORT NO : ETS/279-5/01/2018

**DATE OF REPORT :24-01-2018** 

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address of Customer

: PIT HEAD COKING COAL WASHERY OF 3.5 MTPA

M/S, STEEL AUTHORITY OF INDIA LIMITED.

DHANBAD, JHARKHAND, INIDA

Date of Sampling

03-01-2018

**Analysis Start Date** 

06-01-2018

Analysis End Date

07-01-2018

Duration Of Sampling

03-01-2018

Sample ID No

279-5/01

Sampling Done By

ETS STAFF

Sampling Location

: PROPOSED SITE, AAQ-CWCZ1

Sampling Method

Weather Condition

: ETS/STP/AIR-01

Sampling Machine Placed At Height

: 3.5 mtr. : CLEAR

(From Ground) Ambient Temperature

04-01-2018

: 24.0 °C

S. No.	Test Parameters	Unit	Result	Specification/Limit (as Per CPCB)	Test Method
4	Particulate Matter (PM10)	µg/m³	85.3	For 24 Hrs.=100	IS: 5182 (Part-23)
2.	Particulate Matter (PM2.5)	h6/w <sub>3</sub>	45.0	For 24 Hrs.=60	Gravimetric Method
3.	Sulphur Dioxide (SO2)	µg/m³	12.0	For 24 Hrs.=80	IS: 5182 (Part-2)
4.	Nitrogen Dioxide (NO2)	µg/m³	22.2	For 24 Hrs.=80	IS: 5182 (Part-6)

\*\*\*\*End of Test Report\*\*\*\*



Page 1 of 1

For Enviro-Tech Services

Md. Humrai

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