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SEIL/APPCB/BZA/2020/024
28th December 2020

Sembcorp Energy India Limited
(Formerly Thermal Powertech Corporation India Ltd)
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To
The Member Secretary,
Andhra Pradesh Pollution Control Board,
D. No. 33-26-14 D/2, Near Sunrise Hospital,
Pushpa Hotel Centre, Chelamavari Street,
Kasturibaipet,
Vijayawada- 520010.

Dear Sir,


Sub: Submission of Half Yearly CFO Compliance Report of SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited- SGPL) for the period April 2020 to September 2020

Ref: Consent Order to SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited- SGPL) Ref: APPCB/HO/UH-IV/CFO: VJA/Auto Renewal-1/2017 - dated 29.01.2017.

This has reference to the above subject and cited reference. We are here with submitting the half yearly compliance report for the period of April 2020 to September 2020 against the conditions stipulated under CFO issued to SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited- SGPL), Nellore.

Thanking you,

Yours faithfully,
For **M/s. Sembcorp Energy India Limited,**


Pavan Kumar Rao V
Head HSE - SEIL

Copy To: The Regional Officer, APPCB, Nellore



Compliance Against CFO Conditions (APPCB)

Consent Order to SGPL Ref: APPCB/HO/UH-IV/CFO: VJA/Auto Renewal-1/2017– dated 29.01.2017.

Consent Amendment Order No: APPCB/VJA/NLR/182/HO/CFO/20 dated 17/06/2019.

[Name change from SGPL to SEIL Project 2]

Consent Amendment Order No: APPCB/VJA/NLR/182/HO/CFO/2016 dated 13/07/2020. [Hazardous Waste Authorization amendment]

i) Outlet for Discharge of Effluents:

Outlet No.	Outlet Description	Max. Daily discharge (M3/day)	Point of Disposal	Status of Compliance
1.	Cooling Tower Blow down	2,10,560	To Sea through marine out fall after treatment and compliance of marine discharge standards	Complying with. Effluent discharge is within the specified limits. SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited–SGPL) has installed flow meters points for measuring the water consumption & discharges. SEIL P2 submitted letters to APPCB on Water Quantities discharged to Marine Outfall is attached as Annexure– I.
2.	Clarifier Blow Down	15,712		
3.	Filter Back Wash	2328		
4.	First Pass RO Reject	14120		
5.	DM Plant Regeneration	32	Green Belt Development / Recycling after treatment and compliance of on land for irrigation standards	
6.	Boiler Blow Down	100		
7.	Domestic (Plant)	17		

ii) Emissions from Chimneys:

Chimney No.	Description of Chimney	Status of compliance
1.	2 No's of Super Critical Boilers of each Capacity 660 MW connected to two individual stacks	Complied


iii) Hazardous Waste with recycling option:

S. No.	Name of the Hazardous Waste	Stream	Quantity of Hazardous Waste	Disposal Option	Status of compliance
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1.	Used oil from power generating equipment	5.1 of Schedule – I	30 KL / Annum	Authorized Re-Processors / Recyclers	Complying with. SEIL P2 has registered in APEMC portal as a waste generator. Submitted Hazardous Waste Annual returns is attached as Annexure- II.
2.	Waste Oil from DG Sets	5.1 of Schedule – I	1 KL/ Annum		NIL
3.	Lead Acid Batteries	--	10 No's	Return to Manufacturers / dealers on buy back basis.	Submitted Half yearly battery returns attached as Annexure- III.

Schedule A:


S. No	Specific Conditions	Status of Compliance of Conditions
1.	Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and / or violation of standards stipulated in this order shall be informed to this board, under intimation to the collector and district magistrate and take immediate action to bring down the discharge / emission below the limits.	Complying with. <ul style="list-style-type: none">✓ Emissions are within the limits and meeting the standards.✓ Effluent discharge is within the limits and meeting the standards. Stack Emission Monitoring reports, ETP & Marine Outfall monitoring reports are attached as Annexure- IV.
2.	The industry should carry out analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the board.	Complying with. <ul style="list-style-type: none">✓ Waste water discharges & emissions from chimneys monitored on quarterly basis.✓ Reports are submitted to APPCB. Stack Emission Monitoring reports, ETP & Marine Outfall monitoring reports are attached as Annexure- IV. STP Treated Effluent Analysis reports attached as Annexure- V
3.	All the rules & regulations notified by Ministry of Law and Justice, Govt. of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.	Complying with. PLI Copy is attached as Annexure- VI. (Policy Number: 03040050290000 Policy Effective from 18/04/2020 to 17/04/2021)




4.	<p>The industry should put up two sign boards (6x4 ft each) at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.</p>	<p>Complying with.</p> 
5.	<p>Notwithstanding anything contained in this consent order, the Board hereby reserves the right and powers to review/ revoke any and / or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.</p>	<p>Noted.</p>
6.	<p>The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by Board.</p>	<p>As per the Ministry of Finance, Govt. of India with effect from 1st July'2017 the water cess has been abolished. However, we are submitting the water cess returns data once in six months to APPCB.</p>
7.	<p>The applicant shall submit Environment statement in Form V before 30th October every year as per Rule No. 14 of E(P) Rules, 1986 & amendments thereof.</p>	<p>Complied.</p> <p>Environment Statement for FY2019-20 in Form- V submitted to APPCB vide letter ref. No: SEIL P2/APPCB/NLR/2020/016 dt.13.05.2020 attached as Annexure- VII</p>

8.	<p>The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / lend/ sell/ transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.</p>	<p>Complied.</p> <p><u>Auto Renewal of Consent Order to SGPL Ref: APPCB/HO/UH-IV/CFO: VJA/Auto Renewal-1/2017– dated 29.01.2017 and valid up to 28.02.2022). [Amalgamation]</u></p> <p><u>Consent Amendment Order No: APPCB/VJA/NLR/182/HO/CFO/2019 dated. 17/06/2019. [Name change from SGPL to SEIL Project 2].</u></p> <p><u>Consent Amendment Order No: APPCB/VJA/NLR/182/HO/CFO/2016 dated. 13/07/2020. [Hazardous Waste Authorization amendment].</u></p>
9.	<p>Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of water Act , 1974 or Section 21 of Air Act 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Rules, 1976 and Air Rules 1982, to Appellate authority constituted under section 28 of the Water (Prevention and Control of Pollution) Act , 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act , 1981.</p>	<p>Noted.</p>



Schedule B:

S. No	Specific Conditions	Status of Compliance of Conditions																																					
1	<p>The industry shall comply with the following effluent standards based on disposal points permitted:</p> <table border="1" data-bbox="229 349 831 741"> <thead> <tr> <th>Outlet No.</th> <th>Parameter</th> <th>Limiting standards</th> </tr> </thead> <tbody> <tr> <td rowspan="10">1 to 4</td> <td>pH</td> <td>5.5 to 8</td> </tr> <tr> <td>Suspended solids</td> <td>100.0</td> </tr> <tr> <td>Oil & Grease</td> <td>20.0 mg/l</td> </tr> <tr> <td>Temperature</td> <td>shall not exceeded 5°C above the receiving water temperature</td> </tr> <tr> <td>Biochemical oxygen demand (3 days at 20°C)</td> <td>100 mg/l</td> </tr> <tr> <td>Chemical Oxygen Demand (COD)</td> <td>250 mg/l</td> </tr> <tr> <td>Arsenic</td> <td>0.2 mg/l</td> </tr> <tr> <td>Mercury</td> <td>0.01 mg/l</td> </tr> <tr> <td>Lead</td> <td>2.0 mg/l</td> </tr> <tr> <td>Cadmium</td> <td>2.0 mg/l</td> </tr> <tr> <td>Hexavalent Chromium</td> <td>1.0 mg/l</td> </tr> <tr> <td>Bio assay test</td> <td>90% survival fish after 96 hours in 100% effluents</td> </tr> <tr> <td rowspan="4">5 to 7</td> <td>pH</td> <td>5.5 - 9.0</td> </tr> <tr> <td>Suspended solids</td> <td>200.0 mg/l</td> </tr> <tr> <td>Oil & Grease</td> <td>10.0 mg/l</td> </tr> <tr> <td>Biochemical oxygen demand (3 days at 20°C)</td> <td>100.0 mg/l</td> </tr> </tbody> </table>	Outlet No.	Parameter	Limiting standards	1 to 4	pH	5.5 to 8	Suspended solids	100.0	Oil & Grease	20.0 mg/l	Temperature	shall not exceeded 5°C above the receiving water temperature	Biochemical oxygen demand (3 days at 20°C)	100 mg/l	Chemical Oxygen Demand (COD)	250 mg/l	Arsenic	0.2 mg/l	Mercury	0.01 mg/l	Lead	2.0 mg/l	Cadmium	2.0 mg/l	Hexavalent Chromium	1.0 mg/l	Bio assay test	90% survival fish after 96 hours in 100% effluents	5 to 7	pH	5.5 - 9.0	Suspended solids	200.0 mg/l	Oil & Grease	10.0 mg/l	Biochemical oxygen demand (3 days at 20°C)	100.0 mg/l	<p>Complying with.</p> <p>ETP & STP are in operation. ETP Outlet & Marine Outfall treated effluents analysis reports attached as Annexure- IV & Annexure- V</p>
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2	<p>The source of water is sea water. The following is the permitted water consumption: Total permitted water consumption is 3,13,440 m³/day</p> <table border="1" data-bbox="229 981 842 1249"> <thead> <tr> <th>Sl.No</th> <th>Purpose</th> <th>Quantity in (M³/day)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>For cooling tower make up (saline water)</td> <td>273728.0</td> </tr> <tr> <td rowspan="8">2.</td> <td>Non-cooling water - RO first pass</td> <td></td> </tr> <tr> <td>Clarifier</td> <td>15712.0</td> </tr> <tr> <td>Filtration</td> <td>2328.0</td> </tr> <tr> <td>Desal reject</td> <td>14120.0</td> </tr> <tr> <td>Misc Services</td> <td>6360.0</td> </tr> <tr> <td>Domestic - Plant</td> <td>22.0</td> </tr> <tr> <td>RO Second pass</td> <td>190.0</td> </tr> <tr> <td>DM Plant</td> <td>32.0</td> </tr> <tr> <td>Water Feed</td> <td>1908.0</td> </tr> <tr> <td></td> <td>Total</td> <td>313440.0</td> </tr> </tbody> </table>	Sl.No	Purpose	Quantity in (M ³ /day)	1.	For cooling tower make up (saline water)	273728.0	2.	Non-cooling water - RO first pass		Clarifier	15712.0	Filtration	2328.0	Desal reject	14120.0	Misc Services	6360.0	Domestic - Plant	22.0	RO Second pass	190.0	DM Plant	32.0	Water Feed	1908.0		Total	313440.0	<p>SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited– SGPL), requested to consider the recent MoEF&CC Notification dated 16th October, 2017 under Serial No. 5B, as per which the said water consumption limit is not applicable for sea water based Thermal Power Plants. However, Sea Water Consumption is well below the prescribed limit.</p>									
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3	<p>The emissions shall not contain constituents in excess of the prescribed limits mentioned below</p> <table border="1" data-bbox="229 1424 852 1554"> <thead> <tr> <th>Chimney No.</th> <th>Parameter</th> <th>Emission standards in mg/Nm³</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Particulate Matter</td> <td>50</td> </tr> </tbody> </table>	Chimney No.	Parameter	Emission standards in mg/Nm ³	1	Particulate Matter	50	<p>Complied.</p> <p>Particulate Matter is within the specified limit from both stacks. CEMS has been installed for both the stacks and connected to APPCB /CPCB Web-link. Stack Emission Monitoring reports performed by third party consultant are attached as Annexure- IV.</p>																															
Chimney No.	Parameter	Emission standards in mg/Nm ³																																					
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<p>4</p>	<p>The industry shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10µm)- 100 µg/m³; PM2.5 (Particulate Matter size less than 2.5- 60 µg/ m³; SO₂- 80 µg/m³; NO_x- 80 µg/m³, outside the factory premises at the periphery of the industry. Standards for other parameters as mentioned in the National Ambient Air Quality Standards.</p> <p>CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.</p> <p>Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A) & Night time (10 PM to 6 AM) - 70 dB (A)</p>	<p>Complying with.</p> <p>PM10, PM2.5, NO_x, SO₂ concentrations and Noise levels (day time & Night time) are within the specified limits at the periphery of the plant. CAAQMS stations installed and connected with APPCB / CPCB web-link. Ambient Air Quality Monitoring reports conducted by thirds party consultant are attached as Annexure- VIII.</p>
<p>5</p>	<p>The industry shall complete the installation of Coal crusher and its pollution control equipment by 15.03.2016 as committed by the industry vide its letter dt.20.02.2016.</p>	<p>Complying with.</p> <p>Bag filters along with Cyclone (DE System), Dust suppression and Dry fog Dust suppression systems are installed in coal crusher unit.</p> 

6	Water sprinkling system at coal yard shall be commissioned by 1st week of March, 2016.	<p>Complying with.</p> <p>Coal yard water sprinkler system is fully operational. The sprinkler system is designed to cover complete yard. Coal Yard sprinklers operation video submitted in Compact Disk to APPCB.</p> <p>As a backup additional measure, water hydrant lines & water monitors are also provided at sprinkler system, whenever required.</p> 
7	The industry shall complete the closed pipe conveyor for coal transportation by March, 2016.	<p>Complied.</p> 
8	The industry shall complete dust suppression and dust extraction system at various dust emission sources by 15.03.2016 as committed by the industry vide its letter dated.20.02.2016.	<p>Complied.</p> 

9	The industry shall complete the construction and commissioning of Effluent Treatment Plant (ETP) by 28.04.2016.	<p>Complying with.</p> <p>SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited– SGPL) ETP is fully operational and treated water is used for the greenbelt and coal dust suppression. ETP treated water analysis reports are attached in Annexure– IV.</p> 
10	The industry shall complete the construction and commissioning of Sewage Treatment Plant (STP) by April, 2016.	<p>Complied.</p> <p>SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited– SGPL) STP is fully operational and STP treated water is used for greenbelt development. STP treated water analysis reports are attached in Annexure– V.</p> 
11	The proponent shall achieve and maintain the compliance of the standards for discharge or emission of pollutants and other enactments as applicable and notified for the Thermal Power Plants under the Environmental (Protection) Rules, 1986 and amendments thereof.	<p>Complying with.</p> <p>SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited – SGPL) is continuously complying with emissions & discharge standards as per CFO. Stack Emissions, ETP and Marine Outfall monitoring reports are attached in Annexure- IV.</p> <p>As per Revised Emissions Norms for Stack Emissions Dated. 11.12.2017 CPCB Directions, SEIL has to comply with the new emissions norms for SOx till Dec 2021.</p>

12	The industry shall not discharge effluents into canal systems, back water, marshy areas and the sea without treatment. The discharge into sea shall be done only after treatment and meeting the discharge standards into marine coastal area.	<p>Complying with.</p> <p>Marine Outfall monitoring reports attached as Annexure- IV.</p>
13	The industry shall construct and complete the ash pond and HDPE lining to the ash pond phase-I by April 2016 to control ground water contamination.	<p>Complied.</p> 
14	The industry shall complete the ash slurry conveying system (HCSD- High Concentrated Slurry System) by March 2016.	<p>Complied.</p> 
15	The industry shall submit compliance report on the conditions mentioned in the consent order every 6 months to the Regional Office/Zonal Office.	<p>Complying with.</p> <p>SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited – SGPL) has submitted the six-monthly CFO compliance report to APPCB vide letter no. SEIL/APPCB/BZA/2020/020 dated 30.06.2020.</p>

16	<p>The industry shall install following online continuous monitoring systems for stack emissions and effluent and connect monitoring system to APPCB/CPCB websites as per CPCB directions of CPCB for 17 category industries. The online monitoring system shall be calibrated periodically as per equipment suppliers manual / CPCB guidelines.</p> <p>i. The industry shall provide online monitoring systems for boiler stack for monitoring the parameters PM, NO_x, SO₂.</p> <p>ii. For marine outfall of treated effluents (outlet No.1 to 4) the industry shall install real time monitoring system at the outlet of polishing pond for measurement of pH, TSS, Temperature.</p> <p>iii. For onland application of treated effluents (outlet No.5 to 7), the industry shall install real time monitoring system at the outlet of ETP for measurement of pH, TSS, Temperature.</p>	<p>Complying with.</p> <p>CEMS has been installed for both the stacks and connected to APPCB / CPCB web-link.</p> <p>pH, Temperature and TSS instruments installed at marine outfall for online monitoring and connected to APPCB / CPCB web-link.</p> <p>pH, Temperature and TSS instruments installed at ETP for online monitoring and connected to APPCB / CPCB web-link.</p>
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The industry shall provide Electro Magnetic flow meters at the intake point of sea water (i.e. at sea coast) with totalizer facility for assessing the quantity water used for different categories stipulated in this order.

Complying with.

SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited– SGPL) has installed flow meters with totalizer at Sea Water Intake, ETP outlet, Marine Outfall outlet, High Rate Solid Contact Clarifier (HRSCC) outlet, Cooling tower Make-up, CT Blow-down.

As per the directions received, we have installed additional 3 No's of flow meters at ETP inlet, Coal Handling system SPDS (Stock pile dust suppression system) and DFDS (Dry fog Dust suppression system).






PT & CT Flow meter




Flow meter at SPDS



Flow Meter at DFDS

18	<p>The industry shall provide Electro Magnetic flow meters with totalizers for measuring the hydraulic load of treated effluents recycled/used and discharged into sea after treatment through marine outfall.</p>	<p>Complying with.</p>  
19	<p>The industry shall concrete or asphalt the internal roads and work area.</p>	<p>Complying with.</p> 
20	<p>The proponent ensures that the ratio of domestic and imported coal shall be 70:30 as per the order dt.18.05.2011 issued by MOE& F, GOI.</p>	<p>SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited– SGPL) is yet to sign Domestic Power Purchase Agreement [PPA]. The realization of domestic coal will be possible once domestic PPA is signed.</p>

21	<p>The industry shall achieve 100% disposal of fly ash and bottom ash as per Fly Ash Notification issued by MOE& F, GOI vide S.O.2804(E) dated 03.11.2009.</p>	<p>Complying with.</p> <p>SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited– SGPL) is achieving 100% fly ash utilization since Nov 2019.</p> <p>Attached letter submitted to CPCB on Annual Ash utilization for FY2019-2020 vide letter no. SEIL P2/APPCCB/Nellore/2020/016 dated 20th April 2020 as Annexure– IX.</p>
22	<p>Unutilised fly ash shall be disposed off in the ash pond in the form of slurry. After settlement of slurry, the overflow shall be collected in settling tank from where the treated wastewater shall be pumped back to the plant for reuse. Mercury and other heavy metals (Hg,Cr,Pb As etc.) shall be monitored in the bottom ash and also in the effluents emanating from ash pond. No ash shall be disposed of low lying areas.</p>	<p>Complying with.</p> <p>SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited– SGPL) is achieving 100% fly ash utilization since Nov 2019.</p> <p>Attached letter submitted to CPCB on Annual Ash utilization for FY2019-2020 vide letter no. SEIL P2/APPCCB/Nellore/2020/016 dated 20th April 2020 as Annexure– IX.</p> <p>Wet Bottom ash is transported to ash pond in the form of slurry (80% Fly Ash & 20% Bottom Ash with 30% to 40% water) through closed pipes with the help of HCSD (High concentration slurry disposal) pumps. Ash water overflow is treated in High Rate Suspended Solid Clarifier and ETP for using in green belt development & dust suppression.</p> <p>Heavy Metals monitoring in Bottom Ash is carried out regularly (Reports are attached as Annexure- X.</p>
23	<p>Regular monitoring of ground water for the heavy metals (Hg,Cr,Pb As etc.) in and around the ash pond area shall be carried out. Records shall be maintained and half yearly reports shall be furnished to the Regional office.</p>	<p>Complying with.</p> <p>Piezo wells are in operational and water samples analysis carried out regularly. Analysis reports attached as Annexure- XI.</p> 

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The industry shall dispose solid waste (NON-HAZARDOUS) as follows:

S1.No.	Name of the Solid	Quantity	Disposal
1	Fly Ash	1.50 Million Tons/Annum	Shall be disposed to cement brick units, excess to ash pond.
2	Bottom Ash	0.40 Million Tons/Annum	To ash pond.

Complying with.

SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited– SGPL) is achieving 100% fly ash utilization since Nov 2019.

Attached letter submitted to CPCB on Annual Ash utilization for FY2019-2020 vide letter no. SEIL P2/APPCCB/Nellore/2020/016 dated 20th April 2020 as **Annexure– IX**.

Wet Bottom ash is transported to ash pond in the form of slurry (80% Fly Ash & 20% Bottom Ash with 30% to 40 % water) through closed pipes with the help of HCSD (High concentration slurry disposal) pumps.

For the year FY2019-20 (April 2019 to March 2020):

Fly Ash Generated: 0.455 Million Tons
Bottom Ash Generated: 0.1 Million Tons


SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited– SGPL) is disposing the fly ash to cement industries, brick units, exporting fly ash etc.

<p>25</p>	<p>The industry shall develop the thick green belt in an area of 315 acres all along the periphery of the industry and ash pond area and vacant places in the industry.</p>	<p>Complying with.</p> <p>An area of 315 acres green belt / green cover development completed adopting scientific methods like establishment of mist chamber, drip & sprinkler system, vermicompost production & application of bio pesticides. Peripheral plantation along inside of the compound wall has been taken up with 3 tiers of plantations and completed for 2 km length.</p> 
<p>26</p>	<p>The industry shall comply with all the conditions stipulated in the CFE order dt.23.03.2011 & CFE amendment order dt. 16.06.2011 issued by the Board.</p>	<p>Complying with.</p>

27	The industry shall comply with all the conditions stipulated in the Environmental Clearance order dt. 30.09.2010 issued by MOE&F, GOI.	Complying with. EC Six monthly reports submitted to APPCB & MoEF&CC vide Ref: SEIL Project 2/MoEF&CC/Chennai/EC/2020/020 dated. 30th June 2020.
28	The conditions are without prejudice to the right and contentions of this Board in any Hon'ble court of law and also without prejudice to the further orders / directions of the Hon'ble High court in W.P. No.14305 of 2011 & W.P. No.20114 of 2011.	Noted.

Schedule – C:

1	All the rules and regulations notified by Ministry of Environment and Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous wastes should be followed.	Complying with. SEIL P2 has been registered in APEMC portal as a waste generator to dispose the waste along with required compliance.
2	The industry shall not store hazardous waste for more than 90 days as per the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and amendments thereof.	Complying with. Disposing through APEMC Authorized Waste Receivers.

<p>3</p>	<p>The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.</p>	<p>Complying with.</p> <p>SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited–SGPL) is storing the Used / Waste Oil and Used Lead Acid Batteries under a secured hazardous storage shed and disposing through APEMC Authorized Receivers. Hazardous Waste Annual Returns and Manifest Copies attached as Annexure- II</p> 
<p>4</p>	<p>The industry shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concern Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.</p>	<p>Complying with.</p> <p>Hazardous waste disposal being done through APPCB Authorized waste Receivers by following Manifest system as per HWM rules, 2016.</p>
<p>5</p>	<p>The industry shall maintain proper records for Hazardous Wastes stated in Authorisation in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 22(2) of the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules, 2008 and amendments thereof.</p>	<p>Complying with.</p> <p>SEIL P2 is maintaining Hazardous waste records in Form-3. SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited–SGPL) has submitted the Hazardous Waste Annual returns in Form– 4 to APPCB vide SEIL P2/APPCB/Nellore/2020/012 dated 02.04.2020 as Annexure– II.</p>

Auto Renewal CFO Conditions Compliance:

S. No.	Specific Conditions	Status of Compliance of Conditions						
1.	The industry shall install and maintain online monitoring systems and connect monitoring system to APPCB/CPCB websites as per CPCB directions dated 05.02.2014 & 02.03.2015 and guidelines issued regarding online monitoring systems from time to time.	Complying with. CEMS is installed for both the stacks and connected to APPCB / CPCB web-link. Stack Emission Monitoring reports performed by third party consultant are attached as Annexure- IV.						
2.	The industry shall submit a copy of policy of Public Liability Insurance (PLI) duly indicating the amount contributed towards Environmental Relief Fund (ERF) to the RO once in six months.	Complying with. PLI Copy is attached as Annexure-VI. (Policy Number: 03040050290000 Policy Effective from 18/04/2020 to 17/04/2021)						
3.	The industry shall comply with standards and directions issued by CPCB / MoEF & CC as and when notifications are issued.	Noted.						
4.	The industry shall submit compliance report on the conditions mentioned in the consent order every six months i.e., on 1st of January & July of every year to the Regional Office/ Zonal Office.	Complying with. SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited–SGPL) has submitted the six monthly CFO compliance report to APPCB vide SEIL/APPCB/BZA/2020/020 dated 30.06.2020.						
5.	<p>The Industry shall also comply with water consumption limits and time lines notified by the MoEF & CC, GOI in the G.S.R. 3305 (E), dated 07.12.2015 as applicable.</p> <table border="1"> <thead> <tr> <th>Industry</th> <th>Parameter</th> <th>Standards</th> </tr> </thead> <tbody> <tr> <td>Thermal Power Plant (Water consumption limit)</td> <td>Water consumption</td> <td> <p>I. All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption upto maximum of 3.5 m³/MWh within a period of two years from the date of publication of this notification.</p> <p>II. All existing CT-based plants reduce specific water consumption upto maximum of 3.5 m³/MWh within a period of two years from the date of publication of this notification.</p> <p>III. New plants to be installed after 1st January, 2017 shall have to meet specific water consumption upto maximum of 2.5 m³/MWh and achieve zero waste water discharged.</p> </td> </tr> </tbody> </table>	Industry	Parameter	Standards	Thermal Power Plant (Water consumption limit)	Water consumption	<p>I. All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption upto maximum of 3.5 m³/MWh within a period of two years from the date of publication of this notification.</p> <p>II. All existing CT-based plants reduce specific water consumption upto maximum of 3.5 m³/MWh within a period of two years from the date of publication of this notification.</p> <p>III. New plants to be installed after 1st January, 2017 shall have to meet specific water consumption upto maximum of 2.5 m³/MWh and achieve zero waste water discharged.</p>	<p>SEIL P2, requested to consider the recent MoEF&CC Notification dated 16th October, 2017 under Serial No. 5B, as per which the said water consumption limit is not applicable for sea water based Thermal Power Plants.</p> <p>Since Sea Water is used for its operations, hence the above relaxation applies to SEIL P2.</p>
Industry	Parameter	Standards						
Thermal Power Plant (Water consumption limit)	Water consumption	<p>I. All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption upto maximum of 3.5 m³/MWh within a period of two years from the date of publication of this notification.</p> <p>II. All existing CT-based plants reduce specific water consumption upto maximum of 3.5 m³/MWh within a period of two years from the date of publication of this notification.</p> <p>III. New plants to be installed after 1st January, 2017 shall have to meet specific water consumption upto maximum of 2.5 m³/MWh and achieve zero waste water discharged.</p>						

6.

The Industry shall also comply with standards notified by the MoEF & CC, GOI in the G.S.R. 3305 (E), dated 07.12.2015 and G.S.R. 682 (E), dated 07.03.2016 as applicable.

TPPs (units) installed after 1 st January, 2004, upto 31 st December, 2016*	
Particulate Matter	50 mg/Nm ³
Sulphur Dioxide (SO ₂)	600 mg/Nm ³ (units smaller than 500 MW capacity units) 200 mg/Nm ³ (for units having capacity of 500 MW and above)
Oxides of Nitrogen (NO _x)	300 mg/Nm ³
Mercury (Hg)	0.03 mg/Nm ³

SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited–SGPL) is complying with the emission norms of SPM. Stack Emissions Third Party Test Reports attached as **Annexure- IV**.

Mercury emissions through SEIL stack is well with in permissible limits.

As per CPCB directions letter No. B-33014/07/2017-18/IPC-II/TPP/15841 dated 11.12.2017):

SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited–SGPL) need to install FGD by 31st Dec, 2021 & 30th Sept., 2021 in Unit 1 & Unit 2 respectively so as to comply SO_x emission limit.

SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited–SGPL) boilers are equipped with in-built low NO_x burners, providing Over Fire Air (OFA) for reducing the NO_x emissions and SEIL Project 2 (formerly known as Sembcorp Gayatri Power Limited– SGPL) Unit#1 & Unit#2 are complying with NO_x emissions limit since its operation.