

**TEST REPORT**

Page 1 of 1

**AMBIENT AIR MONITORING**

<b>Report No :</b>	EL-NO-AR-144-12-2020	<b>Report Date :</b>	26.12.2020
<b>Customer Name &amp; Address</b>  M/s. HI Tech Arai Pvt Ltd Shed No.1/170-L, Thuvarankulam, Melur Taluk, Madurai - 625 020.	<b>Sample Reference No :</b>	EL-NO-AR-144-12-2020	
	<b>Sample Description :</b>	Ambient Air	
	<b>Sample Drawn By :</b>	Laboratory	
	<b>Sample Collected Date :</b>	19.12.2020	
	<b>Qty of Sample Received :</b>	Filter Paper(2 nos) & Approx 25 ml Solution(4 nos)	
	<b>Sample Received On :</b>	21.12.2020	
	<b>Test Commenced On :</b>	21.12.2020	
	<b>Test Completed On :</b>	24.12.2020	
	<b>Sampling Method :</b>	EL-SOP-ARS-01 to 11	
	<b>Sample Mark:</b>	Near Power House	

S.No	Name of the Test	Test Method	Units	Results	Max. Annual Average Limits of NAAQs
1.	Ammonia (as NH <sub>3</sub> )	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	µg/m <sup>3</sup>	<5.0	100
2.	Arsenic (as As)	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	ng/m <sup>3</sup>	<0.1	6.0
3.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS 5182 (Part 11): 2006 (Reaffirmed 2017)	µg/m <sup>3</sup>	<0.5	5.0
4.	Benzo [α] Pyrene (as C <sub>20</sub> H <sub>12</sub> )	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	ng/m <sup>3</sup>	<0.5	1.0
5.	Carbon Monoxide (as CO)	Instruments Manual Based SOP No.EL-SOP-ARS-17	mg/m <sup>3</sup>	<1.2	2.0
6.	Lead (as Pb)	IS 5182 (Part 22) : 2004 (Reaffirmed 2014) Clause No.5	µg/m <sup>3</sup>	<0.5	0.5
7.	Nickel (as Ni)	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	ng/m <sup>3</sup>	<1.0	20
8.	Oxidants (as Ozone O <sub>3</sub> )	IS : 5182 (Part IX) - 1974 (Reaffirmed 2014)	µg/m <sup>3</sup>	<10.0	100
9.	Oxides of Nitrogen (as NO <sub>2</sub> )	IS 5182 (Part 6) : 2006 (Reaffirmed 2017)	µg/m <sup>3</sup>	19.4	40
10.	Particulate Matter (as PM <sub>10</sub> )	IS 5182 (Part 23) : 2006 (Reaffirmed 2017)	µg/m <sup>3</sup>	46.7	60
11.	Particulate Matter (as PM <sub>2.5</sub> )	EPA 40 CFR Part 50 - Appendix L	µg/m <sup>3</sup>	22.8	40
12.	Sulphur Dioxide (as SO <sub>2</sub> )	IS 5182 (Part 2) : 2001 (Reaffirmed 2017)	µg/m <sup>3</sup>	8.9	50

&lt;--- End of Report ---&gt;

**Notes :** The concentrations of the parameters tested in the above location are within the prescribed annual average limits of NAAQs tolerance limits.

Report Confirmed By :


**R.REVATHI**  
 Technical Manager

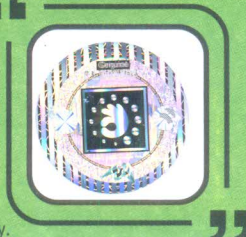



For EXCELLENCE LABORATORY


  
 Authorized Signatory  
**R.S.DINAKARAN**  
 Quality Manager

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**TEST REPORT**

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**STACK MONITORING**

<b>Report No :</b>	EL-NO-SK-171-12-2020	<b>Report Date :</b>	26.12.2020
<b>Customer Name &amp; Address</b>  M/s. HI Tech Arai Pvt Ltd Shed No.1/170-L, Thuvarankulam, Melur Taluk, Madurai - 625 020.	<b>Sample Reference No :</b>	EL-NO-SK-171-12-2020	
	<b>Sample Description :</b>	Stack	
	<b>Sample Drawn By :</b>	Laboratory	
	<b>Sample Collected Date :</b>	19.12.2020	
	<b>Qty of Sample Received :</b>	Thimble(1 no),Approx 50 ml Solution(2 nos) & Gas (1L)	
	<b>Sample Received On :</b>	21.12.2020	
	<b>Test Commenced On :</b>	21.12.2020	
	<b>Test Completed On :</b>	24.12.2020	
	<b>Sampling Method :</b>	EL-SOP-SKS-01 to 07	
<b>Sample Mark:</b>	DG 500 KVA - I		

S.No	Name of the Test	Test Method	Units	Results	Max. Permissible TNPCB Norms for 75 to 800 KVA
1.	Stack Diameter	By Customer	m	0.20	NA
2.	Ambient Temperature	Instruments Manual Based SOP No.EL-SOP-ARS-15	°C	31	NA
3.	Flue Gas Temperature	IS 11255 (Part 3) : 2008 Clause No.6	°C	142	NA
4.	Flue Gas Velocity	IS 11255 (Part 3) : 2008 Clause No.5	m/s	10.4	NA
5.	Flue Gas Flow Rate	IS 11255 (Part 3) : 2008	Nm <sup>3</sup> /hr	861.2	NA
*6.	Carbon Monoxide. (as CO)	SOP No.EL-SOP-SKT-10 Issue No.01 October,10:2019	g/kw-hr	0.08	3.5
*7.	Oxides of Nitrogen (as NO <sub>2</sub> ) + Hydrocarbon (as CH <sub>4</sub> )	IS 11255 (Part 7) : 2005 (Reaffirmed 2017) & EL-SOP-ARS-17	g/kw-hr	0.11	4.0
8.	Particulate Matter (PM).	IS : 11255 (Part 1) - 1985 (Reaffirmed 2014)	g/kw-hr	0.14	0.2
9.	Sulphur Dioxide (as SO <sub>2</sub> )	IS : 11255 (Part 2) - 1985 (Reaffirmed 2014)	mg/Nm <sup>3</sup>	9.4	NA

&lt;--- End of Report ---&gt;

**Notes:**

 The concentrations of the parameters tested in the above Stack Emission are within the prescribed limits of **TNPCB tolerance limits.**
**Report Confirmed By :**

**R.REVATHI**  
 Technical Manager

**For EXCELLENCE LABORATORY**

Authorized Signatory


**R.S.DINAKARAN**  
 Quality Manager

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	<b>Sample Description :</b>	Stack	
	<b>Sample Drawn By :</b>	Laboratory	
	<b>Sample Collected Date :</b>	19.12.2020	
	<b>Qty of Sample Received :</b>	Thimble(1 no),Approx 50 ml Solution(2 nos) & Gas (1L)	
	<b>Sample Received On :</b>	21.12.2020	
	<b>Test Commenced On :</b>	21.12.2020	
	<b>Test Completed On :</b>	24.12.2020	
	<b>Sampling Method :</b>	EL-SOP-SKS-01 to 07	
<b>Sample Mark:</b>	DG 500 KVA - II		

S.No	Name of the Test	Test Method	Units	Results	Max. Permissible TNPCC Norms for 75 to 800 KVA
1.	Stack Diameter	By Customer	m	0.15	NA
2.	Ambient Temperature	Instruments Manual Based SOP No.EL-SOP-ARS-15	°C	31	NA
3.	Flue Gas Temperature	IS 11255 (Part 3) : 2008 Clause No.6	°C	139	NA
4.	Flue Gas Velocity	IS 11255 (Part 3) : 2008 Clause No.5	m/s	10.0	NA
5.	Flue Gas Flow Rate	IS 11255 (Part 3) : 2008	Nm <sup>3</sup> /hr	469.2	NA
*6.	Carbon Monoxide. (as CO)	SOP No.EL-SOP-SKT-10 Issue No.01 October,10:2019	g/kw-hr	0.10	3.5
*7.	Oxides of Nitrogen (as NO <sub>2</sub> ) + Hydrocarbon (as CH <sub>4</sub> )	IS 11255 (Part 7) : 2005 (Reaffirmed 2017) & EL-SOP-ARS-17	g/kw-hr	0.13	4.0
8.	Particulate Matter (PM).	IS : 11255 (Part 1) - 1985 (Reaffirmed 2014)	g/kw-hr	0.16	0.2
9.	Sulphur Dioxide (as SO <sub>2</sub> )	IS : 11255 (Part 2) - 1985 (Reaffirmed 2014)	mg/Nm <sup>3</sup>	12.8	NA

&lt;-- End of Report --&gt;

**Notes:**

 The concentrations of the parameters tested in the above Stack Emission are within the prescribed limits of **TNPCC tolerance limits.**
**Report Confirmed By :**

**R.REVATHI**  
 Technical Manager



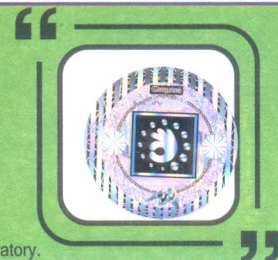
**For EXCELLENCE LABORATORY**

Authorized Signatory


**R.S.DINAKARAN**  
 Quality Manager

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**TEST REPORT**
**NOISE MONITORING**

<b>Report No :</b>	EL-NO-NE-108-12-2020	<b>Report Date :</b>	26.12.2020			
<b>Customer Name &amp; Address</b>  M/s. Hi Tech Arai Pvt Ltd Shed No.1/170-L, Thuvarankulam, Melur Taluk, Madurai - 625 020.	<b>Sample Reference No :</b>	EL-NO-NE-108-12-2020				
	<b>Sample Description :</b>	Sound				
	<b>Monitoring By :</b>	Laboratory				
	<b>Monitoring Date :</b>	19.12.2020				
	<b>Data Received On :</b>	21.12.2020				
	<b>Sampling Method :</b>	IS:9989-1981(Reaffirmed 2001)				
	<b>Monitoring Unit :</b>	dB (A)				
S.No.	Name of the Location	Monitoring Distance In m	Monitoring Time	Day Time (6.00 a.m - 10.00 p.m)		
				Minimum	Maximum	L Equivalent
1.	Moulding Plant	Site	10.00 AM - 11.00 AM	68.1	71.5	68.5
Permissible Limit for Noise as per the Factories Rules, 1950.				Maximum 90.0		
<--- End of Report --->						
<b>Notes:</b> The sound levels tested in the above locations are within the prescribed limits of <b>Factories Rules 1950 standard limits.</b>						
<b>Report Confirmed By :</b>  <i>lrv</i>				<b>For EXCELLENCE LABORATORY</b>  <i>R.S.</i> <b>Authorized Signatory</b>		

**R.REVATHI**  
 Technical Manager

**R.S.DINAKARAN**  
 Quality Manager

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**TEST REPORT**
**NOISE MONITORING**

<b>Report No :</b>	EL-NO-NE-109-12-2020	<b>Report Date :</b>	26.12.2020			
<b>Customer Name &amp; Address</b>  M/s. Hi Tech Arai Pvt Ltd Shed No.1/170-L, Thuvarankulam, Melur Taluk, Madurai - 625 020.	<b>Sample Reference No :</b>	EL-NO-NE-109-12-2020				
	<b>Sample Description :</b>	Sound				
	<b>Monitoring By :</b>	Laboratory				
	<b>Monitoring Date :</b>	19.12.2020				
	<b>Data Received On :</b>	21.12.2020				
	<b>Sampling Method :</b>	IS:9989-1981(Reaffirmed 2001)				
		<b>Monitoring Unit :</b>	dB (A)			
S.No.	Name of the Location	Monitoring Distance in m	Monitoring Time	Night Time (10.00 p.m - 6.00 a.m)		
				Minimum	Maximum	L Equivalent
1.	Near Power House	Site	10.00 PM-11.00 PM	61.9	66.3	63.3
Permissible Limit for Noise as per the TNPCB Norms, 2020. (Night Time)				Maximum 70.0		
<--- End of Report --->						
<b>Notes:</b> The sound levels tested in the above locations are within the prescribed limits of <b>TNPCB tolerance limits of 2020.</b>						
<b>Report Confirmed By :</b>  <i>R.Revathi</i>				<b>For EXCELLENCE LABORATORY</b>  <i>R.S.Dinakaran</i> <b>Authorized Signatory</b>		

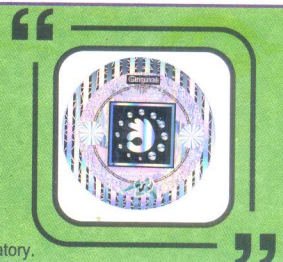
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 Technical Manager

**R.S.DINAKARAN**  
 Quality Manager




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**TEST REPORT**

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**WATER ANALYSIS**

<b>Report No :</b>	EL-NO-WR-230-12-2020	<b>Report Date :</b>	26.12.2020
<b>Customer Name &amp; Address</b>  M/s. Hi Tech Arai Pvt Ltd Shed No.1/170-L, Thuvarankulam, Melur Taluk, Madurai - 625 020.	<b>Sample Reference No :</b>	EL-NO-WR-230-12-2020	
	<b>Sample Description :</b>	Water	
	<b>Sample Drawn By :</b>	Laboratory	
	<b>Sample Collected Date :</b>	19.12.2020	
	<b>Qty of Sample Received :</b>	2 Liter (Approximately)	
	<b>Sample Received On :</b>	21.12.2020	
	<b>Test Commenced On :</b>	22.12.2020	
	<b>Test Completed On :</b>	24.12.2020	
	<b>Sampling Method :</b>	EL-SOP-WRS-01	
<b>Sample Mark:</b>	STP Water (Hand Wash)		

S.No	Name of the Test	Test Method	Units	Results	Max. Permissible Limits of TNPCB Std for Treated Sewage
1.	Biochemical Oxygen Demand (BOD) at 27°C for 3 days.	IS 3025 (Part 44) : 1993 (Reaffirmed 2019)	mg/L	<2.0	30
2.	Chemical Oxygen Demand (COD).	IS 3025 (Part 58) : 2006 (Reaffirmed 2017)	mg/L	<4.0	150
3.	pH value @ 25°C.	IS : 3025 (Part 11) : 1983 (Reaffirmed 2017) Clause No.2	No.	7.2	5.5 - 9.0
4.	Total Suspended Solids @ 105°C.	IS : 3025 (Part 17) : 1984 (Reaffirmed 2017)	mg/L	<5.0	50

&lt;--- End of Report ---&gt;

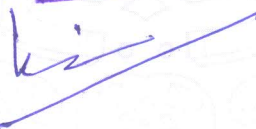
**Notes:**

 The concentration of the parameters tested in the above sample is within the prescribed limits of **TNPCB tolerance limits of 2020.**
**Report Confirmed By :**

**R.REVATHI**  
 Technical Manager

For EXCELLENCE LABORATORY


**R.S.DINAKARAN**  
 Quality Manager

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Lab: No. 23/93, Fifth Street, Ram Nagar, S.S. Colony, Madurai - 625 010.

B.O : No. 15, Metha Layout, Masakalipalayam Road, Peelamedu, Coimbatore - 641 004. B.O: No. 22/33A Second Street, Ram Nagar, Tiruppur - 641 602.



**TEST REPORT**

**WEATHER MONITORING**

<b>Report No :</b>	EL-NO-WE-6-12-2020	<b>Report Date :</b>	26.12.2020
<b>Customer Name &amp; Address</b>  M/s. Hi Tech Arai Pvt Ltd Shed No.1/170-L, Thuvarankulam, Melur Taluk, Madurai - 625 020.	<b>Sample Reference No :</b>	EL-NO-WE-6-12-2020	
	<b>Sample Description :</b>	Weather	
	<b>Monitoring By :</b>	Laboratory	
	<b>Monitoring Date :</b>	19.12.2020	
	<b>Data Received On :</b>	22.12.2020	
	<b>Sampling Method :</b>	EL-SOP-ARS-14-17	
<b>Monitoring Unit :</b>	Near Power House		

S.No	Name of the Test	Test Method	Units	Results	Max. Permissible Limits of ASHRAE
1.	Rain Fall	Instruments Manual Based SOP No. EL-SOP-ARS-16	Mm	0.00	--
2.	Relative Humidity	Instruments Manual Based SOP No.EL-SOP-ARS-14	%	72.5	30 - 65
3.	Temperature	Instruments Manual Based SOP No.EL-SOP-ARS-15	°C	28.5	--
4.	Wind Direction	Instruments Manual Based SOP No. EL-SOP-ARS-16	--	East - West	--
5.	Wind Speed	Instruments Manual Based SOP No. EL-SOP-ARS-16	m/s	1.8	--

<--- End of Report --->

**Notes:**

The above location Relative Humidity does not fulfill the necessities of **ASHRAE standard** with respect to the parameters tested.

**Report Confirmed By :**

*R. Revathi*

**R.REVATHI**  
Technical Manager

**For EXCELLENCE LABORATORY**

*R.S. Dinakaran*

**Authorized Signatory**  
**R.S.DINAKARAN**  
Quality Manager



*Ki*



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