



NABHA POWER LIMITED

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Received
10/11/2019

Govt. of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Min. of Environment, Forests & Climate Change
ब्लॉक नं. 24-25, सेक्टर 31-ए
Chandigarh

NPL/MoEF/EC/Nov/ 14

Date: 09.12.2019

To,

The Director
Ministry of Environment, Forest and Climate Change
(Northern Region)
Bays Nos. 24-25, Sector 31-A,
Chandigarh-160030

Ref: Environmental Clearance No J-13011/44/2008- IA-II (T) dated 3rd October 2008 and as Amended on dated 15th November 2010.

Sub: Half-Yearly Environment Clearance Compliance Report for the Period of 1st April 2019 to 30th September 2019.

Dear Sir,

Please find enclosed Half Yearly Environment Clearance Compliance Report of **M/s Nabha Power Ltd., Vill. Nalash, Distt- Patiala (Punjab)** for the period from 1st April 2019 to 30th September 2019.

Thanking You,

Yours Sincerely,

For Nabha Power Limited

(Rajiv Bhandari)
DGM-HSE

Encl: As above.

Cc: (i) The Executive Environment Engineer, Regional Office, Patiala, Ground Floor, Vatavaran Bhawan, Nabha Road, Patiala.
(ii) In-charge-Central Pollution Control Board, Zonal Office (North) PICUP Bhawan Vibhuti Khand, Gomti Nagar, Lucknow (UP) - 226 010

Wholly Owned Subsidiary of L&T Power Development Limited
Corporate Office: L&T House, N M Marg, Ballard Estate, Mumbai-400 001
Regd office: PO Box No -28, Near Nalash, Rajpura-140401, Punjab
CIN No: U40102PB2007PLC031039

**SIX MONTHLY COMPLIANCE
REPORT OF ENVIRONMENTAL
CLEARANCE**

**NABHA POWER LIMITED
2×700 MW THERMAL POWER PLANT**



**VILL. NALASH
DISTT. PATIALA
(PUNJAB)**

Submitted to:

**MINISTRY OF ENVIRONMENT, FORESTS AND
CLIMATE CHANGE
Regional Office (Northern Region)
Chandigarh-160030
Central Pollution Control Board, Lucknow
Punjab State Pollution Control Board, Patiala**

Submitted By:

**NABHA POWER LIMITED
VILL. NALASH**

PATIALA (PUNJAB)

Period: April-2019 to September-2019

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Introduction

Nabha Power Limited (NPL), was established as Special Purpose Vehicle (SPV) by the erstwhile Punjab State Electricity Board (PSEB) to develop the Rajpura Thermal Power Project at a site near village Nalash, Distt Patiala, Punjab. An RfQ/RfP was floated by PSEB in line with the Case 2 competitive bidding guidelines, Govt of India (GoI) and L&T Power Development Limited (a wholly owned subsidiary of L&T) was identified as the lowest bidder. NPL has signed Power Purchase Agreement on 18th January, 2010 with PSEB and the NPL was also transferred to L&T Power Development Limited as its wholly owned subsidiary on 18th January, 2010.

The 1400 MW power plant is constructed as a unit configuration of 2 x 700 MW units, with one steam turbine and one boiler for each unit.

NPL is having two Pulverized Fuel Boilers, generating steam at 25.71MPa at 568 °C with two Condensing Turbo Generator Sets each having generating capacity of 700 MW of power. Installation of associated mechanical and electrical equipment, auxiliary units like coal, ash handling plant, water treatment plant, cooling water system, electrostatic precipitators (ESPs), NOx control equipment etc. are part of the total installation.

SALIENT FEATURES OF NABHA POWER LTD.

Total Capacity	2x700 MW (1400 MW)
Fuel Requirement and Source	5.7 MT/Year, SECL Mines
Water requirement and source	50 Cusec from Bhakra main canal
Status	Unit 1 Operational since 1 st Feb 2014
	Unit 2 Operational since 10 th July 2014

Project Proponent : Nabha Power Ltd.
Project Status : U # I & U#II Synchronised on Feb-2014 and July-2014 respectively
Reference : Ministry of Environment & Forest- Environmental Clearance No.-J-13011/44/2008-IA-II (T) dated 3rd October 2008 and Amendment dated 15th November 2010.

COMPLIANCE REPORT FOR THE PERIOD OF April-2019 to Sept.-2019

S. No.	MOEF Conditions	Compliance Status
1.	The total land requirement for the project shall be restricted to 1278 acres.	The land requirement for 1400 MW has been restricted within 1278 acres only.
2.	Prior clearance from the competent authority shall be obtained for locating the proposed power plant in proximity (about 3 kms) of the defence installation. A copy of the same shall be furnished to the ministry and the regional office of this ministry within one month from the date of issue of this clearance letter.	NOC from Ministry of defence & AAI obtained on 25 th May, 2009, Ref No.:No. 21(7)/2008/D(Coord) & 22 nd July,2008, Ref No.: No. AAI/20012/664/ 2008-ARI (NOC) respectively.
3.	Sulphur & ash contents in the coal to be used in the project shall not exceed 0.5% & 34%.	Sulphur & ash contents in the coal being used are below 0.5% & 34%. Respectively. The Testing Reports are attached here as Annexure 1 & 2.
4.	A bi-flue stack of height 275 m shall be provided with continuous online monitoring equipment for SO _x , NO _x & particulate matter. Exit velocity of flue gas should not be less than 25 m/sec.	Continuous online monitoring equipment are functional at 275 Mtr. stack on both the flues attached to Boiler 1 & Boiler 2 and monitoring of PM, Sox & Nox. is being done. As per EC validity extension dated 5.02.2014, exit velocity of flue gases shall not be less than 22 m/s therefore the exit velocity of flue gas is being maintained more than 22 m/sec in both the units. The Stack Emission Monitoring Reports from MoEF & CC approved laboratory is attached here as Annexure-3.
5.	High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure particulate emission doesn't exceed 50 mg/m ³ .	The ESP's attached to Boiler 1 & 2 are functional and have efficiencies more than 99.99%. The SPM emissions are < 50 mg/Nm ³ . The stack Emission Monitoring Reports from MoEF & CC approved laboratory is attached here as Annexure-3
6.	Space provision shall be kept for retrofitting for FGD, if required at later date.	Space provision for FGD had already been earmarked
7.	Adequate dust extraction system such as cyclones/bag filters and water spray system in dusty areas such as coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	The Dust extraction system & Dust suppression system (water sprinklers) is operational in the coal handling area, ash handling and at all transfer points. The photographs of the same is attached here as Annexure-4
8.	Fly ash to be collected in dry form in storage facility (silos) shall be provided. 100% utilization of fly ash shall be achieved from day one. Unutilized fly ash in emergency and bottom ash shall be disposed in ash pond and bottom ash in conventional slurry mode. Mercury and other heavy metals (Hg, Cr, Pb etc.) will be monitored in bottom ash and fly ash as also in the effluent emanating from ash pond.	Fly Ash Silos (3 Nos.) are fully operational. The utilization report of Fly ash is being submitted with the Regional Office, PPCB and MoEF&CC on six monthly basis. However, the same is attached here as Annexure-5 Analysis of heavy metals is being done for both bottom & fly ash on six monthly basis.
9.	Ash pond shall be lined with HDPE lining. Adequate safety measures shall also be implemented to protect ash dyke from getting breached.	Ash Pond bed is provided with HDPE lining (500 micron thick) over 50 mm thick sand cushion and top of HDPE liner is protected with 300 mm earth cover
10.	Closed cycle cooling system with cooling towers shall be provided. Effluents shall be treated as per the prescribed norms.	Complied.

11.	The treated effluents conforming to the prescribed standard shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during Monsoon. Arrangement shall be made that effluent & storm water do not get mix.	The Power plant is based on Zero Discharge (ZLD) concept and the treated effluents conforming to prescribed standards are being re-circulated and reused within the Plant. There is no discharge outside the plant boundary.
12.	A Sewage Treatment Plant shall be provided, and treated sewage shall be used for raising green belt/plantation.	The Sewage treatment plant of 50 KLD capacities is in operation. The treated water is being used for Green belt development/Plantation. The treated effluent report is attached as Annexure-6
13.	Rain water harvesting should be adopted. Central Ground Water Authority/board shall be consulted for finalization of appropriate rain water harvesting technology with in a period of three months from the date of clearance and details shall be furnished.	Rain water harvesting pits have been made as per the Rain water harvesting scheme approved by CGWA.
14.	Adequate safety measures shall be provided in plant area to check/minimize spontaneous fire in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry at Chandigarh.	The safety measures submitted to MOEF vide letter ref: NPL/SKN/MOEF/1423 dated: 28 th June 2012 have been implemented to check/minimize spontaneous fire in coal yard.
15.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of project.	Adequate arrangements were made for construction labour such as toilets, STP, safe drinking water, medical health care etc.
16.	Storage facilities for liquid fuel such as LDO and HFO/LSHS shall be made in the plant area where risk is minimum to the storage facilities. Onsite and off-site disaster management plan shall be prepared to meet any eventuality in case of an accident taking place. Mock drills shall be conducted regularly and based on the same, modification required, if any shall be incorporated in the DMP.	The Storage tanks for LDO & HFO storage have been made after necessary risk assessment. On-site and off-site disaster management plan is prepared, and the adequacy of the Plan is being tested on regular basis through conducting mock drills.
17.	Regular monitoring of ground water in and around ash pond area shall be carried out, records maintained, and six-monthly reports shall be furnished to Regional Office, Chandigarh.	Regular monitoring is being done and reports are being submitted to MOEF & PPCB on six monthly basis. Latest reports are attached as Annexure-7
18.	A green belt of adequate width and density shall be developed around plant periphery covering about 1/3 rd of project area preferably with local species.	2.5 Lakh trees already planted @2500/ha with local species. The Green Belt Development Report is attached as Annexure-8
19.	Activities under CSR shall be enhanced with proper financial allocation. Details of these activities shall be submitted to the Regional Office of the Ministry, SPCB and the Ministry.	Rs. 84.29 lacs have been spent till 30 Sep 2019 against the set target of Rs.4.40. Major works are in progress and will be completed within stipulated time. Details is attached as Annexure-9 .
20.	First aid & sanitation arrangement shall be made for the drivers and other contract workers during construction phase.	First aid centre & adequate sanitation arrangement for the drivers and other contract workers are in place.
21.	Noise level emanating from turbines shall be limited to 75 dB (A). For people working in the high noise area, requisite personal protective equipment like Earplug/ear muffs etc. shall be provided. Workers engaged in noisy area such as turbine area, air compressors etc. shall be periodically examined to maintain audiometry record and for any hearing loss including shifting to non-noisy/less noisy areas.	The Noise levels are maintained well below the prescribed standards. PPE's are being provided to all the workers depending upon the task being performed. Medical examination of the workers engaged in high noise area is being done on six monthly basis and records being maintained.

22.	Regular monitoring of ground level concentration of SO ₂ , NO _x , SPM, RSPM and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of the monitoring shall be decided in consultation with SPCB. Periodic report to be submitted to Regional office of this Ministry.	Monitoring reports are regularly being submitted to Regional office of Ministry and PPCB. Latest report are attached as Annexure-10
23.	The project proponent shall advertise in two local newspaper widely circulated in the region around the project, one of which shall be in the vernacular language of the locality/Municipal area/Gram Panchayat concerned and on the company's website within seven days from the date of clearance letter, informing that the project has been accorded environment clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at website of the ministry of Environment and forests at http://envfor.nic.in .	Complied.
24.	A separate Environment Management Cell with qualified staff to be set up for implementation of the stipulated environmental safeguards.	EMC comprising of qualified staff with adequate experience and knowledge is in place to cater environmental responsibilities.
25.	Half yearly report on status of implementation of the stipulated conditions and environmental safeguards shall be submitted to this Ministry/Regional Office/CPCB/SPCB.	Complied.
26.	Regional office of the Ministry of Environment & Forests located at Chandigarh will monitor implementation of stipulated conditions. A complete set of documents including EIA report & EMP report along with additional information submitted from time to time shall be forwarded to the regional office for their use during monitoring.	Complied.
27.	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes & year wise expenditure should be reported to Ministry.	Being Complied
28.	The project authorities shall inform the regional office as well as the Ministry regarding the date of financial closure and final approval of project by concerned authorities and the dates of start of land development work and commissioning of plant.	Plant is in Operation and generation capacity is 1400 MW
29.	Full co-operation should be extended to the scientists/officers from the Ministry/Regional office of the Ministry at Chandigarh/the CPCB/the SPCB who would be monitoring compliance of environmental status.	The NPL is providing full co-operation to the scientists/officers from the Ministry/Regional office of the Ministry at Chandigarh/the CPCB/the SPCB who are monitoring compliance of environmental status, time to time.
30.	No additional coal consumption beyond 5.8 MTPA (at 85 % PLF) earlier envisaged for 2 x 660 MW and no additional land for the enhanced capacity shall be permitted.	Being Complied.

31.	The project proponent shall upload the status of compliance of the conditions stipulated in the environmental clearance issued vide Ministry's letter of even no. dated 03.10.2008, in its website and update periodically and also simultaneously send the same by email to regional office of Ministry of Environment and Forests.	NPL website is live & the compliance reports are uploaded periodically on website. Website address: http://www.Intnabhapower.com
32.	Critical pollutants levels including NOx, RPSM _{10 and 2.5} , SO ₂ shall be regularly monitored and results displayed in your website and also at main gate of the power plant.	Being Complied.

Reference: Ministry of Environment & Forest-Environmental Clearance No -J-13011/44/2008- IA-II (T) dated 3rd October 2008 and Amendment dated 15th November 2010. Validity Extension Dated 5.02.2014

S. No.	MOEF Conditions	Compliance Status
33	Harnessing solar power within the premises of the plant particularly at the available roof tops shall be under taken and status of implementation shall be submitted periodically to regional office of ministry	Solar panels on field hostel roof, Clarifier area, CHP and at DM plant area has already been provided.
34	A long-term study on radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute. Thereafter mechanism for an in-built continuous monitoring for radio-activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	Radioactive and Heavy metal contents in Coal are being analysis on six monthly basis from approved lab of MoEF&CC and PPCB.
35	Exit velocity of flue gases shall not be less than 22 m/s. Mercury emissions from stack shall also be monitored on periodic basis.	The exit velocity of flue gases is more than 22 m/s. Mercury emissions from the stack is regularly monitored and the reports are being submitted to MOEF&CC on periodic basis. Latest report is attached as Annexure-3
36	Fugitive emissions shall be controlled to prevent impact on agriculture or non-agriculture land.	Adequate measures to control fugitive emissions already in place.
37	No ground water shall be extracted for use in operation of power plant even in lean season.	Complied.
38	Source sustainability of water requirement shall be carried out by an institute of repute. The study shall also specify the source of water for meeting the requirement during lean season. The report shall be submitted to the Regional Office of ministry within six months.	The Source Sustainability Study of water was conducted before granting the EC by MOEF to know the source of fulfilment of water requirement by the purposed Plant. For Nabha Power Limited the source of water is Bhakhra Canal and necessary permissions in this regard was taken from Irrigation Department, Punjab and was submitted with your kind office before grant of Environmental Clearance. When we had applied for Extn. of EC, our plant was already Commissioned, and we were having valid Consent to Operate from State Pollution Control Board. Therefore, the said condition is not applicable on us.
39	Hydro geological study of the area shall be reviewed annually and report submitted to the ministry. No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up/ operation of the power plant.	No Ground Water abstraction is being done. We are only using Canal water for generation of Power. Therefore, the said condition is not applicable on us.
40	Minimum required environment flow suggested by the competent authority of the state government shall be maintained in the Channel / Rivers (as applicable) even in lean season.	Agreed
41	C.O.C of 5.0 shall be adopted	Adopted and being complied.

42	Fly ash shall not be used for agricultural purpose. No mine void filling will be undertaken as an option for fly ash utilization without adequate lining of mine with suitable media such that no leachate shall take place at any point of time. In case, the option for mine void filling is to be adopted, prior detailed study of soil characteristics of mine area shall be undertaken from an institute of repute and adequate clay lining shall be ascertained by the State Pollution Control Board and implementation done in close coordination with the State Pollution Control Board	Agreed
43	Green belt consisting of 3 tiers of plantations of native species around the plant and at least 100m width shall be raised. Wherever 100m width is not feasible a 50 m width shall be raised, and adequate justification shall be submitted to Ministry. Tree density shall not be less than 2500 per ha with survival rate not less than 75 %.	Complied. The Green Belt Development Report is attached as Annexure-8
44	Three tier green belt shall be developed all around ash pond over and above the green belt around the plant boundary.	Complied.
45	A common Green Endowment Fund shall be created, and the interest earned out of it shall be used for the development and management of Green cover of the area.	Being complied
46	The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.	<p>For villages</p> <ul style="list-style-type: none"> - NPL under the WB scheme helped building of 3 Overhead water tanks. State govt has already implemented scheme of Overhead tanks in most of the NPL catchment villages. - RO water Purifiers have been installed in most of the villages by the state govt. For schools - All schools in NPL catchment area have drinking water facilities linked to OH tanks / deep Borewells. - Under new initiatives, NPL Started Support class in surrounding villages to assist Govt. School going children in their respective studies. - Similarly, Libraries have been established in Govt Schools to inculcate the habit of book reading & also to increase general knowledge level. <p>NPL emphasis is now on the development of educational institutions with focus on renovation & upgradation of Sports, Health & Sanitation through construction of Model Aganwaries / Classrooms, washroom, renovation of school/Aganwari buildings, cycle stands. Sports Ground/Tournament,</p>
47	An amount of Rs 22 Crores shall be earmarked as one-time capital cost for CSR program. Subsequently a recurring expenditure of Rs 4.4 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with the road map for implementation.	<p>CSR spent of last five years</p> <ul style="list-style-type: none"> - 2014-15 : 4.56 cr - 2015-16 : 4.43 cr - 2016-17 : 4.47 cr - 2017-18 : 4.41 cr - 2018-19 : 4.40 cr
48	CSR scheme should address Public Hearing issues and shall be undertaken based on need based assessment in and around villages within 5.0 km of the site and in constant consultation with the village Panchayat and District administration. As part of CSR prior identification of local employable youth and eventual employment in the project after imparting relevant training shall also be undertaken. Development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such program. Company shall provide separate budget for community development activities and income generating programs.	<p>Complied.</p> <p>Presently working in 49 villages (radius of 5 kms). All schemes are being implemented in the target villages in coordination with village panchayats.</p> <p>Skill Training (Apoox. 400 Girls) – Being imparted through 11 vocational training centers. Courses include Beautician, Tailoring, and Embroidery.</p> <p>Skill Training (Boys) – 30 boys from surrounding villages have been enrolled in one-year course of Electrician at</p>

	Vocational training program for possible self-employment and jobs shall be imparted to identify villagers free of cost.	National Small-scale Industry Corporation (NSIC), Rajpura. Local youth are being given preference for jobs in plant as per their skills, qualification and criteria set for the job.
49	It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.	- In-built monitoring of schemes through a 5-member CSR committee chaired by Senior Plant Officials who meets quarterly to discuss and implement projects identified. - Social Audit got done for last year.
50	An Environmental cell shall be created at the project site itself and shall be headed by an officer of the company of appropriate seniority and qualification. It shall be ensured that the head of the cell shall directly report to the Head of the organization.	Environmental Cell Headed by DGM-HSE is already in place who directly reports to the Head of Organisation.
51	Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional Office of this ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	Regular monitoring of ground water quality including heavy metals is being carried out regularly in and around the Ash Dykes. Piezometer wells are established around the ash pond area and being regularly monitored. Latest reports are attached as Annexure-7
52	Monitoring of the surface quantity and quality shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.	No Ground Water is being abstracted as we are using Canal water for generation of Power. The quality and quantity of the canal water is monitored, and records are being maintained. We are already monitoring Heavy metals in Ground Water by taking sample thru Piezometer and submitting the respective reports to Regional office of the ministry at Chandigarh. Latest reports are attached as Annexure-7
53	The environment statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.	Complied. Last Environmental Report was submitted On 27.09.2019 with Regional Office of the Ministry at Chandigarh and PPCB, Patiala.
54	The project proponent shall formulate a well laid Corporate Environment Policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the conditions stipulated in this clearance letter and other applicable environmental laws and regulations.	HSE Policy has been framed and accordingly officers have been designated for achieving the objectives by adherence to the Policy. We are certified for Integrated Management System requirements (ISO 9001, 14001 & 45001 & 50001)

Annexure – 1

Test Report of Sulphur % in Coal



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

PPCB-Ref. No. Lab/3250192
Dated 30.09.2019

TEST REPORT

Not Valid for Consent Purpose

ULR No.	NA	Test Report No.	EL130919GS001
Type of Sample	Coal	Date of Reporting	19/09/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (if any)	NA
Sampling Protocol	ASTM D7582	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	13/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	From Coal Pile	Packing, Markings, Seal & Quantity	Poly Bag Marked 'Coal' 1kg
Testing Protocol	Lab SOP	Period of Analysis	13/09/2019 to 17/09/2019
Sample Description	Black colored powder		

TEST RESULTS

I-Chemical Testing

1. Pollution & Environment (Coal)

S. No.	Test Parameter	Units	Results	Standards*	Test Method
1.	Sulphur as SO ₄	%	0.42	0.5	Lab SOP No. EL/SOP/C/01

Remarks : Sample complies with respect to above tests only
*Client's Specification

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report; NA: Not Applicable

Symbols : -

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Checked by QA

Format No. F/7.8.2-PC-01 02.09.19 Rev 01

Dr. Sandeep Garg
Authorized Signatory-Chemical

Page 1 of 1

Annexure- 2

Test Report of Ash % in Coal

Annexure-2

Details of Average Ash Content in Coal in %

Month	Average Ash Content in Coal in %
April-19	30.16
May-19	31.21
June-19	31.22
July-19	29.63
August-19	28.80
September-19	28.91
Average	29.98

Annexure- 3

Stack Emission Monitoring Results and Photograph of Continuous Emission Monitoring System (CEMS).

[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PCB]

PCB-Ref. No. Lrb/32206/1
Dated-30/03/2013

TEST REPORT

Not Valid for Consent Purpose

ULR No. NA	Test Report No. EL130919GA001
Type of Sample. Stack Emission	Date of Reporting. 17/09/2019

Customer	Nabha Power Limited P.O Box 28, Near VIII. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference (If any)	NA
Sampling Protocol	IS: 11255 & CPCB Guidelines (LATS/80/2013-14)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	11/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	Boiler (Unit-1)	Environmental Conditions:	NA
Source of emission	Stack attached to Boiler	Capacity	2322 TPH
Make & Model	Boiler-1	Type & Quantity of Fuel Used	Coal (350 Ton/hr)
APCD Details (If provided)	ESP	Stack Description (Shape & Material)	Circular & Metal
Stack Identification	Single	Internal Diameter of Stack (m)	7.5
Sampling Port hole/Platform	Permanent	Height of Stack from nearest roof top (m)	--
Stack Velocity (m/s)	24.8	Stack Temperature (*K)	402
Sampling Time (min)	85	Height of Stack from ground level (m)	275
Testing Protocol	IS: 11255 & CPCB Guidelines (LATS/80/2013-14)		
Period of Analysis	13/09/2019 to 17/09/2019		

TEST RESULTS

I -Chemical Testing

1. Atmospheric Pollution (Stack Emission)

S. No.	Test Parameter	Units	Results	Standards	Test Method
1.	Particulate Matter (PM)	mg/Nm ³	41	50	IS: 11255 (P-1) 1985
2.	Sulphur Dioxide (SO ₂)	ppm	544	-	Lab SOP: EL/SOP/SE/12
3.	Nitrogen Oxides (as NO _x)	ppm	176	-	Lab SOP: EL/SOP/SE/12
4.	Carbon Monoxide (CO)	mg/Nm ³	5.3	-	Lab SOP: EL/SOP/SE/12
5.	Carbon Dioxide (CO ₂)	%	13.9	-	Lab SOP: EL/SOP/SE/12
6.	Mercury as Particulate Phase (Hg)	mg/Nm ³	BDL(DL 0.01)	0.03	USEPA Method-29

Remarks : Sample complies with prescribed standards

OTHER INFORMATION :

Abbreviation : ULR: Unique Lab Report, BDL Below Detection Limit; NA: Not Applicable

Note : --

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Tand
Checked by QA

sg
Dr. Sandeep Garg
Authorized Signatory-Chemical

[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

Not Valid for Consent Purpose

ULR No. NA	Test Report No. EL130919GA002
Type of Sample. Stack Emission	Date of Reporting. 17/09/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference (If any)	NA
Sampling Protocol	IS: 11255 & CPCB Guidelines (LATS/80/2013-14)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	12/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	Boiler (Unit-2)	Environmental Conditions:	NA
Source of emission	Stack attached to Boiler	Capacity	2322 TPH
Make & Model	Boiler-2	Type & Quantity of Fuel Used	Coal (350 Ton/hr)
APCD Details (If provided)	ESP	Stack Description (Shape & Material)	Circular & Metal
Stack Identification	Single	Internal Diameter of Stack (m)	7.5
Sampling Port hole/Platform	Permanent	Height of Stack from nearest roof top (m)	--
Stack Velocity (m/s)	23.7	Stack Temperature (*K)	403
Sampling Time (min)	100	Height of Stack from ground level (m)	275
Testing Protocol	IS: 11255 & CPCB Guidelines (LATS/80/2013-14)		
Period of Analysis	13/09/2019 to 17/09/2019		

TEST RESULTS

I -Chemical Testing

1. Atmospheric Pollution (Stack Emission)

S. No.	Test Parameter	Units	Results	Standards	Test Method
1.	Particulate Matter (PM)	mg/Nm ³	42	50	IS: 11255 (P-1) 1985
2.	Sulphur Dioxide (SO ₂)	ppm	507	-	Lab SOP: EL/SOP/SE/12
3.	Nitrogen Oxides (as NO _x)	ppm	181	-	Lab SOP: EL/SOP/SE/12
4.	Carbon Monoxide (CO)	mg/Nm ³	13	-	Lab SOP: EL/SOP/SE/12
5.	Carbon Dioxide (CO ₂)	%	11.7	-	Lab SOP: EL/SOP/SE/12
6.	Mercury as Particulate Phase (Hg)	mg/Nm ³	BDL(DL 0.01)	0.03	USEPA Method-29

Remarks : Sample complies with prescribed standards.

OTHER INFORMATION :

Abbreviation : ULR: Unique Lab Report, BDL Below Detection Limit; NA: Not Applicable

Note : --

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Checked by QA

Dr. Sandeep Garg
Authorized Signatory-Chemical

[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PCB]

TEST REPORT

ULR No. NA	Test Report No. EL200619GA009
Type of Sample. Stack Emission	Date of Reporting. 27/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference (if any)	NA
Sampling Protocol	IS: 11255 & CPCB Guidelines (LATS/80/2013-14)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	19/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	Boiler (Unit-1)	Environmental Conditions:	NA
Source of emission	Stack attached to Boller	Capacity	2322 TPH
Make & Model	Boiler-1	Type & Quantity of Fuel Used	Coal (340 Ton/hr)
APCD Details (if provided)	ESP and Cyclone	Stack Description (Shape & Material)	Circular & Metal
Stack Identification	Single	Internal Diameter of Stack (m)	7.5
Sampling Port hole/Platform	Permanent	Height of Stack from nearest roof top (m)	--
Stack Velocity (m/s)	24.2	Stack Temperature (*K)	418
Sampling Time (min)	84	Height of Stack from ground level (m)	275
Testing Protocol	IS: 11255 & CPCB Guidelines (LATS/80/2013-14)		
Period of Analysis	20/06/2019 to 24/06/2019		

TEST RESULTS

I -Chemical Testing

1. Atmospheric Pollution (Stack Emission)

S. No.	Test Parameter	Units	Results	Limits	Test Method
1.	Particulate Matter (PM)	mg/Nm ³	40	50	IS: 11255 (P-1) 1985
2.	Sulphur Dioxide (SO ₂)	ppm	595	-	Lab SOP: EL/SOP/SE/12
3.	Nitrogen Oxides (as NO _x)	ppm	171	-	Lab SOP: EL/SOP/SE/12
4.	Carbon Monoxide (CO)	mg/Nm ³	5.1	-	Lab SOP: EL/SOP/SE/12
5.	Carbon Dioxide (CO ₂)	%	12.2	-	Lab SOP: EL/SOP/SE/12
6.	Mercury as Particulate Phase (Hgp)	mg/Nm ³	BDL(DL 0.01)	0.03	USEPA Method-29

Remarks : Sample complies with prescribed standards.

OTHER INFORMATION :


Abbreviation : ULR: Unique Lab Report, BDL Below Detection Limit; NA: Not Applicable

Note : --

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****


Checked by


Dr. Roopak Kumar
Authorized Signatory-Chemical

[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

ULR No. NA	Test Report No. EL200619GA010
Type of Sample. Stack Emission	Date of Reporting. 27/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference (if any)	NA
Sampling Protocol	IS: 11255 & CPCB Guidelines (LATS/80/2013-14)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	19/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	Boiler (Unit-2)	Environmental Conditions:	NA
Source of emission	Stack attached to Boiler	Capacity	2322 TPH
Make & Model	Boller-2	Type & Quantity of Fuel Used	Coal (340 Ton/hr)
APCD Details (If provided)	Electrostatic, Precipitator & Cyclone	Stack Description (Shape & Material)	Circular & Metal
Stack Identification	Single	Internal Diameter of Stack (m)	7.5
Sampling Port hole/Platform	Permanent	Height of Stack from nearest roof top (m)	--
Stack Velocity (m/s)	22.5	Stack Temperature (°K)	413
Sampling Time (min)	84	Height of Stack from ground level (m)	275
Testing Protocol	IS: 11255 & CPCB Guidelines (LATS/80/2013-14)		
Period of Analysis	20/06/2019 to 24/06/2019		

TEST RESULTS

I -Chemical Testing

1. Atmospheric Pollution (Stack Emission)

S. No.	Test Parameter	Units	Results	Limits	Test Method
1.	Particulate Matter (PM)	mg/Nm ³	38	50	IS: 11255 (P-1) 1985
2.	Sulphur Dioxide (SO ₂)	ppm	501	-	Lab SOP: EL/SOP/SE/12
3.	Nitrogen Oxides (as NO _x)	ppm	182	-	Lab SOP: EL/SOP/SE/12
4.	Carbon Monoxide (CO)	mg/Nm ³	18	-	Lab SOP: EL/SOP/SE/12
5.	Carbon Dioxide (CO ₂)	%	11.8	-	Lab SOP: EL/SOP/SE/12
6.	Mercury as Particulate Phase (Hgp)	mg/Nm ³	BDL(DL 0.01)	0.03	USEPA Method-29

Remarks : Sample complies with prescribed standards.

OTHER INFORMATION :


Abbreviation : ULR: Unique Lab Report, BDL Below Detection Limit; NA: Not Applicable

Note : --

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****


Checked by


Dr. Roopak Kumar
Authorized Signatory-Chemical



PUNJAB POLLUTION CONTROL BOARD

AIR LABORATORY, HEAD OFFICE, VATAVARAN BHAWAN, PATIALA

Email:- aso2airlab@gmail.com

Telefax: 0175- 2302392

- | | |
|--|--|
| 1. Laboratory Sample No. | 623-24/ H.O.Lab./Air/Monitoring/2019 |
| 2. Name of Industry | M/s, Nabha Power Ltd, Vill Nalash, Rajpura, Patiala. |
| 3. Name of Sample collecting Officer | Er.Nikhil Gupta, AEE. Dr Rupinder Kaur. SA |
| 4. Designation of Authorizing Test | EE, RO, Patiala |
| 5. Type of Sample | Stack Emission |
| 6. Date & Time of Sample Collection | 26.06.2019 |
| 7. Date & Time of Sample receipt in Lab. | 27.06.2019 |
| 8. Point of Sample collection | Details as Given Below |

15-1/2/3
ਨਵੀਂ ਡਾਕ

ਦਿ: ਦਿ: *Wp*

Results

Point of Sample Collection	Parameter	Results
From Port hole on stack after APCD (Unit I)	Particulate Matter	45 mg/Nm ³ @ 12% CO ₂
From Port hole on stack after APCD (Unit II)	Particulate Matter	38 mg/Nm ³ @ 12% CO ₂

Endst. No: 19508-09

2-7-19

for Scientific Officer
(Air Laboratory)



A copy of the above is forwarded to the following for information and necessary action:-

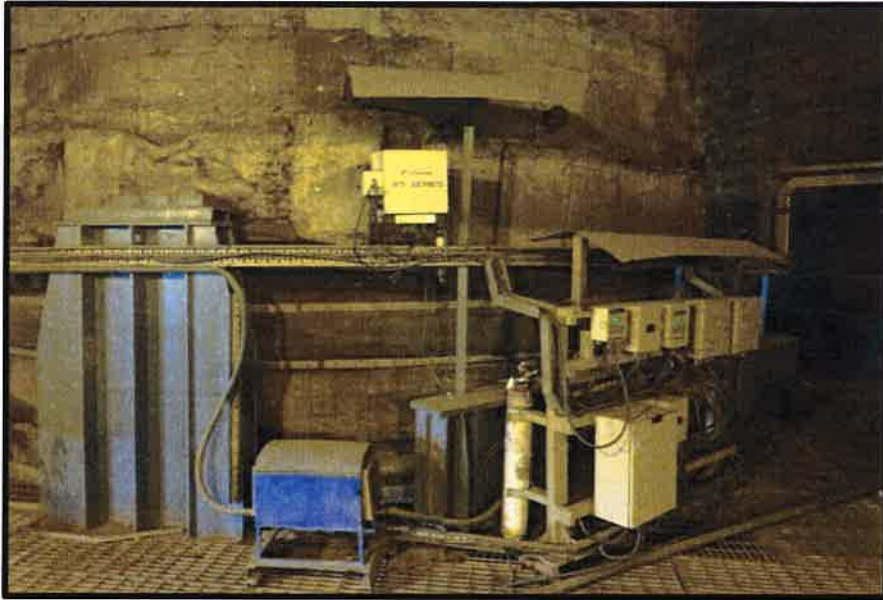
- The Senior Environmental Engineer, Punjab Pollution Control Board, Patiala.
- The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Patiala.

for Scientific Officer
(Air Laboratory)



4
3
2
1

Annexure-3



Continuous emission monitoring system installed at main stack for measurement of Particulate Matter & Gaseous Emissions.

Annexure- 4

Measures taken to control fugitive emissions

Annexure-4

1. Measures taken to control fugitive emissions during coal handling



Covered conveyors for transfer of coal from Wagon tippler to coal bunkers for abatement of fugitive emissions



Dust suppression (sprinkler system) provided at each coal stockpile to arrest Dust



Automated and Mechanized Coal handling System to minimize manual operations



Three side covered windscreen to control fugitive emissions due to wind flow

Annexure-4



Dust Extraction System at Crusher House



Dust Extraction System at Bunker

Annexure-4



New Dust Canal System installed at Wagon Tippler Area to control Fugitive Emission During Unloading of Coal.

Annexure-5

Fly Ash Utilization Report

Nabha Power Ltd												
Fly Ash Utilization FY 2019-20												
Period	Month	Coal Consumed(MT)	Ash Generation Data (MT)			Ash Utilisation Data (MT)			%Ash utilised		Total Ash Utilised (MT)	Remark
			Dry Fly ash Collection	Wet Collection (Pond Ash)	Dry Fly ash	Dry Fly ash	Pond Ash	DFA	Total Ash			
FY 2019-2020	Apr-19	308774.00	77655.00	16006.00	0.00	93661.00	77655.12	4796.00	82451.12	100.00%	88.03%	
	May-19	424035.06	110502.00	21882.86	0.00	132384.86	110402.86	5009.00	115411.86	99.91%	87.18%	
	Jun-19	431489.00	111904.14	22775.85	2797.00	134679.99	107107.14	5697.00	112804.14	95.71%	83.76%	
	Jul-19	432118.50	109835.20	18612.20	9944.40	128447.40	101890.77	4912.00	106802.77	92.76%	83.15%	
	Aug-19	434092.80	106245.00	19287.00	0.00	125532.00	106245.82	10785.00	117030.82	100.00%	93.23%	
	Sep-19	439164.00	108059.00	14390.00	0.00	122449.00	107859.37	15594.00	123453.37	99.82%	100.82%	
	Total	2469673.36	624200.34	112953.91	12741.4	737154.25	611161.08	46793.00	657954.08	97.91	89.26	

Annexure-6

Treated Sewage Monitoring Results

[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

Not Valid for Consent Purpose

ULR No.	NA	Test Report No.	EL130919GE005
Type of Sample	Waste Water (Sewage)	Date of Reporting	17/09/2019

Customer	Nabha Power Limited P.O Box 28, Near VIII. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	13/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	From Pipe (STP Outlet)	Packing, Markings, Seal & Quantity	Plastic & Glass Bottle Marked 'B/13/01' 2 litre + 1 litre
Testing Protocol	CPCB & PPCB Guidelines	Period of Analysis	13/09/2019 to 17/09/2019
Sample Description	Turbid liquid with suspended particles.		

TEST RESULTS

I-Chemical Testing

1. Pollution & Environment (Sewage)

S. No.	Test Parameter	Units	Results	Standards*	Test Method
1.	pH	-	7.46	6.5-9.0	APHA-23 rd Ed 2017-4500B
2.	Total Dissolved Solids	mg/l	350	-	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	42	≤ 100	APHA-23 rd Ed 2017- 2540 D
4.	Biochemical Oxygen Demand	mg/l	14	≤ 30	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD (3 days)
5.	Chemical Oxygen Demand	mg/l	36	≤ 250	APHA-23 rd Ed 2017- 5220B
6.	Oil & Grease	mg/l	BDL(DL 3)	-	APHA-23 rd Ed 2017- 5520D

Remarks : Sample complies with respect to above tests only.

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection limit, NA: Not Applicable

Symbols : * Discharge standards as per G.S.R 1265 (E) & PPCB Guidelines

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Tamp
Checked by QA

SJ
Dr. Sandeep Garg
Authorized Signatory-Chemical

[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

FRCD-Ref. No. Lab/3298691
Dated-30.09.2011

ULR No.	NA	Test Report No.	EL200619GE002
Type of Sample	Waste Water (Sewage)	Date of Reporting	27/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	20/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	From Pipe (STP Outlet)	Packing, Markings, Seal & Quantity	2 Plastic Bottles Marked 'B/20/01' 2 litre
Testing Protocol	IS:3025 & APHA 23 rd Ed 2017	Period of Analysis	20/06/2019 to 27/06/2019
Sample Description	Slightly turbid liquid with suspended & settleable particles.		

TEST RESULTS

I-Chemical Testing

1. Pollution & Environment (Sewage)

S. No.	Test Parameter	Units	Results	Standards*	Test Method
1.	pH	-	7.73	5.5-9.0	APHA-23 rd Ed 2017-4500B
2.	Total Dissolved Solids	mg/l	302	-	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	43	100	APHA-23 rd Ed 2017- 2540 D
4.	Biochemical Oxygen Demand	mg/l	2.3	30	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD (3 days)
5.	Chemical Oxygen Demand	mg/l	8	250	APHA-23 rd Ed 2017- 5220B
6.	Oil & Grease	mg/l	BDL(DL 3)	10	APHA-23 rd Ed 2017- 5520D

Remarks : Sample complies with prescribed standard.

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL Below Detection Limit;NA: Not Applicable

Symbols : *Standards as per discharge of environmental pollutants (wastewater) Inland surface water as per The Environment(Protection)Rules, 1986

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Not Valid for Consent Purpose

Checked by
Amandeep Kaur
21.6.19

Dr. Roopak Kumar
Authorized Signatory-Chemical

**POLLUTION CONTROL BOARD VATAVARAN BHAVAN,
NABHA ROAD, PATIALA
WATER ANALYSIS REPORT**



TC-7045

- | | |
|--|--|
| 1. Laboratory Sample No. | E- 493/ H.O.Lab. Monitoring/2019 |
| 2. ULR No. | ULR-TC704518000000001083 |
| 3. Name of Industry | M/s Nabha Power Ltd, Village Nalash,
The-Rajpura, Distt. Patiala. |
| 4. Name of Sample collecting Officer | Er. Nikhil Gupta, AEE |
| 5. Designation of the officer authorizing Test | Environmental Engineer, Regional Office, Patiala |
| 6. Type of Sample | Grab |
| 7. Date & Time of Sample collection | 19.06.2019 |
| 8. Date & Time of Sample receipt in Lab. | 20.06.2019 |
| 9. Period of Analysis | 20.06.2019 to 01.07.2019 |
| 10. Test Methods | As per relevant parts of IS:3025/ & Methods of APHA |

Results

Sr. No.	Parameters	Outlet of STP
1	pH	7.36
2	Total Suspended Solids mg/l	12.0
3	Total Dissolved Solids mg/l	676
4	Bio-chemical Oxygen Demand mg/l	14
5	Chemical Oxygen Demand mg/l	48
6	*Oil & Grease mg/l	BDL

* Not covered under scope of NABL

Note: BDL Below Method detection Limit

---End of Report---

Analyzed by *Amr*
17/12/19
Endst. No: 19673-74

Prerna 1/7/19
Scientific Officer

Dt. 2-7-19

A copy of the above is forwarded to the:-

- The Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office-I, Patiala.
- The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Patiala.

ASm
Asstt. Scientific Officer
17/12/19

AEE I/S-A
Get sampling
charges being
financial
maker

Annexure-7

Ground Water Quality Monitoring Results



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

PPCB-Ref. No. Lab/3230002
Dated-30.09.2011

TEST REPORT

ULR No.	NA	Test Report No.	EL050719GW002
Type of Sample	Ground Water	Date of Reporting	09/07/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	05/07/2019	Date of Receipt of Sample	05/07/2019
Sampling Location	From Piezometer Well No.1 (Depth-170 feet)	Packing, Markings, Seal & Quantity	Plastic & Glass Bottle Marked 'B/05/01' 2 litre + 250ml
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	05/07/2019 to 09/07/2019
Sample Description	Colourless, odourless liquid free from suspended & settleable particles.		

TEST RESULTS

I-Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	76	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	312	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	7.73	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	29	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL- Below Detection Limit, NA: Not Applicable

Symbols : -

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Amandeep Kaur
Checked by

Dr. Roopak Kumar
Authorized Signatory-Chemical

Format No. F/7.8.2-W-01- 15.11.18 Rev 02

Page 1 of 1

[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

Lab No. Lab/8230092
Dated-30.09.2019

ULR No.	NA	Test Report No.	EL050719GW003
Type of Sample	Ground Water	Date of Reporting	09/07/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (if any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	05/07/2019	Date of Receipt of Sample	05/07/2019
Sampling Location	From Piezometer Well No.2 (Depth-170 feet)	Packing, Markings, Seal & Quantity	Plastic & Glass Bottle Marked 'B/05/02' 2 litre + 250ml
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	05/07/2019 to 09/07/2019
Sample Description	Colourless, odourless liquid free from suspended & settleable particles.		

TEST RESULTS

I -Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	70	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	305	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	7.77	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	22	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL- Below Detection Limit, NA: Not Applicable

Symbols : -

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Not Valid for Consent Purpose
Checked by
Amandeep Kaur
9-7-19

Dr. Roopak Kumar
Authorized Signatory-Chemical



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

Date: 03.03.2019

ULR No.	NA	Test Report No.	EL050719GW004
Type of Sample	Ground Water	Date of Reporting	09/07/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	05/07/2019	Date of Receipt of Sample	05/07/2019
Sampling Location	From Piezometer Well No.3 (Depth-170 feet)	Packing, Markings, Seal & Quantity	Plastic & Glass Bottle Marked 'B/05/03' 2 litre + 250ml
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	05/07/2019 to 09/07/2019
Sample Description	Colourless, odourless liquid free from suspended & settleable particles.		

TEST RESULTS

I-Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	76	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	327	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	7.67	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	24	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL- Below Detection Limit, NA: Not Applicable

Symbols : -

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Not Valid for Consent Purpose

Amandeep Kaur
Checked by

Dr. Roopak Kumar
Authorized Signatory-Chemical



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

ULR No. L53/3238892

Date: 30.09.2019

ULR No.	NA	Test Report No.	EL050719GW005
Type of Sample	Ground Water	Date of Reporting	09/07/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	05/07/2019	Date of Receipt of Sample	05/07/2019
Sampling Location	From Piezometer Well No.4 (Depth-70-80 feet)	Packing, Markings, Seal & Quantity	Plastic & Glass Bottle Marked 'B/05/04' 2 litre + 250ml
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	05/07/2019 to 09/07/2019
Sample Description	Colourless, odourless liquid free from suspended & settleable particles.		

TEST RESULTS

I -Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	82	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	340	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	7.28	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	27	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL- Below Detection Limit, NA: Not Applicable

Symbols : -

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

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Amandeep Kaur

Dr. Roopak Kumar
Dr. Roopak Kumar
Authorized Signatory-Chemical



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PCB]

No. Lab/3233402
30.09.2011

TEST REPORT

ULR No.	NA	Test Report No.	EL200619GW002
Type of Sample	Ground Water	Date of Reporting	24/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	19/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	From Piezometer No.1	Packing, Markings, Seal & Quantity	Plastic & Glass Bottle Marked 'B/19/01' 2 litre + 250ml
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	20/06/2019 to 24/06/2019
Sample Description	Colourless liquid.		

TEST RESULTS

I-Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	70	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	310	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	7.8	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	22	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL- Below Detection Limit, NA: Not Applicable

Symbols : -

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Checked by


Dr. Roopak Kumar
Authorized Signatory-Chemical

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CIN : U74140PB2011PTC034739



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TEST REPORT

ULR No.	NA	Test Report No.	EL200619GW003
Type of Sample	Ground Water	Date of Reporting	24/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	19/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	From Piezometer No.2	Packing, Markings, Seal & Quantity	Plastic & Glass Bottle Marked 'B/19/02' 2 litre + 250ml
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	20/06/2019 to 24/06/2019
Sample Description	Colourless liquid.		

TEST RESULTS

I-Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	72	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	341	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	8.90	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	28	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

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Symbols : -


Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

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Page 1 of 1



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CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

PPCB-Ref. No. Lab/3238892

ULR No.	NA	Test Report No.	EL200619GW004
Type of Sample	Ground Water	Date of Reporting	24/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	19/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	From Piezometer No.3	Packing, Markings, Seal & Quantity	Plastic & Glass Bottle Marked 'B/19/03' 2 litre + 250ml
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	20/06/2019 to 24/06/2019
Sample Description	Colourless liquid.		

TEST RESULTS

I -Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	82	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	352	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	7.60	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	31	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

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Dr. Roopak Kumar
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Page 1 of 1



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

ULR No.	NA	Test Report No.	EL200619GW005
Type of Sample	Ground Water	Date of Reporting	24/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	19/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	From Piezometer No.4	Packing, Markings, Seal & Quantity	Plastic & Glass Bottle Marked 'B/19/04' 2 litre + 250ml
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	20/06/2019 to 24/06/2019
Sample Description	Colourless liquid.		

TEST RESULTS

I-Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	80	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	371	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	7.50	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	29	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

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Dr. Roopak Kumar
Authorized Signatory-Chemical

Page 1 of 1

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

TeleFax: 0172-4616225 M: 9781303109 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

POLLUTION CONTROL BOARD VATAVARAN BHAVAN,
NABHA ROAD, PATIALA
GROUND WATER REPORT



AEE 1

1. Laboratory Sample No.
2. ULR Number
3. Name of Industry
4. Name of Sample collecting Officer
5. Designation of authorizing Test
6. Date & Time of Sample collection
7. Date & Time of Sample receipt in Lab.
8. Period of Analysis
9. Test Methods

GW 143-146/ H.O.Lab/ G.W. Monitoring/2018-19
ULR-TC70451800000001084P
Ground Water Samples taken from
M/s Nabha Power Limited, Vill. Nalas, Rajpura.
Er. Nikhil Gupta, AEE
EE, RO, Patiala.
19.06.2019
20.06.2019
20.06.2019 to 27.06.2019
As per relevant parts of IS:3025 &
Methods of APHA

Get sampling
charges
Immediately

TC-7045
-1/2/3
@
inh

Results

Sr. no.	Parameters	Near Coal Handling Plant	Near Storm Water Sump	Along ash dyke	Between Ash dyke and reservior
1	pH	7.74	7.73	7.72	7.27
2	Total Suspended Solids mg/l	BDL	BDL	BDL	BDL
3	Total Dissolved Solids mg/l	349	330	316	454
4	*Chemical Oxygen Demand mg/l	BDL	BDL	BDL	BDL
5	*Bio-Chemical Oxygen Demand mg/l	BDL	BDL	BDL	BDL
6	Total Hardness mg/l	92	98	104	312
7	*Magnesium mg/l	11.4	12.1	14.6	34
8	Sulphate mg/l	23	36	25	42
9	*Mercury mg/l	BDL	BDL	BDL	BDL
10	*Lead mg/l	BDL	BDL	BDL	BDL
11	Total Chromium mg/l	BDL	BDL	BDL	BDL

*Not covered under scope of NABL.
Note: BDL means Below Method Detection Limit.

--End of Report--

Analyzed by *Sankar* 28-6-19

Naraina 28/6/19
Scientific Officer

Endst. No: 19288-89

Dt. 11/7/2019

A copy of the above is forwarded to the:-

1. The Senior Environment Engineer, Punjab Pollution Control Board, Zonal Office, -I, Patiala.
2. The Environment Engineer, Punjab Pollution Control Board, Regional Office, Patiala.

Asstt. Scientific Officer

10/7/19
28/6/19



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

Lab No. EL/160519GW001
Date: 20/05/2019

ULR No.	NA	Test Report No.	EL160519GW001
Type of Sample	Ground Water	Date of Reporting	20/05/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (if any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	16/05/2019	Date of Receipt of Sample	16/05/2019
Sampling Location	From Peizometer No.1	Packing, Markings, Seal & Quantity	Plastic Bottle Marked 'B/16/01' 2 litre
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	16/05/2019 to 20/05/2019
Sample Description	Colourless liquid with suspended & settleable particles.		

TEST RESULTS

I -Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	73	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	318	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	7.96	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	24	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL- Below Detection Limit, NA: Not Available

Symbols : NA

Terms & Conditions : Please refer terms and conditions overleaf.

****End of Report****

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[Signature]
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[Signature]
Dr. Roopak Kumar
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Format No. F/7.8.2 15.11.18 Rev 01

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Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



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TEST REPORT

Lab No. 156/2230-32
Dated-30.09.2011

ULR No.	NA	Test Report No.	EL160519GW002
Type of Sample	Ground Water	Date of Reporting	20/05/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	16/05/2019	Date of Receipt of Sample	16/05/2019
Sampling Location	From Peizometer No.2	Packing, Markings, Seal & Quantity	Plastic Bottle Marked 'B/16/02' 2 litre
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	16/05/2019 to 20/05/2019
Sample Description	Colourless liquid with suspended & settleable particles .		

TEST RESULTS

I -Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	75	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	359	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	8.02	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	30	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

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Symbols : NA

Terms & Conditions : Please refer terms and conditions overleaf.

****End of Report****

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Dr. Roopak Kumar
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Page 1 of 1

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

TeleFax: 0172-4616225 M: 9781303109 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

PPCB-Ref. No. Lab/3239882
Dated-30.05.2019

ULR No.	NA	Test Report No.	EL160519GW003
Type of Sample	Ground Water	Date of Reporting	20/05/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	16/05/2019	Date of Receipt of Sample	16/05/2019
Sampling Location	From Peizometer No.3	Packing, Markings, Seal & Quantity	Plastic Bottle Marked 'B/16/03' 2 litre
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	16/05/2019 to 20/05/2019
Sample Description	Liquid with suspended & settleable particles .		

TEST RESULTS

I-Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	87	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	361	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	7.88	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	32	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL- Below Detection Limit, NA: Not Available

Symbols : NA

Terms & Conditions : Please refer terms and conditions overleaf.

****End of Report****

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Dr. Roopak Kumar
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PPCB-Ref. No. Lab/0268092
Dated-30.09.2011

TEST REPORT

ULR No.	NA	Test Report No.	EL160519GW004
Type of Sample	Ground Water	Date of Reporting	20/05/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	16/05/2019	Date of Receipt of Sample	16/05/2019
Sampling Location	From Peizometer No.4	Packing, Markings, Seal & Quantity	Plastic Bottle Marked 'B/16/04' 2 litre
Testing Protocol	IS 3025 & APHA 2017	Period of Analysis	16/05/2019 to 20/05/2019
Sample Description	Slightly yellowish liquid with suspended & settleable particles .		

TEST RESULTS

I -Chemical Testing

1. Ground Water

S. No.	Test Parameter	Units	Results	Test Method
1.	Total Hardness as CaCO ₃	mg/l	87	APHA-23 rd Ed 2017- 2340C
2.	Total Dissolved Solids	mg/l	392	APHA-23 rd Ed 2017- 2540C
3.	Total Suspended Solids	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 2540 D
4.	pH	-	7.66	APHA-23 rd Ed 2017-4500B
5.	Sulphate as SO ₄	mg/l	27	APHA-23 rd Ed 2017-4500E
6.	Biochemical Oxygen Demand	mg/l	BDL(DL 2)	IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 °C
7.	Chemical Oxygen Demand	mg/l	BDL(DL 5)	APHA-23 rd Ed 2017- 5220B
8.	Arsenic as As	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3114C
9.	Total Chromium as Cr	mg/l	BDL(DL 0.05)	APHA-23 rd Ed 2017- 3111B
10.	Lead as Pb	mg/l	BDL(DL 0.01)	APHA-23 rd Ed 2017- 3111B
11.	Mercury as Hg	mg/l	BDL(DL 0.0005)	APHA-23 rd Ed 2017- 3112B

Remarks : Party asked for above tests only

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL- Below Detection Limit, NA: Not Available

Symbols : NA

Terms & Conditions : Please refer terms and conditions overleaf.

****End of Report****

Not Valid for Consent Purpose

Checked by

Dr. Roopak Kumar
Authorized Signatory-Chemical

[A Govt. Approved, ISO 9001:2015, 14001 & OHSAS-18001:2007 certified & Approved by MOEF, PPCB]

TEST REPORT



15/04/2019
15/04/2019

Test Report No. : EL090419GW001	SL/19-20/13645	Page No. 1/1
Customer	Nabha Power Limited PO Box 28, Near Village-Nalash Dist Patiala , Rajpura-140101	
Work Order No. & Date	NPL/47000-06931 Dated 18/09/2018	
Type of Sample	Ground Water	
Mode of Collection of Sample	Sampling by laboratory	
Date of Sampling	09/04/2019	
Sampling Location	Piezometer Well No. 1 (170 feet)	
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	
Packing, Markings, Seal & Quantity	Plastic Bottle & Glass Bottle Marked ' B/09/01' 2litre + 250ml	
Date of Receipt of Sample	09/04/2019	
Period of Analysis	09/04/2019 To 15/04/2019	
Date of Reporting	15/04/2019	
Sample Observation	Colourless liquid with suspended particles.	

RESULTS

S.No.	Test Parameter	Units	Results	Test Method
1	Total Dissolved Solids	mg/L	501	APHA-23rd Ed 2017- 2540C
2	Total Suspended Solids	mg/L	25	APHA-23rd Ed 2017- 2540 D
	pH	-	7.66	APHA-23rd Ed 2017-4500B
4	Arsenic as As	mg/L	BDL(DL 0.01)	APHA-23rd Ed 2017-3114C
5	Chromium as Cr	mg/L	BDL(DL 0.05)	APHA-23rd Ed 2017-3111B
6	Lead as Pb	mg/L	BDL(DL 0.01)	APHA-23rd Ed 2017-3111B
7	Mercury as Hg	mg/L	BDL(DL 0.0005)	APHA-23rd Ed 2017-3112B

Remarks (if any) BDL=Below Detection Limit; DL= Detection Limit
Please refer Terms & Conditions overleaf.

15/04/2019

End of Report


Lab Incharge


Dr. Roopak Kumar
Authorized Signatory-Chemical



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & OHSAS-18001:2007 certified & Approved by MOEF, PPCB]

TEST REPORT



EC/19-20/12646
09.09.2011

Test Report No. :EL090419GW002	EC/19-20/12646	Page No. 1/1
Customer	Nabha Power Limited PO Box 28, Near Village-Nalash Dist Patiala , Rajpura-140101	
Work Order No. & Date	NPL/47000-06931 Dated 18/09/2018	
Type of Sample	Ground Water	
Mode of Collection of Sample	Sampling by laboratory	
Date of Sampling	09/04/2019	
Sampling Location	Piezometer Well No. 2 (170 feet)	
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	
Packing, Markings, Seal & Quantity	Plastic Bottle & Glass Bottle Marked 'B/09/02' 2litre + 250ml	
Date of Receipt of Sample	09/04/2019	
Period of Analysis	09/04/2019 To 15/04/2019	
Date of Reporting	15/04/2019	
Sample Observation	Colourless liquid with suspended & settleable particles.	

RESULTS

S.No.	Test Parameter	Units	Results	Test Method
1	Total Dissolved Solids	mg/L	432	APHA-23rd Ed 2017- 2540C
2	Total Suspended Solids	mg/L	42	APHA-23rd Ed 2017- 2540 D
	pH	-	6.56	APHA-23rd Ed 2017-4500B
4	Arsenic as As	mg/L	BDL(DL 0.01)	APHA-23rd Ed 2017-3114C
5	Chromium as Cr	mg/L	BDL(DL 0.05)	APHA-23rd Ed 2017-3111B
6	Lead as Pb	mg/L	BDL(DL 0.01)	APHA-23rd Ed 2017-3111B
7	Mercury as Hg	mg/L	BDL(DL 0.0005)	APHA-23rd Ed 2017-3112B

Remarks (if any) BDL=Below Detection Limit; DL= Detection Limit
Please refer Terms & Conditions overleaf.


Lab Incharge

End of Report


Dr. Roopak Kumar
Authorized Signatory-Chemical



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & OHSAS-18001:2007 certified & Approved by MOEF, PPCB]

TEST REPORT




Lab No. EL/19-20/13647
dated-30.03.2019

Test Report No. :EL090419GW003	EL/19-20/13647	Page No. 1/1
Customer	Nabha Power Limited PO Box 28, Near Village-Nalash Dist Patiala , Rajpura-140101	
Work Order No. & Date	NPL/47000-06931 Dated 18/09/2018	
Type of Sample	Ground Water	
Mode of Collection of Sample	Sampling by laboratory	
Date of Sampling	09/04/2019	
Sampling Location	Piezometer Well No. 3 (170 feet)	
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	
Packing, Markings, Seal & Quantity	Plastic Bottle & Glass Bottle Marked ' B/09/03' 2litre + 250ml	
Date of Receipt of Sample	09/04/2019	
Period of Analysis	09/04/2019 To 15/04/2019	
Date of Reporting	15/04/2019	
Sample Observation	Colourless liquid with suspended & settleable particles.	

RESULTS

S.No.	Test Parameter	Units	Results	Test Method
1	Total Dissolved Solids	mg/L	360	APHA-23rd Ed 2017- 2540C
2	Total Suspended Solids	mg/L	38	APHA-23rd Ed 2017- 2540 D
	pH	-	7.11	APHA-23rd Ed 2017-4500B
4	Arsenic as As	mg/L	BDL(DL 0.01)	APHA-23rd Ed 2017-3114C
5	Chromium as Cr	mg/L	BDL(DL 0.05)	APHA-23rd Ed 2017-3111B
6	Lead as Pb	mg/L	BDL(DL 0.01)	APHA-23rd Ed 2017-3111B
7	Mercury as Hg	mg/L	BDL(DL 0.0005)	APHA-23rd Ed 2017-3112B

Remarks (if any) BDL=Below Detection Limit; DL= Detection Limit
Please refer Terms & Conditions overleaf.


Lab Incharge

End of Report


Dr. Roopak Kumar
Authorized Signatory-Chemical

Formal no F/7 8 2;15.11.2018

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CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & OHSAS-18001:2007 certified & Approved by MOEF, PCB]

TEST REPORT



15/04/2019

Test Report No. :EL090419GW004	22/19-20/13648	Page No. 1/1
Customer	Nabha Power Limited PO Box 28, Near Village-Nalash Dist Patiala , Rajpura-140101	
Work Order No. & Date	NPL/47000-06931 Dated 18/09/2018	
Type of Sample	Ground Water	
Mode of Collection of Sample	Sampling by laboratory	
Date of Sampling	09/04/2019	
Sampling Location	Piezometer Well No. 4 (70-80 feet)	
Sampling Protocol	IS: 3025 (P-1) 1987 R1998 Amdt-1	
Packing, Markings, Seal & Quantity	Plastic Bottle & Glass Bottle Marked 13/09/04' 2litre + 250ml	
Date of Receipt of Sample	09/04/2019	
Period of Analysis	09/04/2019 To 15/04/2019	
Date of Reporting	15/04/2019	
Sample Observation	Colourless liquid with suspended & settleable particles.	

RESULTS

S.No.	Test Parameter	Units	Results	Test Method
1	Total Dissolved Solids	mg/L	366	APHA-23rd Ed 2017- 2540C
2	Total Suspended Solids	mg/L	39	APHA-23rd Ed 2017- 2540 D
	pH	-	7.59	APHA-23rd Ed 2017-4500B
4	Arsenic as As	mg/L	BDL(DL 0.01)	APHA-23rd Ed 2017-3114C
5	Chromium as Cr	mg/L	BDL(DL 0.05)	APHA-23rd Ed 2017-3111B
6	Lead as Pb	mg/L	BDL(DL 0.01)	APHA-23rd Ed 2017-3111B
7	Mercury as Hg	mg/L	BDL(DL 0.0005)	APHA-23rd Ed 2017-3112B

Remarks (if any) BDL=Below Detection Limit; DL= Detection Limit
Please refer Terms & Conditions overleaf

15/04/2019

End of Report


Lab Incharge


Dr. Roopank Kumar
Authorized Signatory-Chemical

Format no. F/7.8.2:15.11.2018

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Annexure-8

Green Belt Photographs

Annexure-8

NPL is having a complete dedicated team of skilled horticulturists for the forestation and greenery development program at our plant. A green belt of 2.50 lac plants is developed inside as well outside plant premises. Also small patches of gardens are developed inside of the plant premises wherever the open space is available to improve the plant beautification.



Pic-1 Green belt around coal stock pile area



Pic-2 Green belt around plant premises



Pic-3 Green belt along boundary



Pic-4 Green belt on both sides of road

Annexure-9

CSR Report

Nabha Power Limited

Corporate Social Responsibility

April- September 2019

NABHA POWER LIMITED

April 2019

Blood Donation Camp



Blood camp had been organized at Vill Bhappal in association with Youth Club and community people. A medical team from Govt. Medical College Sec-32, Chandigarh collected 74 units of blood. NPL facilitated the camp by making necessary arrangements Tentage, Refreshments, token of appreciation to Blood donors.

NABHA POWER LIMITED

Road Safety Drive



Road Safety drive in association with Traffic Police and Market committee officials Rajpura. Considering the ongoing wheat harvesting season, drive was conducted at Grain market where large number of Tractor trollies were covered to put reflective stickers. More than 400 vehicles were covered under the drive.



Support to Govt Health Centers for Medical Tools



To strengthen functioning of existing 7 Govt. Sub Health Centers of surrounding area, 42 ANMs/Asha workers had been provided basic health checkup tools which include Digital Thermometer, Digital BP Apparatus, Digital weighing machine Baby/Adult. ANMs/Asha workers work at grass root level & facilitating the rural people for basic health services.



Distribution of School Bags to needy Children



To help the needy children for basic leaning material, NPL distributed school bags along with geometry boxes to 1000 school children covering 14 Govt. schools of surrounding villages.



Support under Welfare Schemes



Support extended to 35 families under NPL CSR Welfare schemes. 26 families supported under shagan, Similarly 09 families had been provided financial under female child scheme.

May-2019

Skill Development

25 girls/women completed a one week advanced training in Beautician and hair therapy at Orane International Beautician institute at Rajpura. Participants were awarded certificates on the completion of training program.



Renovation of Dharamshala

Existing Dharamshala building renovated and facelifted by conducting whitewash. Now being utilized for NPL Skill Training Center and Aganwari Center.



Welfare Schemes

Welfare Scheme	Beneficiaries (May)	Amount (Lac)
Female Child	10	2.10
Shagan Scheme	13	2.73
Total	07	4.83



Female Welfare



Support extended during month

Shagan Scheme:-26

Female Child:-09

Total:- 35



Rural Development

Cleaning of drains/Ponds

Purpose:- Cleaned the drains/ponds to avoid flooding during the monsoon season

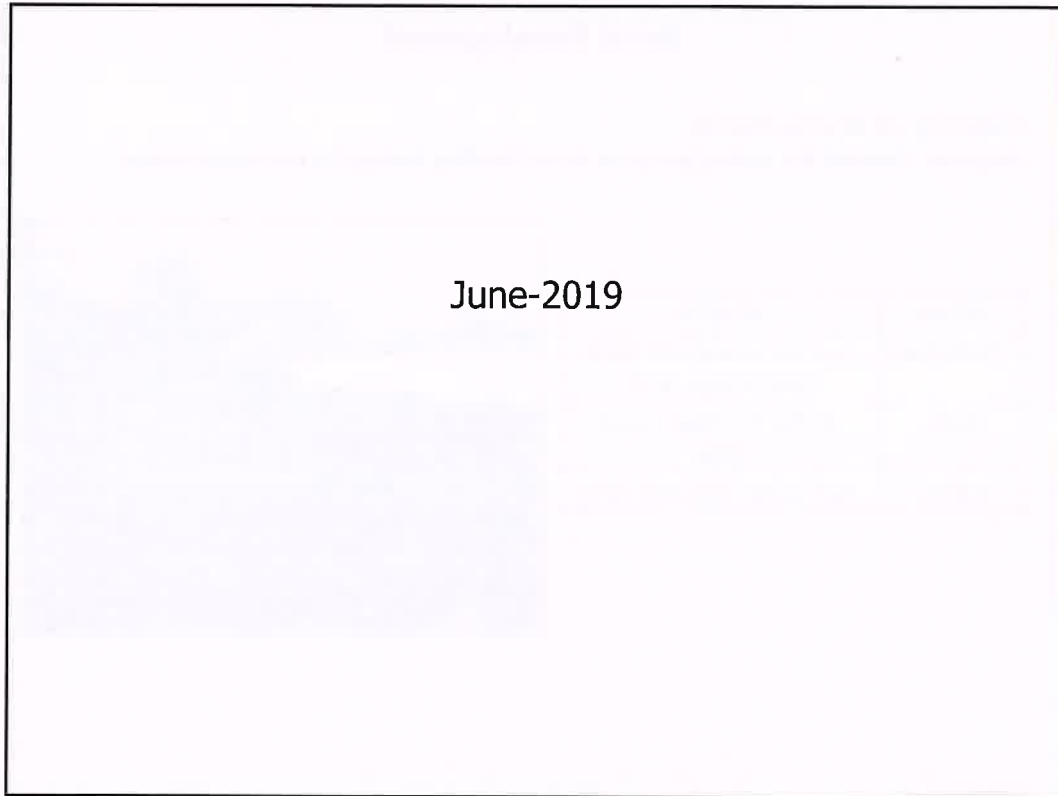
Village	Location
Cholti Kheri	Toe drain along with fields near bridge no.12
Naina	Outlet for village waste water
Sadhror	Rain water drain and Pond





Support to 8 Govt. Sub Health Centers for Staff/Patients furniture




SR. NO	ITEM	UG ANI	BHAPPA L	JANSU I	MIRZAPUR	KHAROL A	BADALI MAI KI	ALUN A	Kotla	TOTAL
1	EXAMINATION TABLE WITH SCREEN & MATTRES	1	1	1	1	0	1	1	1	7
2	REVOLVING CHAIR	1	1	1	1	1	1	1	1	8
3	LONG BENCH WITH BOX	1	1	1	1	1	1	1	1	8
4	REVOLVING STOOL	1	1	1	1	1	1	1	2	8
5	CHAIRS	10	4	4	4	4	4	4	4	38
7	ALMIRAH LARGE	6	2	6	5	5	6	8	2	40
8	STEEL THREE JOINT CHAIR	1	1	1	1	0	1	1	2	8




June-2019

 <p>Pond Development</p>	<p><u>June/2019</u></p> <p>Considering the coming Monsoon season drains/ponds have been cleaned to avoid flooding and increase the rain water storage capacity.</p>
 <p>Support to Govt. Health Centers</p>	<p><u>June/2019</u></p> <p>To strengthen the functioning of existing govt health centers, NPL provided basic medical check up tools and furniture to 8 Sub Health Centers located in surrounding villages of plant site</p>



Road Safety Drive

To spread awareness about the road safety and the traffic rules, NPL conducted a Road Safety drive in association with Traffic Police and Market committee officials Rajpura.




Support under Welfare Schemes

50 families from 27 village had been extended support under NPL CSR Welfare schemes (Shagan Scheme and Female child Welfare Scheme)


Welfare Schemes

Welfare Scheme	Beneficiaries	Amount (Lac)
Female Child	22	4.62
Shagan Scheme	08	1.68
Total	30	6.30

Female Child



Shagan Scheme



July-2019

Skill Development Centre's

Running 11 skill development centre's in 11 villages. Out of 11 centre's 9 are stitching & 2 are beautician centre's. Where 400 students (approx.,) will be trained in 1 year.



Skill Development

1 year full time Electrician course through NSIC, Rajpura

Training will enable to get the job in the industry or they can start their own small business.



Learning Enrichment Program in 10 Govt Primary Schools

Learning Enrichment Program started in 10 Government Primary Schools to enable slow learners and academically weaker students in Math and English, thereby creating a fulfilled, interactive learning atmosphere for students.



August-2019

2nd Cancer check-up camp

- Vill Badali Mai Ki date 25th August
- In association with World Cancer Care Charitable Trust and village panchayat/youth club members
- Camp witnessed footfall of approximately 600 people from the nearby villages
- Conducted cancer check-up like mammography, oral cancer, bone density, blood cancer, prostate cancer, pap smear and general medical check-up.
- Also shared the common symptoms of various cancers and its general causes.



Plantation Drive

To contribute towards environment conservation, on 17th august 2019, Nabha Power Limited organized a Tree plantation drive at vill. Naina in the presence of panchayat members and community people. In this drive, 10,000 fruit-bearing saplings were distributed in 20 villages. This was a dual-purpose initiative which not only contribute to the environment but will also give a source of income to farmers/panchayats after a period of time.



Youth Dialogue

- An interaction program with Youth belongs to our surrounding villages of plant site organized on 9th august 2019.
- To interact with youth and extract their ideas towards their contribution in various CSR activities like promotion of Sports, Drug De-addiction, Blood donation Camps, Plantation etc.
- Motivated them to contribute in the field of Education, Health, Sports or other social activities.
- Renowned resource persons were also invited who have done significant work in Youth leadership/development.



Pilot Project of Jute

Under CSR initiatives, a training program on jute products was planned in the month of June 2019. The agenda for this training is to provide livelihood to our women in nearby villages of NPL. Training program has been started in village Nalash Khurd from August 2019. In which a batch of 30 students has been enrolled. A trainer (Ms. Mukesh Rani) has been hired for this training. She will give training of various products of jute to our students/artisans. This training is planned for 1 year and minimum time for producing the product with market acceptability is fixed within 3 months.

Simultaneously we are coordinating with professional agencies (La10 & AIACA) to conduct this training through master trainers. These agencies will provide us the linkage to the market.



Skill Development

Exhibition by Women Self Help Group at NPL.

Date - 14 August 2019

Products/Items – Pickle, Desi Ghee, Spices, Jute Bags, Phulkari Dupatta, Woollen Items and other decorated items.

Total Sale – Rs. 6545



Welfare Schemes

In the month of August, under CSR initiatives we have supported 9 families from 7 villages under shagan & female child scheme

Shagan Scheme



Female Child



September-2019

2nd Blood Donation Camp



2nd Blood camp cum Medical Check camp had been organized at Vill Jansui in association with Youth Club and community people. Medical team from Govt.Rajindra Hospital, Patiala collected 97 units of blood while a team of doctors from Gian Sagar Medical College Banur conducted free medical check up . NPL facilitated the camp by making necessary arrangements Tentage, Refreshments, token of appreciation to blood donors.



Dental & Eye Check up Camp

General Dental & Eye check-up camp organized at village Basantpura , where 550 patients visited and availed the services of the free medical health check-up camp. During the camp, free health checkup was also done for Diabetes, Blood Pressure . The camp was organized with association of specialized team of doctors from Gian Sagar Hospital, including Eyes & dental specialists, general physicians and trained nursing staff.



Welfare Schemes

Support of Rs.21,000 (each) to needy families under Shagan and Female Child Scheme

No. of cases processed :- 92 families



Annexure-10

Ambient Air Quality Monitoring Results

[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

ULR No.	NA	Test Report No.	EL130919GA010
Type of Sample	Ambient Air	Date of Reporting	17/09/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (if any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	10/09/2019 to 11/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	Near NDCT	Period of Analysis	13/09/2019 to 17/09/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	74	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	41	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	14	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	27	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	20	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	25	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.76	04	IS 5182 Part-10:1999, RA 2014
8.	Lead (Pb)	µg/m ³	0.13	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2014

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations

: DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note

: *Non NABL

Terms & Conditions

: Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Tamp
Checked by QA

shy
Dr. Sandeep Garg
Authorized Signatory-Chemical

[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

TEST REPORT

Not Valid for Consent Purpose

ULR No.	NA	Test Report No.	EL130919GA011
Type of Sample	Ambient Air	Date of Reporting	17/09/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	10/09/2019 to 11/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	Near Loco Shed	Period of Analysis	13/09/2019 to 17/09/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	77	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	46	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	15	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	31	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	21	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	26	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.71	04	IS 5182 Part-10:1999, RA 2014
8.	Lead (Pb)	µg/m ³	0.11	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2014

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations : DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note : *Non NABL

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Tanj
Checked by QA

SG
Dr. Sandeep Garg
Authorized Signatory-Chemical



Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739



[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]
Dated-30.09.2019

TEST REPORT

Not Valid for Consent Purpose

ULR No.	NA	Test Report No.	EL130919GA009
Type of Sample	Ambient Air	Date of Reporting	17/09/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	10/09/2019 to 11/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	Near Storm Sump-2	Period of Analysis	13/09/2019 to 17/09/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	77	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	46	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	17	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	29	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	20	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	25	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.73	04	IS 5182 Part-10:1999, RA 2014
8.	Lead (Pb)	µg/m ³	0.10	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2014

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations : DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note : *Non NABL

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Dated-30.09.2019

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TEST REPORT

ULR No.	NA	Test Report No.	EL130919GA008
Type of Sample	Ambient Air	Date of Reporting	17/09/2019

Customer	Nabha Power Limited P.O Box 28, Near VIII. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (if any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	10/09/2019 to 11/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	Near Switch yard	Period of Analysis	13/09/2019 to 17/09/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	78	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	46	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	16	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	30	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	18	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	24	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.69	04	IS 5182 Part-10:1999, RA 2014
8.	Lead (Pb)	µg/m ³	0.12	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (NI)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2014

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations : DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note : *Non NABL

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

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TEST REPORT

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ULR No.	NA	Test Report No.	EL130919GA006
Type of Sample	Ambient Air	Date of Reporting	17/09/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	10/09/2019 to 11/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	Vill. Dabhali	Period of Analysis	13/09/2019 to 17/09/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	72	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	40	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	12	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	25	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	21	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	25	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.59	04	IS 5182 Part-10:1999, RA 2014
8.	Lead (Pb)	µg/m ³	BDL(DL0.04)	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2014

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations : DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note : *Non NABL

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

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TEST REPORT

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ULR No.	NA	Test Report No.	EL130919GA007
Type of Sample	Ambient Air	Date of Reporting	17/09/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	10/09/2019 to 11/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	Vill. Salempur	Period of Analysis	13/09/2019 to 17/09/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	70	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	41	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	14	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	27	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	20	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	23	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.65	04	IS 5182 Part-10:1999, RA 2014
8.	Lead (Pb)	µg/m ³	BDL(DL0.04)	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2014

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations : DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note : *Non NABL

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TEST REPORT

ULR No.	NA	Test Report No.	EL130919GA012
Type of Sample	Ambient Air	Date of Reporting	17/09/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	10/09/2019 to 11/09/2019	Date of Receipt of Sample	13/09/2019
Sampling Location	Vill. Dadumajra	Period of Analysis	13/09/2019 to 17/09/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	73	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	38	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	13	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	25	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	18	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	22	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.62	04	IS 5182 Part-10:1999, RA 2014
8.	Lead (Pb)	µg/m ³	BDL(DL0.04)	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2014

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations : DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note : *Non NABL

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

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TEST REPORT

ULR No.	NA	Test Report No.	EL200619GA008
Type of Sample	Ambient Air	Date of Reporting	27/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	18/06/2019 to 19/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	Near NDCT	Period of Analysis	20/06/2019 to 26/06/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	77	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	43	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	14	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	26	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	34	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	25	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.58	04	IS 5182 Part-10:1999, RA 2014 (NDIR Method)
8.	Lead (Pb)	µg/m ³	BDL(DL0.04)	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2017

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations : DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note : *Non NABL

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TEST REPORT

ULR No.	NA	Test Report No.	EL200619GA006
Type of Sample	Ambient Air	Date of Reporting	27/06/2019

Customer	Nabha Power Limited P.O Box 28, Near VIII. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	18/06/2019 to 19/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	Near Loco Shed	Period of Analysis	20/06/2019 to 26/06/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	79	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	47	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	12	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	26	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	35	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	24	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.66	04	IS 5182 Part-10:1999, RA 2014 (NDIR Method)
8.	Lead (Pb)	µg/m ³	BDL(DL0.04)	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2017

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations

: DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note

: *Non NABL

Terms & Conditions

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TEST REPORT

ULR No.	NA	Test Report No.	EL200619GA005
Type of Sample	Ambient Air	Date of Reporting	27/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	18/06/2019 to 19/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	Near Switch Yard	Period of Analysis	20/06/2019 to 26/06/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	76	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	43	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	15	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	26	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	38	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	26	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.69	04	IS 5182 Part-10:1999, RA 2014 (NDIR Method)
8.	Lead (Pb)	µg/m ³	BDL(DL0.04)	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2017

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations

: DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Serles, NAAQS- National Ambient Air Quality Standards

Note

: *Non NABL

Terms & Conditions

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TEST REPORT

ULR No.	NA	Test Report No.	EL200619GA007
Type of Sample	Ambient Air	Date of Reporting	27/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	18/06/2019 to 19/06/2019	Date of Receipt of Sample	20/06/2019
Sampling Location	Near Storm Water Sump	Period of Analysis	20/06/2019 to 26/06/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	71	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	40	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	13	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	24	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	37	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	24	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.68	04	IS 5182 Part-10:1999, RA 2014 (NDIR Method)
8.	Lead (Pb)	µg/m ³	BDL(DL0.04)	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2017

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations : DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note : *Non NABL

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CIN : U74140PB2011PTC034739



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TEST REPORT

Dated: 30.06.2019

ULR No.	NA	Test Report No.	EL210619GA003
Type of Sample	Ambient Air	Date of Reporting	27/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	20/06/2019 to 21/06/2019	Date of Receipt of Sample	21/06/2019
Sampling Location	Vill. Dabhali	Period of Analysis	21/06/2019 to 27/06/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	70	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	38	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	12	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	22	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	37	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	23	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.61	04	IS 5182 Part-10:1999, RA 2014 (NDIR Method)
8.	Lead (Pb)	µg/m ³	BDL(DL0.04)	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2017

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations : DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note : *Non NABL

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TEST REPORT

PCCB-Ref. No. Lab/3238892

Dated-30.09.2011

ULR No.	NA	Test Report No.	EL210619GA001
Type of Sample	Ambient Air	Date of Reporting	27/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	20/06/2019 to 21/06/2019	Date of Receipt of Sample	21/06/2019
Sampling Location	Vill. Salempura	Period of Analysis	21/06/2019 to 27/06/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	71	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	40	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	12	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	26	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	36	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	24	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.65	04	IS 5182 Part-10:1999, RA 2014 (NDIR Method)
8.	Lead (Pb)	µg/m ³	BDL(DL0.04)	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2017

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations

: DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note

: *Non NABL

Terms & Conditions

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TEST REPORT

ULR No.	NA	Test Report No.	EL210619GA002
Type of Sample	Ambient Air	Date of Reporting	27/06/2019

Customer	Nabha Power Limited P.O Box 28, Near Vill. Nalash Distt. Patiala	Work Order No. & Date	NPL/47000-06931 Dt.18/09/18
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	20/06/2019 to 21/06/2019	Date of Receipt of Sample	21/06/2019
Sampling Location	Vill. Dadumajra	Period of Analysis	21/06/2019 to 27/06/2019
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Weather

TEST RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	73	100	IS:5182 (P-23) 2006 RA 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	42	60	Lab SOP EL/SOP/AAQ/01
3.	Sulphur Dioxide (SO ₂)	µg/m ³	12	80	IS:5182 (P-2) 2001 RA 2017
4.	Oxides of Nitrogen (NO ₂)	µg/m ³	23	80	IS:5182 (P-6) 2006 RA 2017
5.	Ammonia (NH ₃)	µg/m ³	40	400	Lab SOP EL/SOP/AAQ/02
6.	Ozone (O ₃)	µg/m ³	22	180	IS:5182 (P-9):2006 RA 2014
7.	Carbon Monoxide (CO)	mg/m ³	0.67	04	IS 5182 Part-10:1999, RA 2014 (NDIR Method)
8.	Lead (Pb)	µg/m ³	BDL(DL0.04)	1.0	IS:5182 (P-22):2004 RA 2014
9.	Arsenic (As)	ng/m ³	BDL(DL1)	06	Lab SOP EL/SOP/AAQ/04
10.	Nickel (Ni)	ng/m ³	BDL(DL10)	20	Lab SOP EL/SOP/AAQ/04
11.	Benzene (C ₆ H ₆)*	µg/m ³	BDL(DL5)	05	IS:5182 (P-11) 2006 RA 2017
12.	Benzo-a-pyrene (BaP), Particulate Phase Only	ng/m ³	BDL(DL1)	01	IS:5182 (P-12) 2004 RA 2017

Remarks : Sample complies with prescribed standards

Other Information

Abbreviations

: DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Note

: *Non NABL


Terms & Conditions

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