



SEIL Energy India Limited

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SEIL P1/APPCB/BZA/2025/011
27th September 2025

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

Sub.: **Submission of Environment Statement for FY2024-25 – SEIL Energy India Limited Project-1, Nellore.**

Ref: CFO order issued vide Ref: APPCB/VJA/NLR/930/HO/CFO/2016 Dt. 16.11.2021.

Dear Sir,

With reference to the above, please find enclosed herewith Environment Statement of SEIL Energy India Limited Project-1, Nellore for FY2024-25, duly filled in Form V.

Thanking you,

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

Gnanadesigan N
Head HSE- SEIL

Encl: Environment Statement in Form V along with Annexures

Copy To:

1. The Additional Director, Scientist 'E', MoEF&CC, IRO, Vijayawada
2. The Regional Officer, APPCB, Nellore

ENVIRONMENTAL STATEMENT FOR THE YEAR 2024-25

of

**2x660 MW
Super Critical Coal Based Thermal Power Plant**

At
***Painampuram & Nelaturu villages
Muthukur Mandal
SPSR Nellore District
Andhra Pradesh***

Submitted By

***SEIL Energy India Limited Project-1
SPSR NELLORE,
ANDHRA PRADESH***

September 2025

FORM V
(See Rule 14)

Environmental Statement Report for the financial year ending the 31st of March 2025

PART- A

- (i) Name and address of the : Mr. Sunil Kumar Gupta
Owner/Occupier of the Industry, Head- O&M
Operation or process SEIL Energy India Limited Project-1
Pynampuram/Nelaturu Village
Muthukur Mandal, SPSR Nellore-524344
0861-3052311, 0861-3052309
- (ii) Industry Category : A (Coal based thermal power plant)
- (iii) Production capacity : 1320 MW (2X660 MW)
- (iv) Year of Establishment : 2015
- (V) Date of the last Environmental : 27th September 2024
statement Submitted

PART- B

Water and Raw Material consumption

1. Water Consumption, m³/d:

- Plant Process : 16357
Cooling : 155106
Domestic : 14

Name of Product	Process Water Consumption per Unit of Product Output	
	During the Previous Financial Year (2023-24)	During the Current Financial Year (2024-25)
Electricity	0.63 m ³ /MWH	0.73 m ³ /MWH
	(Excl. Cooling Tower makeup)	(Excl. Cooling Tower makeup)
	6.67 m ³ /MWH (Incl. Cooling Tower makeup)	6.96 m ³ /MWH (Incl. Cooling Tower makeup)

2. Raw Material Consumption

Name of Products	Name of Raw Materials	Unit	Consumption of raw material per unit of output	
			During the current Financial year (2023-24)	During the current Financial year (2024-25)
Electricity	Coal	MT/MWH	0.62	0.65
	Fuel Oil	ML/MWH	0.12	0.0001

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

PART- C
Pollution Discharged to Environment/Unit of Output
 (Parameters as specified in the consent issued)

(i) Pollution	Quantity of pollutants discharged	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
a) Water	Please refer Annexure-I (Effluent Water Quality Third Party Monitoring reports)		
b) Air	Please refer Annexure-II (Stack Emission Third Party Monitoring reports)		

PART- D
Hazardous Wastes
 (As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016)

(a) From Process:

S.No.	Hazardous Wastes	Total Quantity	
		During the Current Financial year (2023-24)	During the Current Financial year (2024-25)
1	Expired Paints/ Paint Waste/ Empty Paint Cans	6.54 MT	4.92 MT
2	Expired Chemicals/ Chemical Waste/ Empty Chemical	0	0
3	Spent Ion Exchange Resins	0	0
4	Oil Soaked or Chemicals coated Cotton waste	5.63 MT	0.700 MT
5	Used Oil Filters/ Damaged Filters	0.36 MT	0.05 MT
6	ETP Sludge/ Oil Sludge	0	0
7	Used Lubricant Oil	12.11 MT	25.02 MT
8	Waste Oil from DG Sets	0	0
9	Aerosol Cans	65 KG	70 KG
10	Used Empty Chemical Jar/ Bottles	0	0
11	Used Empty PVC oil sample Bottles	0	0
12	Used Grease	1.6 MT	0.29 MT
Other Wastes			
13	Lead Acid Batteries	122 No's	38 No's
14	E-Waste	2.95 MT	3.00 MT

PART- E
Solid Wastes

(b) From pollution control facilities:

S.No.	Solid Wates	Total Quantity (MT)	
		During the Current Financial year (2023-24)	During the Current Financial year (2024-25)
1	Ash (Fly Ash+ Bottom Ash)	17,57,571 MT	14,75,114 MT

(C) Disposal

(1) Quantity recycled or re-utilized with in the plant:

S.No.	Solid Wates	Total Quantity (MT)	
		During the Current Financial year (2023-24)	During the Current Financial year (2024-25)
1	Ash (Fly Ash+ Bottom Ash)	2,43,071 MT	NIL

(2) Sold:

S.No.	Solid Wates	Total Quantity (MT)	
		During the Current Financial year (2023-24)	During the Current Financial year (2024-25)
1	Ash (Fly Ash+ Bottom Ash)	15,53,942 MT	12,62,198 MT

(3) Disposed: (Total Ash Disposal)

S.No.	Solid Wates	Total Quantity (MT)	
		During the Current Financial year (2023-24)	During the Current Financial year (2024-25)
1	Ash (Fly Ash+ Bottom Ash)	18,00,763 MT	18,26,589 MT

PART- F

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

Characteristics of Solid Wastes

Fly Ash

Parameter	Unit	Fly Ash
Chromium (as Cr ⁺⁶)	ppm	0.36
Arsenic (as As)	ppm	0.53
Lead (as Pb)	ppm	0.65
Mercury (as Hg)	ppm	<0.03

Disposal practice of Solid Waste:

(a) Disposal Practice of Hazardous Waste:

S.No.	Name of Hazardous Waste	Disposal Practice
1	Expired Paints/ Paint Waste/ Empty Paint Cans	Disposal to Authorized recyclers/ Reprocessors/ Incinerators
2	Expired Chemicals/ Chemical Waste/ Empty Chemical	Disposal to Authorized recyclers/ Reprocessors/ Incinerators
3	Spent Ion Exchange Resins	Disposal to Authorized recyclers/ Reprocessors/ Incinerators
4	Oil Soaked or Chemicals coated Cotton waste	Disposal to Authorized recyclers/ Reprocessors/ Incinerators
5	Used Oil Filters/ Damaged Filters	Disposal to Authorized recyclers/ Reprocessors/ Incinerators
6	ETP Sludge/ Oil Sludge	Disposal to Authorized recyclers/ Reprocessors/ Incinerators
7	Used Lubricant Oil	Disposal to Authorized recyclers/ Reprocessors/ Incinerators/ Pre-processors
8	Waste Oil from DG Sets	Disposal to Authorized recyclers/ Reprocessors/ Incinerators/ Pre-processors
9	Aerosol Cans	Disposal to Authorized recyclers/ Reprocessors/ Incinerators
10	Used Empty Chemical Jar/ Bottles	Disposal to Authorized recyclers/ Reprocessors/ Incinerators
11	Used Empty PVC oil sample Bottles	Disposal to Authorized recyclers/ Reprocessors/ Incinerators
12	Used Grease	Disposal to Authorized recyclers/ Reprocessors/ Incinerators
Other Wastes		
13	Lead Acid Batteries	Return to manufacturers/dealers on buyback basis/ Authorized recyclers
14	E-Waste	Authorized recyclers/ Reprocessors

(b) Disposal Practice of Solid Waste:

S.No.	Name of Solid Waste	Disposal Practice
1	Ash (Fly Ash+ Bottom Ash)	Utilization in Cement/ AAC blocks/ Brick Industry/ RMC/ Export to other countries/ Disposal in Ash Pond/ Filling of Low-lying areas

PART– G

Impact of the pollution control measures on conservation of natural resources and on the cost of production.

Energy Conservation Initiatives Undertaken in FY2024-25:

Sl. No.	Initiatives	Energy Savings (MWh)	Fuel (MT)
1	Unit-2 Air Pre Heater-2A/2B clogged heating element baskets replaced with new and damaged seals replaced during COH for APH DP, leakage and Fan power reduction.	11697	11499
2	Unit-2 coal burners, abraded primary & secondary air diffusers replaced with new and combustion improved.	-	2874.68
3	Unit-2 Turbine steam path auditing, seals rectifications and sand blasting carried out during COH	-	1270.58
4	CW Pump-2A & 2B impeller protective coating carried out for pump efficiency improvement.	2065.49	-
5	Unit-2 NDCT rectification carried out during COH, which improved NDCT effectiveness by 2.2%. Also, condenser tubes bullet cleaning carried out.	-	1248.55
6	Fourth CW Pump stopped during part load and high condenser vacuum conditions	26349.35	-
7	CW blowdown pump stopped, and blowdown given through main CW pump discharge without affecting condenser vacuum during seasonal benefits.	1839.6	-

- Portal water consumption reduced by 50% by installing float in overhead tanks.
- Water Taps & Flushers flow optimized by installing aerators in SEIL Project-1 Admin building.
- Service water and Portable water Flow meters installed for Effective monitoring.
- Daily mail-based alerts for high water consuming areas.
- Green belt area water controlling and optimization through daily monitoring by installing area wise flow meters.

- Different initiative/ technologies like Double Ring Method, Online Drip System, WAPASA & Israel Technology adopted for water consumption reduction in our green belt in both plants.

PART– H

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

- A total of about Rs. 2,96,21,000 has been spent on Environment Monitoring, House Keeping, Waste Disposal, Green Belt Maintenance, Ash Management, Maintenance of Pollution Control Monitoring equipment like CEMS, CAAQMS & EQMS for the financial year 2024–25.
- Regular monitoring of Ambient Air Quality, Stack emissions and Effluent quality have been taken up to evaluate the efficiency of the pollution control systems and control measures. Both CEMS, CAAQMS & EQMS are connected to APPCB / CPCB websites and data is being transmitted on real time basis.
- Energy Management system (EMS) Implemented for Auxiliary consumption optimization.
- Bulk shipment of Ash disposal done to Sri Lanka and Middle East.
- SEIL has hired JCB for free loading of pond ash to supply customers.
- Exploring export opportunities.
- Finding other modes of transportation of fly ash to the customers.
- LOI issued to NHAI for pond ash off take and the same was in progress.
- The parking area has been enhanced for further parking of more bulkers.
- Break bulk shipment to middle east.
- Online Performance Tool (SPARK) Introduced for heat rate Optimization.
- Energy Management system (EMS) Implementation under progress for Auxiliary consumption optimization.
- Massive tree plantation is done inside as well as outside of the Plant premises. Lawns/ gardens also are developed inside the plant premises to enhance aesthetics. Conocarpus plantation is done all around the coal stack area to suppress the wind-borne coal dust.
- All internal roads are made up of concrete/asphalt to reduce the fugitive dust emission inside the plant premises.
- Upgraded DFDS System installed for dust suppression.
- Rainwater Harvesting Ponds are constructed & maintained in the site.
- Good Housekeeping practices and 5S system has been implemented in the company by deploying approx. 200 No's of manpower.
- Company has undertaken 5S audit from QCFI and is being certified.

PART- I

Any other particulars for improving the quality of the environment.

- SEIL Energy India Limited P-1 certified with ISO 9001:2015 (QMS), ISO 14001:2015 (EMS) & ISO 45001:2018 (OHSAS).
- More than 458 acres of Greenbelt development completed inside & all along the periphery of the plant boundary.
- World Environment Day was celebrated with Plantation, Competitions, awareness sessions, Sea Beach Cleaning Activity & Green Rally to build up environmental awareness among employees and the community.



Gnanadesigan N
Head-HSE
On Behalf of Head O&M

Mr. Sunil Kumar Gupta
Head- O&M
SEIL Energy India Limited
Date: 27-09-2025

ANNEXURE- I



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-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: ETP OUTLET (Treated Effluent)

Date of Monitoring: 07.05.2024

Sample Collected By: Ganesh

Sample Registration Date: 09.05.2024

Analysis Starting Date: 09.05.2024

Analysis Completed Date: 17.05.2024

Issue Date: 17.05.2024

Lab Ref: SEPL/ES/SEILEILP/05-24/0002

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	RESULTS	STANDARD
1.	pH	IS:3025(Part-11)1983	--	7.2	5.5-9.0
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	402	2100
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	44	200
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	46	250
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	28	100
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	<1.0	10

Note: IS- Indian Standard

K.S.Laj
Verified by



Praveesh W.
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





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TEST REPORT

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M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: ETP OUTLET (Treated Effluent)

Date of Monitoring: 21.08.2024

Sample Collected By: Ganesh

Sample Registration Date: 22.08.2024

Analysis Starting Date: 22.08.2024

Analysis Completed Date: 28.08.2024

Issue Date: 28.08.2024

Lab Ref: SEPL/ES/SEILEILP/08-24/0002

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	RESULTS	STANDARD
1.	pH	IS:3025(Part-11)1983	--	7.4	5.5-9.0
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	431	2100
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	48	200
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	51	250
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	35	100
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	<1.0	10

Note: IS- Indian Standard

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(2x660 MW Coal Based Thermal Power Plant),

Near Pynampuram / Nelaturu (V), Muthukur (M),

SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Waste water

Sample Location: **Ash Pond Effluent Water**

Date of Monitoring: 07.05.2024

Sample Collected By: Ganesh

Sample Registration Date: 09.05.2024

Analysis Starting Date: 09.05.2024

Analysis Completed Date: 17.05.2024

Issue Date: 17.05.2024

Lab Ref: SEPL/ES/SEILEILP/05-24/0001

TEST RESULT

S.NO	TEST PARAMETERS	UNIT	TEST METHOD	RESULT	STANDARD
1.	pH	---	IS:3025(Part-11)1983	7.45	6.5-8.5
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	72	100
5.	Chemical Oxygen Demand (COD)	mg/l	IS:3025(Part-58)-2006	102	250
6.	Biochemical Oxygen Demand (BOD) (3 days at 27 °C)	mg/l	IS:3025(Part-44)-1993	61	100
7.	Oil & Grease	mg/l	IS:3025(Part-39)-1991	2.4	10
8.	Total Arsenic as As	mg/l	IS:3025(Part-37)-1988	<0.01	0.2
9.	Mercury as Hg	mg/l	IS:3025(Part-48)-1994	<0.001	0.01
10.	Lead as Pb	mg/l	IS:3025(Part-47)-1994	<0.01	2.0
11.	Cadmium as Cd	mg/l	IS:3025(Part-41)-1992	<0.001	2.0
12.	Hexavalent Chromium as Cr ⁶⁺	mg/l	IS:3025(Part-52)-2003	<0.001	1.0

IS-Indian Standard

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(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram/ Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) - 524344.

Discipline: Chemical

Group: Water

Product: Water

Location: Boiler Feed Water

Qty: 1 Ltrs

Packing: Plastic Container

Date Of Sampling: 07.05.2024

Sample Registration Date: 09.05.2024

Analysis Starting Date: 09.05.2024

Issue Date: 17.05.2024

Lab Ref: SEPL/ES/SEILEILP/05-24/0001

Sample collected person details: S. Ganesh

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Total Suspended Solids	IS 3025(P-17)1984	mg/l	100	5.6
2	Oil & Grease	IS 3025(P-39)2021	mg/l	<1.3	<1.0
3	Copper (Total)	IS 3025(P-42)1992	mg/l	1.0	0.49
4	Ferrous as Fe ⁺	IS 3025(P-53)2003	mg/l	1.0	0.31
5	Free Available Chlorine	IS 3025(P-26)1986	mg/l	<0.3	0.02

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(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram/ Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location: Cooling Tower Blow Down

Qty: 1 Ltrs

Packing: Plastic Container.

Date Of Sampling: 07.05.2024

Sample Registration Date: 09.05.2024

Analysis Starting Date: 09.05.2024

Issue Date: 17.05.2024

Lab Ref: SEPL/ES/SEILEILP/05-24/0002

Sample collected person details: S. Ganesh

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Zinc	IS 3025(P-49)1994	mg/l	1.0	0.32
2	Chromium (Total)	IS 3025(P-52)2023	mg/l	0.2	BDL
3	Phosphate	IS 3025(P-31)1998	mg/l	5.0	3.3
4	Free Available Chlorine	IS 3025(P-26)1986	mg/l	0.5	0.17

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(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Marine Outfall Water

Date of Sampling: 07.05.2024

Sample Collected By: Ganesh

Sample Registration Date: 09.05.2024

Analysis Starting Date: 09.05.2024

Analysis Completed Date: 17.05.2024

Issue Date: 17.05.2024

Lab Ref: SEPL/ES/SEILEILP/05-24/0001

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	RESULTS	STANDARDS
1	pH	IS:3025(Part-11)1983	--	7.1	6.5-8.5
2	Temperature Intake	--	°C	25.9	Shall not exceed 5°C above the Receiving temperature
3	Temperature Out Fall	--	°C	28.3	
4	Electric Conductivity	IS: 3025:1964	µs/cm	28,587	--
5	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	19412	--
6	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	86	100
7	Chemical Oxygen Demand	IS:3025(Part-58)-2006	mg/l	92	250
8	Biochemical Oxygen Demand (3 days at 27°C)	IS:3025(Part-44)-1993	mg/l	57	100
9	Oil & Grease	IS:3025(Part-39)-1991	mg/l	<1.0	10
10	Total Hardness as CaCO ₃	IS:3025(Part-21)-2012	mg/l	4,571	--
11	Total Alkalinity as CaCO ₃	IS:3025(Part-23)-2012	mg/l	689	--
12	P- Alkalinity as CaCO ₃	IS:3025(Part-13)-1964	mg/l	Nil	--
13	Turbidity	IS:3025(Part-10)-2012	NTU	23.6	--
14	Calcium as Ca	IS:3025(Part-40)-2012	mg/l	1,587	--
15	Magnesium as Mg	IS:3025(Part-46)-2012	mg/l	268	--
16	Sodium as Na	IS:3025(Part-45)1993	mg/l	698	--

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S. No	TEST PARAMETERS	TEST METHOD	UNITS	RESULTS	STANDARDS
17	Potassium as K	IS:3025(Part-45)-1993	mg/l	254	--
18	Chloride as Cl	IS:3025(Part-32)-2012	mg/l	7,487	--
19	Sulphates as SO ₄	IS:3025(Part-24)-2012	mg/l	723	--
20	Nitrates as NO ₃	IS:3025(Part-34)-2012	mg/l	45.9	--
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	459	--
23	Iron as Fe	IS:3025(Part-53)-2012	mg/l	1.1	--
24	Flouride as F	IS:3025(Part-60)-2012	mg/l	1.8	--
25	Copper as Cu	IS:3025(Part-42)-2012	mg/l	0.52	--
26	Manganese as Mn	IS:3025(Part-59)-2012	mg/l	0.68	--
27	Phenolic Compounds as C ₆ H ₅ OH	IS:3025(Part-43)-2012	mg/l	<0.005	--
28	Cadmium as Cd	IS:3025(Part-41)-2012	mg/l	<0.005	2.0
29	Mercury as Hg	IS:3025(Part-48)-2012	mg/l	<0.001	0.01
30	Selenium as Se	IS:3025(Part-56)-2012	mg/l	<0.005	--
31	Arsenic as As	IS:3025(Part-37)-2012	mg/l	<0.01	0.2
32	Cyanide as CN	IS:3025(Part-27)-2012	mg/l	<0.01	--
33	Lead as Pb	IS:3025(Part-47)-2012	mg/l	<0.01	2.0
34	Zinc as Zn	IS:3025(Part-49)-2012	mg/l	0.31	--
35	Hexavalent Chromium as Cr ⁺⁶	IS:3025(Part-38)-1964	mg/l	<0.001	1.0
36	Boron as B	IS:3025(Part-57)-2012	mg/l	0.008	--
37	Silica as SiO ₂	IS:3025(Part-35)-2019	mg/l	29.2	--

Note: IS- Indian Standard

K.S.Laj
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Praveesh W.
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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





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-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Marine Outfall Water

Date of Sampling: 07.05.2024

Sample Collected By: Ganesh

Sample Registration Date: 09.05.2024

Analysis Starting Date: 09.05.2024

Analysis Completed Date: 17.05.2024

Issue Date: 17.05.2024

Lab Ref: SEPL/ES/SEILEILP/05-24/0002

TEST RESULT

TEST SPECIES	SOURCE OF ORGANISM	LENGTH & WEIGHT (For Fish)	REMARKS
Zebra Fish	Through vendors	1. Length 4.2 cm 2. Weight 3.7 gm	1. Fish were not fed <u>Yes</u> 2. Temperature range in aquarium 25°C

REFERENCE TEST DATA

START DATE: 09.05.2024

END DATE: 17.05.2024

COMMENTS:

The test species undergone toxicity for about 96 Hrs.
RESULT: 98% survival of fish was noticed

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

K.S.Laj
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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: ETP OUTLET (Treated Effluent)

Date of Monitoring: 21.08.2024

Sample Collected By: Ganesh

Sample Registration Date: 22.08.2024

Analysis Starting Date: 22.08.2024

Analysis Completed Date: 28.08.2024

Issue Date: 28.08.2024

Lab Ref: SEPL/ES/SEILEILP/08-24/0002

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	RESULTS	STANDARD
1.	pH	IS:3025(Part-11)1983	--	7.4	5.5-9.0
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	431	2100
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	48	200
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	51	250
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	35	100
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	<1.0	10

Note: IS- Indian Standard

K.S.Laj
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TEST REPORT

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(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: STP OUTLET

Date of Monitoring: 21.08.2024

Sample Collected By: Ganesh

Sample Registration Date: 22.08.2024

Analysis Starting Date: 22.08.2024

Analysis Completed Date: 28.08.2024

Issue Date: 28.08.2024

Lab Ref: SEPL/ES/SEILEILP/08-24/0002

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	RESULTS	STANDARD
1.	pH	IS:3025(Part-11)1983	--	7.2	5.5-9.0
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	182	<2100
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	54	<200
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	59	<250
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	28	<100
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	<1.0	<10

Note: IS-Indian Standard

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TEST REPORT

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M/S. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),

Near Pynampuram / Nelaturu (V), Muthukur (M),

SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Waste water

Sample Location: **Ash Pond Effluent Water**

Date of Monitoring: 21.08.2024

Sample Collected By: Ganesh

Sample Registration Date: **22.08.2024**

Analysis Starting Date: **22.08.2024**

Analysis Completed Date: **28.08.2024**

Issue Date: **28.08.2024**

Lab Ref: **SEPL/ES/SEILEILP/08-24/0001**

TEST RESULT

S.NO	TEST PARAMETERS	UNIT	TEST METHOD	RESULT	STANDARD
1.	pH	---	IS:3025(Part-11)1983	7.50	6.5-8.5
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	62	100
5.	Chemical Oxygen Demand (COD)	mg/l	IS:3025(Part-58)-2006	89	250
6.	Biochemical Oxygen Demand (BOD) (3 days at 27 °C)	mg/l	IS:3025(Part-44)-1993	72	100
7.	Oil & Grease	mg/l	IS:3025(Part-39)-1991	3.1	10
8.	Total Arsenic as As	mg/l	IS:3025(Part-37)-1988	<0.01	0.2
9.	Mercury as Hg	mg/l	IS:3025(Part-48)-1994	<0.001	0.01
10.	Lead as Pb	mg/l	IS:3025(Part-47)-1994	<0.01	2.0
11.	Cadmium as Cd	mg/l	IS:3025(Part-41)-1992	<0.001	2.0
12.	Hexavalent Chromium as Cr ⁶⁺	mg/l	IS:3025(Part-52)-2003	<0.001	1.0

IS-Indian Standard

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(2x660 MW Coal Based Thermal Power Plant),

Near Pynampuram / Nelaturu (V), Muthukur (M),

SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location: Boiler Feed Water

Qty: 1 Ltrs

Packing: Plastic Container

Date Of Sampling: 21.08.2024

Sample Registration Date: 22.08.2024

Analysis Starting Date: 22.08.2024

Issue Date: 28.08.2024

Lab Ref: SEPL/ES/SEILEILP/08-24/0001

Sample collected person details: S. Ganesh

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Total Suspended Solids	IS 3025(P-17)1984	mg/l	100	5.1
2	Oil & Grease	IS 3025(P-39)2021	mg/l	<1.3	<1.0
3	Copper (Total)	IS 3025(P-42)1992	mg/l	1.0	0.59
4	Ferrous as Fe ⁺	IS 3025(P-53)2003	mg/l	1.0	0.36
5	Free Available Chlorine	IS 3025(P-26)1986	mg/l	<0.3	0.01

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TEST REPORT

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M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location: Cooling Tower Blow Down

Qty: 1 Ltrs

Packing: Plastic Container.

Date Of Sampling: 21.08.2024

Sample Registration Date: 22.08.2024

Analysis Starting Date: 22.08.2024

Issue Date: 28.08.2024

Lab Ref: SEPL/ES/SEILEILP/08-24/0002

Sample collected person details: S. Ganesh

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Zinc	IS 3025(P-49)1994	mg/l	1.0	0.27
2	Chromium (Total)	IS 3025(P-52)2023	mg/l	0.2	BDL
3	Phosphate	IS 3025(P-31)1998	mg/l	5.0	3.8
4	Free Available Chlorine	IS 3025(P-26)1986	mg/l	0.5	0.1

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TEST REPORT

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M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Marine Outfall Water

Date of Sampling: 21.08.2024

Sample Collected By: Ganesh

Sample Registration Date: 22.08.2024

Analysis Starting Date: 22.08.2024

Analysis Completed Date: 28.08.2024

Issue Date: 28.08.2024

Lab Ref: SEPL/ES/SEILEILP/08-24/0001

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	RESULTS	STANDARDS
1	pH	IS:3025(Part-11)1983	--	7.2	6.5-8.5
2	Temperature Intake	--	°C	27.5	Shall not exceed 5°C above the Receiving temperature
3	Temperature Out Fall	--	°C	29.4	
4	Electric Conductivity	IS: 3025:1964	µs/cm	27,593	--
5	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	18487	--
6	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	92	100
7	Chemical Oxygen Demand	IS:3025(Part-58)-2006	mg/l	95	250
8	Biochemical Oxygen Demand (3 days at 27°C)	IS:3025(Part-44)-1993	mg/l	63	100
9	Oil & Grease	IS:3025(Part-39)-1991	mg/l	<1.0	10
10	Total Hardness as CaCO ₃	IS:3025(Part-21)-2012	mg/l	4,385	--
11	Total Alkalinity as CaCO ₃	IS:3025(Part-23)-2012	mg/l	793	--
12	P- Alkalinity as CaCO ₃	IS:3025(Part-13)-1964	mg/l	Nil	--
13	Turbidity	IS:3025(Part-10)-2012	NTU	26.3	--
14	Calcium as Ca	IS:3025(Part-40)-2012	mg/l	1,498	--
15	Magnesium as Mg	IS:3025(Part-46)-2012	mg/l	274	--
16	Sodium as Na	IS:3025(Part-45)1993	mg/l	699	--

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S. No	TEST PARAMETERS	TEST METHOD	UNITS	RESULTS	STANDARDS
17	Potassium as K	IS:3025(Part-45)-1993	mg/l	266	--
18	Chloride as Cl	IS:3025(Part-32)-2012	mg/l	7,424	--
19	Sulphates as SO ₄	IS:3025(Part-24)-2012	mg/l	745	--
20	Nitrates as NO ₃	IS:3025(Part-34)-2012	mg/l	48.3	--
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	464	--
23	Iron as Fe	IS:3025(Part-53)-2012	mg/l	1.5	--
24	Flouride as F	IS:3025(Part-60)-2012	mg/l	1.2	--
25	Copper as Cu	IS:3025(Part-42)-2012	mg/l	0.56	--
26	Manganese as Mn	IS:3025(Part-59)-2012	mg/l	0.74	--
27	Phenolic Compounds as C ₆ H ₅ OH	IS:3025(Part-43)-2012	mg/l	<0.005	--
28	Cadmium as Cd	IS:3025(Part-41)-2012	mg/l	<0.005	2.0
29	Mercury as Hg	IS:3025(Part-48)-2012	mg/l	<0.001	0.01
30	Selenium as Se	IS:3025(Part-56)-2012	mg/l	<0.005	--
31	Arsenic as As	IS:3025(Part-37)-2012	mg/l	<0.01	0.2
32	Cyanide as CN	IS:3025(Part-27)-2012	mg/l	<0.01	--
33	Lead as Pb	IS:3025(Part-47)-2012	mg/l	<0.01	2.0
34	Zinc as Zn	IS:3025(Part-49)-2012	mg/l	0.36	--
35	Hexavalent Chromium as Cr ⁺⁶	IS:3025(Part-38)-1964	mg/l	<0.001	1.0
36	Boron as B	IS:3025(Part-57)-2012	mg/l	0.008	--
37	Silica as SiO ₂	IS:3025(Part-35)-2019	mg/l	33.2	--

Note: IS- Indian Standard

K.S.Laj
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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Marine Outfall Water

Date of Sampling: 21.08.2024

Sample Collected By: Ganesh

Sample Registration Date: 22.08.2024

Analysis Starting Date: 22.08.2024

Analysis Completed Date: 28.08.2024

Issue Date: 28.08.2024

Lab Ref: SEPL/ES/SEILEILP/08-24/0002

TEST RESULT

TEST SPECIES	SOURCE OF ORGANISM	LENGTH & WEIGHT (For Fish)	REMARKS
Zebra Fish	Through vendors	1.Length 4.6 cm 2. Weight 3.9 gm	1. Fish were not fed <u>Yes</u> 2. Temperature range in aquarium 25°C

REFERENCE TEST DATA

START DATE: 22.08.2024

END DATE: 28.08.2024

COMMENTS:

The test species was undergone toxicity for about 96 Hrs.
RESULT: 98% survival of fish was noticed

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

K.S.Laj
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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: ETP OUTLET (Treated Effluent)

Date of Monitoring: 14.11.2024

Sample Collected By: Ganesh

Sample Registration Date: 15.11.2024

Analysis Starting Date: 15.11.2024

Analysis Completed Date: 21.11.2024

Issue Date: 21.11.2024

Lab Ref: SEPL/ES/SEILEILP/11-24/0002

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARD	RESULTS
1.	pH	IS:3025(Part-11)1983	--	5.5-9.0	7.7
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	2100	442
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	200	41
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	250	49
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	100	28
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	10	<1.0

Note: IS- Indian Standard

K.S.Laj
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TEST REPORT

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M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: STP OUTLET

Date of Monitoring: 14.11.2024

Sample Collected By: Ganesh

Sample Registration Date: 15.11.2024

Analysis Starting Date: 15.11.2024

Analysis Completed Date: 21.11.2024

Issue Date: 21.11.2024

Lab Ref: SEPL/ES/SEILEILP/11-24/0002

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARD	RESULTS
1.	pH	IS:3025(Part-11)1983	--	5.5-9.0	7.6
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	<2100	191
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	<200	57
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	<250	61
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	<100	32
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	<10	<1.0

Note: IS-Indian Standard

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TEST REPORT

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(2x660 MW Coal Based Thermal Power Plant),

Near Pynampuram / Nelaturu (V), Muthukur (M),

SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Wastewater

Sample Location: **Ash Pond Effluent Water**

Date of Monitoring: 13.11.2024

Sample Collected By: Ganesh

Sample Registration Date: 14.11.2024

Analysis Starting Date: 14.11.2024

Analysis Completed Date: 20.11.2024

Issue Date: 20.11.2024

Lab Ref: SEPL/ES/SEILEILP/11-24/0001

TEST RESULT

S.NO	TEST PARAMETERS	UNIT	TEST METHOD	RESULT	STANDARD
1.	pH	---	IS:3025(Part-11)1983	7.45	6.5-8.5
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	74	100
5.	Chemical Oxygen Demand (COD)	mg/l	IS:3025(Part-58)-2006	82	250
6.	Biochemical Oxygen Demand (BOD) (3 days at 27 °C)	mg/l	IS:3025(Part-44)-1993	79	100
7.	Oil & Grease	mg/l	IS:3025(Part-39)-1991	3.6	10
8.	Total Arsenic as As	mg/l	IS:3025(Part-37)-1988	<0.01	0.2
9.	Mercury as Hg	mg/l	IS:3025(Part-48)-1994	<0.001	0.01
10.	Lead as Pb	mg/l	IS:3025(Part-47)-1994	<0.01	2.0
11.	Cadmium as Cd	mg/l	IS:3025(Part-41)-1992	<0.001	2.0
12.	Hexavalent Chromium as Cr ⁶⁺	mg/l	IS:3025(Part-52)-2003	<0.001	1.0

IS-Indian Standard

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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

TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),

Near Pynampuram / Nelaturu (V), Muthukur (M),

SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location: Boiler Feed Water

Qty: 1 Ltrs

Packing: Plastic Container

Date Of Sampling: 13.11.2024

Sample Registration Date: 14.11.2024

Analysis Starting Date: 14.11.2024

Issue Date: 20.11.2024

Lab Ref: SEPL/ES/SEILEILP/11-24/0001

Sample collected person details: S. Ganesh

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Total Suspended Solids	IS 3025(P-17)1984	mg/l	100	5.4
2	Oil & Grease	IS 3025(P-39)2021	mg/l	<1.3	<1.0
3	Copper (Total)	IS 3025(P-42)1992	mg/l	1.0	0.77
4	Ferrous as Fe ⁺	IS 3025(P-53)2003	mg/l	1.0	0.35
5	Free Available Chlorine	IS 3025(P-26)1986	mg/l	<0.3	0.09

K.S. Jay
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Praveesh W.
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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),

Near Pynampuram / Nelaturu (V), Muthukur (M),

SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location: **Cooling Tower Blow Down**

Qty: 1 Ltrs

Packing: Plastic Container.

Date Of Sampling: 13.11.2024

Sample Registration Date: 14.11.2024

Analysis Starting Date: 14.11.2024

Issue Date: 20.11.2024

Lab Ref: SEPL/ES/SEILEILP/11-24/0001

Sample collected person details: S. Ganesh

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Zinc	IS 3025(P-49)1994	mg/l	1.0	0.39
2	Chromium (Total)	IS 3025(P-52)2023	mg/l	0.2	BDL
3	Phosphate	IS 3025(P-31)1998	mg/l	5.0	3.8
4	Free Available Chlorine	IS 3025(P-26)1986	mg/l	0.5	0.3

K.S. Jay
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P. Suresh Kumar
Authorized by
Managing Director

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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur(M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Marine Outfall Water

Date of Sampling: 14.11.2024

Sample Collected By: Ganesh

Sample Registration Date: 15.11.2024

Analysis Starting Date: 15.11.2024

Analysis Completed Date: 21.11.2024

Issue Date: 21.11.2024

Lab Ref: SEPL/ES/SEILEILP/11-24/0001

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	pH	IS:3025(Part-11)1983	--	6.5-8.5	7.8
2	Temperature Intake	--	°C	Shall not exceed 5°C above the Receiving temperature	24.1
3	Temperature Out Fall	--	°C		27.6
4	Electric Conductivity	IS: 3025:1964	µs/cm	--	27,625
5	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	--	18536
6	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	100	89
7	Chemical Oxygen Demand	IS:3025(Part-58)-2006	mg/l	250	93
8	Biochemical Oxygen Demand (3 days at 27°C)	IS:3025(Part-44)-1993	mg/l	100	65
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	--	4,392
11	Total Alkalinity as CaCO ₃	IS:3025(Part-23)-2012	mg/l	--	785
12	P- Alkalinity as CaCO ₃	IS:3025(Part-13)-1964	mg/l	--	Nil
13	Turbidity	IS:3025(Part-10)-2012	NTU	--	29.2
14	Calcium as Ca	IS:3025(Part-40)-2012	mg/l	--	1,536
15	Magnesium as Mg	IS:3025(Part-46)-2012	mg/l	--	271
16	Sodium as Na	IS:3025(Part-45)1993	mg/l	--	678

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S. No	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
17	Potassium as K	IS:3025(Part-45)-1993	mg/l	--	254
18	Chloride as Cl	IS:3025(Part-32)-2012	mg/l	--	7,435
19	Sulphates as SO ₄	IS:3025(Part-24)-2012	mg/l	--	752
20	Nitrates as NO ₃	IS:3025(Part-34)-2012	mg/l	--	47.8
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	--	461
23	Iron as Fe	IS:3025(Part-53)-2012	mg/l	--	1.3
24	Flouride as F	IS:3025(Part-60)-2012	mg/l	--	1.9
25	Copper as Cu	IS:3025(Part-42)-2012	mg/l	--	0.61
26	Manganese as Mn	IS:3025(Part-59)-2012	mg/l	--	0.79
27	Phenolic Compounds as C ₆ H ₅ OH	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	--	0.43
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	--	0.006
37	Silica as SiO ₂	IS:3025(Part-35)-2019	mg/l	--	31.1

Note: IS- Indian Standard

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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur(M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Marine Outfall Water

Date of Sampling: 14.11.2024

Sample Collected By: Ganesh

Sample Registration Date: 15.11.2024

Analysis Starting Date: 15.11.2024

Analysis Completed Date: 21.11.2024

Issue Date: 21.11.2024

Lab Ref: SEPL/ES/SEILEILP/11-24/0002

TEST RESULT

TEST SPECIES	SOURCE OF ORGANISM	LENGTH & WEIGHT (For Fish)	REMARKS
Zebra Fish	Through vendors	1.Length 4.6 cm 2.Weight 3.8 gm	1.Fish were not fed <u>Yes</u> 2. Temperature range in aquarium 25°C

REFERENCE TEST DATA

START DATE:15.11.2024

END DATE: 21.11.2024

COMMENTS:

The test species was 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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(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: ETP OUTLET (Treated Effluent)

Date of Monitoring: 17.02.2025

Sample Collected By: Ganesh

Sample Registration Date: 18.02.2025

Analysis Starting Date: 18.02.2025

Analysis Completed Date: 24.02.2025

Issue Date: 24.02.2025

Lab Ref: SEPL/ES/SEILEILP/02-25/0002

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	446
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	200	39
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	250	45
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	100	33
6.	Oil & Grease	IS:3025(Part-39)-1991	mg/l	10	<1.0

Note: IS- Indian Standard

K.S. Jay
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P. Suresh W.
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Managing Director

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

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TEST REPORT

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M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: STP OUTLET

Date of Monitoring: 17.02.2025

Sample Collected By: Ganesh

Sample Registration Date: 18.02.2025

Analysis Starting Date: 18.02.2025

Analysis Completed Date: 24.02.2025

Issue Date: 24.02.2025

Lab Ref: SEPL/ES/SEILEILP/02-25/0002

TEST RESULT

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARD	RESULTS
1.	pH	IS:3025(Part-11)1983	--	5.5-9.0	7.2
2.	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	<2100	174
3.	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	<200	52
4.	Chemical Oxygen Demand	IS:3025(Part-58)-1986	mg/l	<250	66
5.	Biochemical Oxygen Demand (5 days at 20°C)	IS:3025(Part-44)-1993	mg/l	<100	37
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:

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(2x660 MW Coal Based Thermal Power Plant),

Near Pynampuram / Nelaturu (V), Muthukur (M),

SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Wastewater

Sample Location: **Ash Pond Effluent Water**

Date of Monitoring: 17.02.2025

Sample Collected By: Ganesh

Sample Registration Date: 18.02.2025

Analysis Starting Date: 18.02.2025

Analysis Completed Date: 24.02.2025

Issue Date: 24.02.2025

Lab Ref: SEPL/ES/SEILEILP/02-25/0001

TEST RESULT

S.NO	TEST PARAMETERS	UNIT	TEST METHOD	STANDARD	RESULT
1.	pH	---	IS:3025(Part-11)1983	6.5-8.5	7.28
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	73
5.	Chemical Oxygen Demand (COD)	mg/l	IS:3025(Part-58)-2006	250	81
6.	Biochemical Oxygen Demand (BOD) (3 days at 27 °C)	mg/l	IS:3025(Part-44)-1993	100	64
7.	Oil & Grease	mg/l	IS:3025(Part-39)-1991	10	4.8
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

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(2x660 MW Coal Based Thermal Power Plant),

Near Pynampuram / Nelaturu (V), Muthukur (M),

SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location: Boiler Feed Water

Qty: 1 Ltrs

Packing: Plastic Container

Date Of Sampling: 17.02.2025

Sample Registration Date: 18.02.2025

Analysis Starting Date: 18.02.2025

Issue Date: 24.02.2025

Lab Ref: SEPL/ES/SEILEILP/02-25/0001

Sample collected person details: S. Ganesh

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Total Suspended Solids	IS 3025(P-17)1984	mg/l	100	6.1
2	Oil & Grease	IS 3025(P-39)2021	mg/l	<1.3	<1.0
3	Copper (Total)	IS 3025(P-42)1992	mg/l	1.0	0.71
4	Ferrous as Fe ⁺	IS 3025(P-53)2003	mg/l	1.0	0.49
5	Free Available Chlorine	IS 3025(P-26)1986	mg/l	<0.3	0.03

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SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Water

Location: **Cooling Tower Blow Down**

Qty: 1 Ltrs

Packing: Plastic Container.

Date Of Sampling: 17.02.2025

Sample Registration Date: 18.02.2025

Analysis Starting Date: 18.02.2025

Issue Date: 24.02.2025

Lab Ref: SEPL/ES/SEILEILP/02-25/0002

Sample collected person details: S. Ganesh

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	Zinc	IS 3025(P-49)1994	mg/l	1.0	0.44
2	Chromium (Total)	IS 3025(P-52)2023	mg/l	0.2	BDL
3	Phosphate	IS 3025(P-31)1998	mg/l	5.0	2.9
4	Free Available Chlorine	IS 3025(P-26)1986	mg/l	0.5	0.3

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Discipline: Chemical

Group: Water

Product: Marine Outfall Water

Date of Sampling: 17.02.2025

Sample Collected By: Ganesh

Sample Registration Date: 18.02.2025

Analysis Starting Date: 18.02.2025

Analysis Completed Date: 24.02.2025

Issue Date: 24.02.2025

Lab Ref: SEPL/ES/SEILEILP/02-25/0001

TEST RESULT

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1	pH	IS:3025(Part-11)1983	--	6.5-8.5	7.4
2	Temperature Intake	--	°C	Shall not exceed 5°C above the Receiving temperature	21.3
3	Temperature Out Fall	--	°C		23.9
4	Electric Conductivity	IS: 3025:1964	µs/cm	--	27,636
5	Total Dissolved Solids	IS:3025(Part-15)1984	mg/l	--	18549
6	Total Suspended Solids	IS:3025(Part-15)1984	mg/l	100	84
7	Chemical Oxygen Demand	IS:3025(Part-58)-2006	mg/l	250	91
8	Biochemical Oxygen Demand (3 days at 27°C)	IS:3025(Part-44)-1993	mg/l	100	69
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	--	4,385
11	Total Alkalinity as CaCO ₃	IS:3025(Part-23)-2012	mg/l	--	789
12	P- Alkalinity as CaCO ₃	IS:3025(Part-13)-1964	mg/l	--	Nil
13	Turbidity	IS:3025(Part-10)-2012	NTU	--	32.6
14	Calcium as Ca	IS:3025(Part-40)-2012	mg/l	--	1,543
15	Magnesium as Mg	IS:3025(Part-46)-2012	mg/l	--	268
16	Sodium as Na	IS:3025(Part-45)1993	mg/l	--	672

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S. No	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
17	Potassium as K	IS:3025(Part-45)-1993	mg/l	--	251
18	Chloride as Cl	IS:3025(Part-32)-2012	mg/l	--	7,446
19	Sulphates as SO ₄	IS:3025(Part-24)-2012	mg/l	--	751
20	Nitrates as NO ₃	IS:3025(Part-34)-2012	mg/l	--	44.2
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	--	458
23	Iron as Fe	IS:3025(Part-53)-2012	mg/l	--	1.6
24	Fluoride as F	IS:3025(Part-60)-2012	mg/l	--	1.2
25	Copper as Cu	IS:3025(Part-42)-2012	mg/l	--	0.72
26	Manganese as Mn	IS:3025(Part-59)-2012	mg/l	--	0.75
27	Phenolic Compounds as C ₆ H ₅ OH	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	--	0.41
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	--	0.006
37	Silica as SiO ₂	IS:3025(Part-35)-2019	mg/l	--	29.5

Note: IS- Indian Standard

K.S.Lg
Verified by



Pavesh K.
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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-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Discipline: Chemical

Group: Water

Product: Marine Outfall Water

Date of Sampling: 17.02.2025

Sample Collected By: Ganesh

Sample Registration Date: 18.02.2025

Analysis Starting Date: 18.02.2025

Analysis Completed Date: 24.02.2025

Issue Date: 24.02.2025

Lab Ref: SEPL/ES/SEILEILP/02-25/0002

TEST RESULT

TEST SPECIES	SOURCE OF ORGANISM	LENGTH & WEIGHT (For Fish)	REMARKS
Zebra Fish	Through vendors	1.Length 4.4 cm 2.Weight 3.9 gm	1. Fish were not fed <u>Yes</u> 2. Temperature range in aquarium 25°C

REFERENCE TEST DATA

START DATE: 18.02.2025

END DATE: 24.02.2025

COMMENTS:

The test species was undergone toxicity for about 96 Hrs.
RESULT: 98% survival of fish was noticed

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

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ANNEXURE- II



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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution

Product: Stack Emission Monitoring- MAY 2024

Location: Unit#1 (Stack Attached to 660 MW Boiler)

Date of Monitoring: 07.05.2024

Sample Registration Date: 09.05.2024

Analysis Starting Date: 09.05.2024

Analysis Completed Date: 17.05.2024

Issue Date: 17.05.2024

Lab Ref: SEPL/ES/SEILEILP/05-24/0001

TEST RESULT

1. Time of Sampling ---- : 10:30 Hrs. to 11:35 Hrs.
2. Time Duration : 01:05 Hrs.
3. Ambient Temperature (°C) : 35.2
4. Flue gas Temperature (°C) : 146
5. Velocity of the flue gas (m/sec) : 25.10
6. C/s area of the duct (m³) : 33.20
7. Stack Diameter (m) : 6.5
8. Flue gas Flow Rate (Nm³/Hr) : 2906726.4

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm ³	<50	32.8
2.	Sulphur Dioxide (SO ₂)	IS 11255 (part-2)1985	mg/Nm ³	-	724
3.	Oxides of Nitrogen (NO _x)	IS 11255 (part-7)1985	mg/Nm ³	450	278
4.	Carbon Monoxide (CO)	NSPS Test Method-10	ppm	-	1.9
5.	Mercury as Hg	State of California Air Resources Board, Method10A	mg/Nm ³	0.03	<0.01

Instrument Details:

Instrument : Stack Monitoring Kit
Make : Sree Scientific Equipment
Model / SI No : Sem-150/220206
Calibration Due : 27.02.2025

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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution

Product: Stack Emission Monitoring- MAY 2024

Location: Unit#2 (Stack Attached to 660 MW Boiler)

Date of Monitoring: 07.05.2024

Sample Registration Date: 09.05.2024

Analysis Starting Date: 09.05.2024

Analysis Completed Date: 17.05.2024

Issue Date: 17.05.2024

Lab Ref: SEPL/ES/SEILEILP/05-24/0002

TEST RESULT

1. Time of Sampling ---- : 11:40 Hrs. to 12:35 Hrs.
2. Time Duration : 00:55 Hrs.
3. Ambient Temperature (°C) : 34.6
4. Flue gas Temperature (°C) : 148
5. Velocity of the flue gas (m/sec) : 24.47
6. C/s area of the duct (m³) : 33.20
7. Stack Diameter (m) : 6.5
8. Flue gas Flow Rate (Nm³/Hr) : 2924654.4

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm ³	<50	26.9
2.	Sulphur Dioxide (SO ₂)	IS 11255 (part-2)1985	mg/Nm ³	-	788
3.	Oxides of Nitrogen (NO _x)	IS 11255 (part-7)1985	mg/Nm ³	450	342
4.	Carbon Monoxide (CO)	NSPS Test Method-10	ppm	-	1.7
5.	Mercury as Hg	State of California Air Resources Board, Method10A	mg/Nm ³	0.03	<0.01

Instrument Details:

Instrument : Stack Monitoring Kit
Make : Sree Scientific Equipment
Model / SI No : Sem-150/220206
Calibration Due : 27.02.2025

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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution

Product: Stack Emission Monitoring- AUGUST 2024

Location: Unit#1 (Stack Attached to 660 MW Boiler)

Date of Monitoring: 21.08.2024

Sample Registration Date:22.08.2024

Analysis Starting Date: 22.08.2024

Analysis Completed Date: 28.08.2024

Issue Date: 28.08.2024

Lab Ref: SEPL/ES/SEILEILP/08-24/0001

TEST RESULT

1. Time of Sampling ---- : 10:45 Hrs. to 11:40 Hrs.
2. Time Duration : 00:55 Hrs.
3. Ambient Temperature (°C) : 37.4
4. Flue gas Temperature (°C) : 148
5. Velocity of the flue gas (m/sec) : 24.54
6. C/s area of the duct (m³) : 33.20
7. Stack Diameter (m) : 6.5
8. Flue gas Flow Rate (Nm³/Hr) : 2933020.8

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm ³	<50	36.6
2.	Sulphur Dioxide (SO ₂)	IS 11255 (part-2)1985	mg/Nm ³	-	845
3.	Oxides of Nitrogen (NO _x)	IS 11255 (part-7)1985	mg/Nm ³	450	262
4.	Carbon Monoxide (CO)	NSPS Test Method-10	ppm	-	1.8
5.	Mercury as Hg	State of California Air Resources Board, Method10A	mg/Nm ³	0.03	<0.01

Instrument Details:

Instrument : Stack Monitoring Kit
Make : Sree Scientific Equipment
Model / SI No : Sem-150/220206
Calibration Due : 27.02.2025

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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution

Product: Stack Emission Monitoring- AUGUST 2024

Location: Unit#2 (Stack Attached to 660 MW Boiler)

Date of Monitoring: 21.08.2024

Sample Registration Date: 22.08.2024

Analysis Starting Date: 22.08.2024

Analysis Completed Date: 28.08.2024

Issue Date: 28.08.2024

Lab Ref: SEPL/ES/SEILEILP/08-24/0002

TEST RESULT

1. Time of Sampling ---- : 11:40 Hrs. to 12:30 Hrs.
2. Time Duration : 00:50 Hrs.
3. Ambient Temperature ($^{\circ}\text{C}$) : 35.3
4. Flue gas Temperature ($^{\circ}\text{C}$) : 145
5. Velocity of the flue gas (m/sec) : 24.41
6. C/s area of the duct (m^3) : 33.20
7. Stack Diameter (m) : 6.5
8. Flue gas Flow Rate (Nm^3/Hr) : 2917483.2

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm^3	<50	37.4
2.	Sulphur Dioxide (SO_2)	IS 11255 (part-2)1985	mg/Nm^3	-	852
3.	Oxides of Nitrogen (NO_x)	IS 11255 (part-7)1985	mg/Nm^3	450	325
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	<0.01

Instrument Details:

Instrument : Stack Monitoring Kit
Make : Sree Scientific Equipment
Model / SI No : Sem-150/220206
Calibration Due : 27.02.2025

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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution

Product: Stack Emission Monitoring- NOVEMBER 2024

Location: Unit#1 (Stack Attached to 660 MW Boiler)

Date of Monitoring: 14.11.2024

Sample Registration Date: 15.11.2024

Analysis Starting Date: 15.11.2024

Analysis Completed Date: 21.11.2024

Issue Date: 21.11.2024

Lab Ref: SEPL/ES/SEILEILP/11-24/0001

TEST RESULT

1. Time of Sampling ---- : 10:30 Hrs. to 11:25 Hrs.
2. Time Duration : 00:55 Hrs.
3. Ambient Temperature (°C) : 32.1
4. Flue gas Temperature (°C) : 144
5. Velocity of the flue gas (m/sec) : 24.63
6. C/s area of the duct (m²) : 33.20
7. Stack Diameter (m) : 6.5
8. Flue gas Flow Rate (Nm³/Hr) : 2943777.6

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm ³	<50	39.4
2.	Sulphur Dioxide (SO ₂)	IS 11255 (part-2)1985	mg/Nm ³	-	781
3.	Oxides of Nitrogen (NO _x)	IS 11255 (part-7)1985	mg/Nm ³	450	228
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	<0.01

Instrument Details:

Instrument : Stack Monitoring Kit
Make : Sree Scientific Equipment
Model / SI No : Sem-150/220206
Calibration Due : 27.02.2025

K.S. Jay
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Managing Director

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TEST REPORT

ISSUED TO:

M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution

Product: Stack Emission Monitoring- NOVEMBER 2024

Location: Unit#2 (Stack Attached to 660 MW Boiler)

Date of Monitoring: 14.11.2024

Sample Registration Date: 15.11.2024

Analysis Starting Date: 15.11.2024

Analysis Completed Date: 21.11.2024

Issue Date: 21.11.2024

Lab Ref: SEPL/ES/SEILEILP/11-24/0002

TEST RESULT

1. Time of Sampling ---- : 11:30 Hrs. to 12:25 Hrs.
2. Time Duration : 00:55 Hrs.
3. Ambient Temperature (°C) : 34.2
4. Flue gas Temperature (°C) : 146
5. Velocity of the flue gas (m/sec) : 24.58
6. C/s area of the duct (m³) : 33.20
7. Stack Diameter (m) : 6.5
8. Flue gas Flow Rate (Nm³/Hr) : 2937801.6

S. NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm ³	<50	37.8
2.	Sulphur Dioxide (SO ₂)	IS 11255 (part-2)1985	mg/Nm ³	-	986
3.	Oxides of Nitrogen (NO _x)	IS 11255 (part-7)1985	mg/Nm ³	450	288
4.	Carbon Monoxide (CO)	NSPS Test Method-10	ppm	-	1.4
5.	Mercury as Hg	State of California Air Resources Board, Method10A	mg/Nm ³	0.03	<0.01

Instrument Details:

Instrument : Stack Monitoring Kit
Make : Sree Scientific Equipment
Model / SI No : Sem-150/220206
Calibration Due : 27.02.2025

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TEST REPORT

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M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution

Product: Stack Emission Monitoring- FEBRUARY 2025

Location: Unit#1 (Stack Attached to 660 MW Boiler)

Date of Monitoring: 17.02.2025

Sample Registration Date: 18.02.2025

Analysis Starting Date: 18.02.2025

Analysis Completed Date: 24.02.2025

Issue Date: 24.02.2025

Lab Ref: SEPL/ES/SEILEILP/02-25/0001

TEST RESULT

1. Time of Sampling ---- : 10:10 Hrs. to 11:05 Hrs.
2. Time Duration : 00:55 Hrs.
3. Ambient Temperature (°C) : 31.4
4. Flue gas Temperature (°C) : 142
5. Velocity of the flue gas (m/sec) : 25.24
6. C/s area of the duct (m³) : 33.20
7. Stack Diameter (m) : 6.5
8. Flue gas Flow Rate (Nm³/Hr): 2778564.48

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm ³	<50	36.2
2.	Sulphur Dioxide (SO ₂)	IS 11255 (part-2)1985	mg/Nm ³	-	778
3.	Oxides of Nitrogen (NO _x)	IS 11255 (part-7)1985	mg/Nm ³	450	222
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	<0.01

Instrument Details:

Instrument : Stack Monitoring Kit
Make : Sree Scientific Equipment
Model / SI No : Sem-150/220206
Calibration Due : 27.02.2026

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TEST REPORT

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M/s. SEIL ENERGY INDIA LIMITED PROJECT-1

(2x660 MW Coal Based Thermal Power Plant),
Near Pynampuram / Nelaturu (V), Muthukur (M),
SPSR Nellore (Dist.) -524344.

Group: Atmospheric Pollution

Product: Stack Emission Monitoring- FEBRUARY 2025

Location: Unit#2 (Stack Attached to 660 MW Boiler)

Date of Monitoring: 17.02.2025

Sample Registration Date: 18.02.2025

Analysis Starting Date: 18.02.2025

Analysis Completed Date: 24.02.2025

Issue Date: 24.02.2025

Lab Ref: SEPL/ES/SEILEILP/02-25/0002

TEST RESULT

1. Time of Sampling ---- : 11:20 Hrs. to 12:15 Hrs.
2. Time Duration : 00:55 Hrs.
3. Ambient Temperature (°C) : 33.5
4. Flue gas Temperature (°C) : 147
5. Velocity of the flue gas (m/sec) : 25.42
6. C/s area of the duct (m³) : 33.20
7. Stack Diameter (m) : 6.5
8. Flue gas Flow Rate (Nm³/Hr) : 3062102.4

S.NO	TEST PARAMETERS	TEST METHOD	UNITS	STANDARDS	RESULTS
1.	Particulate Matter (PM)	IS 11255 (part-1)1985	mg/Nm ³	<50	34.1
2.	Sulphur Dioxide (SO ₂)	IS 11255 (part-2)1985	mg/Nm ³	-	882
3.	Oxides of Nitrogen (NO _x)	IS 11255 (part-7)1985	mg/Nm ³	450	294
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	<0.01

Instrument Details:

Instrument : Stack Monitoring Kit
Make : Sree Scientific Equipment
Model / SI No : Sem-150/220206
Calibration Due : 27.02.2026

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Verified by



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