

**TAMILNADU POLLUTION CONTROL BOARD**

Advanced Environmental Laboratory, Tirunelveli.

AMBIENT AIR QUALITY SURVEY - REPORT OF ANALYSIS**Report. F. No. 16/AEL-TNV/AAQS/2021 - 2022 Dated: 16.06.2021**

1. Name of the Industry : M/s. Seshasayee Paper and Board Limited
2. Address of the Industry : Tirunelli Elanthikulam,
Singamparai (P),
Tirunelveli District – 627 601.
3. Date of Survey : 15.06.2021
4. Duration of survey : 8 hours
5. Category/Classification : Red Large
6. Land use classification : Industrial

Meteorological Conditions

Ambient Temperature (°C)	Min	Max	Relative Humidity (%)	Min	Max
	30.0	34.2		56	76
Weather condition	Clear sky		Rain Fall (mm)	NIL	
Predominant Wind Direction	South West to North East		Mean Wind Speed (Km/hr.)	11.3	

AMBIENT AIR QUALITY SURVEY RESULTS

St. No	Location of the sampling station	Direction *	Approximate Distance in meter *	Approximate Height from Gl. (m)	Pollutants (µg/m ³)		
					PM ₁₀	SO ₂	NO _x
1.	On top of scaffolding behind guest house	North East	610	3.5	44.70	9.03	17.83
2.	On top of scaffolding near time office	East	300	3.5	54.73	11.04	14.26
3.	On top of scaffolding near labour quarters outside the factory	South	800	3.5	47.92	6.52	13.08
4.	On top of scaffolding near substation	South West	500	3.5	36.74	5.02	9.81
5.	On top of scaffolding at the west boundary of the unit	West	600	3.5	47.54	6.02	10.85

Note: * With respect to major emission sources.

The analytical results are restricted to the sampling period of 8 hrs

Test Performed	Test Method
PM ₁₀	IS 5182: (Part23) – 2006
SO ₂	Modified west – Graeke / IS 5182 : (Part 2) – 2001 RA: 2012
NO ₂	Jacobs – Hochheiser / IS 5182: (Part 6) – 2006 RA : 2012

M. S. S. S. S.
16.6.2021
Deputy Chief Scientific Officer

J. V. Jayasudha
16.6.2021
Deputy Chief Scientific Officer,
AEL, TNPCB, Tirunelveli -10.

**ADVANCED ENVIRONMENTAL LABORATORY
TAMIL NADU POLLUTION CONTROL BOARD, TIRUNELVELI.**

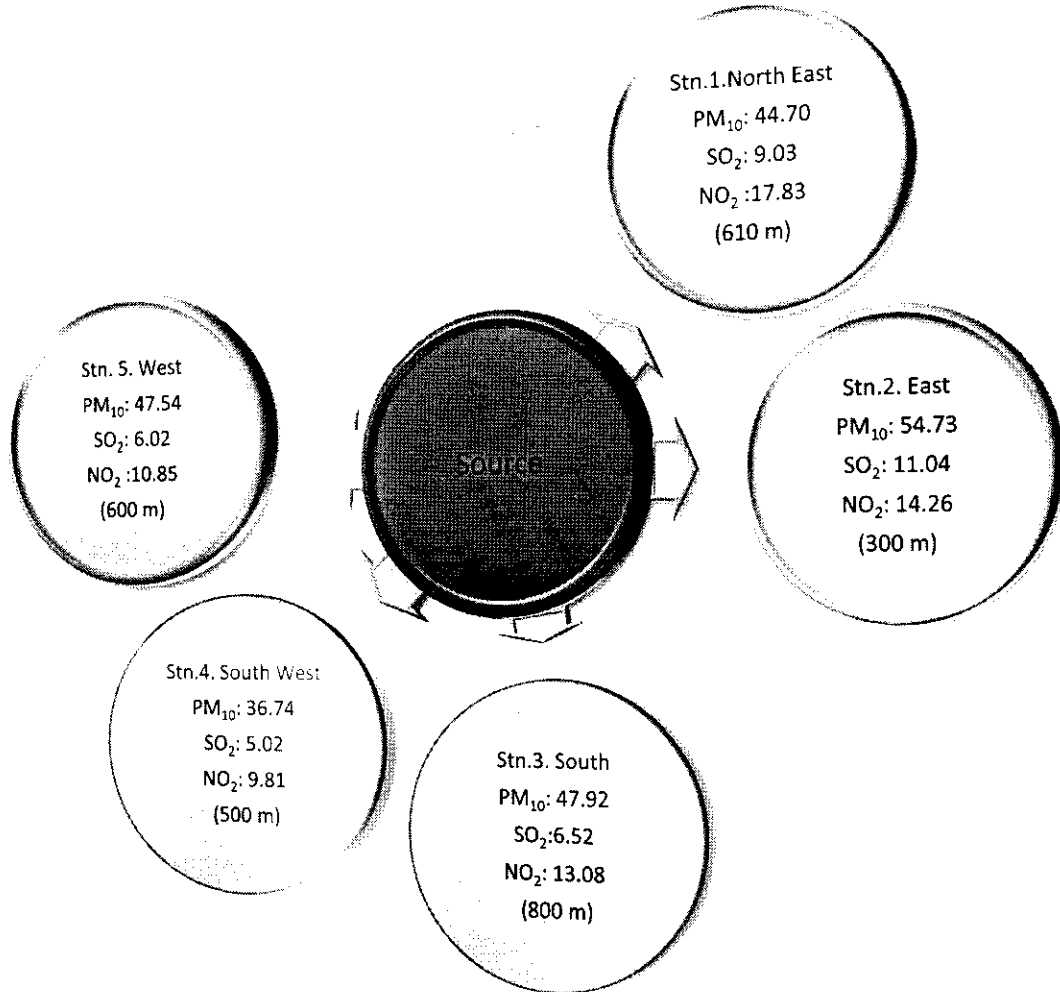
AMBIENT AIR QUALITY SURVEY

Schematic Diagram Showing Location of Sampling

Name of the Industry: M/s. Seshasayee Paper and Board Limited, Tirunelveli District

Date of Survey: 15.06.2021

Predominant Wind Direction: South West to North East



Note: All the values are expressed in $\mu\text{g}/\text{m}^3$ and restricted to the sampling period of 8 hours

Metrological Conditions	
Predominant Wind Direction	South West to North East
Wind Speed (KM/hr)	11.3
Weather Condition	Clear Sky
Rainfall	---

M. V. Jayasudha
16.6.2021
Deputy Chief Scientific Officer

J. V. Jayasudha
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Deputy Chief Scientific Officer,
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STACK MONITORING SURVEY – REPORT OF ANALYSIS

Report .F.No. 16/AEL - TNV/ SM/ 2021 - 2022, Dated: 16.06.2021

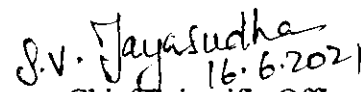
1. Name of the Industry : M/s. Seshasayee Paper and Board Limited
2. Address of the Industry : Tirunelli Elanthaikulam,
Singamparai (P),
Tirunelveli District – 627 601.
3. Date of Survey : 15.06.2021
4. Type of Industry : Paper

STACK MONITORING SURVEY RESULTS

Sl. No.	Stack attached to	Stack Temp °k	Flue Gas Velocity (m/sec)	Gas Discharge rate (NM ³ /hr)	Pollutants (mg/m ³)		
					PM	SO ₂	NO _x
1.	Boiler attached with Co. Gen plant	403	9.90	162266	15.56	40.0	66.91

Test Performed	Test Method
PM ₁₀	IS 5182: (Part23) – 2006
SO ₂	Modified west – Graeke / IS 5182 : (Part 2) – 2001 RA: 2012
NO ₂	Jacobs – Hochheiser / IS 5182: (Part 6) – 2006 RA : 2012


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STACK DETAILS

Report F. No. 16/AEL- TNV/SM/2021 - 2022, Dated: 16.06.2021

1. Name and Address of the Industry: M/s. Seshasayee Paper and Board Limited
Tirunelli Elanthaikulam,
Singamparai (P),
Tirunelveli District – 627 601.
2. Date of survey : 15.06.2021

Sl.No.	Particulars	I	
1.	Stack attached to	AFBC Boiler	
2.	Details of Process Stack	Coal based boiler with 3 field ESP	
3.	Height from G. Level in (m)	45	
4.	Diameter in (m) at sampling point	2.8	
5.	Port Hole height from Ground Level or Bends or Ducts in (m)	21	
6.	Fuel Used (with % of Sulphur content)	1. Coal (<0.2%) 2. Bio fuel	
7.	Fuel Consumption rate per day (Mention Units)	168 TPD	
8.	Boiler type & Capacity	AFBC -50 TPH	
9.	APC measures provided	Yes - ESP (3 field)	
10.	APC Functional Status	Functioning	
11.	Composition of Flue gas	CO%	-
		CO2%	-
		O2%	-
12.	Moisture Content in %	-	
13.	Ambient Temp in °K	306	
14.	Temperature of the Flue Gas in °K	403	
15.	Velocity of Flue Gas in m/sec	9.90	
16.	Volume of Flue gas sampled in m ³	0.630	
17.	Gaseous Discharge rate per day in Nm ³ /hr	162266	
18.	Combustion efficiency %	93%	

M. R. J.
16.6.2021
Deputy Chief Scientific Officer

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16.6.2021
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STACK MONITORING SURVEY – Additional Details

Report F. No. 16/AEL – TNV/SM/2021 - 2022, Dated: 16.06.2021

1. Name of the Industry : M/s. Seshasayee Paper and Board Limited
2. Address of the Industry : Tirunelli Elanthaikulam,
Singamparai (P),
Tirunelveli District – 627 601.
3. Date of Survey : 15.06.2021
4. Type of Industry : Red large /Paper

Stack Monitoring Additional Details

Sl. No.	Details of stack mentioned in the Air consent order	Details of Stack available and in working condition	Details of Stack for which stack Emission Sampling have been done	Justification for the left out of stack Emission Sampling
1.	Stack attached with boiler of co-gen plant	Yes ESP – 3 field	45 mts. height	Conducted
2.	Stack attached with DG set	-	7 mts	Not in operation

[Signature]
16.6.2021
Deputy Chief Scientific Officer

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TAMILNADU POLLUTION CONTROL BOARD

Advanced Environmental Laboratory, Tirunelveli.

AMBIENT/SOURCE NOISE LEVEL SURVEY – REPORT OF ANALYSIS

Report. No.F.No.: 16/ AEL/ - TNV/NLS/2021 - 2022, Dated: 16.06.2021

1.	Name of the Industry	M/s. Seshasayee Paper and Board Limited		
2.	Address of the Industry	Tirunelli Elanthaikulam, Singamparai (P), Tirunelveli District – 627 601.		
3.	Date of Survey	15.06.2021		
Category		Red Large	Land use Classification	: Industrial
Type of Survey		Ambient	Time of Survey	: Day
Meteorological conditions:			Clear sky	

Logging Parameters

Instrument Used	Quest	Serial No.	CC 8110032		
Logging Interval	10 Minutes at each point	Measuring Range	50 -110 dB (A)		
Weighting	“A”	Peak Weighting	“C”	Weighting	“A”
Sound Incidence	RANDOM		Time in hrs	14.00 to 16.00	

Report of Noise Level Monitoring

Sl. No	Location	Duration (min)	Distance (M)	Direction	Sound Level dB (A)
					Leq
1.	West Boundary	10	400	West	51.7
2.	North Boundary	10	500	North	47.3
3.	South Boundary	10	300	South	53.6
4.	East Boundary	10	800	East	48.9
5.	<u>Source:</u> Power Plant DG Hall	10	-	-	82.9

NOTE:

Leq - value is the average energy for the measured period.

[Signature]
Deputy Chief Scientific Officer

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Deputy Chief Scientific Officer,
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TAMILNADU POLLUTION CONTROL BOARD
Advanced Environmental Laboratory, Tirunelveli.

GENERAL PARTICULARS

Report F. No. 16/AEL – TNV/AAQ/SM/2021 - 2022, Dt: 16.06.2021

1. Name and Address of the Industry: M/s. Seshasayee Paper and Board Limited,
Tirunelli Elanthaikulam,
Singamparai (P),
Tirunelveli District – 627 601.
2. Date of survey : 15.06.2021

1.	Processes description	Paper manufacturing from imported virgin pulp, indigenous wet lap pulp and waste paper pulp	
2.	Emission Sources	AFBE - Boiler	
3.	Fugitive Emission Sources	Fuel storage yard	
4.	Raw Material Consumptions	Co-gen Plant	Paper Plant
		Coal : 131.5 Tons Biofuel: 36.23 Tons	Pulp – 168.6 Tons
5.	Production Capacity as Per Air Consent Order No. & Date	Power : 6.6 MW, Air : 1908220970515, dt: 17.09.2019 Paper : 90000 TPA (246.5 TPD) Air : 2108237090296, dt: 20.05.2021	
6.	Production on the day of survey	Power : 5.3 MW, Paper : 211 Tons	
7.	Percent Production with respect to Air Consent Order	Power : 80.3 % Paper : 86 %	
8.	Air Consent Order No. and Validity	No. : 1908220970515 (Co-gen plant), valid up to : 31.03.2021 No. : 2108237090296 (Paper plant), valid up to : 30.11.2021	
9.	Details of APC measures	3 field ESP attached	
10.	Functional Status of APC measures	Working well	
11.	Compliance with Consent Conditions	Complied	
12.	Field Observations	-	

[Signature] 16.6.2021
Deputy Chief Scientific Officer

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Advanced Environmental Laboratory, Tirunelveli.

Report. F. No. 16/AEL-TNV/AAQS/SM/2021 - 2022 Dated: 16.06.2021

1. Name of Industry : M/s. Seshasayee Paper and Board Limited
2. Pollution Category : Red large
3. Date of AAQ Survey : 15.06.2021
4. Predominant Wind Direction : South West to North East
5. Weather condition : Clear Sky

STATUS OF POLLUTANTS LEVEL

I. AMBIENT AIR QUALITY:-

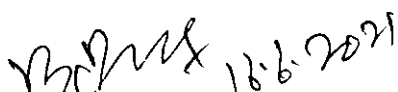
1. Total No. of AAQ stations monitored : 5
2. No. of AAQ stations in which Pollutants Level exceeded the Boards standards : -

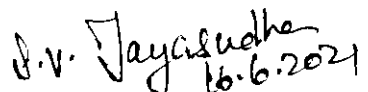
Maximum and Minimum values of Pollutants Level observed:

Sl. No	POLLUTANT	Values in microgram/m ³		BOARD'S STANDARD (As per consent order)
		Maximum	Minimum	
1.	<u>Respirable Suspended Particulate Matter:</u> PM ₁₀	54.73	36.74	100
2.	<u>GASEOUS POLLUTANTS:-</u>			
	(i) SO ₂	11.04	5.02	80
	(ii) NO ₂	17.83	9.81	80

II. STACK MONITORING:-

1. Total No. of Stacks Monitored : 1
2. No. of Stacks in which Pollutants Level exceeded the Boards standards : NIL


Deputy Chief Scientific Officer


Deputy Chief Scientific Officer,
AEL, TNPCB, Tirunelveli -10.