



SEIL Energy India Limited

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SEIL P1/MoEF&CC/BZA/2025/001
25th June 2025

To
The Additional Director,
Scientist 'E',
Ministry of Environment, Forest & Climate Change,
Sub-Office, Integrated Regional Office (IRO),
Vijayawada- 520010.

Sub.: Submission of Half Yearly CRZ Compliance Report for SEIL Energy India Limited Project-1 for the period October 2024 to March 2025

Ref.: CRZ clearance Letter No. F.No. 11-129/2010-IA – III dated 5th December 2011

Dear Sir,

With reference to the above, we hereby submit the Half-Yearly compliance status report for the period October 2024 to March 2025 along with relevant supporting documents in line with the conditions stipulated in Coastal Regulation Zone (CRZ) Clearance issued to SEIL Energy India Limited Project-1, located at Nellore.

Hope you find the above in order.

Thanking you,

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

Gnanadesigan N
Head HSE- SEIL

Copy To:

1. The Director, IA.I, MoEF&CC, New Delhi
2. The Regional Director, Regional Office, MoEF&CC, Chennai
3. The Regional Officer, APPCB, Nellore

Date: 25-06-2025

To,
The Additional Director,
Scientist 'E',
Ministry of Environment, Forest & Climate Change,
Sub-Office, Integrated Regional Office (IRO),
Buckinghampeta,
Vijayawada- 520002.

Sub: Third Party Certificate - Half yearly compliance report on the conditions of CRZ-Reg.

Ref: CRZ Letter No: F. No. 11-129/2010 - IA.III dated 05-12-2011

Respected Sir/Madam,

With reference to "Costal Regulatory Zone" clearance issued to **M/s. SEIL Energy India Limited Project-1**, Nellore, we hereby certify that **M/s. SEIL Energy India Limited Project-1** has complied with all the conditions imposed in CRZ clearance and enclosed supporting annexures for the period of October 2024 to March 2025.

Thanking You,

Yours Sincerely,

For **UNIVERSAL ENVIRO ASSOCIATES LLP**,

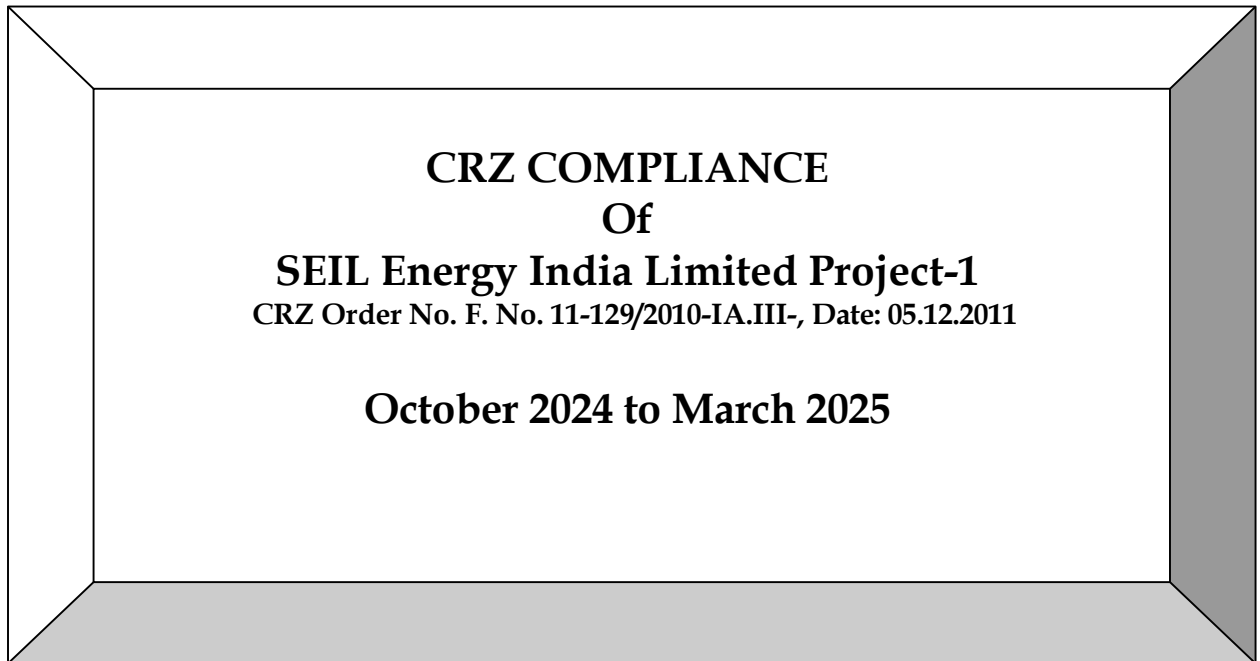

(T Krishna)
Technical Manager

Authorized Signatory



Copy To:

1. The Director, IA.I, MoEF & CC, New Delhi
2. The Regional Director, Regional Office, MoEF&CC, Chennai
3. The Regional Officer, APPCB, Nellore



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

Background:




SEIL Energy India Limited Project-1 is a leading independent thermal power plant situated in Nellore district of Andhra Pradesh.

SEIL Project-1 is currently consisting of 2x660 MW is under operation since March 2015.

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

CRZ Clearance for the project is obtained from Ministry of Environment & Forests, Vide F.No.11-129/2010-IA.III Dated: 5th Dec 2011. The condition wise compliance to the clearance letter is detailed below.

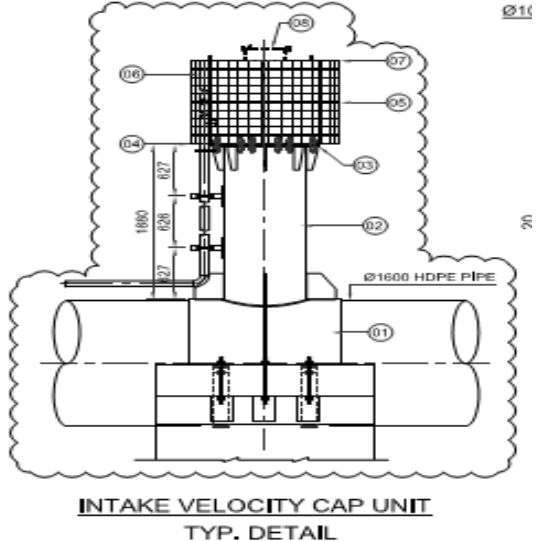
CRZ Clearance Order No. F. No. 11-129/2010-IA.III-, Date: 05.12.2011

Compliance of CRZ Conditions		
S No.	Condition	Compliance
<u>Specific Conditions:</u>		
i.	"Consent For Establishment" shall be obtained from state pollution control board under air and water act and a copy shall be submitted to the Ministry before start of any construction work at the site.	Complied. Consent For Establishment (CFE) from AP Pollution Control Board has been obtained vide Order. No. 177/PCB/CFE/RO/-NLR/HO/2009-433, Dated: 15/05/2010.
ii.	Cutter suction dredging shall be adopted instead of grab technology so as to control the sediments during dredging.	Complied. Cutter suction dredging was adopted during the said activities.
iii.	Top of the pipeline buried shall be minimum 2 m below the sea bed. The PP shall obtain a certificate of compliance from the agency executing the pipeline, with supporting documentation and shall submit to RO of MoEF and to State PCB.	<p>Complied. Pipeline is buried at 2 m below the seabed. The compliance certificate submitted to RO of MoEF and APPCB. Copy of the same is given here.</p> <p style="text-align: right;"> GAYATRI</p> <p>Date: 24th June' 2014 Sub.: Sea Water Intake Pipeline Installation Certificate</p> <p style="text-align: center;"><u>TO WHOMSOEVER IT MAY CONCERN</u></p> <p>Dear Sir,</p> <p>Vide Order No. TPCIL/INFRA-01/SWI & EXT CHP/SUPPLY/001 & TPCIL/INFRA-01/SWI & EXT CHP/SERVICES/002 dated 29-12-10 from TPCIL, we have executed the work of laying the sea water intake and outfall pipelines including offshore Intake System and Diffusers for their 2X660MW Coal based Thermal Power Project at Painampuram and Nelatur Villages, Muthukuru Mandal, SPSR Nellore district.</p> <p>Entire offshore intake pipeline and Outfall pipeline of length 2000Mtrs and 1200Mtrs respectively are installed and buried in the sea bed with a minimum back fill of 2Mtrs from top of the pipeline. This is ensured through conducting post pipeline laying and post backfilling offshore depth survey through Echosounder (Bathymetry survey). Cross section profiles for offshore chainage from LFP to Intake Header and Outfall diffuser has been attached for your reference.</p> <p>Thanking You.</p> <p>For GAYATRI PROJECTS LIMITED</p> <p style="text-align: center;"> I. S. N. MURTHY DGM - Projects, GPL (EPC-PP).</p> <p style="text-align: center;"></p> <p style="font-size: small;">Gayatri Projects Limited, B1, 5-3-1090, T991 Towers No. Brown Road, Somajiguda, Hyderabad 500 082 CIN: L99999AP1999PLC057289</p> <p style="font-size: x-small;">T : 01 40 2311 0200/4294/4296 F : 01 40 2330 9435 E : gpl@gayatri.co.in www.gayatri.co.in</p>

CRZ Clearance Order No. F. No. 11-129/2010-IA.III-, Date: 05.12.2011

S No.	Condition	Compliance
iv.	No effluent from fly ash system is permitted to discharge into the marine system as committed by PP. The effluent from fly ash shall be treated and the entire quantity shall be recycled in the cooling tower makeup etc., and suitable meter shall be installed to record the quantity of effluent recycled.	Complying. No effluent from fly ash system is discharged into marine water. The entire effluent water from ash pond is collected and recycled. Flow Meters are installed for recording the quantity.
v.	Shall implement all the measures as committed to the Ministry vide their letter dated 01.08.2011, as a part of the clarifications submitted by the PP. A copy of these submissions shall be submitted to RO of MoEF.	Complied. SEIL has implemented all the conditions as given in CRZ clearance.
vi.	A suitable STP shall be provided to treat the domestic effluent and treated effluent shall be used for green belt, dual plumbing system etc. Measuring meters shall be provided to record the treated effluent used for different purposes.	Complied. State of Art STP is provided to treat the domestic sewage generated at the site. The treated water is being used for greenbelt development.
vii.	All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.	Complying. The compliance in matrix format of mitigation measures submitted in EIA report is attached as Annexure-I .
viii	The proponent shall commit himself to be one of the partners / proponents (who have undertaken / will be undertaking similar power projects in the close proximity of site) as and when instructed by the MoEF/State	Noted.

CRZ Clearance Order No. F. No. 11-129/2010-IA.III-, Date: 05.12.2011

S No.	Condition	Compliance
	Government Authorities in preparing an overall EIA report comprising both terrestrial / marine EIA components for the region and share the cost of the study and proposed mitigation measures for the coastal stretch as decided by the authorities in the best interest of protecting the environment.	
ix	Appropriate screens and trash bars shall be put in place at the intake to avoid fish entering into the pipe due to heavy quantity of water drawl by once through water intake system.	<p>Complied.</p> <p>Appropriate screens and trash bars are provided to avoid fish entering into the pipe.</p> 
x	Temperature and salinity level shall be monitored regularly by providing on-line monitoring system at the appropriate location on the outfall system.	<p>Complying.</p> <p>The parameters are being monitored regularly by providing online EQMS which is connected to APPB/CPCB on real time basis.</p>
xi	Periodic monitoring of coastal water shall be carried out at outfall location.	<p>Complying.</p> <p>Monthly joint sampling of coastal water is being practiced along with state PCB office. Also, Marine Outfall monitoring report conducted by MoEF&CC approved third party agency is attached as Annexure-II.</p>

CRZ Clearance Order No. F. No. 11-129/2010-IA.III-, Date: 05.12.2011

S No.	Condition	Compliance
xii.	No construction work other than those permitted in coastal regulation zone notification shall be carried out in coastal regulation zone area.	Complied.
xiii.	The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a senior executive.	Complied. SEIL established an Environment Management Cell with suitable qualified personnel under the supervision of Head-HSE.
xiv.	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.	Complying.

CRZ Clearance Order No. F. No. 11-129/2010-IA.III-, Date: 05.12.2011

General Conditions:		
S No.	Condition	Compliance
i.	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.	Noted for compliance.
ii.	Full support shall be extended to the officers of this Ministry / regional office at Bangalore by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	Noted for compliance.
iii.	A six – monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bangalore regarding the implementation of the stipulated conditions.	Complying. Latest Half Yearly compliance report submitted vide Letter No: SEIL P1/MoEF&CC/BZA/2024/002 dated 24 th December 2024.
iv.	Ministry of Environment & Forests or any other competent Authority may stipulate any additional conditions or modify the existing ones, if necessary, in the interest of environment and the same shall be complied with.	Noted.
v.	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with satisfaction of the Ministry.	Noted.
vi.	In the event of change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.	Noted.

CRZ Clearance Order No. F. No. 11-129/2010-IA.III-, Date: 05.12.2011

S No.	Condition	Compliance
vii.	The project proponents shall inform the regional office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.	Complied and communicated.
viii.	A copy of the clearance letter shall be marked to concerned Panchayat / local NGO, if any, from whom any suggestions / representation has been made received while processing the proposal.	Complied.
ix.	Tamil Nadu Pollution Control Board shall display a copy of the clearance letter at the Regional Office, district industries centre and Collector's Office/ Tahsildar's office for 30 days.	Noted. Copy of compliance has been submitted to APPCB.
7.	These stipulations would be enforced among others under the provisions of water (prevention and control of pollution) Act 1974, the air (prevention and control of pollution) Act 1981, the environment (protection) Act, 1986, the public liability (Insurance) Act 1991 and EIA notification 1994, including the amendments and rules made thereafter.	Noted.
8.	All other statutory clearances such as the approvals for storage of diesel from chief controller of explosives, fire department, civil aviation department, forest conservation Act, 1980 and wild life (Protection) Act, 1972 etc., shall be obtained, as applicable by project proponents from the respective competent authorities.	Complied. All the necessary approvals are obtained from respective authorities.

CRZ Clearance Order No. F. No. 11-129/2010-IA.III-, Date: 05.12.2011

S No.	Condition	Compliance
9.	The project proponent shall advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded environmental clearance and copies of clearance letters are available with the state pollution control board and may also be seen on the website of the Ministry of Environment and Forest at http://www.envfor.nic.in . The advertisement should be made within 10 days from the date of receipt of the clearance letter and a copy of the same should be forwarded to the regional office of this Ministry at Bangalore.	Complied and communicated.
10.	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in writ Petition (civil) No.460 of 2004 as may be applicable to this project.	Noted.
11.	Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.	Noted. Compliance report is being uploaded on company website at https://seilenergy.com/AboutUs/Disclosure
12.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad / Municipal corporation, Urban local body and local NGO, if any from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Complied.

CRZ Clearance Order No. F. No. 11-129/2010-IA.III-, Date: 05.12.2011

S No.	Condition	Compliance
13.	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Noted. EC Compliance Report uploaded on the Company website. https://seilenergy.com/AboutUs/Disclosure The reports are being sent to all the concern regulatory authorities through E-mail on Half Yearly basis.
14.	The proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Complied. Six monthly EC Compliance reports are being submitted to concern regulatory bodies along with monitoring and analysis data. Latest EC Compliance report was submitted on 29 th May 2025 vide letter No. SEIL P1/MoEF&CC/Chennai/2025/002 to concern regulatory Authorities.
15.	The Environmental statement for each financial year ending 31 st March in form-V as is mandated to be submitted by the project proponent to the concerned state pollution control board as prescribed under the environment (protection) rules, 1986 as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Complied. Environmental Statement (Form-V) for each financial year is being submitted to APPCB and the same is uploaded on company Website. https://seilenergy.com/AboutUs/Disclosure Reports are being submitted to concern regulatory authorities by E-mail.

SEIL Energy India Limited Project-1				
Impact on Air Environment and Control Measures				
S.No	Particulars	Notation	Compliance Status	Mitigation Plan/Remarks
1	Emission Details		Complied	-
	PM		Complied	With in the emission norms i.e. 50 mg/Nm3
	SOx		In progress	Based on the permissible sulphur level in coal which is 0.59%. The SOX range is 1600 mg/Nm3 which will be brought down to within 200 mg/Nm3 after installation of FGD by 31.12.2029.
	NOx		Complied	With in the emission norms i.e. 450 mg/Nm3
2	Stack Height		Complied	Stack with a height 275 m provided
3	Meteorological Data		Complied	Weather station installed in the site for hourly measures of weather parameters
4	Estimation of Ground Level Concentration		Complied	Completed during EIA preparation
5	Application of ISCST3		Complied	Done during EIA Study
6	Maximum Ground Level Concentrations		Complied	Estimated during EIA preparation
7	Post Project Scenario		Complied	Stack Monitoring is being conducted by MoEF&CC approved third party
8	Impact on Forests		Complied	Only Ipuru reserve forest is 7.8 km away from the site , which is in an upwind direction. Hence there is no impact on forests.
9	Air Pollution Control Measures		Complying	i) Water sprinkling is being done & Vacuum truck is deployed for maintaining good housekeeping practices in the plant premises & Vicinity. ii) Silos provided for collection of Ash, which is eventually given to users iii) High efficiency ESP provided iv) Dust Extraction (DE) and Dry Fog Dust Suppression (DFDS) system implemented to mitigate fugitive emissions v) Low NOx Burners provided in stacks vi) Coal Transfer Points are provided with Dust Extraction System/Dry Fog Dust Suppression (DFDS)

Notation-

Low	Medium	High

SEIL Energy India Limited Project-1				
Impact on Water Environment and Control Measures				
S.No	Particulars	Notation	Compliance Status	Mitigation Plan/Remarks
1	Pretreatment of Sea Water		Complied	Desalination plant installed to meet all the sweet water requirements
2	Waste Water Generation		Complied	Efforts are undertaken to reduce Wastewater Generation.
3	Water Pollution Control Measures		Complying	i) Toilet facilities were provided ii) Adequate arrangements to ensure proper drainage of water was made.
4	Wastewater Treatment and Disposal		Complying	i) DM plant regeneration wastewater is being neutralized in ETP and routed to the Central Monitoring Basin for use in horticulture/greenbelt. ii) Wastewater streams except domestic wastewater is being routed to ETP for treatment which is then being fully utilized for greenbelt and horticulture development. iv) Part of the cooling tower blowdown is being used for ash handling and balance is being discharged into the sea.
5	Impact on Ground Water		Complying	The Ash pond was made impervious with HDPE liner to prevent any leaching out of it
6	Storm Water Management		Complying	Rain water harvesting pits constructed and maintained

Notation-

Low	Medium	High

SEIL Energy India Limited Project-1				
Impact on Land Environment and Control Measures				
S.No	Particulars	Notation	Compliance Status	Mitigation Plan/Remarks
1	Impact on Terrestrial Ecology		Complied	i) Greenbelt is developed in an area of 455 acres ii) Impervious HDPE liner was given in Ash Pond to avoid leaching
2	Impact on Aquatic Ecology		Complying	i) The water from ash pond if any, is being adjusted for pH (matching to pH of sea water), clarified and then discharged. ii) The location of the outfall was located at 950 meters from the coast to ensure proper dilution and minimize the impact on marine ecology.
3	Greenbelt Development Plan		Complied	i) Greenbelt is developed in an area of 455 acres to control dust/noise pollution. ii) Established our own nursery with the help of forest department to further develop the greenbelt and to promote native species. iii) SEIL developed Buddha Garden within the plant premises
4	Solid Waste Generation and Management		Complying	i) Achieving 100% Fly Ash Utilization since September 2019

Notation-

Low	Medium	High

SEIL Energy India Limited Project-1				
Impact on Noise Environment and Control Measures				
S.No	Particulars	Notation	Compliance Status	Mitigation Plan/Remarks
1	Noise Pollution Control Measures		Complied	i) Onsite workers working in noise prone areas was provided with earmuffs & ear plugs as per the requirement ii) All high noise making equipment were provided with acoustic enclosures. iii) Proper encasement of noise generating sources was done to control the noise levels and signage displayed in high noise area & regarding proper PPE usage. iv) The steam turbine generators were provided with acoustic enclosures. v) Thick greenbelt of 455 acres is developed all around the palant, which is effectively acting as noise barrier

Notation-

Low	Medium	High



SPECTRA ENVIROTECH PVT LTD

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

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

TEST REPORT

ANNEXURE-II

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

K.S. Jay
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





SPECTRA ENVIROTECH PVT LTD

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

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

K.S.Lg
Verified by



Pooresh 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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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: 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

K.S.Laj
Verified by



Praveesh W.
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-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/02-25/0001

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

K.S. Jay
Verified by



Praveesh W.
Authorized by
Managing Director

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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.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: 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

K.S.Laj
Verified by



Praveesh W.
Authorized by
Managing Director

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