

Sembcorp Energy India Limited

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SEIL P1/MoEF&CC/Chennai/2021/003
30th May 2022~~To~~

The Regional Director,
Regional Office (South Eastern Region),
Ministry of Environment, Forests & Climate Change,
1st & 2nd Floor, HEPC Building, No. 34, Cathedral Garden Road,
Nungambakkam,
Chennai – 600034.

Sub.: Submission of Half Yearly EC Compliance Report of SEIL Project-1 (formerly known as Thermal Powertech Corporation India Limited—TPCIL) for the period from October 2021 to March 2022

Ref.: EC Letter No: J 13012/02/2009— IA.II (T) dated 04-11-2009, amended dated 02.03.2015

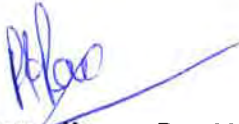
Dear Sir,

As per the provision of Environment Clearance and EIA Notification 2006, we are herewith submitting the half yearly compliance status report for the period of October 2021 to March 2022 along with supporting documents to the conditions specified with respect to Environmental Clearance issued to SEIL Project-1 (Formerly known as Thermal Powertech Corporation India Limited— TPCIL), Nellore.

Hope the above is in order.

Thanking you,

Yours faithfully,
For **Sembcorp Energy India Limited**,



Pavan Kumar Rao V
Head HSE- SEIL

Copy To:

1. The Director, IA.I, MoEF&CC, New Delhi
2. The Joint Director (S), Scientist 'D', MoEF&CC, IRO, Vijayawada
3. The Environmental Engineer, APPCB, Nellore



UNIVERSAL
ENVIRO ASSOCIATES
SINCE 1994

Recognised by NABL and
MoEF & CC, GOI, New Delhi.
Certified by ISO 9001 : 2015 and
ISO 45001 : 2018

Date: 30-05-2022

To,
The Regional Director,
Regional Office (South Eastern Region),
Ministry of Environment, Forests & Climate Change,
1st & 2nd Floor, HEPC Building, No. 34, Cathedral Garden Road,
Nungambakkam,
Chennai – 600034.

Sub: Third Party Certificate - Half yearly compliance report on conditions of EC-Reg.
Ref: EC Letter No: J 13012/02/2009— IA.II (T) dated 04-11-2009, amended dated 02.03.2015.

Respected Sir/Madam,

With reference to "Environmental Clearance" issued for **M/s. Sembcorp Energy India Limited - Project-1** (Formerly known as Thermal Powertech Corporation India Limited— TPCIL), Nellore, we are herewith certifying that **M/s. Sembcorp Energy India Limited-Project-1** has complied all the conditions imposed in EC and attached annexures for the period October 2021 to March 2022.

Thanking you,

Yours faithfully,
For **Universal Enviro Associates,**

T. Krishna
T Krishna
(Technical Manager)



Copy To:

1. The Director, IA.I, MoEF&CC, New Delhi
2. The Joint Director (S), Scientist 'D', MoEF&CC, IRO, Vijayawada
3. The Environmental Engineer, APPCB, Nellore

104 & 105, Libra Enclave, RTC X Roads, Musheerabad, Hyderabad - 500 020.

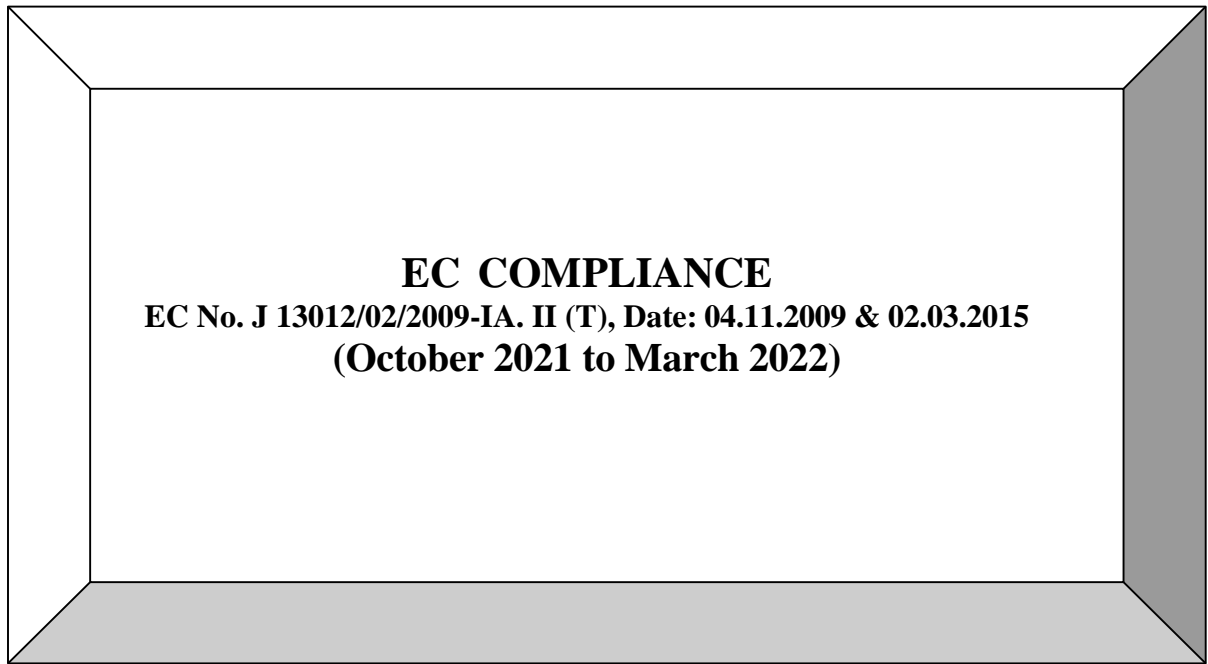
Ph: 040 - 2763 3361, e-mail: uea123@gmail.com, www.universalenviro.in

Lab & Works: # 178, Ramakrishna Nagar, Opp. IOCL, Chengicherla, Hyderabad - 500 039.

WTP, STP, ETP & ZLD (Supply, O&M) | POLLUTION TESTING & ANALYSIS | ENV. AUDIT | OTHER ENV. SERVICES

M/s. Sembcorp Energy India Limited Project-1
(Formerly Known as M/s. Thermal Powertech Corporation India Limited.,)
Painampuram & Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.), Andhra Pradesh.

EC No. J 13012/02/2009-IA. II (T), Date: 04.11.2009 & 02.03.2015



Prepared By:
Universal Enviro Associates, Hyderabad
Accredited by NABL (TC-6239)



Universal Enviro Associates

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01. Background:

Sembcorp Energy India Ltd (SEIL) Project-1 [formerly known as Thermal Powertech Corporation India Limited (TPCIL)] is a leading independent power company in India. SEIL is promoted by Sembcorp Utilities Pvt. Ltd., which is part of the Singapore based Sembcorp Group.

At SEIL currently, Stage-I power plant consisting of 2x660 MW is under operation since October 2015.

The location map and key map are shown in **Figure-1** & **Figure-2** respectively. The 10 km radius topographical map around the project is shown in **Figure-3**. The latitude & longitude of North South extremes of Site are 80°08'35.956''E & 14°19'5.211''N and 80°09'16.325''E & 14°21'0.874''N respectively.



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Fig. - 1 (LOCATION MAP)



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Fig. - 2 (KEY MAP OF PROJECT SITE)

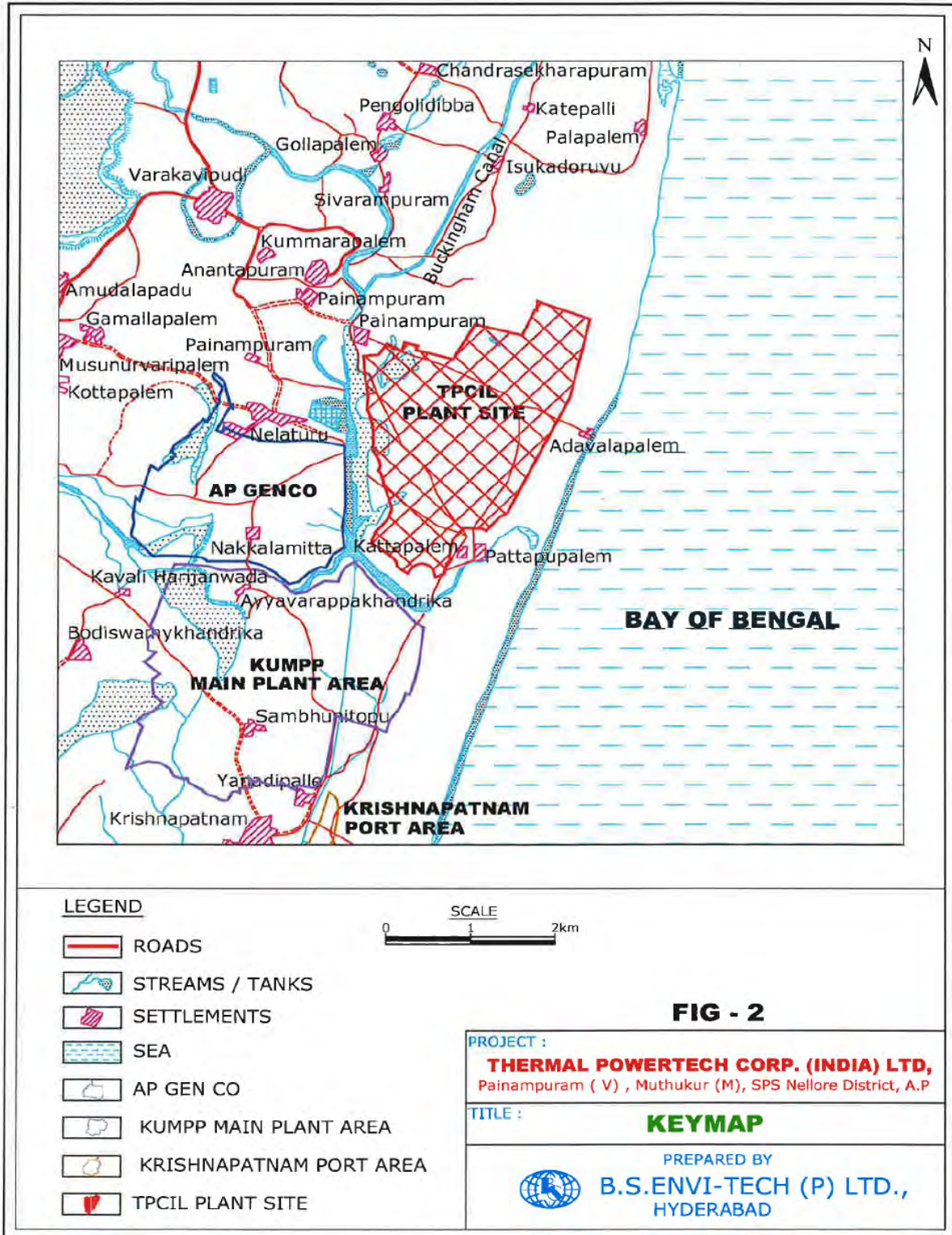
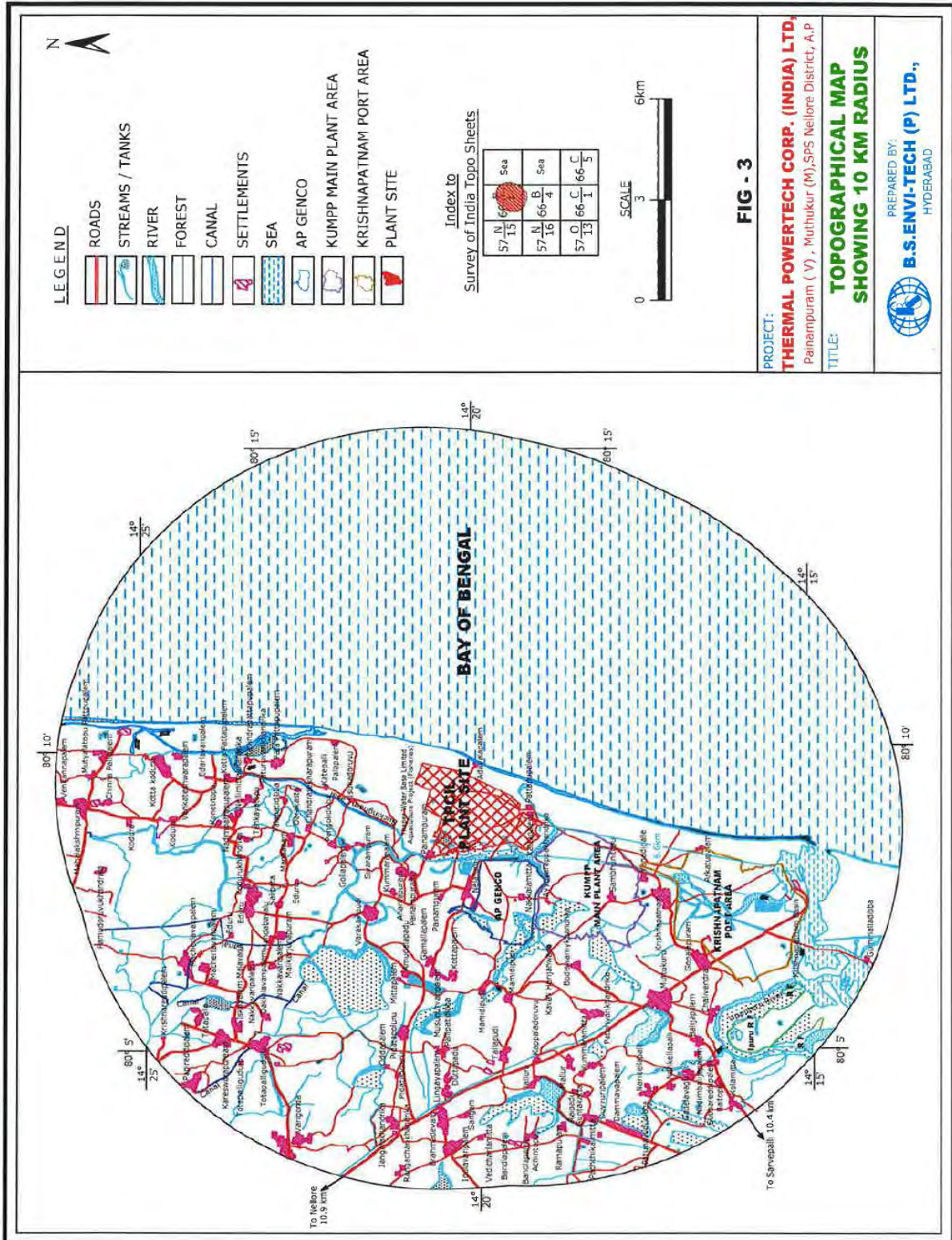


Fig - 3 (TOPOGRAPHICAL MAP OF 10 KM RADIUS AREA)



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02. Statutory Approvals/Clearances:

The following statutory approvals and clearances were received for the Project:

S. No.	Authorization	Accorded By	Validity
1	Environment Clearance	Ministry of Environment & Forests, Govt. of India	MoEF Letter dated 4/11/2009. The validity of EC is extended to 7 years by MoEF notification to start operations. Accordingly, SEIL commenced its operations by Sept 2015, well within due date.
2	CRZ Clearance	Ministry of Environment & Forests, GOI	F. No. 11-129/2010-IA.III. Dated: 5 th December, 2011
3	Combined Consent for Operation (CFO) for two units	AP Pollution Control Board, Hyderabad	Order No. APPCB/VJA/VJA/930/HO/CFO/2016 Dated: 16 th Nov 2021. Renewed and is valid till 30th Nov 2026.



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CONDITION WISE COMPLIANCE TO ACCORDED ENVIRONMENT CLEARANCE

S No.	Condition	Compliance Status
4. i	Status of implementation of 100% utilisation of Fly Ash generated shall be submitted to the Ministry within six months of operation of the plant.	Complying. SEIL (formerly known as Thermal Powertech Corporation India Limited-TPCIL) is achieving 100% fly ash utilization since September 2019. Attached letter submitted to CPCB on Annual Fly Ash utilization for FY2021-2022 vide letter no. SEIL P1/CPCB / Delhi/2021/002 dated 28 th April 2022 as Annexure-I
ii	Stacks of 275 m height (Bi-Flue for Stage -I and Single Flue for Stage II) shall be provided with continuous online monitoring equipment for SO _x , NO _x and PM. Exit Velocity of flue gases shall not be less than 25 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.	Complying. One Bi-Flue gas chimney of 275 m height (Stage-I) is provided along with continuous online emission monitoring equipment for measuring SO _x , NO _x and Particulate Matter.  Mercury is being monitored on quarterly basis. Exit velocity of flue gas is well within prescribed norms. Stack Emission Monitoring Reports performed by third Party consultant which is MoEF&CC approved are attached as Annexure-II .
iii	Possibility for installation of combined intake with neighbouring Power Plants shall be examined and in the event of non-feasibility adequate justification shall be submitted within a period of six months.	Installation of combined intake with neighbouring Power Plant was not found feasible.



S No.	Condition	Compliance
iv	<p>High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³.</p>	<p>Complying. Electrostatic Precipitators (ESPs) with more than 99.9% efficiency (72 fields each) are installed to control the Particulate Matter Emission less than 50 mg/Nm³.</p>  
v	<p>Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.</p>	<p>Complying. Bag filters are provided for coal crusher.</p> 

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S No.	Condition	Compliance
		<p>Dust Suppression systems has been provided at Transfer Points to further minimize fugitive dust.</p> <p>Additional water sprinklers have been provided to suppress fugitive emissions at coal yard.</p> <p>SEIL has also provided wind barriers with 3-5 layers of thick Conocarpus trees (wind resistant plants) all around coal yard, which are designed to arrest spreading of fugitive dust emissions.</p>



S No.	Condition	Compliance
vi	<p>Fly ash shall be collected in dry form and storage facility (silos) shall be provided (as applicable). 100% fly ash utilisation shall be ensured from 4th year onwards. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.</p>	<p>Fly ash is collected in dry form and stored in silos of 3x2000 cum capacity for disposal to various users. Unutilised fly ash is being disposed to the ash pond in lean slurry form.</p>  <p>SEIL Project-1 (formerly known as Thermal Powertech Corporation India Limited - TPCIL) is achieving 100% fly ash utilization since September 2019.</p> <p>Attached letter submitted to CPCB on Annual Fly Ash utilization for FY2021-2022 vide letter no. SEIL P1/CPCB/Delhi/2021/002 dated 28th April 2022 as Annexure-I</p> <p>SEIL has installed and commissioned fly ash classification unit of 5 Lakh Tonne per annum within the site.</p> <p>Bottom Ash heavy metals analysis reports, Piezo Wells ground water quality reports & Ash Pond Effluent Quality Monitoring reports are attached as Annexure- III, IV & V respectively.</p>

S No.	Condition	Compliance
vii	Ash Pond shall be lined with HDP/LDP lining. Adequate safety measures shall also be implemented to protect the ash dyke from breached.	<p>Complying.</p> <p>Ash pond is lined with impervious HDPE liner.</p>  <p>The dyke is designed and incorporated safety measures adequate.</p>

viii	<p>Closed cycle cooling system with natural draft cooling towers shall be provided. The Effluents shall be treated as per the prescribed norms.</p>	<p>Complying. Natural Draft Cooling Towers are installed at the site.</p>  <p>ETP consists of Flash Mixer, Lamella Clarifier, Sludge Pit, Oily Water Separation Unit, Oily water collection tank and Central Monitoring Basin & Dosing system is used to treat the effluent to meet the prescribed norms. Reports are attached as Annexure-VI.</p> 
S No.	Condition	Compliance
ix	<p>No ground water shall be extracted for the project work at any stage.</p>	<p>Complied. No ground water was extracted for the project work. Entire water requirement of the plant is being met from seawater.</p>

x	Hydrogeological study of the area shall be reviewed annually and results to be submitted to the Ministry and concerned agency in the State Government. In case adverse impact on ground water quality and quantity is observed, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.	<p>Complying.</p> <p>Ground water is not being used at SEIL.</p> <p>Hydrogeology studies are carried out for the site and surroundings.</p> <p>Hydrogeology Study is being reviewed annually and latest report submitted on 18th April 2022 and the same is attached as Annexure-VII.</p>
xi	Minimum required environmental flow suggested by the Competent Authority of the State Government shall be maintained in the Channel/rivers even in lean season.	<p>Not applicable.</p> <p>Not applicable as SEIL is not extracting any River/canal water. Entire water requirement for plant operations is being met through seawater.</p>
xii	The treated effluents conforming to the prescribed standards should be only discharged. Arrangement shall be made that effluents and storm water do not get mixed.	<p>Complying.</p> <p>ETP and STP are in operation for treating wastewater generated in the plant to meet the prescribed standards. Treated water is being used for Dust suppression and Green Belt.</p>  <p>Storm water system is adequately designed to avoid mixing with effluents and has a separate disposal system.</p> <p>ETP treated effluent and Marine outfall water analysis reports are attached as Annexure-VI & VIII respectively.</p>
S No.	Condition	Compliance
xiii	A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.	<p>Complying.</p> <p>Sewage Treatment Plant (STP) is provided and operational for treating the domestic sewage</p>


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		<p>generated.</p>  <p>The treated domestic wastewater is used for greenbelt development.</p> <p>STP Treated effluent analysis reports are attached as Annexure-IX.</p>
xiv	<p>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.</p>	<p>Complying.</p> <p>Approved Third party studies are carried out and rainwater harvesting pits are constructed and maintained along the storm water drains.</p> <p>The rainwater from storm water drains is collected in RWH ponds.</p>
xv	<p>Adequate safety measures shall be provided in the plant area to check /minimize spontaneous fires 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.</p>	<p>Complying.</p> <p>The coal yard is provided with fire hydrant system and water sprinklers arrangement to control spontaneous combustion of coal. Photos provided in the report. Plant layout map with coal yard location is attached as Annexure-X.</p>



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S No.	Condition	Compliance
xvi	Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made in the plant areas in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	Complying. SEIL has provided storage facilities for LDO and HFO. These facilities are certified by the Chief Controller of Explosives, Nagpur. Adequate firefighting systems are provided. Onsite Emergency Management Plan is in place to meet any eventuality and the same is annexed as Annexure-XI .
xvii	Regular monitoring of ground water in and around the ash pond area including heavy metals (Hg, Cr, As, Pb) shall be carried out, records maintained and six monthly reports shall be furnished 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.	Complying. Piezometer wells are provided around ash pond site. Regular monitoring of ground water in and around the ash pond area is being carried out. Piezo well Analysis Reports are attached as Annexure-IV .
xviii	Shelter Belt consisting of 3 tiers of plantation around the plant of 100 m width and adequate tree density shall be developed.	Complying. SEIL is developing scientifically designed greenbelt with adequate tree density. Native species have been chosen for plantation. An area of about 450 acres area is being brought under green cover in phased manner. Photos are provided in this report.
xix	First Aid and sanitation arrangement shall be made for the drivers and other contract workers during construction phase.	Complied. Necessary facilities have been provided during construction period. Currently, there are no constructional activities and the labour camp is not operational.




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S No.	Condition	Compliance
xx	<p>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 /ear muffs 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 including shifting to non-noisy/less noisy areas.</p>	<p>Complying.</p> <p>SEIL has ensured that the ambient noise level at the plant boundary shall comply with National ambient noise standards. Quarterly monitoring of noise level data is Complying the standards.</p> <p>Workers are provided with adequate personal protective equipment.</p> <p>Necessary medical examinations are conducted and records are being maintained.</p> <p>APPCB approved third party Noise Quality Monitoring Reports are attached as Annexure- XII.</p>
xxi	<p>Regular monitoring of ground level concentration of SO_x, NO_x, RSPM and Hg 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 location of the monitoring stations and the 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.</p>	<p>Complied.</p> <p>Continuous AAQM stations (with online analysers) are provided at 4 locations. The data is continuously uploaded to CPCB & APPCB websites on real time basis.</p> <p>In addition, manual ambient air quality monitoring is carried out by engaging third party laboratory (approved by state PCB). The locations and monitoring are in consultation with PCB.</p> <p>MoEF&CC approved third party Ambient Air Quality Monitoring Reports are attached as Annexure-XIII.</p> <div data-bbox="895 1682 1401 1883"></div>



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S No.	Condition	Compliance
xxii	A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months from the date of issue of this letter.	Not Applicable
xxiii	An amount of Rs.32.0 crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs.6.4 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 road map for implementation.	Complying. SEIL has cumulatively spent an amount of INR 70.98 crores on CSR related activities. The details of CSR activities being implemented during October 2021 to March 2022 by SEIL are attached as Annexure-XIV .



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xxiv	<p>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 generating projects consistent with the traditional skills of the people besides 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 generating programmes. This will be in addition to vocational training for individuals imparted to take up self-employment and jobs.</p>	<p>Complying. Company CSR Policy was prepared and executed based on Socio Economic study which was initially conducted.</p>
xxv	<p>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</p>	<p>Complied during construction phase.</p>



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S No.	Condition	Compliance
xxvi	The Project proponent shall advertise in at least two local newspapers 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 the Website of the Ministry of Environment and Forests at http://envfor.nic.in .	Complied. Advertisements have been given in Telugu newspaper on dated: 04 th July- 2009 and in English newspaper on dated: 03 rd July 2009.
xxvii	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad /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.	Complied. Clearance letter was sent to concerned Panchayat, Zilla Parishad/ Municipal Corporation, urban local body. Clearance letters are also uploaded in Sembcorp website at https://www.sembcorpenergyindia.com/AboutUs/Disclosure
xxviii	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.	Complied. SEIL has established an Environment Management Cell with suitable qualified personnel under the supervision of Head-HSE, who reports directly to the Station Head. Environment Management Cell is attached Annexure-XV .




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xxix	<p>The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely: SPM, RSPM, SO_x, NO_x (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.</p>	<p>Complied.</p> <p>Regular compliance reports are submitted to ministry. SEIL has uploaded the status reports including the monitored data in the Sembcorp website at https://www.sembcorpenergyindia.com/AboutUs/Disclosure</p> <p>The environmental monitored data including Ambient Air Quality for criteria pollutants and stack emission are displayed at the main gate.</p>  <p><u>Main Gate display of AAQ data</u></p>
xxx	<p>The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data to the respective Regional Office of MOEF, the respective Zonal office of CPCB and SPCB.</p>	<p>Complying.</p> <p>Six Monthly reports against EC compliance is being submitted to MOEF&CC, the respective Zonal office of CPCB and SPCB.</p>



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xxxii	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 EC conditions and shall also be sent to the respective Regional Offices of the Ministry.	Complying. Environment Statement (Form-V) for FY2020-21 has been submitted to APPCB (Ref. No.: SEIL P1/APPCB/BZA/2021/006 dated 28 th September 2021 and the same is attached as Annexure-XVI .
xxxiii	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental 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 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. SEIL is submitting the six monthly reports on status of compliance and the monitored data to the concerned regulatory authorities. The reports are being uploaded on APPCB & Sembcorp website. https://www.sembcorpenergyindia.com/AboutUs/Disclosure https://pcb.ap.gov.in/UI/Submission Compliance of EC CFE CFO Direction.aspx




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S No.	Condition	Compliance
xxxiii	<p>Regional Office of the Ministry of Environment and Forests will monitor the implementation of the stipulated conditions. A complete set of 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 upload the compliance status in their website and update the same from time to time at least six monthly basis. Criteria pollutants levels including NO_x (from Stack and ambient air) shall be displayed at the main gate of the power plant.</p>	<p>Noted. Being complied.</p> <p>The compliance reports are also uploaded in Sembcorp website.</p> <p>https://www.sembcorpenergyindia.com/AboutUs/Disclosure</p> <p>The environmental monitored data including Ambient Air Quality for criteria pollutants and stack emission data is being displayed at the main gate.</p>  <p><u>.Main Gate display of AAQ data</u></p>
xxxiv	<p>Separate funds shall be allocated for implementation of environmental protection measures along with item wise 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 year wise expenditure should be reported to the Ministry.</p>	<p>Expenditure related to Environment protection measures for the reporting period is attached as Annexure-XX.</p>
xxxv	<p>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 commission of Plant.</p>	<p>Complied and communicated.</p>



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S No.	Condition	Compliance
xxxvi	Full cooperation shall be extended to the Scientists/Officers from the Ministry /Regional Office of the Ministry at Bangalore/CPCB/SPCB who should be monitoring the compliance of environmental status.	Noted for compliance.
xxxvii	Harnessing Solar Power within the premises of the plant particularly at available roof tops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half yearly monitoring reports.	Complying. Solar panels have been installed at canteen roof.
xxxviii	Long term study of radioactivity and heavy metals contents on coal to be used shall be carried out through a reputed institute and results thereof analysed every two year and reported along with monitoring reports. 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.	Complying. Quarterly monitoring reports of heavy metal analysis of Coal and Radioactive Analysis reports of Coal & Ash are attached as Annexure-XVII & Annexure-XVIII.




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S No.	Condition	Compliance
xxxix	Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land.	Complying. Stock Pile Dust Suppression system around coal yards, Dry Fog dust suppression System along conveyor belts, Cyclone separators & bag filters at crusher house, Vacuum truck for road dust cleaning are implemented to avoid fugitive dust emissions and prevent the impact on agricultural or non-agricultural land. 
xl	Space for FGD shall be provided for future installation as may be required.	Complying. Adequate space provision is available.
xli	No ground water shall be extracted for use in operation of the power plant even in lean season. No water bodies including natural drainage system in the area shall be distributed due to activities associated with the setting up / operation of the power plant.	Complying.



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S No.	Condition	Compliance
xlii	Fly ash is not to be used for agricultural purpose. No mine void filling will be undertaken as an option for 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 of mine void filling is to be adopted, prior detailed study of soil characteristics of the 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.	Complying.
xliii	Green belt shall also be developed around the ash pond over and above the green belt around the plant boundary.	Complying.
xliv	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.	Complied. Separate fund centre has been earmarked for Green belt development and maintenance.



S No.	Condition	Compliance
xlv	<p>For proper and periodic monitoring of CSR activities, a CSR committee or a social audit committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final.</p>	<p>Complied.</p> <p>CSR Committee has been formed and is working. CSR committee stake holders meetings conducted.</p>   

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S No.	Condition	Compliance
xlvi	An Environment Cell comprising of at least one expert in environment science / engineering, ecology, occupational health and social science, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement / mitigation measures.	Complying. SEIL has established an Environment Management Cell with suitable qualified personnel under the supervision of Head-HSE, who reports directly to the Station Head. Services of Marine biologist & ecologist will be hired based on the requirement.
xlvii	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.	Complied. Environmental Policy has been incorporated in the QHSE Policy. QHSE Policy is attached as Annexure-XIX.
5	The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.	Noted.
6	The environmental clearance accorded shall be valid for a period of 5 years to start operations by the Power Plant.	Noted. The validity of EC is extended to 7 years by MoEF&CC. The 2x660 MW project has already commenced operations since 2015.



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S No.	Condition	Compliance
7	Concealing factual data or submission of false /fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act 1986.	Noted.
8	In case of any deviation or alteration in the project proposed including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed to add additional environmental protection measures required, if any	Noted for compliance.
9	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.	Noted.
10	Any appeal against this environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of National Environmental Appellate Act, 1997.	Noted.



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GREEN BELT/ GREEN COVER DEVELOPMENT IN SITE



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GREEN COVER AROUND PERIPHERY



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GREEN COVER ALONG THE PLANT ROADS



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GREEN COVER ALONG PIPE RACK & INTERNAL ROADS



GREEN COVER INSIDE THE PLANT



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GREEN COVER ALONG MAIN PLANT ROAD



AVENUE PLANTATION



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GREEN COVER NEAR PLANT SERVICE BUILDING



GREEN COVER NEAR SERVICE BUILDING



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GREEN COVER IN NORTH EAST AREA



COAL YARD WATER SPRINKLING



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CONTINUOUS AMBIENT AIR QUALITY MONITORING STATION INSIDE THE PLANT

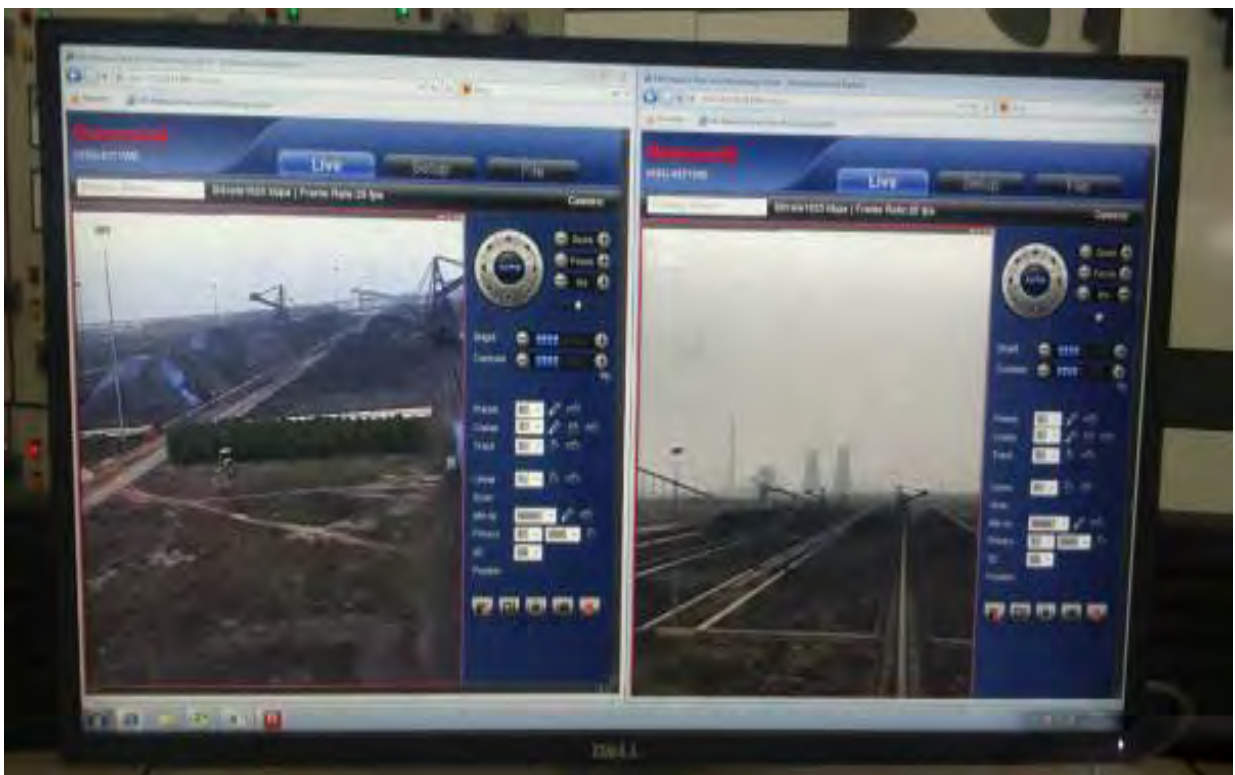


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WIND BREAK PLANTATION AROUND COAL YARD



CONTINUOUS MONITORING OF DUST SUPPRESSION SYSTEM AT COAL YARD USING PTZ CAMERAS



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DUST EXTRACTION SYSTEM AT TRANSFER POINTS



MAIN GATE DISPLAY BOARD - AMBIENT AIR QUALITY & EMISSIONS DATA DISPLAY

