

Ref No: SEPL/EC/Ph-1/Compliance Report/56/2023

Dated: 23.05.2023

To,

Ministry of Environment, Forests & Climate Change Govt. of India, Regional Office (NCZ), 25, Subhas Road Dehradun – 248001 Telephone-0135-2713009

Subject: Submission of Half Yearly Compliance Report (01-Oct-2022 to 31-Mar-2023) for the Environmental Clearance of 225 MW Gas Based CCPP – Phase - I at Village - Khaikhera, Tehsil - Kashipur, District - Udham Singh Nagar, Uttarakhand

#### Reference: Environmental Clearance Letter No:

1. Environmental Clearance Letter No: J-13012/77/2009 - IA. II (T)

#### Dear Sir,

This is in reference to above letters, we are submitting herewith hard copy along with soft copy (CD) of half yearly compliance report to the Environmental clearance conditions imposed by MoEF for 225 MW Gas Based Combined Cycle Power Plant – Phase - I by M/s Srayanthi Energy Pvt. Ltd., Kashipur.

This is to inform you that, as per UPCL clearance, plant is under operation since 1st Apr'2023.

Details of the reports are as follows:

- 1. EC Compliance Report (For Phase I)
- 2. Annexure as per EC

Please acknowledge the receipt of the same.

Thanking you.

With Regards

For M/s Sravanthi Energy Pvt. Ltd

**Vice President (Operation)** 

#### Enclosure:

- 1. Compliance Report to the Environmental Clearance Conditions (For Phase I)
- 2. Annexure as per EC stipulations
- 3. Form V (FY. 2022 2023)
- 4. Form 4

#### Cc:

- 1. The Director (Thermal), MoEF, Govt. of India, IA Section, Indira Parayavaran Bhawan Jorbag Road New Delhi-110003
- 2. In Charge CPCB, Zonal office, Ground floor, PIUCP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow-226010
- 3. Regional Office, UEPPCB, Kashipur, Uttarakhand

Sravanthi Energy Pvt. Ltd.

Corporate Office: 7th Floor, Block B, Building Number 9, DLF Cybe City, Phase-III, Gurugram-122002 Tel.: +91-124-4787000/01/02/03

Works: Village-Khaikhera, Dariyal Road, Post Office-Mahuwakhera Ganj, Tehsil-Kashipur, Distt- Udham Singh Nagar, Uttarakhand, Pin-244713 Tel - 05947-261300

CIN: U40101HR2009PTC038954

www.sravanthigroup.com

Environment Clearance Letter No. J-13012/77/2009-IA. II (T)

Project Name: M/s. Sravanthi Energy Pvt. Ltd.

Location Village-Khaikhera, Tehsil- Kashipur, Dist.-U. S. Nagar, Uttarakhand

Project 225 MW Gas Based CCPP (Phase I)

Compliance & Monitoring Report Period: 01st Oct'2022 to 31st Mar'2023

Sr. No.	<b>Environmental Clearance Conditions</b>	Compliance
	Con	ditions
(i)	In case the fuel is changed from natural gas to any other fuel, liquid or solid, the proponent shall apply a fresh for environment clearance along with necessary requisite documents as per the EIA Notification 2006 (and its amendments). In such a case, the requirement of holding fresh public hearing/ consultation will be determined by the Expert Appraisal committee.	Fuel is natural gas.  Proponent agrees to apply fresh environment clearance along with necessary requisite document as per EIA notification 2006(and its amendments) in case the fuel is changed.
(ii)	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers.  Monitoring parameters shall also include heavy metals (Cr, As, Pb) and records shall be 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.	For regular monitoring of ground water level, one piezometer is provided. Ground water parameters including heavy metals (Cr, As, Pb) are monitored. Records are maintained. Recent report is enclosed as <b>Annexure-1</b> The data is compared with baseline data.
(iii)	Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished.	Rainwater harvesting is adopted in consultation with the Groundwater Authority/ Body. The pictures are enclosed as <b>Annexure-2</b>
(iv)	A well designed rainwater harvesting system shall be put in place within six months, which shall comprises of rain water collection from the built up and open area in the plant premises.	Well-designed rainwater harvesting system is put in place. Pictures are enclosed as Annexure-2
(v)	Three stacks of 40 m each shall be provide with continuous online monitoring equipments. Exit velocity of	Stacks of 40m provided with continuous

	flue gases shall not be less than	online monitoring equipment. Exit velocity
	22m/sec.	of flue gas is greater than 22m/sec
(vi)	Closed cycle cooling system with induced draft cooling towers shall be provided. The effluents shall be treated to conform to prescribed norms.	Air Cooled Condenser (ACC) is installed for condensing & cooling the steam to reduce the water consumption instead of using water cooled condenser system. In ACC, air is used as cooling media for steam cooling purposes. ACC installation eliminate makeup water supply, blowdown disposal, chemicals for water treatment and concerns over water-pollution etc. SEPL significantly reduced the load on ground water consumption by installing ACC, even the installation cost is very high compared to water cooled condenser.
(vii)	The treated effluents conforming to the prescribed standards only shall be reused to the extent possible and excess discharged. Arrangement shall be made that effluents and storms water do not get mixed.	Provision for effluent collection and treatment is made. Treated effluent is reused for green belt development to the max. extent possible. The detail of Effluent Treatment Plant is attached as  Annexure – 3  Arrangement is such that effluent and storm water do not get mixed.
( ''')	A course to the last of	_
(viii)	A sewage treatment plant (as applicable) shall be provided and the treated sewage shall be used for raising greenbelt/ plantation. Continuous monitoring of effluent discharge shall be undertaken and it shall be ensured that when discharge enters the natural drain the temperature of effluent shall be at ambient.	Sewage treatment plant is provided and treated sewage is used for greenbelt/plantation. Continuous monitoring of effluent discharge is carried out. No effluent discharge to natural drains. The detail of Sewage treatment Plant is attached as Annexure-4.
(ix)	Green belt should be 30% of the total area of land.	30% of the total land area is in green belt. Till now 4270 nos trees have been planted in the plant. The details of plantation along with photographs is attached as <b>Annexure-5</b> .
(x)	First Aid and sanitation arrangement shall be made for the drivers and other contract workers during construction phase.	The plant is in operation phase. However, the Plant has an established first aid centre. Picture enclosed as <b>Annexure-6</b> • A medical van is available at site. Male Nursing Assistant is appointed at site for health check-up for drivers, workers, and contractors and first aid, if required Adequate facility for sanitation is established.

(xi)	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/earmuffs etc. Shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss include shifting to non-noisy/ less noisy areas.	Gas Turbine is provided with acoustic enclosure. Regular monitoring of noise in the work zone is carried out and the level is lower that 75 dBA.  Personal protective equipment are provided for all plant personnel. No persons are permitted to work on running equipment.
(xii)	Regular monitoring of ground level concentration of SO2, NOx, RSPM (PM10 & PM2.5) etc. shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The locations of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.	Regular monitoring of ground level concentration of SO2, NOx, RSPM (PM10 & PM 2.5) etc is carried out in the impact zone.  The details are forwarded to SPCB at regular intervals.
(xiii)	An amount of Rs. 4.0 Corers shall be earmarked as one-time capital cost for CSR programme. Subsequently a recurring expenditure of Rs. 1.0 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Detail of the activities to be undertaken shall be submitted within six months along with road map for implementation.	Socio-Economic study has been conducted and based on that, CSR activities under progress.  The Socio-Economic Survey Report has also been submitted to the MoEF regional office  The details of CSR activities are attached as
(xiv)	As part of CSR programme the company shall conduct need-based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generation projects consistent with the traditional skills of the people beside development of fodder farm, fruit bearing orchards, vocational training etc can form a part of such programme. Company shall provide separate budget for community development activities and income	Annexure - 7

	generating programmes. This will be in addition to vocational training for individuals imparted to take up selfemployment and jobs.	
(xv)	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 the project.	The Plant is in Operating phase
(xvi)	The project proponent shall advertise in at least two local newspaper widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental 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 Forest at http://envfor.nic.in.	Complied.  Copies of press advertisement have already been submitted to the Ministry.
(xvii)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions/ representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	EC letter already made available in our company website www.sravanthigroup.com
(xviii)	A dedicated Environment management Cell with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	Environment management cell is in place. The structure for same is attached as Annexure - 8 Complied. Status of compliance of the stipulated EC
(xix)	The proponent shall upload the status of compliance of the stipulated EC conditions, including result of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional	conditions, including results of monitored data is being periodically uploaded on SEPL website.  Monitored Data Results are attached as Annexure — 1 (Ground Water Analysis



	Office of MOEF, the respective Zonal office of CPCB and the SPCB. The criteria pollutant levels namely, SPM, RSPM (PM10 & PM2.5), SO2, NOx (ambient as well as stack emissions shall be displayed at a convenient location near the main gate of the company in the public domain.	Results) and <b>Annexure – 10</b> (AAQ Analysis Results)
(xx)	The project proponent shall also submit six monthly reports on 'the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well by e- mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB	Submitting six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by email) to the respective zonal office of CPCB and the SPCB.
(xxi)	The environment statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Office of the Ministry by Email.	The environment statement of each financial year ending 31st March in Form-V is being submitted to concerned SPCB and is being displayed on the company website and is also being sent to the respective Regional offices of the ministry by email.
(xxii)	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environment safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.	Complying. Status of the implementation of the stipulated environmental safeguards and project activities is attached as Annexure-9.
(xxiii)	Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of	A complete set of documents have already been submitted to Regional office of MOEF.



	documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the regional office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least sixmonthly bases. Criteria pollution levels including NOx (from stack and ambient air) shall be displayed at the main gate of the power plant.	
(xxiv)	Separate funds shall be allocated for implementation of environmental protection measures along with itemwise break-up. These costs shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and yearwise expenditure should be reported to the Ministry.	Complying. Separate fund has been kept for implementation of environmental protection measures along with item wise break up.
(xxv)	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	Financial Closure was achieved on 31st August 2010 Commercial operation on 20th Nov'16
(xxvi)	Full cooperation shall be extended to the Scientists/ Officers from the Ministry/ Regional Office of the Ministry at Lucknow/ CPCB/ SPCB who would be monitoring the compliance of environmental status.	Full cooperation shall be extended to the visiting Scientists/Officers from the Ministry / Regional Office of the Ministry at Lucknow / CPCB / SPCB





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**Certificate of Analysis** 

7.8 F-01(B)

PARTY CODE : S/UK/003

**SRAVANTHI ENERGY PVT LTD** 

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: GROUND WATER (BOREWELL WATER-1)

Sample Qty.

: 2.5 LTRS

DT Recd : 11-03-2023

REPORT NO. : CWM00122303

Ref No. : SEPL-01/O&M/EHS/WO

-915/2022 DATE-22/12/2022

IS: 3025 (P-52)

RESULTS OF ANALYSIS Reference : IS: 10500-2012

Description : One sample of Ground Water (Borewell Water-1) was collected by us on **PARAMETERS** Results Acceptable Permissible Protocols (Limit) (Max.) (Limit) (Max.) ρН 7.14 6.5 to 8.5 Colour Relaxation IS, 3025 (P-11) <1 Hazen 5 Hazen 15 Hazen Odour IS: 3025 (P-4) Agreeable Agreeable Taste Agreeable IS: 3025 (P-5) Agreeable Agreeable Turbidity Agreeable IS: 3025 (P-7 & 8) <1 NTU 1 NTU **Total Dissolved Solids** 5 NTU IS: 3025 (P-10) 298 mg/L 500 ma/L Total Hardness (as CaCO3) 2000 mg/L IS: 3025 (P-16) 145 mg/L 200 mg/L Calcium (as Ca) 600 mg/L IS: 3025 (P-21) 35 mg/L 75 mg/L Magnesium (as Mg) 200 mg/L IS: 3025 (P-40) 12 mg/L 30 mg/L 100 mg/L Chloride (as CI) IS: 3025 (P-46) 58 mg/L 250 mg/L Sulphate (as SO4) 1000 mg/L IS: 3025 (P-32) 18 mg/L 200 mg/L Total Alkalinity 400 mg/L IS: 3025 (P-24) 130 mg/L 200 mg/L 600 mg/L Iron (as Fe) IS: 3025 (P-23) <0.1 mg/L 1 mg/L No Relaxation Microbiological Examination IS: 3025 (P-53) F coli Absent/100 ml Absent/100 ml Total Coliform MPN 100 ml IS: 1622 Not detected/100 ml Not detected/100 Not detected/100 ml IS: 1622 ml Lead (as pb) Not detected 0.01 mg/L No Relaxation Mercury (as Hg) IS: 3025 (P-65) Not detected 0.001 mg/L No Relaxation Arsenic (as As) IS: 3025 (P-48) Not detected 0.01 mg/L 0.05 mg/L Chromium (as Cr) IS: 3025 (P-65)

Date of performance: 11/03/2023 to 16/03/2023

Openion: - The Chemical & Bacteriology analysis indicates that the sample received conforms to IS: 10500-2012 specification (Acceptable

0.05 mg/L

Not detected

SAMPLE DRAWN BY US

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No Relaxation



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SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: GROUND WATER (BOREWELL WATER-2)

Sample Qty.

: 2.5 LTRS

DT Recd : 11-03-2023

**REPORT NO.: CWM00132303** 

Ref No. : SEPL-01/08M/EHS/WO

-915/2022

DATE-22/12/2022

RESULTS OF ANALYSIS Reference : IS: 10500-2012

	Reference : IS: 1	10500-2012	l a	<b>:</b>	
Description	: One sample of Ground Water (Borewell Water-2) was collected by us on 10/03/2023,				
PARAMETERS	Results	Acceptable (Limit) (Max.)	Permissible (Limit) (Max.)	Protocols	
pH Colour Odour Taste Turbidity Total Dissolved Solids Total Hardness (as CaCO3) Calcium (as Ca) Magnesium (as Mg) Chloride (as Cl) Sulphate (as SO4) Total Alkalinity Iron (as Fe) Microbiological Examination E.coli Total Coliform MPN/100 ml		6.5 to 8.5 5 Hazen Agreeable Agreeable 1 NTU 500 mg/L 200 mg/L 30 mg/L 250 mg/L 200 mg/L 200 mg/L 1 mg/L 1 mg/L	Relaxation 15 Hazen Agreeable Agreeable 5 NTU 2000 mg/L 600 mg/L 100 mg/L 1000 mg/L 400 mg/L	IS: 3025 (P-11) IS: 3025 (P-4) IS: 3025 (P-5) S: 3025 (P-7 & 8) IS: 3025 (P-10) IS: 3025 (P-16) IS: 3025 (P-21) IS: 3025 (P-40) IS: 3025 (P-40) IS: 3025 (P-46) IS: 3025 (P-24) IS: 3025 (P-23) IS: 3025 (P-23) IS: 3025 (P-53)  IS: 1622 IS: 1622	
Lead (as pb) Mercury (as Hg) Arsenic (as As) Chromium (as Cr)	<ul><li>Not detected</li><li>Not detected</li><li>Not detected</li><li>Not detected</li></ul>	0.01 mg/L 0.001 mg/L 0.001 mg/L 0.05 mg/L	No Relaxation 0.05 mg/L	IS: 3025 (P-65) IS: 3025 (P-48) IS: 3025 (P-65) IS: 3025 (P-52)	

Date of performance: 11/03/2023 to 16/03/2023

Openion: The Chemical & Bacteriology analysis indicates that the sample received conforms to IS: 10500-201 specification acceptable

Limits) wrt above tests only.



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225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: GROUND WATER (VILLAGE-BERKHERA PANDEY, GW-1)

Sample Qty.

: 2.5 LTRS

DT Recd : 11-03-2023

**REPORT NO.: CWM00082303** 

Ref No.

: SEPL-01/0&G/EHS/WQ-

894/2022

DATE-09/08/2022

RESULTS OF ANALYSIS Reference : IS: 10500-2012

Description

: One sample of Ground Water (Berkhera Pandey GW-1) was collected by us on

73 4 75 4 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X	1	0/03/2023.			neoted by us off
PARAMETERS		Results	Acceptable (Limit) (Max.)	Permissible (Limit) (Max.)	Protocols
pH Colour Odour Taste Turbidity Total Dissolved Solids Total Hardness (as CaCO3) Calcium (as Ca) Magnesium (as Mg) Chloride (as Cl) Sulphate (as SO4) Iron (as Fe) Nitrates (as NO3) Lead (as pb) Mercury (as Hg) Arsenic (as As) Chromium (as Cr) Copper (as Cu) Manganese (as Mn) Free Residual chlorine (as Cl2)		7.16 <1 Hazen Agreeable Agreeable <1 NTU 338 mg/L 132 mg/L 134 mg/L 11 mg/L 68 mg/L 16 mg/L <0.1 mg/L Not detected	6.5 to 8.5 5 Hazen Agreeable Agreeable 1 NTU 500 mg/L 200 mg/L 30 mg/L 30 mg/L 250 mg/L 250 mg/L 0.01 mg/L 0.01 mg/L 0.05 mg/L 0.05 mg/L 0.05 mg/L 0.1 mg/L 0.05 mg/L	Relaxation 15 Hazen Agreeable Agreeable 5 NTU 2000 mg/L 600 mg/L 200 mg/L 100 mg/L 1000 mg/L No Relaxation No Relaxation No Relaxation No Relaxation No Relaxation No Relaxation 1.5 mg/L 0.3 mg/L	IS: 3025 (P-11) IS: 3025 (P-4) IS: 3025 (P-5) IS: 3025 (P-7 & 8) IS: 3025 (P-10) IS: 3025 (P-16) IS: 3025 (P-21) IS: 3025 (P-40) IS: 3025 (P-40) IS: 3025 (P-46) IS: 3025 (P-32) IS: 3025 (P-32) IS: 3025 (P-34) IS: 3025 (P-34) IS: 3025 (P-65) IS: 3025 (P-2) IS: 3025 (P-2) IS: 3025 (P-2)
( )		a.im	O'T INDET (IMILITY)	1.0 mg/L	IS: 3025 (P-26)

Date of performance: 11/03/2023 to 15/03/2023

Openion: - The Chemical & Bacteriology analysis indicates that the sample received conforms to 1S: 10500-2012 specification (Acceptable Limits) wrt above tests only.

SAMPLE DRAWN BY US

DATE 15-03-2023 Muth.Signatory

Person Ind With Signatory







PARTY CODE : S/UK/003

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225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: GROUND WATER (VILLAGE-RAJPURA RANI GW-2)

Sample Qty. : 2.5 LTRS

DT Recd : 11-03-2023

**REPORT NO.: CWM00092303** 

: SEPL-01/O&G/EHS/WO-

894/2022

DATE-09/08/2022

**RESULTS OF ANALYSIS** Reference: IS: 10500-2012

Description	: !	One sample of Grou 10/03/2023.	md Water (Rajpura Ran	i GW-2) was collect	ed by us on
PARAMETERS		Results	Acceptable (Limit) (Max.)	Permissible (Limit) (Max.)	Protocols
pH Colour Colour Colour Colour Taste Turbidity Total Dissolved Solids Total Hardness (as CaCO3) Calcium (as Ca) Magnesium (as Mg) Chloride (as Cl) Sulphate (as SO4) Iron (as Fe) Nitrates (as NO3) Lead (as pb) Mercury (as Hg) Arsenic (as As) Chromium (as Cr) Copper (as Cu) Manganese (as Mn) Free Residual chlorine (as Cl2)		7.20 <1 Hazen Agreeable Agreeable <1 NTU 302 mg/L 121 mg/L 28 mg/L 13 mg/L 52 mg/L 10 mg/L <0.1 mg/L Not detected	6.5 to 8.5 5 Hazen Agreeable Agreeable 1 NTU 500 mg/L 200 mg/L 30 mg/L 250 mg/L 200 mg/L 0.01 mg/L 0.01 mg/L 0.05 mg/L 0.05 mg/L 0.1 mg/L	Relaxation 15 Hazen Agreeable Agreeable 5 NTU 2000 mg/L 600 mg/L 200 mg/L 100 mg/L 1000 mg/L 400 mg/L No Relaxation No Relaxation No Relaxation No Relaxation No Relaxation No Relaxation 1.5 mg/L 0.3 mg/L 1.0 mg/L	IS: 3025 (P-11) IS: 3025 (P-4) IS: 3025 (P-5) IS: 3025 (P-7 & 8) IS: 3025 (P-10) IS: 3025 (P-16) IS: 3025 (P-21) IS: 3025 (P-21) IS: 3025 (P-40) IS: 3025 (P-46) IS: 3025 (P-32) IS: 3025 (P-32) IS: 3025 (P-32) IS: 3025 (P-53) IS: 3025 (P-65) IS: 3025 (P-22) IS: 3025 (P-2) IS: 3025 (P-26)

Date of performance: 11/03/2023 to 15/03/2023

Openion: - The Chemical & Bacteriology analysis indicates that the sample received conforms to IS: 10500-2012 specification (Acceptable Limits) wrt above tests only.

SAMPLE DRAWN BY US

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7.8 F-01(B)

**PARTY** 

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PARTY CODE : S/UK/003

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: GROUND WATER (VILLAGE-KANAKPUR GW-3)

Sample Qty. : 2.5 LTRS

DT Recd : 11-03-2023

**REPORT NO.: CWM00102303** 

Ref No.

: SEPL-01/O&G/EHS/WO-

894/2022

DATE 09/08/2022

**RESULTS OF ANALYSIS** Reference: IS: 10500-2012

7.13	Description PARAMETERS	: (	One sample of Gro Results	und Water (Kanakpur GW Acceptable (Limit) (Max.)	-3) was collected Permissible (Limit) (Max.)	by us on 10/03/2023.  Protocols
- · · · · · · · · · · · · · · · · · · ·	Odour Taste Turbidity Total Dissolved Solids Total Hardness (as CaCO3) Calcium (as Ca) Magnesium (as Mg) Chloride (as Cl) Sulphate (as SO4) Iron (as Fe) Nitrates (as NO3) Lead (as pb) Mercury (as Hg) Arsenic (as As) Chromium (as Cr) Copper (as Cu) Manganese (as Mn)		<1 Hazen Agreeable Agreeable <1 NTU 412 mg/L 141 mg/L 32 mg/L 15 mg/L 67 mg/L 26 mg/L <0.1 mg/L 3.64 mg/L Not detected	5 Hazen Agreeable Agreeable 1 NTU 500 mg/L 200 mg/L 30 mg/L 250 mg/L 250 mg/L 200 mg/L 0.01 mg/L 0.01 mg/L 0.05 mg/L 0.01 mg/L 0.05 mg/L 0.1 mg/L	Relaxation 15 Hazen Agreeable Agreeable 5 NTU 2000 mg/L 600 mg/L 100 mg/L 1000 mg/L 1000 mg/L No Relaxation No Relaxation No Relaxation No Relaxation No Relaxation 1.5 mg/L	IS: 3025 (P-4) IS: 3025 (P-5) IS: 3025 (P-7 & 8) IS: 3025 (P-10) IS: 3025 (P-16) IS: 3025 (P-16) IS: 3025 (P-40) IS: 3025 (P-40) IS: 3025 (P-46) IS: 3025 (P-32) IS: 3025 (P-32) IS: 3025 (P-53) IS: 3025 (P-65) IS: 3025 (P-65) IS: 3025 (P-65) IS: 3025 (P-65) IS: 3025 (P-52) IS: 3025 (P-2)

Date of performance: 11/03/2023 to 16/03/2023

Openion :- The Chemical & Bacteriology analysis indicates that the sample received conforms to IS: 10500-2012 specification (Acceptable Limits) wrt above tests only.

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**PARTY** 

PARTY CODE : S/UK/003

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: GROUND WATER (VILLAGE-KATTAYA GW-4)

Sample Qty. : 2.5 LTRS

DT Recd : 11-03-2023

REPORT NO. : CWM00112303 Ref No.

: SEPL-01/0&G/EHS/WO-

894/2022

DATE-09/08/2022

RESULTS OF ANALYSIS Reference: IS: 10500-2012

Description PARAMETERS pH		ound Water (Kattaya GW <b>Acceptable</b> (Limit) (Max.)	/-4) was collected by Permissible (Limit) (Max.)	us on 10/03/2023. Protocols
Colour Colour Colour Taste Turbidity Total Dissolved Solids Total Hardness (as CaCO3) Calcium (as Ca) Magnesium (as Mg) Chloride (as Cl) Sulphate (as SO4) Iron (as Fe) Nitrates (as NO3) Lead (as pb) Mercury (as Hg) Arsenic (as As) Chromium (as Cr) Copper (as Cu) Manganese (as Mn) Free Residual chlorine (as Cl2)	7.30  1 Hazen Agreeable Agreeable 1 Agreeable 2 Agreea	6.5 to 8.5 5 Hazen Agreeable Agreeable 1 NTU 500 mg/L 200 mg/L 30 mg/L 250 mg/L 250 mg/L 200 mg/L 0.01 mg/L 0.01 mg/L 0.05 mg/L 0.05 mg/L 0.05 mg/L 0.1 mg/L 0.05 mg/L 0.07 mg/L 0.09 mg/L	Relaxation 15 Hazen Agreeable Agreeable 5 NTU 2000 mg/L 600 mg/L 1000 mg/L 1000 mg/L 1000 mg/L 400 mg/L No Relaxation No Relaxation No Relaxation No Relaxation No Relaxation No Relaxation 1.5 mg/L 0.3 mg/L 1.0 mg/L	IS: 3025 (P-11) IS: 3025 (P-4) IS: 3025 (P-5) IS: 3025 (P-7 & 8) IS: 3025 (P-10) IS: 3025 (P-16) IS: 3025 (P-21) IS: 3025 (P-40) IS: 3025 (P-40) IS: 3025 (P-32) IS: 3025 (P-32) IS: 3025 (P-32) IS: 3025 (P-34) IS: 3025 (P-65) IS: 3025 (P-20) IS: 3025 (P-2) IS: 3025 (P-2) IS: 3025 (P-26)

Date of performance: 11/03/2023 to 16/03/2023

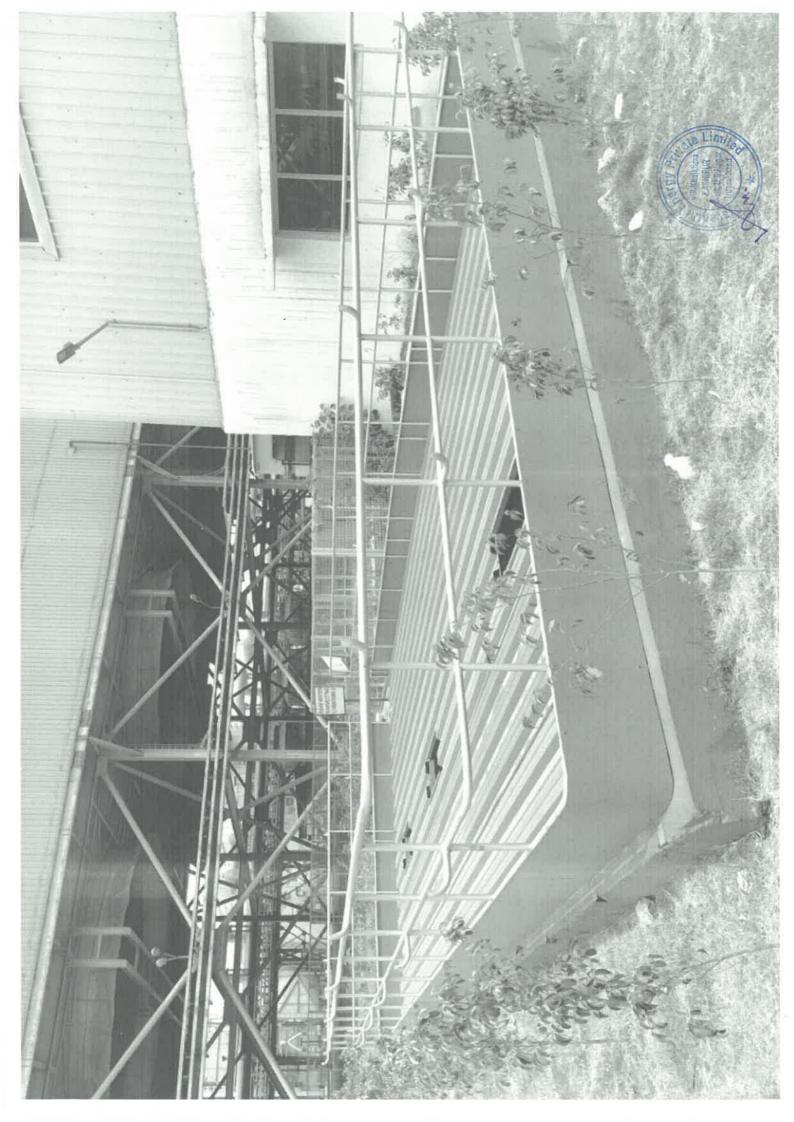
Openion: - The Chemical & Bacteriology analysis indicates that the sample received conforms to IS: 10500-2012 specification (Acceptable

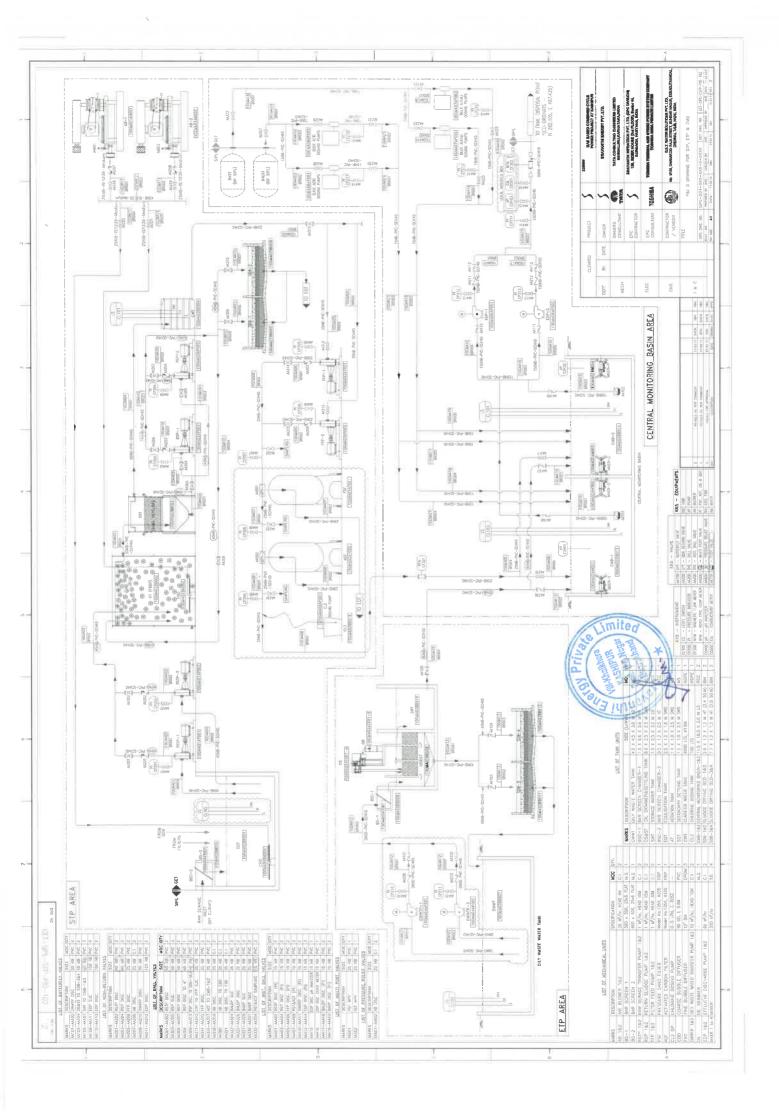
SAMPLE DRAWN BY US

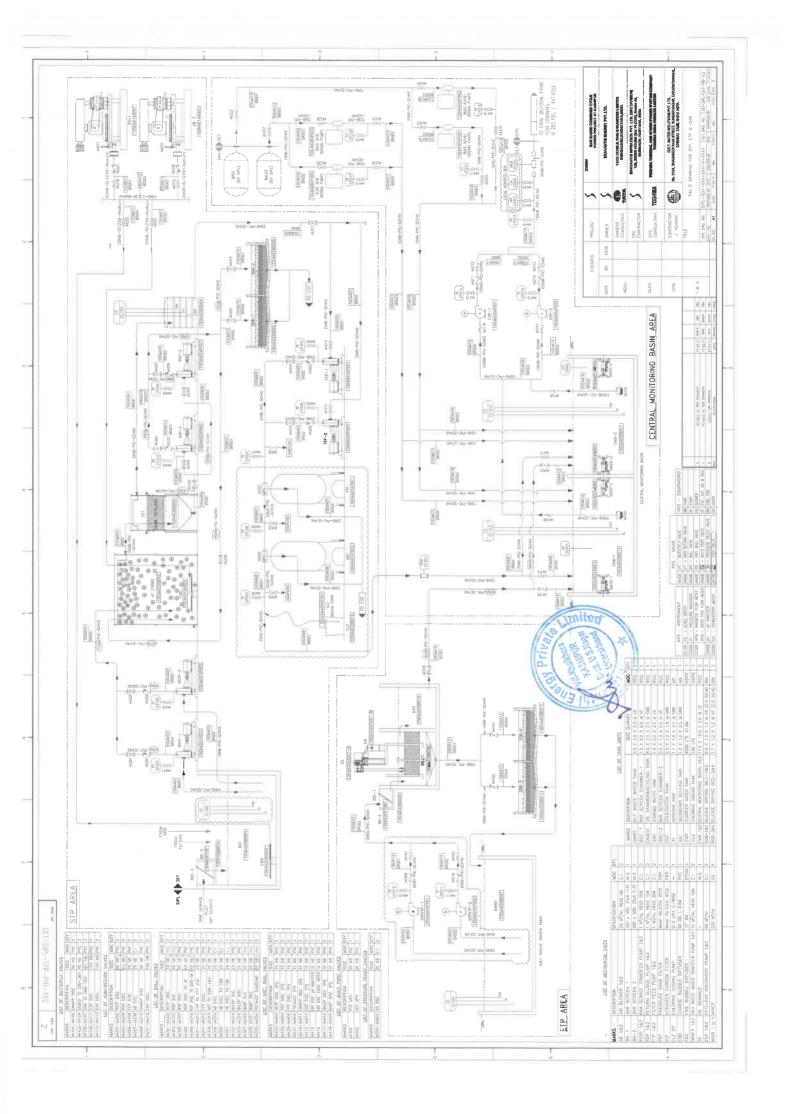
DATE 16-03-2023 Auth Signatory

Person In lauth Cian

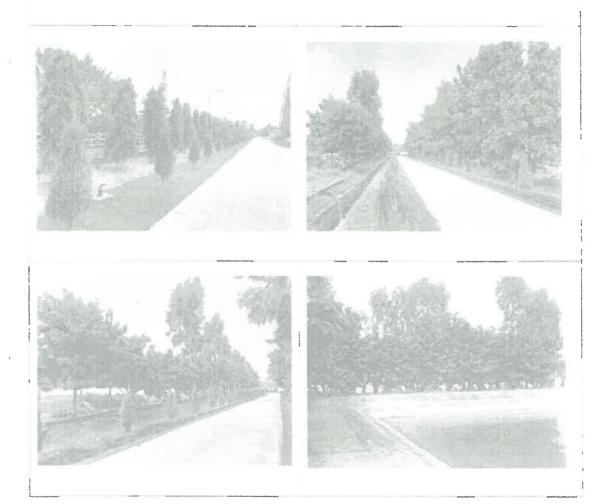








#### Annexure - 5

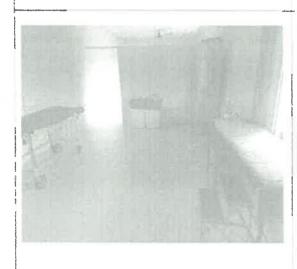




#### Annexure - 6











# Annexure – 7 CSR Activities

#### **Activities Completed/On progress:**

- ◆ Ambulance has been purchased under CSR activities and extended helping hand number of times.
- Classroom furniture has been provided in Primary Pathsala Kataiya Village and Primary Pathsala in Khaikhera village.
- School Kits (Uniform, bags, water bottles, note books etc.) have been distributed in Primary Pathsala Kataiya village and Primary Pathsala in Khaikhera village.
- ♦ Construction of Bore wells and hand pumps for safe drinking water in Khaikhera & Kataiya village is in progress
- ◆ Construction of classroom and sanitation facilities completed at Primary Pathsala Khaikhera village
- Construction of drainage from Madhaya Village to connecting Nala completed.
- Approximately Rs. 2.59 crore is invested under CSR activities till now.

#### Table: CSR Expenditure (for Work Completed & on Progress)

Sr. No.	CSR Head	Activity	Place/Location	Amount Spent/ Progress (Rs.)	Remarks
1 Educ	Education	Uniform Distribution, Furniture, School Building Repair & maintenance, Bicycle Distribution & Drainage Cleaning & Needy People Education Help	Khaikhera Village	6,17,036	Completed
		Uniform, Furniture Distribution & Fees	Katiya Village	4,98,972	Completed
2 .	Health	Ambulance	Site	9,13,092	Completed
3	Drinking Water Facility	Hand Pump Installation & Water Filter & RO	Nearby Villages & Gurdwara	7,23,550	Completed
4	Infrastructure	Construction of Drainage (Sewer)	Madhayya to Nalla	26,12,859	Completed
	Development	Construction of Drainage (Storm)	Khaikhera	11,89,950	Completed



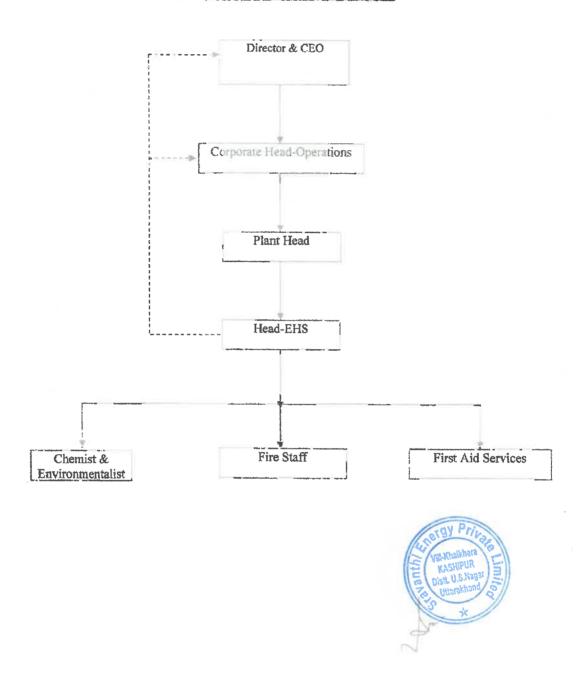
		Road Concreting	Madhaya & Khaikhera	8,58,000	Completed
		Classroom Construction	Divya Convent School	1,50,000	Completed
		Land Purchase	For School & Hospital development	75,00,000	Completed
5	Help to disabled	Tri Cycle & Sewing Machine Distribution	Nearby Villages	2,74,716	Completed
6	Green Belt Development	Park Development	Rudrapur Collectorate	1,50,000	
7	Illumination	Installation of Street light poles with light fixtures and its Electrification works.	Khaikhera	56,000	Completed
8	Construction	For Gurudwara Slab construction	Kháikhera	71,000	Completed
9	Cleaning Activity	For Drain Cleaning	Khaikhera & Maddu	90,268	Completed
10	Water Harvesting	Artificial Structure for Rain Water harvesting	Village Kamola & Dhamola Distt-Nainital	13,02,325	Completed
		Distribution to poor & Needy People Society to Support them in Epedemic Covid 19 & Woolen Blanket	Kashipur, khailkera,Kanakpur,kattya,	7,87,594	Completed
11	Covid-19	Distribution Santizer ,Medical Equipments,PPA	Govt Hospital Kashipur, khailkera,Kanakpur,kattya ETC	4,84,218	Completed
		Donation for Containment of epedemic	Pipal Tree Foundation/ Indian Red Cross Society/Seva Bharathi /Shri Adinath Rajendra Jain Shwetamber Pedhi Trust/Wani Chamber of Commerce Industries & Agriculture	54,66,976	Completed

KASHIPUR Disti. U.S. Nagai Warakhand

13	Flood Relief	Heavy rain Fall	Rudarpur	50,000	Completed
12	Health	Doconline Medicines Service	Kashipur, khailkera,Kanakpur,kattya and Nearby Villages	9,91,056	Completed
		Telemedicine Serivces Nearby Village	Kashipur, khailkera,Kanakpur,kattya and nearby Villages	11,01,999	Completed
		Ambulance Support with Driver to District Adminstrration	CMO Rudarpur	67,750	Completed



ANNEXURE - 8
Environmental, Health & Safety Management Cell
for
M/s. Sravanthi Energy Pyt. Ltd.



#### Annexure - 9

### Implementation Status of Environmental Safeguard at SEPL Site

S. N.	<b>Environmental Safeguard Activity</b>	Status
1	Sanitation Facilities for Workers, Drivers etc.	Provided
2	Environmental Management Plan for Construction Phase	Plant is in operation
3	Disaster Management Plan	Available
4	Environment, Health & Safety Manual	Available
5	Safety Guidelines Leaflet for Visitors	Available
6	Rainwater Harvesting System	Rainwater Harvesting Pit (two nos) completed
7	Effluent Treatment Plant	Completed
8	Sewage Treatment Plant	Completed
9	Stack	Provided
10	Ground Water Level Monitoring (Plezometer)	Ground water level is monitored
11	Environment Monitoring Lab	Established
12	Green belt Development	Developed and maintained







# LABS & RESEARCH PVT. LTD.

2015 CERTIFIED MOEF RECOGNISED GOVT. APPROVED TEST HOUSE

rusted Analytical & Research House

**Certificate of Analysis** 

7.8F-01(B)

PARTY GODE: SJUKJOO3

**PARTY** 

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM

SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: AMBIENT AIR

Ref No.

: SEPL-01/0&M/EHS/WO-9 15/2022 DATE-22/12/2022

DT Recd

: 11-03-2023

REPORT NO : CAVODO72303

RESULTS OF ANALYSIS

Reference: EP Act Standard/NAAQS Schedule VII rule-3 (3B)

Description

Name of the Industry

Location of the Sampling Point

Date of Sampling

Sampling Started at

Sampling Completed at

Actual Time of Sampling (Minutes)

Total Volume of Air sampled (m3)

Flow Rate of SPM( M3/MIN )

Ambient Temperature (degree C)

: One Ambient Air sample was collected by us on 09/03/2023 to 10/03/2023. : SRAVANTHI ENERGY PVT LTD, UTTRAKHAND

: Near GT3

: 09/03/2023 to 10/03/2023

: 2:50 pm dt. 09/03/2023

: 2:50 pm dt. 10/03/2023

: 1440

: 1728 for PM 10 & 20.4 PM 2.5

: 1.2

: 28

**PARAMETERS** 

Particulate Matter (PM 10) Particulate Matter (as PM 2.5) Sulphur Dioxide (as SO2) Carbon Monoxide (as CO) (8 Hr.) Nitrogen Dioxide (as NO2)

Results  $(\mu g/m3)$ 81.6

47.4 22.2 0.104 mg/m3 38.6

(µg/m3) (Max.) 100 60 80 2.0 mg/m3

80

Limits

**Protocols** 

IS 5182 (P-23) Gravimetric IS:5182 (P-2)

IS:5182 (P-10) IS:5182 (P-6)

Date of performance : 11/03/2023 to 15/03/2023





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ERTIFIED MOEF RECOGNISED COVT. APPROVED TEST HOUSE

Trusted Analytical & Research House

**Certificate of Analysis** 

7.8F-01(B)

DARTY CODE: \$/UK/003

**PARTY** 

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM

SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: AMBIENT AIR (VILLAGE-BERKHERA PANDEY)

Ref No.

: SEPL-01/O&G/EHS/WO-8

DT Recd

: 10-03-2023

**REPORT NO.: CAV00032303** 

94/2022 DATE-09/08/2022

**RESULTS OF ANALYSIS** Reference : EP Act Standard/NAAQS Schedule VII rule-3 (3B)

Description

: One Ambient Air sample was collected by us on 09/03/2023 to 10/03/2023

Name of the Industry

: SRAVANTHI ENERGY PVT LTD, UTTRAKHAND

Location of the Sampling Point

: Village Berkhera Pandey

Date of Sampling

: 09/03/2023 to 10/03/2023 : 10:00 am dt. 09/03/2023

Sampling Started at Sampling Completed at

: 10:00 am dt. 10/03/2023

**Actual Time of Sampling (Minutes)** 

: 1440

Total Volume of Air sampled (m3)

: 1584

Flow Rate of SPM( M3/MIN )

: 1.1

Ambient Temperature (degree C)

: 28

PAF	MAS	ETE	RS
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PARAMETERS		Results	Limits	Protocols
		(µg/m3)	(µg/m3) (Max.)	
Particulate Matter (PM 10)	:	72.4	100	IS:5182 (P-23)
Particulate Matter (as PM 2.5)	4.	56.4	60	Gravimetric
Sulphur Dioxide (as SO2)	:	20.2	80	IS:5182 (P-2)
Carbon Monoxide (as CO) (8 Hr.)	:	0.112 mg/m3	2.0 mg/m3	IS:5182 (P-10)
Nitrogen Dioxide (as NO2)	;	40.2	80	IS:5182 (P-6)

Date of performance 11/03/2023 to 16/03/2023



# Trusted Analytical & Research House

**Certificate of Analysis** 

7.8F-01(B)

PARTY CODE : S/UK/003

PARTY

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM

SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: AMBIENT AIR (VILLAGE-RAJPURA RANI)

Ref No.

; SEPL-01/O&G/EHS/WO-8

DT Recd

: 10-03-2023

**REPORT NO.: CAV00042303** 

94/2022 DATE-09/08/2022

**RESULTS OF ANALYSIS** 

Reference: EP Act Standard/NAAQS Schedule VII rule-3 (3B)

Description

: One Ambient Air sample was collected by us on 09/03/2023 to 10/03/2023.

Name of the Industry

: SRAVANTHI ENERGY PVT LTD, UTTRAKHAND

Location of the Sampling Point

Village Rajpura Rani

Date of Sampling

: 09/03/2023 to 10/03/2023 : 1:45 pm dt. 09/03/2023

Sampling Started at

Sampling Completed at

: 1:45 pm dt. 10/03/2023

Actual Time of Sampling (Minutes)

Total Volume of Air sampled (m3)

: 1872 for PM 10 & 20.4 PM 2.5

Flow Rate of SPM( M3/MIN )

: 1.3

Ambient Temperature (degree C)

; 29

PARAMETERS		Results	Limits	Protocols
		(µg/m3)	(µg/m3) (Max.)	
Particulate Matter (PM 10)	:	89.2	100	IS:5182 (P-23)
Particulate Matter (as PM 2.5)	*	50.4	60	Gravimetric
Sulphur Dioxide (as SO2)	:	22.6	80	IS:5182 (P-2)
Carbon Monoxide (as CO) (8 Hr.)	*	0.120 mg/m3	2.0 mg/m3	IS:5182 (P-10)
Nitrogen Dioxide (as NO2)	*	38.6	80	IS:5182 (P-6)



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Date of performance: 11/03/2023 to 16/03/2023



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Trusted Analytical & Research House

**Certificate of Analysis** 

7.8F-01(B)

PARTY CODE : S/UK/003

PARTY

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM

SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: AMBIENT AIR (VILLAGE KANAKPUR)

Ref No.

: SEPL-01/0&G/EHS/WO-8

DT Recd

: 10-03-2023

REPORT NO.: CAV00052303

94/2022 DATE-09/08/2022

**RESULTS OF ANALYSIS** 

Reference: EP Act Standard/NAAQS Schedule VII rule-3 (3B)

Description

: One Ambient Air sample was collected by us on 09/03/2023 to 10/03/2023.

Name of the Industry

: SRAVANTHI ENERGY PVT LTD, UTTRAKHAND

Location of the Sampling Point

: Village Kanakpur

Results

**Date of Sampling** 

: 09/03/2023 to 10/03/2023

Sampling Started at .

: 11:00 am dt, 09/03/2023 : 11:00 am dt. 10/03/2023

Sampling Completed at **Actual Time of Sampling (Minutes)** 

: 1440

Total Volume of Air sampled (m3)

: 1584 for PM 10 & 20.6 PM 2.5

Flow Rate of SPM( M3/MIN )

: 1.1

Ambient Temperature (degree C)

: 30

PAR	A &	450	res	20
PAK	ΑN	12		(3)

		(µg/m3)
Particulate Matter (PM 10)	:	77.2
Particulate Matter (as PM 2.5)	*	48.6
Sulphur Dioxide (as SO2)		20.8
Carbon Monoxide (as CO) (8 Hr.)	*	0.110 mg/m3
Nitrogen Dioxide (as NO2)	:	34.4
Nitrogen Dioxide (as NO2)	:	

Limits (µg/m3) (Max.) 100 IS:5182 (P-23)

60 80 2.0 mg/m3

80

Gravimetric IS:5182 (P-2) IS:5182 (P-10)

IS:5182 (P-6)

**Protocols** 

Date of performance: 11/03/2023 to 16/03/2023

SAMPLE DRAWN BY US

DATE 16-03-2023

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# TS LABS & RESEARCH PVT. LTD.

ISO 9001 - 2015 CERTIFIED MOEF RECOGNISED GOVT. APPROVED TEST HOUSE

Trusted Analytical & Research House

**Certificate of Analysis** 

7.8F-01(B)

PARTY CODE: S/UK/603

PARTY

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM SINGH NAGAR. KASHIPUR-244713, UTTRAKHAND

SAMPLE

: AMBIENT AIR (VILLAGE-KATTAYA)

Ref No.

: SEPL-01/O&G/EHS/WO-8

DT Recd

: 10-03-2023

**REPORT NO.: CAV00062303** 

94/2022 DATE-09/08/2022

**RESULTS OF ANALYSIS** Reference: EP Act Standard/NAAQS Schedule VII rule-3 (3B)

Description

Name of the Industry

: One Ambient Air sample was collected by us on 09/03/2023 to 10/03/2023. : SRAVANTHI ENERGY PVT LTD, UTTRAKHAND

Location of the Sampling Point

: Village Kattaya

**Date of Sampling** 

: 09/03/2023 to 10/03/2023

Sampling Started at

: 1:00 pm dt. 09/03/2023

Sampling Completed at

: 1:00 pm dt. 10/03/2023

**Actual Time of Sampling (Minutes)** 

: 1440

Total Volume of Air sampled (m3)

: 1728 for PM 10 & 21.2 PM 2.5

Flow Rate of SPM( M3/MIN )

Ambient Temperature (degree C)

: 29

#### **PARAMETERS**

PARAMETERS		Results (µg/m3)	Limits	Protocols
Particulate Matter (PM 10)		78.4	(µg/m3) (Max.)	10 4444 10 44
Particulate Matter (as PM 2.5)			100	IS:5182 (P-23)
	1	52.4	60	Gravimetric
Sulphur Dioxide (as SO2)	:	24.2	80	IS:5182 (P-2)
Carbon Monoxide (as CO) (8 Hr.)	;	0.102 mg/m3	2.0 mg/m3	IS:5182 (P-10)
Nitrogen Dioxide (as NO2)	:	44.8	80	IS:5182 (P-6)



Date of performance: 11/03/2023 to 16/03/2023

#### FORM 4

[ See rules 6(5), 13(8), 16(6) and 20(2) ]

#### FORM FOR FILING ANNUAL RETURNS

[To be submitted to State Pollution Control Board by 30<sup>th</sup>day of June of every year for the preceding period April to March]

1. Name and address of the facility: Sravanthi Energy Pvt. Ltd

2×225 MW Combined Cycle Power Plant

Village - Khaikhera, Kashipur-244713

**District – Udham Singh Nagar (Uttarakhand)** 

2. Authorization No. and Date of issue :38431/1075 &18.07.2018

3. Name of the authorized person & full address with telephone, fax number and e-mail:

K. Tirumal Rao

Sravanthi Energy Pvt. Ltd

2×225 MW Combined Cycle Power Plant

Village – Khaikhera, Kashipur-244713

**District – Udham Singh Nagar (Uttarakhand)** 

Telephone No.:08057903030

Fax No.: 05947-272757

Email:ktirumalrao@sravanthigroup.com

4. Production during the year (product wise), wherever applicable

**Electricity: 0 MWH** 

#### Part A. To be filled by hazardous waste generators

1. Total quantity of waste generated category wise

Schedule I - 5.1

: 3.66 MT

Schedule I - 35.3

: 0.00 MT

2. Quantity dispatched:

(i) to disposal facility

(ii) to recycler or co-processors or pre-processor: 3.66 MT

(iii) others



3. Quantity utilized in-house, if any -NIL

**4.** Quantity in storage at the end of the year –

Schedule I - 5.1 : 3.66 MT

Schedule I - 34.3 : 0.00 MT

#### Part B. To be filled by Treatment, storage and disposal facility operators: NA

- 1. Total quantity received -
- 2. Quantity in stock at the beginning of the year -
- 3. Quantity treated -
- 4. Quantity disposed in landfills as such and after treatment -
- 5. Quantity incinerated (if applicable) –
- 6. Quantity processed other than specified above –
- 7. Quantity in storage at the end of the year -

#### Part C. To be filled by recyclers or co-processors or other users: NA

- 1. Quantity of waste received during the year -
  - (i) domestic sources:
  - (ii) imported (if applicable):
- 2. Quantity in stock at the beginning of the year –
- 3. Quantity recycled or co-processed or used –
- 4. Quantity of products dispatched (wherever applicable) –
- 5. Quantity of waste generated –
- 6. Quantity of waste disposed -
- 7. Quantity re-exported (wherever applicable)-
- 8. Quantity in storage at the end of the year -

Signature of the Occupier or Operator of the disposal facility

Date: 12 April 2023

Place: Kashipur

### **ENVIRONMENTAL STATEMENT REPORT**

For The Year

2022-2023

#### Submitted to:

Uttarakhand Environment Protection and Pollution Control Board (UEPPCB)



#### "FORM - V"

# ENVIRONMENTAL STATEMENT REPORT For Year 2022-23

M/s Sravanthi Energy Pvt. Ltd.

#### PART - A

(i)Name and address of the Owner/occupier:

D. V. Rao

of the industry operationor Process

Sravanthi Energy Pvt. Ltd.

2×225 MW Combined Cycle Power Plant

Village - Khaikhera, Kashipur

Dist. -Udham Singh Nagar (Uttarakhand)

(ii)Industry category

Primary - (STC Code)

: 3510

Secondary - (SIC Code)

: 35103

(iii)Production capacity - Units

: Electricity - 2×225 MW

(iv) Year of Establishment

: 2009

(v)Date of the last environmental statement

: 22/06/2022

#### PART - B

Water and Raw Materials Consumption

(1) Water consumption m<sup>3</sup>/d.

**Process** 

:: 16.00m<sup>3</sup>/d

Cooling

: 82.83m<sup>3</sup>/d

**Domestic** 

11.24m<sup>3</sup>/d

Name of products	Process Water consumption	per unit of product output
	During the previous financial year	During the current financial year
Electricity	0.00003940m <sup>3</sup> /KWH	0m³/KWH

#### (2) Raw Material Consumption

Natural Gas	Electricity	0.2162scm/KWH	0/KWH	
		During the previous financial year	During the current financial year	
* Name of raw materia	ls Name of products	Consumption of raw material per Unit of output		

\* Industry may use codes if disclosing details of raw materials would violate contractual obligations, otherwise all industries have to name the raw materials used.

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#### PART - C

Pollution discharged to environment/unit of output.

(Parameter as specified in the consent issued)

Pollutants	Quantity of pollutants discharged	Concentrations of pollutants in discharges	Percentage of variation from prescribedstandardswith
	(mass/day)	(mass/volume)	reasons
(a) Water	Nil	Not applicable	Not applicable
(b) Air	NA	Annexure-1	Within prescribed standards

#### PART - D

#### **HAZARDOUS WASTES**

(As specified under Hazardous Wastes/Management and Handling Rules 1989)

Hazardous Wastes	Total Quantity (kg)		
	During the previous financial year	During the current financial year	
(a) From process	Used Oil - 5.65 MT	Used Oil -3.66 MT	
(b)From pollution control facilities	Nil	Nil	

#### PART - E

#### **SOLID WASTE**

Solid Waste	Total Quantity		
	During the previous	During the current	
	financial year	financial year	
a)From process	Nil	Nil	
b)From pollution control facilities	Nil	Nil	
c)(1) Quantity recycled or reutilized within the Unit.	Nil	Nil	
(2)Sold	Nil	Nil	
(3) Disposed	Nil	Nil	

#### PART - F

Please specify the characterizations (in terms of composition and quantum) of hazardous aswell as solid wastes and indicate disposal practice adopted for both these categories ofwastes.

No solid waste. Used oil is collected in drum &stored at safe location.

#### PART - G

Impact of the Pollution abatement measures taken on conservation of natural resources and on the cost of production.

ETP & STP is operational where effluent is treated and this treated water is used for green belt, this conserves ground water.

VIII-Khalkhera KASHIPUR Distr. U.S. Nagar Uttarakhand

#### PART - H

Additional measures/investmentproposal for environmental protection including abatement of pollution, prevention of pollution.

Both gas turbines supplied by General Electric, are equipped with advanced dry low NO<sub>x</sub> (DLN 2.6) combustor for efficient combustion of gas and maintaining air pollutants to lowest values. Conventional Power Plants use Steam or water as De-NOx agent in enormous quantity to meet the pollution Norms, whereas Sravanthi Gas Turbines are with Dry Low NOx technology use NIL such water or Superheated steam and also keeps the NOx under 25 ppm itself.

Further Conventional Power Plants using Cooling Towers with copious cooling water to condense the exhaust steam of steam turbines, Sravanthi opted ACC –Air Cooled Condensing Technology to conserve the scarce natural resource of water.

Treated water has been connected a forming a ring header for green belt development inside the plant to make as "Zero Discharge".

#### PART - I

Any other particulars for improving the quality of the environment.

Following initiatives taken by SEPL; Kashipur to improve the Environment:

- > Rainwater harvesting system near administrative building (RWH #1) and ECB Building (RWH #2) is made to replenish the ground water.
- > Ground Water Level / Quality Survey being done on routine basisas PCB/CGWB.
- 'World Environment Day' on 5th June is celebrated every year by organizing various types of competitions to create awareness among employees along with massive plantations.
- > STPis in operation for recovery and reuse of sewagewater also for Green Belt.

#### Remarks:

Name & Signature of the Occupier

Will-Khalkhera KASHIPUR Dist. U.S. Nagar Uttarakhand

Seal

D. V. Rao Sravanthi Energy Pvt. Ltd. 2×225 MW Combined Cycle Power Plant Village – Khaikhera, Kashipur 'Dist.-Udham Singh Nagar (Uttarakhand)

#### Annexure-1





### TTS LABS & RESEARCH PVT. LTD.

AN ISO 9001 - 2015 CERTIFIED MOEF RECOGNISED GOVT. APPROVED TEST HOUSE

#### Trusted Analytical & Research House

#### **Certificate of Analysis**

7.8F-01(B)

PARTY CODE : S/UK/003

**PARTY** 

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM

SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: AMBIENT AIR

Ref No.

: SEPL-01/O&M/EHS/WO-9

15/2022 DATE-22/12/2022

DT Recd

: 11-03-2023

**REPORT NO.: CAV00072303** 

**RESULTS OF ANALYSIS** 

Reference: EP Act Standard/NAAQS Schedule VII rule-3 (3B)

Description

: One Ambient Air sample was collected by us on 09/03/2023 to 10/03/2023.

Name of the Industry

: SRAVANTHI ENERGY PVT LTD, UTTRAKHAND

Location of the Sampling Point

: Near GT3

**Date of Sampling** 

: 09/03/2023 to 10/03/2023

Sampling Started at

: 2:50 pm dt. 09/03/2023 : 2:50 pm dt. 10/03/2023

Sampling Completed at Actual Time of Sampling (Minutes)

: 1440.

Total Volume of Air sampled (m3)

: 1728 for PM 10 & 20.4 PM 2.5

Flow Rate of SPM( M3/MIN ) Ambient Temperature (degree C)

Particulate Matter (PM 10)

Sulphur Dioxide (as SO2)

Nitrogen Dioxide (as NO2)

Particulate Matter (as PM 2.5)

Carbon Monoxide (as CO) (8 Hr.)

: 12 : 28

**PARAMETERS** 

Results Limits **Protocols**  $(\mu q/m3)$ (µg/m3) (Max.) 81.6 100 IS:5182 (P-23) 47.4 60 Gravimetric 22.2 80 -IS:5182 (P-2) 0.104 mg/m3 2.0 mg/m3 IS:5182 (P-10) 38.6 80 IS:5182 (P-6)

Date of performance: 11/03/2023 to 15/03/2023

SAMPLE DRAWN BY US

**DATE 15-03-2023** 

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Inc. Auth.Signatory

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Page 1 of 1

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NOTE: 1. Results listed refer only to the tested sample & applicable parameters. Endorsement of products is neither inferred nor implied.

- 2. Liability of laboratory is limited to the invoiced amount only. Any dispute arising out of this report shall be subject to Delhi jurisdiction only
- 3. The Report shall not be reproduced either in full or part without the written approval of laboratory.
- 4. Sample shall be disposed off after issue of Test Report unless specified.

Works/Business: S-78, 1st Floor, Okhla Industrial Area, Phase-2, New Delhi-20. Regd. Off.: 496, Sector-21C, Faridabad, Haryana-121001 Tel.: 011-41006737, CIN: U74999HR2016PTC064658 E-mail: labs.test@cattslabs.com Website: www.cattslabs.com





Trusted Analytical & Research House

Certificate of Analysis

7.8F-01(B)

PARTY CODE: \$/UK/003

**PARTY** 

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM

SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: AMBIENT AIR (VILLAGE-BERKHERA PANDEY)

Ref No.

: SEPL-01/O&G/EHS/WO-8 94/2022 DATE-09/08/2022

DT Recd

: 10-03-2023

REPORT NO.: CAV00032303

RESULTS OF ANALYSIS

Reference : EP Act Standard/NAAQS Schedule VII rule-3 (3B)

Description

Name of the Industry

: One Ambient Air sample was collected by us on 09/03/2023 to 10/03/2023. : SRAVANTHI ENERGY PVT LTD, UTTRAKHAND

Location of the Sampling Point

: Village Berkhera Pandey

Date of Sampling

: 09/03/2023 to 10/03/2023

Sampling Started at

: 10:00 am dt. 09/03/2023

Sampling Completed at

: 10:00 am dt. 10/03/2023

**Actual Time of Sampling (Minutes)** 

: 1440

Total Volume of Air sampled (m3)

: 1584

Flow Rate of SPM( M3/MIN )

: 1.1

Ambient Temperature (degree C)

: 28

**PARAMETERS** 

Results Limits (µg/m3) (µg/m3) (Max.) 72.4 100 56.4 60 20.2 80

**Protocols** 

Particulate Matter (PM 10) Particulate Matter (as PM 2.5) Sulphur Dioxide (as SO2) Carbon Monoxide (as CO) (8 Hr.) Nitrogen Dioxide (as NO2)

0.112 mg/m3 40.2

2.0 mg/m3 80

Gravimetric IS:5182 (P-2) IS:5182 (P-10) IS:5182 (P-6)

IS:5182 (P-23)

Date of performance : 11/03/2023 to 16/03/2023



# EARCH PVT. LTD.

# Trusted Analytical & Research House

**Certificate of Analysis** 

7.8F-01(B)

PARTY CODE : S/UK/003

PARTY

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: AMBIENT AIR (VILLAGE-RAJPURA RANI)

Ref No.

: SEPL-01/O&G/EHS/WO-8

DT Recd

: 10-03-2023

REPORT NO.: CAV00042303

94/2022 DATE-09/08/2022

**RESULTS OF ANALYSIS** 

Reference: EP Act Standard/NAAQS Schedule VII rule-3 (3B)

Description

: One Ambient Air sample was collected by us on 09/03/2023 to 10/03/2023.

Name of the Industry

: SRAVANTHI ENERGY PVT LTD, UTTRAKHAND

Location of the Sampling Point

: Village Rajpura Rani

**Date of Sampling** 

: 09/03/2023 to 10/03/2023

Sampling Started at

: 1:45 pm dt. 09/03/2023

Sampling Completed at

: 1:45 pm dt. 10/03/2023

Actual Time of Sampling (Minutes)

: 1440

Total Volume of Air sampled (m3)

: 1872 for PM 10 & 20.4 PM 2.5

Flow Rate of SPM( M3/MIN )

: 1.3

Ambient Temperature (degree C)

: 29

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.P** #4	PCA	.ro	~ :	~	84.75

PARAMETERS		Results	Limits	Protocols
		(µg/m3)	(µg/m3) (Max.)	
Particulate Matter (PM 10)	:	89.2	100	IS:5182 (P-23)
Particulate Matter (as PM 2.5)	:	50.4	60	Gravimetric
Sulphur Dioxide (as SO2)	*	22.6	80	IS:5182 (P-2)
Carbon Monoxide (as CO) (8 Hr.)	;	0.120 mg/m3	2.0 mg/m3	IS:5182 (P-10)
Nitrogen Dioxide (as NO2)	1	38.6	80	IS:5182 (P-6)

Date of performance: 11/03/2023 to 16/03/2023



Trusted Analytical & Research House

**Certificate of Analysis** 

7.8F-01(B)

PARTY CODE : S/UK/003

PARTY

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM

SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: AMBIENT AIR (VILLAGE KANAKPUR)

Ref No.

: SEPL-01/O&G/EHS/WO-R 94/2022 DATE-09/08/2022

**DT Recd** 

: 10-03-2023

**REPORT NO.: CAV00052303** 

RESULTS OF ANALYSIS

Reference: EP Act Standard/NAAQS Schedule VII rule-3 (3B)

Description

Limits

100

Name of the Industry

: One Ambient Air sample was collected by us on 09/03/2023 to 10/03/2023. : SRAVANTHI ENERGY PVT LTD, UTTRAKHAND

Location of the Sampling Point

: Village Kanakpur

Date of Sampling

: 09/03/2023 to 10/03/2023

Sampling Started at

: 11:00 am dt. 09/03/2023

Sampling Completed at

: 11:00 am dt. 10/03/2023

**Actual Time of Sampling (Minutes)** 

: 1440

Total Volume of Air sampled (m3)

: 1584 for PM 10 & 20.6 PM 2.5

Flow Rate of SPM( M3/MIN )

: 1.1

Ambient Temperature (degree C)

: 30

**PARAMETERS** 

Results (µg/m3) (µg/m3) (Max.) 77.2 48.6 20.8

**Protocols** IS:5182 (P-23)

Particulate Matter (PM 10) Particulate Matter (as PM 2.5) Sulphur Dioxide (as SO2) Carbon Monoxide (as CO) (8 Hr.) Nitrogen Dioxide (as NO2)

60 80 0.110 mg/m3 2.0 mg/m3 34.4 80

Gravimetric IS:5182 (P-2) IS:5182 (P-10) IS:5182 (P-6)

Date of performance: 11/03/2023 to 16/03/2023

SAMPLE DRAWN BY US

DATE 16,03,2023

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# S LABS & RESEARCH PVT. LTD. 15 CERTIFIED MOEF RECOGNISED GOVT. APPROVED TEST HOUSE

# rusted Analytical & Research House

**Certificate of Analysis** 

7.8F-01(B)

PARTY COBE: SJUKJOO3

**PARTY** 

: SRAVANTHI ENERGY PVT LTD

225 MW GBCC PP, VILLAGE-KHAIKHERA, DARIYAL ROAD, UDHAM

SINGH NAGAR, KASHIPUR-244713, UTTRAKHAND

SAMPLE

: AMBIENT AIR (VILLAGE-KATTAYA)

Ref No.

: SEPL-01/O&G/EHS/WO-8 94/2022 DATE-09/08/2022

**DT Recd** 

: 10-03-2023

**REPORT NO.: CAV00062303** 

RESULTS OF ANALYSIS

Reference : EP Act Standard/NAAQS Schedule VII rule-3 (3B)

Description

Name of the industry

Location of the Sampling Point

**Date of Sampling** 

Sampling Started at

Sampling Completed at

**Actual Time of Sampling (Minutes)** 

Total Volume of Air sampled (m3)

Flow Rate of SPM( M3/MIN )

Ambient Temperature (degree C)

: One Ambient Air sample was collected by us on 09/03/2023 to 10/03/2023.

: SRAVANTHI ENERGY PVT LTD, UTTRAKHAND

: Village Kattaya

: 09/03/2023 to 10/03/2023

: 1:00 pm dt. 09/03/2023

: 1:00 pm dt. 10/03/2023

: 1440

: 1728 for PM 10 & 21.2 PM 2.5

: 1.2

: 29

**PARAMETERS** 

Particulate Matter (PM 10) Particulate Matter (as PM 2.5) Sulphur Dioxide (as SO2) Carbon Monoxide (as CO) (8 Hr.) Nitrogen Dioxide (as NO2)

Results (µg/m3) 78.4

52,4 24.2 0.102 mg/m3

44.8

60 80 2.0 mg/m3 80

Limits

(µg/m3) (Max.)

100

**Protocols** 

IS:5182 (P-23) Gravimetric IS:5182 (P-2) IS:5182 (P-10) IS:5182 (P-6)

Date of performance: 11/03/2023 to 16/03/2023

SAMPLE DRAWN BY US

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