

## DATA SHEET

1.	<b>Project type: River -Valley/ Mining/ Industry/ Thermal/ Nuclear/ other (specify)</b>	:	Construction Project.
2.	<b>Name of the project</b>	:	M/s. L&T Seawoods Ltd. "Integrated Seawoods Project" Plot No. R1, Sector 40, Seawoods railway station, Nerul, Navi Mumbai, Maharashtra.
3.	<b>Clearance letter (s)/OM no. and date</b>	:	No. SEAC-2009/CR.135/TC2 dated: 18.12.2009.
4.	<b>Location</b>	:	
	(a) District	:	Mumbai
	(b) State	:	Maharashtra
	(c) Latitude / Longitude	:	Latitude : 19° 07" N Longitude : 72° 54" E
5.	(a) Address for correspondence	:	Mr. Subrata Banyopadhyay M/S. L & T Seawoods Pvt. Ltd. "Integrated Seawoods Project" Plot No. 1, Sector 40, Seawoods Railway Station, Nerul node, Navi Mumbai, Maharashtra. E-Mail: <a href="mailto:subrata.bandyopadhyay@larsentoubro.com">subrata.bandyopadhyay@larsentoubro.com</a>
6.	<b>Salient Features</b>	:	
	(a) Of the project	:	The Project Proponent has been appointed by CIDCO as the developing agency with an objective to upgrade the infrastructure of the existing Railway station and develop an integrated complex comprising of rail station, Retail & Commercial office spaces. The indicative area statement is as follows: Total Plot Area: 1, 62,002.83 sq. m. Total Proposed Construction Area: 8,10,771 sq. m Total FSI area: 2,43,004 sq. m (Commercial- 1,40,684; shopping And retail: 73,251; Hotel & Service apartment: 24,415 & Entertainment: 4,654) Construction for Railways: 43,579 sq. m.

	<b>(b) Of Environmental Management Plans</b>	:	<ul style="list-style-type: none"> <li>▪ Implementation of Sewage Treatment Plant and reuse of treated sewage for flushing, cooling tower and Gardening</li> <li>▪ Implementation of Rainwater Harvesting</li> <li>▪ Use of solar energy for generation of hot water for kitchens and pantries and for street light.</li> <li>▪ Ventilation and Air Conditioning system has been provided with variable speed drive mechanism for energy saving during times of low load.</li> </ul>												
<b>7.</b>	<b>Break Up of the project area</b>														
	<b>(a) Submergence area: forest &amp; non forest.</b>	:	No forest land												
	<b>(b) Others</b>	:	Not Applicable												
<b>8.</b>	<b>Breakup of the project affected population with enumeration of those losing houses /dwelling units only, agricultural land only, both dwelling units &amp; agricultural land &amp; landless labourers /artisan.</b>	:	Not Applicable												
	<b>(a) SC, ST /Adivasis</b>		Not Applicable												
	<b>(b) Others (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is carried out give details and years of survey)</b>	:	Not Applicable												
<b>9.</b>	<b>Financial details</b>														
	<b>(a) Project cost as originally planned and sub-sequent revised estimates and the year of price reference.</b>		Project cost- Originally planned - 3,118.00 Crores Revised Estimated - 5,500.00 Crores												
	<b>(b) Allocation made for environmental management plans with item wise and year wise break-up.</b>	:	<table border="1"> <thead> <tr> <th colspan="3"><b>Cost Break Up For Environmental Management Plan :</b></th> </tr> <tr> <th><b>Environment Protection Measure</b></th> <th><b>Capital Cost in Lakhs (Rs.)</b></th> <th><b>Recurring Cost/ annum in Lakhs (Rs.)</b></th> </tr> </thead> <tbody> <tr> <td>Environment Protection measures during construction stage (barrier construction, water sprinkling etc.)</td> <td>1,50</td> <td>2</td> </tr> <tr> <td>Labour facilities (personal protective equipment, other</td> <td>1,00</td> <td>10</td> </tr> </tbody> </table>	<b>Cost Break Up For Environmental Management Plan :</b>			<b>Environment Protection Measure</b>	<b>Capital Cost in Lakhs (Rs.)</b>	<b>Recurring Cost/ annum in Lakhs (Rs.)</b>	Environment Protection measures during construction stage (barrier construction, water sprinkling etc.)	1,50	2	Labour facilities (personal protective equipment, other	1,00	10
<b>Cost Break Up For Environmental Management Plan :</b>															
<b>Environment Protection Measure</b>	<b>Capital Cost in Lakhs (Rs.)</b>	<b>Recurring Cost/ annum in Lakhs (Rs.)</b>													
Environment Protection measures during construction stage (barrier construction, water sprinkling etc.)	1,50	2													
Labour facilities (personal protective equipment, other	1,00	10													

		measures concerning occupational health, drinking water/ sanitation etc.)		
		Sewage Treatment Plant	7,00	70
		Solid Waste Management	15	10
		Rain Water Harvesting	3,50	2.5
		Green Belt	75	7.5
		Environmental Monitoring (including cost of staffing)	10	20
		<b>Total</b>	<b>1400</b>	<b>122</b>
	<b>(c) Benefit cost ratio/Internal rate of Return and the year of assessment</b>	:	Not Applicable	
	<b>(d) Whether (c) include the cost of environmental management as shown in the above.</b>	:	Not Applicable	
	<b>(e) Actual expenditure incurred on the project so far</b>	:	Rs. 3335.11 Crores	
	<b>(f) Actual expenditure incurred on the environmental management plans so far</b>	:	Rs. 870.21 Lakhs	
<b>10.</b>	<b>Forest land requirement.</b>	:		
	<b>(a) The status of approval for diversion of forest land for non-forestry use</b>	:		
	<b>(b) The status of clearing felling</b>	:		
	<b>(c) The status of compensatory afforestation, if any</b>	:	Not Applicable	
	<b>(d) Comments on the viability &amp; sustainability of compensatory afforestation programme in the light of actual field experience so far</b>	:		
<b>11.</b>	<b>The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information</b>	:	Not Applicable	
<b>12.</b>	<b>Status of construction.</b>	:	01.06.2011	
	<b>a) Date of commencement (Actual and / or planned)</b>	:		
	<b>b) Date of completion (Actual and/ or planned)</b>	:	30.06.2014 (Planned) / 17.12.2019 (anticipated)	
<b>13.</b>	<b>Reason for the delay if the project is yet to start.</b>	:	Not Applicable	
<b>14.</b>	<b>Dates of site visits</b>	:		
	<b>(a) The dates on which the project was monitored by the Regional Office on previous occasions, if any</b>	:	19 <sup>th</sup> January, 2017	
	<b>(b) Date of site visit for this monitoring report</b>	:	Refer Post Monitoring Report	
<b>15.</b>	<b>Details of correspondence with project</b>	:	• Environment Clearance Letter vide No. SEAC-	

**authorities for obtaining action plans /  
information on status of compliance to  
safeguards other than the routine  
letters for logistic support for site visits.  
(The first monitoring report may  
contain the details of all the letters  
issued so far, but the later reports may  
cover only the letters issued  
subsequently.)**

2009/CR.135/TC2 dated: 18.12.2009.  
• Amended EC received dated 05.04.2010

# Post Monitoring Report

## Project

Integrated Seawoods Commercial Complex, Plot No. R1, Sector 40,  
Nerul, Navi Mumbai – 400 706

## Period

January 2017 – June 2017

## Proponent

M/S. L & T Seawoods Ltd.

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January 2017 – June 2017

## **INTRODUCTION**

Environmental Clearance has been granted for proposed Development of Integrated Seawoods Commercial complex, Plot No. R1, Sector 40, Nerul, Navi Mumbai 400 706 by the Ministry of Environment & Forest, Government of India vide letter No. SEAC-2009/CR.135/TC2 dated 18.12.2009. As per the conditions of the clearance, periodic environmental monitoring is to be carried out during the construction and operation phase.

### **SCOPE OF WORK:**

**Includes Monthly monitoring for:**

#### **A. Ambient Air Quality Monitoring:**

**Aim:** To Preserve Air quality around the project area.

The project land is in and around operating Seawoods Railway Station. Ambient air quality monitoring was carried out at a one location (above podium) for 24 hrs. Samples were collected and analyzed for SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub>, CO etc. The results are summarized in **Table No. 1** as per the standard methods mentioned in **Table No. 2**.

#### **Measures adopted to reduce air pollution:**

1. Temporary barricades are erected to prevent the dispersion of dust & other pollutants.
2. Water sprinklers are provided to control dust.
3. DG set is provided with acoustic enclosure meeting CPCB norms.

#### **B. Ambient Noise Level Monitoring:**

**Aim:** To Maintain noise level within the standard limit around the project area.

Work Room Noise level monitoring was carried out during day time at six locations using a sound level meter and the results are reported in **Table No. 3**. The ambient Noise Level Standards are reported in **Table No. 4**. Noise Monitoring report for D.G. set is reported in **Table 5**.

#### **Measures adopted to keep the noise levels within the limiting standard:**

1. Temporary barricades are erected around the site.
2. High noise generating activities are carried out only during day time

January 2017 – June 2017

**C. Tanker water Analysis:**

**Aim:** To Prevent contamination of the ground water table.

Water Sample was collected from the tanker which is being used for construction use and analyzed for various Parameters. Results of the analysis are compared with IS 3025 & presented in **Table no.6**

January 2017 - June 2017





# ADITYA ENVIRONMENTAL SERVICES PVT. LTD.

Recognized by Ministry of Environment & Forest, Govt. Of India as "Environmental Laboratory" vide Notification S. O.983 dated 2<sup>nd</sup> May 2014

Central Lab: P-1, MIDC Commercial Plots, Mohopada, Patalganga, Dist Raigad. P.O. Rasayani - 410222  
Tel. No. 02192 252008/250352  
E-mail: aespvtltd@yahoo.com

## A. AMBIENT AIR QUALITY MONITORING

**Table No. 1 Standard method of analysis for ambient air quality.  
National Ambient Air Quality Standards (NAAQS)  
(Issued vide Notification dated the 16<sup>th</sup> November, 2009)**

S. No.	Pollutant	Time weighted Average	Concentration in Ambient air		
			Industrial, Residential, Rural & Other Area	Ecologically Sensitive Area (notified by central government)	Method of measurement
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO <sub>2</sub> ) µg/ m <sup>3</sup>	Annual * 24 hours**	50 80	20 80	<ul style="list-style-type: none"> <li>▪ Improved West and Gaeke</li> <li>▪ UV - fluorescence</li> </ul>
2	Oxides of Nitrogen (NO <sub>x</sub> ) µg/ m <sup>3</sup>	Annual * 24 hours**	40 80	30 80	
3	Particulate Matter (size less than 10µg/ m <sup>3</sup> ) PM <sub>10</sub> µg/ m <sup>3</sup>	Annual * 24 hours**	60 100	60 100	<ul style="list-style-type: none"> <li>▪ Gravimetric.</li> <li>▪ TOEM</li> <li>▪ Beta attenuation</li> </ul>
4	Particulate Matter (size less than 2.5µg/ m <sup>3</sup> ) or PM <sub>2.5</sub> µg/ m <sup>3</sup>	Annual * 24 hours**	40 60	40 60	
5	Ozone (O <sub>2</sub> ) µg/ m <sup>3</sup>	8Hours** 1Hours**	100 180	100 180	<ul style="list-style-type: none"> <li>▪ UV Photometric</li> <li>▪ Chemiluminescence's Method</li> <li>▪ Chemical Method</li> </ul>
6	Lead (Pb) µg/ m <sup>3</sup>	Annual * 24 hours**	0.50 1.0	0.50 1.0	
7	Carbon Monoxide (CO) mg/m <sup>3</sup>	8Hours** 1Hours**	02 04	02 04	<ul style="list-style-type: none"> <li>▪ ED-XRF using Teflon filter</li> <li>▪ Non dispersive infrared spectroscopy</li> </ul>
8	Ammonia (NH <sub>3</sub> ) µg/ m <sup>3</sup>	Annual * 24 hours**	100 400	100 400	
9	Benzene(C <sub>6</sub> H <sub>6</sub> ) µg/ m <sup>3</sup>	Annual *	05	05	<ul style="list-style-type: none"> <li>▪ Chemiluminescence's Method</li> <li>▪ Indophenols blue method</li> <li>▪ Gas chromatography based continuous analyzer</li> <li>▪ Adsorption and Desorption followed by GC analysis</li> <li>▪ Solvent extraction followed by HPLC/GC analysis</li> </ul>
10	Benzo(a) Pyrene (BaP) - particulate phase only, ng/ m <sup>3</sup>	Annual *	01	01	
11	Arsenic (As), ng/ m <sup>3</sup>	Annual *	06	06	<ul style="list-style-type: none"> <li>▪ AAS/ICP method after sampling on EPM 2000 or equivalent filter paper</li> </ul>
12	Nickel (Ni, ng/ m <sup>3</sup>	Annual *	20	20	

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E-mail: aespvtltd@yahoo.com

<b>Project By</b>	:	"Integrated Sea Wood Commercial Complex"
<b>Sampling Site</b>	:	Plot No. R1, Sector 40, Nerul, Navi Mumbai - 400 706
<b>Nature of Sample</b>	:	Ambient Air
<b>Period</b>	:	January 2017 - June 2017

**Table No. 2 Ambient Air Quality Analysis**

Month	January 2017	February 2017	March 2017	April 2017	May 2017	June 2017	Limiting Standard
Date	18/01/17	11/02/17	06/03/17	03/04/17	03/05/17	03/06/17	
SPM ( $\mu\text{g}/\text{m}^3$ )	160.5	163.2	201.2	163.1	163.1	165.5	200*
RSPM ( $\mu\text{g}/\text{m}^3$ )	50.6	56.2	44.2	58.9	58.9	62.1	100*
SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	12.9	12.4	11.4	11.2	11.2	11.8	80
NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )	14.2	14.0	14.7	13.9	13.9	15.3	80
CO ( $\text{mg}/\text{m}^3$ )	0.5	0.4	0.3	0.31	0.31	0.35	04 #

[ #] Specified under National Ambient Air Quality Standards by CPCB.

(\*) Please refer Consent to Establish vide letter no. BO/RO(P&P)/EIC No. NM-1561-09/E/CC-51 dated 02/02/2010

Revalidated Consent to Establish vide letter no. BO/CAC-cell/CE/CAC-300 dated 22/03/2017

### **Observations:**

All the parameters mentioned in above table are observed to be within the prescribed limits.

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## B. AMBIENT NOISE LEVEL MONITORING

<b>Project By</b>	:	"Integrated Sea Wood Commercial Complex"
<b>Sampling Site</b>	:	Plot No. R1, Sector 40, Nerul, Navi Mumbai - 400 706
<b>Nature of Sample</b>	:	Ambient Noise & DG Set Noise
<b>Period</b>	:	January 2017 - June 2017

**Table No. 3 Ambient Noise Level Measurement**

Locations	January 2017	February 2017	March 2017	April 2017	May 2017	June 2017
	17/01/17	10/02/17	03/03/17	01/04/17	01/05/17	01/06/17
Security Gate	66.7	64.8	60.2	60.4	62.5	65.7
4 Container Road Corner	64.3	65.7	63.1	62.7	64.9	63.5
Near Rly Office	62.5	68.3	58.4	59.5	60.7	64.8
Near Batching Plant	62.7	64.5	62.1	64.0	63.1	61.9
Near Admin Office	63.7	61.2	57.0	57.2	61.8	59.4
Near Main Gate	65.4	63.7	58.6	59.0	58.4	64.5

**Table No. 4 Noise Monitoring for DG Set**

	January 2017	February 2017	March 2017	April 2017	May 2017	June 2017
	17/01/17	10/02/17	03/03/17	01/10/16	01/05/17	01/06/17
East	74.8	73.8	69.8	72.1	73.5	74.1
West	74.1	74.6	70.2	71.6	69.5	73.4
South	73.7	74.9	71.9	73.8	71.2	70.9
North	74.5	73.8	73.7	70.5	74.5	69.4

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**Table No. 5: Noise Level Standards**

Notation	Category of Area	Std. under EP Act (dB(A))	
		Day Time	Night Time
I	Industrial Area	75	70
C	Commercial Area	65	55
R	Residential Areas	55	45

**Observations:**

Noise levels at all the locations of the site are observed to be within the prescribed limit (75 dB) for day time as per Environment Protection Act, 1986

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### C. Construction Water Analysis

<b>Project By</b>	:	"Integrated Sea Wood Commercial Complex"
<b>Sampling Site</b>	:	Plot No. R1, Sector 40, Nerul, Navi Mumbai - 400 706
<b>Nature of Sample</b>	:	Construction Water
<b>Period</b>	:	January 2017 - June 2017

**Table No. 6: Construction Water Monitoring Report**

Locations	January 2017	February 2017	March 2017	April 2017	May 2017	June 2017	Limit
Date	18/01/17	11/02/17	12/09/16	03/04/17	05/11/16	03/06/17	
pH	7.06	7.26	6.98	6.86	7.38	6.66	Not less than 6
Acidity (as CaCO <sub>3</sub> )	ND	ND	ND	ND	ND	ND	50 mg/l
Total Alkalinity as CaCO <sub>3</sub> ,	172	244	112	52	46	248	250 mg/l
Sulphate (as SO <sub>4</sub> )	296	28	04	10	29	25	400 mg/l
Chloride (as Cl)	1023	44	25	13	52	45	2000 mg/l
Suspended Solids	58	48	08	22	26	18	2000 mg/l

**Observations:**

All the parameters are observed to be within the prescribed limits of Water Monitoring Reports.

