SEIL Energy India Limited

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SEIL P2/APPCB/BZA/2026/004
22nd June 2026

To
The Member Secretary,
Andhra Pradesh Pollution Control Board,
Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar,
Vijayawada– 520007.

Sub: **Submission of Half-Yearly CTO Compliance Report for the Period October 2025 to March 2026 – SEIL Energy India Limited Project-2**

Ref: Consent To Operate (CTO) Order No: APPCB/VJA/NLR/182/HO/CFO/2016 dated 14.12.2021 valid till 28.02.2027

Dear Sir,

With reference to the above, we hereby submit the Half-Yearly compliance report for the period October 2025 to March 2026 against the conditions stipulated in Consent To Operate (CTO) issued to SEIL Energy India Limited Project-2, located in SPSR Nellore District.

Hope the above is in order.

Thanking you,

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



Gnanadesigan N
Head HSE - SEIL

Copy To: The Regional Officer, APPCB, Nellore

Date: 20-06-2026

To
The Member Secretary,
Andhra Pradesh Pollution Control Board,
Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar,
Vijayawada– 520007.

Sub: Third Party Certificate -Half yearly compliance report on conditions of CTO – Reg.
Ref: CFO No. APPCB/VJA/NLR/182/HO/CFO/2016, Dated: 14.12.2021.

Respected Sir/Madam,

With reference to the "Consent To Operate" (CTO) issued to **M/s. SEIL Energy India Limited Project-2**, Nellore, we are herewith certifying that **M/s. SEIL Energy India Limited Project-2** has complied all the conditions imposed in CTO for the reporting period of October 2025 to March 2026.

Thanking You,

Yours Sincerely,
For **UNIVERSAL ENVIRO ASSOCIATES LLP,**

T. Krishna

(T Krishna)
Technical Manager

Authorized Signatory

Copy To: The Regional Officer, APPCB, Nellore

CTO COMPLIANCE

SEIL ENERGY INDIA LIMITED PROJECT – 2

Order No. APPCB/VJA/NLR/182/HO/CFO/2016-, Date: 14.12.2021

October 2025 to March 2026

Prepared By:
Universal Enviro Associates, Hyderabad LLP
Accredited by NABL (TC-15961)

Compliance against CTO Conditions		
S No.	**Condition**	**Compliance**
SCHEDULE-A		
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.**
2.	The industry shall carryout 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.** Environment Monitoring Reports conducted by MoEF&CC approved third party are attached as **Annexure-I, II, III & IV.**
3.	All the rules & Regulations notified by Ministry of Law and Justice, Government of India regarding Public liability Insurance Act, 1991 shall be followed as applicable.	**Complying.** PLI Copy is attached as **Annexure-V**.(Policy Number: 0304015430 00 00 Policy Effective from 26/03/2026 to 25/03/2027)
4.	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.	Noted
5.	The industry shall ensure that there shall not be any change in the process technology, source & composition of raw materials and scope of working without prior approval from the Board.	Noted

S No.	Condition	Compliance
6.	The applicant shall submit Environment Statement in Form V before 30th September every year as per Rule no.14 of E (P) Rules 1986 & amendments thereof.	**Complying.** Environment Statement for FY2024-25 vid letter number SEIL P2/APPCB/BZA/2025/007 in Form-V has been submitted to APPCB on 27-September-2025
7.	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 &	Noted. Complying
8.	The industry shall immediately submit the revised application for consent to this Board in the event of any change in the raw material use, process employed, quantity of trade effluents & Quantity of emissions. Any change in the management shall be informed to the Board. The person authorize shall not let out the premises /lend/sell/transfer their industrial premises without obtaining prior permission of the	Noted. Complying
9.	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 Water 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.	Noted.

S No.	Condition	Compliance
10.	The industry shall be liable to pay Environmental Compensation / Other Environmental Taxes, if any environmental damage caused to the surroundings, as fixed by the Collector & District Magistrate or any other component authority as per the Rules in vogue.	Noted.
11.	The industry may explore the possibility of tapping the solar energy for their energy requirements.	Noted for Compliance.
12.	The industry should educate the workers and nearby public of possible accidents and remedial measures.	**Complying.** Regular trainings are being given to workers. All the measures have been taken to avoid any mishap which may lead to harm outside the plant premises (Off site)
SCHEDULE-B		
1.	Concrete / asphalt internal roads shall be repaired/ laid within 3 months.	**Complied.** All internal roads were made concrete/ asphalt and being maintained. 

<table>
<tr><th>S No.</th><th>Condition</th><th>Compliance</th></tr>
<tr><td>2.</td><td>100 % fly ash utilization shall be achieved by March 2022.</td><td>Complying.
SEIL Energy India Limited Project – 2 has attained 91.61% fly ash utilization for FY 2025-26. SEIL is making all efforts to achieve and sustain 100% utilization of fly ash with in three-year cycle. MoUs are signed with brick manufacturers, traders, NHAI Contractors and cement plants for ash utilization.
Dedicated Fly Ash Management Cell has been formed to have focused efforts and approach towards 100% of fly ash</td></tr>
<tr><td colspan="3"><u>Water Pollution:</u></td></tr>
<tr><td>3.</td><td>The industry shall comply with the following effluent standards based on the disposal points permitted:
<table>
<tr><th>Outlet No.</th><th>Parameter</th><th>Limiting Standards</th></tr>
<tr><td rowspan="11">1 to 3</td><td>pH</td><td>6.5 to 8.5</td></tr>
<tr><td>Suspended Solids</td><td>100.0 mg/L</td></tr>
<tr><td>Oil & Grease</td><td>20.0 mg/L</td></tr>
<tr><td>Temperature</td><td>Shall not exceeded 5 ^{0}C above the receiving water temperature</td></tr>
<tr><td>Biochemical Oxygen Demand (3 days at 27 ^{0}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>0.01 mg/L</td></tr>
<tr><td>Mercury</td><td>2.0 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 essay test</td><td>90% survival fish after 95 hours in 100 % effluent</td></tr>
<tr><td rowspan="4">4 & 5</td><td>pH</td><td>5.5 to 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 27 ^{0}C)</td><td>100 mg/L</td></tr>
</table></td><td>Complying.

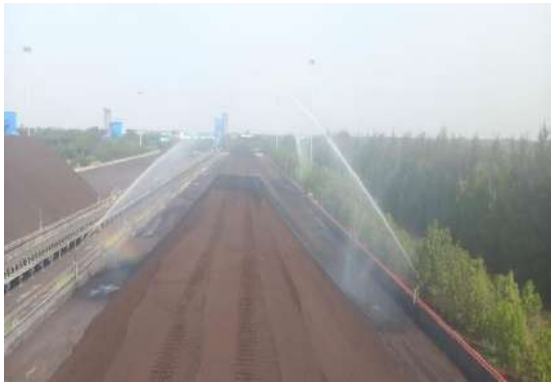
ETP Outlet & Marine Outfall, STP treated water analysis reports performed by MoEF&CC approved third Party consultant are attached as Annexure-I.</td></tr>
</table>

<table>
<tr><th>S No.</th><th>Condition</th><th>Compliance</th></tr>
<tr><td>4.</td><td>The source of water is sea. The following is the permitted water consumption:
<table>
<tr><th>Sl. No.</th><th>Purpose</th><th>Quantity in m^3/day</th></tr>
<tr><td>1</td><td>For Cooling Tower make up (Saline water)</td><td>273728.0</td></tr>
<tr><td rowspan="6">2.</td><td>Non-cooling water – RO First pass</td><td></td></tr>
<tr><td>i) Clarifier</td><td>27714.0</td></tr>
<tr><td>ii) Misc. services</td><td>6300.0</td></tr>
<tr><td>RO Second pass</td><td></td></tr>
<tr><td>i) DM Plant</td><td>1590.0</td></tr>
<tr><td>ii) Domestic (Drinking Water)</td><td>75.0</td></tr>
<tr><td colspan="2">Total</td><td>3,09,407.0</td></tr>
</table></td><td>As per the MoEF&CC Notification dated 28th June 2018 under Serial No. 5B, the said water consumption limit is not applicable for sea water based Thermal Power Plants.
However, the Sea Water withdrawal is well below the prescribed limits, i.e. 1,69,920 KLD during October 2025 to March 2026.</td></tr>
<tr><td>5.</td><td>The industry shall maintain separate digital water meters in the intake point of sea water (i.e. at sea coast) with totalizer facility unit wise to assess daily water consumption quantity instead of cumulative water consumptions.</td><td>Complying.
Separate digital water meters with totalizer facility are provided for Cooling Tower make-up and Desalination system.
Monthly totalizer readings are being captured jointly along with Port Conservator, Govt. of India in a separate log book.</td></tr>
<tr><td>6.</td><td>The industry shall maintain flow meter preferably Electro Magnetic Flow meters with totalizers for water and effluent quantity measurements for different streams of effluents and different categories of water usage stipulated in this order.</td><td>Complying.
SEIL has provided separate flow meters with totalizers for quantity measurement:
- Sea Water Intake
- ETP Outlet
- Marine Out fall
- High-Rate Solid Contact Clarifier (HRSCC) Outlet
- Cooling Tower Makeup
- Cooling Tower Blowdown
- ETP Inlet
- SPDS (Stock Pile Dust Suppression system)
- DFDS (Dry Fog Dust Suppression system)</td></tr>
</table>

<table>
<tr><th>S No.</th><th>Condition</th><th>Compliance</th></tr>
<tr><td>7.</td><td>The industry shall maintain leachate collection tank to collect the leachate from garland drain of ash pond.</td><td>Complying.
The Ash Pond is provided with garland drains all around to collect leachates, if any. Separate Leachate collection tank connected to all the garland drains of Ash Pond.
</td></tr>
<tr><td>8.</td><td>The industry shall maintain provision to collect the excess water from the ash pond into sea to control overflow of saline water from ash pond and to prevent contamination of irrigation tanks.</td><td>Complying.
SEIL has ensured adequate provision at ash pond having an overflow lagoon connected to decantation well of both lagoons and the water is recirculated back to ash handling system for reuse.</td></tr>
<tr><td colspan="3"><u>Air Pollution:</u></td></tr>
<tr><td>9.</td><td>The emissions shall not contain constituents in excess of the prescribed limits mentioned below:
<table><tr><th>Chimney No</th><th>Parameter</th><th>Emission standards</th></tr><tr><td rowspan="4">1&2</td><td>Particular Matter</td><td>50 mg/Nm^3</td></tr><tr><td>Sulphur Dioxide</td><td>*200 mg/Nm^3</td></tr><tr><td>Oxides of Nitrogen</td><td>450 mg/Nm^3</td></tr><tr><td>Mercury (Hg)</td><td>*0.03 mg/Nm^3</td></tr></table>*The industry shall meet the SO_2 emission standard of 200 mg/Nm^3 by 31.12.2024, as per MoEF&CC, GoI notification GSR No. 243 (E), dt.31.03.2021</td><td>SEIL is complying with the Emission norms of Particulate Matter, NOx and mercury.
Stack Emission Monitoring Reports performed by MoEF&CC approved third Party consultant are attached as Annexure–II.
SOx: As per MOEF&CC notification- CG-DL-E-11072025-264545 Dated- 11-July-2025, FGD installation and New Sox emission standards are exempted for SEIL Energy India Limited Project - 2</td></tr>
</table>

S No.	Condition	Compliance
10.	The industry shall comply with ambient air quality standards of PM_{10} (Particulate Matter size less than 10µm)- 100 µg/m^3; $PM_{2.5}$ (Particulate Matter size less than 2.5 µm)- 60 µg/m^3; SO_2- 80 µg/m^3; NOx - 80 µg/m^3, outside the factory premises at the periphery of the industry. Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No. B-29016/20/90/PCI-I, dated 18.11.2009. Noise Levels: Day time (6 AM to 10 PM)- 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A)	**Complying.** SEIL is complying with Ambient Air Quality parameters as prescribed in NAAQMS Standards. Ambient Air Quality Monitoring reports and Noise Monitoring reports conducted by MoEF&CC approved third party consultant are attached as **Annexure-III**.
11.	The industry shall comply with emission limits for DG sets of capacity up to 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 under the Environment (Protection) Amendment Rules, 2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Second Amendment Rules, 2004. In case of DG sets of capacity more than 800 KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.	**Complying.** SEIL is complying with the emission norms. DG stack Emissions is being monitored by MoEF&CC approved third party consultant every quarter and reports attached as **Annexure-VI**.

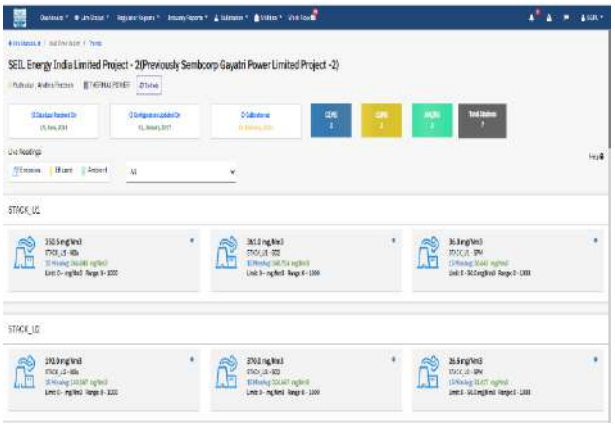
S No.	Condition	Compliance
12.	The industry shall maintain wind barriers/ wind breaking walls to the coal yards as temporary arrangement to control fugitive dust emissions on immediate surroundings.	SEIL has provided wind barriers all around coal yard with 3-tier thick and tall Conocarpus trees. SEIL has transplanted adequate matured plants around coal yard as per directions given in Task force committee meeting.   

S No.	Condition	Compliance
		In addition, SEIL has installed adequate water sprinklers with water hydrant system in coal yard to mitigate fugitive emission. 
13.	The industry shall regularly operate water sprinklers provided to control stock yard to mitigate fugitive dust on the surroundings from coal handling area.	**Complying.** SEIL has installed adequate water sprinklers (around 300 No's) in coal yard to mitigate fugitive emission. Water consumption on monthly basis is being submitted to APPCB. 

S No.	Condition	Compliance
14.	The industry shall provide & maintain necessary air pollution control systems at coal transfer points in coal conveyer system from port boundary to industry premises within 3 months.	**Complying.** Entire coal transportation from port boundary to industry premises is through closed pipe conveyors. All the coal transfer points (11 No's), and one coal crusher are provided with bag filter Dry Fog Dust Suppression (DFDS) System.
15.	The industry shall upgrade the air pollution control systems at coal crusher within 3 months.	**Complying.** Dry fog Dust suppression (DFDS) systems installed at coal crusher.  DFDS System
16.	The industry shall provide separate energy meters along with totalizer facility for each ESP.	**Complying**. SEIL has provided separate energy meters to monitor ESP Power Consumption.
17.	The industry shall provide FGD system to meet the SO_2 emission standard of 200 mg/Nm^3 by 31.12.2024, as per MoEF&CC, GoI notification GSR No. 243 (E), dt.31.03.2021.	As per MOEF&CC notification- **CG-DL-E-11072025-264545** Dated- 11-July-2025, FGD installation and New Sox emission standards are exempted for SEIL Energy India Limited Project - 2

<table>
<tr><th>S No.</th><th>Condition</th><th>Compliance</th></tr>
<tr><td colspan="3"><u>General:</u></td></tr>
<tr><td>18.</td><td>The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board:
a. Daily production details (ER-1 Central Excise Returns).
b. Quantity of Effluents generated, treated, recycled/ reused and disposed.
c. Log Books for pollution control systems.
d. Characteristics of effluents and emissions.
e. Hazardous/Non-Hazardous solid waste generated and disposed.
f. Inspection book.
g. Manifest copies of hazardous.</td><td>Complying.

All such applicable records are being regularly maintained.</td></tr>
<tr><td>19.</td><td>The industry shall dispose solid waste (Non-Haz) as follows
<table>
<tr><th>S. No.</th><th>Name of the Solid Waste</th><th>Quantity</th><th>Disposal</th></tr>
<tr><td>1</td><td>Fly Ash</td><td>1.50 Million Tons/ Annum</td><td>To Cement / brick units</td></tr>
<tr><td>2</td><td>Bottom Ash</td><td>0.40 Million Tons/ Annum</td><td>To cement, brick manufacturing units. Unutilized bottom ash to ash pond in slurry mode</td></tr>
</table></td><td>Complying.
SEIL Energy India Limited Project – 2 has attained 91.61% fly ash utilization for FY 2025-26.
SEIL is making all efforts to achieve and sustain 100% utilization with in the three years cycle. MoUs are signed with brick manufacturers, traders, NHAI Contractors and cement plants for ash utilization.
Dedicated Fly Ash Management Cell has been formed to have focused efforts and approach towards 100% fly ash utilization.</td></tr>
</table>

S No.	Condition	Compliance
20.	The industry shall operate CAAQM stations for monitoring SPM, SO_2, and NOx with recording facility and maintain connectivity to PCB server.	**Complying.** The Ambient Air Quality of the plant area and surroundings is being continuously monitored by using 3 No's of Continuous Air Quality Monitoring CAAQMS Stations. The data is being uploaded to PCB server on real-time basis. 
21.	The industry shall install & maintain online effluent and stack monitoring systems for specified parameters as per CPCB directions dated 05.02.2014 & 02.03.2015 and maintain connectivity to APPCB/CPCB websites.	**Complying.** SEIL has provided Online Stack Emission Monitoring system & Effluent Quality Monitoring system and same is connected with the APPCB/CPCB website. 

S No.	Condition	Compliance
22.	The industry shall carryout regular calibration for the on-line stack monitoring systems and CAAQM stations with tamper proof mechanism.	**Complying.** Regular calibration of the CAAQMS stations along with OEM and third party is being done. Also, the CEMS system is provided with online Remote Calibration facility.
23.	The industry shall dispose 100% of fly ash generated as per the Fly ash Notification.	**Complying.** SEIL Energy India Limited Project-2 has attained 100% fly ash utilization since November 2019. SEIL is making all out efforts to sustain 100% utilization of fly ash and achieved the same. MoUs are signed with brick manufacturers, traders, NHAI Contractors and cement plants for ash utilization. Dedicated Fly Ash Management Cell has been formed to have focused efforts and approach towards 100% fly ash utilization.

24.	The industry shall develop & maintain thick green belt in an area of 315 acres all along the periphery of the industry and ash pond area.	**Complying.** An area of 360 acres green belt/green cover development completed adopting scientific methods like establishment of mist chamber, drip & sprinkler system, vermicompost production and application of bio pesticides. Peripheral plantation along inside of the compound wall has been taken up with 3 tier plantation.    

S No.	Condition	Compliance
25.	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.** The copy of PLI is being submitted to APPCB Regional office on regular basis. (Policy Number: 0304015430 00 00 Policy Effective from 26/03/2026 to 25/03/2027) PLI Policy attached as **Annexure-V.**
26.	The industry shall comply with Board directions issued from time to time.	Noted.
27.	The industry shall comply with standards and directions issued by CPCB/MoEF&CC as and when notifications are issued.	Noted.
28.	The industry shall submit compliance report on the conditions mentioned in the consent order, safety audit reports, Fire NOC, Onsite/Offsite emergency plans (modification if any) every 6 months i.e. on 1st of January and July of every year to the Regional Office/Zonal Office.	**Complying.** SEIL Energy India Limited Project-2 has submitted the six-monthly CFO compliance report to APPCB vide letter No. SEIL P2/APPCB/BZA/2025/008 dated 24-12-2025.

S No.	Condition	Compliance
Special Conditions:		
1.	The industry shall maintain a copy of the NOC issued by the Andhra Pradesh State Disaster Response and Fire Service Dept., (APSDRFSD) at concerned Regional Office, APPCB.	**Complied.** Fire NOC attached as **Annexure-VIII.**
2.	The industry shall prepare a safety report and carry out an independent safety audit report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC, Rules, 1989 and get it approval by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit certificate at concerned Regional Office, APPCB.	**Complied.** Safety Audit report attached as **Annexure-IX.**
3.	The industry shall extend training to the working personnel for the prevention of accidents and necessary antidotes to ensure safety, as per MISHC Rules, 1989.	**Complying.** Safety training is being given to the working personnel.
4.	The industry shall carry out calibration of safety equipment and leak detection systems at regular intervals and shall certify the same with the Factories Department. That certified copy shall be submitted to the APPCB, Regional Office.	Not Applicable.
5.	The industry shall install fluorescent Wind Vane at the highest point in the industry premises.	**Complied.** 

S No.	Condition	Compliance
6.	The industry shall submit Risk analysis and risk assessment covering worst scenario clearly describing impact within the industry premises and outside the industry premises and emergency response system.	Noted and being complied.
7.	The industry shall submit the copy of the safety audit report and On-site / Off-site Emergency Plans as applicable after being certified by the Factories Department to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MISHC Rules, 1989.	**Complying.** Onsite Emergency Management Plan is in place to meet any eventuality.
	SCHEDULE-C	
1.	The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.	**Complying.**
2.	The authorization shall be produced for inspection at the request of an officer authorized by the state Pollution Control Board.	Noted for Compliance.
3.	The person authorized shall not rent, lend, shell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.	Noted.
4.	Any authorized change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorization.	Noted.

S No.	Condition	Compliance
5.	The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site-specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.	**Complying.** Onsite Emergency Management Plan is in place to meet any eventuality. Periodic mock drills are being conducted.
6.	The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposed of Hazardous Waste and Penalty".	Noted for Compliance.
7.	It is duty of the authorised person to take prior permission of the pollution Control Board to close down the facility.	Noted.
8.	The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.	**Complying.** All the Hazardous Wastes generated are being disposed to authorized vendors through APEMC.
9.	An application for the renewal of an authorisation shall be made as laid down under these Rules.	Noted for Compliance.
10	Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.	Noted for Compliance.

S No.	Condition	Compliance
11.	Annual returns shall be filed by June 30th for the period ensuring 31st March of the year.	**Complying.** SEIL Energy India Limited Project-2 has submitted the Hazardous Waste Annual returns in Form–4 to APPCB vide SEIL P2/APPCB/BZA/2026/003 dated 12-06-2026.
12.	The industry shall not store hazardous waste for more than 90 days as per the Hazardous Wastes (Management & Transboundary Movement) Rules, 2016.	**Complying.** Disposal of Hazardous wastes being done through APEMC Authorized Waste Receivers as per HWM rules.
13.	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.	**Complying.** SEIL Energy India Limited Project-2 is storing the Used / Waste Oil and Used Lead Acid Batteries under a secured Hazardous Waste Storage shed and being disposed through APEMC Authorized Receivers. 

S No.	Condition	Compliance
14.	The industry shall maintain 7 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.	**Complying.** Hazardous wastes disposal is being done through APEMC online portal to authorized waste Receivers by following Manifest system as per HWM rules, 2016. Hazardous Waste Manifests are being submitted to RO, APPCB. TREM card is being issued to transporters during transportation.
15.	The industry shall maintain proper records for Hazardous and Other 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 20(2) of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.	**Complying.** SEIL Energy India Limited Project-2 is maintaining Hazardous waste records in Form-3. SEIL Energy India Limited Project-2 has submitted the Hazardous Waste Annual returns in Form– 4 to APPCB vide SEIL P2/APPCB/BZA/2026/003 dated 12-06-2026.

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

Annexure-I

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: ETP OUTLET (Treated Effluent)** **Date of Monitoring: 08.12.2025** **Sample Collected By: Ganesh**	**Sample Registration Date: 09.12.2025** **Analysis Starting Date: 09.12.2025** **Analysis Completed Date: 14.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0002**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARD	RESULTS
1.	pH	IS:3025(Part-11)1983	--	5.5-9.0	8.3
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	2100	38
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	200	67
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	250	59
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	100	60
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	10	<1.0

Note: IS- Indian Standard

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: ETP OUTLET (Treated Effluent)** **Date of Monitoring: 16.03.2026** **Sample Collected By: Ganesh**	**Sample Registration Date: 17.03.2026** **Analysis Starting Date: 17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0002**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARD	RESULTS
1.	pH	IS:3025(Part-11)1983	--	5.5-9.0	7.9
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	2100	43
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	200	72
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	250	64
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	100	67
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	10	<1.0

Note: IS- Indian Standard

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 09.12.2025**
Group: Water	**Analysis Starting Date: 09.12.2025**
Product: Marine Outfall Water	**Analysis Completed Date: 14.12.2025**
Date of Sampling: 08.12.2025	**Issue Date: 14.12.2025**
Sample Collected By: S .Ganesh	**Lab Ref: SEPL/ES/SEILEILP/12-25/0001**

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	pH	IS:3025(Part-11)1983	--	6.5-8.5	7.6
2	Temperature Intake	--	°C	Shall not exceed 5°C above the Receiving temperature	29.2
3	Temperature Out Fall	--	°C		28.1
4	Electric Conductivity	IS: 3025:1964	µs/cm	--	24401
5	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	--	17,812
6	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	100	76
7	Chemical Oxygen Demand	IS:3025(Part-58)-2006	mg/l	250	71
8	Biochemical Oxygen Demand (3 days at 27°C)	IS:3025(Part-44)-1993	mg/l	100	53
9	Oil & Grease	IS:3025(Part-39)-1991	mg/l	10	<1.0
10	Total Hardness as $CaCO_3$	IS:3025(Part-21)-2012	mg/l	--	53
11	Total Alkalinity as $CaCO_3$	IS:3025(Part-23)-2012	mg/l	--	692
12	P- Alkalinity as $CaCO_3$	IS:3025(Part-13)-1964	mg/l	--	Nil
13	Turbidity	IS:3025(Part-10)-2012	NTU	--	5.1
14	Calcium as Ca	IS:3025(Part-40)-2012	mg/l	--	1,180
15	Magnesium as Mg	IS:3025(Part-46)-2012	mg/l	--	264
16	Sodium as Na	IS:3025(Part-45)1993	mg/l	--	583

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S. No	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
17	Potassium as K	IS:3025(Part-45)1993	mg/l	--	273
18	Chloride as Cl	IS:3025(Part-32)-2012	mg/l	--	7,269
19	Sulphates as SO_4	IS:3025(Part-24)-2012	mg/l	--	771
20	Nitrates as NO_3	IS:3025(Part-34)-2012	mg/l	--	41.3
21	Carbonates as CO_3	IS:3025(Part-51)-2017	mg/l	--	Nil
22	Bio Carbonates as HCO_3	IS:3025(Part-51)-2017	mg/l	--	479
23	Iron as Fe	IS:3025(Part-53)-2012	mg/l	--	5.2
24	Fluoride as F	IS:3025(Part-60)-2012	mg/l	--	3.4
25	Copper as Cu	IS:3025(Part-42)-2012	mg/l	--	0.75
26	Manganese as Mn	IS:3025(Part-59)-2012	mg/l	--	0.69
27	Phenolic Compounds as C_6H_5OH	IS:3025(Part-43)-2012	mg/l	--	<0.005
28	Cadmium as Cd	IS:3025(Part-41)-2012	mg/l	2.0	<0.005
29	Mercury as Hg	IS:3025(Part-48)-2012	mg/l	0.01	<0.001
30	Selenium as Se	IS:3025(Part-56)-2012	mg/l	--	<0.005
31	Arsenic as As	IS:3025(Part-37)-2012	mg/l	0.2	<0.01
32	Cyanide as CN	IS:3025(Part-27)-2012	mg/l	--	<0.01
33	Lead as Pb	IS:3025(Part-47)-2012	mg/l	2.0	<0.01
34	Zinc as Zn	IS:3025(Part-49)-2012	mg/l	--	0.44
35	Hexavalent Chromium as Cr^{+6}	IS:3025(Part-38)-1964	mg/l	1.0	<0.001
36	Boron as B	IS:3025(Part-57)-2012	mg/l	--	0.004
37	Silica as SiO_2	IS:3025(Part-35)-2019	mg/l	--	35.9

Note: **IS- Indian Standard**

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Marine Outfall Water (Fish Bio-Assay Test)** **Date of Sampling: 08.12.2025** **Sample Collected By: Ganesh**	**Sample Registration Date: 09.12.2025** **Analysis Starting Date: 09.12.2025** **Analysis Completed Date: 14.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0002**

TEST RESULT

TEST SPECIES	SOURCE OF ORGANISM	LENGTH & WEIGHT (For Fish)	REMARKS
Zebra Fish	Through vendors	1. Length 4.3 cm 2. Weight 3.7 gm	1. Fish were not fed Yes 2. Temperature range in aquarium 30°C

REFERENCE TEST DATA

START DATE: 09.12.2025
END DATE: 14.12.2025

COMMENTS:

The test species were undergone toxicity for about 96 Hrs.
RESULT: 97% survival of fish was noticed

Testing: As per M. L. Jackson & FAO –Food and Agriculture Organization

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Marine Outfall Water** **Date of Sampling: 16.03.2026** **Sample Collected By: S .Ganesh**	**Sample Registration Date: 17.03.2026** **Analysis Starting Date: 17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0001**

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	pH	IS:3025(Part-11)1983	--	6.5-8.5	7.2
2	Temperature Intake	--	°C	Shall not exceed 5°C above the Receiving temperature	28.4
3	Temperature Out Fall	--	°C		29.3
4	Electric Conductivity	IS: 3025:1964	µs/cm	--	24417
5	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	--	17,825
6	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	100	81
7	Chemical Oxygen Demand	IS:3025(Part-58)-2006	mg/l	250	77
8	Biochemical Oxygen Demand (3 days at 27°C)	IS:3025(Part-44)-1993	mg/l	100	64
9	Oil & Grease	IS:3025(Part-39)-1991	mg/l	10	<1.0
10	Total Hardness as $CaCO_3$	IS:3025(Part-21)-2012	mg/l	--	60
11	Total Alkalinity as $CaCO_3$	IS:3025(Part-23)-2012	mg/l	--	681
12	P- Alkalinity as $CaCO_3$	IS:3025(Part-13)-1964	mg/l	--	Nil
13	Turbidity	IS:3025(Part-10)-2012	NTU	--	5.4
14	Calcium as Ca	IS:3025(Part-40)-2012	mg/l	--	1,187
15	Magnesium as Mg	IS:3025(Part-46)-2012	mg/l	--	274
16	Sodium as Na	IS:3025(Part-45)1993	mg/l	--	590

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Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

S. No	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
17	Potassium as K	IS:3025(Part-45)1993	mg/l	--	264
18	Chloride as Cl	IS:3025(Part-32)-2012	mg/l	--	7,275
19	Sulphates as SO_4	IS:3025(Part-24)-2012	mg/l	--	782
20	Nitrates as NO_3	IS:3025(Part-34)-2012	mg/l	--	44.6
21	Carbonates as CO_3	IS:3025(Part-51)-2017	mg/l	--	Nil
22	Bio Carbonates as HCO_3	IS:3025(Part-51)-2017	mg/l	--	483
23	Iron as Fe	IS:3025(Part-53)-2012	mg/l	--	5.4
24	Fluoride as F	IS:3025(Part-60)-2012	mg/l	--	3.9
25	Copper as Cu	IS:3025(Part-42)-2012	mg/l	--	0.67
26	Manganese as Mn	IS:3025(Part-59)-2012	mg/l	--	0.71
27	Phenolic Compounds as C_6H_5OH	IS:3025(Part-43)-2012	mg/l	--	<0.005
28	Cadmium as Cd	IS:3025(Part-41)-2012	mg/l	2.0	<0.005
29	Mercury as Hg	IS:3025(Part-48)-2012	mg/l	0.01	<0.001
30	Selenium as Se	IS:3025(Part-56)-2012	mg/l	--	<0.005
31	Arsenic as As	IS:3025(Part-37)-2012	mg/l	0.2	<0.01
32	Cyanide as CN	IS:3025(Part-27)-2012	mg/l	--	<0.01
33	Lead as Pb	IS:3025(Part-47)-2012	mg/l	2.0	<0.01
34	Zinc as Zn	IS:3025(Part-49)-2012	mg/l	--	0.52
35	Hexavalent Chromium as Cr^{+6}	IS:3025(Part-38)-1964	mg/l	1.0	<0.001
36	Boron as B	IS:3025(Part-57)-2012	mg/l	--	0.003
37	Silica as SiO_2	IS:3025(Part-35)-2019	mg/l	--	38.1

Note: **IS- Indian Standard**

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Marine Outfall Water (Fish Bio-Assay Test)** **Date of Sampling: 16.03.2026** **Sample Collected By: Ganesh**	**Sample Registration Date: 17.03.2026** **Analysis Starting Date: 17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0002**

TEST RESULT

TEST SPECIES	SOURCE OF ORGANISM	LENGTH & WEIGHT (For Fish)	REMARKS
Zebra Fish	Through vendors	1. Length 4.1 cm 2. Weight 3.9 gm	1. Fish were not fed Yes 2. Temperature range in aquarium 29°C

REFERENCE TEST DATA

START DATE: 17.03.2026
END DATE: 21.03.2026

COMMENTS:

The test species were undergone toxicity for about 96 Hrs.
RESULT: 94% survival of fish was noticed

Testing: As per M. L. Jackson & FAO –Food and Agriculture Organization

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: STP OUTLET** **Date of Monitoring: 08.12.2025** **Sample Collected By: S. Ganesh**	**Sample Registration Date: 09.12.2025** **Analysis Starting Date: 09.12.2025** **Analysis Completed Date: 14.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0002**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARD	RESULTS
1.	pH	IS:3025(Part-11)1983	--	5.5-9.0	8.1
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	<2100	187
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	<200	91
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	<250	82
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	<100	43
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	<10	<1.0

Note: IS-Indian Standard

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: STP OUTLET** **Date of Monitoring: 16.03.2026** **Sample Collected By: S. Ganesh**	**Sample Registration Date: 17.03.2026** **Analysis Starting Date: 17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0002**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARD	RESULTS
1.	pH	IS:3025(Part-11)1983	--	5.5-9.0	7.8
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	<2100	173
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	<200	82
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	<250	73
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	<100	54
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	<10	<1.0

Note: IS-Indian Standard

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Annexure-II

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution
Product: Stack Emission Monitoring- DECEMBER 2025
Location: Unit#1 (Stack Attached to 660 MW Boiler)
Date of Monitoring: 08.12.2025
Sample Registration Date: 09.12.2025

Analysis Starting Date: 09.12.2025
Analysis Completed Date: 14.12.2025
Issue Date: 14.12.2025
Lab Ref: SEPL/ES/SEILEILP/12-25/0001

TEST RESULT

1. Time of Sampling ---- : 10:15 Hrs. to 11:15 Hrs.
2. Time Duration : 01:00 Hrs.
3. Ambient Temperature (^oC) : 31.7
4. Flue gas Temperature ($^o C$) : 131
5. Velocity of the flue gas (m/sec) : 22.16
6. C/s area of the duct (m^3) : 44.17
7. Stack Diameter (m) : 7.5
8. Flue gas Flow Rate (Nm^3/hr) : 3523705.92

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm^3	< 50	41.2
2.	Sulphur Dioxide (SO_2)	IS 11255 (part-2)1985	mg/Nm^3	-	784
3.	Oxides of Nitrogen (NOx)	IS 11255 (part-7)1985	mg/Nm^3	350	276
4.	Carbon Monoxide (CO)	NSPS Test Method-10	ppm	-	1.2
5.	Mercury as Hg	State of California Air Resources Board, Method10A	mg/Nm^3	0.03	< 0.03

Instrument Details:
Instrument : Stack Monitoring Kit
Make : Sree Scientific Equipment
Model / Sl No : Sem-150/220206
Calibration Due : 28.02.2026

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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution	**Analysis Starting Date: 09.12.2025**
Product: Stack Emission Monitoring- DECEMBER 2025	**Analysis Completed Date: 14.12.2025**
Location: Unit#2 (Stack Attached to 660 MW Boiler)	**Issue Date: 14.12.2025**
Date of Monitoring: 08.12.2025	**Lab Ref: SEPL/ES/SEILEILP/12-25/0002**
Sample Registration Date: 09.12.2025	

TEST RESULT

1.	Time of Sampling	----	: 11:25 Hrs. to 12:15 Hrs.
2.	Time Duration		: 00:55 Hrs.
3.	Ambient Temperature	(^oC)	: 34.6
4.	Flue gas Temperature	($^o C$)	: 141
5.	Velocity of the flue gas	(m/sec)	: 22.86
6.	C/s area of the duct	(m^3)	: 44.17
7.	Stack Diameter	(m)	: 7.5
8.	Flue gas Flow Rate	(Nm^3/hr)	: 3635014.32

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm^3	< 50	43
2.	Sulphur Dioxide (SO_2)	IS 11255 (part-2)1985	mg/Nm^3	-	850
3.	Oxides of Nitrogen (NOx)	IS 11255 (part-7)1985	mg/Nm^3	350	268
4.	Carbon Monoxide (CO)	NSPS Test Method-10	ppm	-	1.1
5.	Mercury as Hg	State of California Air Resources Board, Method10A	mg/Nm^3	0.03	<0.02

Instrument Details:

Instrument	: Stack Monitoring Kit
Make	: Sree Scientific Equipment
Model / Sl No	: Sem-150/220206
Calibration Due	: 28.02.2026

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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution	**Analysis Starting Date: 17.03.2026**
Product: Stack Emission Monitoring- MARCH 2026	**Analysis Completed Date: 21.03.2026**
Location: Unit#1 (Stack Attached to 660 MW Boiler)	**Issue Date: 21.03.2026**
Date of Monitoring: 16.03.2026	**Lab Ref: SEPL/ES/SEILEILP/03-26/0001**
Sample Registration Date: 17.03.2026	

TEST RESULT

1.	Time of Sampling	----	: 10:15 Hrs. to 11:15 Hrs.
2.	Time Duration		: 01:00 Hrs.
3.	Ambient Temperature	(^oC)	: 30.3
4.	Flue gas Temperature	($^o C$)	: 124
5.	Velocity of the flue gas	(m/sec)	: 20.36
6.	C/s area of the duct	(m^3)	: 44.17
7.	Stack Diameter	(m)	: 7.5
8.	Flue gas Flow Rate	(Nm^3/hr)	: 3237484.32

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm^3	< 50	43.5
2.	Sulphur Dioxide (SO_2)	IS 11255 (part-2)1985	mg/Nm^3	-	791
3.	Oxides of Nitrogen (NOx)	IS 11255 (part-7)1985	mg/Nm^3	450	285
4.	Carbon Monoxide (CO)	NSPS Test Method-10	ppm	-	1.5
5.	Mercury as Hg	State of California Air Resources Board, Method10A	mg/Nm^3	0.03	< 0.03

Instrument Details:

Instrument	: Stack Monitoring Kit
Make	: Sree Scientific Equipment
Model / Sl No	: Sem-150/220206
Calibration Due	: 28.02.2027

K.S.Lag
Verified by

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SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution **Product: Stack Emission Monitoring- MARCH 2026** **Location: Unit#2** (Stack Attached to 660 MW Boiler) **Date of Monitoring: 16.03.2026** **Sample Registration Date: 17.03.2026**	**Analysis Starting Date: 17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0002**

TEST RESULT

1.	Time of Sampling	----	: 11:25 Hrs. to 12:15 Hrs.
2.	Time Duration		: 00:55 Hrs.
3.	Ambient Temperature	(^oC)	: 32.1
4.	Flue gas Temperature	($^o C$)	: 132
5.	Velocity of the flue gas	(m/sec)	: 20.57
6.	C/s area of the duct	(m^3)	: 44.17
7.	Stack Diameter	(m)	: 7.5
8.	Flue gas Flow Rate	(Nm^3/hr)	: 3270876.84

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm^3	< 50	32
2.	Sulphur Dioxide (SO_2)	IS 11255 (part-2)1985	mg/Nm^3	-	843
3.	Oxides of Nitrogen (NOx)	IS 11255 (part-7)1985	mg/Nm^3	450	252
4.	Carbon Monoxide (CO)	NSPS Test Method-10	ppm	-	1.6
5.	Mercury as Hg	State of California Air Resources Board, Method10A	mg/Nm^3	0.03	<0.02

Instrument Details:

Instrument	: Stack Monitoring Kit
Make	: Sree Scientific Equipment
Model / Sl No	: Sem-150/220206
Calibration Due	: 28.02.2027

K.S.Lag
Verified by

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Managing Director

Annexure-III

TEST REPORT

ISSUED TO:
M/S. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 01.11.2025**
Group: Atmospheric Pollution	**Issue Date: 07.11.2025**
Product: Ambient Air Quality Monitoring – OCTOBER 2025	**Lab Ref: SEPL/ES/SEILEILP/10-25/0001**
Location-1: Fire Station (Plant Site)	**Sample collected person details: S. Ganesh**

TESTRESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
02.10.2025	36.5	33.3	11.4	14.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
03.10.2025	31.1	32.5	13.7	11.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
09.10.2025	42.5	31.4	16.8	15.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.10.2025	28.7	31.6	12.1	12.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
16.10.2025	41.6	30.7	17.6	21.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.10.2025	40.1	24.5	20.4	16.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.10.2025	42.7	20.8	14.9	17.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
24.10.2025	38.4	32.2	15.4	18.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
30.10.2025	37.6	35.6	17.5	19.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
31.10.2025	46.8	32.4	17.8	18.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**28.7**	**20.8**	**11.4**	**11.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**46.8**	**35.6**	**20.4**	**21.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**38.6**	**30.5**	**15.8**	**16.7**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**46.1**	**35.2**	**19.9**	**21.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	20

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due: 28.02.2026

K.S.Raj
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 01.11.2025**
Group: Atmospheric Pollution	**Issue Date: 07.11.2025**
Product: Ambient Air Quality Monitoring – OCTOBER 2025	**Lab Ref: SEPL/ES/SEILEILP/10-25/0002**
Location-2: Sivaramapuram village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
02.10.2025	34.5	25.6	21.4	13.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
03.10.2025	27.1	31.2	14.1	14.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
09.10.2025	29.8	30.7	20.5	9.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.10.2025	45.2	31.5	15.3	16.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
16.10.2025	25.7	28.4	19.6	13.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.10.2025	34.9	32.3	17.5	19.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.10.2025	38.7	27.1	16.7	20.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
24.10.2025	28.4	26.4	18.6	24.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
30.10.2025	26.1	30.2	22.8	23.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
31.10.2025	38.2	19.4	15.7	12.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**25.7**	**19.4**	**14.1**	**9.1**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**45.2**	**32.3**	**22.8**	**24.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**32.9**	**28.3**	**18.2**	**16.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**44.0**	**32.2**	**22.5**	**24.1**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220831
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQM-60/220518
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

SPECTRA ENVIROTECH PVT LTD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 01.11.2025**
Group: Atmospheric Pollution	**Issue Date: 07.11.2025**
Product: Ambient Air Quality Monitoring – OCTOBER 2025	**Lab Ref: SEPL/ES/SEILEILP/10-25/0003**
Location-3: Chandrasekharapuram Village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
02.10.2025	29.1	25.5	17.8	11.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
03.10.2025	33.3	30.4	19.2	14.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
09.10.2025	41.2	21.7	13.1	17.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.10.2025	34.8	29.8	12.7	18.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
16.10.2025	46.7	28.6	18.6	14.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.10.2025	34.9	34.6	19.5	15.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.10.2025	37.5	29.7	15.8	20.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
24.10.2025	41.6	26.6	16.1	10.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
30.10.2025	40.2	30.9	20.9	16.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
31.10.2025	37.4	31.1	22.7	17.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**29.1**	**21.7**	**12.7**	**10.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**46.7**	**34.6**	**22.7**	**20.6**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**37.7**	**28.9**	**17.6**	**15.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**46.0**	**34.0**	**19.5**	**20.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

K.S.Raj
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 01.11.2025**
Group: Atmospheric Pollution	**Issue Date: 07.11.2025**
Product: Ambient Air Quality Monitoring – OCTOBER 2025	**Lab Ref: SEPL/ES/SEILEILP/10-25/0004**
Location-4: Varakavipudi Village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
02.10.2025	34.2	32.4	12.4	13.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
03.10.2025	36.8	31.6	16.6	17.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
09.10.2025	44.3	33.7	14.7	12.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.10.2025	34.7	27.1	15.1	14.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
16.10.2025	45.8	23.8	14.2	16.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.10.2025	42.2	24.9	13.5	17.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.10.2025	38.8	37.5	18.9	12	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
24.10.2025	45.1	36.2	19.6	15.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
30.10.2025	38.7	35.7	20.5	19.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
31.10.2025	40.2	29.1	17.3	11.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**34.2**	**23.8**	**12.4**	**11.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**45.8**	**37.5**	**20.5**	**19.9**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**40.1**	**31.2**	**16.3**	**15.1**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**45.7**	**37.3**	**20.3**	**19.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Detail:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

K.S.Raj
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
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LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

SUMMARY OF AMBIENT AIR QUALITY – OCTOBER 2025

Pollutants	Description	Unit	Fire Station (Plant)-1	Sivaramapuram Village-2	Chandra sekharapuram Village-3	Varakavipudi Village-4
PM_{10}	Minimum	µg/m³	28.7	25.7	29.1	34.2
	Maximum		46.8	45.2	46.7	45.8
	Average		38.6	32.9	37.7	40.1
	98 Percentile		46.1	44.0	46.0	45.7
$PM_{2.5}$	Minimum		20.8	19.4	21.7	23.8
	Maximum		35.6	32.3	34.6	37.5
	Average		30.5	28.3	28.9	31.2
	98 Percentile		35.2	32.2	34.0	37.3
SO_2	Minimum		11.4	14.1	12.7	12.4
	Maximum		20.4	22.8	22.7	20.5
	Average		15.8	18.2	17.6	16.3
	98 Percentile		19.9	22.5	19.5	20.3
NO_x	Minimum		11.8	9.1	10.5	11.2
	Maximum		21.5	24.2	20.6	19.9
	Average		16.7	16.8	15.8	15.1
	98 Percentile		21.2	24.1	20.3	19.5

K.S.Raj
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

SPECTRA ENVIROTECH PVT LTD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/S. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 29.11.2025**
Group: Atmospheric Pollution	**Issue Date: 05.12.2025**
Product: Ambient Air Quality Monitoring – NOVEMBER 2025	**Lab Ref: SEPL/ES/SEILEILP/11-25/0001**
Location-1: Fire Station (Plant Site)	**Sample collected person details: S. Ganesh**

TESTRESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
06.11.2025	32.5	28.3	8.4	22.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
05.12.2025	27.1	37.4	20.3	7.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.11.2025	46.2	26	11.5	10.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
14.11.2025	34.6	35.9	18.4	17.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.11.2025	50.3	25.1	24.6	27.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
21.11.2025	34	31.5	28.2	22.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.11.2025	47.5	27.4	20.9	24.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
28.11.2025	41.7	39.2	25.3	28.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**27.1**	**25.1**	**8.4**	**7.6**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**50.3**	**39.2**	**28.2**	**28.9**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**39.2**	**31.4**	**19.7**	**20.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**49.9**	**38.9**	**27.8**	**28.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	20

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due: 28.02.2026

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 29.11.2025**
Group: Atmospheric Pollution	**Issue Date: 05.12.2025**
Product: Ambient Air Quality Monitoring – NOVEMBER 2025	**Lab Ref: SEPL/ES/SEILEILP/11-25/0002**
Location-2: Sivaramapuram village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
06.11.2025	28.6	20.3	16.2	18.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
05.12.2025	23.1	36.4	9.9	20.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.11.2025	33.7	27.5	25.7	14.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
14.11.2025	50.2	37.2	10.3	21.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.11.2025	29.4	23.1	26.8	8.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
21.11.2025	40.3	38.6	22.4	26.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.11.2025	43.8	35.3	20.3	28.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
28.11.2025	34.6	34.9	14.9	30.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**23.1**	**20.3**	**9.9**	**8.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**50.2**	**38.6**	**26.8**	**30.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**35.5**	**31.7**	**18.3**	**21.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**49.3**	**38.4**	**26.6**	**30.0**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220831
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQM-60/220518
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

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SPECTRA ENVIROTECH PVT. LTD. VIZAG

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Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 29.11.2025**
Group: Atmospheric Pollution	**Issue Date: 05.12.2025**
Product: Ambient Air Quality Monitoring – NOVEMBER 2025	**Lab Ref: SEPL/ES/SEILEILP/11-25/0003**
Location-3: Chandrasekharapuram Village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
06.11.2025	36.7	30.2	12.8	7.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
05.12.2025	39.2	36.1	24.9	19.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.11.2025	46.1	26.3	19.5	23.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
14.11.2025	38.6	37.8	8.6	26.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.11.2025	41.3	35.4	26.3	20.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
21.11.2025	29.4	29.5	25.4	10.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.11.2025	43.6	24.1	20.7	26.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
28.11.2025	49.5	32.8	11.5	16.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**29.4**	**24.1**	**8.6**	**7.1**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**49.5**	**37.8**	**26.3**	**26.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**40.6**	**31.5**	**18.7**	**18.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**49.0**	**37.6**	**26.2**	**26.7**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

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SPECTRA ENVIROTECH PVT. LTD. VIZAG

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LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 29.11.2025**
Group: Atmospheric Pollution	**Issue Date: 05.12.2025**
Product: Ambient Air Quality Monitoring – NOVEMBER 2025	**Lab Ref: SEPL/ES/SEILEILP/11-25/0004**
Location-4: Varakavipudi Village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
06.11.2025	40.1	38.2	7.3	19.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
05.12.2025	43.6	26.3	21.5	23.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.11.2025	49.7	37	20.9	18.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
14.11.2025	29.8	22.4	22.6	20.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.11.2025	51.2	18.7	19.4	22.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
21.11.2025	47.3	30.5	18.7	21	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.11.2025	33.1	42.6	26.1	17.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
28.11.2025	41	44.9	28.9	10.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**29.8**	**18.7**	**7.3**	**10.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**51.2**	**44.9**	**28.9**	**23.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**42.0**	**32.6**	**20.7**	**19.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**51.0**	**44.6**	**28.5**	**23.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Detail:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

K.S.Lag
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SPECTRA ENVIROTECH PVT. LTD. VIZAG

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Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

SUMMARY OF AMBIENT AIR QUALITY – NOVEMBER 2025

Pollutants	Description	Unit	Fire Station (Plant)-1	Sivaramapuram Village-2	Chandra sekharapuram Village-3	Varakavipudi Village-4
PM_{10}	Minimum	$\mu g/m^3$	27.1	23.1	29.4	29.8
	Maximum		50.3	50.2	49.5	51.2
	Average		39.2	35.5	40.6	42.0
	98 Percentile		49.9	49.3	49.0	51.0
$PM_{2.5}$	Minimum		25.1	20.3	24.1	18.7
	Maximum		39.2	38.6	37.8	44.9
	Average		31.4	31.7	31.5	32.6
	98 Percentile		38.9	38.4	37.6	44.6
SO_2	Minimum		8.4	9.9	8.6	7.3
	Maximum		28.2	26.8	26.3	28.9
	Average		19.7	18.3	18.7	20.7
	98 Percentile		27.8	26.6	26.2	28.5
NO_x	Minimum		7.6	8.8	7.1	10.2
	Maximum		28.9	30.3	26.8	23.5
	Average		20.2	21.2	18.8	19.2
	98 Percentile		28.8	30.0	26.7	23.4

K.S.Raj
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Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
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SPECTRA ENVIROTECH PVT LTD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/S. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 27.12.2025**
Group: Atmospheric Pollution	**Issue Date: 02.01.2026**
Product: Ambient Air Quality Monitoring – DECEMBER 2025	**Lab Ref: SEPL/ES/SEILEILP/12-25/0001**
Location-1: Fire Station (Plant Site)	**Sample collected person details: S. Ganesh**

TESTRESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
04.12.2025	37.4	35.7	15.4	25.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
02.01.2026	33.5	41.6	26.1	15.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
11.12.2025	51.7	34.8	17.5	17.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
12.12.2025	39.8	40.6	23.9	24.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
18.12.2025	44	31.4	29.6	37.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
19.12.2025	29.7	37.5	34.7	28.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
25.12.2025	42.2	36.8	28.6	31.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
26.12.2025	37.6	44.9	33.4	21.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**29.7**	**31.4**	**15.4**	**15.9**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**51.7**	**44.9**	**34.7**	**37.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**39.5**	**37.9**	**26.2**	**25.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**50.6**	**44.4**	**34.5**	**36.6**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	20

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due: 28.02.2026

K.S.Lag
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SPECTRA ENVIROTECH PVT. LTD. VIZAG

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 27.12.2025**
Group: Atmospheric Pollution	**Issue Date: 02.01.2026**
Product: Ambient Air Quality Monitoring – DECEMBER 2025	**Lab Ref: SEPL/ES/SEILEILP/12-25/0002**
Location-2: Sivaramapuram village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
04.12.2025	35.7	25.9	10.7	23.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
02.01.2026	30.4	41.6	16.9	26.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
11.12.2025	39.8	34.7	31.4	20.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
12.12.2025	54.6	43.9	18.6	28.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
18.12.2025	36.5	29.5	30.5	12.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
19.12.2025	45.8	31.4	27.3	31.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
25.12.2025	51.7	30.6	28.6	34.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
26.12.2025	40.6	39.8	20.4	39.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**30.4**	**25.9**	**10.7**	**12.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**54.6**	**43.9**	**31.4**	**39.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**41.9**	**34.7**	**23.1**	**27.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**54.2**	**43.6**	**31.3**	**39.1**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220831
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQM-60/220518
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 27.12.2025**
Group: Atmospheric Pollution	**Issue Date: 02.01.2026**
Product: Ambient Air Quality Monitoring – DECEMBER 2025	**Lab Ref: SEPL/ES/SEILEILP/12-25/0003**
Location-3: Chandrasekharapuram Village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
04.12.2025	42.6	37.2	18.1	11.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
02.01.2026	45.9	42.1	31.9	25.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
11.12.2025	51.2	31.8	28.4	30.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
12.12.2025	43.1	44.6	16.3	32.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
18.12.2025	36.5	40.9	32.7	27.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
19.12.2025	21.2	35.1	33.8	18.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
25.12.2025	50.8	32.2	27.2	33.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
26.12.2025	35.2	43.7	17.5	21.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**21.2**	**31.8**	**16.3**	**11.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**51.2**	**44.6**	**33.8**	**33.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**40.8**	**38.5**	**25.7**	**25.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**51.1**	**44.5**	**33.6**	**33.6**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

K.S.Raj
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical	**Sample Registration Date: 27.12.2025**
Group: Atmospheric Pollution	**Issue Date: 02.01.2026**
Product: Ambient Air Quality Monitoring – DECEMBER 2025	**Lab Ref: SEPL/ES/SEILEILP/12-25/0004**
Location-4: Varakavipudi Village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
04.12.2025	46.2	43.9	13.7	14.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
02.01.2026	51.8	32.7	26.4	28.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
11.12.2025	42.9	42.2	28.3	25.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
12.12.2025	22.7	28.7	29.1	15.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
18.12.2025	45.3	25.6	12.2	29.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
19.12.2025	42.1	37.9	23.7	17.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
25.12.2025	28.3	47.1	31.9	22.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
26.12.2025	31.1	51.8	34.9	16.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**22.7**	**25.6**	**12.2**	**14.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**51.8**	**51.8**	**34.9**	**29.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**38.8**	**38.7**	**25.0**	**21.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**51.0**	**51.1**	**34.5**	**29.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Detail:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

K.S.Lag
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SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

SUMMARY OF AMBIENT AIR QUALITY – DECEMBER 2025

Pollutants	Description	Unit	Fire Station (Plant)-1	Sivaramapuram Village-2	Chandra sekharapuram Village-3	Varakavipudi Village-4
PM_{10}	Minimum	$\mu g/m^3$	29.7	30.4	21.2	22.7
	Maximum		51.7	54.6	51.2	51.8
	Average		39.5	41.9	40.8	38.8
	98 Percentile		50.6	54.2	51.1	51.0
$PM_{2.5}$	Minimum		31.4	25.9	31.8	25.6
	Maximum		44.9	43.9	44.6	51.8
	Average		37.9	34.7	38.5	38.7
	98 Percentile		44.4	43.6	44.5	51.1
SO_2	Minimum		15.4	10.7	16.3	12.2
	Maximum		34.7	31.4	33.8	34.9
	Average		26.2	23.1	25.7	25.0
	98 Percentile		34.5	31.3	33.6	34.5
NO_x	Minimum		15.9	12.4	11.5	14.3
	Maximum		37.4	39.8	33.8	29.3
	Average		25.4	27.3	25.2	21.2
	98 Percentile		36.6	39.1	33.6	29.2

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TEST REPORT

ISSUED TO:

M/S. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 31.01.2026**
Group : Atmospheric Pollution	**Issue Date : 06.02.2026**
Product : Ambient Air Quality Monitoring – JANUARY 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/01-26/0001**
Location : Fire Station (Plant Site)	**Sample collected person details : S. Ganesh**

TESTRESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
02.01.2026	28.6	38.3	47.6	35.4								
06.01.2026	41.2	39.6	20.1	29.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
09.01.2026	37.6	45.7	31.5	20.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.01.2026	48.3	38.1	22.7	23.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
16.01.2026	44.9	46.9	27.6	30.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.01.2026	47.5	35.2	34.2	34.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.01.2026	32.1	41.5	38.3	33.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.01.2026	47.6	42.8	33.9	35.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
30.01.2026	42.4	49.6	37.5	26.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**28.6**	**35.2**	**20.1**	**20.6**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**48.3**	**49.6**	**47.6**	**35.9**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**41.1**	**42.0**	**32.6**	**30.0**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**48.2**	**49.2**	**46.1**	**35.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	20

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due: 28.02.2026

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

SPECTRA ENVIROTECH PVT LTD

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 31.01.2026**
Group : Atmospheric Pollution	**Issue Date : 06.02.2026**
Product : Ambient Air Quality Monitoring – JANUARY 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/01-26/0002**
Location : Sivaramapuram village	**Sample collected person details : S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
02.01.2026	29.8	38.6	33.9	43.9								
06.01.2026	40.1	29.4	15.2	27.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
09.01.2026	35.6	46.3	20.1	31.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.01.2026	41.2	39.7	35.7	25.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
16.01.2026	50.7	47.6	24.3	31.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.01.2026	40.9	34.1	33.8	16.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.01.2026	49.8	36.9	30.6	35.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.01.2026	47.3	37.8	34.9	39.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
30.01.2026	36.5	43.5	25.7	43.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**29.8**	**29.4**	**15.2**	**16.7**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**50.7**	**47.6**	**35.7**	**43.9**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**41.3**	**39.3**	**28.2**	**32.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**50.6**	**47.4**	**35.6**	**43.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220831
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQM-60/220518
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

K.S.Lag
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SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 31.01.2026**
Group : Atmospheric Pollution	**Issue Date : 06.02.2026**
Product : Ambient Air Quality Monitoring – JANUARY 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/01-26/0003**
Location : Chandrasekharapuram Village	**Sample collected person details : S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
02.01.2026	38.5	36.4	25.4	25.6								
06.01.2026	46.2	33.1	21.2	16.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
09.01.2026	49.7	46.4	35.6	30.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.01.2026	47.3	35.6	32.9	34.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
16.01.2026	48.4	49.8	20.5	36.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.01.2026	40.1	44.4	36.7	31.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.01.2026	26.5	39.7	38.9	24.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.01.2026	45.9	37.2	31.4	38.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
30.01.2026	31.2	47.6	22.6	25.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**26.5**	**33.1**	**20.5**	**16.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**49.7**	**49.8**	**38.9**	**38.7**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**41.5**	**41.1**	**29.5**	**29.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**49.5**	**49.4**	**38.5**	**38.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

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SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 31.01.2026**
Group : Atmospheric Pollution	**Issue Date : 06.02.2026**
Product : Ambient Air Quality Monitoring – JANUARY 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/01-26/0004**
Location : Varakavipudi Village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
02.01.2026	37.6	35.4	36.5	50.2								
06.01.2026	43.1	48.3	16.4	18.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
09.01.2026	46.5	37.6	31.7	31.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.01.2026	47.3	46.9	33.5	30.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
16.01.2026	27.6	31.2	35.7	21.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.01.2026	49.8	30.3	17.6	33.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.01.2026	48.2	43.7	28.9	22.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.01.2026	34.3	50.6	35.1	27.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
30.01.2026	36.9	49.4	38.4	20.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**27.6**	**30.3**	**16.4**	**18.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**49.8**	**50.6**	**38.4**	**50.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**41.3**	**41.5**	**30.4**	**28.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**49.5**	**50.4**	**38.1**	**47.6**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Detail:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

K.S.Lag
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SPECTRA ENVIROTECH PVT. LTD. VIZAG

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LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

SUMMARY OF AMBIENT AIR QUALITY – JANUARY 2026

Pollutants	Description	Unit	Fire Station (Plant)-1	Sivaramapuram Village-2	Chandra sekharapuram Village-3	Varakavipudi Village-4
PM_{10}	Minimum	µg/m³	28.6	29.8	26.5	27.6
	Maximum		48.3	50.7	49.7	49.8
	Average		41.1	41.3	41.5	41.3
	98 Percentile		48.2	50.6	49.5	49.5
$PM_{2.5}$	Minimum		35.2	29.4	33.1	30.3
	Maximum		49.6	47.6	49.8	50.6
	Average		42.0	39.3	41.1	41.5
	98 Percentile		49.2	47.4	49.4	50.4
SO_2	Minimum		20.1	15.2	20.5	16.4
	Maximum		47.6	35.7	38.9	38.4
	Average		32.6	28.2	29.5	30.4
	98 Percentile		46.1	35.6	38.5	38.1
NO_x	Minimum		20.6	16.7	16.4	18.5
	Maximum		35.9	43.9	38.7	50.2
	Average		30.0	32.8	29.3	28.5
	98 Percentile		35.8	43.8	38.4	47.6

K.S.Raj
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:

M/S. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 28.02.2026**
Group : Atmospheric Pollution	**Issue Date : 04.03.2026**
Product : Ambient Air Quality Monitoring – FEBRUARY 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/02-26/0001**
Location : Fire Station (Plant Site)	**Sample collected person details : S. Ganesh**

TESTRESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
03.02.2026	33.1	22.6	31.6	29.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
06.02.2026	45.6	24.8	26.4	33.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.02.2026	41.2	29.3	35.6	24.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.02.2026	51.8	20.4	27.1	28.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.02.2026	47.9	23.8	31.3	34.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.02.2026	50.3	34.6	38.7	38.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
24.02.2026	36.7	35.7	33.1	37.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.02.2026	43.9	27.1	27.9	20.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**33.1**	**20.4**	**26.4**	**20.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**51.8**	**35.7**	**38.7**	**38.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**43.8**	**27.3**	**31.5**	**30.9**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**51.6**	**35.5**	**38.3**	**38.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	20

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due: 28.02.2026

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

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Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 28.02.2026**
Group : Atmospheric Pollution	**Issue Date : 04.03.2026**
Product : Ambient Air Quality Monitoring – FEBRUARY 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/02-26/0002**
Location : Sivaramapuram village	**Sample collected person details : S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
03.02.2026	32.6	26.1	38.5	27.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
06.02.2026	45.9	32.6	20.4	31.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.02.2026	40.1	20.9	25.9	35.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.02.2026	46.8	32.4	30.6	29.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.02.2026	45.1	33.7	29.7	36.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.02.2026	37.6	38.3	36.2	21.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
24.02.2026	51.2	34.6	35.3	20.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.02.2026	50.7	38.6	39.1	24.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**32.6**	**20.9**	**20.4**	**20.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**51.2**	**38.6**	**39.1**	**36.7**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**43.8**	**32.2**	**32.0**	**28.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**51.1**	**38.6**	**39.0**	**36.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220831
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQM-60/220518
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

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LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 28.02.2026**
Group : Atmospheric Pollution	**Issue Date : 04.03.2026**
Product : Ambient Air Quality Monitoring – FEBRUARY 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/02-26/0003**
Location : Chandrasekharapuram Village	**Sample collected person details : S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
03.02.2026	43.5	30.5	29.4	30.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
06.02.2026	49.1	37.9	26.8	21.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.02.2026	52.3	21.6	30.1	35.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.02.2026	44.7	29.8	36.9	38.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.02.2026	42.6	35.4	25.2	31.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.02.2026	35.4	28.3	31.6	36.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
24.02.2026	31.6	34.1	33.4	29.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.02.2026	50.9	22.6	35.8	23.9	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**31.6**	**21.6**	**25.2**	**21.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**52.3**	**37.9**	**36.9**	**38.1**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**43.8**	**30.0**	**31.2**	**30.9**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**52.1**	**37.6**	**36.7**	**37.9**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

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SPECTRA ENVIROTECH PVT. LTD. VIZAG

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TEST REPORT

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M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 28.02.2026**
Group : Atmospheric Pollution	**Issue Date : 04.03.2026**
Product : Ambient Air Quality Monitoring – FEBRUARY 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/02-26/0004**
Location : Varakavipudi Village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
03.02.2026	41.3	24.3	32.8	27.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
06.02.2026	46.1	21.8	20.6	23.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.02.2026	50.6	32.6	35.7	36.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.02.2026	51.7	28.4	37.6	35.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.02.2026	32.5	35.9	30.1	26.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.02.2026	45.2	36.7	22.6	37.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
24.02.2026	43.8	26.4	34.5	27.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.02.2026	39.6	30.6	21.6	32.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**32.5**	**21.8**	**20.6**	**23.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**51.7**	**36.7**	**37.6**	**37.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**43.9**	**29.6**	**29.4**	**30.9**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**51.5**	**36.6**	**37.3**	**37.7**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

Instruments Detail:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2026

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SUMMARY OF AMBIENT AIR QUALITY – FEBRUARY 2026

Pollutants	Description	Unit	Fire Station (Plant)-1	Sivaramapuram Village-2	Chandra sekharapuram Village-3	Varakavipudi Village-4
PM_{10}	Minimum	$\mu g/m^3$	**33.1**	**32.6**	**31.6**	**32.5**
	Maximum		**51.8**	**51.2**	**52.3**	**51.7**
	Average		**43.8**	**43.8**	**43.8**	**43.9**
	98 Percentile		**51.6**	**51.1**	**52.1**	**51.5**
$PM_{2.5}$	Minimum		**20.4**	**20.9**	**21.6**	**21.8**
	Maximum		**35.7**	**38.6**	**37.9**	**36.7**
	Average		**27.3**	**32.2**	**30.0**	**29.6**
	98 Percentile		**35.5**	**38.6**	**37.6**	**36.6**
SO_2	Minimum		**26.4**	**20.4**	**25.2**	**20.6**
	Maximum		**38.7**	**39.1**	**36.9**	**37.6**
	Average		**31.5**	**32.0**	**31.2**	**29.4**
	98 Percentile		**38.3**	**39.0**	**36.7**	**37.3**
NO_x	Minimum		**20.3**	**20.5**	**21.3**	**23.4**
	Maximum		**38.5**	**36.7**	**38.1**	**37.8**
	Average		**30.9**	**28.4**	**30.9**	**30.9**
	98 Percentile		**38.3**	**36.5**	**37.9**	**37.7**

K.S.Raj
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(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 28.03.2026**
Group : Atmospheric Pollution	**Issue Date : 01.04.2026**
Product : Ambient Air Quality Monitoring – MARCH 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/03-26/0001**
Location : Fire Station (Plant Site)	**Sample collected person details : S. Ganesh**

TESTRESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
03.03.2026	37.2	24.5	28.4	25.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
06.03.2026	40.1	28.3	23.9	20.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.03.2026	46.8	31.4	30.2	28.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.03.2026	55.3	25.1	24.1	23.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.03.2026	54.4	26.7	27.6	25.1	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.03.2026	47.3	30.3	32.8	30.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.03.2026	41.5	33.7	26.3	32.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.03.2026	48.8	32.9	31.8	17.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**37.2**	**24.5**	**23.9**	**17.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**55.3**	**33.7**	**32.8**	**32.7**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**46.4**	**29.1**	**28.1**	**25.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**55.2**	**33.6**	**32.7**	**32.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	20

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2027

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due: 28.02.2027

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(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 28.03.2026**
Group : Atmospheric Pollution	**Issue Date : 01.04.2026**
Product : Ambient Air Quality Monitoring – MARCH 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/03-26/0002**
Location : Sivaramapuram village	**Sample collected person details : S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
03.03.2026	30.8	31.6	34.2	30.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
06.03.2026	48.2	36.9	15.9	25.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.03.2026	45.3	25.3	20.4	29.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.03.2026	42.7	28.5	26.8	24.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.03.2026	41.9	30.1	25.5	28.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.03.2026	43.2	33.8	30.7	16.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.03.2026	49.7	29.7	31.9	15.2	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.03.2026	53.4	40.3	39.1	20.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**30.8**	**25.3**	**15.9**	**15.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**53.4**	**40.3**	**39.1**	**30.8**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**44.4**	**32.0**	**28.1**	**24.0**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**52.9**	**39.8**	**38.4**	**30.6**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220831
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2027

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQM-60/220518
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2027

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
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SPECTRA ENVIROTECH PVT LTD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 28.03.2026**
Group : Atmospheric Pollution	**Issue Date : 01.04.2026**
Product : Ambient Air Quality Monitoring – MARCH 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/03-26/0003**
Location : Chandrasekharapuram Village	**Sample collected person details : S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
03.03.2026	47.6	34.2	24.1	25.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
06.03.2026	52.4	35.8	23.8	18.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.03.2026	55.3	24.6	25.6	30.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.03.2026	49.8	32.4	30.4	32.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.03.2026	48.5	30.7	21.9	24.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.03.2026	40.1	25.5	27.3	31.5	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.03.2026	35.6	29.1	28.4	27.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.03.2026	54.3	26.8	29.3	29.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**35.6**	**24.6**	**21.9**	**18.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**55.3**	**35.8**	**30.4**	**32.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**48.0**	**29.9**	**26.4**	**27.5**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**55.2**	**35.6**	**30.2**	**32.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2027

Instruments Details:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2027

K.S.Lag
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SPECTRA ENVIROTECH PVT. LTD. VIZAG

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SPECTRA ENVIROTECH PVT LTD

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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline : Chemical	**Sample Registration Date : 28.03.2026**
Group : Atmospheric Pollution	**Issue Date : 01.04.2026**
Product : Ambient Air Quality Monitoring – MARCH 2026	**Lab Ref : SEPL/ES/SEILP2/AAQ/03-26/0004**
Location : Varakavipudi Village	**Sample collected person details: S. Ganesh**

TEST RESULT

Date Of Sampling	µg/m³				mg/m³	µg/m³				ng/m³		
	PM_{10}	$PM_{2.5}$	SO_2	NO_2	CO	Pb	O_3	NH_3	C_6H_6	BaP	As	Ni
03.03.2026	48.2	21.3	29.4	24.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
06.03.2026	50.4	24.6	16.3	20.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
10.03.2026	56.7	29.4	30.7	31.8	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
13.03.2026	54.9	31.8	31.8	30.6	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
17.03.2026	37.2	30.9	25.9	22.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
20.03.2026	49.1	32.7	19.7	32.3	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
23.03.2026	47.3	21.3	28.4	25.4	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
27.03.2026	45.5	25.9	19.3	29.7	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Min	**37.2**	**21.3**	**16.3**	**20.4**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Max	**56.7**	**32.7**	**31.8**	**32.3**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
Avg.	**48.7**	**27.2**	**25.2**	**27.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
98 Percentile	**56.4**	**32.6**	**31.6**	**32.2**	<1.5	<0.04	<5	<5	<2	<0.5	<1	<10
NAAQ Standards	100	60	80	80	2.0	1.0	100	400	5.0	1.0	6.0	2.0

Instruments Details:
Instrument : Fine Particulate sampler
Model/SI NO : AAQ510 / 220830
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2027

Instruments Detail:
Instrument : Respirable Dust sampler
Model/SI NO : AAQ510 MFC / 220723
Make : SSE (Shree Scientific Equipment)
Calibration Due : 28.02.2027

K.S.Lag
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SPECTRA ENVIROTECH PVT. LTD. VIZAG

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Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

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SUMMARY OF AMBIENT AIR QUALITY – MARCH 2026

Pollutants	Description	Unit	Fire Station (Plant)-1	Sivaramapuram Village-2	Chandra sekharapuram Village-3	Varakavipudi Village-4
PM_{10}	Minimum	$\mu g/m^3$	**37.2**	**30.8**	**35.6**	**37.2**
	Maximum		**55.3**	**53.4**	**55.3**	**56.7**
	Average		**46.4**	**44.4**	**48.0**	**48.7**
	98 Percentile		**55.2**	**52.9**	**55.2**	**56.4**
$PM_{2.5}$	Minimum		**24.5**	**25.3**	**24.6**	**21.3**
	Maximum		**33.7**	**40.3**	**35.8**	**32.7**
	Average		**29.1**	**32.0**	**29.9**	**27.2**
	98 Percentile		**33.6**	**39.8**	**35.6**	**32.6**
SO_2	Minimum		**23.9**	**15.9**	**21.9**	**16.3**
	Maximum		**32.8**	**39.1**	**30.4**	**31.8**
	Average		**28.1**	**28.1**	**26.4**	**25.2**
	98 Percentile		**32.7**	**38.4**	**30.2**	**31.6**
NO_x	Minimum		**17.3**	**15.2**	**18.4**	**20.4**
	Maximum		**32.7**	**30.8**	**32.5**	**32.3**
	Average		**25.4**	**24.0**	**27.5**	**27.2**
	98 Percentile		**32.4**	**30.6**	**32.4**	**32.2**

K.S.Raj
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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.)-524344.

Group: Atmospheric Pollution **Product: Noise Monitoring (24 Hrs.)- DECEMBER 2025** **Sampling Location-1:Main Gate**	**Sample Registration Date: 09.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0001**

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	08.12.2025	00:00	46.7
2		01:00	35.9
3		02:00	38.4
4		03:00	37.5
5		04:00	49.1
6		05:00	48.2
7		06:00	53.2
8		07:00	50.7
9		08:00	41.6
10		09:00	51.9
11		10:00	58.6
12		11:00	52.8
13		12:00	49.3
14		13:00	53.7
15		14:00	42.7
16		15:00	44.3
17		16:00	40.8
18		17:00	50.1
19		18:00	43.8
20		19:00	51.2
21		20:00	39.7
22		21:00	38.4
23		22:00	37.1
24		23:00	35.9

CPCB Standard:Day Time: (6 AM-10 PM) < 75 dB (A), Night Time: (10 PM-6 AM) < 70 dB (A)

Instrument Details: Sound Level Meter
Make/Model :Metravi/SL-3010
Serial No :11180097640
Calibration Due :28.02.2026

Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

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Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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SPECTRA ENVIROTECH PVT LTD

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution **Product: Noise Monitoring (24 Hrs.)- DECEMBER 2025** **Sampling Location-2:BTG Area**	**Sample Registration Date: 09.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0002**

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	08.12.2025	00:00	40.6
2		01:00	42.7
3		02:00	39.1
4		03:00	46.2
5		04:00	48.2
6		05:00	49.7
7		06:00	51
8		07:00	59.8
9		08:00	43.7
10		09:00	51.8
11		10:00	37.4
12		11:00	39.6
13		12:00	50.7
14		13:00	48.6
15		14:00	52.7
16		15:00	46.3
17		16:00	48.9
18		17:00	51.1
19		18:00	40.3
20		19:00	39.3
21		20:00	30.7
22		21:00	42.2
23		22:00	51.1
24		23:00	49.3

CPCB Standard: Day Time: (6 AM-10 PM) < 75 dB (A), Night Time: (10 PM-6 AM) < 70 dB (A)

Instrument Details: Sound Level Meter
Make/Model :Standard/SC-05
Serial No : 200525272
Calibration Due : 28.02.2026

K.S.Lag
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SPECTRA ENVIROTECH PVT. LTD. VIZAG

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Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution
Product: Noise Monitoring (24 Hrs.)- DECEMBER 2025
Sampling Location-3:Coal Handling Plant

Sample Registration Date: 09.12.2025
Issue Date: 14.12.2025
Lab Ref: SEPL/ES/SEILEILP/12-25/0003

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	08.12.2025	00:00	30.7
2		01:00	27.1
3		02:00	48.3
4		03:00	32.6
5		04:00	46.1
6		05:00	49.1
7		06:00	56.6
8		07:00	59.7
9		08:00	47.3
10		09:00	50.9
11		10:00	40.1
12		11:00	52.7
13		12:00	51.3
14		13:00	39.2
15		14:00	41.3
16		15:00	50.1
17		16:00	49.7
18		17:00	38.7
19		18:00	42.8
20		19:00	40.8
21		20:00	37.1
22		21:00	59.3
23		22:00	54.2
24		23:00	46.7

CPCB Standard: Day Time: (6 AM-10 PM) < 75 dB (A), Night Time: (10 PM-6 AM) < 70 dB (A)

Instrument Details: Sound Level Meter
Make/Model : Lutron /SL-34001
Serial No : Q6352440
Calibration Due : 28.02.2026

Verified by

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Managing Director

SPECTRA ENVIROTECH PVT LTD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution **Product: Noise Monitoring (24 Hrs.)- DECEMBER 2025** **Sampling Location-4:Varakavipudi Village**	**Sample Registration Date: 09.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0004**

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	08.12.2025	00:00	26.1
2		01:00	31.9
3		02:00	35.2
4		03:00	38.5
5		04:00	36.7
6		05:00	39.2
7		06:00	48.3
8		07:00	49.7
9		08:00	51.3
10		09:00	52.7
11		10:00	53.6
12		11:00	46.8
13		12:00	45
14		13:00	49.7
15		14:00	50.7
16		15:00	48.7
17		16:00	47.7
18		17:00	39.8
19		18:00	48.7
20		19:00	50.1
21		20:00	43.1
22		21:00	29.7
23		22:00	40.1
24		23:00	35.5

CPCB Standards (Residential Area)

Day Time: (6 AM-10 PM) < 55 dB (A), Night Time: (10 PM-6 AM) < 45 dB (A)

Instrument Details: Sound Level Meter
Make/Model : Metravi/SL-3010
Serial No : 11180097641
Calibration Due : 28.02.2026

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution **Product: Noise Monitoring (24 Hrs.)- DECEMBER 2025** **Sampling Location-5:Sivaramapuram Village**	**Sample Registration Date: 09.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0005**

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	08.12.2025	00:00	37.8
2		01:00	39.1
3		02:00	43.5
4		03:00	41.6
5		04:00	40.7
6		05:00	35.1
7		06:00	52.3
8		07:00	48.2
9		08:00	46.7
10		09:00	45.1
11		10:00	44.7
12		11:00	45.9
13		12:00	42.7
14		13:00	36.2
15		14:00	35.8
16		15:00	49.6
17		16:00	40.1
18		17:00	38.2
19		18:00	51.7
20		19:00	50.2
21		20:00	41.4
22		21:00	39.8
23		22:00	42.7
24		23:00	40.1

CPCB Standards (Residential Area)

Day Time: (6 AM-10 PM) < 55 dB (A), Night Time: (10 PM-6 AM) < 45 dB (A)

Instrument Details: Sound Level Meter
Make/Model :Metravi/SL-3010
SerialNo : 11180097642
Calibration Due : 28.02.2026

K.S.Lag
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SPECTRA ENVIROTECH PVT. LTD. VIZAG

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution
Product: Noise Monitoring (24 Hrs.)- DECEMBER 2025
Sampling Location-6:Chandrasekharapuram Village

Sample Registration Date: 09.12.2025
Issue Date: 14.12.2025
Lab Ref: SEPL/ES/SEILEILP/12-25/0006

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	08.12.2025	00:00	39.2
2		01:00	42.7
3		02:00	32.7
4		03:00	39.8
5		04:00	36.4
6		05:00	41.4
7		06:00	40.1
8		07:00	51.7
9		08:00	48.1
10		09:00	50.6
11		10:00	49.3
12		11:00	50.1
13		12:00	45.3
14		13:00	46.7
15		14:00	51.6
16		15:00	26.4
17		16:00	43.7
18		17:00	42.1
19		18:00	39.2
20		19:00	40.9
21		20:00	34.8
22		21:00	41.9
23		22:00	28.6
24		23:00	33.2

CPCB Standards (Residential Area)
Day Time: (6 AM-10 PM) < 55 dB (A), Night Time: (10 PM-6 AM) < 45 dB (A)

Instrument Details: Sound Level Meter
Make/Model :Metravi/SL-3010
SerialNo : 11180097643
Calibration Due : 28.02.2026

Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

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SPECTRA ENVIROTECH PVT LTD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution **Product: Noise Monitoring (24 Hrs.)- DECEMBER 2025** **Date of Sampling:08-12-2025**	**Sample Registration Date: 09.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0007**

TEST RESULT

Particulars	Main Gate dB (A)	BTG Area dB (A)	Coal Handling Plant dB (A)	Varakavipudi Village dB (A)	Sivaramapuram Village dB (A)	Chandra sekharapuram Village dB (A)
	Day Time: (6 AM-10 PM) < 75 dB (A), Night Time: (10 PM-6 AM) < 70 dB (A)			Day Time: (6 AM-10 PM) <55 dB (A), Night Time: (10 PM-6 AM) < 45 dB (A)		
Minimum	35.9	30.7	27.1	26.1	35.1	26.4
Maximum	58.6	59.8	59.7	53.6	52.3	51.7
Average	45.5	45.9	45.5	43.3	42.9	41.5

K.S.Lag
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TEST REPORT

ISSUED TO: **M/s. SEIL ENERGY INDIA LIMITED PROJECT-2** (2x660 MW Coal Based Thermal Power Plant), Near Ananthavaram (V),Thotapalli Gudur (M), SPSR Nellore (Dist.)-524344.	
Group: Atmospheric Pollution **Product: Noise Monitoring -MARCH 2026** **Sampling Location-1: DG SETS (3 X 1500 KVA)**	**Sample Registration Date: 23.03.2026** **Issue Date: 24.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0001**

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	16.03.2026	10:00	54.9

CPCB Standard:Day Time: (6 AM-10 PM) < 75 dB (A), Night Time: (10 PM-6 AM) < 70 dB (A)

Instrument Details: Sound Level Meter
Make/Model :Metravi/SL-3010
Serial No :11180097640
Calibration Due : 28.02.2027

Verified by

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution **Product: Noise Monitoring (24 Hrs.)- MARCH 2026** **Sampling Location-2:BTG Area**	**Sample Registration Date: 23.03.2026** **Issue Date: 24.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0002**

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	17.03.2026	00:00	35.7
2		01:00	45.3
3		02:00	34.1
4		03:00	42.9
5		04:00	40.3
6		05:00	44.6
7		06:00	47.2
8		07:00	53.9
9		08:00	42.9
10		09:00	56.7
11		10:00	32.9
12		11:00	35.4
13		12:00	46.7
14		13:00	44.8
15		14:00	53.6
16		15:00	41.9
17		16:00	42.1
18		17:00	43.7
19		18:00	47.9
20		19:00	35.8
21		20:00	26.7
22		21:00	48.9
23		22:00	49.8
24		23:00	44.6

CPCB Standard: Day Time: (6 AM-10 PM) < 75 dB (A), Night Time: (10 PM-6 AM) < 70 dB (A)

Instrument Details: Sound Level Meter
Make/Model :Metravi/SL-3010
Serial No :11180097640
Calibration Due : 28.02.2027

K.S.Raj
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

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TEST REPORT

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M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution
Product: Noise Monitoring (24 Hrs.)- MARCH 2026
Sampling Location-3:Coal Handling Plant

Sample Registration Date: 23.03.2026
Issue Date: 24.03.2026
Lab Ref: SEPL/ES/SEILEILP/03-26/0003

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	18.03.2026	00:00	25.7
2		01:00	24.3
3		02:00	44.2
4		03:00	34.5
5		04:00	42.9
6		05:00	45.6
7		06:00	50.3
8		07:00	53.7
9		08:00	43.1
10		09:00	46.2
11		10:00	35.8
12		11:00	54.3
13		12:00	54.8
14		13:00	42.7
15		14:00	39.1
16		15:00	47.2
17		16:00	45.3
18		17:00	33.1
19		18:00	35.1
20		19:00	37.3
21		20:00	30.5
22		21:00	48.3
23		22:00	50.1
24		23:00	42.1

CPCB Standard: Day Time: (6 AM-10 PM) < 75 dB (A), Night Time: (10 PM-6 AM) < 70 dB (A)

Instrument Details: Sound Level Meter
Make/Model :Metravi/SL-3010
Serial No :11180097640
Calibration Due : 28.02.2027

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution **Product: Noise Monitoring (24 Hrs.)- MARCH 2026** **Sampling Location-4:Varakavipudi Village**	**Sample Registration Date: 23.03.2026** **Issue Date: 24.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0004**

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	19.03.2026	00:00	30.1
2		01:00	25.7
3		02:00	31.6
4		03:00	40.9
5		04:00	32.5
6		05:00	33.7
7		06:00	43.9
8		07:00	44.2
9		08:00	47.8
10		09:00	50.1
11		10:00	49.8
12		11:00	43.7
13		12:00	51.3
14		13:00	53.7
15		14:00	46.7
16		15:00	42.2
17		16:00	51.6
18		17:00	35.4
19		18:00	43.7
20		19:00	44.9
21		20:00	40.7
22		21:00	33.9
23		22:00	37.8
24		23:00	39.6

CPCB Standards (Residential Area)
Day Time: (6 AM-10 PM) < 55 dB (A), Night Time: (10 PM-6 AM) < 45 dB (A)

Instrument Details: Sound Level Meter
Make/Model :Metravi/SL-3010
Serial No :11180097640
Calibration Due : 28.02.2027

Verified by

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Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution **Product: Noise Monitoring (24 Hrs.)- MARCH 2026** **Sampling Location-5:Sivaramapuram Village**	**Sample Registration Date: 23.03.2026** **Issue Date: 24.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0005**

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	20.03.2026	00:00	32.8
2		01:00	33.6
3		02:00	40.1
4		03:00	39.8
5		04:00	35.4
6		05:00	30.6
7		06:00	50.7
8		07:00	44.6
9		08:00	42.7
10		09:00	41.9
11		10:00	49.7
12		11:00	50.1
13		12:00	44.7
14		13:00	33.6
15		14:00	30.8
16		15:00	44.2
17		16:00	35.8
18		17:00	34.1
19		18:00	50.9
20		19:00	44.7
21		20:00	39.2
22		21:00	35.7
23		22:00	40.3
24		23:00	33.1

CPCB Standards (Residential Area)
Day Time: (6 AM-10 PM) < 55 dB (A), Night Time: (10 PM-6 AM) < 45 dB (A)

Instrument Details: Sound Level Meter
Make/Model :Metravi/SL-3010
Serial No :11180097640
Calibration Due : 28.02.2027

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TEST REPORT

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(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution **Product: Noise Monitoring (24 Hrs.)- MARCH 2026** **Sampling Location-6:Chandrasekharapuram Village**	**Sample Registration Date: 23.03.2026** **Issue Date: 24.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0006**

TEST RESULT

S. NO	DATE	TIME (Hrs.)	dB (A)
1	24.03.2026	00:00	33.1
2		01:00	39.6
3		02:00	30.3
4		03:00	34.7
5		04:00	32.5
6		05:00	40.6
7		06:00	43.8
8		07:00	50.1
9		08:00	52.2
10		09:00	54.6
11		10:00	53.4
12		11:00	45.8
13		12:00	40.1
14		13:00	41.2
15		14:00	48.7
16		15:00	30.1
17		16:00	38.2
18		17:00	43.5
19		18:00	34.3
20		19:00	35.8
21		20:00	30.9
22		21:00	41.9
23		22:00	32.8
24		23:00	37.3

CPCB Standards (Residential Area)
Day Time: (6 AM-10 PM) < 55 dB (A), Night Time: (10 PM-6 AM) < 45 dB (A)

Instrument Details: Sound Level Meter
Make/Model :Metravi/SL-3010
Serial No :11180097640
Calibration Due : 28.02.2027

Verified by

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution

Product: Noise Monitoring (24 Hrs.)- MARCH 2026

Sample Registration Date: 23.03.2026
Issue Date: 24.03.2026
Lab Ref: SEPL/ES/SEILEILP/03-26/0007

TEST RESULT

Particulars	DG SETS (3 X 1500 KVA) dB (A)	BTG Area dB (A)	Coal Handling Plant dB (A)	Varakavipudi Village dB (A)	Sivaramapuram Village dB (A)	Chandra sekharapuram Village dB (A)
	Day Time: (6 AM-10 PM) < 75 dB (A), Night Time: (10 PM-6 AM) < 70 dB (A)			Day Time: (6 AM-10 PM) <55 dB (A), Night Time: (10 PM-6 AM) < 45 dB (A)		
Minimum	41.3	26.7	24.3	25.7	30.6	30.1
Maximum	54.9	56.7	54.8	53.7	50.9	54.6
Average	48.1	43.3	41.9	41.5	40.0	40.2

K.S.Lag
Verified by

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Annexure-IV

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water
Product: Ground Water
Location-1:Ground Water – Ananthavaram Village (GW-1)
Location-2:Ground Water – Varakavipudi Village (GW-2)
Date of Monitoring: 08.12.2025

Sample Registration Date: 09.12.2025
Analysis Starting Date: 09.12.2025
Analysis Completed Date: 14.12.2025
Issue Date:14.12.2025
Lab Ref: SEPL/ES/SEILEILP/12-25/0001
Sample Collected By: S.Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	5.3	6.7
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	1.3	1.6
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	Agreeable	Agreeable
3	Taste	IS-3025(P-8)	--	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	IS-3025(P-5)	--	Agreeable	Agreeable	1.00	1.00
5	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	1,681	1,439
6	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	552	691
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	180	243
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	173	182
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	142	147
10	P- Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	--	--	Nil	Nil
11	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	49.7	45.9
12	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	21.3	31.8
13	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	0.17	0.34
14	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	0.03	0.04
15	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	167	173

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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-1	GW-2
16	Potassium as K	IS3025(P-45)1993	mg/l	--	--	56	69
17	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	191	183
18	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	77.3	81.4
19	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	34.8	39.1
20	Anionic Detergents as MBAS	Annex K of IS 13428	mg/l	<0.2	<1.0	<0.1	<0.1
21	Mineral Oil	IS 3025(Pt-39)	mg/l	<0.5	No Relaxation	<0.5	<0.5
22	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.31	0.39
23	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.72	0.64
24	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	0.01	0.02
25	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
26	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
27	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
28	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
29	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
30	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
31	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
32	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
33	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	0.02	0.01
34	Hexavalent Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.02	<0.05
35	Silica as SiO_2	IS3025(P-35)1988	mg/l	--	--	4.6	5.1
36	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
37	E-Coli	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
38	Total Coliforms	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent

K.S.Lag
Verified by

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Managing Director

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Ground Water

Location-3: Ground Water – Mittapalem Village (GW-3)

Location-4: Ground Water – Chandrasekharapuram Village (GW-4)

Date of Monitoring: 08.12.2025

Sample Registration Date:09.12.2025
Analysis Starting Date:09.12.2025
Analysis Completed Date:14.12.2025
Issue Date:14.12.2025
Lab Ref: SEPL/ES/SEILEILP/12-25/0002
Sample Collected By: S.Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-3	GW-4
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	8.3	7.2
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.0	1.0
3	Taste	IS-3025(P-8)	--	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	IS-3025(P-5)	--	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	1.0	1.0
6	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,538	1,726
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	493	481
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	154	161
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	138	161
10	P- Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	--	--	Nil	Nil
11	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	40.9	42.8
12	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	23.9	26.1
13	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	<0.1	<0.1
14	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	0.38	0.67
15	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	172	191

Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

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Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-3	GW-4
16	Potassium as K	IS3025(P-45)1993	mg/l	--	--	41	29
17	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	181	167
18	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	73.2	86.8
19	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	39.1	40.5
20	Anionic Detergents as MBAS	Annex K of IS 13428	mg/l	<0.2	<1.0	<0.1	<0.1
21	Mineral Oil	IS 3025(Pt-39)	mg/l	<0.5	No Relaxation	<0.5	<0.5
22	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.01	0.02
23	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.73	0.83
24	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	0.01	0.05
25	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
26	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
27	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
28	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
29	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
30	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
31	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
32	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
33	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	0.02	0.02
34	Hexavalent Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.05	<0.05
35	Silica as SiO_2	IS3025(P-35)1988	mg/l	--	--	4.8	5.9
36	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
37	E-Coli	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
38	Total Coliforms	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent

K.S.Lag
Verified by

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Ground Water

Location-5:Ground Water – Katepalli Village (GW-5)

Location-6:Ground Water – SivaramapuramVillage (GW-6)

Date of Monitoring: 08.12.2025

Sample Registration Date:09.12.2025
Analysis Starting Date:09.12.2025
Analysis Completed Date:14.12.2025
Issue Date:14.12.2025
Lab Ref: SEPL/ES/SEILEILP/12-25/0003
Sample Collected By: S.Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-5	GW-6
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	4.2	5.2
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.6	1.2
3	Taste	IS-3025(P-8)	--	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	IS-3025(P-5)	--	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	0.2	0.1
6	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,441	1,397
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	373	462
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	174	149
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	162	191
10	P- Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	--	--	Nil	Nil
11	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	49.6	43.4
12	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	29.7	21.8
13	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	0.29	0.24
14	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	0.02	0.01
15	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	158	169

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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-5	GW-6
16	Potassium as K	IS3025(P-45)1993	mg/l	--	--	49	52
17	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	156	187
18	Sulphate as SO_4	IS3025(P-24)1986	mg/l	200	400	44.9	58.1
19	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	34.3	39.5
20	Anionic Detergents as MBAS	Annex K of IS 13428	mg/l	<0.2	<1.0	<0.1	<0.1
21	Mineral Oil	IS 3025(Pt-39)	mg/l	<0.5	No Relaxation	<0.5	<0.5
22	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.01	0.02
23	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.51	0.73
24	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	0.02	0.01
25	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
26	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
27	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
28	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
29	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
30	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
31	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
32	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
33	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	0.02	0.03
34	Hexavalent Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.05	<0.05
35	Silica as SiO_2	IS3025(P-35)1988	mg/l	--	--	4.5	4.9
36	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
37	E-Coli	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
38	Total Coliforms	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Surface Water

Location-1:SurfaceWater – Varakavipudi Village (SW-1)

Location-2:Surface Water –Katepalli Village (SW-2)

Date of Monitoring:08.12.2025

Sample Registration Date:09.12.2025
Analysis Starting Date:09.12.2025
Analysis Completed Date:14.12.2025
Issue Date:14.12.2025
Lab Ref: SEPL/ES/SEILEILP/12-25/0004
Sample Collected By: S.Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	SW-1	SW-2
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	6.8	7.6
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.3	1.1
3	Taste	IS-3025(P-8)	--	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	IS-3025(P-5)	--	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	0.1	0.2
6	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,427	1469
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	351	369
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	173	181
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	142	161
10	P- Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	--	--	Nil	Nil
11	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	35.1	36.9
12	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	25.7	26.7
13	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	0.1	0.1
14	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	<0.001	<0.001
15	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	151	164

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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	SW-1	SW-2
16	Potassium as K	IS3025(P-45)1993	mg/l	--	--	69	53
17	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	164	188
18	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	68.2	65.7
19	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	31.7	36.9
20	Anionic Detergents as MBAS	Annex K of IS 13428	mg/l	<0.2	<1.0	<0.1	<0.1
21	Mineral Oil	IS 3025(Pt-39)	mg/l	<0.5	No Relaxation	<0.5	<0.5
22	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.01	0.02
23	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.47	0.89
24	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	0.02	0.02
25	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
26	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
27	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
28	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
29	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
30	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
31	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
32	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
33	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	<5.0	<5.0
34	Hexavalent Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.05	<0.05
35	Silica as SiO_2	IS3025(P-35)1988	mg/l	--	--	4.6	5.1
36	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
37	E-Coli	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
38	Total Coliforms	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water
Product: Ground Water
Location-1:Ground Water – Ananthavaram Village (GW-1)
Location-2:Ground Water – Varakavipudi Village (GW-2)
Date of Monitoring: 16.03.2026

Sample Registration Date: 17.03.2026
Analysis Starting Date: 17.03.2026
Analysis Completed Date: 21.03.2026
Issue Date:21.03.2026
Lab Ref: SEPL/ES/SEILEILP/03-26/0001
Sample Collected By: S.Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-1	GW-2
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	5.6	6.5
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.7	1.4
3	Taste	IS-3025(P-8)	--	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	IS-3025(P-5)	--	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	1.08	1.09
6	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,673	1,446
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	189	254
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	162	176
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	153	158
10	P- Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	--	--	Nil	Nil
11	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	47.1	48.3
12	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	22.6	33.5
13	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	0.19	0.49
14	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	0.02	0.03
15	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	173	184

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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-1	GW-2
16	Potassium as K	IS3025(P-45)1993	mg/l	--	--	62	72
17	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	181	189
18	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	71.3	83.5
19	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	36.7	40.2
20	Anionic Detergents as MBAS	Annex K of IS 13428	mg/l	<0.2	<1.0	<0.1	<0.1
21	Mineral Oil	IS 3025(Pt-39)	mg/l	<0.5	No Relaxation	<0.5	<0.5
22	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.25	0.42
23	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.67	0.69
24	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	0.02	0.01
25	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
26	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
27	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
28	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
29	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
30	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
31	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
32	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
33	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	0.01	0.01
34	Hexavalent Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.02	<0.05
35	Silica as SiO_2	IS3025(P-35)1988	mg/l	--	--	5.1	5.3
36	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
37	E-Coli	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
38	Total Coliforms	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent

K.S.Lag
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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Ground Water

Location-3: Ground Water – Mittapalem Village (GW-3)

Location-4: Ground Water – Chandrasekharapuram Village (GW-4)

Date of Monitoring: 16.03.2026

Sample Registration Date:17.03.2026
Analysis Starting Date:17.03.2026
Analysis Completed Date:21.03.2026
Issue Date:21.03.2026
Lab Ref: SEPL/ES/SEILEILP/03-26/0002
Sample Collected By: S.Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-3	GW-4
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	8.7	7.4
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.4	1.6
3	Taste	IS-3025(P-8)	--	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	IS-3025(P-5)	--	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	1.3	1.2
6	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,546	1,734
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	481	472
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	167	154
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	143	157
10	P- Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	--	--	Nil	Nil
11	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	42.6	44.3
12	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	24.3	27.2
13	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	<0.1	<0.1
14	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	0.43	0.71
15	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	179	183

K.S.Lag
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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-3	GW-4
16	Potassium as K	IS3025(P-45)1993	mg/l	--	--	45	32
17	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	176	171
18	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	75.8	88.7
19	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	40.2	42.5
20	Anionic Detergents as MBAS	Annex K of IS 13428	mg/l	<0.2	<1.0	<0.1	<0.1
21	Mineral Oil	IS 3025(Pt-39)	mg/l	<0.5	No Relaxation	<0.5	<0.5
22	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.02	0.03
23	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.82	0.91
24	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	0.03	0.02
25	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
26	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
27	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
28	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
29	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
30	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
31	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
32	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
33	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	0.01	0.03
34	Hexavalent Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.05	<0.05
35	Silica as SiO_2	IS3025(P-35)1988	mg/l	--	--	5.1	5.6
36	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
37	E-Coli	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
38	Total Coliforms	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Ground Water

Location-5:Ground Water – Katepalli Village (GW-5)

Location-6:Ground Water – SivaramapuramVillage (GW-6)

Date of Monitoring: 16.03.2026

Sample Registration Date:17.03.2026
Analysis Starting Date:17.03.2026
Analysis Completed Date:21.03.2026
Issue Date:21.03.2026
Lab Ref: SEPL/ES/SEILEILP/03-26/0003
Sample Collected By: S.Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-5	GW-6
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	4.5	5.7
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.9	1.5
3	Taste	IS-3025(P-8)	--	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	IS-3025(P-5)	--	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	0.3	0.2
6	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,457	1,381
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	382	473
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	181	151
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	173	187
10	P- Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	--	--	Nil	Nil
11	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	50.1	45.1
12	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	31.2	22.6
13	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	0.34	0.26
14	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	0.03	0.02
15	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	167	178

K.S.Raj
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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	GW-5	GW-6
16	Potassium as K	IS3025(P-45)1993	mg/l	--	--	56	59
17	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	167	191
18	Sulphate as SO_4	IS3025(P-24)1986	mg/l	200	400	47.3	60.2
19	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	36.8	41.3
20	Anionic Detergents as MBAS	Annex K of IS 13428	mg/l	<0.2	<1.0	<0.1	<0.1
21	Mineral Oil	IS 3025(Pt-39)	mg/l	<0.5	No Relaxation	<0.5	<0.5
22	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.02	0.01
23	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.68	0.81
24	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	0.01	0.01
25	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
26	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
27	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
28	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
29	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
30	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
31	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
32	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
33	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	0.02	0.02
34	Hexavalent Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.05	<0.05
35	Silica as SiO_2	IS3025(P-35)1988	mg/l	--	--	4.9	5.1
36	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
37	E-Coli	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
38	Total Coliforms	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water
Product: Surface Water
Location-1:SurfaceWater – Varakavipudi Village (SW-1)
Location-2:Surface Water –Katepalli Village (SW-2)
Date of Monitoring:16.03.2026

Sample Registration Date:17.03.2026
Analysis Starting Date:17.03.2026
Analysis Completed Date:21.03.2026
Issue Date:21.03.2026
Lab Ref: SEPL/ES/SEILEILP/03-26/0004
Sample Collected By: S.Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	SW-1	SW-2
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	6.2	7.1
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.5	1.6
3	Taste	IS-3025(P-8)	--	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	IS-3025(P-5)	--	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	0.2	0.3
6	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,431	1472
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	346	375
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	182	190
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	158	173
10	P- Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	--	--	Nil	Nil
11	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	37.9	38.1
12	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	27.1	28.0
13	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	0.2	0.3
14	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	<0.001	<0.001
15	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	167	171

K.S.Lag
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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	SW-1	SW-2
16	Potassium as K	IS3025(P-45)1993	mg/l	--	--	72	64
17	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	173	190
18	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	70.1	67.3
19	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	33.4	39.2
20	Anionic Detergents as MBAS	Annex K of IS 13428	mg/l	<0.2	<1.0	<0.1	<0.1
21	Mineral Oil	IS 3025(Pt-39)	mg/l	<0.5	No Relaxation	<0.5	<0.5
22	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.02	0.01
23	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.54	0.94
24	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	0.03	0.01
25	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
26	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
27	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
28	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
29	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
30	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
31	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
32	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
33	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	<5.0	<5.0
34	Hexavalent Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.05	<0.05
35	Silica as SiO_2	IS3025(P-35)1988	mg/l	--	--	4.9	5.6
36	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
37	E-Coli	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
38	Total Coliforms	ISO 9308-1	Per/ 100 ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur(M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Drinking Water** **Date of Monitoring: 08.12.2025** **Sample Collected By: S.Ganesh**	**Sample Registration Date: 09.12.2025** **Analysis Starting Date: 09.12.2025** **Analysis Completed Date: 15.12.2025** **Issue Date: 15.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0001**

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
Organoleptic & Physical Parameters						
1	pH	IS3025(P-11)2021	--	6.5-8.5	No relaxation	8.2
2	Color	IS3025(P-04)2021	Hazen	5.0 Max	15 Max	1.5
3	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	171
4	Turbidity	IS3025(P-10)1984	NTU	1.0 Max	5.0 Max	<0.1
5	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500 Max	2000 Max.	94
General Parameters Concerning Substances Undesirable in Excessive Amounts						
6	Aluminum as Al	IS3025(P-55)2003	mg/l	0.03 Max	0.2 Max.	< 0.01
7	Ammonia as N	IS3025(P-34)1988	mg/l	0.5 Max	No relaxation	< 0.1
8	Boron as B	IS3025(P-57)2021	mg/l	0.5 Max	1.0 Max	< 0.01
9	Barium as Ba	APHA-3120B	mg/l	0.7 Max	No relaxation	< 0.01
10	Calcium as Ca	IS3025(P-40)1991	mg/l	75 Max	200 Max	6.7
11	Chloramines	IS: 3025(Part-26)	mg/l	4.0 Max	No relaxation	< 0.07
12	Chlorides as Cl	IS3025(P-32)1988	mg/l	250 Max	1000 Max	68
13	Copper as Cu	IS3025(P-42)1992	mg/l	0.05 Max	1.5 Max	<0.01
14	Fluoride as F	IS3025(P-60)2008	mg/l	1.0 Max	1.5 Max	<0.1
15	Residual Free Chlorine	IS3025(P-26)1986	mg/l	0.2 Max	1.0 Max	< 0.1
16	Iron as Fe	IS3025(P-53)2003	mg/l	0.3 Max	No relaxation	< 0.01
17	Magnesium as Mg	IS3025(P-40)1991	mg/l	30 Max	100 Max	0.2

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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
18	Manganese as Mn	IS3025(P-59)2006	mg/l	0.1 Max	0.3 Max	<0.01
19	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45 Max	No relaxation	6.1
20	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	0.001 Max	0.002 Max	< 0.001
21	Selenium as Se	IS3025(P-56)2003	mg/l	0.01 Max	No relaxation	< 0.01
22	Silver as Ag	APHA-3120B	mg/l	0.1 Max	No relaxation	< 0.01
23	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200 Max	400 Max	7.9
24	Sulphide as H_2S	IS-3025(Pt-29)	mg/l	0.05 Max	No relaxation	< 0.05
25	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200 Max	600 Max	36
26	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200 Max	600 Max	57
27	Zinc as Zn	IS3025(P-49)1994	mg/l	5.0 Max	15 Max	0.03
Parameters Concerning Toxic Substances						
28	Cadmium as Cd	IS3025(P-41)1992	mg/l	0.003 Max	No relaxation	0.002
29	Lead as Pb	IS3025(P-47)1994	mg/l	0.01 Max	No relaxation	< 0.01
30	Mercury as Hg	IS3025(P-48)1994	mg/l	0.001 Max	No relaxation	< 0.001
31	Nickel as Ni	IS3025(P-54)	mg/l	0.02 Max	No relaxation	< 0.01
32	Arsenic as As	IS3025(P-37)1988	mg/l	0.01 Max	No relaxation	< 0.01
33	Chromium as Cr	IS3025(P-52)2003	mg/l	0.05 Max	No relaxation	< 0.05

IS-Indian Standard, **APHA-**American Public Health Association

Detection limit: 0.00001 mg/l for Pesticides, PCB's, PAH & 0.0001 mg/l for Trihalomethanes, to be applicable only when water is chlorinated

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Drinking Water** **Date of Monitoring:08.12.2025** **Sample Collected By: Ganesh**	**Sample Registration Date:09.12.2025** **Analysis Starting Date:09.12.2025** **Analysis Completed Date: 15.12.2025** **Issue Date: 15.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0002**

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
Organoleptic & Physical Parameters						
1	Odor	IS-3025(Pt-5)	--	Agreeable	Agreeable	Agreeable
2	Taste	IS-3025(Pt-8)	--	Agreeable	Agreeable	Agreeable
General Parameters Concerning Substances Undesirable in Excessive Amounts						
3	Anionic detergents as MBAS	Annex K of IS 13428	mg/l	0.2 Max	1.0 Max	<0.1
4	Mineral Oil	IS-3025(Pt-39)	mg/l	0.5 Max	No relaxation	<0.01
Parameters Concerning Toxic Substances						
5	Cyanide as CN	IS-3025(Pt-27)	mg/l	0.05 Max	No relaxation	<0.01
6	Molybdenum as Mo	APHA-3120B	mg/l	0.07 Max	No relaxation	<0.01

Note: IS-Indian Standard, **APHA-**American Public Health Association

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Drinking Water** **Date of Monitoring:08.12.2025** **Sample Collected By: Ganesh**	**Sample Registration Date:09.12.2025** **Analysis Starting Date:09.12.2025** **Analysis Completed Date: 15.12.2025** **Issue Date: 15.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0003**

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
1	DDT	EPA 508	mg/l	Not more than 0.0001	Not more than 0.0001	ND
	a). o,p'-DDT	-	-	-	-	-
	b). p,p'-DDT	-	-	-	-	-
	c). o,p'-DDE	-	-	-	-	-
	d). p,p'-DDE	-	-	-	-	-
	e). o,p'-DDD	-	-	-	-	-
2	BHC (HCH)	EPA 508	mg/l	Not more than 0.0001	Not more than 0.0001	ND
3	Endosulfan	EPA 508	mg/l	Not more than 0.0001	Not more than 0.0001	ND
4	Monocrotophos	EPA 8141A	mg/l	Not more than 0.0001	Not more than 0.0001	ND
5	Ethion	EPA 1657A	mg/l	Not more than 0.0001	Not more than 0.0001	ND
6	Chlorpyrifos	EPA 525A	mg/l	Not more than 0.0001	Not more than 0.0001	ND
	a) Phorate	-	-	-	-	-
	b) PhorateSulphoxide	-	-	-	-	-
	c) Phorate Sulphone	-	-	-	-	-
7	2,4-D	EPA 515.1	mg/l	Not more than 0.0001	Not more than 0.0001	ND

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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
8	Butachlor	EPA 525.2	mg/l	Not more than 0.0001	Not more than 0.0001	ND
9	Isoproturon	EPA 532	mg/l	Not more than 0.0001	Not more than 0.0001	ND
10	Alachlor	EPA 525.2	mg/l	Not more than 0.0001	Not more than 0.0001	ND
11	Atrazine	EPA 525.208	mg/l	Not more than 0.0001	Not more than 0.0001	ND
12	Methyl Parathion	EPA 8141A	mg/l	Not more than 0.0001	Not more than 0.0001	ND
	a) Methyl Parathion	-	-	-	-	-
	b) Methyl Paraoxon	-	-	-	-	-
13	Malathion	EPA 8141A	mg/l	Not more than 0.0001	Not more than 0.0001	ND
	a) Malathion	-	-	-	-	-
	b) Malaoxon	-	-	-	-	-
14	Aldrin	EPA 525.2	mg/l	Not more than 0.0001	Not more than 0.0001	ND
	a) Aldrin	-	-	-	-	-
	b) Dieldrin	-	-	-	-	-

Note: ND- Non-Detectable

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Drinking Water** **Date of monitoring:08.12.2025** **Sample Collected By: Ganesh**	**Sample Registration Date:09.12.2025** **Analysis Starting Date:09.12.2025** **Analysis Completed Date: 15.12.2025** **Issue Date: 15.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0004**

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
Microbiology Analysis						
1	Total Bacterial Count at 36° C	ISO 6222	CFU/ml	--	--	31
2	Coli forms	ISO 9308-1	Per/100ml	Absent/100ml	Absent/100ml	Absent
3	Escherichia. coli	ISO 9308-1	Per/100ml	Absent/100ml	Absent/100ml	Absent

Note: ISO-International Organization for Standardization

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur(M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical
Group: Water
Product: Drinking Water
Date of Monitoring: 16.03.2026
Sample Collected By: S.Ganesh

Sample Registration Date: 17.03.2026
Analysis Starting Date: 17.03.2026
Analysis Completed Date: 21.03.2026
Issue Date: 21.03.2026
Lab Ref: SEPL/ES/SEILEILP/03-26/0001

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
Organoleptic & Physical Parameters						
1	pH	IS3025(P-11)2021	--	6.5-8.5	No relaxation	8.5
2	Color	IS3025(P-04)2021	Hazen	5.0 Max	15 Max	1.9
3	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	183
4	Turbidity	IS3025(P-10)1984	NTU	1.0 Max	5.0 Max	<0.1
5	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500 Max	2000 Max.	81
General Parameters Concerning Substances Undesirable in Excessive Amounts						
6	Aluminum as Al	IS3025(P-55)2003	mg/l	0.03 Max	0.2 Max.	< 0.01
7	Ammonia as N	IS3025(P-34)1988	mg/l	0.5 Max	No relaxation	< 0.1
8	Boron as B	IS3025(P-57)2021	mg/l	0.5 Max	1.0 Max	< 0.01
9	Barium as Ba	APHA-3120B	mg/l	0.7 Max	No relaxation	< 0.01
10	Calcium as Ca	IS3025(P-40)1991	mg/l	75 Max	200 Max	7.0
11	Chloramines	IS: 3025(Part-26)	mg/l	4.0 Max	No relaxation	< 0.07
12	Chlorides as Cl	IS3025(P-32)1988	mg/l	250 Max	1000 Max	72
13	Copper as Cu	IS3025(P-42)1992	mg/l	0.05 Max	1.5 Max	<0.01
14	Fluoride as F	IS3025(P-60)2008	mg/l	1.0 Max	1.5 Max	<0.1
15	Residual Free Chlorine	IS3025(P-26)1986	mg/l	0.2 Max	1.0 Max	< 0.1
16	Iron as Fe	IS3025(P-53)2003	mg/l	0.3 Max	No relaxation	< 0.01
17	Magnesium as Mg	IS3025(P-40)1991	mg/l	30 Max	100 Max	0.1

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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
18	Manganese as Mn	IS3025(P-59)2006	mg/l	0.1 Max	0.3 Max	<0.01
19	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45 Max	No relaxation	6.3
20	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	0.001 Max	0.002 Max	< 0.001
21	Selenium as Se	IS3025(P-56)2003	mg/l	0.01 Max	No relaxation	< 0.01
22	Silver as Ag	APHA-3120B	mg/l	0.1 Max	No relaxation	< 0.01
23	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200 Max	400 Max	7.5
24	Sulphide as H_2S	IS-3025(Pt-29)	mg/l	0.05 Max	No relaxation	< 0.05
25	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200 Max	600 Max	35
26	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200 Max	600 Max	52
27	Zinc as Zn	IS3025(P-49)1994	mg/l	5.0 Max	15 Max	0.02
Parameters Concerning Toxic Substances						
28	Cadmium as Cd	IS3025(P-41)1992	mg/l	0.003 Max	No relaxation	0.001
29	Lead as Pb	IS3025(P-47)1994	mg/l	0.01 Max	No relaxation	< 0.01
30	Mercury as Hg	IS3025(P-48)1994	mg/l	0.001 Max	No relaxation	< 0.001
31	Nickel as Ni	IS3025(P-54)	mg/l	0.02 Max	No relaxation	< 0.01
32	Arsenic as As	IS3025(P-37)1988	mg/l	0.01 Max	No relaxation	< 0.01
33	Chromium as Cr	IS3025(P-52)2003	mg/l	0.05 Max	No relaxation	< 0.05

IS-Indian Standard, **APHA-**American Public Health Association

Detection limit: 0.00001 mg/l for Pesticides, PCB's, PAH & 0.0001 mg/l for Trihalomethanes, to be applicable only when water is chlorinated

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Drinking Water** **Date of Monitoring:16.03.2026** **Sample Collected By: Ganesh**	**Sample Registration Date:17.03.2026** **Analysis Starting Date:17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0002**

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
Organoleptic & Physical Parameters						
1	Odor	IS-3025(Pt-5)	--	Agreeable	Agreeable	Agreeable
2	Taste	IS-3025(Pt-8)	--	Agreeable	Agreeable	Agreeable
General Parameters Concerning Substances Undesirable in Excessive Amounts						
3	Anionic detergents as MBAS	Annex K of IS 13428	mg/l	0.2 Max	1.0 Max	<0.1
4	Mineral Oil	IS-3025(Pt-39)	mg/l	0.5 Max	No relaxation	<0.01
Parameters Concerning Toxic Substances						
5	Cyanide as CN	IS-3025(Pt-27)	mg/l	0.05 Max	No relaxation	<0.01
6	Molybdenum as Mo	APHA-3120B	mg/l	0.07 Max	No relaxation	<0.01

Note: IS-Indian Standard, **APHA-**American Public Health Association

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Drinking Water** **Date of Monitoring:16.03.2026** **Sample Collected By: Ganesh**	**Sample Registration Date:17.03.2026** **Analysis Starting Date:17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0003**

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
1	DDT	EPA 508	mg/l	Not more than 0.0001	Not more than 0.0001	ND
	a). o,p'-DDT	-	-	-	-	-
	b). p,p'-DDT	-	-	-	-	-
	c). o,p'-DDE	-	-	-	-	-
	d). p,p'-DDE	-	-	-	-	-
	e). o,p'-DDD	-	-	-	-	-
2	BHC (HCH)	EPA 508	mg/l	Not more than 0.0001	Not more than 0.0001	ND
3	Endosulfan	EPA 508	mg/l	Not more than 0.0001	Not more than 0.0001	ND
4	Monocrotophos	EPA 8141A	mg/l	Not more than 0.0001	Not more than 0.0001	ND
5	Ethion	EPA 1657A	mg/l	Not more than 0.0001	Not more than 0.0001	ND
6	Chlorpyrifos	EPA 525A	mg/l	Not more than 0.0001	Not more than 0.0001	ND
	a) Phorate	-	-	-	-	-
	b) PhorateSulphoxide	-	-	-	-	-
	c) Phorate Sulphone	-	-	-	-	-
7	2,4-D	EPA 515.1	mg/l	Not more than 0.0001	Not more than 0.0001	ND

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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
8	Butachlor	EPA 525.2	mg/l	Not more than 0.0001	Not more than 0.0001	ND
9	Isoproturon	EPA 532	mg/l	Not more than 0.0001	Not more than 0.0001	ND
10	Alachlor	EPA 525.2	mg/l	Not more than 0.0001	Not more than 0.0001	ND
11	Atrazine	EPA 525.208	mg/l	Not more than 0.0001	Not more than 0.0001	ND
12	Methyl Parathion	EPA 8141A	mg/l	Not more than 0.0001	Not more than 0.0001	ND
	a) Methyl Parathion	-	-	-	-	-
	b) Methyl Paraoxon	-	-	-	-	-
13	Malathion	EPA 8141A	mg/l	Not more than 0.0001	Not more than 0.0001	ND
	a) Malathion	-	-	-	-	-
	b) Malaoxon	-	-	-	-	-
14	Aldrin	EPA 525.2	mg/l	Not more than 0.0001	Not more than 0.0001	ND
	a) Aldrin	-	-	-	-	-
	b) Dieldrin	-	-	-	-	-

Note: ND- Non-Detectable

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Drinking Water** **Date of monitoring:16.03.2026** **Sample Collected By: Ganesh**	**Sample Registration Date:17.03.2026** **Analysis Starting Date:17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0004**

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	ACCEPTABLE LIMITS AS PER IS: 10500:2012	PERMISSIBLE LIMITS AS PER IS 10500:2012	RESULTS
Microbiology Analysis						
1	Total Bacterial Count at 36° C	ISO 6222	CFU/ml	--	--	33
2	Coli forms	ISO 9308-1	Per/100ml	Absent/100ml	Absent/100ml	Absent
3	Escherichia. coli	ISO 9308-1	Per/100ml	Absent/100ml	Absent/100ml	Absent

Note: ISO-International Organization for Standardization

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),ThotapalliGudur(M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Heavy Metal Analysis of Coal- DECEMBER 2025** **Sample Location: Coal Feeder#2** **Date of Monitoring:08.12.2025** **Sample Collected By: S.Ganesh**	**Sample Registration Date: 09.12.2025** **Analysis Starting Date: 09.12.2025** **Analysis Completed Date: 14.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0001**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Arsenic as As	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.83
2	Mercury as Hg	USEPA-3050B Dec-1996(Rev.2)	ppm	0.2	<0.02
3	Chromium as Cr	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	1.72
4	Lead as Pb	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.61

Note: USEPA- United States Environmental Protection Agency

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),ThotapalliGudur(M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Heavy Metal Analysis of Coal- MARCH 2026** **Sample Location: Coal Feeder#2** **Date of Monitoring: 16.03.2026** **Sample Collected By: S.Ganesh**	**Sample Registration Date: 17.03.2026** **Analysis Starting Date: 17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0001**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Arsenic as As	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.76
2	Mercury as Hg	USEPA-3050B Dec-1996(Rev.2)	ppm	0.2	<0.02
3	Chromium as Cr	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	1.65
4	Lead as Pb	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.57

Note: USEPA- United States Environmental Protection Agency

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TEST REPORT

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(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Heavy Metal Analysis of Fly Ash- DECEMBER 2025** **Date of Monitoring: 08.12.2025** **Sample Collected By: S.Ganesh**	**Sample Registration Date: 09.12.2025** **Analysis Starting Date: 09.12.2025** **Analysis Completed Date: 14.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0001**

TEST RESULT

S. No	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Arsenic as As	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.67
2	Mercury as Hg	USEPA-3050B Dec-1996(Rev.2)	ppm	0.2	<0.03
3	Chromium as Cr	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.43
4	Lead as Pb	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.81

Note: USEPA- United States Environmental Protection Agency

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Heavy Metal Analysis of Bottom Ash- DECEMBER 2025** **Date of Monitoring: 08.12.2025** **Sample Collected By: S.Ganesh**	**Sample Registration Date: 09.12.2025** **Analysis Starting Date: 09.12.2025** **Analysis Completed Date: 14.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0002**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Arsenic as As	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.91
2.	Mercury as Hg	USEPA-3050B Dec-1996(Rev.2)	ppm	0.2	<0.02
3.	Chromium as Cr	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.46
4.	Lead as Pb	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.82

Note: USEPA- United States Environmental Protection Agency

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LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Heavy Metal Analysis of Fly Ash- MARCH 2026** **Date of Monitoring: 16.03.2026** **Sample Collected By: S.Ganesh**	**Sample Registration Date: 17.03.2026** **Analysis Starting Date: 17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0001**

TEST RESULT

S. No	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Arsenic as As	USEPA-3050B Dec-1996(Rev.2)	Ppm	5.0	0.71
2	Mercury as Hg	USEPA-3050B Dec-1996(Rev.2)	Ppm	0.2	<0.03
3	Chromium as Cr	USEPA-3050B Dec-1996(Rev.2)	Ppm	5.0	0.50
4	Lead as Pb	USEPA-3050B Dec-1996(Rev.2)	Ppm	5.0	0.86

Note: USEPA- United States Environmental Protection Agency

K.S.Lag
Verified by

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical **Group: Water** **Product: Heavy Metal Analysis of Bottom Ash- MARCH 2026** **Date of Monitoring: 16.03.2026** **Sample Collected By: S.Ganesh**	**Sample Registration Date: 17.03.2026** **Analysis Starting Date: 17.03.2026** **Analysis Completed Date: 21.03.2026** **Issue Date: 21.03.2026** **Lab Ref: SEPL/ES/SEILEILP/03-26/0002**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Arsenic as As	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.85
2.	Mercury as Hg	USEPA-3050B Dec-1996(Rev.2)	ppm	0.2	<0.02
3.	Chromium as Cr	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.54
4.	Lead as Pb	USEPA-3050B Dec-1996(Rev.2)	ppm	5.0	0.90

Note: USEPA- United States Environmental Protection Agency

K.S.Raj
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LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location-1: Piezo Well No-1- Water – North East Side (PW-1)

Location-2: Piezo Well No-2- Water– South East Side (PW-2)

Date of Monitoring: 08.12.2025

Sample Registration Date: 09.12.2025
Analysis Starting Date: 09.12.2025
Analysis Completed Date: 14.12.2025
Issue Date: 14.12.2025
Lab Ref: SEPL/ES/SEILEILP/12-25/0001
Sample Collected By: S. Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	PW-1	PW-2
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	6.9	7.3
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.0	1.2
3	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	0.2	0.2
4	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,301	1,169
5	Temperature	--	°C	--	--	37.9	34.8
6	Total Suspended Solids	IS3025(P-17)1984	mg/l	--	--	31	63
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	342	385
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	191	173
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	169	171
10	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	41.8	38.7
11	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	21.2	29.4
12	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	<0.1	<0.1
13	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	<0.1	<0.1
14	Calcium Hardness as $CaCO_3$	IS3025(P-40)1991	mg/l	--	--	173	181
15	Magnesium Hardness as CaCO3	IS3025(P-40)1991	mg/l	--	--	74	83
16	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	164	135
17	Potassium as K	IS3025(P-45)1993	mg/l	--	--	36	38
18	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	181	179

K.S.Lag
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LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	PW-1	PW-2
19	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	71.3	**81.6**
20	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	29.1	39.7
21	Chemical Oxygen Demand	IS3025(P-58)2006	mg/l	--	--	<5.0	<5.0
22	Biochemical Oxygen Demand (3 days at 27°C)	IS3025(P-44)1993	mg/l	--	--	<3.0	<3.0
23	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.02	0.01
24	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.53	0.41
25	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	<0.01	<0.01
26	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
27	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
28	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
29	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
30	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
31	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
32	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
33	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
34	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	<0.01	<0.01
35	Total Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.01	<0.01
36	Aluminium as Al	IS3025(P-55)2003	mg/l	0.5	1.0	<0.01	<0.01
37	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
38	Dissolved Oxygen	IS3025(P-38)1989	mg/l	--	--	6.8	4.9
39	Oil & Grease	IS3025(P-39)2021	mg/l	--	--	<1.0	<1.0
40	Phosphates as PO_4	IS3025(P-31)1998	mg/l	--	--	<0.01	<0.01
41	Percent Sodium	IS3025(P-45)1993	%	--	--	23.9	21.1
42	E-Coli	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
43	Total Coliforms	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
44	Fecal Coliforms	IS-1622-1981	MPN/ 100ml	--	--	Absent	Absent

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location-3: Piezo Well No-3- Water – South West Side (PW-3)

Location-4: Piezo Well No-4- Water– North West Side (PW-4)

Date of Monitoring: 08.12.2025

Sample Registration Date: 09.12.2025
Analysis Starting Date: 09.12.2025
Analysis Completed Date: 14.12.2025
Issue Date: 14.12.2025
Lab Ref: SEPL/ES/SEILEILP/12-25/0002
Sample Collected By: S. Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	PW-3	PW-4
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	7.5	8.2
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.0	1.0
3	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	0.1	0.1
4	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,391	1,359
5	Temperature	--	°C	--	--	31.3	37.8
6	Total Suspended Solids	IS3025(P-17)1984	mg/l	--	--	86	61
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	279	191
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	152	163
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	181	179
10	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	92	86
11	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	35	40
12	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	<0.1	<0.1
13	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	<0.1	<0.1
14	Calcium Hardness as $CaCO_3$	IS3025(P-40)1991	mg/l	--	--	159	172
15	Magnesium Hardness as CaCO3	IS3025(P-40)1991	mg/l	--	--	126	142
16	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	157	168
17	Potassium as K	IS3025(P-45)1993	mg/l	--	--	41	63
18	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	162	141

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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	PW-3	PW-4
19	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	51.3	**56.7**
20	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	38.9	40.1
21	Chemical Oxygen Demand	IS3025(P-58)2006	mg/l	--	--	<5.0	<5.0
22	Biochemical Oxygen Demand (3 days at 27°C)	IS3025(P-44)1993	mg/l	--	--	<3.0	<3.0
23	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.01	0.05
24	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.43	0.82
25	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	<0.01	<0.01
26	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
27	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
28	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
29	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
30	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
31	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
32	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
33	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
34	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	<0.01	<0.01
35	Total Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.01	<0.01
36	Aluminium as Al	IS3025(P-55)2003	mg/l	0.5	1.0	<0.01	<0.01
37	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
38	Dissolved Oxygen	IS3025(P-38)1989	mg/l	--	--	6.1	3.1
39	Oil & Grease	IS3025(P-39)2021	mg/l	--	--	<1.0	<1.0
40	Phosphates as PO_4	IS3025(P-31)1998	mg/l	--	--	<0.01	<0.01
41	Percent Sodium	IS3025(P-45)1993	%	--	--	39.8	41.2
42	E-Coli	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
43	Total Coliforms	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
44	Fecal Coliforms	IS-1622-1981	MPN/ 100ml	--	--	Absent	Absent

K.S.Lag
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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product Water

Location-5: Piezo Well No-5- Water – Near CAAQMS (PW-5)

Date of Monitoring: 08.12.2025

Sample Registration Date: 09.12.2025
Analysis Starting Date: 09.12.2025
Analysis Completed Date: 14.12.2025
Issue Date: 14.12.2025
Lab Ref: SEPL/ES/SEILEILP/12-25/0003
Sample Collected By: S. Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS
				ACCEPTABLE	PERMISSIBLE	PW-5
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	7.4
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.6
3	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	0.3
4	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,489
5	Temperature	--	°C	--	--	39.7
6	Total Suspended Solids	IS3025(P-17)1984	mg/l	--	--	73
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	271
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	142
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	131
10	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	71
11	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	49
12	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	<0.1
13	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	<0.1
14	Calcium Hardness as $CaCO_3$	IS3025(P-40)1991	mg/l	--	--	181
15	Magnesium Hardness as CaCO3	IS3025(P-40)1991	mg/l	--	--	146
16	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	179
17	Potassium as K	IS3025(P-45)1993	mg/l	--	--	81
18	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	137

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

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Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS
				ACCEPTABLE	PERMISSIBLE	PW-5
19	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	51.6
20	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	36.7
21	Chemical Oxygen Demand	IS3025(P-58)2006	mg/l	--	--	<5.0
22	Biochemical Oxygen Demand (3 days at 27°C)	IS3025(P-44)1993	mg/l	--	--	<3.0
23	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.86
24	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.64
25	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	<0.01
26	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1
27	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001
28	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001
29	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001
30	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01
31	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01
32	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01
33	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01
34	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	<0.01
35	Total Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.01
36	Aluminium as Al	IS3025(P-55)2003	mg/l	0.5	1.0	<0.01
37	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01
38	Dissolved Oxygen	IS3025(P-38)1989	mg/l	--	--	6.7
39	Oil & Grease	IS3025(P-39)2021	mg/l	--	--	<1.0
40	Phosphates as PO_4	IS3025(P-31)1998	mg/l	--	--	<0.01
41	Percent Sodium	IS3025(P-45)1993	%	--	--	30.1
42	E-Coli	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent
43	Total Coliforms	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent
44	Fecal Coliforms	IS-1622-1981	MPN/ 100ml	--	--	Absent

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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SPECTRA ENVIROTECH PVT LTD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location-1: Piezo Well No-1- Water – North East Side (PW-1)

Location-2: Piezo Well No-2- Water– South East Side (PW-2)

Date of Monitoring: 16.03.2026

Sample Registration Date: 17.03.2026
Analysis Starting Date: 17.03.2026
Analysis Completed Date: 23.03.2026
Issue Date: 23.03.2026
Lab Ref: SEPL/ES/SEILEILP/03-26/0001
Sample Collected By: S. Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	PW-1	PW-2
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	6.4	7.6
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.5	1.4
3	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	0.3	0.4
4	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,316	1,172
5	Temperature	--	°C	--	--	38.4	36.8
6	Total Suspended Solids	IS3025(P-17)1984	mg/l	--	--	36	68
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	353	391
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	184	183
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	152	184
10	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	42.7	39.5
11	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	23.5	28.1
12	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	<0.1	<0.1
13	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	<0.1	<0.1
14	Calcium Hardness as $CaCO_3$	IS3025(P-40)1991	mg/l	--	--	181	176
15	Magnesium Hardness as CaCO3	IS3025(P-40)1991	mg/l	--	--	80	91
16	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	172	142
17	Potassium as K	IS3025(P-45)1993	mg/l	--	--	40	43
18	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	172	184

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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	PW-1	PW-2
19	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	73.4	**84.3**
20	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	30.1	40.1
21	Chemical Oxygen Demand	IS3025(P-58)2006	mg/l	--	--	<5.0	<5.0
22	Biochemical Oxygen Demand (3 days at 27°C)	IS3025(P-44)1993	mg/l	--	--	<3.0	<3.0
23	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.01	0.02
24	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.67	0.50
25	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	<0.01	<0.01
26	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
27	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
28	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
29	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
30	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
31	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
32	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
33	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
34	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	<0.01	<0.01
35	Total Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.01	<0.01
36	Aluminium as Al	IS3025(P-55)2003	mg/l	0.5	1.0	<0.01	<0.01
37	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
38	Dissolved Oxygen	IS3025(P-38)1989	mg/l	--	--	6.3	5.1
39	Oil & Grease	IS3025(P-39)2021	mg/l	--	--	<1.0	<1.0
40	Phosphates as PO_4	IS3025(P-31)1998	mg/l	--	--	<0.01	<0.01
41	Percent Sodium	IS3025(P-45)1993	%	--	--	25.7	23.4
42	E-Coli	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
43	Total Coliforms	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
44	Fecal Coliforms	IS-1622-1981	MPN/ 100ml	--	--	Absent	Absent

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location-3: Piezo Well No-3- Water – South West Side (PW-3)

Location-4: Piezo Well No-4- Water– North West Side (PW-4)

Date of Monitoring: 16.03.2026

Sample Registration Date: 17.03.2026
Analysis Starting Date: 17.03.2026
Analysis Completed Date: 23.03.2026
Issue Date: 23.03.2026
Lab Ref: SEPL/ES/SEILEILP/03-26/0002
Sample Collected By: S. Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	PW-3	PW-4
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	7.7	8.6
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.6	1.5
3	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	0.2	0.3
4	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,384	1,367
5	Temperature	--	°C	--	--	32.5	39.1
6	Total Suspended Solids	IS3025(P-17)1984	mg/l	--	--	80	72
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	283	182
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	167	171
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	189	183
10	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	85	89
11	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	43	47
12	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	<0.1	<0.1
13	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	<0.1	<0.1
14	Calcium Hardness as $CaCO_3$	IS3025(P-40)1991	mg/l	--	--	162	161
15	Magnesium Hardness as CaCO3	IS3025(P-40)1991	mg/l	--	--	132	153
16	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	168	173
17	Potassium as K	IS3025(P-45)1993	mg/l	--	--	47	72
18	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	171	154

K.S.Lag
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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS	
				ACCEPTABLE	PERMISSIBLE	PW-3	PW-4
19	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	53.7	**60.1**
20	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	39.2	42.7
21	Chemical Oxygen Demand	IS3025(P-58)2006	mg/l	--	--	<5.0	<5.0
22	Biochemical Oxygen Demand (3 days at 27°C)	IS3025(P-44)1993	mg/l	--	--	<3.0	<3.0
23	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.02	0.04
24	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.50	0.73
25	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	<0.01	<0.01
26	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1	<0.1
27	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001	<0.001
28	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001	<0.001
29	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001	<0.001
30	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01	<0.01
31	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01	<0.01
32	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01	<0.01
33	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01	<0.01
34	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	<0.01	<0.01
35	Total Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.01	<0.01
36	Aluminium as Al	IS3025(P-55)2003	mg/l	0.5	1.0	<0.01	<0.01
37	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01	<0.01
38	Dissolved Oxygen	IS3025(P-38)1989	mg/l	--	--	6.8	3.5
39	Oil & Grease	IS3025(P-39)2021	mg/l	--	--	<1.0	<1.0
40	Phosphates as PO_4	IS3025(P-31)1998	mg/l	--	--	<0.01	<0.01
41	Percent Sodium	IS3025(P-45)1993	%	--	--	40.1	43.7
42	E-Coli	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
43	Total Coliforms	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent	Absent
44	Fecal Coliforms	IS-1622-1981	MPN/ 100ml	--	--	Absent	Absent

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SPECTRA ENVIROTECH PVT LTD

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V),Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product Water

Location-5: Piezo Well No-5- Water – Near CAAQMS (PW-5)

Date of Monitoring: 16.03.2026

Sample Registration Date: 17.03.2026
Analysis Starting Date: 17.03.2026
Analysis Completed Date: 23.03.2026
Issue Date: 23.03.2026
Lab Ref: SEPL/ES/SEILEILP/03-26/0003
Sample Collected By: S. Ganesh

TEST RESULT

S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS
				ACCEPTABLE	PERMISSIBLE	PW-5
1	pH	IS3025(P-11)2021	--	6.5- 8.5	No Relaxation	7.6
2	Color	IS3025(P-04)2021	Hazen	1.0	5.0	1.8
3	Turbidity	IS3025(P-10)1984	NTU	1.0	5.0	0.4
4	Electric Conductivity	IS3025(P-14)2013	µs/cm	--	--	1,491
5	Temperature	--	°C	--	--	41.3
6	Total Suspended Solids	IS3025(P-17)1984	mg/l	--	--	78
7	Total Dissolved Solids	IS3025(P-16)1984	mg/l	500	2000	278
8	Total Hardness as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	153
9	Total Alkalinity as $CaCO_3$	IS3025(P-23)1986	mg/l	200	600	137
10	Calcium as Ca	IS3025(P-40)1991	mg/l	75	200	79
11	Magnesium as Mg	IS3025(P-40)1991	mg/l	30	100	52
12	Free Residual Chlorine	IS3025(P-26)1986	mg/l	0.2	No Relaxation	<0.1
13	Boron as B	IS3025(P-57)2021	mg/l	0.5	1.0	<0.1
14	Calcium Hardness as $CaCO_3$	IS3025(P-40)1991	mg/l	--	--	189
15	Magnesium Hardness as CaCO3	IS3025(P-40)1991	mg/l	--	--	154
16	Sodium as Na	IS3025(P-45)1993	mg/l	--	--	183
17	Potassium as K	IS3025(P-45)1993	mg/l	--	--	89
18	Chloride as Cl	IS3025(P-32)1988	mg/l	250	1000	143

K.S.Lag
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S. NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS AS PER IS:10500		RESULTS
				ACCEPTABLE	PERMISSIBLE	PW-5
19	Sulphates as SO_4	IS3025(P-24)1986	mg/l	200	400	53.4
20	Nitrates as NO_3	IS3025(P-34)1988	mg/l	45	No Relaxation	38.5
21	Chemical Oxygen Demand	IS3025(P-58)2006	mg/l	--	--	<5.0
22	Biochemical Oxygen Demand (3 days at 27°C)	IS3025(P-44)1993	mg/l	--	--	<3.0
23	Iron as Fe	IS3025(P-53)2003	mg/l	<0.3	No Relaxation	0.79
24	Fluoride as F	IS3025(P-60)2008	mg/l	<1.0	<1.5	0.72
25	Copper as Cu	IS3025(P-42)1992	mg/l	<0.05	<1.5	<0.01
26	Manganese as Mn	IS3025(P-59)2006	mg/l	<0.1	<0.3	<0.1
27	Phenolic Compounds as C_6H_5OH	IS3025(P-43)1992	mg/l	<0.001	<0.002	<0.001
28	Cadmium as Cd	IS3025(P-41)1992	mg/l	<0.003	No Relaxation	<0.001
29	Mercury as Hg	IS3025(P-48)1994	mg/l	<0.001	No Relaxation	<0.001
30	Selenium as Se	IS3025(P-56)2003	mg/l	<0.01	No Relaxation	<0.01
31	Total Arsenic as As	IS3025(P-37)1988	mg/l	<0.01	<0.20	<0.01
32	Cyanide as CN	IS3025(P-27)1986	mg/l	<0.05	No Relaxation	<0.01
33	Lead as Pb	IS3025(P-47)1994	mg/l	<0.01	No Relaxation	<0.01
34	Zinc as Zn	IS3025(P-49)1994	mg/l	<5.0	<15	<0.01
35	Total Chromium as Cr^{+6}	IS3025(P-52)2003	mg/l	<0.05	<1.0	<0.01
36	Aluminium as Al	IS3025(P-55)2003	mg/l	0.5	1.0	<0.01
37	Pesticides	As per STP	mg/l	--	No Relaxation	<0.01
38	Dissolved Oxygen	IS3025(P-38)1989	mg/l	--	--	6.9
39	Oil & Grease	IS3025(P-39)2021	mg/l	--	--	<1.0
40	Phosphates as PO_4	IS3025(P-31)1998	mg/l	--	--	<0.01
41	Percent Sodium	IS3025(P-45)1993	%	--	--	32.5
42	E-Coli	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent
43	Total Coliforms	ISO 9308-1	Per/ 100ml	Absent/ 100 ml	Absent/ 100 ml	Absent
44	Fecal Coliforms	IS-1622-1981	MPN/ 100ml	--	--	Absent

K.S.Lag
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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) - 524344.

Discipline: Chemical Group: Waste water Sample Location: **Ash Pond Effluent Water** Date of Monitoring: **08.12.2025** Sample Collected By: Ganesh	**Sample Registration Date: 09.12.2025** **Analysis Starting Date: 09.12.2025** **Analysis Completed Date: 14.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0001**

TEST RESULT

S.NO	TEST PARAMETERS	UNIT	TEST METHOD	STANDARD	RESULT
1.	pH	---	IS:3025(Part-11)1983	6.5-8.5	**7.3**
2.	Color	Hazen	IS-3025(Part-4)2021	Colorless	**Colorless**
3.	Odor	---	IS-3025(Part-5)	Agreeable	**Agreeable**
4.	Total Suspended Solids	mg/l	IS:3025(Part-11)1983	100	**92**
5.	Chemical Oxygen Demand (COD)	mg/l	IS:3025(Part-58)-2006	250	**138**
6.	Biochemical Oxygen Demand (BOD) (3 days at 27 °C)	mg/l	IS:3025(Part-44)-1993	100	**94**
7.	Oil & Grease	mg/l	IS:3025(Part-39)-1991	10	**<1.0**
8.	Total Arsenic as As	mg/l	IS:3025(Part-37)-1988	0.2	**<0.01**
9.	Mercury as Hg	mg/l	IS:3025(Part-48)-1994	0.01	**<0.001**
10.	Lead as Pb	mg/l	IS:3025(Part-47)-1994	2.0	**<0.01**
11.	Cadmium as Cd	mg/l	IS:3025(Part-41)-1992	2.0	**<0.001**
12.	Hexavalent Chromium as Cr^{6+}	mg/l	IS:3025(Part-52)-2003	1.0	**<0.001**

IS-Indian Standard

K.S.Raj
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) - 524344.

Discipline	**: Chemical**	**Sample Registration Date**	**: 17.03.2026**
Group	**: Waste water**	**Analysis Starting Date**	**: 17.03.2026**
Sample Location	**: Ash Pond Effluent Water**	**Analysis Completed Date**	**: 21.03.2026**
Date of Sampling	**: 16.03.2026**	**Issue Date**	**: 21.03.2026**
		Lab Ref: SEPL/ES/SEILP2/APEW/03-26/0001	
		Sample Collected By	**: N. Suresh**

TEST RESULT

S.NO	TEST PARAMETERS	UNIT	TEST METHOD	RESULT
1.	pH	---	IS:3025(Part-11)1983	**7.4**
2.	Color	Hazen	IS-3025(Part-4)2021	**Colorless**
3.	Odor	---	IS-3025(Part-5)	**Agreeable**
4.	Total Suspended Solids	mg/l	IS:3025(Part-11)1983	**80**
5.	Chemical Oxygen Demand (COD)	mg/l	IS:3025(Part-58)-2006	**142**
6.	Biochemical Oxygen Demand (BOD) (3 days at 27 °C)	mg/l	IS:3025(Part-44)-1993	**45**
7.	Oil & Grease	mg/l	IS:3025(Part-39)-1991	**<1.0**
8.	Total Arsenic as As	mg/l	IS:3025(Part-37)-1988	**<0.01**
9.	Mercury as Hg	mg/l	IS:3025(Part-48)-1994	**<0.001**
10.	Lead as Pb	mg/l	IS:3025(Part-47)-1994	**<0.01**
11.	Cadmium as Cd	mg/l	IS:3025(Part-41)-1992	**<0.001**
12.	Hexavalent Chromium as Cr^{6+}	mg/l	IS:3025(Part-52)-2003	**<0.001**

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TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2X660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.)-524344.

Discipline: Chemical	**Date Of Sampling: 08.12.2025**
Group: Water	**Sample Registration Date: 09.12.2025**
Product: Water	**Analysis Starting Date: 09.12.2025**
Location: Boiler Feed Water	**Issue Date: 14.12.2025**
Qty: 1 Ltrs	**Lab Ref: SEPL/ES/SEILEILP/12-25/0001**
Packing: Plastic Container	**Sample collected person details: S. Ganesh**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Total Suspended Solids	IS3025(P-17)1984	mg/l	100	**9.9**
2.	Oil & Grease	IS3025(P-39)2021	mg/l	10	**< 1.0**
3.	Copper (Total)	IS3025(P-42)1992	mg/l	1.0	**0.90**
4.	Ferrous as Fe^{+}	IS3025(P-53)2003	mg/l	1.0	**0.71**
5.	Free Available Chlorine	IS3025(P-26)1986	mg/l	0.5	**< 0.1**

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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2X660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.)-524344.

Discipline: Chemical	**Date Of Sampling: 08.12.2025**
Group: Water	**Sample Registration Date: 09.12.2025**
Product: Water	**Analysis Starting Date: 09.12.2025**
Location: Cooling Tower Blow Down	**Issue Date: 14.12.2025**
Qty: 1 Ltrs	**Lab Ref: SEPL/ES/SEILEILP/12-25/0002**
Packing: Plastic Container	**Sample collected person details: S. Ganesh**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARD	RESULTS
1.	Zinc	IS3025(P-49)1994	mg/l	1.0	**0.64**
2.	Chromium (Total)	IS3025(P-52)2003	mg/l	0.2	**BDL**
3.	Phosphate	IS3025(P-31)1998	mg/l	5.0	**3.9**
4.	Free Available Chlorine	IS3025(P-26)1986	mg/l	0.5	**0.2**

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Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
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Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2X660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.)-524344.

Discipline	**: Chemical**	**Date Of Sampling**	**: 16.03.2026**
Product	**: Water**	**Sample Registration Date**	**: 17.03.2026**
Location	**: Boiler Feed Water**	**Analysis Starting Date**	**: 17.03.2026**
Qty	**: 2 Ltrs**	**Issue Date**	**: 21.03.2026**
Packing	**: Plastic Container**	**Lab Ref : SEPL/ES/SEILP2/BFW/03-26/0002**	
		Sample collected person details: N. Suresh	

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	RESULTS
1.	Total Suspended Solids	IS3025(P-17)1984	mg/l	**8.1**
2.	Oil & Grease	IS3025(P-39)2021	mg/l	**< 1.0**
3.	Copper (Total)	IS3025(P-42)1992	mg/l	**0.83**
4.	Ferrous as Fe^{+}	IS3025(P-53)2003	mg/l	**0.69**
5.	Free Available Chlorine	IS3025(P-26)1986	mg/l	**< 0.1**

K.S.Lag
Verified by

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Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2X660 MW Coal Based Thermal Power Plant),
Near Ananthavaram (V), Thotapalli Gudur (M),
SPSR Nellore (Dist.)-524344.

Discipline : Chemical	**Date Of Sampling : 16.03.2026**
Group : Water	**Sample Registration Date : 17.03.2026**
Product : Water	**Analysis Starting Date : 17.03.2026**
Location : Cooling Tower Blow Down	**Issue Date : 21.03.2026**
Qty : 2 Ltrs	**Lab Ref: SEPL/ES/SEILP2/CTBD/03-26/0003**
Packing : Plastic Container	**Sample collected person details: N. Suresh**

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	RESULTS
1.	Zinc	IS3025(P-49)1994	mg/l	**0.58**
2.	Chromium (Total)	IS3025(P-52)2003	mg/l	**BDL**
3.	Phosphate	IS3025(P-31)1998	mg/l	**4.9**
4.	Free Available Chlorine	IS3025(P-26)1986	mg/l	**0.2**

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

Date: 16/04/2026

Annexure-V

SEIL ENERGY INDIA LIMITED (P1&P2)
SEIL ENERGY INDIA LIMITED - P1,
PYNAMPURAM, NELATUR VILLAGE, MUTHUKURU MANDAL,
MUTHUKUR - 524344
NELLORE
ANDHRA PRADESH
INDIA
37AACCT8413D1ZH(GSTIN Number)

Policy No : 0304015430
Renewal : 00
Endorsement : 00

Dear Sir / Madam,

We thank you for choosing **Tata AIG General Insurance Company Ltd**. as your preferred insurer. Your Policy No. Is 0304015430 00 00.

We are glad that you have chosen our product **PUBLIC LIABILITY ACT** and given us an opportunity to be your risk carrier for this Product.

'Casualty Line' caters to most of the Enterprises / Industries in India, whether Large, Medium or Small. As one of the India's most established insurance companies, we understand these unique needs of coverage. At Tata AIG we care for you and would strive to offer convenience coupled with a range of products that cater continously to your ever increasing needs.

Enclosed please find your policy docket based on the information furnished by you in the Proposal.

We look forward to a long and mutually beneficial relationship and providing you wider range of benefits in the years to come.

Yours Sincerely,
For Tata AIG General Insurance Company Limited
Digitally Signed by: Malpa Devi Maharana
Date: 16/04/2026
Location: Mumbai

Insurance is the subject matter of the solicitation. For more details on risk factors, terms and conditions, please read sales brochure carefully before concluding a sale.
TATA AIG General Insurance Company Ltd. Regd. Office: 15th floor, Tower A, Peninsula Business Park,Ganpatrao Kadam Marg, Off Senapati Bapat Marg, Lower Parel, Mumbai- 400 013.
IRDA Registration No.108, CIN No : U85110MH2000PLC128425, PAN : AABCT3518Q, UIN No : IRDAN108CP0058V01201819
Website: www.tataaig.com Customer Support Number 022 6489 8282 E-mail: customersupport@tataaig.com

PUBLIC LIABILITY ACT POLICY
POLICY SCHEDULE

Attaching to and forming part of Policy No. 0304015430 00 00
Name of Insured Owner: SEIL ENERGY INDIA LIMITED (P1&P2)
Business: Thermal power plant

Address: SEIL ENERGY INDIA LIMITED - P1,
PYNAMPURAM, NELATUR VILLAGE, MUTHUKURU MANDAL,
MUTHUKUR - 524344
NELLORE
ANDHRA PRADESH
INDIA
37AACCT8413D1ZH(GSTIN Number)
Place of supply -ANDHRA PRADESH
State code -37

Territorial limits: Anywhere in India

Policy Period: **From:** 26/03/2026 12:00 AM/ PM
To Midnight of: 25/03/2027 12:00 AM/ PM

Indemnity limit:Rs 2,500,000,000.00(AOA Limit) in respect of any one accident and not exceeding Rs 2,500,000,000.00(AOY Limit) in the aggregate during the policy period.

Service Tax Registration No:

Premium	₹850,000.00
IGST @18 %	₹ 153,000.00

Contribution to the Environment Relief Fund:₹ 850,000.00

Date of Proposal and declaration:22/01/2022

In witness whereof the undersigned being duly authorized by the company and on behalf of the company has hereto set his hand at HYDERABAD on 16/04/2026

The stamp duty of 0.5 paid in cash or demand draft or by pay order,vide Receipt/Challan no: LOA/ENF-1/CSD/174/2026 dated the 25/03/2026

For Tata AIG General Insurance Company Limited
Digitally Signed By: Malpa Devi Maharana
Date: 16/04/2026
Location: Mumbai

Date :16/04/2026
Place :HYDERABAD

Policy Servicing Office
Tata AIG General Insurance Company Limited
5TH AND 6TH FLOOR, IMPERIAL TOWERS,, H.NO 7-1-6-617/A, GHMC NO - 615,616,,HYDERABAD,TELANGANA,HYDERABAD-500016
Tel No:91-44-66864900

Insurance is the subject matter of the solicitation. For more details on risk factors, terms and conditions, please read sales brochure carefully before concluding a sale.
TATA AIG General Insurance Company Ltd. Regd. Office: 15th floor, Tower A, Peninsula Business Park,Ganpatrao Kadam Marg, Off Senapati Bapat Marg, Lower Parel, Mumbai- 400 013.
IRDA Registration No.108, CIN No : U85110MH2000PLC128425, PAN : AABCT3518Q, UIN No : IRDAN108CP0058V01201819
Website: www.tataaig.com Customer Support Number 022 6489 8282 E-mail: customersupport@tataaig.com

RECEIPT

Receipt No. : 106001133056535

Receipt Date : 26/03/2026

Policy No : 0304015430 00 00

Received with thanks from SEIL ENERGY INDIA LIMITED a sum of ₹**18,53,000.00** (Rupees Eighteen Lakhs Fifty Three Thousand And Paise Zero Only)

Sr. No.	Policy Number	Total Premium (₹)	Utilized from the receipt for policy (₹)	Balance (₹)
1	0304015430 00 00	18,53,000.00	18,53,000.00	0.00

Note:

1. This is a computer generated receipt and does not require a signature.
2. Upon issuance of this Receipt, all previously issued temporary receipts, if any, related to this Policy shall be considered null and void.
3. Amounts received by cheque shall be subject to realisation.
4. Any amount received in excess of the Premium is being/shall be refunded by the Company.

GSTIN : 36AABCT3518Q1ZX - TELANGANA Service Accounting Code : 997139

Insurance is the subject matter of the solicitation. For more details on risk factors, terms and conditions, please read sales brochure carefully before concluding a sale.
TATA AIG General Insurance Company Ltd. Regd. Office: 15th floor, Tower A, Peninsula Business Park,Ganpatrao Kadam Marg, Off Senapati Bapat Marg, Lower Parel, Mumbai- 400 013.
IRDA Registration No.108, CIN No : U85110MH2000PLC128425,PAN : AABCT3518Q
Website: www.tataaig.com 24*7 Customer Support Number 022 6489 8282 E-mail: customersupport@tataaig.com

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IRDA Registration No.108, CIN No : U85110MH2000PLC128425, PAN : AABCT3518Q, UIN No : IRDAN108CP0058V01201819
Website: www.tataaig.com Customer Support Number 022 6489 8282 E-mail: customersupport@tataaig.com

LIABILITY INSURANCE POLICY
(UNDER PUBLIC LIABILITY INSURANCE ACT 1991)

1. OPERATIVE CLAUSE

Whereas the Insured Owner named in the schedule hereto and carrying on business described in the said schedule has applied to the Tata AIG General Insurance Company Limited (hereinafter called the Company) for the indemnity hereinafter contained and has made a written proposal and declaration which shall be the basis of this contract and is deemed to be incorporated herein and has paid the premium and statutory contribution towards the Environment Relief Fund as per the provisions of the Public Liability Insurance Act and the rules framed thereunder.

NOW THIS POLICY WITNESSETH that subject to the terms, exceptions and conditions contained herein or endorsed hereon, the company will indemnify the insured owner against the statutory liability arising out of accidents occurring during the currency of the policy due to handling hazardous substances as provided for in the said Act and the Rules framed thereunder.

2. DEFINITIONS:

a) "ACT" unless otherwise specifically mentioned shall mean the Public Liability Insurance Act 1991 as amended from time to time;

b) "Accident" means an accident involving a fortuitous, sudden or unintentional occurrence while handling any hazardous substance resulting in continuous, intermittent or repeated exposure to death of, or injury to any person or damage to any property but does not include an accident by reason only of war or radioactivity;

c) "Handling" in relation to any harzardous substance means the manufacture, processing, treatment, package, storage, transportation by vehicle, use, collection, destruction, conversion, offering for sale, transfer or the like of such hazardous substance;

d) "Hazardous Substance" means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act, 1986, and exceeding such quantity as may be specified, by notification, by the Central Government;

e) "Owner" means a person who owns, or has control over handling any hazardous substance at the time of accident and includes:
i) in the case of a firm any of its partners;
ii) in the case of an association, any of its members, and
iii) in the case of a company, any of its directors, managers, secretaries or other officers who is/are directly in charge of, and is/are responsible to the company for the conduct of the business of the company;

f) "Turnover" shall mean
i) Manufacturing units-Annual Gross Sales of all goods including all levies and taxes
ii) Godowns/ warehouse owners-Total Annual rental receipts.
iii)Transport Operators-Total Annual freight receipts.
iv)Others-Total Annual gross receipts.

3. EXCLUSIONS:

(1) arising out of wilful or intentional non-compliance of any Statutory provisions.

(2) in respect of fines, penalties, punitive and/or exemplary damages.

(3) arising under any other legislation except in so far as provided for in Section 8 Sub Section (1) and (2) of the Act.

(4) in respect of damage to property owned, leased or hired or under hire purchase or on loan to the Insured or otherwise in the Insured Owner's control, care or custody.

(5) directly or indirectly occasioned by, happening through or in consequence of war, invasion, act of foreign enemy, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection or military or usurped power;

(6) directly or indirectly caused by or contributed to by.

(a) ionising radiation or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel

(b) the radioactive, toxic, explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof.

4. CONDITIONS:

(1) The Insured owner shall give written notice to the Company as soon as reasonably practicable of any claim made against the Insured Owner or of any specific event or circumstance that may give rise to a claim. The Insured Owner shall immediately give to the Company copies of notice of applications forwarded by the Collector and all

such additional information and or assistance that the company may require.

(2) No admission, offer, promise or payments shall be made or given by or on behalf of the Insured owner under this policy without the written consent of the Company.

(3) The Company shall not be liable for any claim for relief made after five years from the date of occurrence of the accident.

(4) The Insured Owner shall keep record of annual turnover, and at the time of renewal of insurance declare such turnover and all other details as may be required by the Company. The Company shall at all reasonable times have full rights to call for and examine such records.

(5) If at the time of happening of any accident resulting in a claim under this policy there be any other insurance covering the same liability, then the Company shall not be liable to pay or contribute more than its ratable proportion of such liability.

(6) This policy may be cancelled by the Insured Owner by giving 30 days notice in writing to the company in which event the Company will retain premium at short period scale subject to there not having occurred an accident during the policy period which may give rise to a claims(s), failing which no refund of premium shall be allowable.

(7) This Policy may also be cancelled by the Insurer by giving 30 days notice in writing to the Insured Owner in which event the Company shall be liable to repay on demand a ratable proportion of the premium for the unexpired term from the date of cancellation.

(8) If the Company shall disclaim liability to the Insured Owner for any claim hereunder and such claim shall not within 12 calendar months from the date of such disclaimer have been made the subject matter of a suit in a competent court of law, then the claim for the practical purposes shall be deemed to have been abandoned and shall not thereafter be recoverable hereunder or be made the subject matter of any suit.

(9) The Company shall not be liable to make any payment in respect of any claim if such claim shall be in any manner fraudulent or supported, by any person on behalf of the Insured Owner and/or if the insurance has been continued in consequence of any material misstatement or non-disclosure of any material information by or on behalf of the Insured Owner. In such a case if the Company pays any amount to the claimant due to any statutory provision such amount shall be recoverable from the Insured Owner.

(10) The Policy and the Schedule shall be read together as one contract and any word or expression to which a specific meaning has been assigned in the Act and the Rules framed thereunder or in this Policy shall bear such specific meaning.

(11) Any dispute regarding interpretation of the terms, conditions and exclusions of this Policy shall be determined in accordance with the law and practice of a court of competent jurisdiction within India.

GRIEVANCE REDRESSAL POLICY

Grievance Lodgment Stage

The Company is committed to extend the best possible services to its customers. However, if you are not satisfied with our services and wish to lodge a complaint, please feel free to contact us through below channels:

Call us 24*7 Customer Support Number 022 6489 8282
Email us at customersupport@tataaig.com

Write to us at : Customer Support, Tata AIG General Insurance Company Limited
A-501 Building No.4 IT Infinity Park, Dindoshi, Malad (E), Mumbai - 400097
Visit the Servicing Branch mentioned in the policy document

Nodal Officer

Please visit our website at www.tataaig.com to know the contact details of the Nodal Officer for your servicing branch.
After investigating the grievance internally and subsequent closure, we will send our response within a period of 10 days from the date of receipt of the complaint by the Company or its office in Mumbai. In case the resolution is likely to take longer time, we will inform you of the same through an interim reply.

Escalation Level 1

For lack of a response or if the resolution still does not meet your expectations, you can write to manager.customersupport@tataaig.com. After investigating the matter internally and subsequent closure, we will send our response within a period of 8 days from the date of receipt of your complaint.

Escalation Level 2

For lack of a response or if the resolution still does not meet your expectations, you can write to the Head-Customer Services at head.customerservices@tataaig.com. After examining the matter, we will send you our response within a period of 7 days from the date of receipt of your complaint. Within 30 days of lodging a complaint with us, if you do not get a satisfactory response from us and you wish to pursue other avenues for redressal of grievances, you may approach Insurance Ombudsman appointed by IRDA under the Insurance Ombudsman Scheme. Given below are details of the Insurance Ombudsman located at various centers.

List of Insurance Ombudsman Offices

Office of the Ombudsman	Address & Contact details	Jurisdiction of Office Union Territory, District
AHMEDABAD	Office of the Insurance Ombudsman, Jeevan Prakash Building, 6th Floor, Tilak Marg, Relief Road, Ahmedabad - 380 001. Tel.: 079 - 25501201/02/05/06 Email: bimalokpal.ahmedabad@ecoi.co.in	Gujarat, Dadra & Nagar Haveli, Daman and Diu.
BENGALURU	Office of the Insurance Ombudsman, Jeevan Soudha Building, PID No. 57-27-N-19 Ground Floor, 19/19, 24th Main Road, JP Nagar, Ist Phase, Bengaluru – 560 078. Tel.: 080 - 26652048 / 26652049 Email: bimalokpal.bengaluru@ecoi.co.in	Karnataka
BHOPAL	Office of the Insurance Ombudsman, Janak Vihar Complex, 2nd Floor, 6, Malviya Nagar, Opp. Airtel Office, Near New Market, Bhopal – 462 003. Tel.: 0755 - 2769201 / 2769202 Fax: 0755 - 2769203 Email: bimalokpal.bhopal@ecoi.co.in	Madhya Pradesh Chattisgarh
BHUBANESHWAR	Office of the Insurance Ombudsman, 62, Forest park, Bhubneshwar - 751 009. Tel.: 0674 - 2596461 /2596455 Fax: 0674 - 2596429 Email: bimalokpal.bhubaneswar@ecoi.co.in	Orissa
CHANDIGARH	Office of the Insurance Ombudsman, S.C.O. No. 101, 102 & 103, 2nd Floor, Batra Building, Sector 17 – D, Chandigarh - 160 017. Tel.: 0172 - 2706196 / 2706468 Fax: 0172 - 2708274 Email : bimalokpal.chandigarh@ecoi.co.in	Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Chandigarh
CHENNAI	Office of the Insurance Ombudsman, Fatima Akhtar Court, 4th Floor, 453, Anna Salai, Teynampet, CHENNAI - 600 018. Tel.: 044 - 24333668 / 24335284 Fax: 044 - 24333664 Email : bimalokpal.chennai@ecoi.co.in	Tamil Nadu, Pondicherry Town and Karaikal (which are part of Pondicherry).
DELHI	Office of the Insurance Ombudsman, 2/2 A, Universal Insurance Building, Asaf Ali Road, New Delhi – 110 002. Tel.: 011 - 23239633 / 23237532 Fax: 011 - 23230858 Email: bimalokpal.delhi@ecoi.co.in	Delhi
GUWAHATI	Office of the Insurance Ombudsman, Jeevan Nivesh, 5th Floor, Nr. Panbazar over bridge, S.S. Road, Guwahati – 781001(ASSAM). Tel.: 0361 - 2132204 / 2132205 Fax: 0361 - 2732937 Email : bimalokpal.guwahati@ecoi.co.in	Assam, Meghalaya, Manipur, Mizoram, Arunachal Pradesh, Nagaland and Tripura
HYDERABAD	Office of the Insurance Ombudsman, 6-2-46, 1st floor, "Moin Court", Lane Opp. Saleem Function Palace, A. C. Guards, Lakdi-Ka-Pool, Hyderabad - 500 004. Tel.: 040 - 65504123 / 23312122 Fax: 040 - 23376599 Email : bimalokpal.hyderabad@ecoi.co.in	Andhra Pradesh, Telangana, Yanam and part of Territory of Pondicherry.
JAIPUR	Office of the Insurance Ombudsman, Jeevan Nidhi – II Bldg., Gr. Floor, Bhawani Singh Marg, Jaipur-302 005. Tel.: 0141 - 2740363 Email: Bimalokpal.jaipur@ecoi.co.in	Rajasthan
ERNAKULAM	Office of the Insurance Ombudsman, 2nd Floor, Pulinat Bldg., Opp. Cochin Shipyard, M. G. Road, Ernakulam - 682 015. Tel.: 0484 - 2358759 / 2359338 Fax: 0484 - 2359336 Email : bimalokpal.ernakulam@ecoi.co.in	Kerala, Lakshadweep, Mahe-a part of Pondicherry
KOLKATA	Office of the Insurance Ombudsman, Hindustan Bldg. Annexe, 4th Floor, 4, C.R. Avenue, KOLKATA-700 072. Tel.: 033 - 22124339 / 22124340 Fax : 033 - 22124341 Email: bimalokpal.kolkata@ecoi.co.in	West Bengal, Sikkim, Andaman & Nicobar Islands
LUCKNOW	Office of the Insurance Ombudsman, 6th Floor, Jeevan Bhawan, Phase-II, Nawal Kishore Road, Hazratganj, Lucknow - 226 001. Tel.: 0522 - 2231330 / 2231331 Fax: 0522 - 2231310 Email : bimalokpal.lucknow@ecoi.co.in	Districts of Uttar Pradesh : Laitpur, Jhasi, Mahoba, Hamirpur, Banda, Chitrakoot, Allahabad, Mirzapur, Sonbhabdra, Fatehpur, Pratapgarh, Jaunpur, Varanasi, Gazipur, Jalaun, Kanpur, Lucknow, Unnao, Sitapur, Lakhimpur, Bahraich, Barabanki, Raebareli, Sravasti, Gonda, Faizabad, Amethi, Kaushambi, Balrampur, Basti, Ambedkarnagar, Sultanpur, Maharajgang, Santkabirnagar, Azamgarh, Kushinagar, Gorkhpur, Deoria, Mau, Ghazipur, Chandauli, Ballia, Sidharathnagar

MUMBAI	Office of the Insurance Ombudsman, 3rd Floor, Jeevan Seva Annexe, S. V. Road, Santacruz (W), Mumbai - 400 054. Tel.: 022 - 26106552 / 26106960 Fax: 022 - 26106052 Email : bimalokpal.mumbai@ecoi.co.in	Goa, Mumbai Metropolitan Region excluding Navi Mumbai & Thane
NOIDA	Office of the Insurance Ombudsman, Bhagwan Sahai Palace, 4th Floor, Main Road, Naya Bans, Sector 15, Distt: Gautam Buddh Nagar, U.P-201301. Tel.: 0120-2514250 / 2514252 / 2514253 Email : bimalokpal.noida@ecoi.co.in	State of Uttaranchal and the following Districts of Uttar Pradesh : Agra, Aligarh, Bagpat, Bareilly, Bijnor, Budaun, Bulandshehar, Etah, Kanooj, Mainpuri, Mathura, Meerut,Moradabad, Muzaffarnagar, Oraiyya, Pilibhit, Etawah, Farrukhabad, Firozbad, Gautambodhanagar, Ghazaibad, Hardoi, Shahjahanpur, Hapur, Shamli, Rampur, Kashganj, Sambhal, Amroha, Hathras, Kanshiramnagar, Saharanpur
PATNA	Office of the Insurance Ombudsman, 1st Floor,Kalpana Arcade Building, Bazar Samiti Road, Bahadurpur, Patna 800 006. Tel.: 0612-2680952 Email:bimalokpal.patna@ecoi.co.in	Bihar, Jharkhand
PUNE	Bhagwan Sahai Palace , 4th Floor, Main Road, Naya Bans, Sector 15, G.B. Nagar, Noida. NOIDA – 201301 Tel: 0120-2514250/51/53 Email: bimalokpal.noida@gbic.co.in	Maharashtra, Area of Navi Mumbai and Thane excluding Mumbai Metropolitan Region

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

Annexure-VI

TEST REPORT

ISSUED TO :
M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution Product: **DG STACK EMISSION MONITORING– DECEMBER 2025** Location: **DG SET STACK#1 (1500 KVA)** Date of Monitoring:**08.12.2025** Sample Registration Date: **09.12.2025**	**Analysis Starting Date:09.12.2025** **Analysis Completed Date: 14.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0001**

TEST RESULT

1.	Time of Sampling	----	:09:45 Hrs. to 10:10 Hrs.
2.	Time Duration		:00:25 Hrs.
3.	Ambient Temperature	(°C)	: 32.6
4.	Flue gas Temperature	(° C)	: 131
5.	Velocity of the flue gas	(m/sec)	:13.7
6.	C/s area of the duct	(m^2)	:0.406
7.	Stack Diameter	(m)	:0.129
8.	Flue gas Flow Rate	(Nm^3/hr)	: 20023.92

S.NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter	IS 11255 (part-1)1985	mg/Nm^3	75	52.4
2.	Sulphur Dioxide	IS 11255 (part-2)1985	mg/Nm^3	-	383
3.	Oxides of Nitrogen	IS 11255 (part-7)1985	mg/Nm^3	360	191
4.	Carbon Monoxide	Gas Chromatography	ppm	150	103
5.	Non-Methane Hydro Carbon (NMHC)	Gas Chromatography	mg/Nm^3	100	74

Instrument Details:

Instrument : Stack Monitoring Kit
Make :SSE(Sree Scientific Equipment)
Model / Sl No : Sem-150/220206
Calibration Due : 28.02.2026

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO :

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2
(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution Product: **DG STACK EMISSION MONITORING– DECEMBER 2025** Location: **DG SET STACK#2 (1500 KVA)** Date of Monitoring: **08.12.2025** Sample Registration Date: **09.12.2025**	**Analysis Starting Date:09.12.2025** **Analysis Completed Date: 14.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0002**

TEST RESULT

1.	Time of Sampling	----	: 10:15 Hrs. to 10:40 Hrs.
2.	Time Duration		:00:25 Hrs.
3.	Ambient Temperature	(°C)	: 30.8
4.	Flue gas Temperature	(° C)	: 139
5.	Velocity of the flue gas	(m/sec)	: 12.5
6.	C/s area of the duct	(m^2)	: 0.406
7.	Stack Diameter	(m)	: 0.129
8.	Flue gas Flow Rate	(Nm^3/hr)	: 18270.0

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter	IS 11255 (part-1)1985	mg/Nm^3	75	50.3
2.	Sulphur Dioxide	IS 11255 (part-2)1985	mg/Nm^3	-	476
3.	Oxides of Nitrogen	IS 11255 (part-7)1985	mg/Nm^3	360	182
4.	Carbon Monoxide	Gas Chromatography	ppm	150	51
5.	Non-Methane Hydro Carbon (NMHC)	Gas Chromatography	mg/Nm^3	100	85

Instrument Details:

Instrument : Stack Monitoring Kit
Make :SSE(Sree Scientific Equipment)
Model / Sl No : Sem -150/220509
Calibration Due :28.02.2026

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO :

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution Product: **DG STACK EMISSION MONITORIN- DECEMBER 2025** Location: **DG SET STACK#3 (1500 KVA**) Date of Monitoring:**08.12.2025** Sample Registration Date: **09.12.2025**	**Analysis Starting Date:09.12.2025** **Analysis Completed Date: 14.12.2025** **Issue Date: 14.12.2025** **Lab Ref: SEPL/ES/SEILEILP/12-25/0003**

TEST RESULT

1. Time of Sampling ---- : 10:50 Hrs. to 11:10 Hrs.
2. Time Duration :00:20 Hrs.
3. Ambient Temperature (°C) : 31.3
4. Flue gas Temperature (° C) : 162
5. Velocity of the flue gas (m/sec) : 15.8
6. C/s area of the duct (m^2) : 0.406
7. Stack Diameter (m) :0.129
8. Flue gas Flow Rate (Nm^3/hr) : 23093.28

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter	IS 11255 (part-1)1985	mg/Nm^3	75	51.4
2.	Sulphur Dioxide	IS 11255 (part-2)1985	mg/Nm^3	-	663
3.	Oxides of Nitrogen	IS 11255 (part-7)1985	mg/Nm^3	360	167
4.	Carbon Monoxide	Gas Chromatography	ppm	150	82
5.	Non-Methane Hydro Carbon (NMHC)	Gas Chromatography	mg/Nm^3	100	59

Instrument Details:

Instrument : Stack Monitoring Kit
Make :SSE(Sree Scientific Equipment)
Model / Sl No : EI-106/21-F-16
Calibration Due : 28.02.2026

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

LABORATORY : Plot No 142/1, Eruvada Junction, Sabbavaram (M), Vizag - 531 035
Web : www.spectraenviro.com | **E-mail**: sepl.sjn@gmail.com | info@spectraenviro.com
Cell: 80199 55222, 111 | **BRANCHES:** VIJAYAWADA | HYDERABAD

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO :

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group : Atmospheric Pollution	**Analysis Starting Date :17.03.2026**
Product : DG STACK EMISSION MONITORING– MARCH 2026	**Analysis Completed Date : 21.03.2026**
Location : DG SET STACK#1 (1500 KVA)	**Issue Date : 21.03.2026**
Date of Monitoring : 16.03.2026	**Lab Ref: SEPL/ES/SEILP2/STACK/03-26/0001**
Sample Registration Date : 17.03.2026	

TEST RESULT

1. Time of Sampling ---- :09:45 Hrs. to 10:10 Hrs.
2. Time Duration :00:25 Hrs.
3. Ambient Temperature (^oC) : 31.4
4. Flue gas Temperature ($^o C$) : 124
5. Velocity of the flue gas (m/sec) :12.5
6. C/s area of the duct (m^2) :0.406
7. Stack Diameter (m) :0.129
8. Flue gas Flow Rate (Nm^3/hr) : 18270.0

S.NO.	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter	IS 11255 (part-1)1985	mg/Nm^3	75	54.1
2.	Sulphur Dioxide	IS 11255 (part-2)1985	mg/Nm^3	-	391
3.	Oxides of Nitrogen	IS 11255 (part-7)1985	mg/Nm^3	360	182
4.	Carbon Monoxide	Gas Chromatography	ppm	150	114
5.	Non-Methane Hydro Carbon (NMHC)	Gas Chromatography	mg/Nm^3	100	78

Instrument Details:

Instrument : Stack Monitoring Kit
Make :SSE(Sree Scientific Equipment)
Model / Sl No : Sem-150/220206
Calibration Due : 28.02.2027

Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO :

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group : Atmospheric Pollution	**Analysis Starting Date :17.03.2026**
Product : DG STACK EMISSION MONITORING– MARCH 2026	**Analysis Completed Date : 21.03.2026**
Location: DG SET STACK#2 (1500 KVA)	**Issue Date : 21.03.2026**
Date of Monitoring : 16.03.2026	**Lab Ref : SEPL/ES/SEILP2/STACK/03-26/0002**
Sample Registration Date : 17.03.2026	

TEST RESULT

1.	Time of Sampling	----	: 10:15 Hrs. to 10:40 Hrs.
2.	Time Duration		:00:25 Hrs.
3.	Ambient Temperature	(°C)	: 29.7
4.	Flue gas Temperature	(° C)	: 130
5.	Velocity of the flue gas	(m/sec)	: 11.9
6.	C/s area of the duct	(m^2)	: 0.406
7.	Stack Diameter	(m)	: 0.129
8.	Flue gas Flow Rate	(Nm^3/hr)	: 17393.04

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter	IS 11255 (part-1)1985	mg/Nm^3	75	52.5
2.	Sulphur Dioxide	IS 11255 (part-2)1985	mg/Nm^3	-	464
3.	Oxides of Nitrogen	IS 11255 (part-7)1985	mg/Nm^3	360	188
4.	Carbon Monoxide	Gas Chromatography	ppm	150	57
5.	Non-Methane Hydro Carbon (NMHC)	Gas Chromatography	mg/Nm^3	100	79

Instrument Details:

Instrument : Stack Monitoring Kit
Make :SSE(Sree Scientific Equipment)
Model / Sl No : Sem -150/220509
Calibration Due : 28.02.2027

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

SPECTRA ENVIROTECH PVT LTD

Accredited by MoEF & Accredited by NABL (TC-13099)

Environmental, Micro Biology, Analytical Testings & RO, ETP, STP's Engineering

TEST REPORT

ISSUED TO :

M/s. SEIL ENERGY INDIA LIMITED PROJECT-2

(2x660 MW Coal Based Thermal Power Plant),
Near Ananthavaram(V), Thotapalli Gudur (M),
SPSR Nellore (Dist.) -524344.

Group : Atmospheric Pollution	**Analysis Starting Date :17.03.2026**
Product : DG STACK EMISSION MONITORIN- MARCH 2026	**Analysis Completed Date : 21.03.2026**
Location : DG SET STACK#3 (1500 KVA)	**Issue Date : 21.03.2026**
Date of Monitoring : 16.03.2026	**Lab Ref: SEPL/ES/SEILP2/STACK/03-26/0003**
Sample Registration Date: 17.03.2026	

TEST RESULT

1. Time of Sampling ---- : 10:50 Hrs. to 11:10 Hrs.
2. Time Duration :00:20 Hrs.
3. Ambient Temperature (°C) : 30.2
4. Flue gas Temperature (° C) : 152
5. Velocity of the flue gas (m/sec) : 14.3
6. C/s area of the duct (m^2) : 0.406
7. Stack Diameter (m) :0.129
8. Flue gas Flow Rate (Nm^3/hr) : 20900.88

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter	IS 11255 (part-1)1985	mg/Nm^3	75	49.3
2.	Sulphur Dioxide	IS 11255 (part-2)1985	mg/Nm^3	-	654
3.	Oxides of Nitrogen	IS 11255 (part-7)1985	mg/Nm^3	360	176
4.	Carbon Monoxide	Gas Chromatography	ppm	150	75
5.	Non-Methane Hydro Carbon (NMHC)	Gas Chromatography	mg/Nm^3	100	46

Instrument Details:

Instrument : Stack Monitoring Kit
Make :SSE(Sree Scientific Equipment)
Model / Sl No : EI-106/21-F-16
Calibration Due : 28.02.2027

K.S.Lag
Verified by

SPECTRA ENVIROTECH PVT. LTD. VIZAG

Authorized by
Managing Director

Government of Andhra Pradesh

A.P. State Disaster Response and Fire Services Department

Periodical Renewal Fire Certificate

Annexure-VII

From:
Director General
State Disaster Response & Fire Services
Andhra Pradesh, Vijayawada.

To:
The General Manager,
District Industries Center, SPSR Nellore District

File No: 18565/NLR/MSB/2023, Date:12/07/2023
Occupancy NoC RC Number: PNOC.RC.No:1018/RFO/SR/2016,Dt:10-08-2016 of the RFO,SR and ONOC.RC.No:1018/RFO/SR/2016,Dt:24-07-2017 of the RFO,SR

Sir,

Sub: Andhra Pradesh State Disaster Response and Fire Services Department - Periodical Fire Certificate to the constructed Multi Storeyed Building of **Sembcorp Energy India Ltd [Project-2], represented by Sri Sandeep Kumar Reddy Tikkavarapu, Located at Ananthavaram(V), Varakavipudi (P),T.P Gudur(M),SPSR Nellore District** - Regarding.

Ref:
1. G.O.Ms.NO.71 Home (Prisons-A) Department, Dated.01-04-2010 & G.O.Ms.NO.90 Home(Prison & Fire Services), Dt 13-08-2021 Á G.O.No 120 Home (Prisons & Fire), Dt 25-10-2021
2. This Office Delegation of Powers Rc.No.3350/Audit/NOC/2012, Dated.02-05-2023.
3. This Office NOC for Occupancy Rc No. PNOC.RC.No:1018/RFO/SR/2016,Dt:10-08-2016 of the RFO,SR and ONOC.RC.No:1018/RFO/SR/2016,Dt:24-07-2017 of the RFO,SR, Dt.10/08/2016
4. Renewal NOC For Occupancy PNOC.RC.No:1018/RFO/SR/2016,Dt:10-08-2016 of the RFO,SR and ONOC.RC.No:1018/RFO/SR/2016,Dt:24-07-2017 of the RFO,SR, Dt.24/07/2020
5. Online Application for Renewal NOC of Sri Sandeep Kumar Reddy Tikkavarapu, Located at Ananthavaram(V), Varakavipudi (P),T.P Gudur(M),SPSR Nellore District - Inspection report called for Regarding.
6. Online Inspection Report submitted by Officers of this Department on 10-07-2023.

<< 0 >>

The Management of Sembcorp Energy India Ltd [Project-2], represented by Sri Sandeep Kumar Reddy Tikkavarapu, Located at Ananthavaram(V), Varakavipudi (P),T.P Gudur(M),SPSR Nellore District has requested to issue Periodical Fire Certificate duly remitting the Fire Precautionary fee for Rs.687750/- vide challan No. 71064040852023 & 71063807422023 & 71604042582023, Dated 03/05/2023 at SBI, Through CFMS Challana.

Control Room

,GIS Control Room

,Turbine & Generator Building

,Service Building

,Canteen Building

,8. Generator Transformer, Coal Yard,Coal Conveyor 1A/B (JNT1-JNT2) & (JNT2-JNT3)

,Boilers-2 No.s

,Coal Mill

1. This certificate is being issued as per G.O.Ms.No:90,Home(Prisons & Fire),Dt:13-08-2021 & GO.No:120,Home(Prisons & Fire),Dt-25-10-2021

2. The No Objection Certificate for Occupancy was issued vide reference cited (3) and the Management has also obtained Periodical Renewal Fire Certificate for vide reference 4th cited to the constructed Multi Storeyed Building.

3. The Officers of the department have recommended to issue The Periodical Renewal Fire Certificate **Sri Sandeep Kumar Reddy Tikkavarapu Located at Ananthavaram(V), Varakavipudi (P),T.P Gudur(M),SPSR Nellore District**, subject to the following conditions.

Sl	As Builder	As Occupant	As Security Personnel
1	All the fire protection arrangements shall be maintained in good condition as seen during inspection.	All the escape/exit routes shall not be kept locked/blocked or encroached	All the occupants must know the correct method of operation of the fire fighting system installed.
2	Any loss of life or property due to non-functioning of fire safety measures and other installations shall be the responsibilities of the management.	All occupants shall be trained to operate the fire safety equipments during emergency.	Mock drills should be conducted once in 3 months for initial two years. Thereafter, once in every 6 months.
3	Addition / alteration, if any in the building may be verified by building authority.	Mock drills should be conducted once in 3 months for initial two years. Thereafter, once in every 6 months.	All security personnel shall be trained to operate the fire safety equipments during emergency.
4	This is Only for Fire Safety Point of View.	Raise the alarm if the fire cannot be controlled; Evacuate the area completely at once with nearest safe exit.	Attack the fire using available fire equipment only if you feel capable of controlling. If not, take all steps to isolate the area by closing doors and windows.

4. This Periodical Renewal Fire Certificate is valid from 11/07/2023 to 10/07/2026.

5. The Responsibility/liability of the owner/occupier or both to maintain Fire safety measures in good condition in all times, in accordance with AP Fire safety Act 1999 and Rules, 2006.

6. The Applicant/Management has agreed to comply with proposed revision of fire safety measures, which were sent to government vide Rc No. /MSB/Section/2023 Dt. 11-05-2023 or any other fire safety measures as may be approved by the government from time to time.

The following deficiencies are identified by the officers of the department and needs to be attended to by the management.

Nil

Your Sincerely,

Director General
State Disaster Response & Fire Services
Andhra Pradesh, Vijayawada.

Copy to Sri Sandeep Kumar Reddy Tikkavarapu, Sembcorp Energy India Ltd [Project-2] Located at Ananthavaram(V), Varakavipudi (P),T.P Gudur(M),SPSR Nellore District
Copy to Chief Office for Record Purpose
Copy to Regional Fire Officer Concerned
Copy to District Fire Officer Concerned
Copy to Assistant District Fire Officer Concerned

Annexure-VIII

SEIL ENERGEY INDIA LIMITED – PROJECT-2

EXTERNAL SAFETY AUDIT REPORT-2026



PREPARED BY: Mr. A. JOPHAR AND K.SURI BABU
M/S. SIMPRO SAFETY & ENGINEERING CONSULTANTS
PLOT NOS.48,49 & 50, GROUND FLOOR, ADARSHNAGAR,
OPP : UMCC, GAJULARAMARAM, JEEDIMELTA, HYDERABAD
– 500 055, INDIA

FOREWORD

ACKNOWELDEMENT

We express our whole hearted thanks to Management and Employees of M/s. SEIL Energy India limited situated at Krishanpatnam, Muthukur Mandal SPSR Nellore District, Andhra Pradesh India, for their Co-operation and unstinted help without which the Safety Audit of M/s SEIL Energy India Limited, could not have been possible. The courtesy and Cordiality extended to the audit team is highly appreciated. We do appreciate the best planning and constant co-operation from Mr .Gnanadesigan HOD SAFETY, N.S Venkatesan, Head –Fire & Safety, Mr. P Lakshmipati Raju – AGM HSE and Mr. Chandra Sekhar –Senor manager-Safety and their operation team members and HOD of respective departments for speedy completion of this report.



M/S. SIMPRO SAFETY & ENGINEERING CONSULTANTS – HYDERABAD,

DISCLAIMER

Nothing in this report shall be construed as taking the place of any Law, Rule or Regulation of the relevant Governmental Agencies.

Users of this report are informed that no publication of this type can be complete nor any written document of this type can be a substitute for qualified engineering analysis. The experts and their professional experience only base the observations recommendations mentioned in this report on physical visits of the plant sections.

SIMPRO Safety & Engineering Consultants does not hold any legal obligation in case of occurrence of any incident / accident / emergency in the plant while implementing the recommendations in this report all the views are based on technical expertise and past experience of the auditors.

The validity of this report is one year from concluding date of the Audit or next External Safety Audit due as per Requirements.

AUDITORS PROFILE

S.NO	Name of the auditor	Qualifications	Experience	Name of the organization
1	Mr. Kishen Kasam	1.Bachelour of Science in Power Engineering from BITS, Pilani 2. Diploma in Industrial safety from Department Technical Education, Tamilnadu 3.ISO lead auditor, ISO 45001:2018 From ACS-GP, Global Program	40 years of experience in Power sector.	Worked as Dy. Manager-EHS in Ramagundam Super Thermal Power Station
2	Mr. Pandu Ranga Rao	1.B. Tech , Mechanical Engineering from Sri Venkateswara University 2. M.Phil, PhD in management from Reputed Institutions	40 years of Experience in Power Sector	Worked as Manager – Maintenance in Ramagundam Super Power Thermal Power Station
3	Mr. K.Suri Babu	1.Bachelour of Science from Andhra University 2. PG Diploma in Environmental studies from Andhra University 3.Diploma in Industrial Safety from Annamalai University 4. PG diploma in IRPM&LW from APPC, Hyderabad 5. ISO Lead auditor in ISO 14001:2015 & ISO 45001 :2018 from TUV Nord and CII	39 years of experience in EHS field	Worked in Paper Sector/Power sector/Pharma Sector/ Infrastructure/ Steel sector in EHS departments with different designations from Manager to Dy. General manager

Knowing is not enough, we must apply.
Willing is not enough, we must do

Every incident is a notice that something is wrong with men, machine or method - Investigate

A Safety Management System provides organizations with a framework to improve employee safety and health, reduce workplace risks and create better, safer working conditions. The development and implementation of a comprehensive Safety Management System will support continual improvement and enables an organization to develop and maintain a strong safety culture. The formal and organization-wide approach to managing safety risk and guaranteeing the efficacy of safety risk controls is known as a safety management system (SMS). It consists of processes, practices, and policies for managing safety risks. In system safety and safety management, SMS presents an evolving process. It is a systematic procedure requiring businesses to treat safety with the same importance as other fundamental business activities.

Safety means not getting exposed to harm, safety is controlling of high risk in activities, so also safety is loss control. In totality, safety is a systematic approach in the control of activities, so as to avoid unwanted incidents and achieving good work environment. When systematic approach is practiced, it needs to be checked periodically for its effective functioning

SEIL Energy India Limited - SEIL - (Formerly Sembcorp Energy India Limited) is a leading independent power producer (IPP) committed to India's energy security. The company has a successful track record of developing and operating thermal power generation assets in the country. It has a 2.64 GW supercritical thermal power generation complex located in SPSR Nellore District, Andhra Pradesh, India.

Though several audits are being conducted by the organization, including internal audits of the systems being implemented, one of the requirements is conducting of the safety audit as per the statutory requirement.

In order to meet not only the statutory regulations under Factories Act, but also to self-assess the implementation part of safety management systems and site specific safety improvement; M/s SEIL has to conduct External Safety Audit for this year by a reputed external agency

So as to comply with the requirement, SEIL Management is engaging outside agency, for evaluating its occupational health and safety management system performance, followed by compliance of the observations and as part of it, engaged **SIMPRO Safety & Engineering Consultants** for conducting the safety audit for the year 2026.

SIMPRO Safety & Engineering Consultants feels it as an honor for getting the above assignment. **SIMPRO Safety & Engineering Consultants** took this opportunity and carried out the audit, with an objective to review the various work practices and activities of the organization, such that the Occupational Health and Safety functioning of the organization is in line with the regulatory and other OHS system requirements.

Audit not only looks into the deviations or lacunae but also focuses on the best practices implemented by the organization. The recommendations given in the report are to be viewed as an aid to Management, for continual improvement and not as any faultfinding exercise.

SIMPRO Safety & Engineering Consultants offers it's sincere thanks to the top management for providing the opportunity to Lumen in conducting the audit.

SIMPRO SAFETY & ENGINEERING CONSULTANTS extends its sincere thanks to all the HODs & other Plant Personnel for their cooperation to the audit team in carrying the audit successfully.

12,13,14th February 2026
Hyderabad

Simpro Safety & Engineering Consultants Hyderabad

for **SIMPRO Safety & Engineering Consultants**

K.Paul Bennette

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1.0 EXECUTIVE SUMMARY

- **M/s. SEIL Energy India Limited, Project-2** is one of the best organizations in the field of Power generation in India. SEIL is an acknowledged as leading power producer in India

- The management of M/s SEIL Energy Limited, project-2 wanted to review of its Safety Management System by third party. So The task has awarded to "SIMPRO SAFETY & ENGINEERING CONSULTANTS"

A. NOTE WORTHY OBSERVATIONS-GENERAL & PROCESS

- It is appreciable that the organization has successfully implemented 5'S" in the organization and got certification from QCI. It will help the organization to improve work place safety, efficiency and productivity.

- Safety sub-committees are formed to encourage the members to identify the unsafe conditions and Acts and discuss in the meeting and bring them to the notice of Apex Safety committee. So more employees are actively participating in the safety committees to improve safety performance of the organization

- Management Safety Walk downs are carried out by Senior Management at all locations as per the schedule. A minimum of three walk downs per month will be conducted with a team comprising members from all Operation & Maintenance Departments. All observations will be recorded and presented during the daily O&M meeting to review targets based on the severity and assess the resources required. Top management will be monitoring the observations on daily basis.

- It is very good to note that every month SEIL Organized Mass Toolbox Talk (MTBT). In MTBT, one senior management representative declares HSE Theme of the Month. All employees and Associates are assembled in one place and discuss about the them. Everyday Safety department send Safety DM (Daily Mailer) as per the month's theme. Video quiz were conducted as per monthly theme. In Monthly Apex Committee Meeting, Safety Moment being presented as per the month's theme.

- It is very good to note that Behavior Based Safety system is implemented in the organization. BBS Auditor goes to any job location, observes the job from a safe distance, analyses various steps of the job such as PTW, Isolation, HIRA, Tool Box, Pre and Post jobsite housekeeping, SOPs/SMPs implementation, etc., related to the job and records observation of Safe Act and Unsafe Act and makes spot corrections as far possible.

- It is good to note that Organization has defined and documented the occupational health safety Policy. The same policy is being displayed in all conspicuous places in the factory premises.

- It is appreciable that mock drills are being conducted for identified fire emergency situation at this stage of Construction. And it is advised to conduct mock drills for all identified situations in holidays/night shifts also to check the actual readiness on holidays to meet the emergency situations

- The organization has strongly believed that Training is one of the core elements in prevail the safety in the organization continuously. In view of that, a Training matrix for all level of employees is planned and being implemented. It is advised to take Training feedback is to be taken from Manager of participant for every training session to now the effectiveness of the training given to the participant

- It is good to note that 54th National Safety Week 2025 was observed from 04th March to 10thMarch 2025. Various promotional and awareness activities were conducted for Employees and Associates during the week. Winners were awarded by Chief Guest Sh. K Sudheer Babu, Chief Engineer (O&M) SDDTPS at the Valedictory Function.

- It is appreciable to note that SEIL Fire Team Participated in District Level Off-Site Mock Drill organized by State Authorities at BPCL Krishnapatnam Port.

- It is very good to note that National Fire Service Fortnight 2025, was organized from 14th April to 30th April 2025. Various promotional and awareness activities were conducted for SEIL Employees, Associates, and Families at Township during Fortnight. Winners were awarded at the Valedictory Function.

- It is good to note that World Environment Day was celebrated on 05th June 2025. Mass Plantation was done by Employees & Associates at both SEIL P-1 & SEIL P-2. Also organized various Environmental promotional activities like Online Quiz Competition for Employees, Poster Competition for Children, Slogan competition for Associates, Elocution Competition for Employees & Spouse at Township.

- It is good to note that Under "Life", Plantation drive conducted at MV Palem High School, near SEIL on 6th June 2025 in which Shri Ch. Rajasekhar, Regional, Officer, APPCB attended as Chief Guest. School Children participated with enthusiasm in large numbers and took ownership of the sapling planted by them

- It is very good to note that Half Yearly ERP Mock Drill Conducted simultaneously at SEIL P-1 & P-2 involving complete evacuation of Employees and Associates except critical operation staff. Scenario - Severe Cyclone "BANDU" in June and Scenario – "Leakage of Chemical while handling in storage area" in December 2024.

- It is good to note that Job Specific Toolbox talk, and Dynamic Risk Assessment being conducted before every O&M activity.

- It is good to note that Pre-employment medical examination and Safety Induction training being conducted for all new employees and workers.

- It is highly appreciable that organization has carried out training on innovative way of rescuing the of personnel working at height without any unnecessary problems during rescue time
- It is observed that work permit system is implemented and adhere to the system always even for small works
- It is appreciable that Risk Assessment is done for all O&M activities and review the same again whenever any process change occurs.
- It is highly appreciable that Skill assessment is being for all Riggers, welders and other technicians before deploying them into the work by Safety engineer
- It is very good to note that Vertigo and acrophobia test is carrying out for all the workers for work height
- It is good note that organization has developed departmental Champions to ensure good implementation in all departments
- It is good to note that organization system has good Contractor Management system
- It is highly appreciable that Organization is more committed for the health of the employees by providing availability of doctor in the OHC for 8 hours daily without fail
- Organization has "MUTUAL AID "agreement with neighbouring industries for risk mitigation in case of emergency situation

- Organization has defined and documented the occupational health safety Policy. The same policy is displayed in all conspicuous places in the factory premises.
- It is recommended to provide Auto Fire suppression system for all critical electrical panels in the operations to quick recovery and minimum damage when fire occurs due to short circuit of cables
- It is recommended to conduct Thermograph test for electrical cable trenches at least once in 5 years to know the integrity of electrical cables exposed to vulnerable environmental conditions by third party.
- It is very good to note that the Company has got following awards for Their EHS management system

1. CII Gold Award was received for the excellence in Industrial Safety Leadership from the Confederation of Indian Industry (CII), Andhra Pradesh.
2. BBS 'Platinum Benchmarking Award' for excellence in 'Occupational Safety and Health' and the award was received from the Forum of Behavioural Safety.
3. 5S 'Excellence Award' was received from the Quality Circle Forum of India (QCFI), Nagpur.
4. SEIL bagged 'Gold Award' for Excellence in the Healthiest Workplace category at the INFHRA Awards 2024.
5. SEIL has won the Best Housekeeping Practices (Industrial Category) Award from Asian Housekeepers Association and Clean India Journal.
6. SEIL wins two prestigious India CSR & Sustainability Awards 2024 in 'Best Healthcare & Wellness Programme' and 'Best Environmentally Sustainable Programme categories

- Earth pits monitoring is being done. But the Test date, Due date and Resistance value are not displayed on the Earth pit covers in some of the areas
- Near Missing capturing is very less. It is necessary to capture more near misses and analyse them to prevent incidents

- It is good to note about the implementation of motivational and promotional programs such as conducting safety competitions, celebrating safety day celebrations etc., so as to get the effective participation from employees in the OSH performance.
- Walk through safety inspections are being conducted for identifying unsafe conditions / unsafe acts, a multi-functional team can be set up for carrying out the inspections section wise and to focus on process safety, structural safety, mechanical & electrical safety and about housekeeping aspects.
- Provision of PPE both respiratory and non-respiratory is in place. Hygiene of respiratory PPE may be strictly ensured.
- Monitoring of work environment, incident investigation, carrying of safety inspections is being followed.
- Periodical review, compliance of legal requirements, ensuring continual improvement; imparting education and training on OHS issues are found satisfactory.

B. MAJOR OBSERVATIONS TO BE FOCUSSED FOR FURTHER IMPROVEMENT:

- It is necessary to carry out the arc flash study for all critical electrical panels and draw arc flash boundaries in front of electrical panels and also display the intensity of flash on the panel
- Auto Fire Suppression system is to be provided for critical electrical panels to safe guard the electrical panels , however one pilot project is installed at SCR at SEIL P2, l study its effectiveness and then implement it at main plant.
- Periodical Thermograph for electrical cables exposed to vulnerable environmental conditions. I.e. at HP Crusher area, CCV MCC room and Coal feeder area etc. to know the integrity of electrical cables
- Fire safety audit is to be conducted with expert agency to know the fire load and crosscheck the fire hydrant system accordingly. Hydrant System designed as per TAC and Consultant

reports. Also, insurers are assessing periodically. Hence, fire load calculation not needed at present.

- Periodical structural inspections are to carried out for all the buildings and chimneys in the factory premises for every 5 years with competent agency. Structural audit was done 2021 and it should be done in 2026-27. So it can be removed the list
- Industrial hygiene and Safety studies are to be carried out to identify, evaluate and control environmental stressors like Chemical, physical and biological that are caused illness, injuries or fatalities. It will help us to protect our worker health
- It is very much necessary to check the ability of all outsourcing agencies to achieve the intended objectives of the OH&S management system.
- sFume hood is to be tested by external agency once in a year.
- MVWS with detection system is in place which is sufficient, however CO2 Purging system for cable galleries is to be provided for better result.

C. NOTE WORTHY OBSERVATIONS- ELECTRICAL:

- Regular thermography is being carried out on electrical panels, cables, and 400KV AIS joints to detect abnormal temperature rise. This proactive approach helps identify loose connections, overloading, and insulation failures before they lead to equipment damage or fire hazards. Every Month individual Areas thermography is being carried out.

- Look Listen Feel (LLF) is carried on all Electrical panels to ensure clear visual indication of the presence of any hotspots. This helps prevent accidental flashovers before any scheduled maintenance activities. Every Month individual Areas LLF 's are being carried out.

- Motors are monitored through parameters such as vibration, temperature, noise, and current trends. Early identification of abnormalities ensures timely corrective actions, reduces unplanned downtime, and enhances operational safety.

- Daily meeting for 20minuts about work progress for operational and maintenance defects are monitored daily. Identified defects are recorded, prioritized, and addressed promptly to prevent escalation into safety incidents or equipment failures. Defects are to be cleared

within 72 hrs. and detailed monthly meeting to review the month progress and generate monthly progress report..

- Engaging a team of manpower from different departments, 01 from EMD, 01 from C&I and 01 from Fire Fighting team, the team cleans cable trays daily starting from stacking path to reclaiming path as per schedule as a recurring process

- Online Dissolved Gas Analysis (DGA) is used for continuous monitoring of the GT transformer. This enables early detection of internal faults such as arcing, overheating, or insulation degradation, thereby improving reliability and preventing catastrophic failures.

- Periodic illumination surveys are conducted jointly with the Safety team to ensure adequate lighting levels in work areas. Proper illumination reduces human error, improves visibility, and minimizes the risk of slips, trips, and operational accidents. **Survey is carried out in every 6 months**

- Residual Current Circuit Breakers (RCCBs) are periodically tested as per schedules maintained in SAP. This ensures effective protection against earth leakage, electric shock hazards, and electrical fires.

- Safety-related defects such as missing guards, damaged insulation, unsafe conditions, or signage issues are specifically monitored every day. Immediate corrective actions are taken to maintain a safe working environment and same are been recorded.

- Behavior-Based Safety audits are conducted to observe work practices and reinforce safe behaviors. Unsafe acts are addressed through counseling and training, helping build a strong safety culture among associates. minimum 1Num BBS has to be submitted every week

- 5S principles (Reorganizing, Neatness, Cleaning, Standardization & Discipline) are implemented across the workplace. Housekeeping audits are conducted every 10 days to ensure clean, organized, and hazard-free work areas.

- Daily toolbox talks are conducted before starting work to brief associates on job-specific hazards, safety precautions, PPE requirements, and lessons learned from previous

incidents. This ensures preparedness and risk awareness. Every month first week Friday is assigned to oversee the Pending points.

- GT transformer oil samples are taken to ensure monitoring of oil quality, moisture content, dielectric strength, and aging characteristics, supporting safe and reliable transformer operation.GT transformer oil samples are sent to PGCIL for testing every six months

- Daily toolbox talks are conducted before starting work to brief associates on job-specific hazards, safety precautions, PPE requirements, and lessons learned from previous incidents. This ensures preparedness and risk awareness. monthly 5 nos tool box talk has to be done.

- Protection relays are tested once every two years to verify their accuracy, response time, and coordination. Proper relay functioning ensures quick isolation of faults, protecting personnel and equipment. In every AOH testing of relays is carried out.

- All power tools are inspected once every three months for electrical safety, mechanical integrity, earthing, and insulation condition. Defective tools are removed from service to prevent injuries and electric shocks.

- Regular internal safety audits are conducted to evaluate compliance with safety standards, procedures, and statutory requirements. Audit findings are tracked, and corrective and preventive actions are implemented for continuous improvement.

- Regular internal safety audits are conducted to evaluate compliance with safety standards, procedures, and statutory requirements. Audit findings are tracked, and corrective and preventive actions are implemented for continuous improvement.

- Field audit by senior management is being done for safety concerns related to process of the plant and equipment

- Electrical equipment protection audit is being carried out by third party to ensure safe operations

- PTW audits are being done by Line managers and HOD for avoiding PTW violations and to ensure proper practice of SOPs determined by SEIL

- Elevators/ EOTs load test every six months by authorized external agency.
- Lab equipment calibration is done annually by authorized NABL certified external agency.
- Monthly conducting brainstorming sessions on different technical topics for knowledge enhancement

❖ Site specific observations and recommendations are given in detail in Chapter N05 this report for implementation as per the priority of SEIL energy India Limited, Project-2

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2.0 INTRODUCTION

2.1 INDUSTRY INFORMATION:

1.	Name of the Organization	M/s. SEIL Energy India Limited,Project-2
2.	Address	SEIL Energy India Limited Pynampuram / Nelaturu Village Muthukur Mandal, Nellore – 524344 Andhra Pradesh
3.	Phone Number	(91) 0861 305 2300, (91) 0861 305 2304
4.	Name of the Occupier	Sri Janmejaya Mahapatra CEO,
5.	Address of the Occupier	Building 7A,Level-5,DLF Cyber city, Gurugram-122002 Haryana state, India
6.	Phone number	(91) 0861 305 2300, (91) 0861 305 2304
7.	Name of the land/Factory Manager- SEIL-Project-1	Mr. JVLH Nageswara Rao
8	Address of the Factory Manager SEIL-Project-1	Pyanapuram, Nelaturu village, Muthukur mandal, SPSR Nellore- 524344,Andhra Pradesh, Phone No. 91-8613501300
11.	★ Police station ★ Nearest Fire Station ★ Nearest Hospital	★ Nellore ★ Nellore ★ Govt. Hospital, Nellore
12.	Manufacturing Process	Power generation

2.1 Products manufactured in the unit:

Power generation in the plant

2.2 Process description- Process Flow Chart-Project-2

Process Description:

SEIL Energy India Limited, Project -1 has 2 X 660-Megawatt Supercritical coal-fired units.

SEIL P-1 is supercritical plant consists of water tube boiler with bowl mills in opposite wall firing with single furnace having multiple passes and single reheat stage. It also uses Tri-sector regenerative type Air preheater to preheat the air before entering the furnace. The plant employs single shaft multi cylinder turbines (HIP, LP1 and LP2) with intermediate steam extractions & a dual back pressure condenser. The power generation is done with the help of 660MW generator at 22KV level and evacuated at 400KV level through GIS. The Generating transformer is a 3-single phase bank of 270 MVA capacity which steps up the voltage from 22 to 400 KV.

SEIL P-2 is supercritical plant consists of water tube boiler with bowl mills in corner wall firing with single furnace having two passes and single reheat stage. It also uses Tri-sector regenerative type Air preheater to preheat the air before entering the furnace. The plant employs multi cylinder turbines (single shaft) with 3 stages (HIP, LP1, LP2) with intermediate steam extractions & a dual back pressure condenser. The power generation is done with the help of 660MW generator at 20KV level and evacuated at 400KV level through GIS. The Generating transformer used by SEIL is a 3-single phase bank of 260 MVA capacity each which steps up the voltage from 20 to 400 KV.

Water Supply Scheme:

The water requirement of power plant with closed circuit cooling system is estimated to be 332736 Cu.m/Day for P1 and 304080 Cu.m/day for P2. The requirement will be met from Bay of Bengal. The water supply for the plant is taken from the sea, through a HDPE submarine pipeline (sea water intake pipe) of about 2.26Km length. This sea water is collected in the sea water intake pump house fore bay, from where it is pumped to the CT makeup and water treatment plant. The sea water is treated and then used for plant operation as service and DM water. The reject water from different areas of the plant is treated through Effluent Treatment plant (ETP) and collected in the seawater outfall tank and from there, the water is pumped into the sea through seawater outfall pipeline which is laid up to 1.4km from the plant into the sea. Sea water intake pump house: The sea water intake pump house is located at about 300 meters P-1 & 200 Meters P-2 from the plant boundary. The pump house is designed to accommodate for both the phases of CT

makeup pumps 6 Nos. (03 each plant) and Desalination feed water pumps 4 Nos. (02 nos. each plant) The water from the sea travelled through gravity to enter the pump house fore-bay. From this fore-bay water is pumped to the CW pump house with the help of 3 (2 working +1 stand by) vertical CT make up pumps of 6,052 Cu.m/hr. for each pump in SEIL P-1 and 5,700 Cu.m/hr. for SEIL P-2. These pumps will cater the cooling water requirement (SEIL-P1 is 11137 Cu.m/hr.) due to blow down and evaporation which is specifically called as CT Make up. 2 Nos of vertical Desalination pumps are also located in the pump house of capacity 1760 Cu.m/hr. in SEIL P-1 and 1270 Cu.m/hr. in SEIL P-2, which supply sea water requirement (SEIL P1 is 1578 Cu.M/Hr.) for water treatment plant. DM water generation, service, fire, portable water requirement of plant is catered to, with the help of treated water.

PT Plant & RO-DM Plant:

The system consists of Water Pre-treatment plant, followed up with a Desalination plant and DM plant. Water Pre-treatment consists of clarification and filtration. Clarification of sea water involves coagulation, flocculation and disinfection which are done in the 2 Nos. of Dissolved Air Flotation (DAF) chambers. Clarified water from the DAF flows by gravity to a set of five Rapid Gravity Sand (RGSF) Filters. Filtered water from RGSF led by gravity, stored in a filtered water storage tank. Treated water from RGSF is further filtered through a set of Dual Media (DMF) Filters which is having Anthracite and Sand layers, for effective filtration and Micron Cartridge (MCF) filters, before the water is led to Desalination Process. Desalination Process involves SWRO, BWRO stages where the salinity of the sea water is reduced to micro levels. The desalinated water produced in SWRO plant will be employed in as process water. The delivery point is product/fire water storage tanks. After SWRO Water enters BWRO stages as SWRO permeate. The delivery point of this stage will be the BWRO water storage tank. Desalinated water from the BWRO product water storage tank shall be pumped to Mixed Bed Exchanger, for further producing DM water. The delivery point for this stage is the DM water storage tank from where it is transferred to Condensate Storage Tanks in BTG area.

Natural Draught Cooling Tower:

2 for each plant Natural Draught cooling towers are employed. The shape of the cooling tower is Hyperbolic in vertical and circular in plan. The height of the cooling tower is 174.00 Mt, bottom diameter is 131.13Mt, Neck diameter 76.92Mtrs and Top diameter is 79.63 Mt. Steam from the last stage of LP turbine is dumped to the condenser which is under vacuum. This steam will be cooled by circulating water supplied by CW pump through cold tunnel. The hot water from the condenser is fed to the cooling tower through the hot tunnel. In cooling tower, the hot water is allowed to fall in the form of the fine droplets against the draught, which will cool the water. The cool water collected in the fore bay is again circulated to the condenser by CW pumps. Some amount of water will be lost in the form of Continuous blow down to maintain Cycle of Concentration and evaporation loss. This lost amount of water will be compensated for by the CT makeup water.

CW Pump House:

For each unit, 4 Nos. (Total 8) of circulating water pumps, which are of concrete volute type, having 42,000 Cu.m./hr. capacity P-1 & 40,000 Cu.m./hr. capacity P-2 for each pump is installed in the pump house. All 8 are working under normal conditions. The cool water from the cooling tower is pumped by these pumps to condenser, for cooling the steam, from last stage of LP turbine. 3Nos. of CW blow down pumps (2 Working +1 Standby), each having capacity of 4520 Cu.m./hr. in SEIL P-1 & 4300 Cu.m./hr. in SEIL P-2 are also located in CW pump house. The Blow down water from the NDCT is directed into the sea through the sea water outfall pipeline.

Coal Handling Plant: SEIL employs two stages of coal handling which are 1) External Coal Handling (From port end to plant boundary and 2) Internal Coal Handling (From plant boundary to coal bunkers of respective units)

ECHP: The coal received (both domestic & imported) at the Krishnapatnam port end will be unloaded into the silos arranged especially for SEIL, at the port end. From this silo, coal is fed to the single flight pipe conveyor through feeders. The starting point of this conveyor is at 200m

inside the port boundary. The designed capacity of ECHP from the port is 4000TPH for both plants. The length of pipe conveyor is 5.2 km in SEIL(P-1) and 7.5 km in SEIL (P-2) with a conveying speed of 6.17 m/s. As an environmental Protection measure, to avoid coal spillage and emission of coal dust during conveying, SEIL has employed closed pipe conveying system. To access and maintain the conveyor throughout the length of the conveyor, 2 nos. each plant for self-propelled maintenance trolleys are provided. The coal is discharged into a surge hopper within the plant boundary, from where it is fed on to the conveyors of In-Plant coal handling system.

ICHP SEIL(P-1): Internal Coal Handling plant (ICHP)which is designed to receive coal from External Coal Handling plant (ECHP) to the two existing units and two future units. There are 12 Transfer Points. Coal from port will be discharged to the Surge Hopper at TP-1, After TP 1, crusher house is installed to crush the coal from 150 mm to 20mm.Two streams of conveyors (one working & one stand-by) are provided for conveying the crushed coal, with rated capacity of 3600 TPH for stacking and 2800 TPH for reclaiming through Stacker cum reclaimer. Stacking operation feeding from TP-2 and TP-3 to Coal stockyard. 2 Nos. of Stacker cum Re-claimers are provided which are having a stacking capacity 3600 TPH and reclaiming capacity of 2800TPH. In the event of bunker feeding not required, entire coal will be stacked having overall storage capacity of 9,34,000 Tons of coal in the plant premises in 4 stockpiles (840 m x 50mX 10m). Metal detectors and In-line magnetic separators are also provided before feeding to bunkers for removal of metallic ferrous materials. Belt weigh scales are also provided, on stacker cum reclaimer boom conveyor for measurement of flow rate. (can be removed from this report)

ICHP SEIL(P-2): In-Plant Coal Handling System is designed to receive coal from External Coal Handling System to the two existing units and two future units. There are 10 Junction Towers. Coal from port will be discharged to the Surge Hopper in JNT E-1, After JNTE-1, crusher house is installed to crush the coal from 150 mm to 25mm.Two streams of conveyors (one working & one stand-by) are provided for conveying the crushed coal, with rated capacity of 3600 TPH from JNT-1 to Coal stockyard. 3 Nos. of Stacker cum Re-claimers are provided which are having a

stacking capacity and reclaiming capacity of 3600TPH. In the event of bunker feeding not required, entire coal will be stacked having overall storage capacity of 8,77,000 Tons of coal in the plant premises in 4 stockpiles (762 m x 40mX 10m). Metal detectors and In-line magnetic separators are also provided before feeding to bunkers for removal of metallic ferrous materials. Coal sampling unit is provided to sample crushed coal of 20 mm size. Belt weigh scales are also provided, on conveyors for measurement of flow rate. Chimney: The Chimney is 275 m high, of RCC construction with twin steel flues, one for each unit enclosed, by a windshield of reinforced concrete shell. Flue gas emission point is 275 m above plant grade level. The chimney has 6 internal platforms, 6 external platforms and a roof platform. Aviation warning lights are provided at various levels as per International Civil Aviation Organization guidelines. The chimney is designed to withstand flue gas temperatures of 161°C.

ESP SEIL P-1: SEIL employs one ESP per unit. Each ESP contains 4 passes with 4 compartments in each pass. Each compartment comprises of 9 fields. Hence there are total of 144 fields (4 passes x 4 compartment/pass x 9 fields/compartment) for each ESP. There will be 72 ESP transformers for each ESP (1 Transformer/ 2 fields). Emitting and Collecting electrodes are placed opposite to each other in every respective compartment. Rapping mechanism is envisaged for collection of ash deposited on the electrodes. Flue gases from the furnace along with fly ash, will be passed to ESP to collect 99.9 % of ash. The flue gas, with minute traces of fine deposits will be escaped to atmosphere, through chimney

ESP SEIL P-2: SEIL employs one ESP per unit. Each ESP contains 2 passes with 3 compartments in each pass. Each compartment comprises of 8 fields. Hence there are total of 48 fields for each ESP. There will be 48 ESP transformers for each ESP (1 Transformer/ 1 fields). Emitting and Collecting electrodes are placed opposite to each other in every respective compartment. Rapping mechanism is envisaged for collection of ash deposited on the electrodes. Flue gases from the furnace along with fly ash, will be passed to ESP to collect 99.9 % of ash. The flue gas, with minute traces of fine deposits will be escaped to atmosphere, through chimney.

Ash Handling System (SEIL-P1): Ash handling system is designed to evacuate the total Ash generated in the form of bottom ash (20% of Total ash produced) and fly ash (80% of total ash produced) from the coal fired boiler of the 660 MW X 2 unit. Bottom ash and coarse ash (Economizer ash) are collected in three BOTTOM ASH HOPPERS from boiler furnace and conveyed through individual pipes by Clinker grinders & Jet pumps to three common ash slurry sumps. Three streams with Nine Slurry pumps are there which has conveyed these bottom ashes to dyke (Lagoon). The fly ash is collected in 144 ESP hoppers (48 Coase hoppers & 96 fine hoppers), 4 nos. Buffer hoppers & 6 nos. APH hoppers for each unit. Fly ash from all these hoppers is conveyed by Vacuum conveying (From ESP to Buffer Hopper) & then it is conveyed pneumatically by Dense phase pneumatic (From Buffer hopper to Silo) up to 03 Nos Fly Ash Silo each having storage capacity of 2000 Cubic. M each. In silo two types of conveying system are there, one is Dry conveying & another is Wet conveying. In dry conveying all ash can be conveyed through Bulkers or 1 T bagging system. If absence of Bulkers & bagging all fly ash can be conveyed through Wet system by open Trucks. There is an Emergency provision for conveying both Bottom ash & fly ash from slurry sump to Dyke via Slurry pumps in the form of fine slurry in case of non-availability of bulkers, silo Equipment or dry conveying lines. Water recovered from these Dykes through recovery sump & pumps. Out of three bottom ash conveying lines one line has dedicated to spray water for dust suppression and flushing purposes

Ash Handling System (SEIL-P2): Ash handling system is designed to evacuate the total Ash generated in the form of bottom ash, coarse ash and fly ash from the coal fired boiler of the 660 MW units. Bottom ash and coarse ash (Economizer ash) are collected from boiler furnace and conveyed through Economizer hoppers into the bottom ash hopper and further conveyed to BA silo of capacity 900cu.m, through Submerged Scrapper Chain Conveyor and followed by open conveyor. The fly ash is collected in 96 ESP hoppers and 6 nos. APH hoppers for each unit. Fly ash from all these hoppers is conveyed pneumatically by dense phase pneumatic conveying system, to 03 Nos Fly Ash Silo each having storage capacity of 2000 Cubic.m. fly ash can be

conveyed in wet mode by HCSD pumps to dyke or can be unloaded to bulker (off takers) in dry mode for commercial purpose.

Power Generation & Distribution system: The system consists of 660MW capacity Generators, 3 single phase bank of Generator transformers for each unit, 2 Nos. of 3 winding Station Transformers, to serve for the Station auxiliaries, 4 Nos.(2 for each unit) of Unit auxiliary Transformers to serve the Unit auxiliaries and the Gas Insulated Switch yard (GIS).Power is generated by the 660MW generator at 22KV for SEIL P-1 and 20KV for SEIL P-2 voltage level and is stepped up to the evacuation voltage level of 400KV. The connection between the generator and the generator transformer is by Isolated Phase bus duct and from generator transformer's high voltage terminals to 400KV GIS yard; it will be through overhead conductor. Unit Auxiliary Transformers will get power from their respective unit generators to feed unit auxiliaries at 11KV level. Station Transformers fed from 400KV GIS yard will be used to feed power at 11KV level for SEIL(P1) and Station transformers will get power from their respective unit generators to feed station auxiliaries at 11KV level at SEIL(P2), to meet station auxiliary requirement. 3 Emergency DG sets with AMF panels are provided to cater the emergency loads during a system Blackout condition, for safe shut down at both the Plants.

Fuel Oil System: SEIL is using HSD and HFO as fuels for boiler ignition. High Speed Diesel (HSD) is used as start up fuel for boiler. Heavy Furnace Oil (HFO) is used for hot start-up of boiler, till stabilization of combustion, with pulverized coal. HFO and HSD are received by road tankers. The two numbers of horizontal twin screw HFO and HSD unloading pumps are provided for unloading HFO and HSD from the road tankers to respective storage tanks. Steam Heat Tracing is adopted for HFO piping and electrical heat tracing in the tanks. Two numbers of HFO storage tanks and one no. HSD storage tank are provided. HFO and HSD from these tanks are pumped to the boilers, by 3 numbers HFO forwarding and 3 numbers of HSD forwarding pumps.

Environmental Measures:

SEIL is religiously following the environmental norms stipulated by MOEF. The different environmental protection measures followed by the company are

1) To minimize fly ash emission to atmosphere, high efficiency ESPs are installed. The ESPs are designed to limit the particulate emission to less than 50 mg/Nm3.

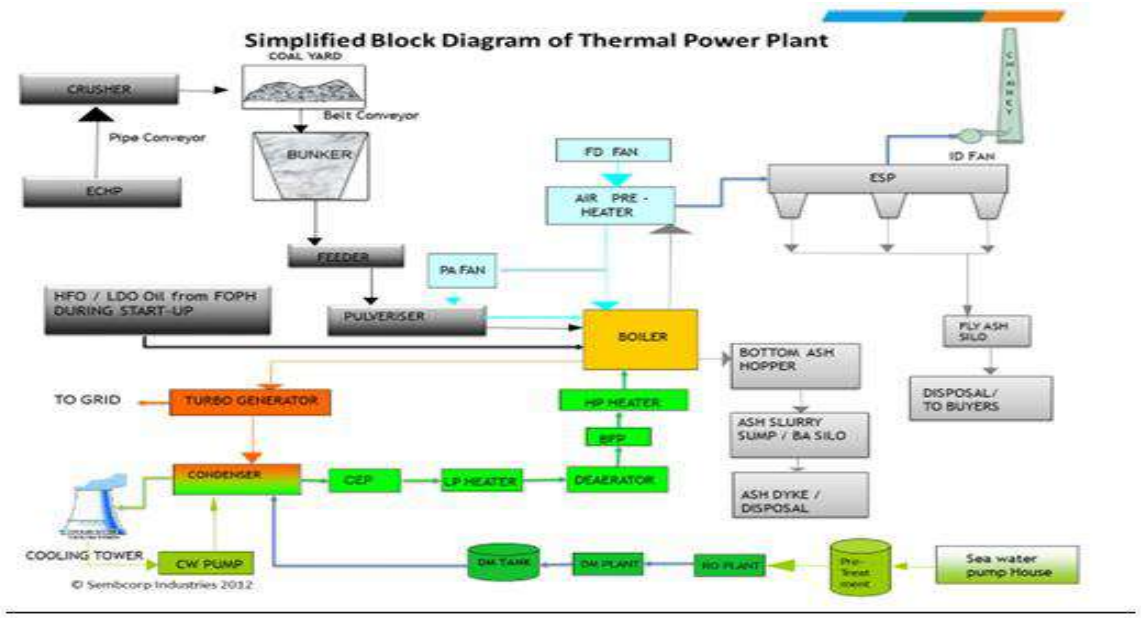
2) The chimney is installed to let the flue gas into the atmosphere at about 275 meters height.

3) Dust extraction system of coal crusher and other equipment are provided with bag filters to minimize fugitive dust emission from CHP. Water spray arrangement is provided to spray water all-around the coal stockpiles to suppress dust.

4) All the equipment in the plant is designed for noise level not exceeding 90 db. The Steam turbine generator would be provided with acoustic enclosures. The steam turbine is in a closed building which considerably reduces the noise outside turbine hall.

5) A thick green belt in an area of about 395 acres in SEIL(P-1) and 315 acres in SEIL(P-2) of land will be developed all around the plant, which acts as noise and air pollution barrier

PROCESS FLOW CHART:



2.3 WORKING HOURS:

Timings	
A- Shift	06:00 hrs to 14:00 hrs
General Shift	08:30 hrs to 18:00 hrs
B-Shift	14:00 hrs to 22:00 hrs
C-Shift	22:00 hrs to 06:00 hrs

2.4 LIST OF RAW MATERIALS/ CHEMICALS USED IN THE PLANT:

In the manufacturing process different raw materials are used to produce the Power. The list of raw materials and chemicals are shown below:

SEIL P-2 Bulk Chemicals and Quantity:

S.No.	Description	Quantity	Capacity	Location
1	FERRIC CHLORIDE STORAGE TANK - A	1	53.55 m3	PRE-TREATMENT PLANT
2	FERRIC CHLORIDE STORAGE TANK - B	1	53.55 m3	PRE-TREATMENT PLANT
3	HYDROCLORIC ACID STORAGE TANK - A	1	12 m3	WATER TREATMENT PLANT
4	HYDROCLORIC STORAGE TANK - B	1	12 m3	WATER TREATMENT PLANT
5	CAUSTIC STORAGE TANK - A	1	12 m3	WATER TREATMENT PLANT
6	CAUSTIC STORAGE TANK - B	1	12 m3	WATER TREATMENT PLANT
7	LIGUID CO2 STORAGE TANK	1	20 m3	WATER TREATMENT PLANT
8	SODIUM SILICATE STORAGE TANK	1	12 m3	WATER TREATMENT PLANT
9	ACID STORAGE TANK	1	20 m3	CPU
10	CAUSTIC STORAGE TANK	1	20 m3	CPU
11	Hydrocloric ACID STORAGE TANK	1	8 m3	EC PLANT

2.4 LIST OF EQUIPMENT USED FOR MANUFACTURING PROCESS:

Sl No	MAIN AREA	SUB AREA	AREA	Equipment	Classification
1	CHP	ICHP-STACKING	DRIVES	Belt Conveyor - E1A	Critical
2	CHP	ICHP-STACKING	PUMPS	Belt Conveyor - E1A Scoop Oil Pump	Critical
3	CHP	ICHP-STACKING	FANS	Belt Conveyor - E1A ;Scoop Lube Oil Cooling Fan	Critical
4	CHP	ICHP-STACKING	DRIVES	Belt Conveyor - E1B	Critical
5	CHP	ICHP-STACKING	PUMPS	Belt Conveyor - E1B - Scoop Oil Pump	Critical
6	CHP	ICHP-STACKING	FANS	Belt Conveyor - E1B ;Scoop Lube Oil Cooling Fan	Critical
7	CHP	ICHP-STACKING	DRIVES	Belt Conveyor - 1A	Critical
8	CHP	ICHP-STACKING	PUMPS	Belt Conveyor - 1A Scoop Oil Pump	Critical
9	CHP	ICHP-STACKING	FANS	Belt Conveyor - 1A ;Scoop Lube Oil Cooling Fan	Critical
10	CHP	ICHP-STACKING	DRIVES	Belt Conveyor - 1B	Critical
11	CHP	ICHP-STACKING	PUMPS	Belt Conveyor - 1B - Scoop Oil Pump	Critical
12	CHP	ICHP-STACKING	FANS	Belt Conveyor - 1B ;Scoop Lube Oil Cooling Fan	Critical
13	CHP	ICHP-STACKING	DRIVES	Vibrating Grizzly feeder - 1	Critical
14	CHP	ICHP-STACKING	DRIVES	Vibrating Grizzly feeder - 2	Critical
15	CHP	ICHP-STACKING	DRIVES	Vibrating Grizzly feeder - 3	Critical
16	CHP	ICHP-STACKING	DRIVES	Vibrating Grizzly feeder - 4	Critical
17	CHP	ICHP-STACKING	DRIVES	Crusher - 1	Critical

18	CHP	ICHP-STACKING	PUMPS	Crusher - 1 lube oil Pump-A	Critical
19	CHP	ICHP-STACKING	PUMPS	Crusher - 1 lube oil Pump-B	Critical
20	CHP	ICHP-STACKING	FANS	Crusher -1- Scoop Lube Oil Cooling Fan	Critical
21	CHP	ICHP-STACKING	DRIVES	Crusher - 2	Critical
22	CHP	ICHP-STACKING	PUMPS	Crusher - 2 lube oil Pump	Critical
23	CHP	ICHP-STACKING	PUMPS	Crusher - 2 lube oil Pump-B	Critical
24	CHP	ICHP-STACKING	FANS	Crusher -2- Scoop Lube Oil Cooling Fan	Critical
25	CHP	ICHP-STACKING	DRIVES	Crusher - 3	Critical
26	CHP	ICHP-STACKING	PUMPS	Crusher - 3 lube oil Pump-A	Critical
27	CHP	ICHP-STACKING	PUMPS	Crusher - 3 lube oil Pump-B	Critical
28	CHP	ICHP-STACKING	FANS	Crusher -3- Scoop Lube Oil Cooling Fan	Critical
29	CHP	ICHP-STACKING	DRIVES	Crusher - 4	Critical
30	CHP	ICHP-STACKING	PUMPS	Crusher - 4 lube oil Pump-A	Critical
31	CHP	ICHP-STACKING	PUMPS	Crusher - 4 lube oil Pump-B	Critical
32	CHP	ICHP-STACKING	FANS	Crusher -4- Scoop Lube Oil Cooling Fan	Critical
33	CHP	ICHP-STACKING	DRIVES	Belt feeder - 1	Critical
34	CHP	ICHP-STACKING	DRIVES	Belt feeder - 2	Critical
35	CHP	ICHP-STACKING	DRIVES	Belt feeder - 3	Critical
36	CHP	ICHP-STACKING	DRIVES	Belt feeder - 4	Critical

37	CHP	ICHP-STACKING	FANS	DE System ID Fan-A	Critical
38	CHP	ICHP-STACKING	FANS	DE System ID Fan-B	Critical
39	CHP	ICHP-STACKING	Conveyor	SCR-1 Boom Conveyor	Critical
40	CHP	ICHP-STACKING	Conveyor	SCR-2 Boom Conveyor	Critical
41	CHP	ICHP-STACKING	Conveyor	SCR-3 Boom Conveyor	Critical
42	Boiler	FOPH	PUMPS	HFO Forwarding pump-A	Semi-Critical
43	Boiler	FOPH	PUMPS	HFO Forwarding pump-B	Semi-Critical
44	Boiler	FOPH	PUMPS	HFO Forwarding pump-C	Semi-Critical
45	Boiler	FOPH	PUMPS	LDO Forwarding pump-A	Semi-Critical
46	Boiler	FOPH	PUMPS	LDO Forwarding pump-B	Semi-Critical
47	Boiler	FOPH	PUMPS	LDO Forwarding pump-C	Semi-Critical
48	Boiler	FOPH	PUMPS	Drain Oil Transfer Pump-A	Semi-Critical
49	Boiler	FOPH	PUMPS	Drain Oil Transfer Pump-B	Semi-Critical
50	Boiler	FOPH	PUMPS	Oil Water MIX Transfer Pump-A	Semi-Critical
51	Boiler	FOPH	PUMPS	Oil Water MIX Transfer Pump-B	Semi-Critical
52	Boiler	FOPH	PUMPS	Oil Recovery Transfer Pump-A	Semi-Critical
53	Boiler	FOPH	PUMPS	Oil Recovery Transfer Pump-B	Semi-Critical
54	Boiler	FOPH	PUMPS	HFO Unloading pump-A	Semi-Critical
55	Boiler	FOPH	PUMPS	HFO Unloading pump-B	Semi-Critical
56	Boiler	FOPH	PUMPS	HFO Decanting pump	Semi-Critical
57	Boiler	FOPH	PUMPS	LDO Unloading pump-A	Semi-Critical
58	Boiler	FOPH	PUMPS	LDO Unloading pump-B	Semi-Critical
59	Boiler	Boiler-1	FANS	ID Fan-1A	Critical
60	Boiler	Boiler-1	FANS	ID Fan-1B	Critical
61	Boiler	Boiler-1	PUMPS	ID Fan-1A Bearing Cooling Fan-A	Critical
62	Boiler	Boiler-1	PUMPS	ID Fan-1A Bearing Cooling Fan-B	Critical
63	Boiler	Boiler-1	PUMPS	ID Fan-1B Bearing Cooling Fan-A	Critical
64	Boiler	Boiler-1	PUMPS	ID Fan-1B Bearing Cooling Fan-B	Critical
65	Boiler	Boiler-1	FANS	FD Fan-1A	Critical
66	Boiler	Boiler-1	FANS	FD Fan-1B	Critical
67	Boiler	Boiler-1	FANS	PA Fan-1A	Critical
68	Boiler	Boiler-1	FANS	PA Fan-1B	Critical
69	Boiler	Boiler-1	FANS	Mill Seal Air Fan-1A	Critical
70	Boiler	Boiler-1	FANS	Mill Seal Air Fan-1B	Critical

71	Boiler	Boiler-1	FANS	Scanner Air Fan-AC	Critical
72	Boiler	Boiler-1	FANS	Scanner Air Fan-DC	Critical
73	Boiler	Boiler-1	APH	APH-1A Main Drive	Critical
74	Boiler	Boiler-1	APH	APH-1A Aux Drive	Critical
75	Boiler	Boiler-1	APH	APH-1B Main Drive	Critical
76	Boiler	Boiler-1	APH	APH-1B Aux Drive	Critical
77	Boiler	Boiler-1	PUMPS	Boiler StartUp Drain Pump-1A	Critical
78	Boiler	Boiler-1	PUMPS	Boiler StartUp Drain Pump-1B	Critical
79	Boiler	Boiler-1	PUMPS	APH Flush Pump-1	Critical
80	Boiler	Boiler-1	PUMPS	ID Fan-1A LOP-A	Critical
81	Boiler	Boiler-1	PUMPS	ID Fan-1A LOP-B	Critical
82	Boiler	Boiler-1	PUMPS	ID Fan-1B LOP-A	Critical
83	Boiler	Boiler-1	PUMPS	ID Fan-1B LOP-B	Critical
84	Boiler	Boiler-1	PUMPS	FD Fan-1A LOP-A	Critical
85	Boiler	Boiler-1	PUMPS	FD Fan-1A LOP-B	Critical
86	Boiler	Boiler-1	PUMPS	FD Fan-1B LOP-A	Critical
87	Boiler	Boiler-1	PUMPS	FD Fan-1B LOP-B	Critical
88	Boiler	Boiler-1	PUMPS	PA Fan-1A LOP-A	Critical
89	Boiler	Boiler-1	PUMPS	PA Fan-1A LOP-B	Critical
90	Boiler	Boiler-1	PUMPS	PA Fan-1B LOP-A	Critical
91	Boiler	Boiler-1	PUMPS	PA Fan-1B LOP-B	Critical
92	Boiler	Boiler-1	APH	APH-1A Support Bearing Peak value	Critical
93	Boiler	Boiler-1	APH	APH-1B Support Bearing Peak value	Critical
94	Boiler	Boiler-1	MILLS	Coal Mill-1A Drive	Critical
95	Boiler	Boiler-1	MILLS	Coal Mill-1B Drive	Critical
96	Boiler	Boiler-1	MILLS	Coal Mill-1C Drive	Critical
97	Boiler	Boiler-1	MILLS	Coal Mill-1D Drive	Critical
98	Boiler	Boiler-1	MILLS	Coal Mill-1E Drive	Critical
99	Boiler	Boiler-1	MILLS	Coal Mill-1F Drive	Critical
100	Boiler	Boiler-1	MILLS	Coal Mill-1G Drive	Critical
101	Boiler	Boiler-1	MILLS	Coal Mill-1H Drive	Critical
102	Boiler	Boiler-1	PUMPS	Coal Mill-1A Lube Oil Pump-A	Critical
103	Boiler	Boiler-1	PUMPS	Coal Mill-1A Lube Oil Pump-B	Critical
104	Boiler	Boiler-1	PUMPS	Coal Mill-1B Lube Oil Pump-A	Critical
105	Boiler	Boiler-1	PUMPS	Coal Mill-1B Lube Oil Pump-B	Critical
106	Boiler	Boiler-1	PUMPS	Coal Mill-1C Lube Oil Pump-A	Critical
107	Boiler	Boiler-1	PUMPS	Coal Mill-1C Lube Oil Pump-B	Critical

108	Boiler	Boiler-1	PUMPS	Coal Mill-1D Lube Oil Pump-A	Critical
109	Boiler	Boiler-1	PUMPS	Coal Mill-1D Lube Oil Pump-B	Critical
110	Boiler	Boiler-1	PUMPS	Coal Mill-1E Lube Oil Pump-A	Critical
111	Boiler	Boiler-1	PUMPS	Coal Mill-1E Lube Oil Pump-B	Critical
112	Boiler	Boiler-1	PUMPS	Coal Mill-1F Lube Oil Pump-A	Critical
113	Boiler	Boiler-1	PUMPS	Coal Mill-1F Lube Oil Pump-B	Critical
114	Boiler	Boiler-1	PUMPS	Coal Mill-1G Lube Oil Pump-A	Critical
115	Boiler	Boiler-1	PUMPS	Coal Mill-1G Lube Oil Pump-B	Critical
116	Boiler	Boiler-1	PUMPS	Coal Mill-1H Lube Oil Pump-A	Critical
117	Boiler	Boiler-1	PUMPS	Coal Mill-1H Lube Oil Pump-B	Critical
118	Boiler	Boiler-1	PUMPS	Coal mill-1A HOP-A	Critical
119	Boiler	Boiler-1	PUMPS	Coal mill-1A HOP-B	Critical
120	Boiler	Boiler-1	PUMPS	Coal mill-1B HOP-A	Critical
121	Boiler	Boiler-1	PUMPS	Coal mill-1B HOP-B	Critical
122	Boiler	Boiler-1	PUMPS	Coal mill-1C HOP-A	Critical
123	Boiler	Boiler-1	PUMPS	Coal mill-1C HOP-B	Critical
124	Boiler	Boiler-1	PUMPS	Coal mill-1D HOP-A	Critical
125	Boiler	Boiler-1	PUMPS	Coal mill-1D HOP-B	Critical
126	Boiler	Boiler-1	PUMPS	Coal mill-1E HOP-A	Critical
127	Boiler	Boiler-1	PUMPS	Coal mill-1E HOP-B	Critical
128	Boiler	Boiler-1	PUMPS	Coal mill-1F HOP-A	Critical
129	Boiler	Boiler-1	PUMPS	Coal mill-1F HOP-B	Critical
130	Boiler	Boiler-1	PUMPS	Coal mill-1G HOP-A	Critical
131	Boiler	Boiler-1	PUMPS	Coal mill-1G HOP-B	Critical
132	Boiler	Boiler-1	PUMPS	Coal mill-1H HOP-A	Critical
133	Boiler	Boiler-1	PUMPS	Coal mill-1H HOP-B	Critical
134	Boiler	Boiler-1	COAL FEEDERS	Coal Feeder Belt Conveyor-1A	Critical
135	Boiler	Boiler-1	COAL FEEDERS	Clean Out Conveyor-1A	Critical
136	Boiler	Boiler-1	COAL FEEDERS	Coal Feeder Belt Conveyor-1B	Critical
137	Boiler	Boiler-1	COAL FEEDERS	Clean Out Conveyor-1B	Critical
138	Boiler	Boiler-1	COAL FEEDERS	Coal Feeder Belt Conveyor-1C	Critical

139	Boiler	Boiler-1	COAL FEEDERS	Clean Out Conveyor-1C	Critical
140	Boiler	Boiler-1	COAL FEEDERS	Coal Feeder Belt Conveyor-1D	Critical
141	Boiler	Boiler-1	COAL FEEDERS	Clean Out Conveyor-1D	Critical
142	Boiler	Boiler-1	COAL FEEDERS	Coal Feeder Belt Conveyor-1E	Critical
143	Boiler	Boiler-1	COAL FEEDERS	Clean Out Conveyor-1E	Critical
144	Boiler	Boiler-1	COAL FEEDERS	Coal Feeder Belt Conveyor-1F	Critical
145	Boiler	Boiler-1	COAL FEEDERS	Clean Out Conveyor-1F	Critical
146	Boiler	Boiler-1	COAL FEEDERS	Coal Feeder Belt Conveyor-1G	Critical
147	Boiler	Boiler-1	COAL FEEDERS	Clean Out Conveyor-1G	Critical
148	Boiler	Boiler-1	COAL FEEDERS	Coal Feeder Belt Conveyor-1H	Critical
149	Boiler	Boiler-1	COAL FEEDERS	Clean Out Conveyor-1H	Critical
150	Boiler	Aux Boiler	PUMPS	Aux Boiler Feed Pump-A	Critical
151	Boiler	Aux Boiler	PUMPS	Aux Boiler Feed Pump-B	Critical
152	Boiler	Aux Boiler	FANS	Aux Boiler Blower	Critical
153	Boiler	Aux Boiler	PUMPS	Aux Boiler LDO Pump	Critical
154	Boiler	Boiler-2	FANS	ID Fan-2A	Critical
155	Boiler	Boiler-2	FANS	ID Fan-2B	Critical
156	Boiler	Boiler-2	FANS	ID Fan-2A Bearing Cooling Fan-A	Critical
157	Boiler	Boiler-2	FANS	ID Fan-2A Bearing Cooling Fan-B	Critical
158	Boiler	Boiler-2	FANS	ID Fan-2B Bearing Cooling Fan-A	Critical
159	Boiler	Boiler-2	FANS	ID Fan-2B Bearing Cooling Fan-B	Critical
160	Boiler	Boiler-2	FANS	FD Fan-2A	Critical
161	Boiler	Boiler-2	FANS	FD Fan-2B	Critical

162	Boiler	Boiler-2	FANS	PA Fan-2A	Critical
163	Boiler	Boiler-2	FANS	PA Fan-2B	Critical
164	Boiler	Boiler-2	FANS	Mill Seal Air Fan-2A	Critical
165	Boiler	Boiler-2	FANS	Mill Seal Air Fan-2B	Critical
166	Boiler	Boiler-2	FANS	Scanner Air Fan-AC	Critical
167	Boiler	Boiler-2	FANS	Scanner Air Fan-DC	Critical
168	Boiler	Boiler-2	APH	APH-2A Main Drive	Critical
169	Boiler	Boiler-2	APH	APH-2A Aux Drive	Critical
170	Boiler	Boiler-2	APH	APH-2B Main Drive	Critical
171	Boiler	Boiler-2	APH	APH-2B Aux Drive	Critical
172	Boiler	Boiler-2	PUMPS	ID Fan-2A LOP-A	Critical
173	Boiler	Boiler-2	PUMPS	ID Fan-2A LOP-B	Critical
174	Boiler	Boiler-2	PUMPS	ID Fan-2B LOP-A	Critical
175	Boiler	Boiler-2	PUMPS	ID Fan-2B LOP-B	Critical
176	Boiler	Boiler-2	PUMPS	FD Fan-2A LOP-A	Critical
177	Boiler	Boiler-2	PUMPS	FD Fan-2A LOP-B	Critical
178	Boiler	Boiler-2	PUMPS	FD Fan-2B LOP-A	Critical
179	Boiler	Boiler-2	PUMPS	FD Fan-2B LOP-B	Critical
180	Boiler	Boiler-2	PUMPS	PA Fan-2A LOP-A	Critical
181	Boiler	Boiler-2	PUMPS	PA Fan-2A LOP-B	Critical
182	Boiler	Boiler-2	PUMPS	PA Fan-2B LOP-A	Critical
183	Boiler	Boiler-2	PUMPS	PA Fan-2B LOP-B	Critical
184	Boiler	Boiler-2	PUMPS	Boiler Start Up Drain Pump-2A	Critical
185	Boiler	Boiler-2	PUMPS	Boiler Start Up Drain Pump-2B	Critical
186	Boiler	Boiler-2	PUMPS	APH Flush Pump-2	Critical
187	Boiler	Boiler-2	APH	APH-2A Support Bearing Peakvue	Critical
188	Boiler	Boiler-2	APH	APH-2B Support Bearing Peakvue	Critical
189	Boiler	Boiler-2	MILLS	Coal Mill-2A Drive	Critical
190	Boiler	Boiler-2	MILLS	Coal Mill-2B Drive	Critical
191	Boiler	Boiler-2	MILLS	Coal Mill-2C Drive	Critical
192	Boiler	Boiler-2	MILLS	Coal Mill-2D Drive	Critical
193	Boiler	Boiler-2	MILLS	Coal Mill-2E Drive	Critical
194	Boiler	Boiler-2	MILLS	Coal Mill-2F Drive	Critical
195	Boiler	Boiler-2	MILLS	Coal Mill-2G Drive	Critical
196	Boiler	Boiler-2	MILLS	Coal Mill-2H Drive	Critical

197	Boiler	Boiler-2	PUMPS	Coal Mill-2A Lube Oil Pump-A	Critical
198	Boiler	Boiler-2	PUMPS	Coal Mill-2A Lube Oil Pump-B	Critical
199	Boiler	Boiler-2	PUMPS	Coal Mill-2B Lube Oil Pump-A	Critical
200	Boiler	Boiler-2	PUMPS	Coal Mill-2B Lube Oil Pump-B	Critical
201	Boiler	Boiler-2	PUMPS	Coal Mill-2C Lube Oil Pump-A	Critical
202	Boiler	Boiler-2	PUMPS	Coal Mill-2C Lube Oil Pump-B	Critical
203	Boiler	Boiler-2	PUMPS	Coal Mill-2D Lube Oil Pump-A	Critical
204	Boiler	Boiler-2	PUMPS	Coal Mill-2D Lube Oil Pump-B	Critical
205	Boiler	Boiler-2	PUMPS	Coal Mill-2E Lube Oil Pump-A	Critical
206	Boiler	Boiler-2	PUMPS	Coal Mill-2E Lube Oil Pump-B	Critical
207	Boiler	Boiler-2	PUMPS	Coal Mill-2F Lube Oil Pump-A	Critical
208	Boiler	Boiler-2	PUMPS	Coal Mill-2F Lube Oil Pump-B	Critical
209	Boiler	Boiler-2	PUMPS	Coal Mill-2G Lube Oil Pump-A	Critical
210	Boiler	Boiler-2	PUMPS	Coal Mill-2G Lube Oil Pump-B	Critical
211	Boiler	Boiler-2	PUMPS	Coal Mill-2H Lube Oil Pump-A	Critical
212	Boiler	Boiler-2	PUMPS	Coal Mill-2H Lube Oil Pump-B	Critical
213	Boiler	Boiler-2	PUMPS	Coal mill-2A HOP-A	Critical
214	Boiler	Boiler-2	PUMPS	Coal mill-2A HOP-B	Critical
215	Boiler	Boiler-2	PUMPS	Coal mill-2B HOP-A	Critical
216	Boiler	Boiler-2	PUMPS	Coal mill-2B HOP-B	Critical
217	Boiler	Boiler-2	PUMPS	Coal mill-2C HOP-A	Critical
218	Boiler	Boiler-2	PUMPS	Coal mill-2C HOP-B	Critical
219	Boiler	Boiler-2	PUMPS	Coal mill-2D HOP-A	Critical
220	Boiler	Boiler-2	PUMPS	Coal mill-2D HOP-B	Critical
221	Boiler	Boiler-2	PUMPS	Coal mill-2E HOP-A	Critical
222	Boiler	Boiler-2	PUMPS	Coal mill-2E HOP-B	Critical
223	Boiler	Boiler-2	PUMPS	Coal mill-2F HOP-A	Critical
224	Boiler	Boiler-2	PUMPS	Coal mill-2F HOP-B	Critical
225	Boiler	Boiler-2	PUMPS	Coal mill-2G HOP-A	Critical
226	Boiler	Boiler-2	PUMPS	Coal mill-2G HOP-B	Critical
227	Boiler	Boiler-2	PUMPS	Coal mill-2H HOP-A	Critical
228	Boiler	Boiler-2	PUMPS	Coal mill-2H HOP-B	Critical
229	Boiler	Boiler-2	COAL FEEDERS	Coal Feeder Belt Conveyor-2A	Critical
230	Boiler	Boiler-2	COAL FEEDERS	Clean Out Conveyor-2A	Critical

231	Boiler	Boiler-2	COAL FEEDERS	Coal Feeder Belt Conveyor-2B	Critical
232	Boiler	Boiler-2	COAL FEEDERS	Clean Out Conveyor-2B	Critical
233	Boiler	Boiler-2	COAL FEEDERS	Coal Feeder Belt Conveyor-2C	Critical
234	Boiler	Boiler-2	COAL FEEDERS	Clean Out Conveyor-2C	Critical
235	Boiler	Boiler-2	COAL FEEDERS	Coal Feeder Belt Conveyor-2D	Critical
236	Boiler	Boiler-2	COAL FEEDERS	Clean Out Conveyor-2D	Critical
237	Boiler	Boiler-2	COAL FEEDERS	Coal Feeder Belt Conveyor-2E	Critical
238	Boiler	Boiler-2	COAL FEEDERS	Clean Out Conveyor-2E	Critical
239	Boiler	Boiler-2	COAL FEEDERS	Coal Feeder Belt Conveyor-2F	Critical
240	Boiler	Boiler-2	COAL FEEDERS	Clean Out Conveyor-2F	Critical
241	Boiler	Boiler-2	COAL FEEDERS	Coal Feeder Belt Conveyor-2G	Critical
242	Boiler	Boiler-2	COAL FEEDERS	Clean Out Conveyor-2G	Critical
243	Boiler	Boiler-2	COAL FEEDERS	Coal Feeder Belt Conveyor-2H	Critical
244	Boiler	Boiler-2	COAL FEEDERS	Clean Out Conveyor-2H	Critical
245	TURBINE	TURBINE-1	TURBINES	Main Turbine-1	Critical
246	TURBINE	TURBINE-1	PUMPS	OCCW Pump-1A	Critical
247	TURBINE	TURBINE-1	PUMPS	OCCW Pump-1B	Critical
248	TURBINE	TURBINE-1	PUMPS	CCCW Pump-1A	Critical
249	TURBINE	TURBINE-1	PUMPS	CCCW Pump-1B	Critical
250	TURBINE	TURBINE-1	PUMPS	CEP-1A	Critical
251	TURBINE	TURBINE-1	PUMPS	CEP-1B	Critical
252	TURBINE	TURBINE-1	PUMPS	CEP-1C	Critical
253	TURBINE	TURBINE-1	PUMPS	MDBFP	Critical
254	TURBINE	TURBINE-1	PUMPS	TDBFP-1A Booster Pump	Critical

255	TURBINE	TURBINE-1	PUMPS	TDBFP-1B Booster Pump	Critical
256	TURBINE	TURBINE-1	TURBINES	TDBFP-1A	Critical
257	TURBINE	TURBINE-1	TURBINES	TDBFP-1B	Critical
258	TURBINE	TURBINE-1	FANS	TDBFP-1A LOP-A	Critical
259	TURBINE	TURBINE-1	PUMPS	TDBFP-1A LOP-B	Critical
260	TURBINE	TURBINE-1	PUMPS	TDBFP-1B LOP-A	Critical
261	TURBINE	TURBINE-1	PUMPS	TDBFP-1B LOP-B	Critical
262	TURBINE	TURBINE-1	PUMPS	Vacuum Pump-1A	Critical
263	TURBINE	TURBINE-1	PUMPS	Vacuum Pump-1B	Critical
264	TURBINE	TURBINE-1	PUMPS	Vacuum Pump-1C	Critical
265	TURBINE	TURBINE-1	PUMPS	Stator Cooling Water Pump-1A	Critical
266	TURBINE	TURBINE-1	PUMPS	Stator Cooling Water Pump-1B	Critical
267	TURBINE	TURBINE-1	PUMPS	H2 Side Seal Pump-AC	Critical
268	TURBINE	TURBINE-1	PUMPS	H2 Side Seal Pump-DC	Critical
269	TURBINE	TURBINE-1	PUMPS	Air Side Seal Oil Pump-AC	Critical
270	TURBINE	TURBINE-1	PUMPS	Air Side Seal Oil Pump-DC	Critical
271	TURBINE	TURBINE-1	PUMPS	EH Oil Pump-1A	Critical
272	TURBINE	TURBINE-1	PUMPS	EH Oil Pump-1B	Critical
273	TURBINE	TURBINE-1	PUMPS	CPU Recirculation Pump-1A	Critical
274	TURBINE	TURBINE-1	PUMPS	CPU Recirculation Pump-1B	Critical
275	TURBINE	TURBINE-1	PUMPS	TDBFP-1A EOP	Critical
276	TURBINE	TURBINE-1	PUMPS	TDBFP-1B EOP	Critical
277	TURBINE	TURBINE-1	PUMPS	Bearing Oil Pump	Critical
278	TURBINE	TURBINE-1	PUMPS	HP Start up Oil Pump	Critical
279	TURBINE	TURBINE-1	PUMPS	Emergency Oil Pump	Critical
280	TURBINE	TURBINE-1	PUMPS	Condensate Transfer Pump	Critical
281	TURBINE	TURBINE-1	PUMPS	Boiler Filling Pump-1A	Critical
282	TURBINE	TURBINE-1	PUMPS	Boiler Filling Pump-1B	Critical
283	TURBINE	TURBINE-1	PUMPS	CPU Back Wash Pump-1A	Critical
284	TURBINE	TURBINE-1	PUMPS	CPU Back Wash Pump-1B	Critical
285	TURBINE	TURBINE-1	PUMPS	CPU Flushing Water Pump-1A	Critical
286	TURBINE	TURBINE-1	PUMPS	CPU Flushing Water Pump-1B	Critical
287	TURBINE	TURBINE-1	PUMPS	COLTC-1A (Pass-B)	Critical
288	TURBINE	TURBINE-1	PUMPS	COLTC-1B (Pass-A)	Critical
289	TURBINE	TURBINE-1	PUMPS	Jock Oil Pump-AC	Critical
290	TURBINE	TURBINE-1	PUMPS	Jock Oil Pump-DC	Critical
291	TURBINE	TURBINE-1	PUMPS	EH Oil Regenerative Pump	Critical

292	TURBINE	TURBINE-1	PUMPS	EH Oil Recirculation Pump	Critical
293	TURBINE	TURBINE-1	PUMPS	MOT - Centrifuge Booster pump	Critical
294	TURBINE	TURBINE-1	FANS	Seal Oil Vapour Exhaust Fan-1A	Critical
295	TURBINE	TURBINE-1	FANS	Seal Oil Vapour Exhaust Fan-1B	Critical
296	TURBINE	TURBINE-1	FANS	MOT Vapour Exhaust Fan-1A	Critical
297	TURBINE	TURBINE-1	FANS	MOT Vapour Exhaust Fan-1B	Critical
298	TURBINE	TURBINE-1	FANS	GSC Vapour exhaust Fan-1A	Critical
299	TURBINE	TURBINE-1	FANS	GSC Vapour exhaust Fan-1B	Critical
300	TURBINE	TURBINE-1	PUMPS	Turning gear motor	Critical
301	TURBINE	TURBINE-1	PUMPS	EH Oil Flusher Pump	Critical
302	TURBINE	TURBINE-1	PUMPS	MOT Flusher Pump	Critical
303	TURBINE	TURBINE-1	PUMPS	MDBFP-1 LOP	Critical
304	TURBINE	TURBINE-1	PUMPS	MOT Centrifuge	Critical
305	TURBINE	TURBINE-1	PUMPS	TDBFP Centrifuge	Critical
306	TURBINE	TURBINE-2	TURBINES	Main Turbine-2	Critical
307	TURBINE	TURBINE-2	PUMPS	OCCW Pump-2A	Critical
308	TURBINE	TURBINE-2	PUMPS	OCCW Pump-2B	Critical
309	TURBINE	TURBINE-2	PUMPS	CCCW Pump-2A	Critical
310	TURBINE	TURBINE-2	PUMPS	CCCW Pump-2B	Critical
311	TURBINE	TURBINE-2	PUMPS	CEP-2A	Critical
312	TURBINE	TURBINE-2	PUMPS	CEP-2B	Critical
313	TURBINE	TURBINE-2	PUMPS	CEP-2C	Critical
314	TURBINE	TURBINE-2	PUMPS	MDBFP	Critical
315	TURBINE	TURBINE-2	PUMPS	TDBFP-2A Booster Pump	Critical
316	TURBINE	TURBINE-2	PUMPS	TDBFP-2B Booster Pump	Critical
317	TURBINE	TURBINE-2	TURBINES	TDBFP-2A	Critical
318	TURBINE	TURBINE-2	TURBINES	TDBFP-2B	Critical
319	TURBINE	TURBINE-2	PUMPS	TDBFP-2A LOP-A	Critical
320	TURBINE	TURBINE-2	PUMPS	TDBFP-2A LOP-B	Critical
321	TURBINE	TURBINE-2	PUMPS	TDBFP-2B LOP-A	Critical
322	TURBINE	TURBINE-2	PUMPS	TDBFP-2B LOP-B	Critical
323	TURBINE	TURBINE-2	PUMPS	Vacuum Pump-2A	Critical
324	TURBINE	TURBINE-2	PUMPS	Vacuum Pump-2B	Critical
325	TURBINE	TURBINE-2	PUMPS	Vacuum Pump-2C	Critical
326	TURBINE	TURBINE-2	PUMPS	Stator Cooling Water Pump-2A	Critical
327	TURBINE	TURBINE-2	PUMPS	Stator Cooling Water Pump-2B	Critical

328	TURBINE	TURBINE-2	PUMPS	H2 Side Seal Pump-AC	Critical
329	TURBINE	TURBINE-2	PUMPS	H2 Side Seal Pump-DC	Critical
330	TURBINE	TURBINE-2	PUMPS	Air Side Seal Oil Pump-AC	Critical
331	TURBINE	TURBINE-2	PUMPS	Air Side Seal Oil Pump-DC	Critical
332	TURBINE	TURBINE-2	PUMPS	EH Oil Pump-2A	Critical
333	TURBINE	TURBINE-2	PUMPS	EH Oil Pump-2B	Critical
334	TURBINE	TURBINE-2	PUMPS	CPU Recirculation Pump-2A	Critical
335	TURBINE	TURBINE-2	PUMPS	CPU Recirculation Pump-2B	Critical
336	TURBINE	TURBINE-2	PUMPS	TDBFP-2A EOP	Critical
337	TURBINE	TURBINE-2	PUMPS	TDBFP-2B EOP	Critical
338	TURBINE	TURBINE-2	PUMPS	Bearing Oil Pump	Critical
339	TURBINE	TURBINE-2	PUMPS	HP Startup Oil Pump	Critical
340	TURBINE	TURBINE-2	PUMPS	Emergency Oil Pump	Critical
341	TURBINE	TURBINE-2	PUMPS	Condensate Transfer Pump	Critical
342	TURBINE	TURBINE-2	PUMPS	Boiler Filling Pump-2A	Critical
343	TURBINE	TURBINE-2	PUMPS	Boiler Filling Pump-2B	Critical
344	TURBINE	TURBINE-2	PUMPS	COLTC-2A (Pass-B)	Critical
345	TURBINE	TURBINE-2	PUMPS	COLTC-2B (Pass-A)	Critical
346	TURBINE	TURBINE-2	PUMPS	Jock Oil Pump-AC	Critical
347	TURBINE	TURBINE-2	PUMPS	Jock Oil Pump-DC	Critical
348	TURBINE	TURBINE-2	PUMPS	EH Oil Regenerative Pump	Critical
349	TURBINE	TURBINE-2	PUMPS	EH Oil Recirculation Pump	Critical
350	TURBINE	TURBINE-2	PUMPS	MOT - Centrifuge Booster pump	Critical
351	TURBINE	TURBINE-2	FANS	Seal Oil Vapour Exhaust Fan-2A	Critical
352	TURBINE	TURBINE-2	FANS	Seal Oil Vapour Exhaust Fan-2B	Critical
353	TURBINE	TURBINE-2	FANS	MOT Vapour Exhaust Fan-2A	Critical
354	TURBINE	TURBINE-2	FANS	MOT Vapour Exhaust Fan-2B	Critical
355	TURBINE	TURBINE-2	FANS	GSC Vapour exhaust Fan-2A	Critical
356	TURBINE	TURBINE-2	FANS	GSC Vapour exhaust Fan-2B	Critical
357	TURBINE	TURBINE-2	PUMPS	Turning gear motor	Critical
358	TURBINE	TURBINE-2	PUMPS	EH Oil Flusher Pump	Critical
359	TURBINE	TURBINE-2	PUMPS	MOT Flusher Pump	Critical
360	TURBINE	TURBINE-2	PUMPS	MDBFP-2 LOP	Critical
361	TURBINE	TURBINE-2	PUMPS	MOT Centrifuge	Critical
362	TURBINE	TURBINE-2	PUMPS	TDBFP Centrifuge	Critical

363	TURBINE	CPU Regeneration	PUMPS	Waste Water Discharge Pump-A	Critical
364	TURBINE	CPU Regeneration	PUMPS	Waste Water Discharge Pump-B	Critical
365	TURBINE	CPU Regeneration	PUMPS	Regenerative Roots Blower-A	Critical
366	TURBINE	CPU Regeneration	PUMPS	Regenerative Roots Blower-B	Critical
367	TURBINE	CPU Regeneration	FANS	N-Pit Roots Blower-A	Critical
368	TURBINE	CPU Regeneration	FANS	N-Pit Roots Blower-B	Critical
369	TURBINE	PAC	COMPRESSOR	Plant Air Compressor - 1	Critical
370	TURBINE	PAC	COMPRESSOR	Plant Air Compressor - 2	Critical
371	TURBINE	PAC	COMPRESSOR	Plant Air Compressor - 3	Critical
372	TURBINE	PAC	COMPRESSOR	Plant Air Compressor - 4	Critical
373	TURBINE	PAC	COMPRESSOR	Plant Air Compressor - 5	Critical
374	CHP	ECHP	DRIVES	Vibrating feeder - 1 (JNT-1E)	Critical
375	CHP	ECHP	DRIVES	Vibrating feeder - 2 (JNT-1E)	Critical
376	CHP	ECHP	DRIVES	Vibrating feeder - 3 (JNT-1E)	Critical
377	CHP	ECHP	DRIVES	Vibrating feeder - 4 (JNT-1E)	Critical
378	CHP	ECHP	FANS	DE System ID Fan (JNT-1E)	Critical
379	CHP	ECHP	DRIVES	Pipe Conveyor - 1(Plant End)	Critical
380	CHP	ECHP	FANS	Pipe Conveyor -1 cooling fan - bottom	Critical
381	CHP	ECHP	FANS	Pipe Conveyor -1 cooling fan - top	Critical
382	CHP	ECHP	DRIVES	Pipe Conveyor - 2(Plant End)	Critical
383	CHP	ECHP	FANS	Pipe Conveyor -2 cooling fan - bottom	Critical
384	CHP	ECHP	FANS	Pipe Conveyor -2 cooling fan - top	Critical
385	CHP	ECHP	DRIVES	Pipe Conveyor - 3(Plant End)	Critical

386	CHP	ECHP	FANS	Pipe Conveyor -3 cooling fan - bottom	Critical
387	CHP	ECHP	FANS	Pipe Conveyor -3 cooling fan - top	Critical
388	CHP	ECHP	DRIVES	Pipe Conveyor - 4 (Plant End)	Critical
389	CHP	ECHP	FANS	Pipe Conveyor -4 cooling fan - bottom	Critical
390	CHP	ECHP	FANS	Pipe Conveyor -4 cooling fan - top	Critical
391	CHP	ECHP	DRIVES	Pipe Conveyor - 5(Port End)	Critical
392	CHP	ECHP	FANS	Pipe Conveyor -5 cooling fan - bottom	Critical
393	CHP	ECHP	FANS	Pipe Conveyor -5 cooling fan - top	Critical
394	CHP	ECHP	DRIVES	Pipe Conveyor - 6 (Port End)	Critical
395	CHP	ECHP	FANS	Pipe Conveyor -6 cooling fan - bottom	Critical
396	CHP	ECHP	FANS	Pipe Conveyor -6 cooling fan - top	Critical
397	CHP	ECHP	FEEDER BREAKE	RDE System ID Fan (Port End)	Critical
398	CHP	ECHP	FEEDER BREAKE	R Feeder Breaker-1- Crusher	Critical
399	CHP	ECHP F	FEEDER BREAKE	R Feeder Breaker-1- Chain Conveyor	Critical
400	CHP	ECHP F	FEEDER BREAKE	R Feeder Breaker-1- Wobbler-Sea Side	Critical
401	CHP	ECHP F	EEDER BREAKE	R Feeder Breaker-1- Wobbler-ITPCIL Side	Critical
402	CHP	ECHP F	EEDER BREAKE	R Feeder Breaker-2- Crusher	Critical
403	CHP	ECHP F	EEDER BREAKE	R Feeder Breaker-2- Chain Conveyor	Critical
404	CHP	ECHP F	EEDER BREAKE	R Feeder Breaker-2- Wobbler-Sea Side	Critical
405	CHP	ECHP F	EEDER BREAKE	R Feeder Breaker-2- Wobbler-ITPCIL Side	Critical

406	CHP	ECHP	FEEDER BREAKE	R Feeder Breaker-3- Crusher	Critical
407	CHP	ECHP	FEEDER BREAKE	R Feeder Breaker-3- Chain Conveyor	Critical
408	CHP	ECHP	FEEDER BREAKE	R Feeder Breaker-3- Wobbler-Sea Side	Critical
409	CHP	ECHP	FEEDER BREAKE	R Feeder Breaker-3- Wobbler-TPCIL Side	Critical
410	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 2A	Critical
411	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 2A - Scoop oil Pump	Critical
412	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 2A ;Scoop Lube Oil Cooling Fan	Critical
413	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 2B	Critical
414	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 2B - Scoop oil Pump	Critical
415	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 2B ;Scoop Lube Oil Cooling Fan	Critical
416	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 2C	Critical
417	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 2C - Scoop oil Pump	Critical
418	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 2C ;Scoop Lube Oil Cooling Fan	Critical
419	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 3A	Critical
420	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 3A - Scoop oil Pump	Critical
421	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 3A - Scoop oil Cooling Fan	Critical
422	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 3B	Critical
423	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 3B - Scoop oil Pump	Critical
424	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 3B - Scoop oil Cooling Fan	Critical

425	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 4A	Critical
426	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 4A Scoop Oil Pump	Critical
427	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 4A ;Scoop Lube Oil Cooling Fan	Critical
428	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 4B	Critical
429	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 4B - Scoop Oil Pump	Critical
430	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 4B ;Scoop Lube Oil Cooling Fan	Critical
431	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 5A	Critical
432	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 5A - Scoop oil Pump	Critical
433	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 5A ;Scoop Lube Oil Cooling Fan	Critical
434	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 5B	Critical
435	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 5B - Scoop oil Pump	Critical
436	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 5B ;Scoop Lube Oil Cooling Fan	Critical
437	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 6A	Critical
438	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 6A - Scoop oil Pump	Critical
439	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 6A - Scoop oil Cooling Fan	Critical
440	CHP	ICHP-RECLAIMING	DRIVES	Belt Conveyor - 6B	Critical
441	CHP	ICHP-RECLAIMING	PUMPS	Belt Conveyor - 6B - Scoop oil Pump	Critical
442	CHP	ICHP-RECLAIMING	FANS	Belt Conveyor - 6B - Scoop oil Cooling Fan	Critical
443	CHP	ICHP-RECLAIMING	PUMPS	Stock Pile Dust Suppression Pump-1A	Critical

444	CHP	ICHP-RECLAIMING	PUMPS	Stock Pile Dust Suppression Pump-1B	Critical
445	CHP	ICHP-RECLAIMING	PUMPS	Service Water System Pump-1A	Critical
446	CHP	ICHP-RECLAIMING	PUMPS	Service Water System Pump-1B	Critical
447	CHP	ICHP-RECLAIMING	PUMPS	Dry Fog Dust Suppression Pump-1A	Critical
448	CHP	ICHP-RECLAIMING	PUMPS	Dry Fog Dust Suppression Pump-1B	Critical
449	CHP	ICHP-RECLAIMING	FANS	Bunker ventilation ID Fan-1A	Critical
450	CHP	ICHP-RECLAIMING	FANS	Bunker ventilation ID Fan-1B	Critical
451	CHP	ICHP-RECLAIMING	FANS	Bunker ventilation ID Fan-2A	Critical
452	CHP	ICHP-RECLAIMING	FANS	Bunker ventilation ID Fan-2B	Critical
453	BOP	FIRE FIGHTING SYSTE	PUMPS	HVAC Pumps-1	Critical
454	BOP	FIRE FIGHTING SYSTE	PUMPS	HVAC Pumps-2	Critical
455	BOP	FIRE FIGHTING SYSTE	PUMPS	Service water pumps-1	Critical
456	BOP	FIRE FIGHTING SYSTE	PUMPS	Service water pumps-2	Critical
457	BOP	FIRE FIGHTING SYSTE	PUMPS	Portable water pumps-1	Critical
458	BOP	FIRE FIGHTING SYSTE	PUMPS	Portable water pumps-2	Critical
459	BOP	FIRE FIGHTING SYSTE	PUMPS	APH/ESP/BBD Wash water pumps-A	Critical
460	BOP	FIRE FIGHTING SYSTE	PUMPS	APH/ESP/BBD Wash water pumps-B	Critical
461	BOP	FIRE FIGHTING SYSTE	PUMPS	CHP water pumps-A	Critical
462	BOP	FIRE FIGHTING SYSTE	PUMPS	CHP water pumps-B	Critical
463	BOP	FIRE FIGHTING SYSTE	PUMPS	Jockey pumps-A	Critical

464	BOP	FIRE FIGHTING SYSTE	PUMPS	Jockey pumps-B	Critical
465	BOP	FIRE FIGHTING SYSTE	PUMPS	Main Fire Water Pumps-A	Critical
466	BOP	FIRE FIGHTING SYSTE	PUMPS	Main Fire Water Pumps-B	Critical
467	BOP	FIRE FIGHTING SYSTE	PUMPS	Main Fire Water Pumps-C	Critical
468	BOP	FIRE FIGHTING SYSTE	PUMPS	Main Fire Water Pumps-D	Critical
469	BOP	FIRE FIGHTING SYSTE	PUMPS	DE Fire Water Pumps-A	Critical
470	BOP	FIRE FIGHTING SYSTE	PUMPS	DE Fire Water Pumps-B	Critical
471	BOP	CWPH	PUMPS	CW Blowdown Pump-A	Critical
472	BOP	CWPH	PUMPS	CW Blowdown Pump-B	Critical
473	BOP	CWPH	PUMPS	CW Blowdown Pump-C	Critical
474	BOP	CWPH	PUMPS	CW Pump-1A	Critical
475	BOP	CWPH	PUMPS	CW Pump-1B	Critical
476	BOP	CWPH	PUMPS	CW Pump-2A	Critical
477	BOP	CWPH	PUMPS	CW Pump-2B	Critical
478	BOP	WTP	PUMPS	Transit Blowdown Pump-A	Critical
479	BOP	WTP	PUMPS	Transit Blowdown Pump-B	Critical
480	BOP	WTP	PUMPS	Transit Blowdown Pump-C	Critical
481	BOP	SEA WATER SYSTEM	PUMPS	PTP Feed Pump-A	Critical
482	BOP	SEA WATER SYSTEM	PUMPS	PTP Feed Pump-B	Critical
483	BOP	SEA WATER SYSTEM	PUMPS	CT Makeup Pump-A	Critical
484	BOP	SEA WATER SYSTEM	PUMPS	CT Makeup Pump-B	Critical
485	BOP	SEA WATER SYSTEM	PUMPS	CT Makeup Pump-C	Critical
486	BOP	SEA WATER SYSTEM	PUMPS	Continuous dosing pump-A	Critical
487	BOP	SEA WATER SYSTEM	PUMPS	Continuous dosing pump-B	Critical

488	BOP	SEA WATER SYSTEM	PUMPS	Screen washer pump-A	Critical
489	BOP	SEA WATER SYSTEM	PUMPS	Screen washer pump-B	Critical
490	BOP	WTP	PUMPS	SWRO HP Feed Pumps-A	Critical
491	BOP	WTP	PUMPS	SWRO HP Feed Pumps-B	Critical
492	BOP	WTP	PUMPS	SWRO HP Feed Pumps-C	Critical
493	BOP	WTP	PUMPS	SWRO HP Feed Pumps-D	Critical
494	BOP	WTP	PUMPS	BWRO HP Feed Pumps-A	Critical
495	BOP	WTP	PUMPS	BWRO HP Feed Pumps-B	Critical
496	BOP	WTP	PUMPS	BWRO HP Feed Pumps-C	Critical
497	BOP	WTP	PUMPS	Sludge Transfer Pumps-A	Critical
498	BOP	WTP	PUMPS	Sludge Transfer Pumps-B	Critical
499	BOP	WTP	PUMPS	Recirculation Pumps-A	Critical
500	BOP	WTP	PUMPS	Recirculation Pumps-B	Non-Critical
501	BOP	WTP	PUMPS	Filter Feed Pump-A	Non-Critical
502	BOP	WTP	PUMPS	Filter Feed Pump-B	Non-Critical
503	BOP	WTP	PUMPS	Filter Feed Pump-C	Non-Critical
504	BOP	WTP	PUMPS	SWRO LP Feed Pump-A	Non-Critical
505	BOP	WTP	PUMPS	SWRO LP Feed Pump-B	Non-Critical
506	BOP	WTP	PUMPS	SWRO LP Feed Pump-C	Non-Critical
507	BOP	WTP	PUMPS	SWRO LP Feed Pump-D	Non-Critical
508	BOP	WTP	PUMPS	Filter Back Wash Pumps-A	Non-Critical
509	BOP	WTP	PUMPS	Filter Back Wash Pumps-B	Non-Critical
510	BOP	WTP	PUMPS	Reject Transfer Pumps-A	Non-Critical
511	BOP	WTP	PUMPS	Reject Transfer Pumps-B	Non-Critical

512	BOP	WTP	PUMPS	BWRO LP Feed Pumps-A	Non-Critical
513	BOP	WTP	PUMPS	BWRO LP Feed Pumps-B	Non-Critical
514	AHP	WTP	PUMPS	BWRO LP Feed Pumps-C	Semi-Critical
515	AHP	WTP	PUMPS	MB Feed Pumps-A	Semi-Critical
516	AHP	WTP	PUMPS	MB Feed Pumps-B	Semi-Critical
517	AHP	WTP	PUMPS	DM Water Transfer Pumps-A	Semi-Critical
518	AHP	WTP	PUMPS	DM Water Transfer Pumps-B	Semi-Critical
519	AHP	WTP	PUMPS	DM Water Transfer Pumps-C	Semi-Critical
520	AHP	WTP	PUMPS	ECP Feed Pump-A	Semi-Critical
521	AHP	WTP	PUMPS	ECP Feed Pump-B	Semi-Critical
522	AHP	WTP	PUMPS	SWRO Flushing pumps-A	Semi-Critical
523	AHP	WTP	PUMPS	SWRO Flushing pumps-B	Semi-Critical
524	AHP	WTP	PUMPS	BWRO CIP Pumps-A	Semi-Critical
525	AHP	WTP	PUMPS	BWRO CIP Pumps-B	Semi-Critical
526	AHP	WTP	PUMPS	SWRO CIP Pumps-A	Semi-Critical
527	AHP	WTP	PUMPS	SWRO CIP Pumps-B	Semi-Critical
528	AHP	WTP	PUMPS	N-Pit Transfer Pumps-A	Semi-Critical
529	AHP	WTP	PUMPS	N-Pit Transfer Pumps-B	Semi-Critical
530	AHP	WTP	PUMPS	MB Regeneration Pumps-A	Semi-Critical

531	BOP	WTP	PUMPS	MB Regeneration Pumps-B	Semi-Critical
532	BOP	WTP	PUMPS	DM Conditioning Pumps-A	Semi-Critical
533	BOP	WTP	PUMPS	DM Conditioning Pumps-B	Semi-Critical
534	BOP	WTP	PUMPS	Ferric Chloride U/L Pumps-A	Non-Critical
535	BOP	WTP	PUMPS	Ferric Chloride U/L Pumps-B	Non-Critical
536	BOP	WTP	PUMPS	Poly electrolyte D/S Pumps-A	Non-Critical
537	BOP	WTP	PUMPS	Poly electrolyte D/S Pumps-B	Non-Critical
538	BOP	WTP	PUMPS	Ferric Chloride D/S Pumps-A	Non-Critical
539	BOP	WTP	PUMPS	Ferric Chloride D/S Pumps-B	Non-Critical
540	BOP	WTP	PUMPS	Ferric chloride D/S Tank Agitator-A	Non-Critical
541	BOP	WTP	PUMPS	Ferric chloride D/S Tank Agitator-B	Non-Critical
542	BOP	WTP	PUMPS	Poly electrolyte D/S Tank Agitator-A	Non-Critical
543	BOP	WTP	PUMPS	Poly electrolyte D/S Tank Agitator-B	Non-Critical
544	BOP	WTP	Agitator	Flash Mixer Agitator-A	Non-Critical
545	BOP	WTP	Agitator	Flash Mixer Agitator-B	Non-Critical
546	BOP	WTP	Agitator	Flocculator Agitator-1A	Non-Critical
547	BOP	WTP	Agitator	Flocculator Agitator-1B	Non-Critical
548	BOP	WTP	Agitator	Flocculator Agitator-1C	Non-Critical
549	BOP	WTP	Agitator	Flocculator Agitator-1D	Non-Critical

550	BOP	WTP	Agitator	Flocculator Agitator-2A	Non-Critical
551	BOP	WTP	Agitator	Flocculator Agitator-2B	Non-Critical
552	BOP	WTP	Agitator	Flocculator Agitator-2C	Non-Critical
553	BOP	WTP	Agitator	Flocculator Agitator-2D	Non-Critical
554	BOP	WTP	Agitator	Lamella Clarifier Agitator-A	Non-Critical
555	BOP	WTP	Agitator	Lamella Clarifier Agitator-B	Non-Critical
556	BOP	WTP	PUMPS	SMBS D/S Pump-A	Non-Critical
557	BOP	WTP	PUMPS	SMBS D/S Pump-B	Non-Critical
558	BOP	WTP	PUMPS	SWRO Antiscalent D/S Pump-A	Non-Critical
559	BOP	WTP	PUMPS	SWRO Antiscalent D/S Pump-B	Non-Critical
560	BOP	WTP	Agitator	SMBS D/S Tank Agitator-A	Non-Critical
561	BOP	WTP	Agitator	SMBS D/S Tank Agitator-B	Non-Critical
562	BOP	WTP	Agitator	SWRO Antiscalent D/S Agitator-A	Non-Critical
563	BOP	WTP	Agitator	SWRO Antiscalent D/S Agitator-B	Non-Critical
564	BOP	WTP	PUMPS	Morpholine D/S Pump-A	Non-Critical
565	BOP	WTP	PUMPS	Morpholine D/S Pump-B	Non-Critical
566	BOP	WTP	Agitator	Morpholine D/S Tank Agitator	Non-Critical
567	BOP	WTP	PUMPS	Caustic (or Alkali) D/S Pumps-A	Non-Critical
568	BOP	WTP	PUMPS	Caustic (or Alkali) D/S Pumps-B	Non-Critical

569	BOP	WTP	PUMPS	Sodium bi Carbonate D/S Pumps-A	Non-Critical
570	BOP	WTP	PUMPS	Sodium bi Carbonate D/S Pumps-B	Non-Critical
571	BOP	WTP	PUMPS	Calcium Chloride D/S Pumps-A	Non-Critical
572	BOP	WTP	PUMPS	Calcium Chloride D/S Pumps-B	Non-Critical
573	BOP	WTP	PUMPS	Bulk Caustic U/L Pumps-A	Non-Critical
574	BOP	WTP	PUMPS	Bulk Caustic U/L Pumps-B	Non-Critical
575	BOP	WTP	PUMPS	Bulk Acid U/L Pumps-A	Non-Critical
576	BOP	WTP	PUMPS	Bulk Acid U/L Pumps-B	Non-Critical
577	BOP	WTP	PUMPS	Sodium Hypoclorite D/S Pumps-A	Non-Critical
578	BOP	WTP	PUMPS	Sodium Hypoclorite D/S Pumps-B	Non-Critical
579	BOP	WTP	PUMPS	Calcium bi Carbonate D/S Pumps-A	Non-Critical
580	BOP	WTP	PUMPS	Calcium bi Carbonate D/S Pumps-B	Non-Critical
581	BOP	WTP	PUMPS	Magnesium Sulphate D/S Pumps-A	Non-Critical
582	BOP	WTP	PUMPS	Magnesium Sulphate D/S Pumps-B	Non-Critical
583	BOP	WTP	PUMPS	Calcium bi Carbonate Agitators-A	Non-Critical
584	BOP	WTP	PUMPS	Calcium bi Carbonate Agitators-B	Non-Critical
585	BOP	WTP	PUMPS	Ash water recovery pump-A	Non-Critical
586	BOP	WTP	PUMPS	Ash water recovery pump-B	Non-Critical
587	AHP	AWPH	COMPRESSOR	Instrument Air Compressor-A	Critical

588	AHP	AWPH	COMPRESSOR	Instrument Air Compressor-B	Critical
589	AHP	AWPH	COMPRESSOR	Instrument Air Compressor-C	Critical
590	AHP	AWPH	COMPRESSOR	Conveying Air Compressor-A	Critical
591	AHP	AWPH	COMPRESSOR	Conveying Air Compressor-B	Critical
592	AHP	AWPH	COMPRESSOR	Conveying Air Compressor-C	Critical
593	AHP	AWPH	COMPRESSOR	Conveying Air Compressor-D	Critical
594	AHP	AWPH	COMPRESSOR	Conveying Air Compressor-E	Critical
595	AHP	AWPH	COMPRESSOR	Conveying Air Compressor-F	Critical
596	AHP	AWPH	PUMPS	Mill Reject Conveying Air Compressor-A	Semi-Critical
597	AHP	AWPH	PUMPS	Mill Reject Conveying Air Compressor-B	Semi-Critical
598	AHP	AWPH	DRIVES	Mill Reject Conveying Air Compressor-C	Semi-Critical
599	AHP	AWPH	DRIVES	Clinker Grinder-1A	Critical
600	AHP	AWPH	DRIVES	Clinker Grinder-1B	Critical
601	AHP	AWPH	DRIVES	Clinker Grinder-2A	Critical
602	AHP	AWPH	DRIVES	Clinker Grinder-2B	Critical
603	AHP	AWPH	Conveyor	Scrapper Chain Conveyor-1A	Semi-Critical
604	AHP	AWPH	Conveyor	Scrapper Chain Conveyor-1B	Semi-Critical
605	AHP	AWPH	Conveyor	Scrapper Chain Conveyor-2A	Semi-Critical
606	AHP	AWPH	Conveyor	Scrapper Chain Conveyor-2B	Semi-Critical
607	AHP	AWPH	PUMPS	Bottom Ash LP Pump-A	Semi-Critical
608	AHP	AWPH	PUMPS	Bottom Ash LP Pump-B	Semi-Critical

609	AHP	AWPH	PUMPS	Bottom Ash LP Pump-C	Semi-Critical
610	AHP	AWPH	PUMPS	Overflow Pump-1A	Semi-Critical
611	AHP	AWPH	PUMPS	Overflow Pump-1B	Semi-Critical
612	AHP	AWPH	PUMPS	Overflow Pump-2A	Semi-Critical
613	AHP	AWPH	PUMPS	Overflow Pump-2B	Semi-Critical
614	AHP	AWPH	PUMPS	ECO Pump-A	Semi-Critical
615	AHP	AWPH	PUMPS	ECO Pump-B	Semi-Critical
616	AHP	AWPH	PUMPS	ECO Pump-C	Semi-Critical
617	AHP	AWPH	PUMPS	ECO Pump-D	Semi-Critical
618	AHP	AWPH	FANS	ESP fluidizing Blower-1A	Semi-Critical
619	AHP	AWPH	FANS	ESP fluidizing Blower-1B	Semi-Critical
620	AHP	AWPH	FANS	ESP fluidizing Blower-2A	Semi-Critical
621	AHP	AWPH	FANS	ESP fluidizing Blower-2B	Semi-Critical
622	AHP	AWPH	PUMPS	AWPH Slude Pump-A	Semi-Critical
623	AHP	AWPH	PUMPS	AWPH Slude Pump-B	Semi-Critical
624	AHP	AWPH	Conveyor	Ash Belt Conveyor-1	Critical
625	AHP	AWPH	Conveyor	Ash Belt Conveyor-2	Semi-Critical
626	AHP	AWPH	Conveyor	Ash Belt Conveyor-3	Semi-Critical
627	AHP	AWPH	Conveyor	Ash Belt Conveyor-4	Critical
628	AHP	AWPH	Conveyor	Ash Belt Conveyor-5	Semi-Critical

629	AHP	AWPH	Conveyor	Ash Belt Conveyor-6	Semi-Critical
630	AHP	AWPH	Conveyor	Ash Belt Conveyor-7	Semi-Critical
631	AHP	AWPH	Crusher	Secondary Crusher-1A	Semi-Critical
632	AHP	AWPH	Crusher	Secondary Crusher-1B	Semi-Critical
633	AHP	AWPH	Crusher	Secondary Crusher-2A	Semi-Critical
634	AHP	AWPH	Crusher	Secondary Crusher-2B	Semi-Critical
635	AHP	AWPH	PUMPS	AWPH Drain Pump-A	Semi-Critical
636	AHP	AWPH	PUMPS	AWPH Drain Pump-B	Semi-Critical
637	AHP	AHP-Silo Area	PUMPS	HCSD Pump-A	Semi-Critical
638	AHP	AHP-Silo Area	PUMPS	HCSD Pump-B	Semi-Critical
639	AHP	AHP-Silo Area	PUMPS	HCSD Pump-C	Semi-Critical
640	AHP	AHP-Silo Area	Conveyor	Ash Belt Conveyor-8	Semi-Critical
641	AHP	AHP-Silo Area	Conveyor	Ash Belt Conveyor-9	Semi-Critical
642	AHP	AHP-Silo Area	FANS	Silo Fluidizing Roots Blower-1A	Semi-Critical
643	AHP	AHP-Silo Area	FANS	Silo Fluidizing Roots Blower-1B	Semi-Critical
644	AHP	AHP-Silo Area	FANS	Silo Fluidizing Roots Blower-2A	Semi-Critical
645	AHP	AHP-Silo Area	FANS	Silo Fluidizing Roots Blower-2B	Semi-Critical
646	AHP	AHP-Silo Area	FANS	Silo Fluidizing Roots Blower-3A	Semi-Critical
647	AHP	AHP-Silo Area	FANS	Silo Fluidizing Roots Blower-3B	Semi-Critical

648	AHP	AHP-Silo Area	PUMPS	Fly Ash LP Pump-A	Semi-Critical
649	AHP	AHP-Silo Area	PUMPS	Fly Ash LP Pump-B	Semi-Critical
650	AHP	AHP-Silo Area	PUMPS	Ash Conditioning Pump-A	Semi-Critical
651	AHP	AHP-Silo Area	PUMPS	Ash Conditioning Pump-B	Semi-Critical
652	AHP	AHP-Silo Area	PUMPS	Ash Conditioning Pump-C	Semi-Critical
653	AHP	AHP-Silo Area	PUMPS	Ash Conditioning Pump-D	Semi-Critical
654	AHP	AHP-Silo Area	Conveyor	Fly Ash Screw Conveyor-1	Semi-Critical
655	AHP	AHP-Silo Area	Conveyor	Fly Ash Screw Conveyor-2	Semi-Critical
656	AHP	AHP-Silo Area	Conveyor	Fly Ash Screw Conveyor-3	Semi-Critical
657	AHP	AHP-Silo Area	Conveyor	Fly Ash Screw Conveyor-4	Semi-Critical
658	AHP	AHP-Silo Area	Conveyor	Fly Ash Screw Conveyor-5	Semi-Critical
659	AHP	AHP-Silo Area	Mixer	Fly Ash Mixer-1	Semi-Critical
660	AHP	AHP-Silo Area	Mixer	Fly Ash Mixer-2	Semi-Critical
661	AHP	AHP-Silo Area	Mixer	Fly Ash Mixer-3	Semi-Critical
662	AHP	AHP-Silo Area	Agitator	Retention Tank-1 Agitator	Semi-Critical
663	AHP	AHP-Silo Area	Agitator	Retention Tank-2 Agitator	Semi-Critical
664	AHP	AHP-Silo Area	Agitator	Retention Tank-3 Agitator	Semi-Critical
665	AHP	AHP-Silo Area	PUMPS	Charge Pump-1	Semi-Critical
666	AHP	AHP-Silo Area	PUMPS	Charge Pump-2	Semi-Critical

667	AHP	AHP-Silo Area	PUMPS	Charge Pump-3	Semi-Critical
668	AHP	AHP-Silo Area	PUMPS	LOP for HCSD Pump-A	Semi-Critical
669	AHP	AHP-Silo Area	PUMPS	LOP for HCSD Pump-B	Semi-Critical
670	AHP	AHP-Silo Area	PUMPS	LOP for HCSD Pump-C	Semi-Critical
671	AHP	AHP-Silo Area	PUMPS	Seal Water Pump-A	Semi-Critical
672	AHP	AHP-Silo Area	PUMPS	Seal Water Pump-B	Semi-Critical
673	AHP	AHP-Silo Area	PUMPS	Ash Conditioner-1	Semi-Critical
674	AHP	AHP-Silo Area	DRIVES	RVF For Ash Conditioner-1	Semi-Critical
675	AHP	AHP-Silo Area	DRIVES	Ash Conditioner-2	Semi-Critical
676	AHP	AHP-Silo Area	DRIVES	RVF For Ash Conditioner-2	Semi-Critical
677	AHP	AHP-Silo Area	DRIVES	Ash Conditioner-3	Semi-Critical
678	AHP	AHP-Silo Area	DRIVES	RVF For Ash Conditioner-3	Semi-Critical
679	AHP	AHP-Silo Area	PUMPS	Silo Area Drain Pump-A	Semi-Critical
680	AHP	AHP-Silo Area	PUMPS	Silo Area Drain Pump-B	Semi-Critical
681	BOP	HVAC	FANS	AWU-1 Blower-A	Non-Critical
682	BOP	HVAC	FANS	AWU-1 Blower-B	Non-Critical
683	BOP	HVAC	PUMPS	AWU-1 Pump-A	Non-Critical
684	BOP	HVAC	PUMPS	AWU-1 Pump-B	Non-Critical
685	BOP	HVAC	FANS	AWU-2 Blower-A	Non-Critical

686	BOP	HVAC	FANS	AWU-2 Blower-B	Non-Critical
687	WTP	HVAC	PUMPS	AWU-2 Pump-A	Non-Critical
688	WTP	HVAC	PUMPS	AWU-2 Pump-B	Non-Critical
689	WTP	HVAC	FANS	AWU-3 Blower-A	Non-Critical
690	WTP	HVAC	FANS	AWU-3 Blower-B	Non-Critical
691	WTP	HVAC	PUMPS	AWU-3 Pump-A	Non-Critical
692	WTP	HVAC	PUMPS	AWU-3 Pump-B	Non-Critical
693	WTP	HVAC	FANS	AWU-4 Blower-A	Non-Critical
694	WTP	HVAC	FANS	AWU-4 Blower-B	Non-Critical
695	WTP	HVAC	PUMPS	AWU-4 Pump-A	Non-Critical
696	WTP	HVAC	PUMPS	AWU-4 Pump-B	Non-Critical
697	WTP	HVAC	FANS	AWU-5 Blower-A	Non-Critical
698	WTP	HVAC	FANS	AWU-5 Blower-B	Non-Critical
699	WTP	HVAC	PUMPS	AWU-5 Pump-A	Non-Critical
700	WTP	HVAC	PUMPS	AWU-5 Pump-B	Non-Critical
701	WTP	HVAC	FANS	AWU-6 Blower-A	Non-Critical
702	WTP	HVAC	FANS	AWU-6 Blower-B	Non-Critical
703	WTP	HVAC	PUMPS	AWU-6 Pump-A	Non-Critical
704	WTP	HVAC	PUMPS	AWU-6 Pump-B	Non-Critical

705	WTP	HVAC	FANS	AWU-7 Blower-1	Non-Critical
706	WTP	HVAC	FANS	AWU-7 Blower-2	Non-Critical
707	WTP	HVAC	FANS	AWU-7 Blower-3	Non-Critical
708	AHP	HVAC	PUMPS	AWU-7 Pump-A	Non-Critical
709	AHP	HVAC	PUMPS	AWU-7 Pump-B	Non-Critical
710	AHP	HVAC	PUMPS	AWU-7 Pump-C	Non-Critical
711	AHP	HVAC	PUMPS	AWU-7 Pump-D	Non-Critical
712	AHP	HVAC	FANS	AWU-8 Blower-1	Non-Critical
713	AHP	HVAC	FANS	AWU-8 Blower-2	Non-Critical
714	AHP	HVAC	FANS	AWU-8 Blower-3	Non-Critical
715	AHP	HVAC	PUMPS	AWU-8 Pump-A	Non-Critical
716	AHP	HVAC	PUMPS	AWU-8 Pump-B	Non-Critical
717	AHP	HVAC	PUMPS	AWU-8 Pump-C	Non-Critical
718	AHP	HVAC	PUMPS	AWU-8 Pump-D	Non-Critical
719	AHP	HVAC	PUMPS	AHU-Condenser water pump-A	Non-Critical
720	AHP	HVAC	PUMPS	AHU-Condenser water pump-B	Non-Critical
721	AHP	HVAC	PUMPS	AHU-Condenser water pump-C	Non-Critical
722	AHP	HVAC	PUMPS	AHU-Chilled water pump-A	Non-Critical
723	AHP	HVAC	PUMPS	AHU-Chilled water pump-B	Non-Critical

724	AHP	HVAC	PUMPS	AHU-Chilled water pump-C	Non-Critical
725	AHP	HVAC	FANS	CCR AHU#7	Non-Critical
726	AHP	HVAC	FANS	CCR AHU#8	Non-Critical
727	AHP	HVAC	FANS	CCR AHU#9	Non-Critical
728	AHP	HVAC	FANS	CCR AHU#10	Non-Critical
729	AHP	HVAC	FANS	UAF 1 Blower	Non-Critical
730	AHP	HVAC	PUMPS	UAF-1 Pump-A	Non-Critical
731	AHP	HVAC	PUMPS	UAF-1 Pump-B	Non-Critical
732	AHP	HVAC	FANS	UAF 2 Blower	Non-Critical
733	AHP	HVAC	PUMPS	UAF-2 Pump-A	Non-Critical
734	AHP	HVAC	PUMPS	UAF-2 Pump-B	Non-Critical
735	AHP	HVAC	FANS	UAF 3 Blower	Non-Critical
736	AHP	HVAC	PUMPS	UAF-3 Pump-A	Non-Critical
737	AHP	HVAC	PUMPS	UAF-3 Pump-B	Non-Critical
738	AHP	HVAC	FANS	UAF 4 Blower	Non-Critical
739	AHP	HVAC	PUMPS	UAF-4 Pump-A	Non-Critical
740	AHP	HVAC	PUMPS	UAF-4 Pump-B	Non-Critical
741	AHP	HVAC	FANS	UAF 5 Blower	Non-Critical
742	AHP	HVAC	PUMPS	UAF 5 pump 01	Non-Critical

743	AHP	HVAC	PUMPS	UAF 5 pump 02	Non-Critical
744	AHP	HVAC	FANS	AHU CCR CT Fan-1	Non-Critical
745	AHP	HVAC	FANS	AHU CCR CT Fan-2	Non-Critical
746	AHP	HVAC	FANS	AHU CCR CT Fan-3	Non-Critical
747	AHP	HVAC	PUMPS	Intermediate sump pump-A	Non-Critical
748	AHP	HVAC	PUMPS	Intermediate sump pump-B	Non-Critical
749	CHP	TP1	Sampling unit	TP-1 Coal Sampling unit - Primary cutter	Non-Critical
750	CHP	TP1	Equipment	TP-1 Belt feeder	Non-Critical
751	CHP	TP1	Sampling unit	TP-1 Coal Sampling unit - Crusher	Non-Critical
752	CHP	TP1	Sampling unit	TP-1 Coal Sampling unit - Secondary cutter	Non-Critical
753	CHP	TP1	Equipment	TP-1 Bucket Elevator	Non-Critical
754	CHP	TP1	Sampling unit	TP-1 Coal Sampling unit - bottle sampler drive	Non-Critical
755	CHP	BCN 8	Sampling unit	BC - 8 Coal Sampling unit - Primary cutter	Non-Critical
756	CHP	BC-8	Belt feeder	BC - 8 Belt feeder	Non-Critical
757	CHP	BC-8	Coal Sampling	BC - 8 Coal Sampling unit - Crusher	Non-Critical
758	CHP	BC-8	Coal Sampling	BC - 8 Coal Sampling unit - Secondary cutter	Non-Critical
759	CHP	BC-8	Coal Sampling	BC - 8 Coal Sampling unit - Screw feeder	Non-Critical
760	CHP	BC-8	Coal Sampling	BC - 8 Coal Sampling unit - bottle sampler drive	Non-Critical

3.0 GOOD EHS PRATICES AT M/S SEIL PROJECT-2

3.0 GOOD EHS PRACTICES AT M/S SEIL ENERGY INDIA LIMITED:

3.1 SAFETY COMMITTES:

Safety Committees

Area	Members of the Committee	HSE Coordinator
Boiler & AHP	**Chairman: Yogesh** **SEIL:** Alok , Avnish,Sujit, Lijjo, Rajesh S **Contractors: Agencies:** SVIPL, Newell	Secretary: N Raja

Area	Members of the Committee	HSE Coordinator
CHP	**Chairman: Hareesh** **SEIL:** Thanam, Siva Prasad, Kaleem, Santosh, Rama Chandra N **Contractors:** CHP area AMC Agencies: KNK, MACMET, Newell	Secretary: G Chandra Sekhar

Area	Members of the Committee	HSE Coordinator
Turbine & Generator	**Chairman: Arun Felix** **SEIL:** Pavan Kumar, Eswar Rao, Rajesh Y, Rama Chandra **Contractors:** Sri sai, Newell	Secretary: Chandra Sekhar

Area	Members of the Committee	HSE Coordinator
BOP	**Chairman: Venkata Ramana** **SEIL:** Ranga Rao, Indrasena Reddy, Avinash, Rama Chandra N **Contractors: BOP area AMC** Agencies: Sri Sai, Newell, Himalaya, NEC	Secretary: Naveen N






As per the advice of Dy-CIF safety committees were formed and associates are encouraged to give their feedback / observations / problems faced at site. SEIL will take up with targeted dates. Total 10 committees in both plants. Chairmans of all groups present associates concerns in Apex safety committee meeting with Target dates as per the severity.

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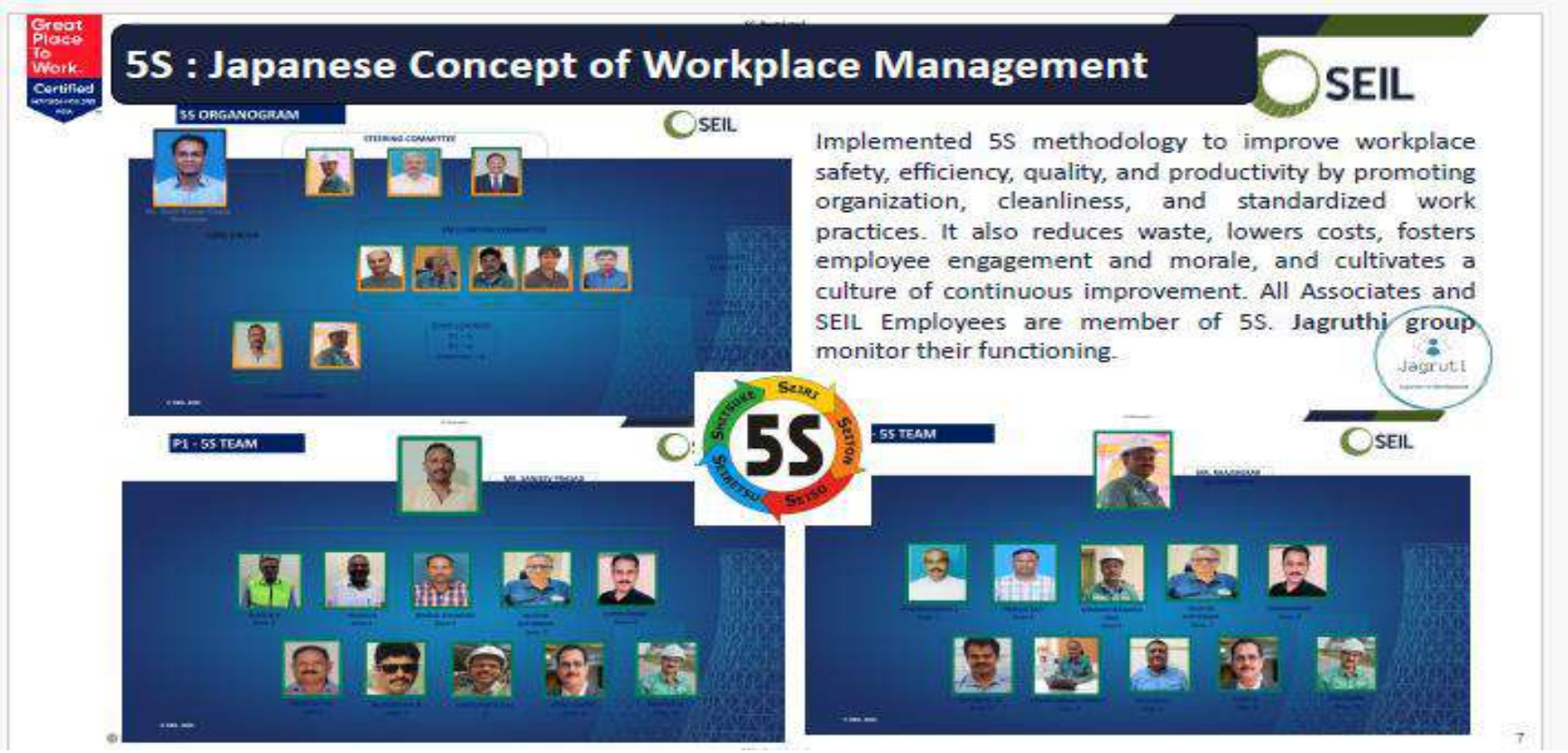
3.2 SAFETY WALK DOWNS:



3.3 5 'S' CONCEPT:

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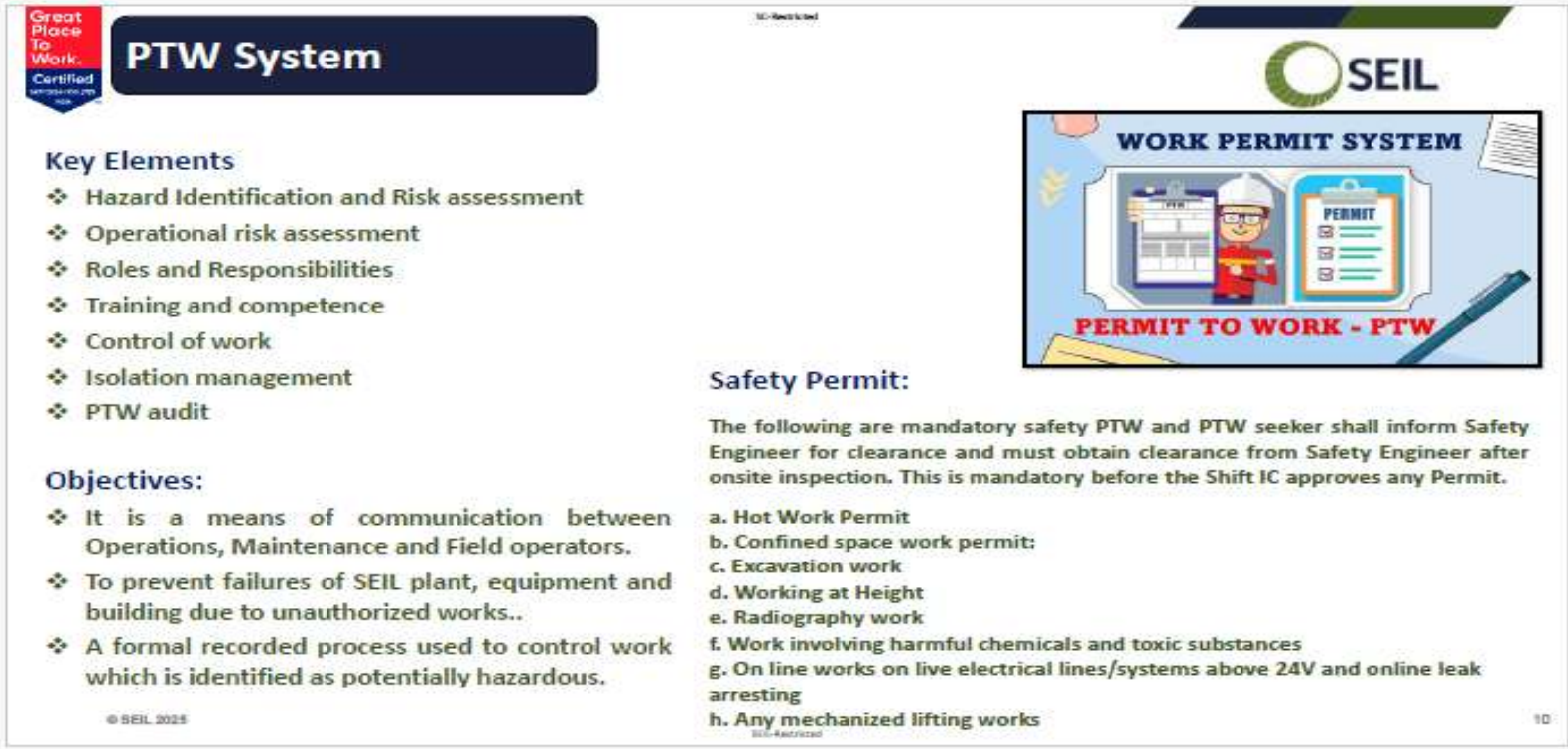
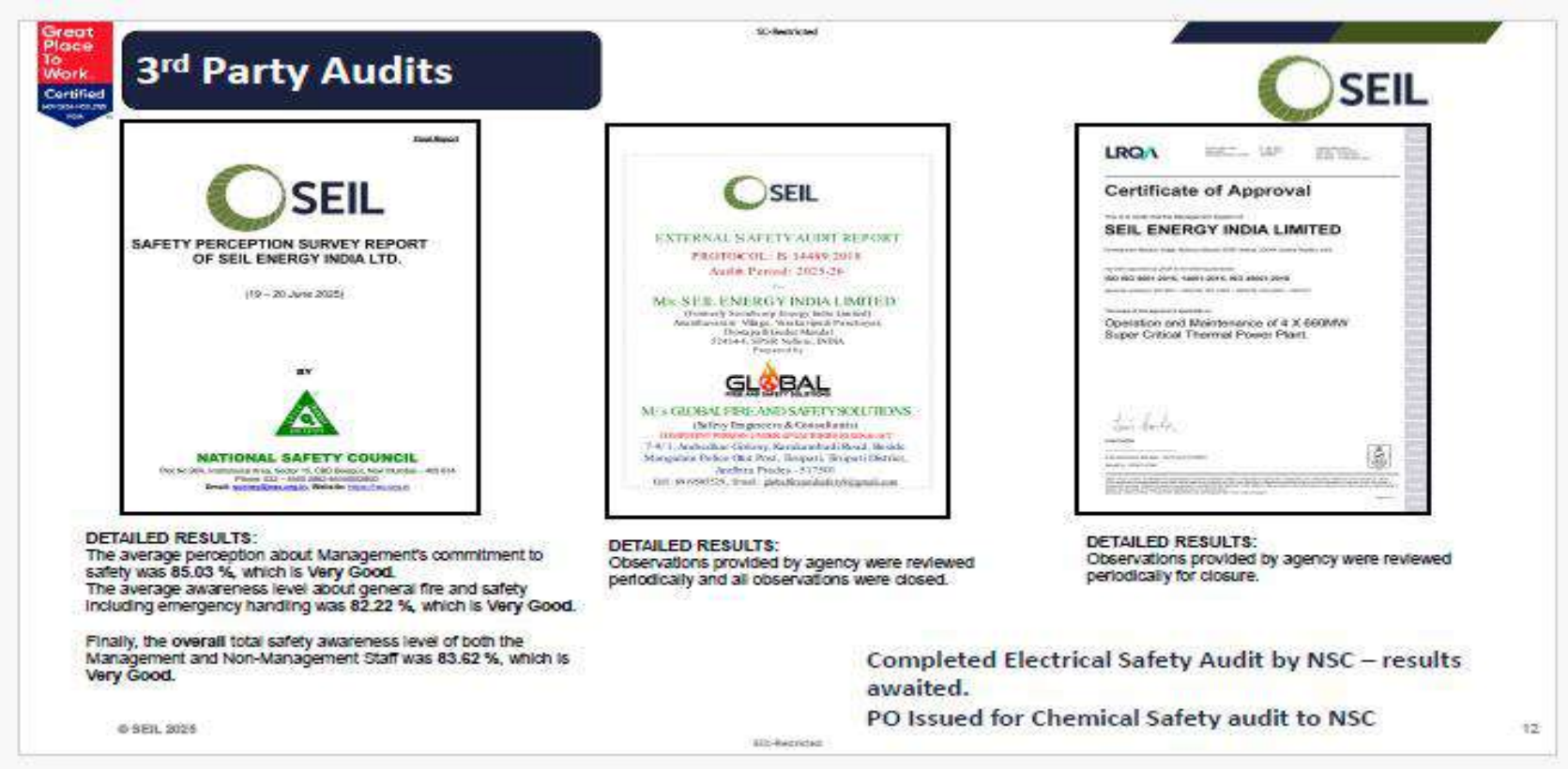
SEIL

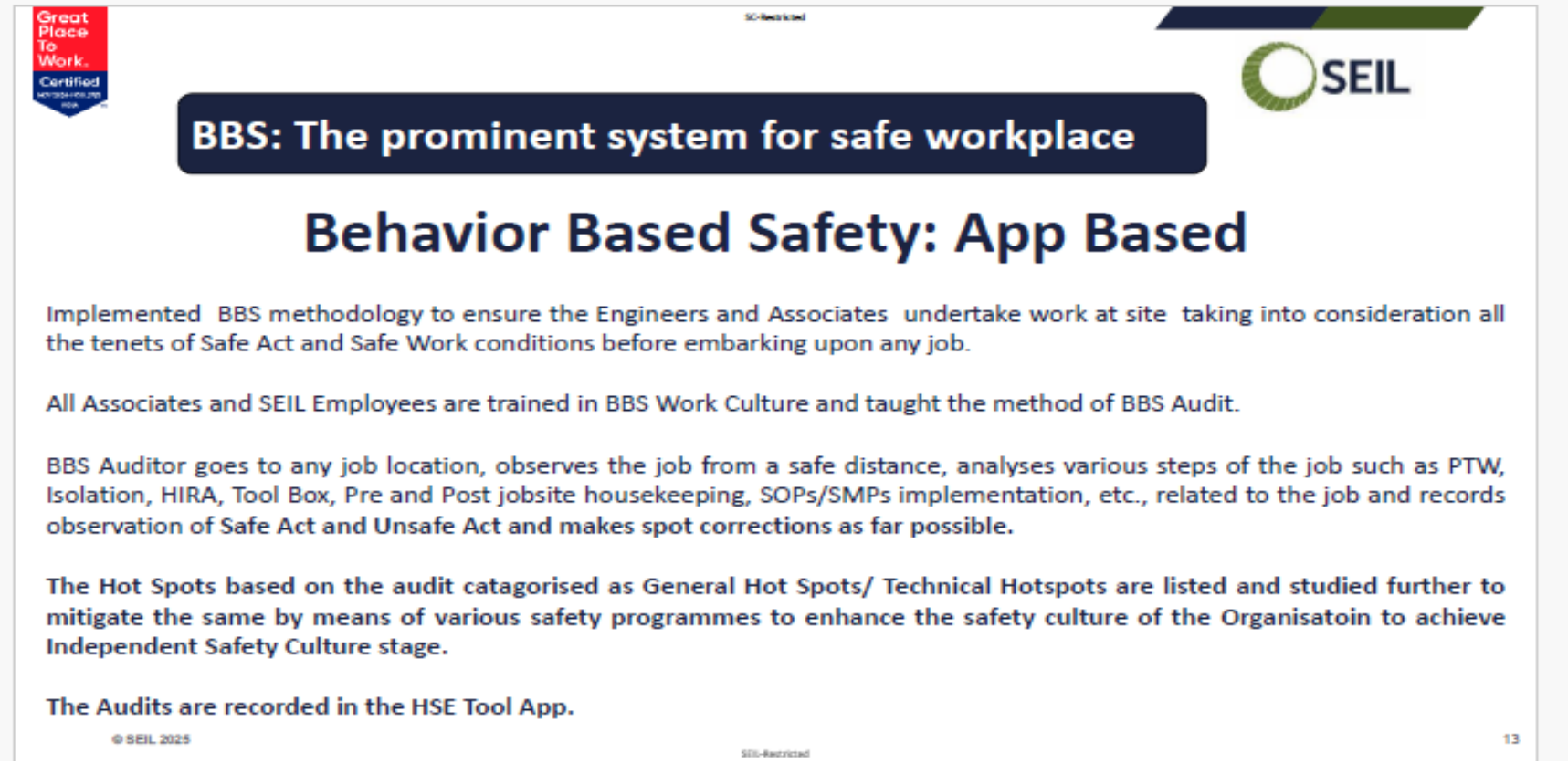
3.4 PERMIT TO WORK SYSTEM:



3.5 3RD PARTY AUDITS:



3.6 BEHAVIOUR BASED SAFETY:



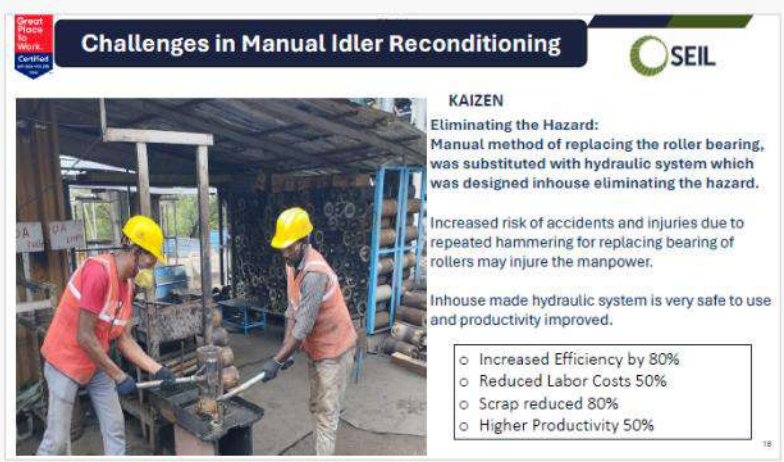
3.7 INVOLVEMENT OF STAKE HOLDERS:



3.8 SAFETY TRAINING FOR ASSOCIATES:

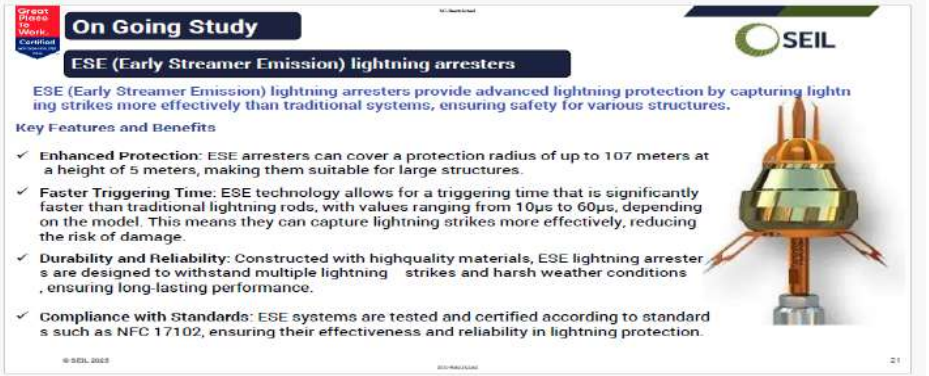


3.9 HAZARDS ELIMINATION BY CHAGNING THE WORK METHODOLOGY:





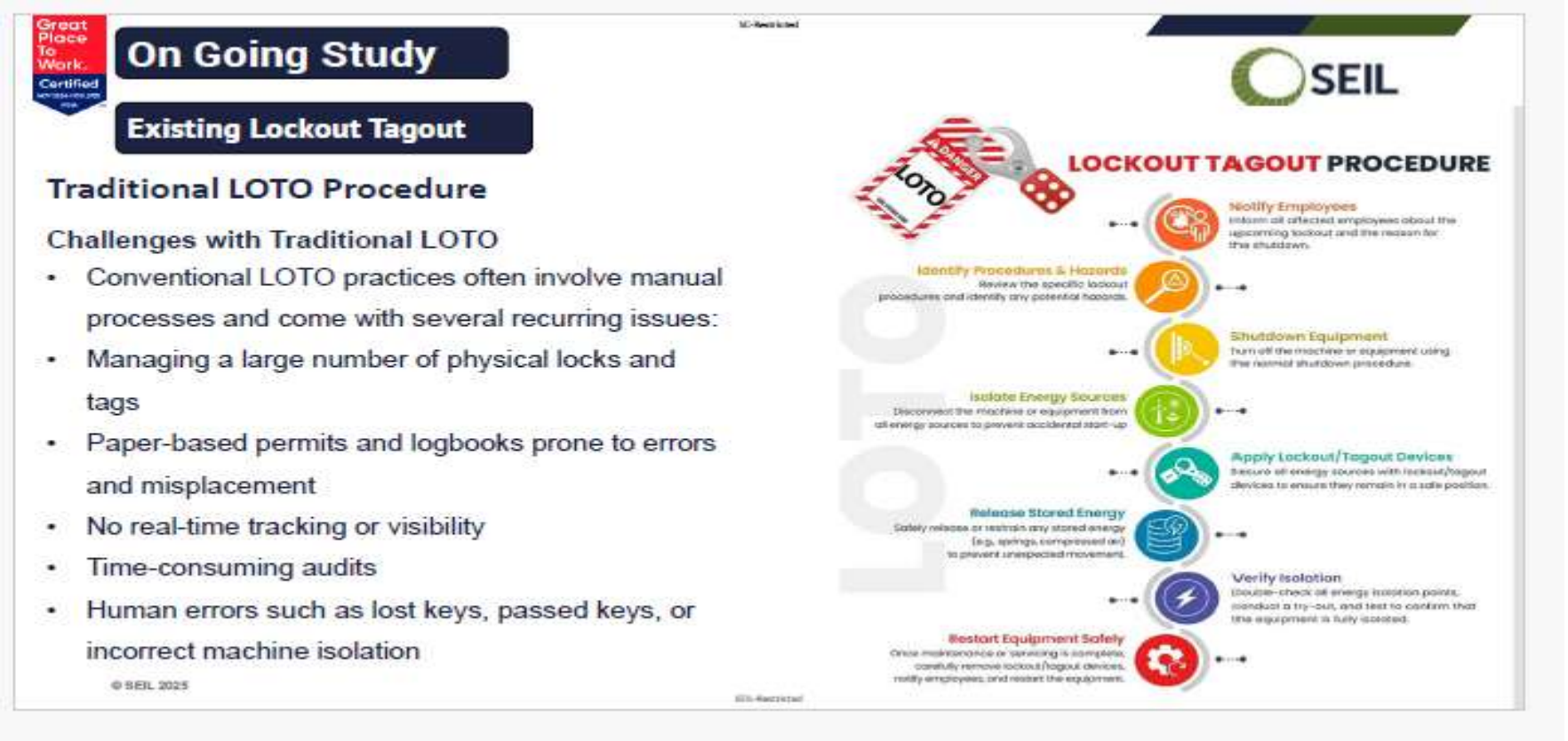




3.9.1 ADVANCED LIGHTINING ARRESTERS:



3.9.2 LCOK OUT TAGOUT:


Great Place To Work. Certified
On Going Study
Existing Lockout Tagout
Traditional LOTO Procedure
Challenges with Traditional LOTO
• Conventional LOTO practices often involve manual processes and come with several recurring issues:
• Managing a large number of physical locks and tags
• Paper-based permits and logbooks prone to errors and misplacement
• No real-time tracking or visibility
• Time-consuming audits
• Human errors such as lost keys, passed keys, or incorrect machine isolation
© SEIL 2025
SEIL
LOCKOUT TAGOUT PROCEDURE
Notify Employees
Identify Procedures & Hazards
Shutdown Equipment
Isolate Energy Sources
Apply Lockout/Tagout Devices
Release Stored Energy
Verify Isolation
Restart Equipment Safely

3.9.3 SAFETY SKIT:



4.0 REVIEW OF SAFETY MANAGEMENT SYSTEM

4.0 Safety Management System:

S.NO	CONTENT	APPLICABLE LEGISLATION /GOOD HSE PRACTICE	COMPLIANCE	RECOMMENDATION/ COMMENT
1	**SAFETY ORGANIZATION**	Section-40-B of Factories Act	Safety department is set up with a Sr.General manager and being assisted by a competent team Safety officers are qualified and experienced. They carrying out plant safety inspections, conduct accident investigation and organize safety committee meetings etc. as prescribed under the statute	Effective functioning of safety department is observed
2	**SAFETY COMMITEE**	**Section 41-G** [Rule 88C (3) of the Factories Rules	Safety committee is formed with equal proportion with Staff and workers as per the factory rules. The committee is being met once in 3 months and discuss on unsafe conditions/unsafe acts in the factory. Action plan is being prepared to take mitigate measures. Meeting minutes are being circulated	Action plan is being reviewed in the next meeting and advise people if any lapses found
3	**SAFETY BUDGET**	Good practice	No specific safety budget but top priority is being given for safety jobs	Appreciable
4	**HEALTH & SAFETY POLICY**	Section-7A	Safety and health policy is defined, documented and displayed in all conspicuous places in the factory premises	Good
5	**PLANT SAFETY INSPECTIONS**	Good HSE practice	Plant safety inspections are being carried out	Good

			Periodically by Safety Officers, Engineers and jointly with plant personnel. Reports are being generated.	
6	**SITE SAFETY MANUAL**	Good HSE practice	Safety manual is available.	Good
7	**WORKPERMIT SYSTEM**	Good HSE Practice	Work permit system for hot work, height work, electrical permit, Excavation Permit, Confined space entry are in place. The Safety department is receiving the duplicate copy and is kept in the department	Good
8	**CONTRACTOR SAFETY MANAGEMENT**	Good HSE Practice	Contractors are engaged, mainly for housekeeping, maintenance works. The terms and conditions of work order include safety provisions / norms and clauses for violations, is to be included in the work order	It is highly appreciable that organization has a contractor's evaluation procedure
9	**MOTIVATIONAL AND PROMOTIONAL MEASURES**	Good HSE Practice	Various safety competitions are being organized during national HSE campaigns such as NSD, Environment day etc. and prizes are being awarded to winners.	It is highly commendable
10	**SAFETY EDUCATION AND TRAINING**	Sec. 7-A (1) (c) and Sec.111-A of the Factories Act, 1948 places a duty on the occupier to arrange training on	Safety trainings are being conducted in the organization periodically	Annual HSE training calendar is prepared and trainings are conducted accordingly. Effectiveness of trainings are being evaluated

		health and safety at work. Appropriate 'Training Policy' may be established for various categories of workers.		
11	**ACCIDENT INVESTIGATION, REPORTING AND ANALYSIS**	Sec. 88 of the Factories Act, 1948 and Rule 130 of the Factories Rules,	All incidents, accidents are being investigated and analyzed for root causes	Reports are available. Root cause analysis is to be done by adopting one of QC tools
12	**STATUTORY LICENSES AND APPROVALS**	Mandatory	All licenses and approvals are obtained. A legal register is prepared and being tracked	Good adherence to applicable legislation
13	**FIRST AID APPLIANCES**	The first aid boxes should be distinctively marked with a red cross on white background. [Rule 91 of the Factories Rules,	Adequate number of first aid boxes are provided throughout the plant	Good arrangement
14	**OHC/ FIRST-AID CENTRE**	Rule 88-M of the … Factories …, 1969 requires provision and maintenance of an Occupational Health Centre. Therefore, the ambiguity with names may be removed by	OHC with good facilities is provided	GOOD facilities are provided in OHC

		keeping the name of the facility as "Occupational Health Centre", instead of 'Ambulance Room' and 'Plant Medical Unit'.		
15	**OCCUPATIONAL DISEASES**	As per 29 occupational diseases listed in the Third Schedule to the Factories Act, 1948.	No such cases are found	It is good
16	**MEDICAL EXAMINATIONS**	[Rule 88-L (1) (b) of the .. Factories Rules,	Periodical examinations are being conducted for employees once in a year	It is good practice
17	**BIO-MEDICAL WASTE MANAGEMENT**	R 4 (4) of the Bio-Medical Wastes (Management and Handling) Rules]	Bio-Medical waste is generated and being disposed to authorized agency for its safe disposal	It is good practice
18	**PERSONAL PROTECTTION EQUIPMENT**	Rule-61-C of Factories Act and other practices	Suitable PPE are being given and sufficient stock is being maintained	It is good practice
19	**HOUSE KEEPING**	Section-11 ,Factories Act-1948	Good Housekeeping is being maintained	Good housekeeping is observed in the factory premises and all departments
20	**HIRA**	Good HSE practice	HIRA is done for all activities and safety measures are taken accordingly	Good documentation
21	**FIRE PREVENTION**	Rule 71 (10) (a) of the …	Adequate Number of fire extinguishers of various	Good Fire net work

	AND PROTECTION	Factories Rules,].	types and capacities are provided and being inspected periodically. Fire hydrant system is provided around the factory premises.	
22	**EMERGENCY PREPAREDNESS**	As per Section 41B(4),Factories Act,1948	On-site emergency plan is in place. Emergency situations with respect to operations are identified and mock drills are being conducted	Holiday/Sunday mock drills are to be conducted to check the readiness of employees
22	**ELECTRICAL SAFETY**	IE Rule 46 and 63, Approval of Central Electricity Authority to energize the electrical equipment was available.	The report reflects the condition as observed in several areas visited during the audit Process and examination of relevant documents. Documents are maintained as per the requirement for the maintenance departments. Preventive maintenance schedule is prepared and being followed; In general, housekeeping is good Substations, drive rooms are well maintained • Panel doors locked • Good housekeeping / illumination • Rubber mats provided Statutory clearances are in order.	Electrical safety audit is to be carried out

			List of authorized persons (Holding Govt. certificates) for operating substations are to be displayed Testing & Calibration of instruments / protection relays are done every year • Protection relays are tested through external agency • Transformer oil testing is carried out through External agency • Main transformers are also tested by Expert agency • All master instruments are tested & calibrated by a Competent agency • However, so far as electrical safety standards and basic safety rules are concerned, some grey areas are still there, which need management attention for • Improvement. One of the	

			important criteria of improving safety standard is visible demonstration of company's objective through systems, policies and programs.	
23	**TOOLS AND TACKLES TESTING**	As per Section-28 and 29 of Factories Act	Material handling equipment like EOT cranes, electric hoists, chain pulley Blocks, etc. are being tested and periodically examined by competent person and records are maintained in Form No.-38 as per statutory requirement. This is a good practice. Lifting tackles like Wire Rope Slings, Chain Slings, D-shackles, are also being tested by competent person and records are maintained	Good record is being maintained
24	**MATERIAL HANDLING**	Good HSE practice	Manual material handling training is being given to all the employees & contractor men working in the factory	Good training is being given. Record is being maintained
25	**HANDLING OF GAS CYLINDERS**	Good HSE practice	Oxygen, D.A. Argon and other gas cylinders are being stored at dedicated place by taking suitable precautions. Names of the gas cylinders stored are displayed.	Good storage facility observed
26	**GUARDING OF MACHINES AND DANGEROUS AREAS**	Section-26 of the Factories Act	Machine guarding is found to be good. Machine guarding interlock is also provided	Good practice observed

27	**MEANS OF ACESS, PLATFORMS & RAILINGS**	As per Section-32 of Factories Act	Most of the access / approach, floors, walkways / passages, gangways, etc. were found in good condition & maintained.	Good condition is observed
28	**VENTILATION,ILLUMINATION, NOISE, VIBRATIONS & RAILINGS & ERGONOMICS**	As per section-13 of Factories Act	Air conditioning is provided for comfort of the personal in the areas of the company, like Administrative building, all Control Rooms, offices, etc. The general natural Ventilation system is good. Supplementary Ventilation like exhaust fans, Industrial fan has also been provided. The general Illumination level of the entire Plant is good during day time. Illumination survey is carried out every month by electrical Department. Noise Level Monitoring is being done periodically. Reports shows that at some locations noise levels were above 75 dB (A) and at some locations below 75dB(A). Noise may be controlled at these locations and/or workers should wear earplugs / earmuffs.	Good ventilation provided
29	**PREVENTIVE MAINTENANCE**	Good HSE practice	Preventive Maintenance schedule is prepared for all equipment. Periodicity of maintenance is given by considering the importance of equipment	Preventive maintenance schedule is in place

30	**Stack and AAQ Monitoring**	Good HSE practice	Stack and AAQ monitoring is done every month. Noise and fugitive emission levels are also being monitored monthly.	Work place monitoring is carried out monthly
31	**MANAGEMENT OF CHANGE**	Good HSE Practice	Management of change procedure is available. Risk assessment is being done whenever there is change in process and any modification work done	Management of change procedure is available
32	**SATUTORY WARNINGS & NOTICES**	Good HSE practice	Statutory warnings / notices, caution boards, safety instructions, etc. are found displayed in some places	Good signage in the factory premises
33	**MSDS**	Good HSE practice	MSDS of all the chemicals are available with the Safety Department and in the Laboratory	Displayed MSDS of all chemicals used at usage area
34	**COLOR CODING OF PIPE LINES**	Good HSE practice	Color coding of lines is displayed in one location in factory premises	Appreciable

4.1 Fire Protection System:

M/s SEIL Energy India Limited is very well equipped with fire protection system. The details are as given below:

SEIL PlantNo2:

FIRE STATIONS AT SEIL-P2:





4.2 FIRE FIGHTING APPLIANCES:

SL NO	ITEM	QUANTITY	
		SEIL P1	SEIL P2
01	Multipurpose Fire Tender	02	02
02	DCP Tender (Cap-2000Kg)	01	
03	Fire Jeep	01	
04	Ambulance + Medi cover ACLS	02	02
05	DCP Trolley Mounted 150 kg	01	-
06	Aqua fast Portable Floating Pump	01	01
07	Ejector Pump	03	03
08	High Expansion Foam Generator	02	01
09	Water Cum Foam Monitor	03	03
10	Oscillating Water cum Foam Monitor	01	01
11	Mechanical Foam Making Mobile Unit	04	03
12	Rope Ladder	03	02
13	Trolley Mounted B A set	01	01
14	Breathing Apparatus Set	23	14
15	Emergency Escape Breathing Device	04	04
16	Tripod Stand /Rolling Rescue Stretcher	01	01
17	BA Compressor	01	-
18	Nitrogen (N2) Refilling Machine	01	01
19	Hose Binding Machine	01	01

4.3 FIRE PUMPS AVAILABLE IN SEIL-PROJECT-2

- Fire water pump house containing HPT, 2 Jockey pumps, 4 Electrical Pumps and 2 Diesel operated pump.
  Each having 273M^3 capacity
  Water reservoir of 1100M^3 X 2

Booster Pump House

- 1 Electrical + 1 Diesel @ 137 M^3 capacity

4.4 FIRE HYDARNT NET WORK IN SEIL UNIT-2

SL NO	LOCATION	HYDRANT	RISER	MONITER	TOTAL
01	WTP	07	-	-	07
02	CHP AREA	103	25	94	222
03	BOILER-1	02	18	-	20
04	BOILER-2	02	16	01	19
05	TG-1	-	07	-	07
06	TG-2	-	07	-	07
07	ESP 1&2	10	02	06	18
08	GIS	12	-	-	12
09	FOPH	07	-	03	10
10	CWPH	01	-	-	01
11	WARE HOUSE	16	-	-	16
12	CCB	-	05	-	05
13	OTHER AREA	36	12	-	48
	TOTAL	196	92	104	392

4.5 FIRE HYDRANT RISER/WATER MONITOR/FIRE HOSE BOXES IN SEIL-PROJECT-2:









4.6 FIRE EXTINGUISHERS DEPLOYMENT IN SEIL-PROJECT-2:









WATER SPRAY SYSTEM (HVWS)		
SL NO	LOCATION	NO OF DV
1	CHP	2
2	TRANSFORMER YARD	20
3	BOILER BURNER	4
4	TURBINE LUBE OIL STORAGE TANK & PURFIER # 1 & 2	2
5	CLEAN & DIRTY OIL TANK # 1	2
6	BOILER FEED PUMPS LUBE OIL TANKS,COOLERS & CONSOLES # 1 & 2	2
7	GENERATOR SEAL OIL TANKS & COOLER ASSEMBLY # 1 & 2	2
8	AHP	2
	TOTAL	36

WATER SPRAY SYSTEM (MVWS)		
SL NO	LOCATION	NO OF DV
1	CHP	61
2	FOPH	07
3	CABLE CELLR /CABLE VAULT/ CABLE SPREADER	19
	TOTAL	87

4.7 FIRE EXTINGUSIHERS AT SEIL-PROJECT-2:

SL NO	LOCATION	FOAM	CO2	DCP	Clean agent / DCP Modular	TOTAL
1	TG #1 & #2	17	30	58		105
2	CCR Building	02	29	54		85
3	Boiler #1	08	10	17		35
4	Boiler #2	13	04	17		34
5	ESP 1 & 2	02	16	34		52
6	GT-1 & 2 GIS and Service bldg	09	21	26	02	58
7	CWPH, AHP, Workshop	08	23	40	01	72
8	FOPH, FWPH, HCSD PH	08	14	23		45
9	WTP, ECP,ETP, RO	02	16	35	01	54
10	JNT 1E, ECHP, MCC-1, CH	09	17	40		66
11	JNT-4 to 7, MCC-2, H2 ST	04	10	24		38
12	SWIPH, SCR-1 to 3 dozers Shed	03	12	16		31
13	JNT-8 to 10 & bunker	06	07	12		25
14	WAREHOUSE	13	17	26	07	63
15	OTHER AREA	03	08	14		25
16	Fire Station	08	41	76	19	144
	TOTAL	115	275	512	30	932

FIRE SAFETY AND SCBA TRAINING:










4.8 WORK AT HEIGHT AND RESCUE TRAINING:



4.9 HIGH RESCUE TRAINING FOR EMPLOYEES AND ASSOCIATES:



4.9.1UNDER RESCUE TRAINING FOR ASSOCIATES:



4.9.2 CONFINED MCOK DRILL CONDUCTED DURING COH:


Great Place To Work. Certified
SC-Restricted
Confined Space Rescue Mock Drill
Conducted During COH
SEIL
Boiler #2 16Mtr Manhole
CW Pipeline Underground
25

4.9.3 FIRE MOCK DRILL AT PORT END WITH MUTUAL AIDERS IN APPRIL-2025:



SEIL 2025

4.9.4 PARTICIPATION IN DISTRCIT LEVEL MOCK DRILL:



4.9.5 FIRE FIGHTING WEARING PROXIMITY SUITE:



2025

4.9.6 OIL FIRE FIGHTING WITH FAOM:



4.9.7 RESUERS WITH DEFEDING AND MONKEY CROSSING TECHNIQUES





4.9.8 VARIOUS COMPETETIONS ON FIRE SAFETY IN BOTH PLANTS:



4.9.9 TRAINING GIVEN BY US TO OTHER ORGANIZATIONS:







© SEIL 2025



FIRE EXTINGUISHERS OPEARTION DEMO AT SEIL TOWNSHIP:



4.9.9.1FIRE EXTINGUSHRES – ARRANGEMENT-MAINTENNANCE:

Different fire extinguishers are like CO2, DCP, MF are placed near the equipment and Other areas where ever necessary

- Fire hydrant system checks are conducting on daily basis. However, it is recommended to calculate fire load of the premises and ensure that the existing fire suppression measures are adequate.
- Required numbers of fire extinguishers (different classes) are available in the site and servicing done by the internal safety team once in a month.

4.9.9.2 EMERGENCY PREPAREDNESS AND RESPONSE:

- Well drawn on site emergency plan is in place.
- Training programs are being organized periodically on "On site Evacuation Drill" periodically at least once in six months
- Mock drills are to be organized at regular intervals for different scenario's.
- Assembly point/ECC/shift ECC are designated for specially
- Responsibilities of site controller, incident controller etc. are defined
- List of telephone s, mutual aid scheme, Government officials etc are included
- Wind socks are provided
- Mutual aid scheme with neighboring industries is introduced

4.9.9.3 MATERIAL HANDLING- SAFETY SUGGESTIONS:

Dos's

- Stacking of materials must never be against the wall and should be well within 3 meters height. At least 1.5 meters around the stacking must be kept clear for movement and ins - pection on regular basis.
- Yellow line discipline to be adhered where ever applicable.
- Ensure adequate firefighting equipment is available in the area.
- Adequate Firefighting equipment's and water Hydrant system with Monitor to be installed.

- To maintain clean environment in the storage area and to avoid Oil/Liquid spillage.
- Authorized Operator only to handle Fork Lift trucks/ to follow instructions as per Equipment manual.
- No one is permitted to sit on the forklift truck other than the truck operator if it is engaged. To drive at safe speed with caution.
- Do not leave the Fork Lift Truck with engine on and do not load such that visibility is restricted. Recommended to tie the bunch of drums with tie band.
- Ensure proper Anchoring of the Load on Vehicles.
- Avoid using Fork Lift truck wherever trolley can be used.
- Use proper lifting tackles and associated tools and equipment such as Hoist, Chain Pulley blocks, Jacks etc., for handling heavy loads.
- Avoid swinging of Hoist chain with or without load and movement of personnel below the overhead load being carried.

DON'TS

- Do not carry load without properly balancing it.
- Don't carry load over persons and machines.
- Don't allow load to remain suspended.
- Don't overload the equipment beyond its capacity.
- Don't allow more than one person to give signals.
- Don't use the equipment for pulling the load.
- Don't create jerk while transferring the load.
- Don't ride on the load.

ACCIDENTS –INCIDENTS REPORTING- RECOMMENDATIONS	
Observation	**Recommendation**

Accidents-Incidents record	Site is maintaining accident-incident record. But needs to prepare a trend analysis based on which the training programs needs to be conducted
Mechanism for capturing the near Misses	Site needs to explore the options to communication for effective capturing of Near-Misses
Work Place Monitoring and exposure studies	Site needs to carry out a preliminary assessment of exposure studies to understand the effectiveness of engineering, administrative and PPE controls in the areas of chemical usage for establishing a base record.
First-aid Cases	First –aid cases are being recorded and analyzed for root cause. Safety re-induction for the employee is also being done for the employee taken first-aid. The Safety-re-induction record is being maintained

5.0 METHODOLOGY

The site safety audit was conducted referencing to BIS 14489:2018. Audit is based on discussions with plant personnel, perusal of documents and records submitted by the company, field inspection, information data, clarifications & inputs provided by the company personnel, etc.

During the safety audit the audit team focused on the documents of the organization, related to the following practices:

An illustrative list of documents perused during the safety audit is given below:

- OS & H Policy
- Organization Chart
- Training records on safety, fire and first aid
- Record of tests and examinations of equipment and structures as per statutes
- Safe Operating Procedures for various operations
- Record of Work Permits
- Record of monitoring of flammable and explosives substances at work place
- Maintenance and testing records of fire detection and fire fighting equipment
- Material Safety Data Sheets
- On-site Emergency Plans and record of Mock Drills
- Housekeeping inspection records
- Minutes of Safety committee meetings
- Approval of layouts and other approval from Statutory Authorities
- Maintenance inspection records
- Calibration and testing records
- Shut down maintenance procedures
- Records of previous audits

The following elements of safety management system are elaborated in this report.

- Occupational Safety & Health Policy
- OS & H Organizational setup
- Education & Training
- Employees participation in OS&H management
- Motivational and promotional measures
- Safety manual and safety awareness
- Compliance with statutory requirements
- Hazardous area classification
- New equipment review / inspection
- Accident reporting, analysis, investigation & implementation of recommendations
- Risk Assessment including hazard identification
- Safety Inspections
- Health and Safety improvement plans / targets
- First aid facilities – Occupational Health Centre
- Personal Protective Equipment
- Housekeeping
- Machine and General area guarding
- Material handling equipment
- Electrical and Personal safeguarding
- Ventilation, Illumination and Noise
- Work environment monitoring system
- Prevention of occupational diseases including periodic medical examination
- Safe Operating Procedures
- Work Permit System
- Fire prevention, protection and fighting systems

- Emergency Preparedness Plans
- Process / Plant modification procedure
- Transportation of Hazardous Substances
- Contractor Safety System
- Safety for Customers
- Safety Checklists

5.1. AUDIT GOALS AND OBJECTIVES

5.1.1. AUDIT GOALS

1. Audit goal is decided based on documented Safety Management system and to verify the safety practices are in line with IS code (IS 14489:2018) of safety practices

2. To verify and assess the Safety management system of the organization against the OH& S Standard and to identify the areas for improvement

3. To evaluate the capability of safety management system to ensure compliance with statutory, regulatory and contractual requirements

5.1.2. AUDIT OBJECTIVES:

The audit objectives are defined as follows:

- Identify design deficiencies and weaknesses, if any, that might have cropped up during modifications/ additions of facilities.
- Examine the existing operating/maintenance and other work practices, safety systems, fire protection facilities and control measures which might have degraded over the time.
- Identify potential Health & Safety (H&S) hazards not covered by the existing control procedures

- Recommend improvements for better effectiveness of the existing procedures, systems and control measures for H&S Hazards.

- Recommend Procedures, systems and control measures for the hazards identified.

- Study compliance with critical statutory provisions and relevant codes of practice and recommend actions to be taken wherever there is non-compliance

5.1.3. AUDIT SCOPE:

Audit scope includes as follows:

1. Physical Locations
2. Activities and Processes of organization
3. Organization activities performed by Company employees and Contract employees
4. Applicable Legal and Other requirements with respect to OH&S

5.1.4 AUDIT TEAM:

The audit is carried out is as per IS 14489:2018 and requirements of Factories Act, 1948 and other safety Statues on **12th,13th and 14th February, 2026**

The audit is carried out by experienced persons from **M/s Simpro Safety Solutions** are as follows:

1. Mr.K.Suri Babu
2. Mr. Kishan
3. Mr.Pandu Ranga rao
4. Mr. Alapati Jophar

The team representatives on behalf of the organization are as follows:

1. Mr. N.S.Venkatesan- Head- Fire Safety & Safety – Project 2
2. Mr. P Lakshmipati Raju – AGM HSE –Project-2

5.1.5 OPENING MEETING:

The purpose of opening meeting is to introduce the audit team to Company Management and to restate the purpose of audit i.e the objective and scope, how it will be undertaken and how results are to be communicated back to the company. At the same time the company will introduce their team members to audit team

In this opening meeting –

- Members of the audit team and auditee teams were introduced.
- Audit plan, purpose of audit objectives and necessary documents to be maintained to implement the OH&S system were explained
- Methods and audit procedures were also explained
- Departmental heads are informed the timing of visit to their department
- Resources and facilities required for the auditor was conformed
- Schedule of the audit is prepared and finalized
- Date and timing of closing meeting are also finalized and fixed in the meeting
- Opportunity for the organization members was given to clarify their queries regarding audit procedure and methodology
- Observations and Recommendations were recorded and summarized in the chapter no.5.0

5.1.6 DOCUMENTS AND RECORDS VERIFIED:

Documents and records verified for the purpose of examine the implementation of OH&S systems. The records verified during the audit are as follows:

1. Statutory licenses required to operate the industry like factory license, Explosive licenses form Chief Controller of Explosives and Other licenses from concerned authority were checked for their validities and compliance

2. Work permit system formats, Standard operating Procedures were checked

3. Safety training record and feedback given by the trainees were also checked

4. Accident/Incident record, near misses capture record, accident/incident record were checked

5. Mock drill record was also checked

6. Following Elements of OH&S management systems and technical aspects as mentioned in annexure-A of the IS 14489:2018 were audited:

➢ **OH & S MANAGEMENT**

1. OH & S Policy
2. OH & S organizational set-up
3. Safety Manual
4. Standard modification procedure
5. Plant modification procedure
6. Work permit System
7. Contractors Safety System
8. Plant design and layout
9. Medical management of accidents

10. Management of emergencies (natural/man-made)
11. Employee selection and placement
12. Safety culture
13. Statutory licenses, approvals and records
14. Motivational and promotional measures for OH&S
15. Hazard identification and job safety analysis
16. Product safety
17. Safety training record
18. Change management
19. Emergency preparedness
20. Mock drill record
21. Root cause analysis for incidents
22. Accidents and Incidents records

6.0 FIELD OBSERVATIONS- RECOMMENDATIONS

6.0 PROCESS SAFETY OBSERVATIONS

SAFETY LAPSES –LOCATION WISE –RECOMMENDATIONS

SEIL PLANT-2

A. MAIN OPERATIONS- CHEMISTRY: (PROJECT-2)

LOCATION	OBSERVATION	RECOMMENDATIONS
MAIN OPERATIONS	It is observed that temperature in turbine floor is more than ambient temperature even though exhaust fans are running	Turbine halls in power plants generally have risk environment with significant heat and fire and operational hazards. Strict control of ambient and equipment temperatures is required. To meet the safe environment, robust ventilation is necessitated. So explore the possibility of providing turbo ventilators in place exhaust fans. – OPPORTUNITY FOR IMPROVEMENT
	Boiler-No1 ESP inlet temperature is maintained 126°C.and it is very nearer to dew point. It encourages the corrosion of wire and plate electrodes.	Maintain the temperature more than 140^{0}c at least to prevent corrosion of the wire and plate electrodes even boiler is running on low load. Explore the possibilities to provide BB zone by pass provision by arranging a damper with connecting duct.- EQUIPMENT SAFETY
	No Arch flash study is to be carried out for all critical panels (Switch gear panels)	Carry out the arch flash study for all critical electrical panels- As per IEEE-1584 and NFPA-70E
	No Auto fire suppression system for switch gear panels(415V)	Provide auto fire suppression system for switch electrical panels (415V) – OPPORTUNITY FOR IMPROVEMENT

	Normal tube lights are provided in UPS battery unit-1&2 rooms along with FLP bulbs	Normal tube lights are to be replaced with FLP bulbs.- These FLP lights are essential in UPS battery rooms to prevent explosions Caused by the buildup of highly hydrogen gas emitted during battery charging process
	Containment wall height is seems to be less as nearly 400 batteries are stored in one bay and each battery contains3 liters	Height of containment wall is to be reviewed to prevent acid to come out of the containment
	Emergency phone in Boiler floor lift in unit-2 is not functioning	An emergency phone is provided in Boiler-2 floor lift
	Boiler -2 top sheets are damaged	Boiler-2 top sheets are replaced with new one
	Boiler-2 soot blower safety valve exhaust pipe got corroded	Boiler -2 soot blower safety valve exhaust pipe is to be painted
	Ladder at coal bunker angle is very less and steep	75^0 angle is to be maintained for ladder at coal bunker to avoid stress while climbing
	Attemperator water line and HRS safety valve have no insulation	Insulation is to be provided for attemperator water line and HRS safety valves to prevent heat loses and burn injuries
	Soot blowers (LRSB) steam line (super heater) area insulation damaged up to Puppet valve	Insulation is to be provided to steam line to prevent heat loses and burn injuries
	Boiler floors stair cases and floor grills are corroded	Boiler floors stair cases and floor grills are to be painted to prevent corrosion.
	Hose reel boxes are found missing in 8,9,10 and 11 and other floors	Hose reel boxes are to be provided at floors at 8,9,10 and 11
	Boiler 7th to 6th (Boiler left side) stair case is very steep and there is a chance of slipping while getting down from steps	Boiler 7th to 6th (boiler side) stair case is to be attended and made alright to prevent slipping while getting down from steps

	No rubber mat is provided for LSP-56 electrical panel	Provide rubber mat for LSP-56 electrical panel

CHEMISTRY:

LOCATION	OBSERVATION	RECOMMENDATION
CHEMISTRY	Distribution chamber insulation valve is corroded	Distribution chamber insulation valve is corroded
	Pressure sand filter supporting structures are corroded badly	It is recommended to paint the pressure filter supporting structures to prevent corrosion.
	Mono rail for raw material chemical preparations is badly corroded and damaged.	Mono rail is to be removed / painted to prevent further corrosion.
	Sodium silicate carboys storage place has no containment	Secondary containment is to be provided for sodium silicate carboys storage area.
	Chemical storage cabinet vapor exhaust outlet pipe is up to just outside the room	Chemical storage cabinet vapor exhaust outlet pipe is to be extended up to building top
	No periodical testing of bund wall of caustic and HCL storage tanks for leakage	Test the bund wall periodically for any leakage
	Chemical storage area fume hood exhaust (Fine chemical room) gases are letting out near the room	Chemical storage area fume hood exhaust (Fine chemical room) pipe is to be extended up to building top

B. CHP/OHC/FIRE DEPARTMENT/HSE:

LOCATION	OBSERVATION	RECOMMENDATIONS
CHP/OHC/HSE DEPARTMENTS	No fire protection for cable galleries at Coal handling plant	Fire protection like CO2 purging system is to be provided for cable galleries near TP1 area
	Coal conveyor Top sheets at Crusher area are damaged	Top sheets of coal conveyor at crusher area are to be replaced
	Coal conveyor supporting structures are corroded	Anti-corrosion painting is to be done for coal conveyor supporting structures.
	Out sourcing agency (Medi buddy) is to be inspected for its OHS management system	Out sourcing agency OHS management system is to be checked and a report is to be made- As per 8.1.4.3 of ISO 45001 requirement
	No check of Fire pumps efficiencies/Fire hydrant flow by competent agency.	Fire Pumps efficiency /Fire hydrant flow is to be checked by competent agency. Once in 5 years.- NFPA requirement.
	No Fire safety audit is carried out in the organization	Fire safety audit is to be carried out to check the actual fire load of the different areas and counter check the measures taken for fire suppression are adequate – OPPORTUNITY FOR IMPROVEMENT
	No display of safety statistics like leading indicators/lagging indicators	Safety statistics like lagging /leading indicators are to be displayed
	No manager feedback after training of employee	Take feedback from manager after training of employee to know the effectiveness of training
	No Industrial hygiene study carried out in the organization	Industrial hygiene study is to be carried out to check the dust exposure/noise & vibration/Heat stress/chemical hazards/radiation levels. This is to be

		done as per Factory Act,1948,Section 11-20 (Chapter-III- Health)
	No display of responsible person name on First-aid box for its maintenance	Display of responsible person name on First aid box
	No secondary containment for lead acid batteries storage area	Provide secondary containment for lead acid batteries storage area
	No interlock with guard for conveyor drum is provided	Provided interlock with guard for conveyor drum. It is a good EHS practice
	No display of whistle blower policy phone number/E-mail ID	Displayed Whistle blower policy phone number/e-mail ID
	No suitable safety googles provided to employee to see the furnace brightness	Anti-glare face mask is to be provided to see the furnace brightness (Opportunity for improvement

6.1 MECHANICAL OBSERVATIONS

MECHANICAL:

SNO	LOCATION	OBSERVATION	Recommendation
1	In Mechanical Work shop	Operators of Radial Drilling Machine and Lathe machines not wearing Helmet and Glove	Nitryl coated Nylon /Polyester Glove/Leather Glove are recommended for work shop
2	Boiler MRHS Sump pit	Electrical Motors outside Installed and no Canopy arranged for Safety	Non-Compliance as per Section 36 A of the Factories Act 1948.Canopy is to be arranged
3	Boiler surroundings	Lots of scrap stocked un attended	Falling Hazard may occur. Scrap should be removed
4	Air Receiver Tanks	Safety valves of the tanks are rust condition and Test certificates not available at the two plants TG and Ash Handling Area	As per ASME Section VIII and ISO 4126 /API 527,test certificates are to be procured. If not in service , display a board stating that tanks are not using
5	Hot work is going on at running near Boiler Ground floor	Fire Extinguisher not ready at nearby	Required as per IS 17893 Highly Objectionable Fire extinguishers are to be placed
6	EOT Crane and Hoists at Various places in the plant	Test details not updated and some places paper stickers details not visible.	Mandatory and Non- compliance as per Section 28,,29 of Factories act. So test details are to be updated. Replace the stickers with updated one
7	In the Boiler Ground floor Near MRHS Motors	Oil Drums found without caps	Fire catching. Caps are to be provided
8	Hydrogen Cylinders Main Storage Area	Outside the room Grass Cutting is needed	Fire Hazard Factories Act S -11. Unnecessary vegetation is to be removed
9		Structural Design Changing work Going on poor housekeeping and cable management	Fire Hazard Factories Act S -11, Permit Required as per IS 17893.

		Scrap stock No Hot work no permit with welder/Supervisor No PPE	
10	Lifting Devices at work shop	No Test certificate sticker on Chain blocks due for testing on 11-02-2026 not done during visit on 11-02-2026 fore noon at 12.45 .Multi colored Hoists in more number	Mandatory and Noncompliance as per Section 28,,29 of Factories act. Plan for testing as per Before schedule date
11	Boiler	Painting needed for railings at places	Painting is to be done
12	Fire Hydrant stand post near Operating Gate Valve near Crusher and also at other places	DV Valves lines replaced but not painted again corroding due not painted	No compliance as per IS 908:1975.Paintaing is to be done
13	Hydra Vehicle no AP 26 CA 2383	Lifting load indication not functioning not rectified but in use for last 15 days	As per IS 15785 Noncompliance and S 28 and 29 of factories act. Lifting load indication is to be attended immediately
14	In the boiler area AHP/CHP	Electrical and C&I agency workers not wearing Masks and Gloves (Electrical) at work spot	Proper EH Rated /Masks as per IS 9473 /2002 are to be provided
15	At places in the plant	Scaffoldings dismantling unsafely	Base Planks to be used for dismantling also

6.3 ELECTRICAL OBSERVATIONS

ELECTRICAL OBSERVATIONS:

SLNO	LOCATION	OBSERVATION	RECOMMENDATION
1	TG	In TG floor Scaffolding dismantling work under progress near EOT bus-bar with Isolation and height permit. Risk assessment is poor incompetent. Height pass/vertigo test records are not available. No proper approach to height rungs span is about 0.75 mtrs . No landing platform, workers are standing on scaffolding pipe and moving from place to place. Chances of slip and fall. In permit tag at switch gear no sign. And validity date also expired.	Risk assessment and Height work permits are in place. Dynamic Risk assessment is to be reviewed and strictly adhere to work permit system as per SOP. Proper safety precautions are to be taken while doing height work
2	H2 cylinders feeding area.	This is high risk area flammability range (4-75% in air) wide ignition energy range, colourless/flame less combustion and need for prompt leak reporting. Dos and don'ts not available. ordinary lighting provided near the area. H2 cylinders 8 nos stored as spare.	Ensure earthing and bonding to all H2 lines flanges to prevent static electricity generation. Provide FLP lighting wherever necessary. Display SOP in local language for safe handling, operations and procedures. Assign competent personal only for H2 related tasks. Train operation and maintenance. staff on H2 hazards. Provide and ensure usage of PPEs.
3	Transformers yard	GT and UATs - No warning sign and unauthorised entry restriction board.	Equipment nomenclature to be displayed. Warning sign with rating and unauthorised persons entry restriction board to be displayed at the entry gate. Danger notice as per IER .35 in Hindi or English and

			local language with skull and bone as per relevant ISS No.2551.
4	CW PIT-Unit-1	Safety net provided on the pit and not tied properly. Gaps at one end and one side tied to electrical cables.	Safety nets to be provided effectively and tied all corners to prevent any fall of material and tied to rigid structure.
5	Hoist-condenser area	Hoist test details not available	Test details like capacity ,date of testing and next due date to be displayed
6	HT/LT SWGR	Protection relays test details not displayed	Calibration test details and due date to be displayed. Display details near by the relays
7	HT/LT	SLD, Dos & Don'ts , list, not displayed	Do's and Don'ts shall be displayed for all electrical operations (Rule 44 IE 56)/Sec 2 of FA.as per IER.47A Requires drawings and records of electrical installations to be available for inspection.
8	HT/LT SWGR	PPEs like, discharge rod, rescue hook and hand gloves not available.	As per IER.48 Adequate protective devises and safety appliances shall be provided. PPES are not available during audit time. PPE made available nearby
9	HT SWGR	Equipment nomenclature front and rear side not displayed.	To be displayed to avoid any error for O&M works. Available in some panels, will be marked in other panels also.
10	HT SWGR	Emergency lighting not found.	To be provided
11	HT/LT SWGR	Smoke detectors are available. No fire suppression provided to HT/LT switch-gear.	Effectiveness of existing smoke detectors location to be assessed. Fire suppression to be provided to prevent damage of property in case of any fire as per IS 3034:1993 -Fire safety of electrical installations mandates automatic extinguishing system inside industrial panels, switch-gear with tube based clean agent suppression system

12	Permit system	TG-2 EOT crane Permit tag displayed as per tag validity is from 30.1.26 to 31.01.26 checked on 10.2.26 no name & sign at isolated by found nil.	Permit system to be strictly followed and implemented as per SOP. Awareness to be enhanced among operational authorized team for effective implementation.
13	TG-EOT crane	No live indication and waning sign to displayed to EOT crane bus bar	Three phase R, Y B indication bulbs and warning sign to be displayed either side of bas bar to prevent any inadvertent touching and electrocution. Warning signage is to displayed
14	List of authorized persons	No authorized persons details are available and displayed at HT/LT switchgear areas.	Competent person for supervision IE Rule 45; CEA Reg. 3(1)(b) Electrical work must be supervised by a person holding a Supervisor's Certificate of Competency issued by State Licensing Board. - Certified Wire-man for LV work IE Rule 45; CEA Reg. 3(1)(c) LV installation/repair work executed only by person holding a valid Wireman Permit. Will be displayed

7.0 COMPLIANCE TO APPLICABLE LEGISLATION

Sr. No.	EHS Issue/observation	Action to be taken	Present status	Applicable legislation
1	Consent To Establishment under water Act	Industry shall have CFE before establishing the plant	Complied	water(Prevention & control of pollution) Act-1974
2	Consent to operate under water Act	Industry shall have CFO before Putting the plant in to operation	Complied. Valid up to 31.03.2024	water(Prevention & control of pollution) Act-1974
3	Consent to operate under Ai r Act	Industry is having CFO with up to November,2022.respect to water Act	Complied. Valid up to 31.03.2024	Air(Prevention & control of pollution) Act-1981
4	Hazardous waste Handling	Industry shall have hazardous waste handling and storage consent	Complied. Valid up to 31.03.2024	Hazardous waste(Management &Handling) Act -2016
5	Environment Protection	Industry has to submit environment statement every year on or before 30th of September	Being Complied	Environment(protection) Act-1986

Sr. No.	EHS Issue/observation	Action to be taken	Present status	Applicable legislation
6	Boiler License	The boiler is registered	Complied	Indian Boilers Act,1923
7	License for Electrical installations	Electrical inspectorate has given license	Complied	Electricity Act,1910/1956
8	Factory License	Applied for continuation by paying yearly fees	Complied	Factory Act,1948
9	Water Cess return filing	Flow meters fixed and Cess returns are to be filed	Complied	Water (Prevention & control of pollution) Cess Act-1977
10	Public Liability coverage for industry	Public liability Insurance is to be taken	Complied	public liability insurance)Act
11	Manufacture ,storage & importing of Chemicals	Adhere to the system	Complied	Manufacture ,storage & import of hazardous chemical Rules-1994 (Information to APPCB)

Sr. No.	EHS Issue/observation	Action to be taken	Present status	Applicable legislation
13	Used batteries disposal	As per the Battery Management Rules,2008, Returns needs to be filed for every six months to APPCB in the form-8 when plant is commissioned	Complied	Battery Management Rules-2016
14	EHS Policy	EHS policy is to be displayed in English and local language at main gate and other prominent areas.	Complied	As per the factory Act,1948, Sec 7(A),factory shall have EHS policy and it shall be displayed
15	Establishment of OHC/First aid center	OHC/First aid room is to be established in the factory premises	Complied	factory Act,948
16	Mock-drills are to be conducted for the identified on-site emergencies	As per the Factory Act-1948 and MSHIC Rules,2008, Mock-drills needs to be conducted for all identified emergency situations	Being Complied.	Factory Act-1948 and MSHIC Rules,2008,
17	On-site Emergency plan	As per MSHIC rules, 2008, The industry shall have On-site Emergency preparedness plan and response. All types of		MSHIC Rules-2016

Sr. No.	EHS Issue/observation	Action to be taken	Present status	Applicable legislation
		emergencies are to be identified and mitigate measures are also to be written for addressing the emergency situations. Emergency escape routes and Emergency assembling points are to be identified	Complied	
18	MSDS of Chemicals	MSDS sheets of the chemicals are to be displayed	Complied	Good Practice
19	Periodical health Examinations (As per the Factory Act,1948)	Periodical health examinations are to be conducted once in year to all employees and submit report to Inspector of factories	Complied	Factory Act,1948)
20	Safety Committee	Safety committee has to be constituted and safety meeting are to be conducted once in three months. The MOM is to be displayed	complied	Factory Act,1948

Sr. No.	EHS Issue/observation	Action to be taken	Present status	Applicable legislation
21	Safety trainings	Safety trainings are to be conducted for all employees	Complied	Good Practice
22	Appointment of qualified Safety Officer	A qualified safety Officer is to be recruited	Complied	Factory Act,1948
23	New Equipment Safety assessment	Ensure internal/external safety assessment of new equipment before commissioning	Complied	Good Practice
24	Appointment of qualified Electricians	Ensure that all licenses are being renewed immediately after expiry period	Complied	IE Rule No 45
25	Electrical Resistance gloves	Ensure proper gloves are used	**Being followed**	IE Rule No -61
26	Earth pit Inspections	Earth pits are to be monitored periodically	**complied**	IS 3043:1989
27	Fire suppression arrangement near panels	Fire suppression system is to be provided near panels, i.e Fire extinguishers /sand buckets	**compiled**	IE rule No.43
29	High Power committee recent Recommendations	HARA ,HAZOP are to be conducted	Complied	Recent Circular

IS 14489:2018 CODE OF PRACTICE ON OCCUPATIONAL SAFETY AND HEALTH AUDIT			
S.NO	**SAFETY AUDIT ELEMENTS**	**SUMMARY OF OBSERVATIONS**	**Remarks**
OCCUPATIONAL HEALTH & SAFETY POLICY			
1.	Does the organization have a health and safety policy? (If yes, please attach one copy)	Health and safety policy is in place	Complied
2.	Do you have any corporate safety policy? (If yes, please attach one copy)	The policy is developed	Complied
3.	Who has signed the health safety policy? (Indicate his position)	Occupier - CEO	Complied
4.	Whether it is prepared as per guidelines of the Statutory Provisions?	Policy is prepared as per guidelines of statutory provisions	Complied
5.	When was the safety policy declared and adopted?	Policy is declared and implemented in the unit.	Complied
6.	How many times it has been updated till now?	Safety policy is reviewed in MRM	Complied
7.	Whether the policy is made known to all?	Yes	Complied
8.	Whether the safety policy was scrutinized by outside expert agency?	Yes,	Complied
9.	What was the last date of updation?	9th July 2025	Complied
10.	Does it find a place in the annual report?	Yes	Complied
SAFETY AND HEALTH ORGANIZATION SETUP			
11.	Does the factory have a safety department?	Yes	Complied

12.	Whether the strength and qualifications of Safety Officers are as per the statutes?	Nearly 20 Yes all are qualified	Complied
13.	Does the head of safety department /safety officer report to the chief executive?	Yes ,	Complied
14.	How often are the safety officers retained in the latest techniques of total safety management? What is the frequency of retaining?	As and when opportunity comes, Attending safety seminars and Training programs	Being complied
15.	What additional duties the safety officer is required to do?	Roes and Responsibilities are clearly mentioned in the SEIL Competency frame work	Complied
16.	What is the power of safety officer vis-à-vis unsafe condition or unsafe act?	Empowered to stop any unauthorized and unsafe activities	Complied
Safety Committees			
17.	Does the Factory has Safety Committee? Their types, structure and terms of reference	Safety committee is formed.	Complied
18.	Is the tenure of the SC as per statute?	Yes ,2 years	Complied
19.	Selection of SC elected or nominated	Nominated	Complied
20.	Frequency of SC meeting	Once in 3 months	Complied
21.	What are the subjects / or the problem discussed in the meeting.	Unsafe conditions/Unsafe acts	Complied
22.	How are recommendations of the committee(s) implemented?	First-priority	Complied
23.	Are the minutes of the safety committee(s) implemented?	Yes	Complied
24.	Are the minutes forwarded to the trade union(s) and chief executive and occupier?	Not applicable	----------

25.	How the management and trade union are play their active roles in supporting and accepting the committee(s) recommendations(s)?	Yes. Management is taking keen interest in safety.	-------
26.	How are the safety committee(s) members apprised of the latest developments in safety health and environment?	Regular updates internal and external communication channels such as News Letters, Apex Meetings, Daily mailers etc.	Complied
Safety Budget			
27.	What is the annual safety budget?	As of now, No separate budget, however any safety critical issues are funded.	Complied
28	How much percentage is this budget of the total turnover of the Company?	No limitation as far safety is concerned	Complied
29	How much budget has utilized till date?	NA	Complied
30	Is the safety budget adequate?	Yes	Complied
31	How is the safety budget arrived at?	NA	--
32	What is the pattern of expenditure for the last five years?	NA	---
33	What are approved sanctions for the expenditure in this budget?	NA	----
34	Does this budget get reflected in the annual report of the company?	NA	-----
SAFETY MANUAL			
35	What is the periodicity of updation / review of safety manual	Safety manual is there	Complied
36	Does the safety manual adequately address all the hazards in the plant?	Yes	Complied
37	Are the employee made aware of safety rules / instruction mentioned in the safety manual?	Yes	Complied
STANDARD OPERATING PROCEDURES (SOP)			

38	Are written Standard / safe operating procedures available for all operations and processes?	Yes , Being followed the same	Being complied
39	Whether the written Standard / safe operating procedures are displayed or made available and explained in the local language to the workers?	Kept in work places for immediate reference	Complied
40	Whether concerned section and safety department prepares standard / safe operating procedure jointly?	Yes ,.	Complied
41	Are standard / safe operating procedures reviewed and updated?	As per predefined procedure & any major changes.	Being followed
42	Have the workers been informed of the consequences of failure to observe the standard / safe operating procedures?	Will be Covered during in trainings	Being followed
PLANT MODIFICATION PROCEDURES			
43	What is the system for effecting any change in the existing plant, equipment or process?	Change control procedure in place.	Being Complied
44	Whether the P & I diagrams and other related documents are updated accordingly?	Yes , as per IMS body recommendations	Complied
45	Whether hazard assessment done before implementation of modifications.	Yes	Complied
WORK PERMIT SYSTEM			
46	What types of work permits exist in the factory?	Work permit system is in place, refer PTW SOP	General work permits and Safety work permits such as Hot work, Height work, Confined space,

			Tanker unloading &Electrical work permits are in place
47	Are the necessary forms detailing required safety precautions have been prepared and used for each type of work-permit?	Yes	complied
48	Is the responsibility assigned to authorized person for issuing of safety work permit?	Yes	Complied
49	Is the copy of safe work permit sent to safety officer before execution of the job?	Yes	Complied
50	Is validity period specified in the safety work permit? Are the records of work permit available and maintained in proper order?	yes	Complied
Control Measures for Work at Height			
51	Is adequate safe access provided to all places where workers need to work?	yes	complied
52	Are all such access in good condition?	Yes	Complied
53	Are all scaffolds are properly designed and erected?	N.A	---
54	Are ladders securely clamped or lashed in place?	Yes , all ladders is in good condition	Complied
55	Are planks in good condition?	Yes	Complied
56	Are scaffold walkaways, platforms, runs or stairs free of debris, grease, any unnecessary obstruction and projecting nails?	Yes , all walkways are clear access.	Complied

57	Are the scaffolds higher than 20 m.? If yes, is a netting or intermediate railing provided between toe-boards and hand railings?	NA	---
58	Are folding stepladders properly used?	NA	--
59	Are ladders set up at the proper slope of about 1:4?	Yes	Complied
60	Do workers use hand lines to lift tools or materials?	Yes	Complied
61	Are proper ladders used around electrical hazards?	Yes	Complied
62	On sloping roofs, are crawling boards, lifelines, safety belts and edge protection provided where needed?	AS & when required provide the same.	Complied
63	Whether the weak spots, skylights, or deteriorated asbestos-cement boards through which a worker might fall while working in the roof has been identified and safety net provided appropriately?	Not having such type of buildings.	Complied
64	Are the workers being medically examined for their fitness to work at height?	Yes	Complied
Work in Confined Space			
65	Is work permit system followed for working in confined space?	Yes	Complied
66	Whether monitoring of the atmosphere inside the confined space is carried out and ensured that there is no flammable or toxic gas in the area?	Yes	Complied
67	Whether the person entering the confined space is using suitable personal protective equipment(PPE)?	Yes	Complied

68	Is rescue team available in case of any emergency?	Yes	Complied
CONTRACTORS' SAFETY SYSTEM			
69	Is there any system for selection of contractors?	Yes	Complied
70	Are there any guidelines on contractor's safety and training?	Yes	Complied
71	Whether contract document includes necessary safety and welfare clauses as per statutes?	Yes	Complied
72	Is there any programme to ensure use of PPE by contractors personnel?	Company is being provided to all contract workmen	Complied
73	Do the contractors have their own safety organization?	No	--
74	Are the contractors reporting all accidents and injuries?	Yes	Complied
75	Are contractor workers trained to observe safety at work place?	Yes	Complied
76	Whether contractor workers are engaged in process / operations? If yes, are they aware of safe operating procedures?	Contract workers are engaged in housekeeping& helping activities.	Complied
PLANT DESIGN AND LAYOUT			
77	Whether hazardous operations in the plant are segregated?	Yes	Complied
78	Whether occupational health & safety aspects are considered during the design?	Yes	Complied
79	Is all the equipment provided with adequate space for working, maintenance etc.?	Yes	Complied
80	Are the storage tanks provided with enough space / clearance between them?	Yes	Complied

81	Whether the plant layout has taken care of the movement of firefighting equipment and emergency exits?	Yes	Complied
MEDICAL MANAGEMENT OF ACCIDENTS			
82	Are medical facilities available with trained first aid staff and equipment in round the clock shift for all including contractors?	Yes	Complied
83	Is the ambulance van available for round the clock basis with the dedicated driver?	Yes	Complied
84	Is there any mutual aid scheme available with the nearest hospitals to manage and treat injuries during emergency?	Yes	Complied
85	Are the workers / contractor workers aware of emergency medical facilities?	Yes	Complied
MANAGEMENT OF EMERGENCIES (NATURAL / MAN-MADE)			
86	Does the system exist to detect and control these Emergencies?	Fire alarm system & fixed detectors are available	complied
87	Does the system exist to detect and control these Emergencies?	The facility having auto operated fire hydrant system & portable fire extinguishers	complied
EMPLOYEES SELECTION AND PLACEMENT			
88	Whether norms are available for selection of different category of employees?	Recruitment policy in place. Preference is being given for the Safety Knowledge in the process	Complied
89	Whether pre-employment medical examination is being conducted for employees?	Yes	Complied

90	Is there any procedure to evaluate safety awareness and record of the employees during their promotion?	Yes	Complied
SAFETY CULTURE{Attitudes of Managers}			
91	Do the managers follow the plant safety rules at all times?	Yes	Complied
92	What are their attitudes towards safety reviews and audits?	They are accepted in positive way & will co-ordinate & support to implement the best safety practices.	Complied
93	What is the response of management to safety violation?	Taking seriously & giving counseling to improve safety culture.	Complied
94	Whether safety related decisions are taken in consultation with the workers?	Yes	Complied
95	What is the attitude of the managers towards non use of personal protective equipment?	They are insisting to wear appropriate PPE in work place.	Complied
Attitudes of Workers			
96	Whether workers are aware of the consequences of their wrong actions?	Trainings conducted on importance of PPE at work place.	Complied
97	Are laid down safe working procedures followed strictly?	Yes	Complied
98	What is the attitude of the workers towards their own mistake, which can prejudice safety?	Given counseling to such type of personnel.BBS system is in place	Complied
99	Do the workers report near miss incidents and suggest safety improvements?	Yes	Complied
100	Are the workers aware of the system of rewards and sanctions relating to safety matters?	Yes	Complied

101	What is the attitude of workers towards use of personal protective equipment?	Wearing appropriate PPE while working without fail	Complied
STATUTORY LICENSES, APPROVALS AND RECORDS			
102	Whether all the safety related Acts / Rules (with latest amendments) applicable to your organization identified, informed to all employees and complied?	Yes	Complied
103	Whether the licences have been validated?	Factory license, CFO ,PESO license etc.	Complied
MOTIVATIONAL AND PROMOTIONAL MEASURES FOR OH & S			
104	Does the factory have occupational health and safety suggestion scheme?	They are planning not yet implemented	Complied
105	Are occupational health and safety contests organized in the factory?	Yes, conducted during NSD & WED celebrations.	Complied
106	Does the factory participate in National Awards?	Yes, CII, BBS, Goldern Peacock by NSC	Complied
107	Has the factory been awarded during last five years?	Yes, Many Award were obtained at National level	Complied
108	Does the organization publish safety bulletin / newsletters?	Yes, Safety Spectrum is our internal magazine	Complied
109	Whether the safety bulletins are widely distributed?	Yes	---
110	How is the occupational health and safety information including accident statistics disseminated in the factory? (Bulletin boards, Newsletter etc.)	safety information board is displayed	Complied
111	What are the activities conducted during National Safety day / week?	Safety quiz, elocution, firefighting drill, safety posters, safety quotations competition to all employees & contract employees.	Complied

112	What is the percentage of Workers participating in the various safety promotional activities?	More than 80% of the people participated in various safety promotional activities.	Complied
HAZARD IDENTIFICATION AND JOB SAFETY ANALYSIS			
113	Was an initial process hazard analysis (PHA) completed?	Completed	
114	What are the stages of PHA? Whether a dedicated group is identified for PHA?	Yes	Complied
115	Was the PHA appropriate for the complexity of the process and identify, evaluate, and control the hazards involved in the process?	Yes	Complied
116	Does the hazard evaluation use one or more of the following PHA methodologies: What-If Anysis, Process Checklist, Hazard and Operability Study (HAZOP), Failure Mode and Effects Criticality Analysis (FMECA), Fault Tree Analysis (FTA) or any other appropriate equivalent methodology?	Will follow any one of the system mentioned	Complied
117	Does PHA assures addressing issues of inherent safety features with respect to material and their properties?	Yes	Complied
118	Does the PHA address the hazard identification, incidents history, consequences of failures (engineering and administrative controls), human factors, consequent analysis with respect to possible safety and health effects of failure of controls?	Yes	Complied
119	What are the stages of PHA? Whether a dedicated group is identified for PHA?	Yes	Complied

120	Does the system exists to promptly address findings and recommendations of PHA?	Yes	Complied
121	Are the PHA's updated and revalidated at least every five years by a qualified team to assure that the PHA is consistent with the current process?	Yes	Complied
122	Whether the activities requiring Job Safety Analysis have been identified?	yes	Complied
123	Whether the identified jobs for Hazard Identification have been carried out by trained and experienced persons?	being done	Complied
124	Whether the checklists have been prepared on each Job Safety Analysis and are being used while carrying out the job?	Prepared	Complied
PRODUCT SAFETY			
125	Whether hazards arising from use of the products are identified?	HAZOP study has done in the past. It is to be done again.	It is under process
126	Whether material safety data sheet prepared for the products?	Yes	Complied
127	Are all the products labeled and packed appropriately?	NA	----
128	Whether safety instructions are given along with products?	NA	----
SAFETY TRAINING			
129	Whether training needs have been identified?	Yes	Complied

130	Is there any programme of induction training, its duration and topics covered?	Yes, General safety and Process safety	Complied
131	Whether the assessment of the trainees has been carried out?	Yes	Complied
132	What are the infra-structural facilities available for training?	Separate training hall & projector	Complied
133	Whether training is conducted by qualified person?	Yes	Complied
134	Whether trainers are being re-trained from time to time?	Yes, trainers being attended external trainings occasionally	Complied
135	Whether proper records of training program conducted are maintained?	Trainings are being conducted but records are available	Complied
136	How training programs are evaluated?	Through feedback from employees	Complied
137	Whether schedule for training on occupational health and safety is available and maintained?	Yes	Complied
138	Whether the training programmes are reviewed?	Yes	Complied
139	Are all the employees periodically trained / retrained and what is the frequency of such training?	Yes	Complied
140	Are the retraining needs identified whenever a new process / products and change in existing process introduced?	Yes	Complied
141	Whether training covers top management?	Yes	Complied
142	How many hours of safety training is given to different employees?	Being tracked .Nearly 10 hours /employee/annum	Complied
CHANGE MANAGEMENT [Management of Change]			

143	Are there written procedures for managing change to process chemicals, technology, equipment and procedures and changes to facilities that affect the plant process / system operation?	Yes	Complied
144	Do the procedures assure that the technical basis for the proposed change addressed prior to any change?	Yes	Complied
145	Do the procedures assure that the impact of the change on safety and health addressed prior to any change?	Yes	Complied
146	Do the procedures assure that modifications to operating procedures are addressed prior to any change?	Yes	Complied
147	Do the procedures assure that the necessary time period for the change is addressed prior to any change?	Yes	Complied
148	Do the procedures assure that the authorization requirements for the proposed change are addressed prior to any change?	Yes	Complied
149	Are employees involved in operating a process, and maintenance and contract employees whose job tasks will be affected by change informed of, and trained in, the change prior to the start-up of process or affected part of process / operations?	Yes	Complied
150	Is the safety information is reviewed and updated on changes?	Yes	Complied
151	Are the operating procedures or practices updated?	Yes	Complied
Mechanical Integrity			
152	Does the mechanical integrity program include for all mechanical equipment including pressure vessels	All equipment are covered in preventive maintenance schedule & SRV's &	Complied

	and storage tanks, piping and components, relief devices and vent systems, emergency shutdown systems, pumps, control systems?	pressure vessels will be tested by competent person periodically.	
153	Are there written procedures to maintain the ongoing integrity of process equipment?	yes	Complied
154	Whether training been provided to each employee involved in maintaining the on-going integrity of process equipment?	Training imparted to all functional HOD's	Complied
155	Are inspections and tests performed on each item of process equipment included in the program?	Yes, as per pre-defined schedule.	Complied
156	Does the inspection and test frequencies meet the manufacturer's recommendation and good engineering practice?	Yes	Complied
157	Are inspections and tests performed more frequently if determined necessary by operating experience?	Yes, as per the defined schedule	Complied
158	Are deficiencies in equipment that are outside limits corrected before further use so as to assure safe operation?	Yes	Being followed
159	In the construction of new plants and equipment, whether quality assurance programme is implemented to ensure that equipment fabricated is suitable for the process?	Not Applicable	--------
160	Are appropriate checks and inspections made during equipment installation stage?	Yes	Complied
161	Are the suitability of maintenance materials, spare parts and equipment ensured during maintenance	Yes	Ensured by Engineering dept.
PHYSICAL HAZARD			

162	Are all the passages, floors and the stairways in good condition?	Yes	---
163	Is glass door taped or otherwise marked to make it visible to workers?	Marked	Complied
164	Do you have the system to deal with the spillage?	Spill control procedure in place	Complied
165	Do you have sufficient disposable bins clearly marked and whether these are suitably located? Are containers of refuse (waste) and trash emptied at the end of every day or soon after they are full? Are the containers or bins regularly cleaned?	Yes , provided	Complied
166	Are drip trays positioned wherever necessary?	NA	--
167	Do you have adequate localized extraction and scrubbing facilities for dust, fumes and gases? Please specify	Exhaust fans & scrubbers are arranged	Complied
168	Whether walkways are clearly marked and free from obstruction?	Not marked but clearly maintained	Needs to mark all walkways & emergency pathways.
169	Do you have any inter-departmental competition for good housekeeping?	Yes, 5S zone divisions and monthly awards	Complied
170	Has your organization elaborated good housekeeping practices and standards and made them known to the employees?	Housekeeping department part of facility management	Complied
171	Are there any working conditions, which make the floors slippery? If so, what measures are taken to make them safe?	Generally maintained good condition & if any slippery conditions observed	Complied
172	Does the company have adequate measures to suppress polluting dust arising out of materials stored on the roadside?	Yes, Scrubbers & dust collectors are arranged	Complied

Machine and General Area Guarding			
173	Whether machinery and equipment which can cause physical injuries to operator have been identified**?**	Taken proper safety precautions such type of equipment.	Complied
174	Are all moving parts and point of operation of machinery adequately guarded?	Yes , provides guards.	Complied
175	Are all fixed guards securely bolted in position and in good condition?	Yes, properly fixed	Complied
176	Are all interlock guards for prevention of physical injury in good condition?	Maintained good condition.	Complied
177	Are all emergency stop buttons effective and clearly labeled?	Yes	Complied
178	Are the operators for machines having moving parts aware of the danger of working with loose clothing?	Yes , covered during training programs.	Complied
179	Are the openings where there is free fall hazard covered or fenced securely?	Yes , properly covered	Complied
Material Handling			
180	Are adequate equipment available for handling materials?	Yes	Complied
181	Are the workers aware of the hazards associated with material being handled?	Yes	---
182	Where manual handling is necessary, are the workers been trained? Do they practice this? Are workers warned for lifting of excessive weight? (Maximum weight of material for adult male and female are 55 Kg and 30 Kg respectively)	Yes, the system is in practice	Complied
183	Do workers follow safe procedures for storage of materials?	Yes	Complied

184	Is the register maintained to record particulars of examination of all lifting machines, tools and tackles?	Register available	Complied
185	Are all the statutory examinations and tests carried out and certified by competent person(s)?	Yes	Complied
186	Are the operators of crane, lifts, hoists and other mechanized operations adequately qualified?	Work permit system in place.	Complied
187	Is the safe working load clearly marked?	Yes	Complied
188	Has the person employed to operate crane, forklift, or to give signals to crane been medically examined for eyesight and colour vision?	Yes	Complied
189	Is the frequency of eyesight and colour vision examination as per the latest rules?	Yes	Complied
Electrical Safeguarding			
190	Are licensed electricians available for electrical work?	Yes	Complied
191	Whether area classification for electrical equipment has been carried out?	FLP electrical fittings are maintained wherever required .	Complied
192	Do the electrical fittings conform to area classification for electrical equipment?	NA	------
193	Is a ground fault current interrupter system (ELCB) in use?	Yes	Complied
194	Are all connections made by using appropriate plugs, receptacles or enclosures? Are fuses provided?	Yes	Complied
195	Are there any make shift connection bare wires or damaged cables?	No	Complied

196	Is there a system of ensuring periodical inspection of hand tools, extension boards used for electrical work?	yes	Complied
197	Do the workers use proper types of PPE during the working on live line?	Yes	Complied
198	Is the separate work permit issued for working on high voltage line?	Yes	Complied
199	Whether the process(s) and equipment that generate and accumulate static charge have been identified?	Yes and taking proper safety measures to dissipate the static electricity.	Complied
200	Whether all such equipment including pipelines for flammable materials are properly bonded and earthed?	Yes ensured by user department & engineering dept.	Complied
201	Whether earth pit resistance is measured and the record maintained?	Earth pit resistance measured and records are being maintained	.Complied
202	Whether lightning arrestor has been installed and is adequate?	Yes	Complied
Safety in Storage and Ware housing			
203	Whether the Material Safety Data Sheet for all chemicals is available?	Yes	Complied
204	Are the chemicals stored as per their hazardous properties including the incompatibility?	Yes	Complied
205	Are all containers clearly, indelibly labelled? Are all chemicals stored as per safety regulations?	Yes	Complied
206	Whether all racks and steel cages have sufficient load bearing capacity?	Yes	Complied
207	Is adequate natural ventilation provided to store room? Is there any emergency exit?	Ventilation & emergency exit provided.	Complied

208	Whether adequate firefighting arrangement existing in flammable chemical storage?	Yes	Complied
209	Whether methodology for handling spillages of hazardous chemical available along with the equipment required handling the spillage?	Spill control procedure & spill control kits in place.	Complied
210	Whether aisles are marked and emergency exits displayed?	Yes	Complied
Hazard Assessment for New Equipment			
211	What is the system for effecting any change in the existing plant, equipment?	Change control procedure in place.	Complied
212	Is there system for evaluating hazards from new equipment?	Through change control system only.	Complied
213	Whether the P and I diagrams and other related documents are updated accordingly?	Yes	Complied
214	Is any Job Hazard Analysis (JHA) carried out after installation of new equipment?	Safety officer is doing such type inspections	---
Hazards from Radiation Sources			
215	Whether licences have been obtained for storage / handling of radioactive material?	NA	------
216	Whether approved Radiological Safety Officer appointed?	NA	---
217	Whether appropriate PPEs are used against radiation hazards?	NA	---
218	Is the flooring of the radioactive material handling area amenable for proper decontamination?	NA	---
219	Is the storage room of radiation source as per the licence condition?	NA	--

220	Are all persons working in the facility have radiation safety training?	NA	--
221	Is the operators handling devices using radioactive materials qualified and possess the necessary certificate?	NA	--
222	Is the periodical radiation monitoring carried out?	NA	--
223	Are the records of inventory of radioactive material maintained in the standard format and submitted to the competent authority as per the period specified?	NA	--
224	Are emergency handling tools available?	NA	--
225	Are the personnel monitoring badges (TLD, Pocket dosimeter etc.) assigned and worn by each radiation worker?	NA	--
226	Are the radiation symbol and red light displayed as required?	NA	--
CHEMICAL HAZARD			
Transportation of Hazardous Substances			
227	What potentially hazardous materials are transported to or from the site (including wastes)	Hazardous wastes only	Complied
228	What mode of transport are used? 1) Road, 2) Rail, and 3) Pipelines 1) Road	Road	Complied
229	Does the company employ licenced vehicle of its own / outside sources? ii) Are the loading / unloading procedures in place and safety precautions displayed?	Will be Hired with third party transport TREM cards will also provide to drivers.	Complied

	iii) Is there a provision to check the healthiness of road tanker with respect to explosives rules? iv) Are loaded tankers or trucks parked in a specific area on-site? v) Do all truck and tanker drivers carry transport emergency (TREM) card or instruction booklet? vi) Do all truck and tanker drivers get training in handling emergencies during transport? vii) Are all the tankers marked for proper Hazchem code?	All drivers will be trained on hazardous chemical handling. Ensure All storage tankers are having HAZ chem code.	
230	Rail 1.What hazardous materials are transported by rail? 2.Does the company have a direct siding on site? 3.Are tankers or other wagons used in transportation?	NA	---
231	Pipelines 1.What materials are transported to and from the site by pipelines? 2.Are the pipelines underground or over ground? 3.Are corrosion protection measures employed in pipelines? 4.Whether intermediate booster pumps are used?	NA	
Handling of Hazardous Substances			
232	What are the hazardous substance handled in the factory?	Used oil Chemical residue, ETP sludge etc	--------

233	Whether quantity of hazardous substances is above the threshold limit specified in the Manufacture, Storage and Handling of *Hazardous Substances Rule*, 1989? If yes, then required documentation is available as per the rule.	NA	
234	Whether written procedure for handling the hazardous substance is available and operators are trained for handling such substances including actions required in case of leakages and spillages?	SOPs are prepared and available	Complied
235	Are the employees aware of the hazards arising from hazardous substances and safety precautions to be taken during handling of these?	Yes	Complied
Material Safety Data Sheets (MSDS)			
236	Are the material safety data sheets available for all the chemicals handled, used and manufactured in the factory?	Yes , MSDS are available in work place.	--
237	Whether the latest MSDS are displayed at strategic locations?	Yes , kept at work places.	--
238	Is it available in local language*?*	No but explained in local language	--
Spill Control Measures			
239	Whether spill control procedure is available?	Yes	Complied
240	Whether spill collection pit / sump is available at the workplace?	Yes	Complied
241	Whether methodology for recovery / disposal of collected material has been established*?*	Yes	---
Storage of Hazardous Substances			

242	Whether storage vessels are identified with the capacity as required under MSIHC, Rules 1989	NA	---
243	What are the storage pressure and temperature? Whether vessels are above ground / underground?	Ambient temp & atmospheric pressure only	--
244	If any of the tanks storing flammable material, whether electrical equipment and fittings are as per electrical area classification?	Yes	--
245	Is the bunded area takes into account the total quantity of the largest tank?	Yes	--
246	Whether the bund perimeter takes into consideration of trajectory of leak from tank?	Yes	--
247	Are the vessels properly bonded and earthed and whether periodically checked and record maintained?		
248	Are the vessels fitted with remotely controlled isolation valves?	No, Manual control valves provided	--
249	Are vessels provided with emergency vent, relief valve, bursting disc, level indicator, pressure gauge, and overflow line?	Yes	--
250	Where do such vents discharge?	Dump tanks & collection tanks.	--
251	Are the vessels provided with alarms for high level, high temperature and high pressure?	yes	
252	Are standby empty tanks or any other alternate systems provided for emptying / transfer in case of emergencies?	No	

253	What are the provisions made for firefighting / tackling emergency situations around the storage vessels?	Hydrant network, deluged system& hydrant sprinkler system	--
254	Has any consequence analysis for loss of containment been carried out?	Not required	Consequences analysis to be done on storage tanks & HARA report to be revised.
255	Whether the vessels are tested as per statute?	Yes	--
256	Whether log sheets are filled up on daily basis for recording the parameters of these vessels?	Yes	-----
257	Whether monitors for detection of leakage of flammable / toxic material installed?	Yes	---------
258	Whether the chemicals stored are as per their compatibility?	Yes	--
Gas Cylinders			
259	What are the various gas cylinders used in the plant?	Nitrogen, Hydrogen, Zero air & Acetylene cylinders and LPG	----
260	Are valid licenses available for storing all these cylinders?	Not applicable	--
261	Are the cylinders stored and segregated as per their compatibility?	Yes	
262	What are the measures taken for combating any emergency in the cylinders storage area?	Properly secured , protective guards or caps to be provided, need to be ensured regularly.	--
263	Whether integrity test certificates are obtained from the suppliers of the cylinders?	Yes	

264	Are the cylinders chained and secured properly along with the valve caps and proper identification colour code?	Properly secured, protective guards or caps to be provided, need to be ensured regularly.	
265	Are the cylinders protected from heat or sun and rain?	Yes	Complied
267	Whether monitors for detection of leakage of flammable / toxic gas installed?	Leak detection system is provided	Complied
Labeling and Colour Coding			
268	Are all the containers, vessels and storage tanks labeled for its content and capacity?	Yes	--
269	Whether the pipelines are color coded as per IS 2379?	Yes	--
270	Is any plant specific color code followed?	Yes	
271	Whether the color codes are displayed conspicuously in the working areas?	Yes	
Hazardous Waste Management			
272	Is identification done for various types of hazardous wastes?	Yes, obtained license from APPCB.	Complied
273	Are these quantities less than those specified by the Hazardous Wastes (Management & Handling) Rules, 1989?	Yes	--
274	What are their disposal modes?	Authorized recyclers	--
275	What are the systems / measures adopted for controlling air / water / land pollution?	Complied all the conditions stipulated in the CFO.	--
276	Whether the solid waste like combustibles, plastic, metals etc. segregated?	Yes	--

FIRE AND EXPLOSION HAZARD			
	Organizational Set-up for Fire Fighting		
277	What is the total strength of fire station and fire crew?	Safety department and security department will be responsible	----
278	How many fire crews are available in each shift?	Nearly 50 persons	----
279	Is there fire squad identified in each shift?	yes	------
280	Standing fire order is available with latest revision	Yes	---------
281	How is the communication with fire station?	By phone and detection system	------
282	Does fire safety inspections carried out?	Yes inspected by Fire authority	Complied
283	Does emergency procedure available for leakage or combustion of flammables?	Yes	Complied
284	What measures are available to control the fire load in the plant area?	Fire hydrant system, portable fire extinguishers, fire alarm system.	Complied
285	Whether technical knowledge and skills of the manager and staff responsible for overall fire safety of the plant is adequate?	Yes , qualified & technically sound EHS staff monitoring the fire safety activities.	Complied
286	How many major and minor incidents / fires were there in the factory during the last five years? Give department / plant wise.	No fire accidents were happened	Complied
287	Have all the fires / incidents been investigated and corrective actions taken? Give break-up.	Yes	--
288	Resources:	Yes	--

	1.Adequacy of protective clothing (coat, trouser, gloves, boots and helmets); 2.Availability of SCBA for firefighting operations and spare cylinders (at least 2 for each SCBA);		
289	Adequacy of hose, nozzles, ladders, lighting equipment and pumps; and	Yes	--
290	Communication facility at fire station, walkie talkie sets during firefighting	Yes, Emergency telephone facility available.	--
Built in Safety in Civil Design and Construction			
291	Whether the two safe means of escape available? Are they in separate directions?	Yes	Complied
292	Is emergency exits provided to the building handling flammables?	Yes	Complied
293	Whether emergency lights are provided?	No	Its recommended to Emergency lights with UPS backup and identification .
294	Whether fire / smoke detectors are installed in fire prone areas?	Yes	Complied
295	Whether fire call points are provided in different areas?	Yes	Complied
296	Whether Fire hydrants are provide near the buildings?	Yes	Complied
297	Is ventilation system in plant handling flammables is adequate to prevent formation of flammable mixtures?	Yes	Complied
298	Is adequate separation is provided between combustible / flammable materials and other material to restrict the fire growth?	Separately stored all combustible & flammable materials	Complied

299	Access routes for firefighting operations is available for areas having high fire load?	Yes	Complied
300	Whether building changes interferes with fire detection and / or fire suppression systems?	Fire alarm system provided	Complied
301	Whether building changes cause unreasonable fire loading / openings in the fire rated walls?	No	--
Built in Safety in Electric Circuits and Equipment			
302	Are the electrical equipment in areas where flammables mixture is likely to be present of flame-proof type?	Yes	----------.
303	Are lightning arrestors are provided to the buildings / structures storing flammable materials?	Yes	Complied.
304	Whether adequate bonding and grounding of electrical equipment / pipelines provided?	Yes	Complied
Explosive Substances			
305	Whether necessary license / approval taken from concerned statutory bodies?	Not required	------
306	Whether systems for explosion suppression, high speed fire detection with deluge, sprinklers, explosion venting etc. are provided?	Yes	Complied
307	Whether explosion resistant walls or barricades are provided around explosive storage?	No	--
308	Whether explosive substance storage areas are restricted for entry?	NA	--
309	Whether only trained persons are handling explosive substances?	NA	--

310	Whether explosive substances are stored and transported in approved containers only?	NA	--
311	Whether electrical fixtures in areas handling explosives are explosion proof type?	NA	--
312	Whether adequate measures are taken to prevent any sources of ignition where explosive substances are handled?	NA	--
Fire Safety in Handling Flammable and Explosive materials			
313	Whether emergency procedure is available for control of leakage?	Covered in OSEP	Complied
314	Whether emergency measures are displayed locally in case of accidental spillage / leakage?	Yes & explained in telugu language during trainings.	--
315	Whether facility is provided for safe drainage of combustible or flammable liquids in case of leakages?	Yes, dyke facilities are amiable	--
316	Whether highly flammable liquids are stored under inert atmosphere?	Yes	--
317	Whether flammable storage tanks are provided with flame arrestors?	Yes	--
318	Whether suitable PPEs are provided?	Yes	--
Fire Detection and Alarm System			
319	What type of fire detection and alarm system provided?	Addressable fire alarm system	Complied
320	Whether all fire prone areas of the plant are covered with fire detection system?	Yes	Complied
321	Whether fire detection equipment and smoke alarms in good operating condition?	Yes	Complied

322	Whether the number of fire call points are adequate and free from obstruction?	Yes sufficient number of fire call points are arranged	Complied
323	Whether regular inspection / maintenance / testing of fire detection and alarm system carried out and records maintained	Yes , third party inspections carried.	Complied
324	Whether emergency power supplies are provided to fire detection and fire alarm system?	Yes, Ups backup provided	Complied
325	Whether smoke detectors are located considering ventilation pattern?	Yes	Complied
326	Whether annunciation of fire is local or in the control room or in both places?	Provided emergency telephone numbers.	Complied
327	Whether any atmospheric monitoring is carried out for explosive mixture of gases or vapors?	Detection system is in place	Complied
328	Whether fire panel is constantly attended?	Yes	Complied
Passive and Active Fire Protection System			
329	What are the passive fire protection measures available? (barriers, doors, dampers etc.)	Fire dampers are provided to AHU system.	Complied
330	Are the areas requiring fire barriers identified?	NA	--
331	Whether the fire barrier provided is of adequate ratings?	NA	--
332	Whether ventilation ducts in flammable areas have been provided with isolation dampers of suitable fire rating?	Yes	--
333	Whether sprinklers / deluge are installed wherever necessary?		

334	Whether regular inspection / maintenance / testing of fire protection system carried out and records maintained?	Yes , inspection records are available	Its recommended to hydrant pumps flow rate to be checked once in year
Fixed Fire Extinguishing System			
335	What are the sources of firewater and whether they are dedicated to the fire extinguishing system?	Yes , fire hydrant tank available	------.
336	Whether the capacity of dedicated water reservoir is adequate to supply to hydrants for minimum 2 h? Whether un-interrupted power supply is provided to the firewater pumps?	Capacity available	----
337	Whether the extinguishing medium selected is appropriate to the class of fire (water, gaseous, foam, dry powder)?	Yes	Complied
338	Whether fire hydrants layout is available?	Yes	Complied
339	Whether additional (over minimum requirement) fire hoses, nozzles are available?	Yes	Available in ECC room
340	Whether the hydrants lines are kept pressurized?	Yes , maintained 6.5 to 7 Kg pressure.	Complied
341	Whether regular inspection / maintenance / testing of fixed fire extinguishing systems carried out and records maintained?	Yes	Complied
Portable Fire Extinguishing System			
342	Whether suitable type and numbers of fire extinguishers provided?	Yes , provided as per the requirement	Complied
343	Whether suitable type and numbers of fire extinguishers provided?	Yes , provided as per the requirement	Complied

344	Whether fire extinguishers periodically inspected, tested, refilled and records maintained?	Yes, once in three months third party inspections being carried.	Complied
345	Whether defective / unchecked fire extinguishers present at site?	No	--
346	Whether additional fire extinguishers are available?	No It is planning to procure	-----
Fire Fighting Equipment and Facilities			
347	Whether fire tenders (water / foam) are available?	Water foam is available	Complied
348	Whether the fire-fighting system and equipment approved, tested and maintained as per relevant standard?	Yes	Complied
349	Whether the SCBA / fire suit provided to fire fighting team for immediate action?	Yes	Complied
350	What is system for maintenance / recharge of SCBA?	NO	-------
351	Is proper access available for firefighting equipment?	Yes	Complied
352	Whether fire hose cabinets are in good condition, easily visible, and accessible?	Yes	Complied
353	Whether drill tower is available? Are fire personnel carrying out regular fire drill?	Yes , But it is to be done perodically	Complied
354	What is the communication facility at fire station? Is it adequate?	Dedicated telephone available	Complied
Fire Drill			
355	Whether mock fire drills are conducted? What is the frequency of drills?	Mock drill are being conducted once six months & fire drills are also being conducted once in two months	Complied

356	Whether fire drills are also performed in night shift	Yes	Complied
357	Whether feedback of fire drill is documented?	Yes	Complied
358	What is the system of mutual-aid scheme?	Not available	It is recommended to arrange mutual aid agreement with neighboring industries & hospitals.
Fire Fighting Training			
359	Whether there is a system of providing firefighting training to plant personnel?	Yes , conducted	Complied
360	What is the frequency and duration of such training? Whether training records are maintained?	Given fire hydrant demonstration to all employees	Complied
360	Whether fire squads are identified for different areas for first-aid fire fighting and rescue, and suitably trained?	Yes	Complied
361	Are all personnel conversant with the fire prevention and protection measures? Whether the fire staff are sent for refresher / advanced training courses?	Yes	Complied
Static Electricity and Lightning			
362	Whether all vessels and pipes are provided with suitable bonding and grounding?	Yes ,earthing continuity given by provided earth jumpers.	Complied
363	Whether arrangement has been made for grounding the tanker containing flammable liquid during loading / unloading?	Yes , provided	Complied

364	Whether spark resistant tools are provided?	Yes.	Complied
365	Whether lightning protection is provided and is adequate?	Yes	Complied
366	Whether antistatic clothing, hand gloves and footwear are provided?	Yes	Complied
Pressure Relief System			
367	Whether the listing of all 'pressure plants' [as defined under *Factories Act*] has been done?	Yes	Complied
INDUSTRIAL HYGIENE / OCCUPATIONAL HEALTH			
Ventilation, Illumination, Noise, Vibration, Heat stress and Non-ionizing Radiations			
	Ventilation		
368	Whether any ventilation study has been carried out?	No	-----
369	Whether natural ventilation is adequate or not?	Yes	-----
370	Whether dust / fumes / hot air is generated in the process?	No	-----
371	Is there any exhaust ventilation system in any section of the plant? Is periodic / preventive maintenance of ventilation system carried out and record is maintained?	Yes	------
372	Does any ventilation system re-circulate the exhausted air in work areas?	Yes	------
373	Is the work environment assessed and monitored for chemical and physical hazards?	Yes	----

374	Whether PPE are provided to workers exposed to dust / fumes and gases?	yes	----
Illumination			
375	Whether illumination study has been carried out for the assessment of illumination level?	Yes	-----
376	Is there any system of periodical cleaning and replacing the light fittings / lamps in order to ensure that they give the intended illumination levels?	Yes	-----
377	Are the workers subject to periodic optometry tests and records maintained?	Yes	------
378	Are emergency lighting available at first aid center.	Yes	---------
Noise			
379	Whether any noise study conducted?	Yes	------
380	Are there any machines / processes generating high-noise?	No	-----
381	Whether engineering and administrative controls been implemented to reduce noise exposure below the permissible limits?	Yes	------
382	Is there a system of subjecting all those employees to periodic audiometric test who work in high level noise areas?	Yes	----
383	Whether the workers are made aware of the ill effects of high noise? Whether ear muffs / plugs are provided and used?	yes	-----
Vibration			

384	Are there equipment which contribute excess level of vibrations and whether they are identified?	No such equipment	------
385	Whether any vibration study has been carried out?	-------	------
386	Are the measures taken to combat vibration to acceptable levels?	yes	-------
387	What is the frequency for measurements of vibration?	Once six months	----------
388	Are the records of measurements and maintenance of equipment / system maintained?	----------	----------
Heat Stress / Cold stress (Extremes of Temperature)			
389	Are there sources from equipment increasing the heat load in work places?	NA	--
390	Whether evaluation of heat stress is carried out?	NA	--
391	Whether natural ventilation is adequate to minimize the heat stress in work environment?	Yes	--
392	Are resources available to deal with very hot or very cold conditions (drinking water, lined gloves, insulated boots)?	Sufficient drinking water is available in canteen & other places.	--
393	Do workers know the symptoms of heat cramps / heatstroke or frost bite / hypothermia?	Yes	--
394	Are the personal protective equipment suitable for reducing the effects of heat stress available?	yes	---
Non-ionising Radiations			
395	Does the work involve likely exposure to non-ionising radiations (ultraviolet,	NA	--

	infrared, radiofrequency, microwaves, lasers, etc.)		
396	Whether risk assessment have been done for all work areas involving presence of non-ionising radiations?	NA	--
397	Are the work areas displayed with relevant safety signs?	NA	--
398	Are the employees aware about the hazards of non-ionising radiations?	NA	--
399	Does written procedures exists for working in non-ionising radiations?	NA	--
400	Is the work environment monitored periodically for physical hazards and control measures initiated whenever deviation from permissible values is observed?	NA	--
421	Whether suitable personal protective equipment are provided to workers exposed to non-ionising radiations?	NA	--
Work Place Monitoring for Hazardous Chemicals			
422	Whether the dust, fumes, smoke aerosols and mist are monitored as per statute and records maintained?	Yes	-----
423	What are the types of detectors used for monitoring concentration of hazardous chemicals?	----------	----------
424	Is any alarm system installed for any leakage of hazardous chemicals?	yes	--------
425	Are antidotes available for toxic chemicals?	Yes	----------
426	Are control measures initiated whenever deviation from permissible values is observed?	yes	--------
First Aid Facilities and Occupational Health Centre (OHC)			

427	Are adequate numbers of first aid boxes provided? Give location details?	Yes, enough number of first aid trainers are available	Complied
428	Are qualified / trained first aiders available in each shift?	No	-------
429	How many qualified / trained first aiders are available at each plant / department?	Few first aid trainers are available	Complied
430	How many persons are trained / given refreshers training in first aid in a year?	Refresher training program to be conducted	--
431	Whether occupational health center is provided?	OHC /First aid center is available	Yes
432	Does OHC conform to the provisions of the existing statutes?	Yes	Complied
434	Are the Medical Attendants / Doctors available in each shift?	Yes available	Complied
435	What facilities are available for transportation of the injured to hospital?	Ambulance is available	Complied
436	Are the names of the trained first aiders displayed?	Yes	Complied
437	Are the name of nearest hospitals and its telephone number available in OHC?	Yes	Complied.
438	Does the plant have any special preventive medicine program?	No	--
439	Is ambulance posted in proper place and is it available whenever required?	Yes, round the clock	Complied
440	Are sufficient numbers of anti-dotes available in case of any emergency?	Yes	Complied
441	Are fire safety measures provided in first aid centre?	Yes	Complied
442	Are emergency lighting arrangements available at first aid centre?	Yes	Complied

Periodic Medical Examination			
443	Whether the periodical medical examination of employees, required under relevant statute is carried out?	Yes	Complied
444	Whether it is ensured that contractors employee are medically examined during pre-employment as well as during the course of employment?	Yes	----
445	During the periodical medical examination of the workers, are they examined as per the hazardous process in which they work? (First schedule of *The Factories Act*, 1948)	Yes	------
446	Are the records of all such examination maintained?		
Personal Protective Equipment and Emergency Equipment			
447	Whether list of required PPE for each hazardous activity is available?	Yes, PPE boxes are arranged	Complied
448	Whether feedback from workers obtained during selection of PPE?	Yes , taking their concern also	Complied
449	Have the workers been trained in proper use of PPE including BA sets?	Yes	Complied
450	What is the system of procurement, inspection, issue, maintenance and replacement of PPE?	As & when requirement PPE are being issued to all employees & contract employees.	Complied
451	Whether qualitative and quantitative fit-check for respirators is ensured prior to use?	Yes	Complied
452	What are the arrangements for safe custody and storage of PPE?	PPE boxes & individual lockers.	Complied
453	Are the contractor's workers provided with the required PPE?	Yes	Complied
454	Do the PPE conform to any standard?	IS standard PPEs only using.	Complied

455	Are sufficient eye wash fountains and safety showers available?	Yes	Complied
456	Whether appropriate respiratory protective devices are available in accordance to the hazard potential?	Yes	Complied
457	Are the staff members trained in the right uses of respiratory protective devices?	Yes	Complied
Occupational Diseases			
458	Whether pre-employment medical checkup data available?	yes	Complied
459	During the medical checkup, is any person found having occupational diseases mentioned in 3rd schedule of *The Factories Act*, 1948?	No	Complied
460	Whether the medical practitioner informed the Chief Inspector of Factories about the occurrence of the occupational disease?	Whenever any case arises. Still no such case is raised	Complied
ACCIDENT/INCIDENT REPORTING,INVESTIGATION AND ANALYSIS			
Accident Reporting and Database Management			
470	What is the procedure for accident / incident / dangerous occurrence reporting?	Accident/Incident investigation procedure in place.	----
471	Whether the accident data for the last *five* years for reportable and non-reportable accidents are available?	-------	-----
Accident Investigation			
472	Are all the accidents investigated?	----	----
474	Whether accident investigation procedure is documented?	----	----

475	Whether accident investigation reports are submitted to top management?	----	----
476	How are the findings from accident investigation reports communicated to workers?	---	--
Analysis of Accidents			
477	Whether accident analysis is done as per IS 3786?	----------	----------
478	Whether root causes of accidents are analysed?	----------	----------
479	Is the accident statistics effectively utilized? If yes, how?	---------	----------
480	What nature of injuries occurred during the last five years?	----------	----------
Implementation of Recommendations			
481	How does the management ensure implementation of the recommendations to avoid recurrence of accidents and incidents?		
Reporting and Investigation of Near-miss Incidents			
482	Are all near-miss incidents reported and investigated?		
483	Is there any system of classifying and analyzing the near-miss incidents?		
EMERGENCY PREPAREDNESS			
	Site Specific Details		
484	Are the site area maps (including layout, access roads and assembly points) available in control room / emergency control centre?	Yes	Complied
Duties and Responsibilities of Key Personnel			

485	Is the hierarchy of emergency response personnel right from site emergency controller downward, and alternative officials identified?	Covered in OSEP & imparted training to all key personnel.	Complied
486	Are the duties and responsibilities assigned to the designated officials during emergency, both during and outside normal working hours clearly identified and understood by them?	Yes, Covered in OSEP & imparted training to all key personnel.	Complied
Identification of Emergencies and Accident Scenario			
487	Are the possible accident scenarios leading to emergency identified and known to the operating personnel?	Identified & listed in OSEP	Complied
488	Are approved emergency preparedness plans (onsite and off-site) in place?	Yes	
Declaration and Termination of Emergency			
489	Is the list of designated officials who are to be communicated about declaration and termination of emergency available in the control room / emergency control centre?	Yes, list available in ECC room	Complied
490	Are the methods of communication (siren, public address system etc.) for declaration and termination of an emergency known to all the workers?	Yes, explained during training programs	Compiled
Resources-evacuation/ Transport			
491	Are the following resources (equipment, personnel and procedures) required to handle emergency available?		Complied

492	1) Communications, 2) Public announcement systems 3) Monitoring of hazardous releases into the environment, 4) Emergency shelters at the facility, 5) Emergency exits with proper illumination, with uninterrupted power supply , 6) Direction for emergency exit / escape route marked in haulage / Alleyways, 7) Transport for evacuation of plant personnel, 8) Medical care including administration of antidotes, and 9) Security / maintenance of law and order.	Electrical operated emergency siren provided Emergency exits clearly marked with direction Ambulance is available for emergency transport OHC & male nurse is available for first aid Security officer & along with their staff controlling the local law order.	Complied
Communication Facilities			
493	Does the emergency control centre have direct communication links with the fire station and the plant control room?	Emergency telephone numbers& separate telephone is available	Complied
494	Are there adequate alarm points from which an emergency alarm can be raised?	Yes	Compiled
495	Is there infrastructure available for ensuring backup electric power supply for communication links where required	DG sets & Ups backup available for emergency handling.	Complied
Medical Care			
496	Is the procedure for emergency medical care available?	Covered in OSEP.	Complied

497	Whether the system has been tested at regular frequency through mock drill / exercises for its adequacy?	Yes, conducted mock drills.	Complied
498	Does the system of periodic replacement of antidotes and medicines required in emergency exist?	Yes	Complied
Updation of Emergency Plan			
499	Is the emergency plan updated based on the feedback from the periodic drills / exercises?	Yes	--
500	Are the contact details of all concerned officials kept updated in the emergency plan?	Yes, available in ECC room & OSEP book	Complied
Periodic Drills / Exercises			
501	Are mock-exercises conducted at stipulated intervals?	Yes, Mock drills are conducted in once in six months & fire drills are to be conducted in once in two months	Complied
502	Are the scenarios varied in the mock-exercises to ensure that all possible factors including meteorological conditions, affected plant personnel covered?	Scenarios taken from OSEP, which are identified and covered in OSEP .But it is to be revised	Complied
503	Whether emergency preparedness Plans have been tested and reviewed at regular frequency through mock drill for its adequacy	Yes, reviewed once two years or any major emergency/ any facility change/ up-dations.	Complied
Training of Plant Personnel			
504	Are the plant personnel trained in handling emergency equipment?	Yes, fully trained	Complied
Public Awareness Programmes			
505	Are public awareness programs	Yes	Complied

	conducted for the people around the site regarding the actions to be taken in case of off-site emergency?		
Mutual-aid Programme			
506	Are the types of accidents where external organizations would be involved in remedial actions identified? Are their responsibilities defined?	Yes	Complied
507	Is the plant responsible for rendering mutual aid assistance to any other external organizations? Does this assistance effect the plant's emergency preparedness?	Yes	Complied
508	Whether the communication channels for mutual assistance identified and known with and between two organizations	Yes	Complied
Emergency Control Centre			
509	Is the emergency control center located beyond the effective distances of identified emergency scenarios?	Yes	Complied
510	If the emergency control center is located within the effect distance, is it suitably protected that it will be available in case of emergency?	Yes	Complied
SAFETY INSPECTION			
511	Are checklists available for inspections? For example availability of checklists like: Handling, Storage and Transportation of hazardous chemicals;	Yes	Complied
512	Electrical hazards;	Yes, Prepared	Complied

528	Whether safety inspection is carried out by a designated team?	Daily by Safety team and mnt teams, Fortningly by Management Safety Walkdown by all key departments	Compiled
529	What is the frequency of safety inspections? c) Is compliance of recommendations sent to top management?	Being done once as per the laid down procedures' reports are available	Compiled
530	Whether an inspection report is generated? d) Is compliance of recommendations reviewed by management?	Yes, generated and discuss in HODs Meetings	Compiled
531	Compliance of Recommendations safety committee?	available	Compiled
532	To whom the recommendations are submitted e) Does top management follows-up the compliance?	Unit Head and CEO	Compiled
533	Are recommendations of safety inspections complied in time?	Yes	Compiled



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_____END OF THE REPORT_____