JSW Energy Limited

Works :
P.B. No.9, Toranagallu
Dist. Ballari - 583 123, Karnataka, India.
CIN. : L74999MH1994PLC077041
Phone : 08395 - 282 200
Website : www.jsw.in

Ref No.: JSWEL/ ENV/ Auth/ 8391
Date : November 22, 2025

To

The Addl. Principal Chief Conservator of Forests (C),
Ministry of Environment, Forests and Climate Change,
Regional Office (South Zone),
Bangaluru.

Sub: Submission of Six Monthly Compliance report-2x130 & 2x300 MW JSWEL.

Ref: EC granted for the 2x130 MW Units vide letter dated June-28, 2006 and EC granted for the 2x300 MW Units vide letter dated October-12, 2007 amended EC dated May-3, 2017.

Dear Sir,

We herewith submit the Six Monthly Common Work Zone Environmental Monitoring Report along with compliance status for 2x130 MW and 2x300 MW units of JSW Energy Limited at Toranagallu, Ballari district, Karnataka for the reporting period of April 2025 to September 2025.

Kindly acknowledge.

Thanking you,

Yours faithfully,
for **JSW Energy Limited**

Kartikeya Misra
Vice President & Head of Plant

Copy to: Member Secretary, KSPCB, Bangaluru
Environmental Officer, KSPCB, Ballari
CPCB, Bangaluru

ENVIRONMENTAL MONITORING

SIX MONTHLY COMPLIANCE REPORT

JSW ENERGY LIMITED

(2X130 MW and 2X300 MW)

Toranagallu, Bellary District,

Karnataka

April 2025 to September 2025

2x130 MW Plant

Compliance Status to MoEF EC conditions vide no. J-11012/30/94-IA. II (I) dated August 02, 1996

S. No.	**Conditions for Setting up of an Integrated Steel Plant by JVSL-2x130 MW power plant instead of 2x120 MW CPP by JTPCL at Toranagallu-EV reg.**	Status Period: April 2025 to September-2025
2.	*The matter has been examined in the Ministry and Environmental clearance accorded earlier to Jindal Vijaynagar Steel limited for setting up a captive power plant of 2x120 mw is hereby transfer infavour of Jindal Tractabel Power Company limited at marginally higher capacity of 2x130 MW using 75% cortex gas and 25% imported coal containing maximum 0.4% sulphur and 15% ash subject to implementation of* ***following conditions and environmental safe guards :***	-
2.i.	*The project authorities must strictly adhere to the stipulations made by the Karnataka Pollution Control Board and the State Government.*	All the stipulations made by KSPCB have been complied.
ii.	*No expansion or modernization of the plant should be carried out without prior approval of the Ministry of Environment and Forest.*	Obtained approval from MOEF for expansion from 2 X 120 MW to 2 X 130 MW and also change in fuel mix in Aug 1996.
iii.	*Electro static precipitators (ESPs) with operation efficiency not less than 99.8% should be provided. Particulate emissions should not exceed the limit of 150 mg/Nm3 at any time failing which the plant should be shut down.*	Complied
iv.	*Dust suppression and extraction devises should be installed in coal handling area to control fugitive emissions.*	Tall wind curtains have been provided around coal stock yard and water spraying arrangements also made to control the fugitive dust in the coal yard area
v.	*Closed circuit cooling that is cooling towers should be provided and the evaporation losses should not exceed 2 %.*	Closed circuit cooling towers have been provided and the evaporation loss is less than 2%.
vi.	*A time bound perspective plant for 100% utilization of fly ash should be prepared and submitted to this Ministry for approval within six months. The requirement of land for ash disposal should be based on ash utilization plan. Ash pond area should be properly lined to avoid ground water contamination*	The fly ash is being utilized for cement and brick manufacturing and other applications.
vii.	*Gaseous emissions and liquid effluent should conform to the standards prescribed by the concerned authorities from time to time.*	Complied. CEMS for stack emission is in place. The offline manual monitoring is also being done. The real time data connectivity has been established to CPCB server. Similarly, liquid effluent is also monitored regularly by M/s Eco green solution systems Pvt. Ltd (A NABL Accredited &

		MoEF approved). The real time data for pH, TSS and temp is connected to CPCB server.
viii.	*Workers in the high noise areas should be provided with ear protection devises and noise levels should not go beyond 85 dB(A) for 8 hours exposure in the work environment*	All the high noise-generating units are provided with acoustic enclosures and noise levels are monitored at 6 locations on monthly basis.
ix.	*Three ambient air quality-monitoring stations should be setup in the downwind direction as well as where the maximum ground level concentration of SPM, SO2 and NOx are anticipated in consultation with the state pollution control board. Stack should be provided with continuous stack monitoring facilities.* *Data on ambient air quality and stack emission should be submitted to this Ministry once in six months and to the state pollution control board once in three months.*	Four automatic ambient air monitoring stations are installed around the JSW plant complex and real time data has been connected to CPCB server as CPCB directives dtd. 7/11/2017. In addition, manual monitoring is also being carried out on monthly basis by MoEF approved third party.
x.	*Treated effluent quality should be regularly monitored along with the flow in consultation with the state pollution control board. Monitoring data should be submitted to this Ministry along with other reports on Compliance status of the conditions of the clearance letter.* *Plans should be made to recycle and reuse the treated wastewater to the extent possible especially for raising greenbelt and meeting cooling water consultation with the local DFO/Agriculture Department using native plant species.*	The treated effluent is sent to guard pond of JSW Steel plant for ore beneficiation plant as per consent to operation. Some quantity of treated effluent is also used within the power plant for ash wetting and dust suppression. And also treated sewage water is being utilized for green belt development purpose with in the plant. The real time data has been connected to CPCB server as CPCB directives.
xii.	*Necessary approvals from the inspectorate of factories, fire safety inspector etc should be obtained and copies of the approval letters be made available to this Ministry.*	Complied
xiii.	*The project authorities should setup the laboratory facilities for collection and analysis of samples under supervision of competent technical personnel which will directly report to the Chief Executive.*	Complied The environment monitoring is being carried out M/s Eco green solution systems Pvt. Ltd. (A NABL accredited & MoEF approved).
xiv.	*A separate environmental management cell with suitably qualified people to carryout various functions should be setup under the control of senior executive who will directly report to the chief executive*	The environment monitoring cell is headed by Head of Plant and comprises of all the relevant department heads has been formed and communicated to the Ministry of Environment, Forest and Climate Change OF India (MoEF&CC). The compliance reports are also submitted to competent authorities from time to time. Periodic reviews are carried out to ensure compliance of environmental safeguards. Compliance data is being monitored on daily basis in morning meetings, wherein all Head of departments are present and the meeting is chaired by Head of Plant

xv.	*Funds earmarked for the Environmental protection measures should be kept in a separate account and should not be diverted to any other purpose and year wise expenditure should be reported to the Ministry.*	The fund earmarked for environmental protection measures has not been diverted for any other purposes.
5.	*The stipulated conditions will be monitored by the regional office of this Ministry located at Bangalore. A six monthly compliance status report should be submitted to them regularly.*	Complied. Six monthly compliance report for EC conditions has been submitting to MoEF&CC & KSPCB

Amendment for Change of Fuel: 2x130 MW
Compliance Status of EC vide J– 13011/10/2001.IAII(T) dated 20.08.2004

S. No.	**Conditions for 2x250 mw Thermal Power Plant (Expansion scheme) and change of fuel configuration in the existing 2x130 MW Power Plants at Toranagallu, Bellary district, Karnataka of M/s Jindal Thermal Power Company Limited- EC reg.**	**Status**
1.	*Amendment in the environmental clearance accorded for the existing 2x130 mw thermal power plant vide letter no.J-11012/30/94-IAII(I) dated 02-08-1996 for change in fuel configuration for imported coal and correx gas from 20:80 to 80:20 ratio is allowed with the maximum consumption of 532400 TPA of imported coal subjected to implementation of all the conditions stipulated vide letter no. J–13011/10/2001.IAII(T)dated 02-08-1996.*	Complied
2.	*The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.*	Noted
3.	*The Environmental Clearance accorded shall be valid for a period of 5 years for construction or operation of the power plant. Incase if the project authorities fails to do so within the stipulated period this environmental clearance shall stand lapse automatically.*	Noted
4.	*In case of any deviation or alteration in the project proposed from those submitted to the Ministry for clearance, a fresh reference should be made to the Ministry to access the adequacy of the conditions imposed and to act additional environmental protection measures required, if any.*	Noted

Amendment for Change of Fuel: 2x130 MW
Compliance Status of EC vide J-13011/10/2001-IA. II (T) dated June 28, 2006

S. No.	Conditions for 2x130 MW Thermal power project at Toranagallu, Bellary district, Karnataka of M/s Jindal Power Company Limited change of fuel:	Status
1.	*On the basis of the information submitted, the proposal was considered by the Expert Committee for environmental appraisal of Thermal Power and Coal Mine projects in its meeting held on 21st-22nd March 2006. It has been decided to permit the change in the existing fuel ratio of 80:20 of coal and corex gas to 100% imported coal or any combination of imported coal and corex gas depending on the fuel availability subjected to following conditions.*	
2.i.	*No additional land shall be acquired for ash disposal.*	No additional land has been acquired.
ii.	*Sulphur content in coal to be used as fuel shall not exceed 0.6 %.*	Complied. Using imported coal having sulfur content of less than 0.6%.
iii.	*100 % ash utilization shall be done in accordance with the notification S.O 763(E) dated 14.9.1999 as amended subsequently on fly ash utilization. In case of emergency, ash disposal shall be done in existing ash pond area. Keeping in view the higher quantity of ash likely to be generated, based on 100% use of coal as fuel, the ash utilization plan shall be prepared and submitted within 3 months.*	Compiled. The ash is being utilized for cement and brick manufacturing, as well as other applications. Part of the fly ash was recycled in the 300 MW units of JSW Energy by feeding it into the furnace along with coal, and the bottom ash was reused in the coal yard by blending it with coal for process use, ensuring 100% ash utilization. An audit of the Ash Annual Compliance Report for FY 2024-25 was carried out by the CPCB-approved auditor, Professor at IIM-ISM, Dhanbad.. There is no legacy ash at the plant.
iv	*Two stacks of 115m height each shall be provided with online continuous monitoring systems.*	Complied. Two stacks of 115 m height have been provided with online continuous monitoring system (CEMS) and real time data has been connected to CPCB server.
v.	*Particulate emission from the stack shall not exceed 100 mg/NM3 at any time failing which the plant shall be shutdown.*	Compiled. The particulate matter emission from the stack is maintained below 100 mg/Nm3.
vi.	*All other conditions stipulated vide letter no.J-11012/30/94-IA.II(I) dated 02.08.1996 and even numbered letter dated 20.08.2004 shall be strictly implemented.*	Noted.
Note.	Compliance to new emission norms	Actual emissions are in compliance with the new norms as per MoEF & CC notifications S.O.3305(E) dated 7.12.2015 and amendment on time to time.

2X300 MW Plant

Compliance Status of MOEF EC for 2 X 250 MW vide J– 13011/10/2001.IAII(T) dated 20.08.2004

S. No.	**Conditions for 2x250 mw Thermal Power Plant (Expansion scheme) and change of fuel configuration in the existing 2x130 MW Power Plants at Toranagallu, Bellary district, Karnataka of M/s Jindal Thermal Power Company Limited-EC reg.**	**Status** Period: Apr-2025 to September-2025
2.	The proposal is regarding expansion of Jindal Thermal Power Plant by installation of two units 250mw each in the premises of existing power plant. Existing land is 102 ha and additional 150 ha is proposed to be acquired from the adjacent Jindal Vijayanagar Steel Complex. Coal requirement will be 2.80MTPA. Capital cost of project will be Rs.2118.58cr. Cost of environmental protection is Rs.106.65 cr.	-
3.	On the basis of information submitted by the project proponent from time to time and after its consideration by the expert committee for thermal power projects, environmental clearance is hereby accorded subject to implementation of following terms and conditions:	-
3.i	All the conditions stipulated by Karnataka Pollution Control Board vide their letter no. KSPCB/CFE-CELL/DEO/AEO-2/JTPCL/2001-2002/101 dated 11th July 2001 should be strictly implemented.	All the stipulations of Consent to operate have been complied
3.ii.	Coal requirement is estimated at 2.80MTPA of washer coal for the expansion scheme having calorific value of 4000 Kcal/kg with 34% ash content and 0.6% Sulphur content in the worst-case scenario.	Imported Coal consumed in Apr`25 to Sep`25 period is 0.61 Million tonnes with 13.4% ash and 0.4% sulphur content.
3.iii.	A twin flue stack height of 220 m height shall be provided with continuous online monitoring equipment. Exit velocity of at least 25 m/sec should be maintained.	A twin flue stack of 275 m height has been provided with online continuous monitoring equipments. The Real time data connectivity has been established to CPCB server.
3.iv.	Twin pass Electrostatic Precipitator (ESP) with adequate redundancy in field should be installed to limit outlet SPM emission from each flue to 75 mg/Nm3 failing which the plant should be shut down.	ESP has been provided to handle coal to maintain particulate matter emission level within 75 mg/Nm3.
3.vi.	Ash generation would be 0.95 MTPA at 100 % PLF. 100 % fly ash shall be utilized in dry form. Ash generated should be used in a phased manner as per provisions of the notification on fly Ash utilization issued by the Ministry in September, 1999 and as amended in August, 2003. By the end of 9th year full fly ash utilization should be ensured. Ash pond should be lined with 0.5 mm thick geo-membrane lining.	Compiled. The ash is being utilized for cement and brick manufacturing, as well as other applications. And the bottom ash was reused in the coal yard by blending it with coal for process use, ensuring 100% ash utilization. An audit of the Ash Annual Compliance Report for FY 2024-25 was carried out by the CPCB-approved auditor, Professor at IIM-ISM,

		Dhanbad. There is no legacy ash at the plant, and 100% ash utilization has been achieved.
3.vii.	Water requirement should not exceed 33109 m3/Day. Reverse Osmosis (RO) plant should be set up to recycle treated waste water to cooling system and the R.O. reject should be disposed off in the ash pond.	RO plant has installed to treat cooling water blow down. RO water is reused in the cooling tower and the reject is sent to guard pond and after dilution with other treated streams is sent to Ore beneficiation plant at JSW steel plant.
3.viii.	Closed circuit cooling system with cooling towers and COC of not less than seven shall be adopted.	Closed circuit induced draft cooling towers have been provided.
3.ix.	Central Groundwater Authority /Board shall be consulted for finalization of appropriate water harvesting technology within a period of two months from the date of clearance.	Rain water harvesting system which includes roof top collection tank and filters. Treated water is being utilized in cooling tower as a makeup.
3.x	Submit a copy of commitment for zero discharge of waste water after plant comes into operation	RO plant is installed for cooling tower blow down. The treated water is used in cooling tower. RO plant rejects are sent to guard pond in JSW steel plant for ore beneficiation.
3.xi.	Regular monitoring of water quality including heavy metals should be undertaken around ash pond and the project area to ascertain the change in the water quality if any, due to leaching of contaminants from ash disposal area.	Water quality is carried out by M/s Ecogreen solution systems (P) ltd. (A NABL accredited & MoEF approved laboratory) on monthly basis for heavy metals. The analysis indicated that there is no leaching of contaminants in to the water.
3.xii.	Noise level should be limited to 75 Leq and regular maintenance of equipment be undertaken. For people working in the area of generator and other high noise area, earplug should be provided.	High noise generating units are provided with acoustic enclosures and noise levels are monitored at 6 locations on monthly basis.
3.xiii.	Low NOx burners as well as Dampers should be used for reducing NOX in the existing as well as expansion units.	Low NOX burners and secondary air dampers have been provided in the boiler
3.xiv.	Gaseous emissions and liquid effluent should conform to the standards prescribed by the concerned authorities from time to time.	Continuous Stack emission monitoring system is in place Moreover, manual monitoring is being carried out. Similarly liquid effluent is monitored regularly by NABL accredited monitoring agency M/s Ecogreen solution systems (P) ltd., (A NABL accredited & MoEF approved).
3.xv.	Greenbelt shall be developed covering 49.2 ha (28.8 ha existing+20.4 ha proposed) in and around the plant periphery. Tree density of 1500-2000 trees per ha should be maintained.	Complied
3.xvi.	Regular monitoring of the air quality should be carried out in and around the power plant and records be maintained. Periodic six-monthly reports should be submitted to this Ministry.	Five automatic ambient air monitoring stations around the power plant complex. In addition, manual monitoring is also being carried out at ten locations on monthly basis by third party for JSW plant complex.
3.xvii.	For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant should be ensured.	Water sprinkling arrangements has been provided in the coal handling areas.
3.xviii.	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which should be in the vernacular language of the locality concerned informing that the project has been accorded	Complied.

	environmental clearance and copies of clearance letters are available with the State Pollution Control Board/Committee, and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in.	
3.xix.	A separate environment monitoring cell with suitable qualified staff should be setup for implantation of the stipulated environmental safe guards.	The environment monitoring cell is headed by Head of Plant and comprises of all the relevant department heads has been formed and communicated to the Ministry of Environment, Forest and Climate Change OF India (MOEFCC). The compliance reports are also submitted to competent authorities from time to time. Periodic reviews are carried out to ensure compliance of environmental safeguards. Compliance data is being monitored on daily basis in morning meetings, wherein all Head of departments are present and the meeting is chaired by Head of Plant.
3.xx.	Half yearly report on the status of implementation of the stipulated conditions and environmental safe guards should be submitted to this Ministry/Regional Office/CPCB/SPCB.	Complied. The Website address is http://www.jsw.in under Energy, Vijayanagar statutory compliance.
3.xxi.	Regional Office of the Ministry of Environment and Forest located at Bangalore will monitor the implementation of the stipulated conditions. Complete set of Environmental Impact Assessment Report and Management Plan should be forwarded to the Regional Office for their use during monitoring.	Complied
3.xxii.	Separate funds should be allocated for the implementation of environmental protection measures along with item-wise break-up. These cost should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	The fund earmarked for environmental protection measures has not been diverted for any other purposes.
3.xxiii.	Full cooperation should be extended the Scientist/Officers from the Ministry/Regional Office the Ministry at Bangalore by CPCB/the SPCB who would be monitoring the compliance of environmental status.	Noted.

Augmentation of Capacity from 2 x 250 MW to 2 x 300 MW

Compliance Status of MOEF EC for 2 X 300 MW vide J-13011/10/2001-IA.II (T) dated Oct 12, 2007

S. No.	Conditions for Augmentation of Power generation capacity from 2x250 MW (Indian Coal) to 2x300 MW (Imported Coal) at Bellary, Karnataka by M/s JSW Energy (Vijayanagar) ltd-Environmental Clearance Reg.	Status
2.	It is noted that the environmental clearance for setting up 2x250 MW Thermal power plant at Toranagallu, Bellary district, Karnataka by M/s Jindal Thermal Power Company Ltd. Was accorded vide this Ministry`s letter of even numbered dated 20.08.2004. M/s JSW Energy (Vijayanagar) Ltd. Has now proposed to install 2x300 MW TPS using imported coal as fuel instead of 2x250 MW based on Indian coal. It is further noted that due to the proposed change:	EC was amended for 2X300 MW for 100 % imported coal.
2.i.	No additional land is required.	No additional land has been acquired.
2.ii.	Coal requirement will decrease from 312 t/hr to 203 t/hr.	Complied.
2.iii.	COC will increase from 5 to 7	Complied
2.iv.	Water requirement will decrease from 34230 m3/hr to 33109 m3/hr	Complied.
2.v.	Maximum predicted ground level concentration of various pollutants namely; SO2, NOx and SPM will also come down as against the earlier projected values.	Complied.
2.vi.	The coordinates of the site are latitude 15.10.40N to 15.11.25N and longitude 76.39.40E to 76.40.10E.	Complied.
2.vii.	The Project will be implemented by M/s JSW Energy (Vijayanagar) Ltd instead of M/s Jindal Thermal Power Company Limited.	Complied.
3.i.	The requisite prior permission from Chief Wildlife Warden shall be obtained for locating the proposed plant within 10 km of Daroji Dear Sanctuary.	Permission from chief wild life warden was obtained.
3.ii.	A twin flue stack of 275 mtr height with exit velocity of at least 25 m/s shall be provided with continuous online monitoring system.	A twin flue stack of 275 m height has been provided with online continuous monitoring equipments. Real time data connectivity has established to CPCB server
3.iii.	Closed circuit cooling system with cooling towers and COC of not less than seven shall be adopted.	Closed circuit induced draft cooling towers have been provided.
3.iv.	Green belt shall be developed covering 49.2 ha (28.8ha existing + 20.4 ha proposed) in and around the plant periphery.	Complied.
3.v.	M/s JSW Energy (Vijayanagar) Ltd. shall be responsible to implement the project with strict compliance.	Noted
4.	All other conditions contained in this Ministry`s letter dated 20.08.2004 shall remain unchanged.	Noted
5.	The Environmental clearance accorded shall be valid for a period of five years to the start of production/operation by the power plant	Noted.

Fuel change for 2 x 300 MW from Imported coal to Blended coal with Domestic coal
Compliance Status of MOEF EC for 2 X 300 MW vide J-13011/10/2001-IA.II (T) (Part)
Dated May 3, 2017

S. No.	Conditions for Change of Fuel for 2 x 300 MW from Imported coal to 50: 50 Blended coal with Domestic coal at Bellary, Karnataka by M/s JSW Energy ltd- Environmental Clearance Reg.	Status
3.	The matter was placed before the Re-constituted EAC (Thermal Power) in its 2nd Meeting held on 20.1.2017. in acceptance of the recommendation of the Re-constituted EAC and in view of the information /clarification furnished by you with respect to implementation of the above mentioned power project, Ministry hereby amends the Environmental clearance dated 20.2.2004 and its amendments dated 12.10.2007 for change in coal source from 100 imported coal to blending of domestic coal (50%) based on e-auction, spot e-auction and special forward e-auction and imported coal (50%) subject to following additional conditions :	-
3.i.	Total coal quantity shall not exceed 2.5 MTPA. Total ash Sulphur content after blending shall be less than 25% and 0.6% respectively.1.25 MTPA of domestic coal shall be sourced through e-auction from western coal fields limited in Nagpur and chandrapur areas (Coalfields: Ballarpur, Wani, Wani north, Majri, Chandrapur ,Nagpur and Umar).	Noted, and also as per Karnataka Pollution Control Board consent to operate AW-329465 dated 28/01/2022 we had started gas firing along with the coal.
3.ii.	Mode of transportation of shall be through rail only. Coal shall be transported from railway sidings viz. WCL Umrer CHP SIDING or Bahupet, CRC, HCL (WCL Chandrapur) or Ballarsha (WCL Ballarpur) or any other railway siding designated by WCL which are in the range of 700-850 km distance from the power plant.	Noted
3.iii.	As proposed top surface of the coal wagons shall be completely covered with tarpaulin sheet/cloth, so that coal will not get exposed to atmosphere and becomes secondary emissions. This will avoid fugitive dust emission during the transport. Water sprinkling shall be done on the top surface of coal at loading point before covering with tarpaulin sheet. Due to safety procedures shall be followed so that the cover sheet does not open up and flyway during transport which will endanger safety of nearby people, agricultural fields, etc. Water sprinkling measures as proposed at loading and unloading point shall be continued.	Noted
3.iv.	Incremental flyash shall be utilized for cement manufacturing.	Noted & accepted
3.v.	Details of domestic coal linkage with allotted coal mine in the e-auction along with firm mode of transportation shall be submitted to ministry within a month after allocation or before lifting the coal whichever is earliar.	Noted

3.vi.	The ministry notifications S.O.3305(E) dated 7.12.2015 and amendment on time to time, shall be achieved by 7.12.2017.	Complied
3.vii.	MOEF & CC notification G.S.R. 02(E) dated 2.1.2014 regarding use of or blended or beneficiated or washed coal with ash content not exceeding 34% shall be complied with as applicable.	Noted
3.viii	Any variance in coal characteristics/source/mode of transport, it shall be brought along with environment and traffic impact assessment study to the ministry for assessing the adequacy of the conditions already stipulated or to incorporate any additional conditions as may be necessary in the interest of environment protection.	Noted
4.	All other conditions stipulated in vide Ministry's EC letters dated 20.8.2004 and 10.10.2007 shall remain the same, as applicable. This issues with the approval of the Competent Authority.	Noted & Accepted
3.iii.	Closed circuit cooling system with cooling towers and COC of not less than seven shall be adopted.	Noted & Accepted
3.iv.	Green belt shall be developed covering 49.2 ha (28.8ha existing + 20.4 ha proposed) in and around the plant periphery.	Complied.
3.v.	M/s JSW Energy (Vijayanagar) Ltd. shall be responsible to implement the project with strict compliance.	Noted
4.	All other conditions contained in this Ministry`s letter dated 20.08.2004 shall remain unchanged.	Noted

INTRODUCTION

The project consists of 2 x 130 MW Coal and Gas fired, and 2x300 MW Coal and Gas fired based power stations. The power plant is a part of the overall steel mill plant complex being developed by JSW Energy Limited at Toranagallu of Bellary District of Karnataka State, India, in the Hospet – Bellary region. The power plant site is located in the Northeast corner of the steel mill plant complex.

SITE LOCATION

The site for 2x130 MW lay in between 15° 09' N latitude 76° 51' E longitude and for 2x300 MW lay in between 15° 10' 40"N,76° 39' 40"E at Toranagallu. Toranagallu is at a distance of 30 km from Bellary and 35 km from Hospet, the nearest towns. Bangalore, the nearest city, is about 340 km from Toranagallu. Toranagallu is connected by road and rail to Bellary / Hospet / Bangalore. Site elevation is 478 m above the mean sea level

Toranagallu is located in Daroji Valley formed by Sandur Hills on South, Copper Mountains on the East and cluster of small Daroji Hills on the North side. Daroji Hills area is rich in mineral resources such as haemostatic iron ore and red oxide of iron and manganese. These mineral resources are also found in Sandur Hills and the copper mountains range.

Hampi, a tourist spot that attracts tourist from all over the world is located about 13 km from Hospet. It is situated on the bank of the river Tungabhadra. Once the flourishing capital of the Vijayanagar Empire, Hampi was abundant in wealth, military prowess, aesthetic sensibilities and culture. Travelers visited it from Italy and Arabia during the 15th century. Today, its ruins spread over an area of 26 Sq. km. The Pampavati Swami Temple, the Queens bath, the Lotus Mahal, the Stone Chariot and the Musical Pillars of Vittala Temple evoke memories of bygone splendor.

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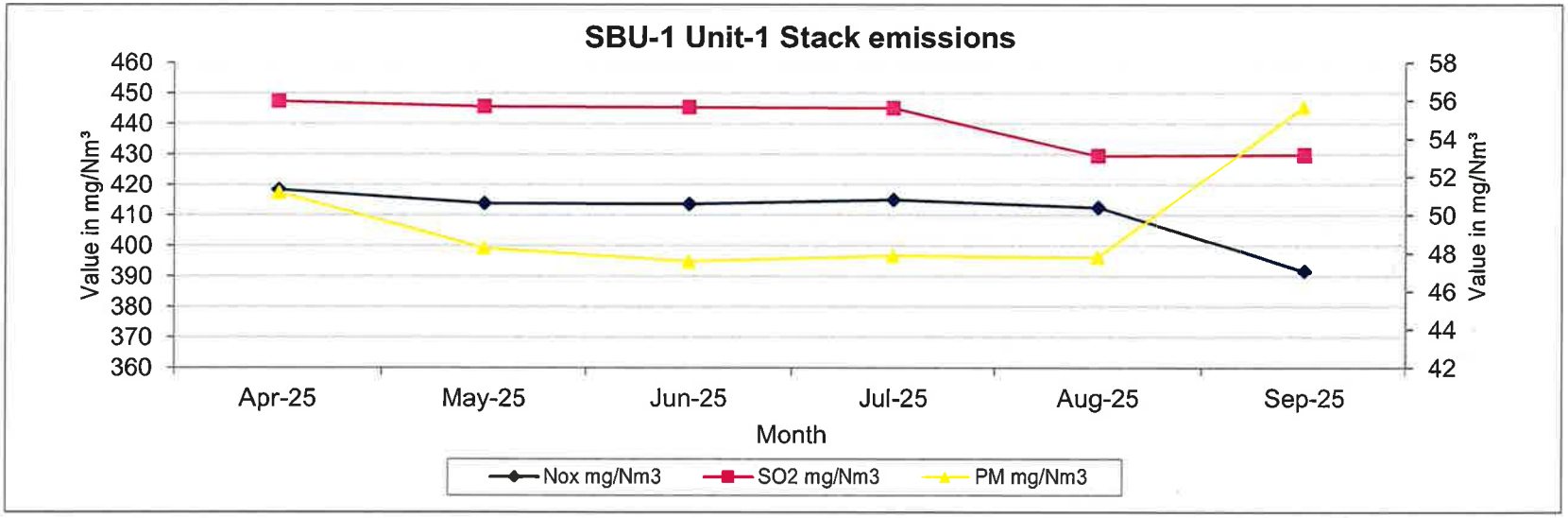
STACK MONITORING DATA

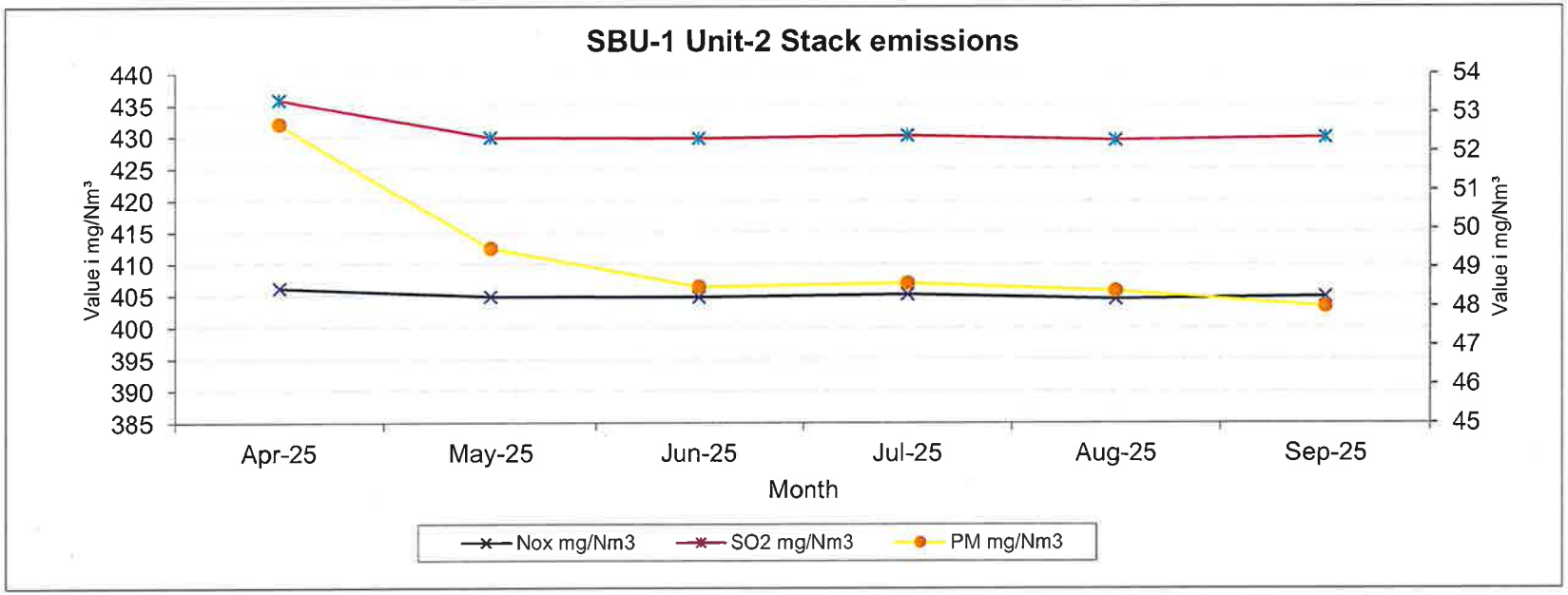
Monthly Mean Stack Emission Report(2X130 MW Unit-1) **Apr-25 to Sep-25**

Month/Parameters	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN	Norms
NOX, mg/Nm^3	418	414	414	415	413	392	411	418	392	600
SO2, mg/Nm^3	447	446	445	445	430	430	441	447	430	600
Particulate matter, mg/Nm^3	51	48	48	48	48	56	50	56	48	100



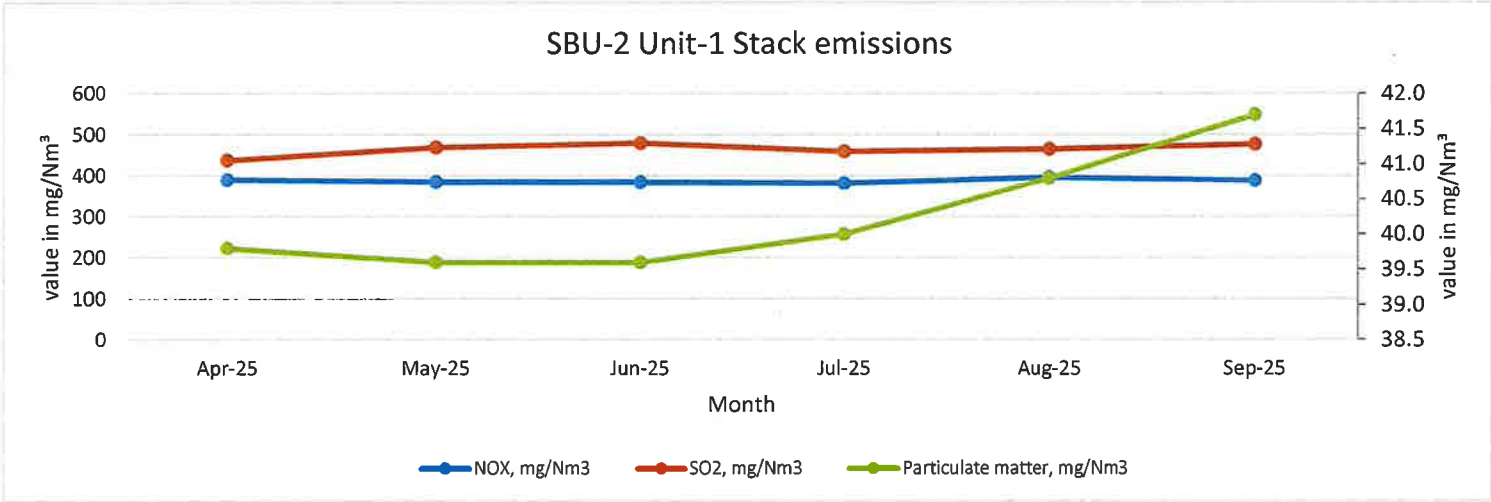
Monthly Mean Stack Emission Report(2X130 MW Unit-2) **Apr-25 to Sep-25**

Month/Parameters	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN	Norms
NOX, mg/Nm^3	406	405	405	405	405	405	405	406	405	600
SO2, mg/Nm^3	436	430	430	430	430	430	431	436	430	600
Particulate matter, mg/Nm^3	53	50	49	49	48	48	49	53	48	100



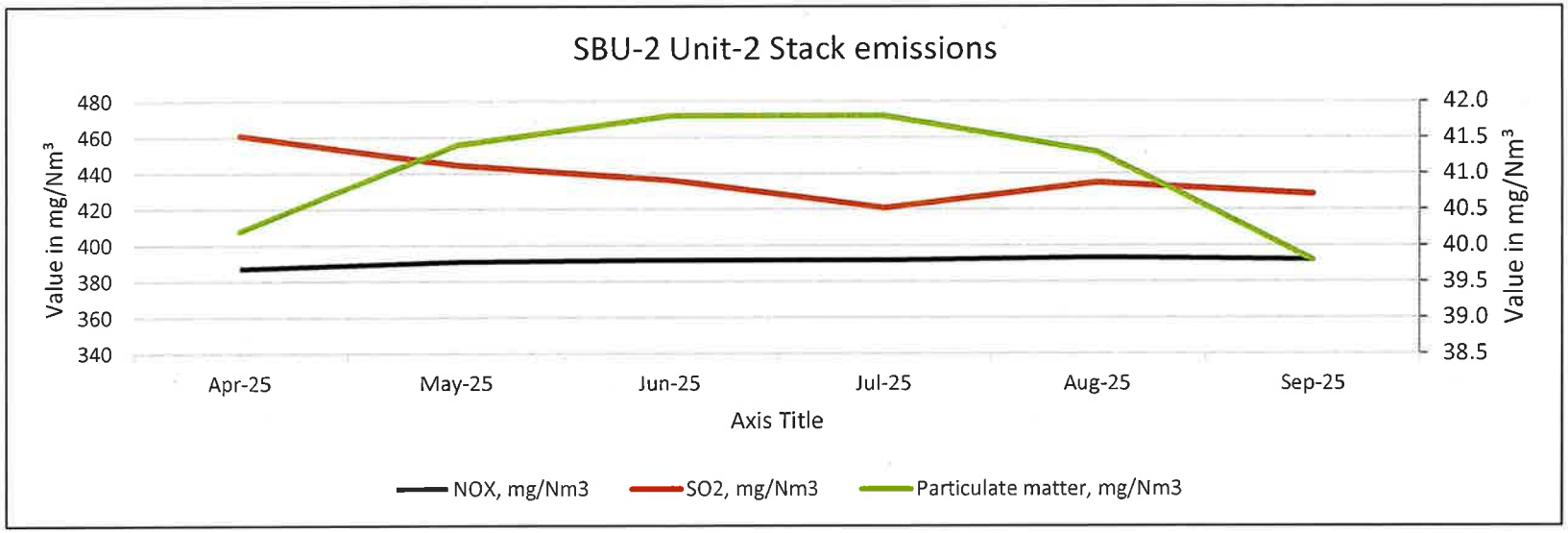
Monthly Mean Stack Emission Report (2X300 MW Unit-1) **Apr-25 to Sep-25**

Month/Parameters	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN	Norms
NOX, mg/Nm^3	390	385	385	382	396	389	388	396	382	-
SO2, mg/Nm^3	438	470	480	459	465	477	465	480	438	-
Particulate matter, mg/Nm^3	39.8	39.6	39.6	40.0	40.8	41.7	40	42	40	100



Monthly Mean Stack Emission Report (2X300 MW Unit-2) **Apr-25 to Sep-25**

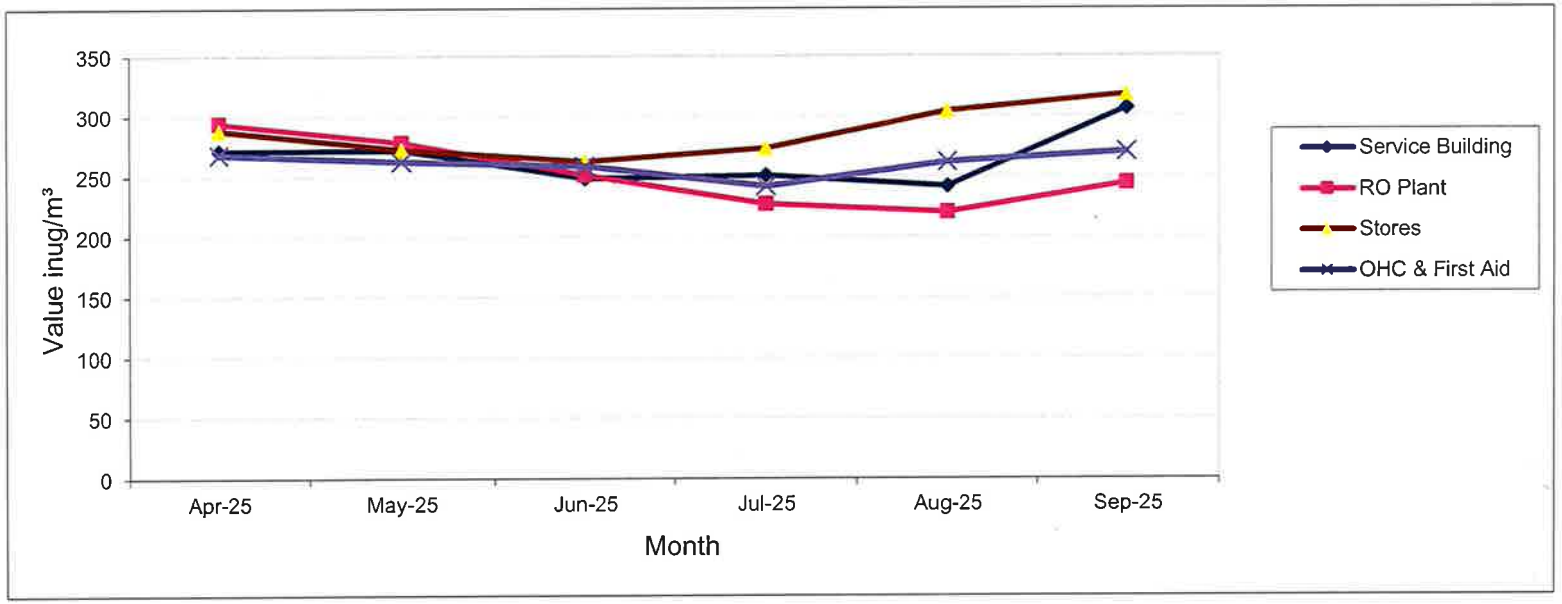
Month/Parameters	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN	Norms
NOX, mg/Nm^3	387	391	392	392	393	392	391	393	387	-
SO2, mg/Nm^3	461	445	436	421	435	428	438	461	421	-
Particulate matter, mg/Nm^3	40.2	41.4	41.8	41.8	41.3	39.8	41	42	40	100



WORK ZONE AIR QUALITY MONITORING DATA

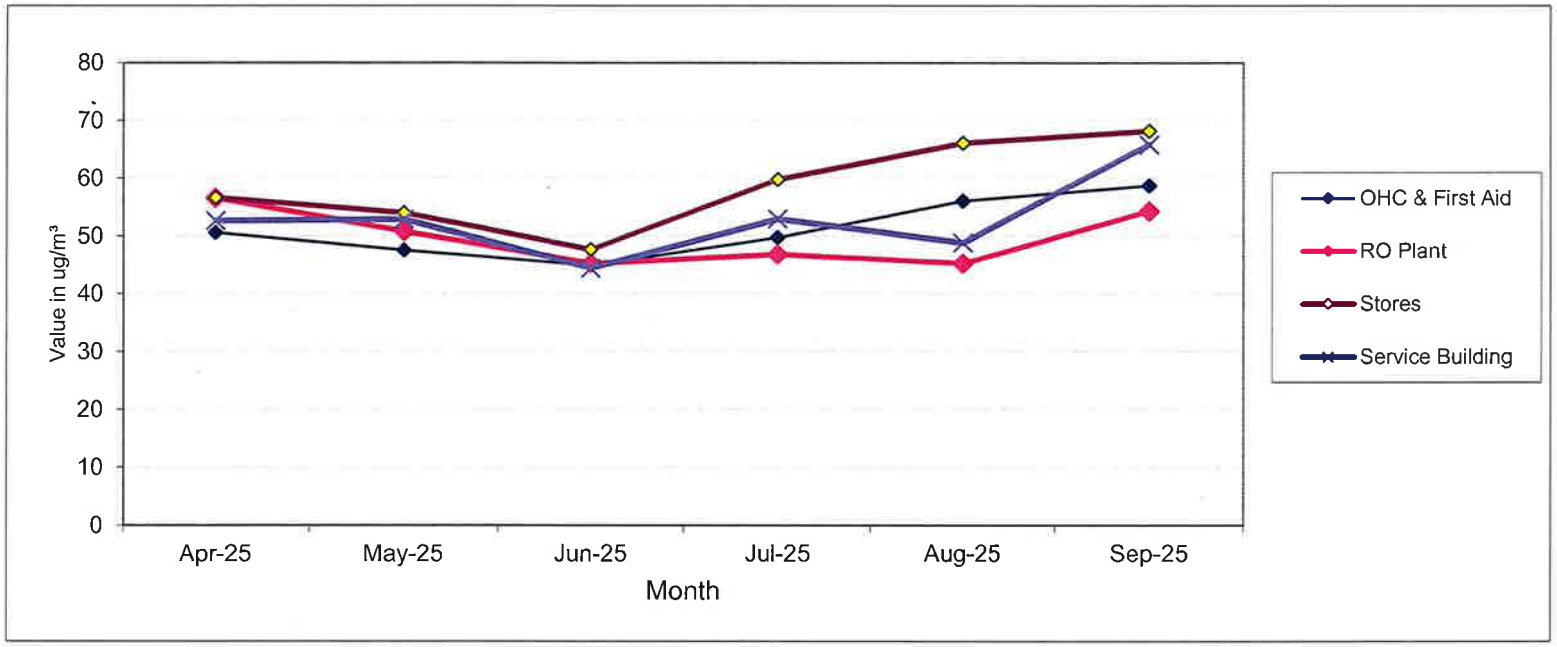
Monthly Average PM10 µg/m3 (Work zone Air Quality) **Apr-25 to Sep-25**

Month / Location	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN
Stores	289	273	263	274	304	318	287	318	263
Service Building	272	272	249	251	242	307	265	307	242
RO Plant	295	279	252	228	221	245	253	295	221
OHC & First Aid	269	263	259	242	262	271	261	271	242



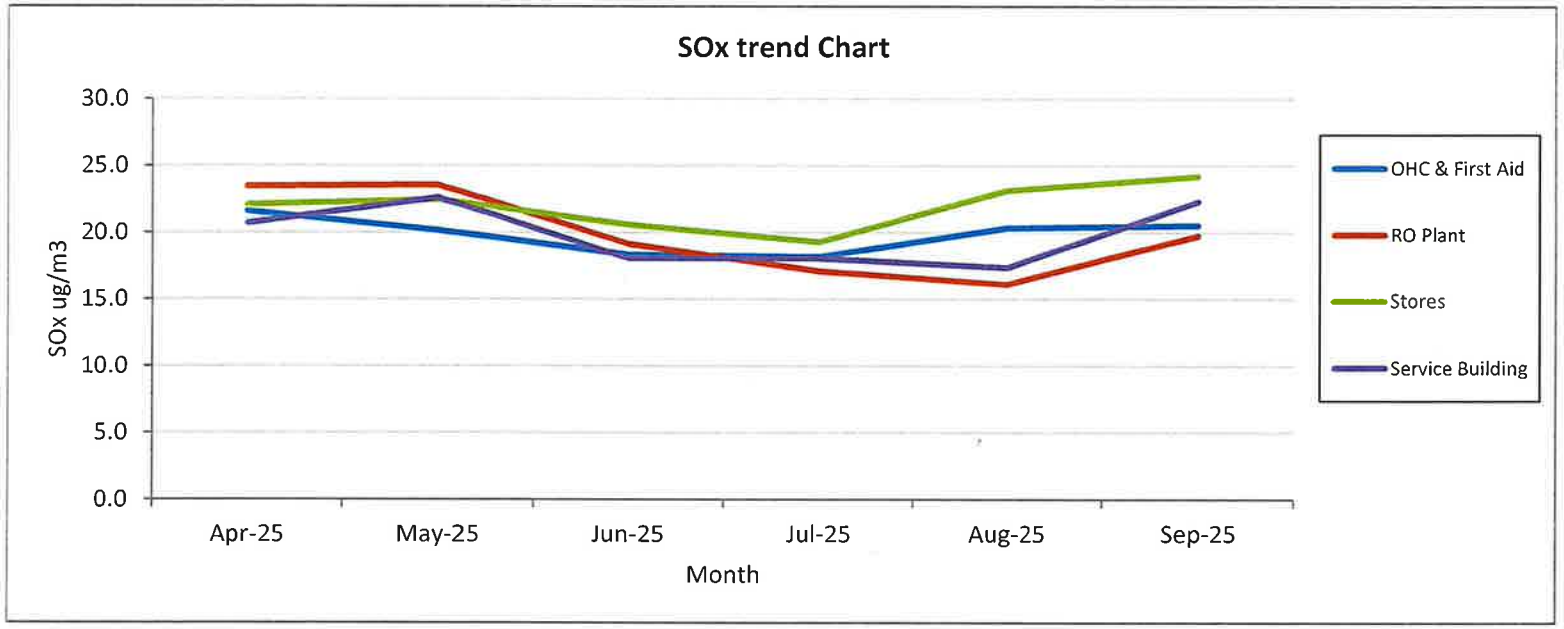
Monythly Average PM2.5 µg/m3 **Apr-25 to Sep-25**

Month / Location	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN
Stores	57	54	48	60	66	68	59	**68**	**48**
Service Building	53	53	44	53	49	66	53	**66**	**44**
RO Plant	57	51	45	47	45	54	50	**57**	**45**
OHC & First Aid	51	48	45	50	56	59	51	**59**	**45**



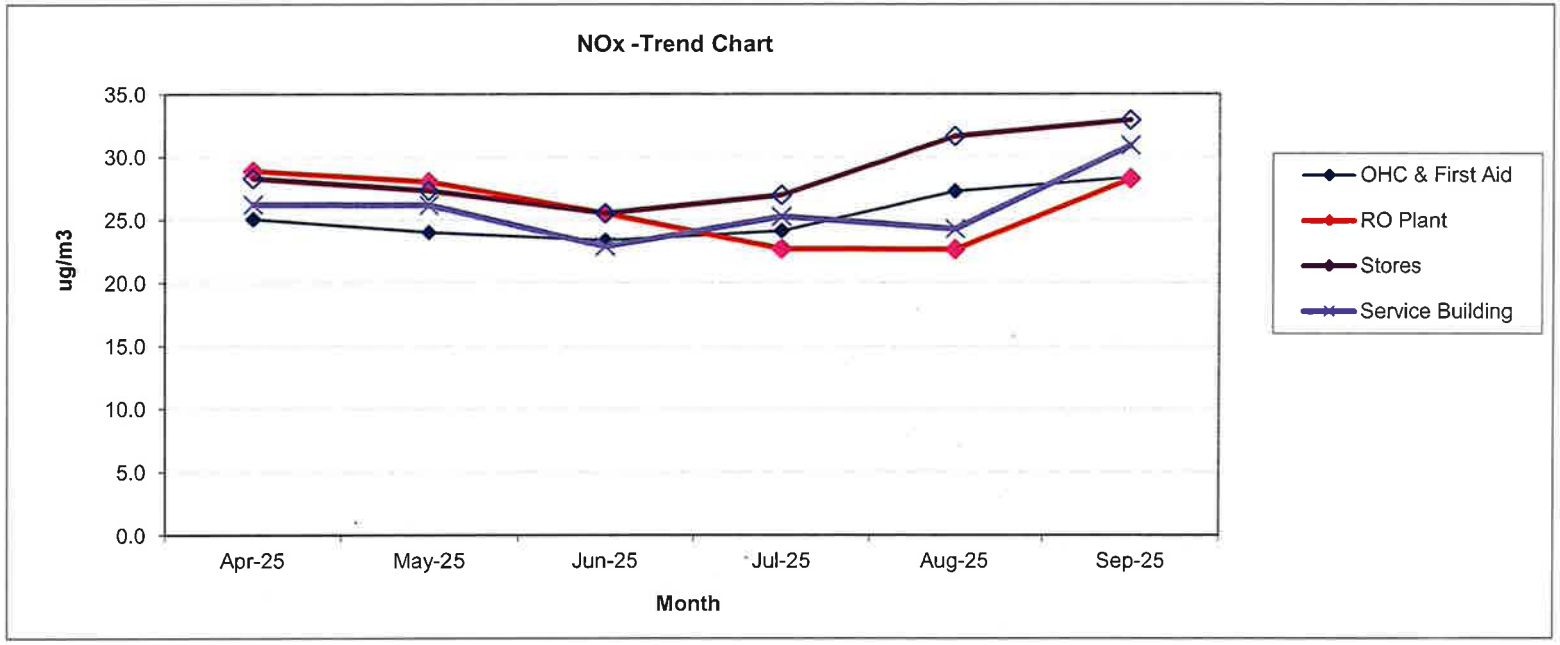
Monythly Average SO2 µg/m3 **Apr-25 to Sep-25**

Month / Location	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN
Stores	22.1	22.5	20.6	19.3	23.2	24.2	**22.0**	24.2	19.3
Service Building	20.7	22.6	18.1	18.1	17.4	22.3	**19.8**	22.6	17.4
RO Plant	23.5	23.6	19.2	17.1	16.1	19.8	**19.9**	23.6	16.1
OHC & First Aid	21.6	20.2	18.4	18.2	20.4	20.6	**19.9**	21.6	18.2



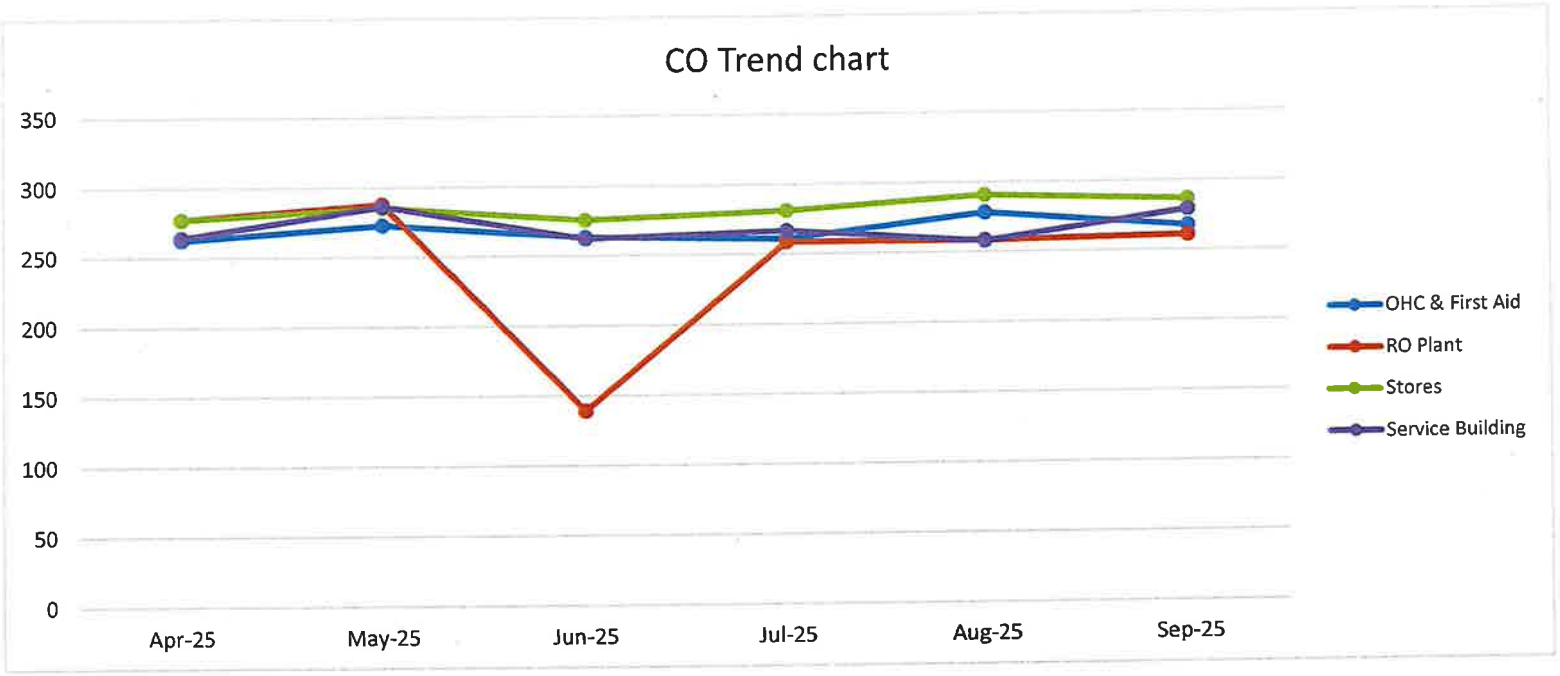
Monthly Average NOX µg/m3 **Apr-25 to Sep-25**

Month / Location	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN
Stores	28.3	27.4	25.6	27.0	31.7	33.0	**28.8**	33.0	25.6
Service Building	26.3	26.2	22.9	25.3	24.3	31.0	**26.0**	31.0	22.9
RO Plant	28.9	28.1	25.6	22.7	22.7	28.3	**26.0**	28.9	22.7
OHC & First Aid	25.1	24.1	23.4	24.2	27.3	28.4	**25.4**	28.4	23.4



Monythly Average CO µg/m3 **Apr-25 to Sep-25**

Month / Location	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN
Stores	278	286	276	282	291	287	283	291	276
Service Building	265	287	263	267	258	280	270	287	258
RO Plant	278	288	139	259	259	261	247	288	139
OHC & First Aid	263	273	264	261	279	268	268	279	261

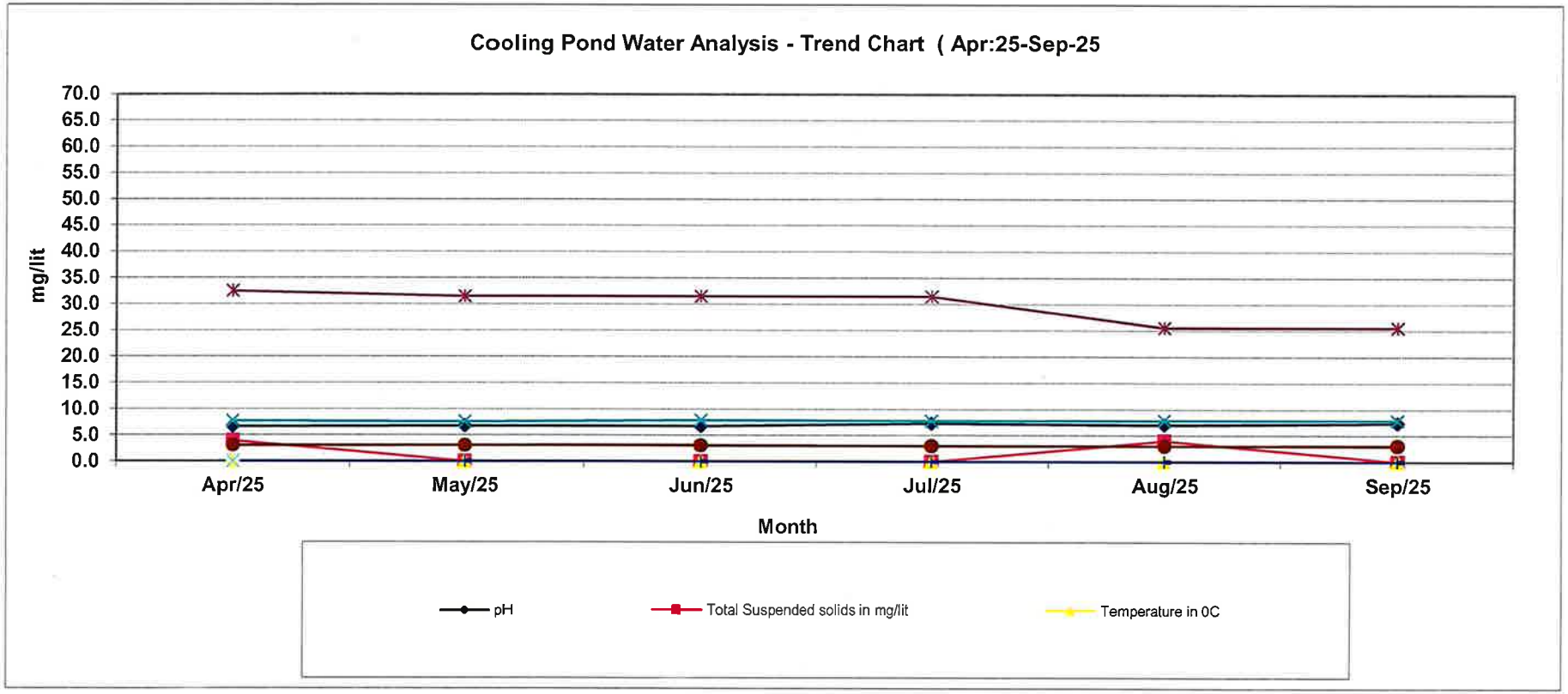


TREATED EFFLUENT QUALITY MONITORING DATA

TREATED EFFLUENT WATER ANALYSIS REPORT

Monthly Mean Treated Effluent Water Analysis Report Apr-25 to Sep-25

Month/Parameters	UOM	Limits	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN
pH	mg/lit	6.5-8.5	6.7	6.8	6.7	7.3	7.0	7.4	7.0	7.4	6.7
Temperature	deg C	-	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Suspended solids	mg/lit	100	4	<1	<1	<1	4	<1	2.0	4.0	<1
Oil & Grease	mg/lit	20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Free Available Chlorine	mg/lit	Nil	<0.1	<0.1	<0.1	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1
Coppper	mg/lit	1.0	0.54	<0.01	0.01	0.02	<0.01	0.02	0.10	0.54	0.01
Iron	mg/lit	1.0	0.06	0.05	<0.01	<0.01	<0.01	0.14	0.1	0.1	0.05
Zinc	mg/lit	1.0	0.08	<0.01	0.15	0.09	0.03	0.02	0.1	0.2	0.02
Corrosion Inhibitor/Phophate	mg/lit	5.0	0.90	1.00	<0.01	<1.0	0.10	<0.1	0.5	1.0	0.1
Chromimum	mg/lit	0.2	0.14	<0.01	0.01	<0.01	<0.01	0.02	0.03	0.1	BDL



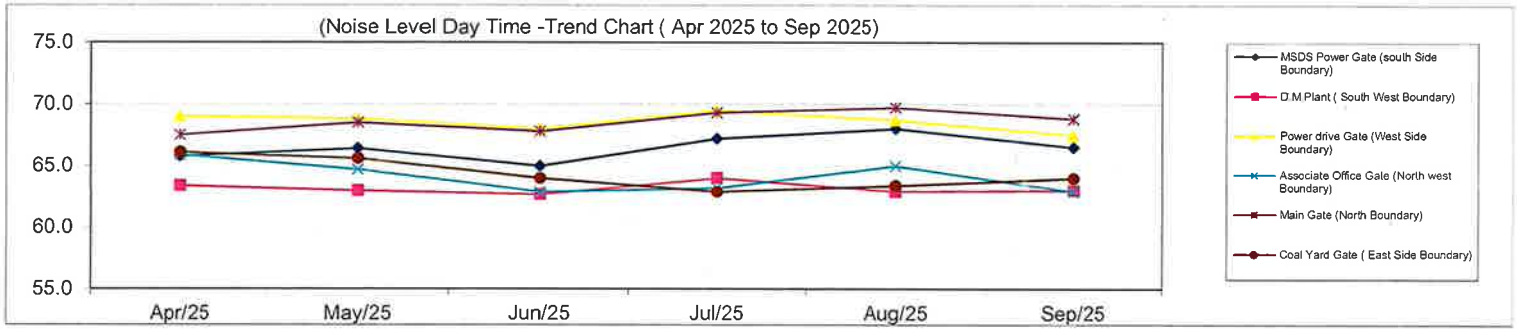
Sewage Water Analysis Report **Apr-25 to Sep-25**

Month/Parameters (2x130 MW -30 KLD)	Limits	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN
pH	6 to 9	8.1	7.9	7.7	8.3	8.0	8.3	8.0	8.3	7.7
Total Suspended solids in mg/lit	10	<1	<1	<1	1	<1.0	4	2	4	1
Biological Oxygen Demand (BOD) at 20 degC for 5 dyas, mg/l	10	6.0	4.0	<2.0	3.0	6.0	7.0	4.7	7.0	3.0
Chemical Oxygen Demand(COD),mg/l	50.0	40.0	24.0	16.0	20.0	38.0	40.0	29.7	40.0	16.0
Phosphate as P, mg/l	2.0	0.8	1.1	0.6	0.9	1.7	1.6	1.1	1.7	0.6
Total Nitrogen as N, mg/l	10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonical Nitrogen as NH_4, mg/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Coliform MPN/100ml	<230	50	70	94	79	94	94	80.2	94	50
Month/Parameters (2x300 MW-50 KLD)	**Limits**	**Apr-25**	**May-25**	**Jun-25**	**Jul-25**	**Aug-25**	**Sep-25**	**AVG**	**MAX**	**MIN**
pH	6 to 9	8.1	7.7	7.6	8.2	7.3	8.5	7.9	8.5	7.3
Total Suspended solids in mg/lit	10	<1	<1	<1	<1	3	4	1.8	4	<1
Biological Oxygen Demand (BOD) at 20 degC for 5 dyas, mg/l	10	8.0	6.0	3.0	3.0	7.0	8	5.8	8.0	3.0
Chemical Oxygen Demand(COD),mg/l	50.0	46.0	32.0	24.0	22.0	42.0	48.0	35.7	48.0	22.0
Phosphate as P, mg/l	2.0	0.9	1.0	0.4	0.4	1.7	1.7	1.0	1.7	0.4
Total Nitrogen as N, mg/l	10.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonical Nitrogen as NH_4, mg/l	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	BDL	BDL	BDL
Coliform MPN/100ml	<230	60.0	94.0	70.0	94.0	94.0	48.0	77	94	48

NOISE LEVEL MONITORING DATA

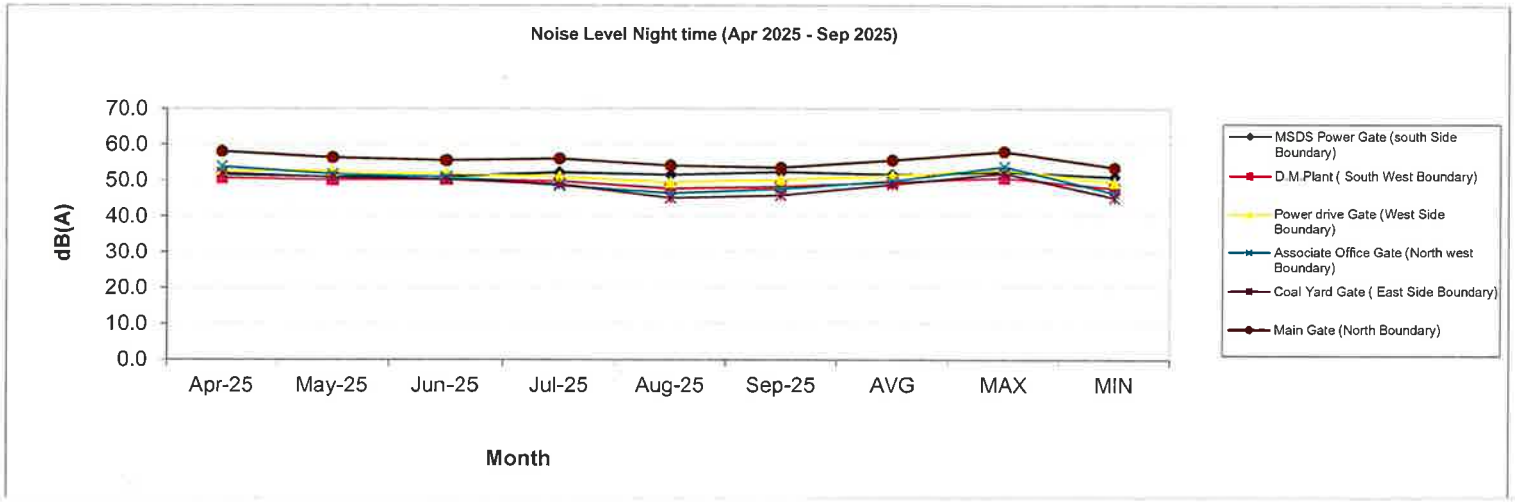
Noise Level Day Time — **Apr-25 to Sep-25**

Month/Location	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN	Norms
MSDS Power Gate (south Side Boundary)	65.8	66.4	65.0	67.2	68.0	66.5	**66**	68.0	65	75.0
D.M.Plant (South West Boundary)	63.4	63.0	62.7	64.0	62.9	63.0	**63**	64.0	63	
Power drive Gate (West Side Boundary)	69.0	68.8	68.0	69.5	68.7	67.5	**69**	69.5	68	
Associate Office Gate (North west Boundary)	65.9	64.7	62.9	63.2	65.0	62.9	**64**	65.9	63	
Coal Yard Gate (East Side Boundary)	66.1	65.6	64.0	62.9	63.4	64.0	**64**	66.1	63	
Main Gate (North Boundary)	67.5	68.5	67.8	69.3	69.7	68.8	**69**	69.7	68	



Noise Level Night Time — **Apr-25 to Sep-25**

Month/Location	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN	Norms
MSDS Power Gate (south Side Boundary)	51.6	51.0	51.2	52.3	51.6	52.4	**52**	52.4	51	70
D.M.Plant (South West Boundary)	50.7	50.2	50.4	49.8	47.8	48.3	**50**	50.7	48	
Power drive Gate (West Side Boundary)	53.0	52.6	51.9	51.2	49.6	50.3	**51**	53.0	50	
Associate Office Gate (North west Boundary)	53.9	51.8	51.0	48.6	46.5	47.7	**50**	53.9	47	
Coal Yard Gate (East Side Boundary)	52.0	50.9	50.3	49.0	45.2	45.9	**49**	52.0	45	
Main Gate (North Boundary)	58.1	56.4	55.6	56.1	54.2	53.6	**56**	58.1	54	



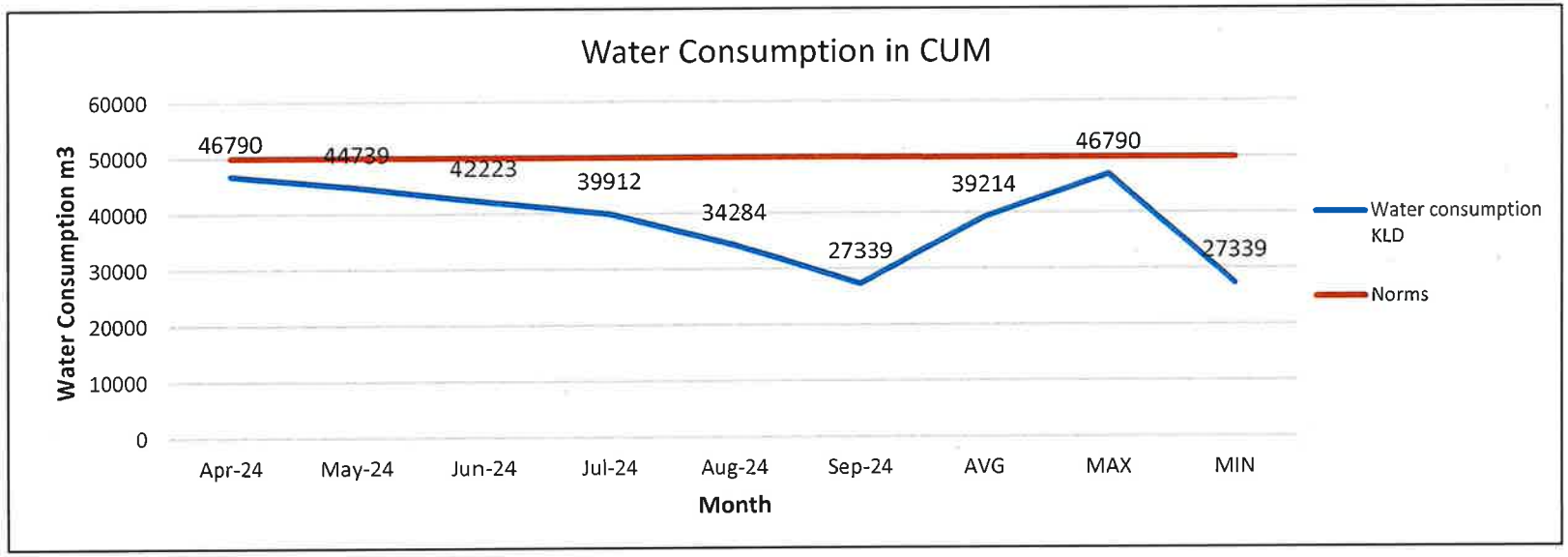
WATER CONSUMPTION REPORT

WATER CONSUMPTION REPORT

JSW Energy Limited

Water Consumption Report (860 MW) **Apr-2025 to Sep-2025**

Month/Location	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	AVG	MAX	MIN	
Water consumption KLD	46790	44739	42223	39912	34284	27339	39214	46790	27339	* Less Due to part load operation
Norms	49967	49967	49967	49967	49967	49967	49877	49877	49877	



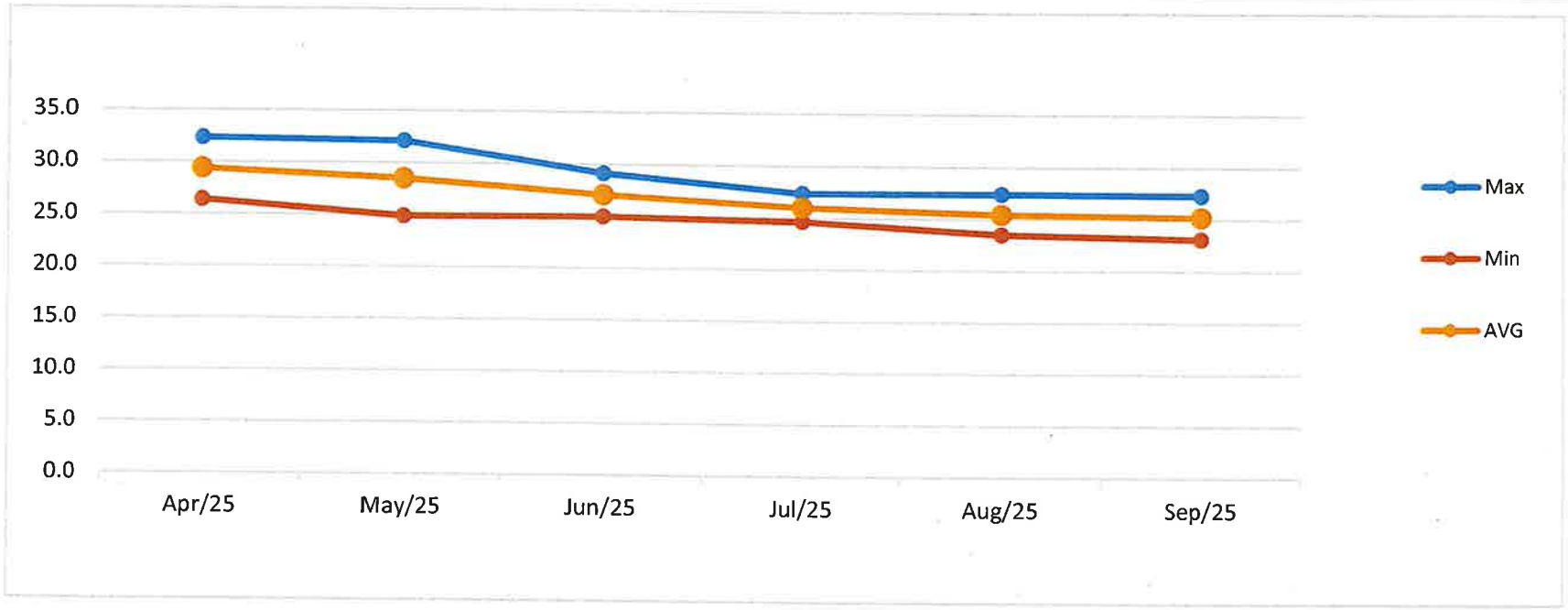
WEATHER MONITORING DATA

WEATHER REPORT

Monthly Mean Ambient Temperature, °C

Apr-25 -Sep-25

Month	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN
MAX	32.3	32.1	29.2	27.4	27.4	27.3	29.3	32.3	27.3
MIN	26.4	24.9	25.0	24.6	23.5	23.1	24.6	26.4	23.1
AVG	29.4	28.5	27.1	26.0	25.5	25.2	26.9	29.4	25.2

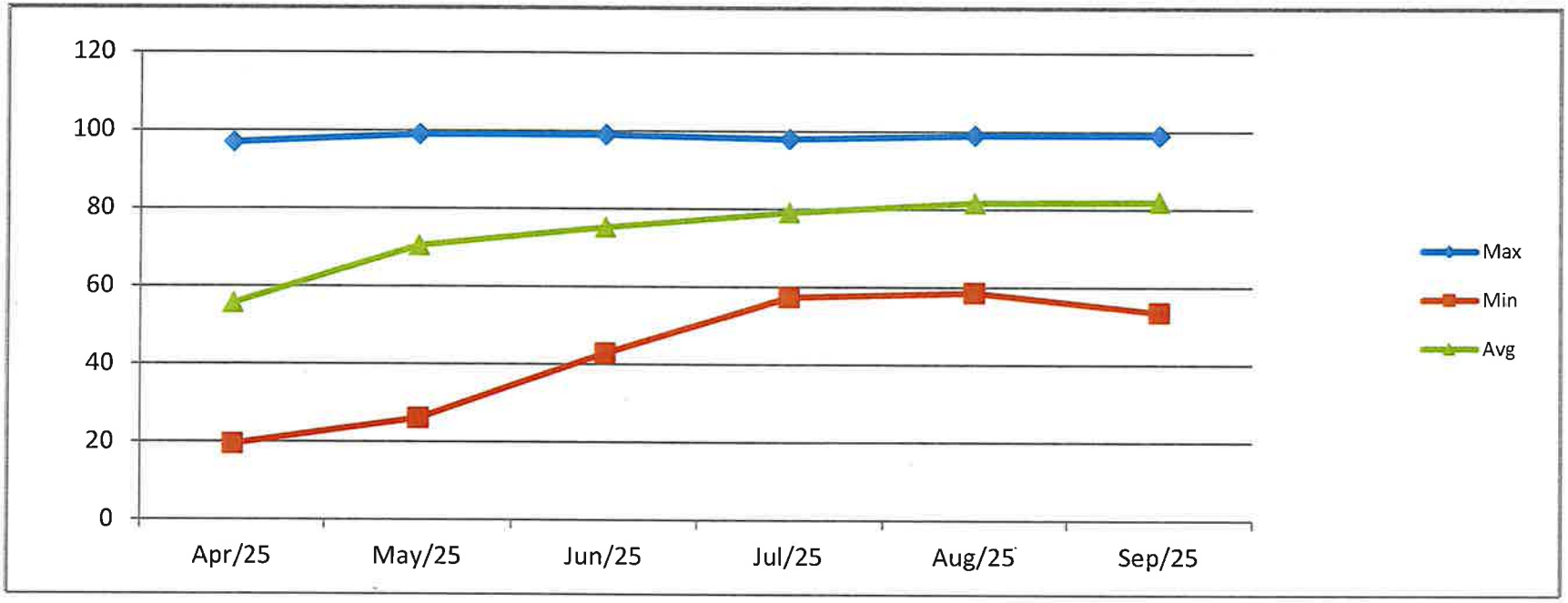


WEATHER REPORT

Monthly Mean Humidity, %

Apr-25 -Sep-25

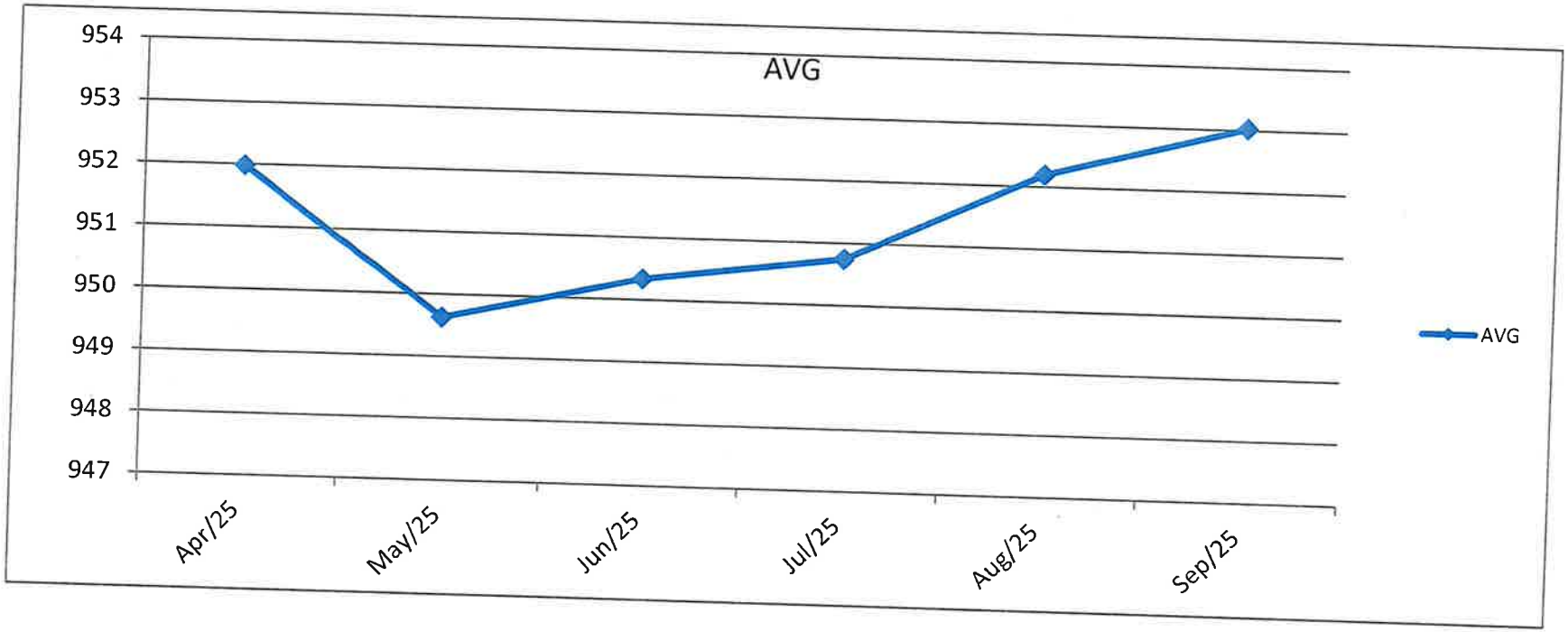
Month	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN
Max	97	99	99	98	99	99	98.5	99	97
Min	20	26	43	57	59	54	43.0	59	20
Avg	56	70	75	79	82	82	74.0	82	56



WEATHER REPORT

Monthly Mean Atmospheric Pressure, mmHg

Month	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Apr-25 -Sep-25 AVG	MAX	MIN
AVG	952	950	950	951	952	953	951	953	950

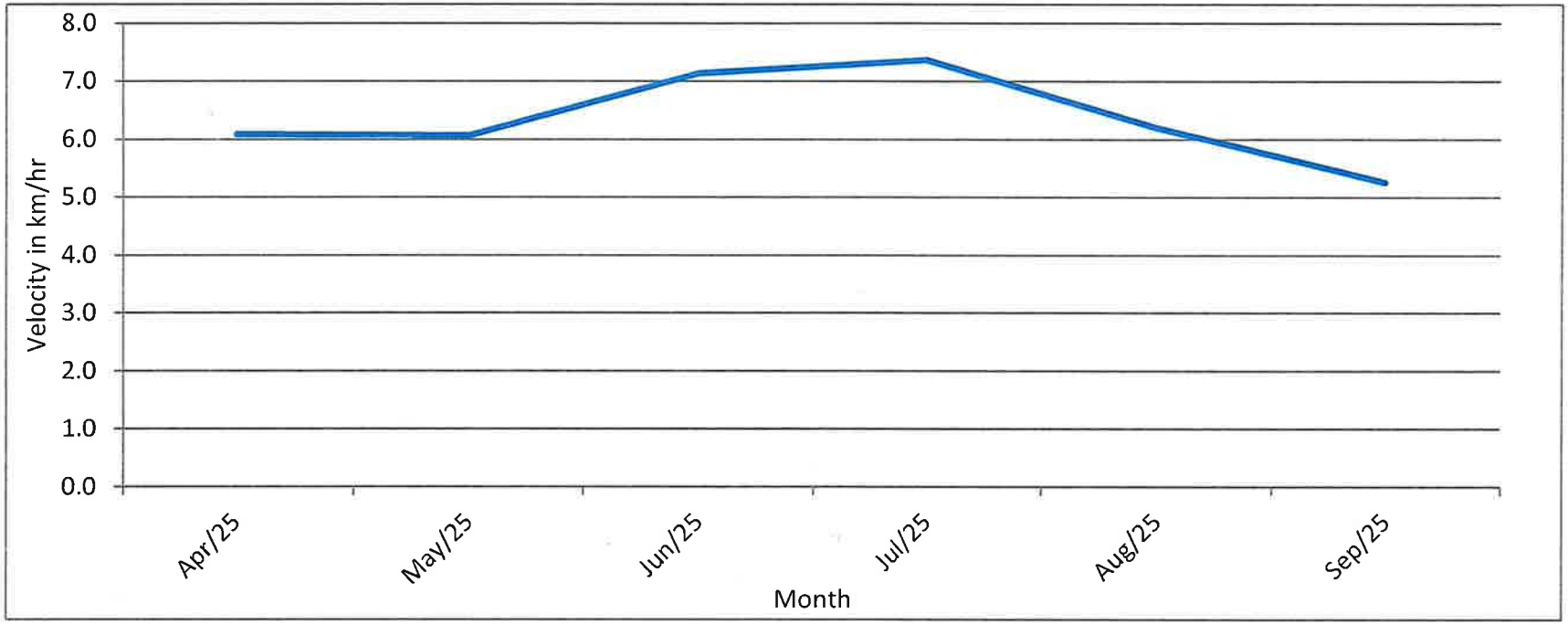


WEATHER REPORT

Monthly Mean Wind Velocity, km/hr

Apr-25 -Sep-25

Month	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	AVG	MAX	MIN
AVG	6.1	6.1	7.1	7.4	6.2	5.3	6.4	7.4	5.3



WEATHER REPORT

Monthly Total Rain Fall, mm — Apr-25 -Sep-25

Month	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Total	MIN
Total	23.5	71.0	12.5	29.0	62.0	68.0	**266.00**	12.50
No of rainy days	8.0	12.0	8.0	7.0	17.0	14.0	**66.00**	7.00