

Corp. Office :

Hind House, Sai Parisar Commercial Complex,
Shri Kant Verma Marg, Bilaspur (C.G.) - 495 001
T +91 7752-436011-50 / F +91 7752-429685
E hecb@hindenergy.com, info@hindenergy.com
W www.hindenergy.com
CIN : U04010WB2005PLC132889

Ref.:

Date: 26/08/2019

To,

The Director,
Ministry of Environment, Forests & Climate Change,
Regional Office (WCZ), Ground Floor,
East Wing, New Secretariat Building,
Civil Lines, Nagpur-440001

Sub: Submission of EC Compliance along with Environmental Six monthly Monitoring Report for the period "*January-June 2019*".

Ref: EC letter no. J-11015/364/2009.IA-II(M) dated 21st May, 2014.

Dear Sir,

We are submitting herewith one copy of the EC Compliance Report and Environmental Status Report for above referred period for 3.6 MTPA Coal Washery of M/S Hind Energy & Coal Beneficiation (India) Pvt. Ltd. located at Hindadih Village, Masturi Tehsil, Bilaspur District, Chhattisgarh for your perusal and record.

Thanking you.

Yours faithfully



Hind Energy & Coal Beneficiation (India) Ltd.

Encl: As above

Copy to:

1. Central Pollution Control Board, Zonal Office, Sahkar Bhawan, North T.T. Nagar, Bhopal -462003
2. CECB, Vyapar Vihar, Near Pt. Din Dayal Upadhyay Garden, Bilaspur

**EC COMPLIANCE REPORT
&
ENVIRONMENTAL STATUS REPORT
(January - June 2019)**

Of

**Hindadih Coal Washery
(2.4 MTPA = Dry Type + 1.2 MTPA Wet Type)**

Located At

**Village - Hindadih, Tehsil - Masturi,
District - Bilaspur, State - Chhattisgarh**

Project Proponent:



Hind Energy & Coal Beneficiation (India) Ltd.

**Hindadih Village, Masturi Tehsil,
Bilaspur District, Chhattisgarh, India**

Environmental Consultant

ANACON LABORATORIES PVT. LTD., NAGPUR

**QCI-NABET Accredited EIA Consultant
MoEF&CC (GOI) and NABL Recognized Laboratory
ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007**

**Lab. & Consultancy: FP-34, 35, Food Park,
MIDC, Butibori, Nagpur - 441122**

Mob.: +91-9372960077

Email: info@anacon.in, ngp@anacon.in

Website: www.anaconlaboratories.com

July, 2019

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INTRODUCTION

M/s Hind Energy & Coal Beneficiation (I) Ltd, (HECBIL) has expanded capacity of its existing Coal beneficiation plant from **3.6 MTPA [2.4 Dry Type + 1.2 MTPA Wet type]** on 01.10.2015 (project commissioned). The coal washery is located at Village Hindadih, Tehsil Masturi, District Bilaspur (C.G.). The raw coal is received generally from SECL Dipka mine which is about 70 km from HECBIL.

Coal beneficiation is the process for cleaning & reducing ash content in the coal, thus improving the quality of coal. This is a wet type of coal Washery, having obtained environmental clearance vide letter No. J-11015/364/2009.IA-II(M) dated 21st May, 2014.

EC compliance status and Environmental monitoring reports for the period of **January 2019 to June 2019** is given below.

Compliance Status of conditions stipulated in Environmental Clearance for 3.6 MTPA Coal Washery of M/s Hind Energy & Coal Beneficiation (I) Ltd, (HECBIL).

COMPLIANCE STATUS

Sr. No.	Specific Conditions	Action Taken
i.	Coal transportation shall be by mechanically covered trucks for loading and unloading.	HECB enquired for mechanically covered trucks with leading truck manufacturers in 2013, 2016 and latest by 2018. However, mechanically covered trucks are not available in market; hence transportation of coal is done through tarpaulin covered trucks only.
ii.	Green belt in and around the coal washery should be further intensified.	Being complied. Density of existing green belt has been increased in phase wise manner. Till date about 10,000 nos. of trees and shrubs has planted within premises. Road side plantation has also been done at approach roads consisting of 2500 nos. of tree and shrubs. (Refer Annexure IV).
iii.	Automatic sprinkler system at the railway siding should be installed.	Complied. The Company has installed fixed and movable type of water sprinkling system within premises. Sprinkling system consisting of rain gun near Raw coal, washed coal and reject storage yard has been installed.
iv.	No extension for the work of railway siding will be sought by the proponent.	Complied. Railway siding work has been completed within permitted time schedule and now in operation. (Refer Annexure II).
v.	No wastewater will be discharged into drains / water resources.	Complied. No wastewater is discharged into drains / water resources as plant

Sr. No.	Specific Conditions	Action Taken
		is operating on zero discharge facility.
vi.	In the proposed expansion, technology used for the washing of coal is wet process. Closed circuit water system will be adopted in the proposed expansion project. Zero effluent discharge system will be maintained.	Complied. Treated effluent after Hi-rate Thickener is being re-use for washing purpose within the premises. No effluent is being let out of the premises, hence maintaining Zero discharge condition as stipulated.
vii.	The proponent should adhere to all the conditions stipulated in letter of Central Ground Water Board letter no.21 4(102)/ CGWA/2011/ 174.	Complied. Proponent is adhering to all conditions of CGWB.
viii.	The assurances given during the Public Hearing and as per the action plan developed by the proponent should be implemented.	Complied. Air pollution control equipment are installed and Hind Energy is also actively doing CSR activities. (Refer Annexure III)
ix.	The CSR cost should be Rs 5 per Tonnes of Coal produced which should be adjusted as per the annual inflation.	The CSR expenditure has been increased to INR 2,75,60,057 by the company till March 2019. HECB is committed to fulfill the statutory obligation of spending minimum 2% net profit for CSR activities as per the Companies act 2013.
x.	Three-tier green belt should be developed along the washery boundary and along transfer and loading points and in the proposed railway siding to mitigate/check dust pollution and the entire coal dispatch from the group of mines should be dove-tailed with the Coal evacuation system prepared for the Angul-Talcher. A 3-tier avenue plantation should also be developed along vacant areas, near washery, storage yards, loading points and transfer points and along internal roads and main approach roads and on the 2- km road upto the railway siding and at the siding.	3-tier plantation has been already implemented. Till date about 7500 nos. of trees and shrubs are planted within premises. Road side plantation is also been done at approach roads consisting of 2500 nos. of tree and shrubs. (Refer Annexure IV)

Sr. No.	Specific Conditions	Action Taken
xi.	The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site(s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored minerals do not catch fire.	Complied. Raw Coal, Washed coal & coal waste (rejects) are stacked properly at earmarked sites(s) surrounded by boundary walls. Water Sprinklers are provided to minimize and control fire catching in coal. (Refer Annexure V)
xii.	Hoppers of the coal crushing unit and washery unit shall be fitted with high efficiency bag filters and mist spray water sprinkling system shall be installed 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	Complied. Coal crusher of the plant are facilitated with Bag filters of adequate capacity and efficiency so as to comply with particulate emission norms. Mist spray water sprinkling system is provided. Closed conveyor system is provided to prevent fugitive dust emissions. Please refer Annexure – III.
xiii.	All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned with mechanical sweepers.	Complied. Approach road is black topped. All internal roads are concrete. Maintenance work is regularly carried out by HECB. Road is being clean through mechanical sweeper. Please refer to Annexure – VIII & IX
xiv.	Trucks engaged for mineral transportation outside the washery upto the railway siding covering a distance of 2 km shall be optimally loaded and covered with tarpaulin with no spillage en route. The trucks shall be properly maintained and emissions shall be below notified limits. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.	Being Complied. No overloading is being permitted. All the vehicles engaged in transportation are covered with tarpaulins during transportation. All the vehicle are in good condition and strictly following norms. The vehicle inspection is conducted regularly.
xv.	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 uploaded on the company website	Being Complied. Records are maintained at plant and also uploaded on the website and same can be accessed at http://www.hindenergy.com

Sr. No.	Specific Conditions	Action Taken
xvi.	The transportation of coal should be by mechanically covered trucks in order to reduce coal spillage and dust pollution	HECB enquired for mechanically covered trucks with leading truck manufacturers in 2013, 2016 and latest by 2018. However, mechanically covered trucks are not available in market; hence transportation of coal is done through tarpaulin covered trucks only (Refer Annexure – I).
xvii.	The waste water should be discharged after proper treatment;	Complied. The HECB is completely reutilizing the process water after treatment through Hi-rate Thickener and settling ponds and maintaining ZERO discharge Condition.
xviii.	All the conditions stipulated in the letter of Central Ground Water Board letter no.21-4(102)/CGWA/NCCR/2011/174 dated Nil should be adhered to.	Complied. All conditions in CGWB letter are adhered.
xix.	The time limit should be provided to the Contractual vendors /contractors for providing mechanically covered trucks for coal transportation.	Noted. The mechanically covered trucks are not available with truck manufactures nor intend to manufacture right now. Same will be procured by HECB whenever available in market.
xx.	The washery unit shall be a zero-discharge facility and no wastewater shall be discharged from the washery into the drains/natural water courses. Recycled water shall be used for development and maintenance of green belt and in the Plant Operations.	Complied. Zero discharge is strictly followed by recycling used water . No wastewater is discharged into drains / water resources.
xxi.	Industrial wastewater (workshop) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May 1993 and 31 st December 1993 or as amended from time to time before use within the washery premises. Oil and grease trap shall be installed for treatment of workshop effluents. No wastewater shall be discharged from the washery into the drains/natural watercourses.	Complied. Effluent treatment plant has been constructed and the treated effluent is confirming with CECB standards. Please refer to Annexure -

Sr. No.	Specific Conditions	Action Taken
xxii.	No additional groundwater shall be used for the Plant Operations. Any additional water requirement envisaged shall be obtained by recycle/reuse to the maximum extent and from rainwater harvesting measures.	Complied. Water recycled from ETP is re- used in plant operation and only makeup water is withdrawn from groundwater.
xxiii.	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 thereon which should be annually updated on the company website.	Being complied. The CSR amount was spent on various need based activities like pond construction, education facilities, drainage repairing, bore well construction and medical instrument donations to government hospital etc. The CSR expenditure details are uploaded on the website and same can be accessed at http://www.hindenergy.com .
xxiv.	Heavy metal content in raw coal, and washed coal shall be analysed once in a year and records maintained thereof.	Complied. Analysis of heavy metal content in raw coal, washed coal is carried out. And records are maintained properly.
xxv.	The project authorities shall in consultation with the Panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.	Complied. The company is actively doing CSR activities in consultation with panchayats and administration of nearby villages.
xxvi.	The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent.	Complied. Air pollution control equipment are installed and Hind Energy is also actively doing CSR activities.

Sr. No.	Specific Conditions	Action Taken
xxvii.	<p>Corporate Environment Responsibility:</p> <p>a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.</p> <p>b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.</p> <p>c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.</p> <p>d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.</p>	<p>Complied. Corporate Environment Policy in place and adhered.</p>

General Conditions:

Sr. No.	General Conditions	Action Taken
i.	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	Noted and agreed.
ii.	No change in the calendar plan of production for quantum of mineral coal shall be made.	Noted and agreed.
iii.	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM ₁₀ , PM _{2.5} , SO ₂ and NO _x monitoring. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc carried out at least once in six months.	Complied. Four nos. of ambient air quality monitoring stations have been established & are operational for monitoring ambient air data. Heavy metals (Hg, As, Ni, Cd & Cr) are monitored. Ambient air quality monitoring data for current monitoring period is enclosed along with Status report.
iv.	Data on ambient air quality (PM ₁₀ , PM _{2.5} , SO ₂ and NO _x) and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly submitted to the Ministry including its concerned Regional Office and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognised under the EPA rules, 1986 shall be furnished as part of compliance report.	Being Complied on regular basis.
v.	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.	Complied. Machines & equipment's producing noise are covered with sound absorbing material & ear plugs/muffs are being provided to the workers in noisy environment.
vi.	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 19 th May 1993 and 31 st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.	Complied. Effluent treatment plant has been constructed and the treated effluent is confirming with CECB standards.

Sr. No.	General Conditions	Action Taken
vii.	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.	Being complied. All the vehicles engaged in transportation are covered with tarpaulins and are maintained so as to follow emission norms.
viii.	Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EPA Rules,1986.	Complied. The environmental quality is being regularly monitored and analyzed through M/s Anacon Laboratory Pvt. Ltd., Nagpur, a MoEF recognized and NABET & NABL accredited Laboratory.
ix.	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.	Complied. Protective Respiratory Devices are provided & safety appliances are being used by the workers. Shoes, mask helmet safety belt & ear plug, have been provided & adequate training has been given to workers.
x.	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 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 out sourcing.	Complied. Protective Respiratory Devices are provided & safety appliances are being used by the workers. Shoes, mask, helmet, safety belt & ear plug, have been provided & adequate training has been given to workers. Regular health checkup conducted.
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.	Being complied. Separate environment cell is in place which is headed by senior person.
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 concerned Regional Office.	A separate account (SBI, Bilaspur; A/c. No. 36262584886) has been opened for Environmental protection measures and year wise expenses will be submitted to Regional office periodically with Six monthly EC compliance reports. A total expenditure of Rs. 59,77,733 has been carried out for EPM activities till March 2019.

Sr. No.	General Conditions	Action Taken
xiii.	The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at http://envfor.nic.in .	After receipt of EC letter dtd. 21st May 2014 same is given to newspaper office immediately for publishing. However it was published on 30th May 2014. (Refer Annexure - VI).
xiv.	A copy of the environmental clearance letter shall be marked to concern Panchayat/ZilaParishad, Municipal Corporation or Urban local body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on company's website.	Circulated and displayed in Gram Panchayat. EC letter was now uploaded on the company website along with other relevant data. Same can be accessed at http://www.hindenergy.com .
xv.	A copy of the environmental clearance letter shall be shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Sector and Collector's Office/Tehsildar's Office for 30 days.	In purview of CECB, CG.
xvi.	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM ₁₀ , PM _{2.5} , SO ₂ and NO _x (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.	EC letter is uploaded on the company website and is updated every Six month along with environmental quality monitoring data. Environmental monitoring data is also displayed on main gate of the company. (Annexure- VII).

Sr. No.	General Conditions	Action Taken
xvii.	The project proponent shall submit six monthly 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, respective Zonal Office s of CPCB and the SPCB.	Being complied.
xviii.	The Regional Office of this Ministry located in the Region 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.	Noted. Full co-operation will be given to the official of the Hon'ble Ministry and all data/document/reports as sought by them will be submitted.
xix.	The Environmental statement for each financial year ending 31 March in For –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 by-mail.	Being complied. Environmental Statement for each year is submitted to CECB regularly.

Other Conditions:

Sr. No.	Other Conditions	Action Taken
1.	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.	Noted and agreed.
2.	The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent	Complied.
3.	The proponent is required to obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection.	Complied. All clearances required are obtained.
4.	The Ministry or any other competent authority may stipulate any further condition for environmental protection.	Noted.
5.	The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.	Being complied. Environment Cell is established for monitoring of EC conditions.
6.	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted and agreed.
7.	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial	Noted and agreed.

	measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations.	
8.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act,2010.	Noted.
9.	This EC supersedes the earlier EC, vide letter no. J-11015/190/2007-IA.II (M) dated 24.06.2008.	Noted.

Annexure I: Letters from Truck Manufacturers



To,

26/09/2018

The Director,

Hind Energy & Coal beneficiation (India) Ltd.,

Bilaspur.

Sub: Your query regarding mechanically covered & operated trucks.

Sir,

This is in reference to your letter dated 23/09/2018 regarding a query of mechanically covered & operated trucks.

We wish to inform you that presently we are not providing any mechanically covered & operated trucks in Tractor Trailer range.

Regards,

For,

Tata Motors Limited.

TATA MOTORS LIMITED

Parthivi Pacific 2nd Floor Above Axis Bank Tatibandh GE Road Raipur 492 009 Chhattisgarh
Tel 91 771 6675501 Fax 91 771 6675523 www.tatamotors.com
Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001



To Whomsoever It May Concern:

This is to certify that our company "AMW Motors Ltd" is one among the largest manufacturer of the heavy commercial vehicles in India.

Furthermore, we certify that we do not manufacture any heavy commercial vehicles which are mechanically covered and operated, and further till date we have no future plans to manufacture the same.

This is for your kind reference.

Assuring best services all time.



AMW Motors Ltd.

AMW MOTORS LTD

(Demerged entity of Asia Motor Works Ltd.)

Plant & Regd. Office : 34 Km. Milestone, Bhuj - Bhachau Road, Village Kanliyabe, Kachchh, Gujarat 370 020, India
Tel.: (91-2832) 243700-10 (11 lines), Fax : (91-2832) 243726 / 30.

Web : www.amwasia.com

Corporate Office : Asia MotorWorks Ltd, 7th Floor, Tower I, Equinox Business Park, (Peninsula Techno Park)
Off Bandra Kurla Road, L.B.S Marg, Kurla (West) Mumbai - 400 070.
Tel.: (91-22) 67101501 / 02 Fax: (91-22) 67101503 / 04

Annexure II: Railway Siding at Gatora



Annexure III: Bag Filters



Annexure IV: Plantation along the Road Side









Annexure V: Boundary Walls and Sprinklers



Annexure VI: Paper Advisement of Environmental Clearance by MOEF

संभाव

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पिकअप ने मारी टोकर एक की मौत, एक गंभीर

जशपुरनगर(निग्र)। बुधवार शाम पिकअप की टोकर से एक ग्रामीण का मौत हो गई। वहीं एक युवक गंभीर रूप से घायल हो गया है, जिसे उपचार के लिए जिला अस्पताल में भर्ती कराया गया। युवक की गंभीर स्थिति को देखते हुए उसे रॉची रेफर किया गया है, जहां उसकी स्थिति गंभीर बनी हुई है। घटना सिटी कोतवाली अंतर्गत ग्राम लोखंडी की है। जानकारी के अनुसार लोखंडी निवासी बिरबहादुर (40) पिता सोमया नगिसिया अपनी पत्नी व बेटों के साथ किसी कार्य के सिलसिले से मेन रोड की ओर निकला हुआ था। वहीं जशपुर के मधुवनटोली निवासी राजकुमार (20) पिता करमदेव यादव भी अपने निजी कार्य के सिलसिले से बाइक से लोखंडी की ओर गया हुआ। इस दौरान लोखंडी मेन रोड में पिकअप क्रमांक सीजी 14 एफ 0131 का चालक संदीप घासी पिता सुंदर घासी वाहन को तेज रफ्तार से चलाते हुए आया और पहले बाइक से सवार राजकुमार को टोकर मार दिया, जिसके बाद वाहन चालक का नियंत्रण बिगड़ा और अपने परिवार के साथ रोड में खड़े बिरबहादुर को टोकर मार दी। घटना में ग्रामीण बिरबहादुर का मौत पर ही मौत हो गई। वहीं बाइक चालक के फिर में गंभीर चोट आई है व उसका पैर भी फैक्टर हो गया।

चिखलाडीह के वीरान जंगल से चार लाख की लकड़ी जब्त

अंबिकापुर(निग्र)। नगर से लगे ग्राम चिखलाडीह में साल जंगल के सफाए के चौथे दिन मौके पर यहां-वहां बिखरी पड़ी लकड़ियों को राजस्व विभाग ने वन विभाग के सुपुर्द कर दिया। कुल 20.806 घन मीटर साल की लकड़ी मौके से जब्त की गई है, जिसकी अनुमानित कीमत लगभग चार लाख रुपए आंकी गई है। वन विभाग द्वारा टुकों से लकड़ियों का परिवहन काष्ठगार में करने का सिलसिला शुरू कर दिया गया है। चार ट्रीप में लकड़ियों का परिवहन प्रतापपुर नाका स्थित काष्ठगार में कराया गया। ग्रामीणों के घरों और बाड़ियों में छिपाकर रखी गई साल की बेशकियती लकड़ियों के जब्त की लोकर अभी तक कोई अंतिम निर्णय नहीं लिया गया है। सर्व वॉर्ट के बाद ग्रामीणों के घरों और बाड़ियों से लकड़ियां जब्त करने की कार्रवाई की जाएगी। अभी तक की जांच में यह स्पष्ट नहीं हो सका है कि आखिरकार ग्रामीणों ने एक-एक कर साल के 231 बड़े पेड़ों को क्यों धराशाय कर दिया। मामले में ग्रामीण अब भी कुछ बोलने को तैयार नहीं हैं।

विदित हो कि शहर से लगभग सात किलोमीटर दूर चिखलाडीह और नर्मदापारा की सीमा पर राजस्व भूमि में वर्षों पुराना साल का जंगल था, जिसे बीते शनिवार और रविवार को ग्रामीणों ने साफ कर दिया। पिछले दो दिन से जंगल में जहां-तहां बिखरी पड़ी साल की बांगी, बल्ली व लड़ा को दूसरे गांव से श्रमिक मंगाकर एक खुले स्थान में संहतित कराने का काम किया जा रहा था जो बुधवार दोपहर बाद पूरा हो गया। जंगल में लावारिस झाल में बिखरी पड़ी कुल 246 बांगी, कंडी व लट्टा जब्त किया गया। बताया गया कि मौके से 20.806 घनमीटर साल की लकड़ी जब्त की गई। प्रति घनमीटर औसत 20 हजार रुपए की दर से बिकने वाली साल की लकड़ियों की अनुमानित कीमत लगभग चार लाख रुपए आंकी गई है। बुधवार देर शाम मापजोख का काम पूरा होने के बाद राजस्व विभाग ने जब्त लकड़ियों को वन विभाग के सुपुर्द कर दिया।

राजस्व विभाग ने वन विभाग के सुपुर्द की लकड़ियां

घरों व बाड़ियों से लकड़ी जब्त करना अभी शेष

कार्यालय कार्यपालन अभियंता, लो. नि. वि. (भ/स) संभाग जशपुर

निविदा आमंत्रण सूचना

क्रमांक - 1335/NIT-1/2014-2015/व.ले.लि. दिनांक 26.05.2014

निविदा प्रपत्र क्रय करने हेतु आवेदन प्रस्तुत करने की अंतिम तिथि - 11.06.2014 अपराह्न 5.30 बजे तक

टेन्डरद्वारा द्वारा प्रस्तुत निविदायें प्राप्त करने की अंतिम तिथि - 18.06.2014 अपराह्न 5.30 बजे तक

निविदा खोलने की तिथि - 19.06.2014 पूर्वाह्न 11.30 बजे तक

क्र./निविदा क्र.	कार्य का नाम / No. of Calls	कार्य की अनुमानित लागत (लाख में) / अमानत राशि (रु. में) / बैंक सालान्की (रु. में)	निविदा प्रपत्र की कीमत (रु. में)	निविदाकारों की श्रेणी	कार्य की अवधि	दर सूची संशोधन दि.
1	जशपुर विकासखण्ड जशपुर में कुकक सूचना केंद्र भवन का निर्माण - प्रथम आमंत्रण	6.26 4700.00 94000.00	750.00	A	सिविल कार्य अ-5 से अ-1 तक	05 माह 00 दिवस वर्षी क्रतु सहित 1-SOR for Building Work (Civil) Issued by EinC PWD Chhattisgarh w.e.f 01-06-09 & amended upto : 11.11.2011
1	गुमहरिया विकासखण्ड जशपुर में कुकक सूचना केंद्र भवन का निर्माण - प्रथम आमंत्रण	6.26 4700.00 94000.00	750.00	A	सिविल कार्य अ-5 से अ-1 तक	05 माह 00 दिवस वर्षी क्रतु सहित 1-SOR for Building Work (Civil) Issued by EinC PWD Chhattisgarh w.e.f 01-06-09 & amended upto : 11.11.2011
1	लोहम विकासखण्ड जशपुर में कुकक सूचना केंद्र भवन का निर्माण - प्रथम आमंत्रण	6.26 4700.00 94000.00	750.00	A	सिविल कार्य अ-5 से अ-1 तक	05 माह 00 दिवस वर्षी क्रतु सहित 1-SOR for Building Work (Civil) Issued by EinC PWD Chhattisgarh w.e.f 01-06-09 & amended upto : 11.11.2011

निविदा संबंधी अन्य शर्तों का अवलोकन विभागीय वेबसाइट www.cg.nic.in/pwdraipur में अथवा संबंधित संभाग में किया जा सकता है।

साइकल हो या वाटुयान बंदी बफर रही मान

कार्यपालन अभियंता
लो. नि. वि. (भ/स) संभाग जशपुर

सूचना

सर्वसाधारण को सूचित किया जाता है कि मे. हिन्द एनर्जी एण्ड कोल बेनिफिकेशन (इंडिया) लिमिटेड उनको द्वारा ग्राम चिखलाडीह, तहसील-मरुपुरी, जिला- बिलासपुर (छ.ग.) में प्रस्तावित क्षमता विस्तार के तहत कोल वीशरी (2.4 एम.टी.पी.ए. से 3.6 एम.टी.पी.ए.) क्षमता प्रस्तावित है जिसके लिए भारत सरकार पर्यावरण एवं वन मंत्रालय, दिल्ली से पत्र क्रमांक J11015/364/2009.IA-II(M) दिनांक 21/05/2014 का पर्यावरणीय स्वीकृति प्रदान की गई है जिसका अवलोकन भारत सरकार पर्यावरण एवं वन मंत्रालय, दिल्ली के वेबसाइट www.envfor.nic.in पर अवलोकन व पाठन किया जा सकता है। एवं छत्तीसगढ़ पर्यावरण संरक्षण मंडल के मुख्य कार्यालय 1-तिलक नगर, शिव मंदिर चौक, मुख्य मार्ग, अंबिकापुर, रायपुर-492001 (छ.ग.) में उपलब्ध है।

कृते
मे. हिन्द एनर्जी एण्ड कोल
बेनिफिकेशन (इंडिया) लिमिटेड
कायरेक्टर

Annexure- VII : AAQ DATA OF MAIN GATE



AMBIENT AIR QUALITY AT HINDADIH COALWASHERY		LAB REPORTS			
PARAMETER	LIMIT (UG/M ³)	NEAR WEIGHT BRIDGE	ROTARY BREAKER	NEAR DISPATCH	NEAR BARRACK
PM ₁₀	100	67.2	61.7	52.9	56.3
PM ₂₅	60	31.7	28.1	16.8	21.9
SO ₂	80	12.8	8.2	7.3	8.7
NOX	80	26.3	17.1	16.4	22.6

Annexure - VIII : Approach road



Annexure – IX: Photographs of mechanical sweeper



ENVIRONMENTAL STATUS REPORT

Air Quality Monitoring

Regular monitoring of environmental parameters is of immense importance to assess the status of environment. With the knowledge of baseline conditions, the monitoring program will serve as an indicator for any deterioration in environmental conditions due to mining operation. Suitable mitigation steps will be taken in time to safeguard the environment, based on monitoring reports. Monitoring is important in the control of pollution since the efficiency of control measures can only be determined by monitoring.

In order to find out the impact of plant activity on sensitive receptors, it is necessary to monitor Environmental Quality to know the level of concentrations of pollutants within and around the plant area. Accordingly Hind Energy & Coal Beneficiation (India) Ltd. monitoring air, quality on monthly basis.

Ambient Air Quality Monitoring

Ambient Air Quality was monitored at four locations within plant premises and four locations in nearby villages. Fugitive emissions were monitored at two locations in the plant premises.

The sampling stations are selected at the above mentioned locations, in downwind and upwind direction of the Industry. ALPL is carrying out regular monitoring for, SPM, RPM, SO₂, NO_x and heavy metals at above Ambient Air Quality Monitoring (AAQM) locations. Monitoring of fugitive emissions include parameters SPM, PM₁₀, SO₂&NO_x.

Frequency of Sampling

Ambient air quality monitoring was carried out on 24 hourly on quarterly basis (once in a quarter) for the monitoring period.

Duration of Sampling

The duration of sampling for PM₁₀, PM_{2.5}, SO₂, NO_x and heavy metals is twenty-four hourly. Data is compared with the standards mentioned in the Gazette Notification of the Central Pollution Control Board (CPCB) Notification 16th Nov. 2009.

Methods and Instruments used for Sampling

The air samples were analyzed as per methods specified by Central Pollution Control Board (CPCB).

The levels of Suspended Particulate Matter, Respirable Particulate Matter, Sulphur Dioxide (SO₂), Oxides of Nitrogen (NO_x) & heavy metals were monitored for identifying the impact on surrounding area. PM₁₀ and PM_{2.5} were collected with the help of Respirable particulate sampler and Fine particulate sampler operating 24 hours and is computed by gravimetric method. Due to the high flow rate of air, the vacuum is formed into the hopper region of sampler which is tapped by providing a nozzle in the hopper which sucks the ambient air for sampling SO₂ and NO_x. The

gases were measured by wet chemical method and were analyzed by colorimetric. The measurement techniques used for various pollutants and other details are given in below:

Measurement Techniques for Various Pollutants

Sr. No.	Parameter	Method	Technical Protocol	Minimum Detection limit ($\mu\text{g}/\text{m}^3$)
1.	Suspended Particulate Matter, SPM	Respirable Dust Sampler (Gravimetric Method)	IS-5182 (Part – IV)	5
2.	Respirable Particulate Matter, PM_{10}	Respirable Dust Sampler (Gravimetric Method)	IS-5182 (Part – IV)	5
3.	Fine Particulate Matter, $\text{PM}_{2.5}$	Fine Particulate Sampler (Gravimetric Method)	IS-5182 (Part-IV)	-
4.	Sulphur Dioxide	Improved West and Geake Method	IS-5182 (Part – II)	4
5.	Oxide of Nitrogen	Jacob & Hochheiser Modified Method	IS-5182 (Part – VI)	4
6.	Heavy Metals	Acid digestion	CPCB Guideline (Vol. 1)	0.0001

Ambient Air Quality

The ambient air quality monitoring was carried out at 4 locations in the Plant premises and 4 locations in the nearby villages in upwind, downwind and crosswind directions of the coal washery project. The air quality monitoring was conducted for PM_{10} , $\text{PM}_{2.5}$, SO_2 , NO_x and heavy meals during this monitoring period.

Fugitive emission monitoring was carried out at two locations within the washery premises during this period for the parameters which includes SPM, PM_{10} , SO_2 & NO_x .

Overall the ambient air concentrations of PM_{10} , $\text{PM}_{2.5}$, SO_2 , NO_x and heavy meals were observed to be well within the limits of concentrations promulgated by CPCB, New Delhi.

National Ambient Air Quality

Standard: PM_{10} (RPM): $100 \mu\text{g}/\text{m}^3$,

$\text{PM}_{2.5}$: 60

$\mu\text{g}/\text{m}^3 \text{SO}_2$: 80

$\mu\text{g}/\text{m}^3$ and NO_x :

80 $\mu\text{g}/\text{m}^3$

Test Report

Jan-Feb-Mar
2019



TEST REPORT

ANACON LABORATORIES PVT. LTD.

ISO 9001:2015, ISO 14001:2015, OHSAS 18001 Certified Organization,
 Recognized By Ministry of Environment & Forests (MoEF), New Delhi
 Accredited By Quality Council of India by NABET - Environment Impact Assessment Studies
 Authorised by Food Safety & Standards Authority of India Under FSS Act
 Approved by Bureau of Indian Standards (BIS)

[Report For The Month of January-February-March-2019 (Qtrly)]

AIR MONITORING ANALYSIS REPORT

Report No.:-	AN/AA/HECBIL/2018-19/810-1	Report Date:-	30/03/2019
Name of Client & Address:-	M/s HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih, Sipat , Bilaspur (C.G.)-495 001.		
Type of Work :-	Ambient Air Monitoring (March-2019)	Sample Ref.No. :-	1819/Mon-771-1
Sample Drawn By :	Anacon Representative	Sample Received Date	25.03.2019
Date of Analysis :-	26.03.2019 to 27.03.2019	Testing Period	01 Day

(24 hrs Sampling)

SL. No.	Sampling Location	Sampling Date	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO _x µg/m ³
1.	Near Steel Yard	22.03.2019	61.7	26.3	11.4	27.1
2.	Near Rotary Breaker	22.03.2019	58.3	23.9	9.3	21.8
3.	Near Dispatch	23.03.2019	51.9	17.3	7.1	18.4
4.	Near Barrack	23.03.2019	52.7	18.6	7.4	19.6
CPCB Standards			100	60	80	80

SL No	Sampling Location	Sampling Date	Pb µg/m ³	As ng/m ³	Ni ng/m ³	Cd µg/m ³	Cr µg/m ³
1.	Near Steel Yard	22.03.2019	0.027	ND	0.039	ND	ND
2.	Near Rotary Breaker	22.03.2019	0.016	ND	0.021	ND	ND
3.	Near Dispatch	23.03.2019	0.014	ND	0.026	ND	ND
4.	Near Barrack	23.03.2019	0.011	ND	0.019	ND	ND
CPCB Standards			1.0 (24 hrs)	6.0 (annual)	20.0 (annual)	---	---

Thanks for utilizing our services.

Chemist:- *S. R. S.*

[Signature]
 Authorized Signatory

Head Office : 60, Bajirabhu Nagar, Nagpur - 440033 India. Ph. No. (0712) 2242077, 9372404924, Email : ngp@anacon.in
 Lab : FP 34-35, Food Park, Five Star Estate, MIDC Bulburi, Nagpur - 441122. Mob. No. 9373287475, Email : labngp@anacon.in
 Support Helplines : Technical (9373287475), Accounts Division (9326960081, 9372960079), Administration (9372960078)
 Email : support@anacon.in. You may also visit us at www.anaconlaboratories.com





TEST REPORT

ANACON LABORATORIES PVT. LTD.

ISO 9001:2015, ISO 14001:2015, OHSAS 18001 Certified Organization,
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 Accredited By Quality Council of India by NABET - Environment Impact Assessment Studies
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 Approved by Bureau of Indian Standards (BIS)

[Report For The Month of January-February-March-2019 (Qtrly)]

Fugitive Dust Monitoring Analysis Report

Report No.:-	AN/FE/HECBIL/2018-19/810-2	Report Date:-	30/03/2019
Name of Client & Address:-	M/s HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih, Seepat , Bilaspur (C.G.)-495 001.		
Type of Work :-	Fugitive Dust Monitoring (March-2019)	Sample Ref.No. :-	1819/Mon-771-2
Sample Drawn By :	Anacon Representative	Sample Received Date	25.03.2019
Date of Analysis :-	26.03.2019	Testing Period	01 Day

SL. NO.	Sampling Location	Sampling Date	SPM $\mu\text{g}/\text{m}^3$	SO ₂ $\mu\text{g}/\text{m}^3$	NO _x $\mu\text{g}/\text{m}^3$
1	Near Weight Bridge	22.03.2019	327	11.7	26.9
2	Near Environment Lab	23.03.2019	204	8.1	16.4
CPCB Standards			2000	--	--

Thanks for utilizing our services

Chemist:- *smf*

Stamp

Authorized Signatory



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TEST REPORT

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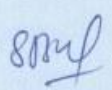
[Report For The Month of January-February-March-2019 (Qtrly)]

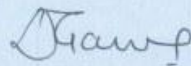
Fugitive Dust Monitoring Analysis Report

Report No.:-	AN/FE/HECBIL/2018-19/810-3	Report Date:-	30/03/2019
Name of Client & Address:-	M/s HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih, Seepat , Bilaspur (C.G.)-495 001.		
Type of Work :-	Fugitive Dust Monitoring (March-2019)	Sample Ref.No. :-	1819/Mon-771-3
Sample Drawn By :	Anacon Representative	Sample Received Date	25.03.2019
Date of Analysis :-	26.03.2019	Testing Period	01 Day

SL.NO.	Sampling Location	Sampling Date	SPM µg/m ³	SO ₂ µg/m ³	NO _x µg/m ³
1	Near Vehicles Parking Area	23.03.2019	261	13.7	28.1
CPCB Standards			2000	--	--

Thanks for utilizing our services

Chemist:- 


 Authorized Signatory

Head Office : 60, Bajiprabhu Nagar, Nagpur - 440033 India. Ph. No. (0712) 2242077, 9372404924, Email : ngp@anacon.in
 Lab : FP-34-35, Food Park, Five Star Estate, MIDC Butibori, Nagpur - 441122. Mob. No. 9373287475, Email : labngp@anacon.in
 Support Helplines : Technical (9373287475), Accounts Division (9328960081, 9372960079), Administration (9372960078)
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TEST REPORT

ANACON LABORATORIES PVT. LTD.

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[Report For The Month of January-February-March-2019 (Qtrly)]

NOISE MONITORING REPORT

Report No.:-	AN/NE/HECBIL/2018-19/811	Report Date:-	30/03/2019
Name of Client & Address:-	M/s HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih, Sipat , Bilaspur (C.G.)-495 001.		
Type of Work :-	Noise Monitoring (March-2019)	Sample Ref.No. :-	1819/Mon-771-N
Sample Drawn By :	Anacon Representative	Data Received	25.03.2019

Date of Sampling: 22nd March-2019.

SL. NO.	LOCATION	RESULT dB(A)	
		Day Time	Night Time
Core Zone			
1.	Near Steel Yard	56.1	42.8
2.	Near Rotary Breaker	52.7	43.9
3.	Near Dispatch	62.8	56.3
4.	Near Barrack	58.2	47.1
CPCB Standards			
Residential Area		55	45
Industrial Area		75	70
Co mmercial Area		65	55

Thanks for utilizing our services.

Chemist:- *smf*

Stamp
Authorized Signatory



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TEST REPORT

ISSUED TO:
 HIND ENERGY AND COAL BENEFICATION (I) LTD.
 Village:- Hindadih
 Seepat, Bilaspur (C.G.)-495 001.

Sample Category : Ground Water
Sample Code : GW-1
Sample Location : Near Main Gate

Report No.-ALPL/30032019/811-1

Sample Inward No. : 1819/Mon-771-GW1
Report Issue Date : 30.03.2019
Your Reference : HECBIL/HINDADIH/BSP/2019-20/06
Reference Date : 30.04.2019

(Page 1 of 2)

Sample Registration Date : 25.03.2019
Quantity received : 2 L
Sample tested as received
Sampling Date : 23.03.2019

Analysis Starting Date : 26.03.2019
Analysis Completion Date : 29.03.2019
Tests required : As per w.o.
Sampled by : Anacon Representative

TEST RESULTS

[Report For The Month of January-February-March-2019 (Otrly)]

Sr. No	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 2		Test Results
				Acceptable Limit	Permissible Limit #	
1.	pH value	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	6.92 at 25°C
2.	Electrical Conductivity at 25°C	µs/cm	IS 3025 (Part 14)	-	-	439
3.	Turbidity	NTU	IS 3025 (Part 10)	1	5	0.6
4.	Apparent colour	Hazen units	IS 3025 (Part 4)	5	15	1
5.	Odour	-	IS 3025 (Part 5)	Agreeable	Agreeable	Agreeable
6.	Taste	-	IS 3025 (Part 8)	Agreeable	Agreeable	Agreeable
7.	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.26
8.	Total dissolved solids (TDS)	mg / l	IS 3025 (Part 16)	500	2000	246
9.	Fluoride (as F)	mg / l	IS 3025 (Part 60)	1.0	1.5	0.61
10.	Cyanide (as CN)	mg / l	IS 3025 (Part 27)	0.05	No relaxation	<0.005
11.	Chlorides (as Cl)	mg / l	IS 3025 (Part 32)	250	1000	27.43
12.	Free residual chlorine	mg/l	IS 3025 (Part 26)	Min. 0.2	1	<0.1
13.	Total alkalinity (as CaCO ₃)	mg / l	IS 3025 (Part 23)	200	600	121.59
14.	Total hardness (as CaCO ₃)	mg / l	IS 3025 (Part 21)	200	600	172.52
15.	Calcium (as Ca)	mg / l	IS 3025 (Part 40)	75	200	46.52
16.	Magnesium (as Mg)	mg / l	IS 3025 (Part 46)	30	100	13.69
17.	Sulphate (as SO ₄)	mg / l	IS 3025 (Part 24)	200	400	21.43
18.	Nitrates (as NO ₃)	mg / l	ALPHA Method	45	No relaxation	12.68
19.	Copper (as Cu)	mg / l	IS 3025 (Part 2)	0.05	1.5	<0.03
20.	Manganese (as Mn)	mg / l	IS 3025 (Part 2)	0.1	0.3	<0.05

NO. ES: ● Please see watermark "Original Test Report" to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● #Permissible limit in absence of an alternate source for drinking water. ● MPN indicates most probable number. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● '<' indicates detection limit of instrument/method and shall be considered as 'absent'. ● Result for test no. 12 is not relevant.

For ANACON LABORATORIES PVT. LTD.

Verified by _____

Authorized Signatory _____
 Dr. (Mrs.) S.D. Garway
 (Director, Lab)

Head Office: Anapurna Nagar, Nagpur - 440033 India. Ph. No. (0712) 2242077, 9372404924, Email : ngp@anacon.in
 Lab: Plot 35, Food Park, Five Star Estate, MIDC Butibori, Nagpur - 441122. Mob. No. 9373287475, Email : labngp@anacon.in
 Support: Vishal Chaturvedi (9373287475), Accounts Division (9326960081, 9372960079), Administration (9372960078)
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TEST REPORT

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Report No.-ALPL/30032019/811-1

ISSUED TO: HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih Seepat, Bilaspur (C.G.)-495 001.	Sample Inward No. : 1819/Mon-771-GW1 Report Issue Date : 30.03.2019 Your Reference : HECBIL/HINDADIH/BSP/2019-20/06 Reference Date : 30.04.2019
--	--

Sample Category : Ground Water
 Sample Code : GW-1
 Sample Location : Near Main Gate

(Page 2 of 2)

Sample Registration Date : 25.03.2019	Analysis Starting Date : 26.03.2019
Quantity received : 2 L	Analysis Completion Date : 29.03.2019
Sample tested as received	Tests required : As per w.o.
Sampling Date : 23.03.2019	Sampled by : Anacon Representative

Sr. No	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 2		Test Result
				Acceptable Limit	Permissible Limit #	
21.	Mercury (as Hg)	mg/l	IS : 3025 (Part 48)	0.001	No relaxation	< 0.0005
22.	Cadmium (as Cd)	mg/l	IS : 3025 (Part 41)	0.003	No relaxation	< 0.001
23.	Selenium (as Se)	mg/l	IS : 3025 (Part 56)	0.01	No relaxation	< 0.001
24.	Arsenic (as As)	mg/l	IS 3025 (Part 37)	0.01	No relaxation	< 0.01
25.	Aluminium (as Al)	mg/l	IS 15302	0.03	0.2	< 0.01
26.	Lead (as Pb)	mg/l	IS 3025 (Part 47)	0.01	No relaxation	< 0.001
27.	Zinc (as Zn)	mg / l	IS 3025 (Part 2)	5	15	< 0.1
28.	Total Chromium (as Cr)	mg / l	IS 3025 (Part 2)	0.05	No relaxation	< 0.03
29.	Boron (as B)	mg/l	IS 3025 (Part 2)	0.5	2.4	< 0.1
30.	Mineral Oil	mg / l	IS 3025 (Part 39)	0.5	No relaxation	< 0.001
31.	Phenolic compounds (as C ₆ H ₅ OH)	mg / l	IS 3025 (Part 43)	0.001	0.002	< 0.001
32.	Anionic detergents	mg / l	IS 13428 (Annex K)	0.2	1.0	< 0.01
33.	Polynuclear aromatic hydrocarbons	µg/l	USEPA 550	0.1	No relaxation	< 0.03
34.	Total coliform	Per 100 ml	IS 15185	Absent	Absent	Absent

NOTES: * Please see watermark "Original Test Report" to confirm the authenticity of this report. * Results shall be referred to tested sample(s) and applicable to tested parameters only. * Test report shall not be reproduced except in full without prior written approval of Anacon Labs. * Liability of Anacon Labs is limited to invoiced amount only. * Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. * Permissible limit in absence of an alternate source for drinking water. * MPN indicates most probable number. * 'mg/l' is equivalent to 'ppm'. * 'µg/l' is equivalent to 'ppb'. * '<' indicates detection limit of instrument/method and shall be considered as 'absent'. * Result for test no. 12 is not relevant.

REMARKS: Based upon request of the party, sample was tested for above mentioned parameters only. sample complies with IS:10500:2012, for test conducted, indicating that it is fit for drinking purpose with respect to tested parameters.

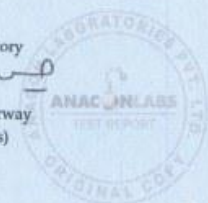
For ANACON LABORATORIES PVT. LTD.

Verified by

 Ms. Roshani Thakur
 (Chemist)

Authorized Signatory

 Dr. (Mrs.) S.D. Garway
 (Director- Labs)



Head Office : 60, Bajiprabhu Nagar, Nagpur - 440033 India. Ph. No. (0712) 2242077, 9372404924, Email : ngp@anacon.in
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 Approved by Bureau of Indian Standards (BIS)

Report No.-ALPL/30032019/811-2

ISSUED TO: HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadiah Seepat, Bilaspur (C.G.)-495 001.	Sample Inward No. : 1819/Mon-771-GW2 Report Issue Date : 30.03.2019 Your Reference : HECBIL/HINDADIAH/BSP/2019-20/06 Reference Date : 30.04.2019
---	---

Sample Category : Ground Water
 Sample Code : GW-2
 Sample Location : Near Security Quarter

(Page 1 of 2)

Sample Registration Date : 25.03.2019	Analysis Starting Date : 26.03.2019
Quantity received : 2 L	Analysis Completion Date : 29.03.2019
Sample tested as received	Tests required : As per w.o.
Sampling Date : 23.03.2019	Sampled by : Anacon Representative

TEST RESULTS

[Report For The Month of January-February-March-2019 (Qtrly)]

Sr. No	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 2		Test Results
				Acceptable Limit	Permissible Limit #	
1.	pH value	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	7.06 at 25°C
2.	Electrical Conductivity at 25°C	µs/cm	IS 3025 (Part 14)	-	-	392
3.	Turbidity	NTU	IS 3025 (Part 10)	1	5	0.3
4.	Apparent colour	Hazen units	IS 3025 (Part 4)	5	15	1
5.	Odour	-	IS 3025 (Part 5)	Agreeable	Agreeable	Agreeable
6.	Taste	-	IS 3025 (Part 8)	Agreeable	Agreeable	Agreeable
7.	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.27
8.	Total dissolved solids (TDS)	mg / l	IS 3025 (Part 16)	500	2000	220
9.	Fluoride (as F)	mg / l	IS 3025 (Part 60)	1.0	1.5	0.21
10.	Cyanide (as CN)	mg / l	IS 3025 (Part 27)	0.05	No relaxation	<0.005
11.	Chlorides (as Cl)	mg / l	IS 3025 (Part 32)	250	1000	36.48
12.	Free residual chlorine	mg/l	IS 3025 (Part 26)	Min. 0.2	1	<0.1
13.	Total alkalinity (as CaCO ₃)	mg / l	IS 3025 (Part 23)	200	600	121.49
14.	Total hardness (as CaCO ₃)	mg / l	IS 3025 (Part 21)	200	600	186.46
15.	Calcium (as Ca)	mg / l	IS 3025 (Part 40)	75	200	53.82
16.	Magnesium (as Mg)	mg / l	IS 3025 (Part 46)	30	100	12.64
17.	Sulphate (as SO ₄)	mg / l	IS 3025 (Part 24)	200	400	31.93
18.	Nitrates (as NO ₃)	mg / l	APHA Method	45	No relaxation	8.27
19.	Copper (as Cu)	mg / l	IS 3025 (Part 2)	0.05	1.5	<0.03
20.	Manganese (as Mn)	mg / l	IS 3025 (Part 2)	0.1	0.3	<0.05

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Verified by

 Ms. Roshani Thakur

For ANACON LABORATORIES PVT. LTD.

Authorized Signatory

Dr. (Mrs.) S.D. Garway
 Director (Labs)

Head Office: Ajiprabhu Nagar, Nagpur - 440033 India. Ph. No. (0712) 2242077, 9372404824. Email : ngp@anacon.in
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Report No.-ALPL/30032019/811-2

ISSUED TO: HIND ENERGY AND COAL BENEFICATION (1) LTD. Village:- Hindadih Seepat, Bilaspur (C.G.)-495 001.	Sample Inward No. : 1819/Mon-771-GW2 Report Issue Date : 30.03.2019 Your Reference : HECBIL/HINDADIH/BSP/2019-20/06 Reference Date : 30.04.2019
---	--

Sample Category : Ground Water
 Sample Code : GW-2
 Sample Location : Near Security Quarter (Page 2 of 2)

Sample Registration Date : 25.03.2019	Analysis Starting Date : 26.03.2019
Quantity received : 2 L	Analysis Completion Date : 29.03.2019
Sample tested as received	Tests required : As per w.o.
Sample Date : 23.03.2019	Sampled by : Anacon Representative

TEST RESULTS

[Report For The Month of January-February-March-2019 (Qtrly)]

Sr. No	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 2		Test Result
				Acceptable Limit	Permissible Limit #	
21.	Mercury (as Hg)	mg/l	IS : 3025 (Part 48)	0.001	No relaxation	< 0.0005
22.	Cadmium (as Cd)	mg/l	IS : 3025 (Part 41)	0.003	No relaxation	< 0.001
23.	Selenium (as Se)	mg/l	IS : 3025 (Part 56)	0.01	No relaxation	< 0.001
24.	Arsenic (as As)	mg/l	IS : 3025 (Part 37)	0.01	No relaxation	< 0.01
25.	Aluminium (as Al)	mg/l	IS: 15302	0.03	0.2	< 0.01
26.	Lead (as Pb)	mg/l	IS: 3025 (Part 47)	0.01	No relaxation	< 0.001
27.	Zinc (as Zn)	mg / l	IS: 3025 (Part 2)	5	15	< 0.1
28.	Total Chromium (as Cr)	mg / l	IS: 3025 (Part 2)	0.05	No relaxation	< 0.03
29.	Boron (as B)	mg/l	IS: 3025 (Part 2)	0.5	2.4	< 0.1
30.	Mineral Oil	mg / l	IS: 3025 (Part 39)	0.5	No relaxation	< 0.001
31.	Phenolic compounds (as CaH ₃ OH)	mg / l	IS: 3025 (Part 43)	0.001	0.002	< 0.001
32.	Anionic detergents	mg / l	IS: 13428 (Annex K)	0.2	1.0	< 0.01
33.	Polynuclear aromatic hydrocarbons	µg/l	USEPA 550	0.1	No relaxation	< 0.03
34.	Total coliform	Per 100 ml	IS: 15185	Absent	Absent	Absent

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • Liability of Anacon Labs is limited to invoiced amount only. • Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. • Permissible limit in absence of an alternate source for drinking water. • MPN indicates most probable number. • 'mg/l' is equivalent to 'ppm'. • 'µg/l' is equivalent to 'ppb'. • '<' indicates detection limit of instrument/method and shall be considered as 'absent'. • Result for test no. 12 is not relevant.

REMARKS: Based upon request of the party, sample was tested for above mentioned parameters only, sample complies with IS:10500:2012, for test conducted, indicating that it is fit for drinking purpose with respect to tested parameters.

For ANACON LABORATORIES PVT. LTD.

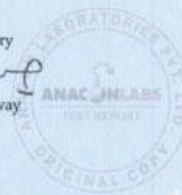
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 Ms. Roshani Thakur
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Authorized Signatory

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Report No.-ALPL/30032019/812-1

ISSUED TO: HIND ENERGY AND COAL BENEFICATION (1) LTD. Village:- Hindadih Seep., Bilaspur (C.G.)-495 001.	Sample Inward No. : 1819/Mon-771-W1 Report Issue Date : 30.03.2019 Your Reference : HECBIL/HINDADIH/BSP/2019-20/06 Reference Date : 30.04.2019
---	---

Sample Category : Effluent Water
 Sample Particulars : Settling Tank-1

Sample Registration Date : 25.03.2019	Analysis Starting Date : 26.03.2019
Quantity received : 2 L & 250ml	Analysis Completion Date : 29.03.2019
Sample tested as received	Tests required : As per w.o.
Sampling Date : 23.03.2019	Sampled by : Anacon Representative

TEST RESULTS

Sr. No.	Test Parameter	Measurement Unit	Test Method	Specification as per IS:2490-1982	Test Result
1.	pH	-	IS 3025 (Part 11)	5.5-9.0	6.76 at 25°C
2.	Chemical oxygen demand (COD)	mg / l	IS 3025 (Part 58)	--	24.9
3.	Biochemical oxygen demand (BOD at 27°C for 3 days)	mg / l	IS 3025 (Part 44)	100	8.27
4.	Total suspended solids (TSS)	mg / l	IS 3025 (Part 17)	--	18
5.	Total dissolved solids (TDS)	mg / l	IS 3025 (Part 16)	2100	392
6.	Chlorides (as Cl)	mg/l	IS 3025 (Part 32)	600	27.46
7.	Sulphate (as SO ₄)	mg/l	IS 3025 (Part 24)	1000	38.59
8.	Oil & Grease	mg / l	IS 3025 (Part 39)	10	< 4

NOTES : ● Please see watermark "Original Test Report" in blue color to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 90 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● '<' indicates detection limit of instrument/method and shall be considered as 'absent'.

REMARKS: Above waste water is recycled 100% and zero discharge in maintain. Sample complies with IS: 2490-1982 effluent on land for Irrigation purpose for the tests conducted.

Verified by

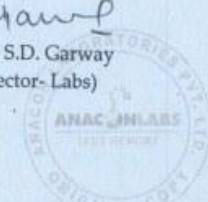
 Roshani Thakur
 (Chemist)

For ANACON LABORATORIES PVT. LTD.,

Authorized Signatory

 Dr. (Mrs.) S.D. Garway
 (Director- Labs)

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 Approved by Bureau of Indian Standards (BIS)

Report No.-ALPL/30032019/812-2

ISSUED TO: HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih Seepat , Bilaspur (C.G.)-495 001.	Sample Inward No. : 1819/Mon-771-W2 Report Issue Date : 30.03.2019 Your Reference : HECBIL/HINDADIH/BSP/2019-20/06 Reference Date : 30.04.2019
--	---

Sample Category : Effluent Water
 Sample Particulars : Settling Tank-2

Sample Registration Date : 25.03.2019	Analysis Starting Date : 26.03.2019
Quantity received : 2 L & 250ml	Analysis Completion Date : 29.03.2019
Sample tested as received	Tests required : As per w.o.
Sampling Date : 23.03.2019	Sampled by : Anacon Representative

TEST RESULTS

Sr. No.	Test Parameter	Measurement Unit	Test Method	Specification as per IS:2490-1982	Test Result
1.	pH	-	IS 3025 (Part 11)	5.5-9.0	7.17 at 25°C
2.	Chemical oxygen demand (COD)	mg / l	IS 3025 (Part 58)	--	16.28
3.	Biochemical oxygen demand (BOD at 27°C for 3 days)	mg / l	IS 3025 (Part 44)	100	4.59
4.	Total suspended solids (TSS)	mg / l	IS 3025 (Part 17)	--	11
5.	Total dissolved solids (TDS)	mg / l	IS 3025 (Part 16)	2100	243
6.	Chlorides (as Cl)	mg/l	IS 3025 (Part 32)	600	16.59
7.	Sulphate (as SO ₄)	mg/l	IS 3025 (Part 24)	1000	21.76
8.	Oil & Grease	mg / l	IS 3025 (Part 39)	10	< 4

NOTES : ● Please see watermark "Original Test Report" in blue color to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 90 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● '<' indicates detection limit of instrument/method and shall be considered as 'absent'.

REMARKS: Above waste water is recycled 100% and zero discharge in maintain. Sample complies with IS: 2490-1982 effluent on lanc' for Irrigation purpose for the tests conducted.

For ANACON LABORATORIES PVT. LTD.,

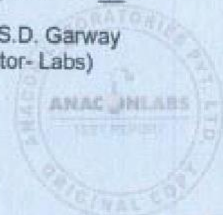
Verified by

Roshani Thakur
 (Chemist)

Authorized Signatory

Dr. (Mrs.) S.D. Garway
 (Director- Labs)

Head Office : 68, Bajiprabhu Nagar, Nagpur - 440033 India. Ph. No. (0712) 2242077, 9372404924, Email : npp@anacon.in
 Lab : FP 34-35, Food Park, Five Star Estate, MIDC Butibori, Nagpur - 441122. Mob. No. 9373287475, Email : labnpp@anacon.in
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Test Report

Apr-May-June 2019



TEST REPORT

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[Report For The Month of April-May-June-2019 (Qtrly)]

AIR MONITORING ANALYSIS REPORT

Report No.:-	AN/AA/HECBIL/2019-20/172-1	Report Date:-	05/07/2019
Issued to	M/s HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih, Sipat , Bilaspur (C.G.)-495 001.		
Type of Work :-	Ambient Air Monitoring (June-2019)	Sample Ref.No. :-	1920/Mon-127-1
Sample Drawn By :	Anacon Representative	Sample Received Date	29.06.2019
Date of Analysis :-	01.07.2019	Testing Period	01 Day

(24 hrs Sampling)

SL. No.	Sampling Location	Sampling Date	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO _x µg/m ³
1.	Near Steel Yard	22.06.2019	56.1	24.9	12.8	26.3
2.	Near Rotary Breaker	22.06.2019	61.7	28.1	8.2	17.1
3.	Near Dispatch	22.06.2019	52.9	16.8	7.3	16.4
4.	Near Barrack	22.06.2019	56.3	21.9	8.7	22.6
CPCB Standards			100	60	80	80

Sl No.	Sampling Location	Sampling Date	Pb µg/m ³	As ng/m ³	Ni ng/m ³	Cd µg/m ³	Cr µg/m ³
1.	Near Steel Yard	22.06.2019	0.024	ND	0.031	ND	ND
2.	Near Rotary Breaker	22.06.2019	0.017	ND	0.023	ND	ND
3.	Near Dispatch	22.06.2019	0.014	ND	0.026	ND	ND
4.	Near Barrack	22.06.2019	0.016	ND	0.018	ND	ND
CPCB Standards			1.0 (24 hrs)	6.0 (annual)	20.0 (annual)	---	---

Thanks for utilizing our services.

Chemist:- *Sanyal*

[Signature]
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 Lab : FP 34-35, Food Park, Five Star Estate, MIDC Butibori, Nagpur - 441122. Mob. No. 9373287475, Email : labngp@anacon.in
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[Report For The Month of April-May-June-2019 (Qtrly)]

Fugitive Dust Monitoring Analysis Report

Report No.:-	AN/FE/HECBIL/2019-20/172-2	Report Date:-	05/07/2019
Name of Client & Address:-	M/s HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih, Seepat , Bilaspur (C.G.)-495 001.		
Type of Work :-	Fugitive Dust Monitoring (June-2019)	Sample Ref.No. :-	1920/Mon-127-2
Sample Drawn By :	Anacon Representative	Sample Received Date	29.06.2019
Date of Analysis :-	01.07.2019	Testing Period	01 Day

SL. NO.	Sampling Location	Sampling Date	SPM µg /m ³	SO ₂ µg /m ³	NO _x µg /m ³
1	Near Weight Bridge	22.06.2019	282	12.7	32.6
2	Near Environment Lab	22.06.2019	216	7.9	14.8
CPCB Standards			2000	--	--

Thanks for utilizing our services

Chemist:- *smf*

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[Report For The Month of April-May-June-2019 (Qtrly)]

Fugitive Dust Monitoring Analysis Report

Report No.:-	AN/FE/HECBIL/2019-20/172-3	Report Date:-	05/07/2019
Issued to	M/s HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih, Seepat , Bilaspur (C.G.)-495 001.		
Type of Work :-	Fugitive Dust Monitoring (June-2019)	Sample Ref.No. :-	1920/Mon-127-3
Sample Drawn By :	Anacon Representative	Sample Received Date	29.06.2019
Date of Analysis :-	01.07.2019	Testing Period	01 Day

SL. NO.	Sampling Location	Sampling Date	SPM µg /m ³	SO ₂ µg /m ³	NO _x µg /m ³
1	Near Vehicles Parking Area	22.06.2019	273	12.8	26.9
CPCB Standards			2000	--	--

Thanks for utilizing our services

Chemist:- *smf*

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[Report For The Month of April-May-June-2019 (Qtrly)]

NOISE MONITORING REPORT

Report No.:-	AN/NE/HECBIL/2019-20/172	Report Date:-	05/07/2019
Name of Client & Address:-	M/s HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih, Sipat , Bilaspur (C.G.)-495 001.		
Type of Work :-	Noise Monitoring (June-2019)	Sample Ref.No. :-	1920/Mon-127-N
Sample Drawn By :	Anacon Representative	Data Received	29.06.2019

Date of Sampling: 22nd June-2019.

SL. NO.	LOCATION	RESULT dB(A)	
		Day Time	Night Time
Core Zone			
1.	Near Steel Yard	58.1	43.6
2.	Near Rotary Breaker	46.9	37.2
3.	Near Dispatch	54.2	46.3
4.	Near Barrack	59.7	51.8
CPCB Standards			
Residential Area		55	45
Industrial Area		75	70
Commercial Area		65	55

Thank for utilizing our services.

Chemist:- *smf*

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Report No.-ALPL/05072019/173-1

ISSUED TO: HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih Seepat, Bilaspur (C.G.)-495 001.	Sample Inward No. : 1920/Mon-127-GW1 Report Issue Date : 05.07.2019 Your Reference : HECBIL/HINDADIH/BSP/2019-20/06 Reference Date : 30.04.2019
--	--

Sample Category : Ground Water
 Sample Code : GW-1
 Sample Location : Near Main Gate

(Page 1 of 2)

Sample Registration Date : 29.06.2019	Analysis Starting Date : 01.07.2019
Quantity received : 2 L	Analysis Completion Date : 04.07.2019
Sample tested as received	Tests required : As per w.o.
Sampling Date : 23.06.2019	Sampled by : Anacon Representative

TEST RESULTS

[Report For The Month of April-May-June-2019 (Otrly)]

Sr. No	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 2		Test Results
				Acceptable Limit	Permissible Limit #	
1.	pH value	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	6.73 at 25°C
2.	Electrical Conductivity at 25°C	µs/cm	IS 3025 (Part 14)	-	-	358
3.	Turbidity	NTU	IS 3025 (Part 10)	1	5	0.8
4.	Apparent colour	Hazen units	IS 3025 (Part 4)	5	15	1
5.	Odour	-	IS 3025 (Part 5)	Agreeable	Agreeable	Agreeable
6.	Taste	-	IS 3025 (Part 8)	Agreeable	Agreeable	Agreeable
7.	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.32
8.	Total dissolved solids (TDS)	mg / l	IS 3025 (Part 16)	500	2000	200
9.	Fluoride (as F)	mg / l	IS 3025 (Part 60)	1.0	1.5	0.53
10.	Cyanide (as CN)	mg / l	IS 3025 (Part 27)	0.05	No relaxation	< 0.005
11.	Chlorides (as Cl)	mg / l	IS 3025 (Part 32)	250	1000	32.48
12.	Free residual chlorine	mg/l	IS 3025 (Part 26)	Min. 0.2	1	< 0.1
13.	Total alkalinity (as CaCO ₃)	mg / l	IS 3025 (Part 23)	200	600	131.69
14.	Total hardness (as CaCO ₃)	mg / l	IS 3025 (Part 21)	200	600	186.14
15.	Calcium (as Ca)	mg / l	IS 3025 (Part 40)	75	200	53.79
16.	Magnesium (as Mg)	mg / l	IS 3025 (Part 46)	30	100	12.58
17.	Sulphate (as SO ₄)	mg / l	IS 3025 (Part 24)	200	400	27.43
18.	Nitrates (as NO ₃)	mg / l	APHA Method	45	No relaxation	13.68
19.	Copper (as Cu)	mg / l	IS 3025 (Part 2)	0.05	1.5	< 0.03
20.	Manganese (as Mn)	mg / l	IS 3025 (Part 2)	0.1	0.3	< 0.05

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For ANACON LABORATORIES PVT. LTD.

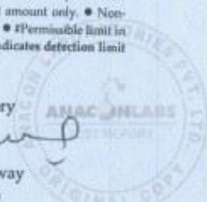
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Head Office : Plot No. 10, Sector 10, Gurgaon - 122001 India. Ph. No. (0712) 2242077, 9372404924. Email : ngo@anaccon.in
 Lab : Plot No. 10, Sector 10, Gurgaon - 122001 India. Ph. No. (0712) 2242077, 9372404924. Email : ngo@anaccon.in
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TEST REPORT

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Report No.-ALPL/05072019/173-1

ISSUED TO: HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih Seepat , Bilaspur (C.G.)-495 001.	Sample Inward No. : 1920/Mon-127-GW1 Report Issue Date : 05.07.2019 Your Reference : HECBIL/HINDADIH/BSP/2019-20/06 Reference Date : 30.04.2019
---	--

Sample Category : Ground Water
Sample Code : GW-1
Sample Location : Near Main Gate

(Page 2 of 2)

Sample Registration Date : 29.06.2019 Quantity received : 2 L Sample tested as received Sampling Date : 23.06.2019	Analysis Starting Date : 01.07.2019 Analysis Completion Date : 04.07.2019 Tests required : As per w.o. Sampled by : Anacon Representative
---	--

Sr. No	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 2		Test Result
				Acceptable Limit	Permissible Limit #	
21.	Mercury (as Hg)	mg/l	IS : 3025 (Part 48)	0.001	No relaxation	< 0.0005
22.	Cadmium (as Cd)	mg/l	IS 3025 (Part 41)	0.003	No relaxation	< 0.001
23.	Selenium (as Se)	mg/l	IS : 3025 (Part 56)	0.01	No relaxation	< 0.001
24.	Arsenic (as As)	mg/l	IS 3025 (Part 37)	0.01	No relaxation	< 0.01
25.	Aluminium (as Al)	mg/l	IS 15302	0.03	0.2	< 0.01
26.	Lead (as Pb)	mg/l	IS 3025 (Part 47)	0.01	No relaxation	< 0.001
27.	Zinc (as Zn)	mg / l	IS 3025 (Part 2)	5	15	< 0.1
28.	Total Chromium (as Cr)	mg / l	IS 3025 (Part 2)	0.05	No relaxation	< 0.03
29.	Boron (as B)	mg/l	IS 3025 (Part 2)	0.5	2.4	< 0.1
30.	Mineral Oil	mg / l	IS 3025 (Part 39)	0.5	No relaxation	< 0.001
31.	Phenolic compounds (as C ₆ H ₅ OH)	mg / l	IS 3025 (Part 43)	0.001	0.002	< 0.001
32.	Anionic detergents	mg / l	IS 13428 (Annex K)	0.2	1.0	< 0.01
33.	Polynuclear aromatic hydrocarbons	µg/l	USEPA 550	0.1	No relaxation	< 0.03
34.	Total coliform	Per 100 ml	IS 15185	Absent	Absent	Absent

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REMARKS: Based upon request of the party, sample was tested for above mentioned parameters only. sample complies with IS:10500:2012, for test conducted, indicating that it is fit for drinking purpose with respect to tested parameters.

For ANACON LABORATORIES PVT. LTD.

Verified by
Rhaksu
Ms. Roshani Thakur
(Chemist)

Authorized Signatory
S.D. Garway
Dr. (Mrs.) S.D. Garway
(Director- Labs)



Head Office : 60, Bajiprabhu Nagar, Nagpur - 440033 India. Ph. No. (0712) 2242077, 9372404924. Email : ngp@anacon.in
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ISSUED TO: HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih Seepat , Bilaspur (C.G.)-495 001.		Sample Inward No. : 1920/Mon-127-GW2 Report Issue Date : 05.07.2019 Your Reference : HECBIL/HINDADIH/BSP/2019-20/06 Reference Date : 30.04.2019	Report No.-ALPL/05072019/173-2
---	--	--	--------------------------------

Sample Category : Ground Water
 Sample Code : GW-2
 Sample Location : Near Security Quarter

(Page 1 of 2)

Sample Registration Date : 29.06.2019	Analysis Starting Date : 01.07.2019
Quantity received : 2 L	Analysis Completion Date : 04.07.2019
Sample tested as received	Tests required : As per w.o.
Sampling Date : 23.06.2019	Sampled by : Anacon Representative

TEST RESULTS

[Report For The Month of April-May-June-2019 (Qtrly)]

Sr. No	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 2		Test Results
				Acceptable Limit	Permissible Limit #	
1.	pH value	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	7.16 at 25°C
2.	Electrical Conductivity at 25°C	µs/cm	IS 3025 (Part 14)	-	-	416
3.	Turbidity	NTU	IS 3025 (Part 10)	1	5	0.6
4.	Apparent colour	Hazen units	IS 3025 (Part 4)	5	15	1
5.	Odour	-	IS 3025 (Part 5)	Agreeable	Agreeable	Agreeable
6.	Taste	-	IS 3025 (Part 8)	Agreeable	Agreeable	Agreeable
7.	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.21
8.	Total dissolved solids (TDS)	mg / l	IS 3025 (Part 16)	500	2000	233
9.	Fluoride (as F)	mg / l	IS 3025 (Part 60)	1.0	1.5	0.42
10.	Cyanide (as CN)	mg / l	IS 3025 (Part 27)	0.05	No relaxation	< 0.005
11.	Chlorides (as Cl)	mg / l	IS 3025 (Part 32)	250	1000	37.52
12.	Free residual chlorine	mg/l	IS 3025 (Part 26)	Min. 0.2	1	< 0.1
13.	Total alkalinity (as CaCO ₃)	mg / l	IS 3025 (Part 23)	200	600	131.68
14.	Total hardness (as CaCO ₃)	mg / l	IS 3025 (Part 21)	200	600	198.53
15.	Calcium (as Ca)	mg / l	IS 3025 (Part 40)	75	200	56.94
16.	Magnesium (as Mg)	mg / l	IS 3025 (Part 46)	30	100	13.68
17.	Sulphate (as SO ₄)	mg / l	IS 3025 (Part 24)	200	400	28.43
18.	Nitrates (as NO ₃)	mg / l	APHA Method	45	No relaxation	9.16
19.	Copper (as Cu)	mg / l	IS 3025 (Part 2)	0.05	1.5	< 0.03
20.	Manganese (as Mn)	mg / l	IS 3025 (Part 2)	0.1	0.3	< 0.05

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Verified by

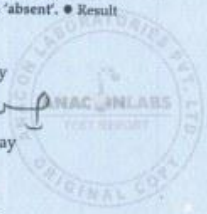
 Ms. Poshani Thakur

For ANACON LABORATORIES PVT. LTD.

Authorized Signatory

Dr. (Mrs.) S.D. Garway

Head Office: Rajprabhu Nagar, Nagpur - 440033 India. Ph. No. (0712) 2242077, 9372404924, Email: nnp@anacn.com
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Report No.-ALPL/05072019/174-1

ISSUED TO: HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadih Seepat, Bilaspur (C.G.)-495 001.	Sample Inward No. : 1920/Mon-127-W1 Report Issue Date : 05.07.2019 Your Reference : HECBIL/HINDADIH/BSP/2019-20/06 Reference Date : 30.04.2019
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Sample Category : Effluent Water
 Sample Particulars : Settling Tank-1

Samp. Registration Date : 29.06.2019	Analysis Starting Date : 01.07.2019
Quantity received : 2 L & 250ml	Analysis Completion Date : 04.07.2019
Sample tested as received	Tests required : As per w.o.
Sampling Date : 23.06.2019	Sampled by : Anacon Representative

TEST RESULTS

Sr. No.	Test Parameter	Measurement Unit	Test Method	Specification as per IS:2490-1982	Test Result
1.	pH	-	IS 3025 (Part 11)	5.5-9.0	6.63 at 25°C
2.	Chemical oxygen demand (COD)	mg / l	IS 3025 (Part 58)	--	32.8
3.	Biochemical oxygen demand (BOD at 27°C for 3 days)	mg / l	IS 3025 (Part 44)	100	9.3
4.	Total suspended solids (TSS)	mg / l	IS 3025 (Part 17)	--	21
5.	Total dissolved solids (TDS)	mg / l	IS 3025 (Part 16)	2100	516
6.	Chlorides (as Cl)	mg/l	IS 3025 (Part 32)	600	32.46
7.	Sulphate (as SO ₄)	mg/l	IS 3025 (Part 24)	1000	28.43
8.	Oil & Grease	mg / l	IS 3025 (Part 39)	10	< 4

NOTES : ● Please see watermark "Original Test Report" in blue color to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 90 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● '<' indicates detection limit of instrument/method and shall be considered as 'absent'.

REMARKS: Above waste water is recycled 100% and zero discharge in maintain. Sample complies with IS: 2490-1982 effluent on land for Irrigation purpose for the tests conducted.

For ANACON LABORATORIES PVT. LTD.,

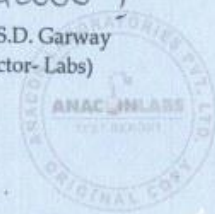
Verified by

 Roshani Thakur
 (Chemist)

Authorized Signatory

 Dr. (Mrs.) S.D. Garway
 (Director- Labs)

Head Office : 80, Bajiprabhu Nagar, Nagpur - 440033 India. Ph. No. (0712) 2242077, 9372404924, Email : ngp@anacon.in
 Lab : FP 34-35, Food Park, Five Star Estate, MIDC Butibori, Nagpur - 441122. Mob. No. 9373287475, Email : labngp@anacon.in
 Support Helpline : Technical (9373287475), Accounts Division (9326960081, 9372960079), Administration (9372960078)
 Email : support@anacon.in. You may also visit us at www.anaconlaboratories.com
 Branches : Maharashtra | Chhattisgarh | Madhya Pradesh | Jharkhand | Delhi





TEST REPORT

ANACON LABORATORIES PVT. LTD.

ISO 9001:2015, ISO 14001:2015, OHSAS 18001 Certified Organization,
 Recognized By Ministry of Environment & Forests (MoEF), New Delhi
 Accredited By Quality Council of India by NABET - Environment Impact Assessment Studies
 Authorised by Food Safety & Standards Authority of India Under FSS Act
 Approved by Bureau of Indian Standards (BIS)

Report No.-ALPL/05072019/174-2

ISSUED TO: HIND ENERGY AND COAL BENEFICATION (I) LTD. Village:- Hindadiah Seepat, Bilaspur (C.G.)-495 001.	Sample Inward No. : 1920/Mon-127-W2 Report Issue Date : 05.07.2019 Your Reference : HECBIL/HINDADIH/BSF/2019-20/06 Reference Date : 30.04.2019
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Sample Category : Effluent Water
 Sample Particulars : Settling Tank-2

Sample Registration Date : 29.06.2019	Analysis Starting Date : 01.07.2019
Quantity received : 2 L & 250ml	Analysis Completion Date : 04.07.2019
Sample tested as received	Tests required : As per w.o.
Sampling Date : 23.06.2019	Sampled by : Anacon Representative

TEST RESULTS

Sr. No.	Test Parameter	Measurement Unit	Test Method	Specification as per IS:2490-1982	Test Result
1.	pH	-	IS 3025 (Part 11)	5.5-9.0	7.08 at 25°C
2.	Chemical oxygen demand (COD)	mg / l	IS 3025 (Part 58)	--	16.52
3.	Biochemical oxygen demand (BOD at 27°C for 3 days)	mg / l	IS 3025 (Part 44)	100	5.16
4.	Total suspended solids (TSS)	mg / l	IS 3025 (Part 17)	--	13
5.	Total dissolved solids (TDS)	mg / l	IS 3025 (Part 16)	2100	259
6.	Chlorides (as Cl)	mg/l	IS 3025 (Part 32)	600	21.46
7.	Sulphate (as SO ₄)	mg/l	IS 3025 (Part 24)	1000	16.52
8.	Oil & Grease	mg / l	IS 3025 (Part 39)	10	< 4

NOTES : ● Please see watermark "Original Test Report" in blue color to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 90 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● '<' indicates detection limit of instrument/method and shall be considered as 'absent'.

REMARKS: Above waste water is recycled 100% and zero discharge in maintain. Sample complies with IS: 2490-1982 effluent on land for Irrigation purpose for the tests conducted.

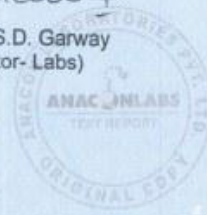
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