

# **JOINT COMMITTEE REPORT**

**(In compliance with Order of Hon'ble NGT (SZ)  
O.A.No. 8 of 2018.)**

**THE INVESTIGATION  
carried out in and around the premises**

**of**

**M/s. Karaikal Port Pvt., Ltd.,  
Karaikal District,  
U.T. of Puducherry**

**between**

**19.02.2019 to 22.02.2019**

**by**



**Central Pollution Control Board,  
Regional Directorate (South)  
“Nisarga Bhavan”, 1st Floor,  
Thimmaiah Road, 7th ‘D’ Cross,  
Shivanagar, Bengaluru - 560 079.**



**Puducherry Pollution Control Committee,  
III Floor, Housing Board Building,  
Anna Nagar, Puducherry – 605 008.**

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**Investigation on Public Complaints on Environmental Status in and around the premises of M/s. Karaikal Port Pvt., Ltd., carried out in compliance with the order of Hon’ble NGT and Hon’ble High Court of Judicature at Madras**

**A. Reference and Background :**

1. Original Application No.8/2018(SZ) Petitioner Sh. Shahul Hameed verse Puducherry Pollution Control Committee before the Hon’ble National Green Tribunal, Principal Bench, New Delhi hearing through video conferencing on 05.12.2018.
2. Writ petition was filled W.P.No.33942 of 2018 by Karaikal Port Pvt Ltd against the verdict of Hon’ble National Green Tribunal, Principal Bench, New Delhi in the Hon’ble High Court of Judicature at Madras and passed the order on 29.01.2019

**Date of Investigation: 19<sup>th</sup> February 2019 - 22<sup>nd</sup> February 2019**

**Background:**

With reference to the original application No.8/2018(SZ) of applicant/petitioner Sh.Shahul Hameed S/o Sh.Syed Ahamed aged 48 Years residing at House No.5, Panam Kolli, Yusufia Nagar, Nagor, Tamil Nadu-611 002 versus Puducherry Pollution Control Committee before the Hon’ble National Green Tribunal, Principal Bench, New Delhi hearing through video conferencing on 05.12.2018, the Hon’ble NGT has directed (**ANNEXURE – L1**) to constitute a Joint Committee by Central Pollution Control Board and Puducherry Pollution Control Committee and to verify the allegations/statements made on the activities of the Karaikal Port Pvt Ltd, Karaikal District, U.T. of Puducherry along with the above said petitioner and to submit the report by 23.01.2019.

Subsequently, Karaikal Port Pvt Ltd has filed a Writ Petition No.33942 of 2018 against the verdict of Hon’ble National Green Tribunal, Principal Bench, New Delhi in the Hon’ble High Court of Judicature at Madras, the appeal of which was admitted and has granted an interim stay (**ANNEXURE – L2**) on the order of the NGT and has further passed an order on 29.01.2019 (**ANNEXURE – L3**), directing to constitute a Joint Committee by Central Pollution Control Board and Puducherry Pollution Control Committee and to verify about allegations/statements made in the application No.8/2018(SZ) on the activities carried out by

Karaikal Port Pvt Ltd, Karaikal District, U.T of Puducherry in the presence of petitioner cum private respondent Sh. Shahul Hameed and to submit the report by as stated in the Hon'ble NGT within six weeks.

**B. Action Taken:**

Central Pollution Control Board (CPCB) and Puducherry Pollution Control Board (PPCC) constituted a committee comprising of Dr.M. Madhusudan, Scientist-E/Additional Director, Sh.K. Karunakaran, Senior Technical Supervisor, from CPCB, Zonal Office, Bengaluru, Dr. N. Ramesh, Senior Environmental Engineer and Sh. Poogajendy.C, Junior Engineer, from PPCC/DSTE, Puducherry and Sh. P. Ashok kumar, Junior Laboratory Assistant from PPCC/DSTE, Karaikal District, U.T. Puducherry. (ANNEXURE – L4)

The Committee planned the schedule for the meeting, investigation, ambient air quality monitoring and communicated to the applicant, Sh. Shahul Hameed to be part of the investigation and to indicate/brief about the allegations made. (ANNEXURE – L5)

Members of the Committee from CPCB & PPCC took a preliminary meeting along with the petitioner Sh. Shahul Hameed and official of Karaikal Port Pvt Ltd namely Sh.Muralidaran, CEO, Sh.A.R. Ramanarayanan, GM - Legal, Sh.M. Sekhar, GM-EHS, Sh.K. Rajendran, Deputy Manager-EHS, in the Office of the Puducherry Pollution Control Committee, Karaikal District, U.T. of Puducherry on 19.02.2019. The copy of the attendance marking the participants is enclosed. (ANNEXURE – L6). The Committee discussed the issues raised by the petitioner and requested him to be part of the investigation and monitoring activities in and around the Karaikal Port Pvt Ltd, covering the areas of Keelavanjore, Karaikal, & Nagore, Nagapatinam, Tamil Nadu. The Committee has also given the full liberty to the petitioner to indicate any environmental degradation if observed. (ANNEXURE – L7).

Second meeting was held at Karaikal Port Administrative office with the Members of the Committee along with the Petitioner Sh. Shahul Hameed and the official of Karaikal Port Pvt Ltd namely Sh. Muralidaran, CEO, Sh. A. R. Ramanarayanan, GM - Legal, Sh. M. Sekhar, GM-EHS, Sh.K. Rajendran, Deputy Manager-EHS on 20.02.2019 so as to understand the overall activities of the Karaikal Port.



**Photo -1** Meeting in PPCC office



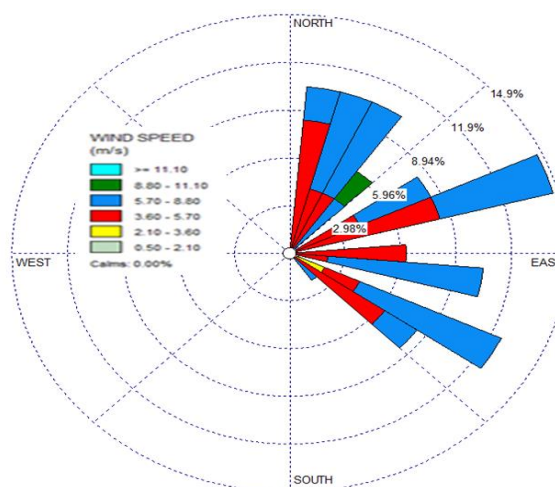
**Photo -2** Meeting in KPPL office

## C. Field Survey:

### C1. Identification of Suitable Monitoring Locations and Ambient Air Quality Measurement:

On understanding the overall area of study, it was observed that the road distance from Karaikal Port to Nagore is about 3 kms towards south western side and 10 kms to Nagapatinam, Tamil Nadu and about 14 kms to Karaikal Municipal limit towards Northern Side. The Members of the Committee, along with the officials of PPCC, comprising of 1) Sh. L. Savaridass, Field Attendant, 2) Sh. P. Ganesa Raju, Scientific Assistant, 3). Sh S. Anthuvan Francis Vinoth, Laboratory Technician, 4). Sh.R. Ramakrishnan, Laboratory Technician 5). Sh.V. Balamurugan, Laboratory Technician of laboratory and the Petitioner along with the Public of Nagore, Tamil Nadu, Keezhavanjore Village, Karaikal District, identified suitable locations, two numbers each in the above villages and two locations in the premises of Karaikal Port on 19.02.2019.

Due care was taken in selecting the locations so as to collect representative sample considering the wind pattern/wind rose plotted for the data of the period 1<sup>st</sup> to 19<sup>th</sup> February 2019 (Fig-1) and nature of complaint. The predominant and highest wind speed was found to be from East North East direction to West South West direction towards Nagore. It is found wind speed is ranging from 2.0 to 9.4 m/s at the average rate of 5.7m/s



**Fig.1** Wind Rose

The Respirable Dust sampler (RDS) model RDS-DXNL and RDS-NL having valid calibration certificate are utilized for both dust and gaseous sampling at the above six locations. The ambient air quality monitoring started on 19.02.2019 evening onwards. The Particulate Matter (PM<sub>10</sub>) samples were collected on 8 hourly basis and the gaseous samples, *i.e.*, Sulphur dioxide (SO<sub>2</sub>) & Nitrogen dioxide (NO<sub>2</sub>) were collected on 4 hourly basis.

The ambient air quality monitoring was planned to conduct for two days (48Hrs). However, due to limited movement of trucks on the day of monitoring, it was decided to continue for one more day. Hence, the ambient monitoring was carried out for 72 hrs starting from 19.02.2019 to 22.02.2019.



**Photo-3** Air Quality Monitoring at ATM Towers, Nagore

**Table-1:** Names of the locations of ambient air quality monitoring and its geographical details:

Sl.No	Locations of Ambient Air Quality Monitoring Carried out Jointly CPCB & PPCC during 19 <sup>th</sup> to 22 <sup>nd</sup> February 2019	Geographical Position	Aerial Distance from Main Gate of KPPL
1.	House No.5, Panam Kolli, Yusufia Nagar, Nagor, Tamil Nadu-611 002	Lat:10°49'40" Lng:79°50'41"	1.5-2.0 Kms
2.	ATM Towers, Kalpandaga Salai, Nagore, Nagapatinam Tamil Nadu-611 002	Lat:10°49'11" Lng:79°50'11"	1-1.5 Kms
3.	House No.15, North Street, Keelavanjore, Karaikal, Puducherry-611 002	Lat:10°50'17" Lng:79°50'23"	0.5-0.75 Kms
4.	Community Hall Upstairs, Keelavanjore, Karaikal, Puducherry-611 002	Lat:10°50'40" Lng:79°50'11"	0.5-0.75 Kms
5.	On the Roof of CAAQMS-1, Near Admin Building, Karaikal Port Premises, Karaikal, Puducherry	Lat:10°49'58" Lan:79°50'29"	200 mts
6.	Near Iron Ore storage plot, Near Northern Break waters, Karaikal Port Premises, Karaikal, Puducherry	Lat:10°50'66" Lng:79°50'92"	1.5-2.0 Kms



**Fig.1 Locations of Ambient Air Quality Monitoring Carried out at Keelavanjur, Nagore & Karaikal port During 19.02.2019 to 22.02.2019**



#### **D. Interaction with the Public and Field Survey in the Surrounding Areas:**

##### **D1. Survey at Keezhavanjore Village, Karaikal, Puducherry:**

Members of the Committee, along with the petitioner Sh. Shahul Hameed visited Keezhavanjore village, which comprises of about 220 houses, situated at the proximate of 0.5-0.75 Km at the western side of the Karaikal Port in the jurisdiction of Karaikal, Puducherry on 19.02.2019. A physical walk on survey was carried out street to street, verified in & outside of the houses and on open lands of Keezhavanjore village by interacting with the public.

Second field survey was made on 20.02.2019 along with the officials of Karaikal Port so as to ensure that both the parties are witnessing and listening to the public and walked along the streets and open land, has done on 19.02.2019.

##### **D2. Survey at Nagore Town, Nagapattinam, Tamil Nadu:**

Nagore town is located towards the south western direction within a Km aerielly from Karaikal Port in the District of Nagapatinam, Tamil Nadu. While indentifying the ambient air quality monitoring stations at Nagore, the Members of the Committee along with the Petitioner Sh. Shahul Hameed and other public were made physical survey at many streets, houses and at open places on 19.02.2019.

Second field survey also was made along with the officials of Karaikal Port towards railway tracks from exit gate of Karaikal Port and Railway Station at Nagore, so as to ensure that both the parties are witnessing the situation and the Committee Members and the Petitioner walked in and around the houses, streets, open lands, Railway tracks and Railway stations on 20.02.2019.

### **D3. Survey at Vanjore Kuppam:**

Vanjore Kuppam is located western side of the Karaikal Port about 1 to 1.5 Kms distance from Port. This village consists of about 80 houses. Physical survey was made by the members of the team on 20.02.2019.

### **D4. Interaction with the District Environmental Engineer of TNPCB:**

Discussed about various complaints received against Karaikal Port by Tamil Nadu Pollution Control Board, followed by road survey towards Nagore to Thiruvarur via Kongelancherry about 10 kms and towards Nagore to Nannillam via Thittacherry about 10 kms was made as to assess the status of coal deposit on the road due to spillage of coal from trucks moving on the road from Karaikal Port.

### **E. Representations Received from Various Groups:**

During the survey, many groups of people have given petitions against the Karaikal Port and deterioration of Environmental conditions which are summarized in table-2

**Table-2: Representations Received from Various Groups:**

<b>Sl.No.</b>	<b>Petition From</b>	<b>Dated</b>	<b>Nature of Petition</b>
1	People of Village, Keezhavanjore	20.02.2019	Supporting Karaikal Port
2	Indian National League, Nogore	21.02.2019	Against Coal Handling by Karaikal Port
3	Nagore Makkal Nala Sangam	21.02.2019	Against Coal Handling by Karaikal Port
4	Nagore Vanigar Sangam Routed through Tamil Nadu Pollution Control Board	19.01.2019	Against Coal Handling by Karaikal Port
5	Grama Panchayat, Keezhavanjore	21.02.2019	Against Coal Handling by Karaikal Port
6	People of Village, Vaddaku Vanjur	22.02.2019	Supporting Karaikal Port



7	Tamil Nadu Dr.J.Jayalalitha Fisheries University, Nagapatinam, Routed through Tamil Nadu Pollution Control Board	06.09.2018	Complaint against Municipal Solid Waste Dumping by Nagore town.
8	Tamil Nadu Pollution Control Board addressed to Collector Nagapatinam	06.08.2018	Complaint against Municipal Solid Waste Dumping by Nagore town.

Out of Eight Petitions Received,

- Two are from Keezhavanjore Village, one group supporting and another group is complaining against the coal handling activities of Karaikal Port.
- Three are from Nagore, Nagapatinam Tamil Nadu in which, all are complaining against the coal handling of Karaikal Port.
- One from Vaddaku Vanjore, supporting the coal handling activities of Karaikal Port.
- Two are about the Municipal Solid Waste Dumped near Vettar river by Nagore town and requested to take appropriate action
- While interacting with the public, diverse views emerged. Most of them are complaining about traces of coal dust deposited on their houses and causing ill health of all kinds. Many people are in opinion, that after mechanization, though traces of dust are still observed, significant reduction of the same has been observed. The employment opportunities and other social initiatives carried out by the Karaikal Port were appreciated.

## **F. Observations of the Field Survey:**

**F1. Keezhavanjore Village** is located at 500 to 750 meters distance towards the western side of the Karaikal Port where handling/transporting large quantity of coal is being carried out. During the process while unloading the coal from ship to conveyer, conveyer to storage yard, storage yard to dispatch involves lot of transfer operations. During these operations if coal is not properly, regularly wetted, the fine powder of the coal is prone to fly off in the atmosphere and settle in the nearby area, particularly at Keezhavanjore village, which is located in predominant wind direction.

1. The Committee during the inspection of the village, observed layers of coal dust deposits in three houses located at the middle of the village. Thin layer of fine coal powder was

observed in few houses and on vegetation. There were some deposit of the carbon soot on the over head tanks and TV antennas in few houses.



**Photo-4.** Coal deposit on TV Antennas at Keezhavanjore Village



**Photo-5** Coal deposit on Over head tanks at Keezhavanjore Village

Such deposits were not observed in all the houses, streets, vegetation and open lands in and around the village at Keezhavanjore.



**Photo-6.** Plants not having coal dust deposit at ground level at Keezhavanjore Village



**Photo-7** No deposit in the drain at the Periphery of Karaikal port towards Keelavanjue village

2. Algae layer was noticed on the pond, but coal deposit on the layer of algae was not observed.
3. On the allegation of crop damage surrounding of Keezhavanjore village, it was observed that the nature of soil itself is saline because of tidal effect (back water) of the rivers Vettar and Piravadayanar, since it is very close to the sea. There is no possibility of any waste water generated by Karaikal Port contaminating the soil or ground water at Keezhavanjore village. It was also inferred that recent Tsunami has increased the salinity of the Soil.



**Photo-8** Over view of roof tops of the few houses in Melavanjure



**Photo-9** Water Pond behind prayer hall at Melavanjure no deposit/mixture of coal dust

**F2. Nagore Town** is located in the south west direction with an aerial distance within a Km from Karaikal Port intersecting by River Vettar. During the wind direction towards Nagore, the possibility of carrying over of the coal dust may cause air pollution. This river flow is influenced by tidal effect except during heavy rain. As per the topography, waste water generated by Karaikal port is likely to flow towards sea and will not flow towards Nagore town.

4. During the survey, it is observed that some traces of coal dust were found in few houses but most of the houses are normal in appearances.
5. It was very evident that coal deposit was found at railway tracks sidings, particularly at track curvatures which was caused by the spillage from the wagons transporting coal. Though Karaikal Port and Railway department claims that regular cleaning is in practice, it is very difficult to separate the fine particle of coal mixed with gravels/jelly. Hence, the deposits accumulated as fine powder may continue to remain as there is no means of separating jelly and fine powder on the tracks. However, in the process of track cleaning, the coal collected is being deposited at intermittent locations of railway tracks which is required to be shifted to Karaikal Port from time to time.



**Photo-10** Track on which wagons carries coal spill over in the track



**Photo-11** Track on which passenger tracks moves found no coal deposit



6. The road way survey jointly carried out by the Members of the Committee, towards Nagore to Thiruvarur and Nagore to Nannilam concludes that there are about 220 to 250 trucks are moving from Karaikal Port every day in which many of the trucks are transporting coal. The coal spillover is prone to happen at the junctions, curvatures, on the humps if the trucks are not properly covered or if overloaded. However, laborers were deployed to clean the road frequently and no significant deposit of spill over during the survey was found on the road sidings.



**Photo-12** Hump at Highways no deposit of coal found



**Photo-13** Laborers deployed to clean the road if coal deposit is found

### **F3. Municipal Solid Waste Dumping Near Vettar River, Nagore**

During the joint survey of the Committee, it is found that huge quantity of municipal solid waste generated by public of Nagore is dumped near the Vettar River.

The dumping stretch is about 400-500 meters. The dumping site is 0.5 Km to Nagore and 1.0 Km to Karaikal port. During the inspection, the solid waste is burning throughout the day and lot of smoke is being dispersed. This might also contribute to the carbon soot deposits which were observed in Nagore.



**Photo-14** Smoke on Municipal Solid Waste

**Other photographs taken during field visit are in Annexure-F1 & F2**

## **G. Investigation in Karaikal Port Private Limited (KPPL), Karaikal, Puducherry**

Karaikal Port Private Limited (KPPL) is situated at the latitude of 10° 54' 49.9932" N and Longitude of 79° 50' 41.4816" E. at Keezhavanjore Village, T.R.Patinam, Karaikal, under the jurisdiction of UT Puducherry. It is a deep sea water port in the Bay of Bengal. The lagoon type basin protected by breakwaters allows its operations all around the year.

Karaikal Port with an area of 602 acres of land on the Eastern coast was leased out to MARG Ltd in the year 2005 for 30 years and likely to be extended further. The port was developed by the Chennai based M/s MARG Limited and became operational during April, 2009. It is reported that the cargo/ materials are imported/ exported from various countries namely Indonesia, Australia, South Africa, and USA.

Karaikal Port is a multi-cargo handling terminal, handling cargoes such as Coal, Raw sugar, Fertilizer, Cement, Project Cargo and Construction materials, Containers and liquid cargo and to serve the hinterland covering the areas of Ariyalur, Perambalur and Trichy Thanjavur, Nagapattinam, Mettur, Salem, Erode, Coimbatore, Dindigul, Nilgiris, Tirupur Bellary, Raichur, Hasaan, Mysore, Shimoga, Palakkad and Walayar.

The Port Layout consist of basic facilities such as five berths, coal and non coal open yards, warehouses, internal roads, railway siding, Customs, Effluent Treatment Plants, Sewage Treatment Plants, Fire Station, Port Medical centre, Canteen etc.

### **G1. Berths Facilities**

Karaikal Port has 5 operational berths for transporting various cargoes/ material and these berths are dedicated exclusively for handling specific products. The Details of the berths are as follows table-3

**Table -3: Details of the Berths at Karaikal Port**

<b>Berth no.</b>	<b>Length overall (m)</b>	<b>Width(m)</b>	<b>Depth (m)</b>	<b>Type of Vessel</b>	<b>Cargo</b>
1	260	21	14.5	Panamax	Liquid/General Cargo
2	230	21	14.5	Panamax	Container/General Cargo
3	360	35.6	15.5	Capesize	Coal
4	365	35.6	15.5	Capesize	Coal
9	220	20	11	Handymax	Container/General Cargo

## **G2. Storage Facilities**

Port having about 600000 sq.m with storage capacity of 3 million tons of coal, iron ore, gypsum and general cargo. The Port also handle consistent volumes of liquid cargo through 4 oil tanks with a combined capacity of 18,900 CBM of which 3800 of 2 nos and 5650 of 2 nos for edible oil. Port has 12 closed warehouses (total area of 85000 Sq. m) with storage capacity of 2.25 lakh tons of fertilizer, food grains, sugar, cement and other clean cargo.

## **G.3. Railway Tracks for Transporting the Material:**

Port obtained rail connectivity in January 2010 and its railway sidings are connected to Trichy via Nagore. The port has 3 railway tracks (Total 5.9 kms) ending in 6 individual sidings of about 700 mts each (3 for loading & 3 for receipt & dispatch). This railway siding is located near by the village Keelavanjore at an aerial distance of 0.5 km.

## **H. Statutory Clearances**

The details of Statutory Clearance and its validities obtained from various Ministries /Departments by the Karaikal Port Pvt. Ltd. are summarized as below in table-4.

**Table -4: Details of Statutory Clearance and its Validities**

<b>Sl. No</b>	<b>Clearances</b>	<b>Authority</b>	<b>Order Reference</b>	<b>Date of Issue</b>	<b>Validity up to</b>
1	Environment Clearance	MoEFCC	MoEF No. 10-42/2009 IA-III	22.09.2009; 03.02.2015 & 14.05.2018	21.09.2019
2	Environment Clearance	MoEFCC	MoEF No.F.No.11-35/2010- IA.III	25.10.2010	
3	NOC Pollution Angle	PPCC	No.PPCC/NOC/KK L/JE/2006/303	09.02.2006	One time
5	Hazardous Waste Authorization	PPCC	PPCC.No.7162/PPC C/HWM/JSA/2015/1 265	07.12.2015	07.12.2020
6	E-Waste Authorization	PPCC	No. 5135/PPCC/e-Waste/JSA-III/2015/1252	04.12.2015	03.12.2020
7	NOC Pollution Angle (General Cargo)	PPCC	No.PPCC/NOC/AD D-PRO/TRP/KKL/JE/1 106	23.11.2016	One time
8	NOC Pollution Angle (Coal enhancement)	PPCC	No.PPCC/MIN/NOC /ENH/TRP/KKL/JE/ 2016/1201	13.12.2016	One Time

9	NOC from (State Ground Water Unit) Puducherry	SGWU	No.854/HG-II/SGWU&SC/2016-17/1111	20.12.2016	One time
10	Consent for Air, Water to operate	PPCC	No.PPCC/CON/AIR/TRP/KKL/JE/2018/ ; No.PPCC/CON/WT R/TRP/KKL/JE/2018/	29.03.2018	31.03.2019, Applied for Renewal
11	NOC for handling Sand	PPCC	No.PPCC/NOC/SAND/TRP/KKL/JE/2018/1264	03.01.2019	5 Years up to 31.01.2023
12	NOC for restoration of Coal handling up to 10 MMTPA		PPCC/NOCCHR/TRP/KKL/JE/2019/1367	01.02.2019	5 Years up to 31.01.2023

### I. Consent to Operate:

The consent issued by Puducherry Pollution Control Committee vide L.No. PPCC/CON/AIR/TRP/KKL/JE/2018/and No.PPCC/CON/WTR/ TRP/KKL /JE/ 2018/dated 29.03.2018 is stands valid till 31<sup>st</sup>, March 2019. However, Karaikal Port has already applied for renewal of the same vide L.No.KPPL/ENV/PPCC/2019/04 dated 25.02.2019.

Puducherry Pollution Control Committee has permitted M/s Karaikal Port Pvt Ltd to handle different types of Cargo in four berths comprising of following materials. Table-5

**Table-5: Cargoes and their Quantities handled by Karaikal Port**

		FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19 (Jan)	
Sl.No	Product	Consent/ NOC	Quantity Handled	Consent/ NOC	Quantity Handled	Consent/ NOC	Quantity Handled	Consent/ NOC	Quantity Handled
1	Coal	6	4.66	10	6.97	10	6.09	5 **	5.05
2	General Cargo	2	0.9	2	1.72	5 *	1.8	5 *	1.65
3	Edible Oil	2.5	0.13	2.5	0.15	0.5	0.05	0.5	0.03
4	Crude	1	0.27	1	0.26	1	0.16	1	0

**All quantities in MMTPA**

**\*\*** The quantity of Coal Cargo that can be handled has been revised to 10.0 MMTPA vide the Minutes of the 162<sup>nd</sup> meeting of Puducherry Pollution Control Committee held on 10th Dec 2018.

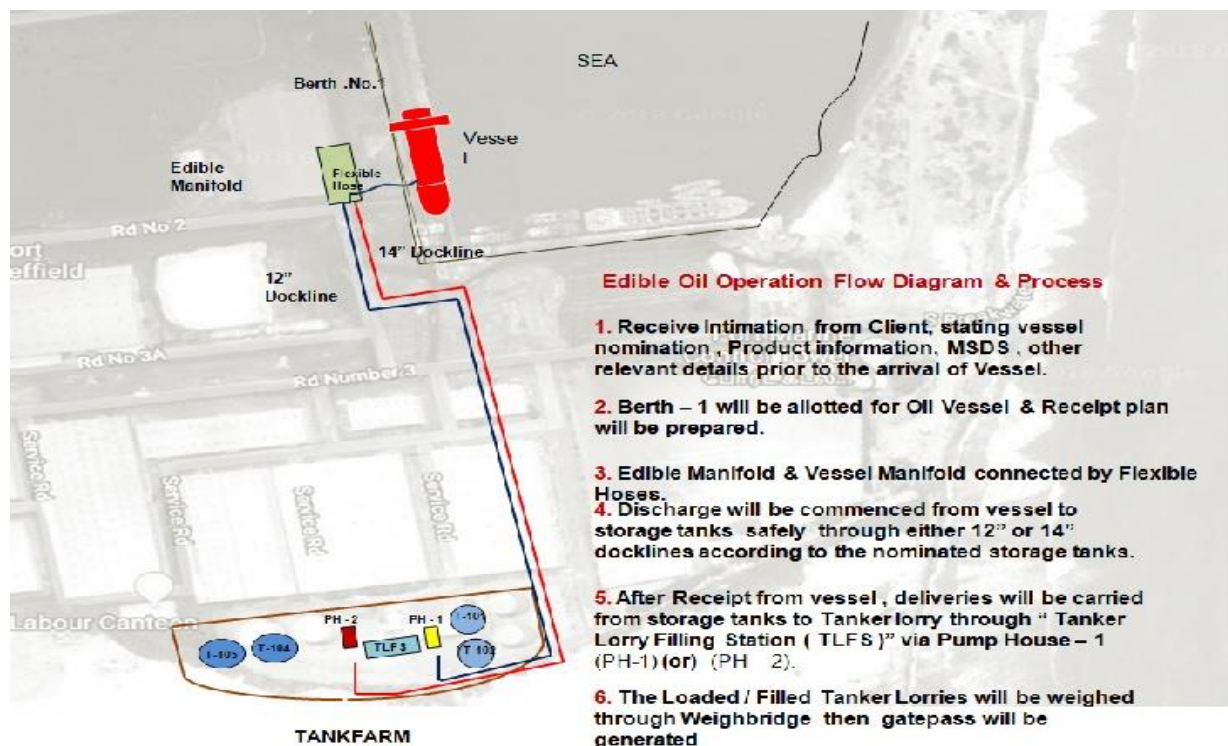
**\*** Included Cement in Bulk (0.5 MMTPA) and Sand (1.0 MMTPA) in the current consent.

**Note:** General Cargo means comprising of Textiles, Machinery, Timber, Steel, Containers, Granite, Wood Chips, Aggregates, Dolomite and clinkers, Marble Slabs, Iron ore, Fertilizers, Clay, Gypsum, Limestone, Agro Products like Sugar, Red Chillies, Wheat, Corn., Salt and Cement (Bags), Sand, Cement in Bulk

The quantity of product handled, as reported by Karaikal Port which is reflected in the table-5 for the three years from 2015 to 2019 were verified and found to be handled within the consented quantity for the year.

It is reported that out of 5 berths being in operation, berth No.1 is mostly utilized for transporting/discharging the liquid (edible and crude oils). The edible oils are pumped from vessel to the storage tank in a closed circuited pipeline. Again, it is transported through tankers to various customers. It is observed that there is no spillage of oil at the transfer points since the pipelines are in closed loop. The crude oil is directly pumped to Chennai Petroleum Corporation Ltd, (CPCL) Nagapattinam.

Fig-3





## **J. Status of Mechanization System for Coal Handling:**

Chronology of events with respect to “The Commissioning of Coal Handling Mechanisation System” is as follows in table-6:

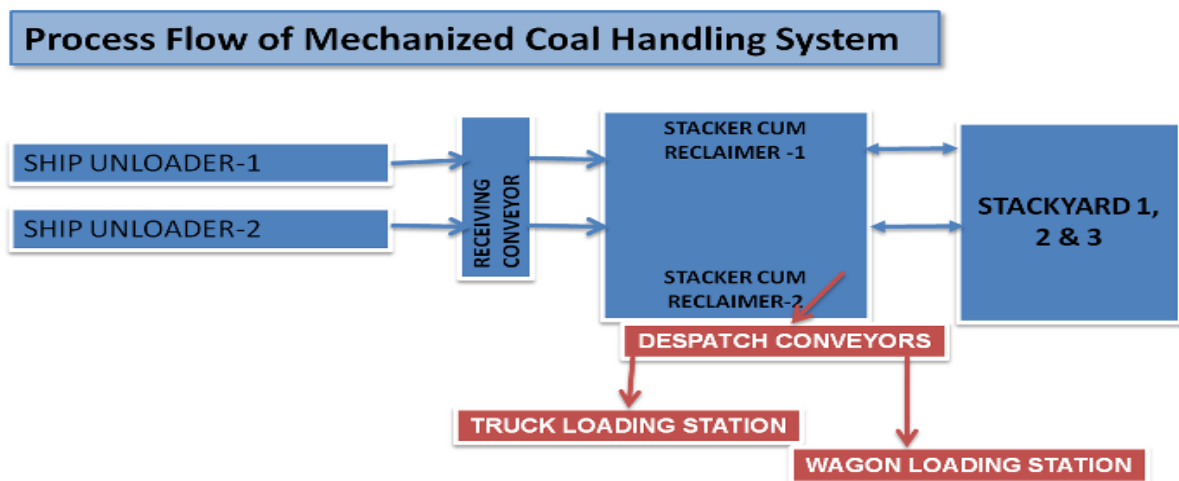
**Table-6: Chronology of events of Commissioning of Mechanisation:-**

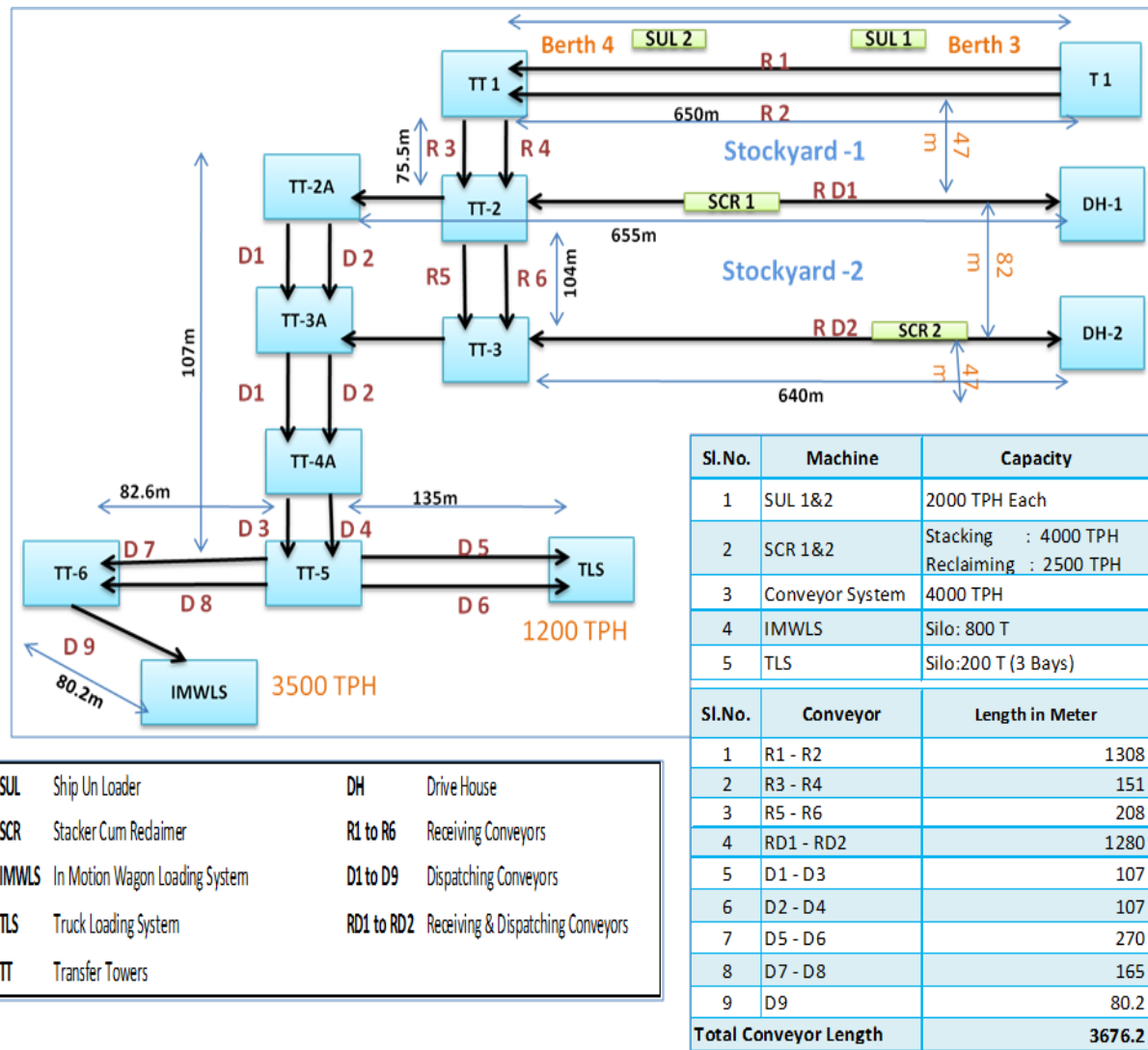
<b>Sl No</b>	<b>Description</b>	<b>Date</b>
1.	KPPL made an application to MoEF for an Environmental & CRZ Clearance for Phase II Project which includes Coal Handling Mechanization	03.11.2008
2.	Received a ToR for Phase II Proposal	22.12.2008
3.	Received an Environmental & CRZ Clearance for the said Project Phase II	22.09.2009
4.	Award of work to M/s FL Smidth for Ship Unloader after due technical negotiations	Aug 2010
5.	Award of work to M/s Mc Nally Bharat for Stacker cum Reclaimer after due technical negotiations	Aug 2010
6.	Award of work to M/s Mc Nelly Bharat for Conveyor System	March 2011
7.	Truck Loading System & Wagon Loading System awarded to M/s Rice Lake Inc	Feb 2011
8.	Received a Show cause from PPCC towards improve mitigation measures to control dust emission including commissioning of mechanized handling	28.02.2011
9.	KPPL replied with the expected date of completion of mechanized coal handling system	11.03.2011
10.	Received a direction from PPCC towards improve mitigation measures to control dust emission including commissioning of mechanized handling	06.06.2011
11.	Award of Work to M/s FL Smidth for Electrical 110 kV transmission line	Aug 2011
12.	<p>KPPL in its reply to the direction (06.06.11) fixed expected date of Completion of Mechanization as Dec 2011 &amp; subsequently Mar 2012.</p> <p>Further, there were many issues linked to each other which have led to the delay in the erection and commissioning of the Mechanisation such as the following</p> <ul style="list-style-type: none"><li>• Right of Way (RoW) Issues with the private land owners and M/s Sanmar for the Transmission Towers erection &amp; stringing.</li><li>• Availability of enhanced Power from the Puducherry Electricity Department (PED) and the related hindrance</li><li>• During the resolving of the issue with respect to the RoW and the availability of Power the original vendors left the site for other project works. Subsequently Sub Contractors demobilized due to stoppage of work. Hence requirement of relook at the Equipment/ systems and its upgradation</li></ul>	<p>09.09.2011</p> <p>to</p> <p>09.01.2018</p>

Sl No	Description	Date
	<ul style="list-style-type: none"> <li>Remobilization of all the Contractors back to work</li> <li>They were to be brought back for completion of the Project which again led to some loss of time.</li> <li>Financial stress due to slow ramp up in cargo quantities and change in customer profile</li> </ul>	
13.	Revised Works awarded to the Vendors as follows <ul style="list-style-type: none"> <li>➤ CREW &amp; Rice Lake to restart the Project Works in March 2018</li> <li>➤ M/s FL Smidth in May 2018</li> </ul>	
14.	PPCC in various communication had given deadlines and KPPL replied to the same with requests for extension of the same in view of the above. In its Renewal of Consent to Operate Order dated 29 <sup>th</sup> March 2018, PPCC set the deadline of 31 <sup>st</sup> March 2019, with a review of the same in Oct 2018.	
15.	Erection and Commissioning completed with the total cost of project to the tune of Rs.450/-Crores and was inaugurated by the Hon'ble Chief Minister of Puducherry on 30 <sup>th</sup> Oct 2018, six months before the revised deadline given by the PPCC.	30.10.2018

This mechanized coal handling system replaced the Conventional Cargo Handling system which involved many components such as Harbor Mobile cranes, Vessel Cranes, and heavy equipments for inter carting the cargo such as Front end loaders, Tippers, Excavators etc. Vessel Cargo is unloaded from the vessel with the help of Harbour Mobile cranes / Vessel Cranes. Further Jetty Cargo will be shifted to stock yard and railway siding with the help of Tippers and heavy equipments.

The Process flow and its infrastructural facilities of mechanized coal handling system are depicted in figure-4 & 5 as follows: The photographs of the mechanized system are enclosed (ANNEXURE-FK).





As depicted in the Process Flow of the Mechanized System above, the flow of Cargo (Coal) from the Ship/ vessel starts with the discharging of the Coal from the Ship/ vessel with the help of the Ship Unloader (SUL) Grab into the SUL Hopper. From this hopper with the help of the belt feeder the coal flows into the Berth Conveyor system which carries the same to the Open Coal Storage Yard. The coal brought in by the conveyor system is stacked in the storage yard with the help of the Stacker cum Reclainer. For dispatching the coal from the storage yard the coal is reclaimed with the help of the Reclainer and put on the dispatch conveyor system which leads to the Silos of the Wagon Loading System (WLS) or the Truck Loading System (TLS). Based on the demand the Trucks and the Wagons are loaded using the bottom chutes of these silos. All these operations are equipped with dust suppression system through wetting.

During the transfer of coal from the Ship/ vessel to the storage yard and then to wagons and trucks from the storage yards using the mechanized system, the use of various

equipment such as tippers, excavators and the loaders are eliminated. The Mechanised System has increased the efficiency of handling and reduction in dust emissions considerably. It is reported that the total quantity of equipment used such as the Tippers, Loaders and the Excavators used during the conventional method of Handling Coal has now come down by 70%.

#### **J1. Reduction of Vehicles due to Mechanised Activity:**

The coal from 14 plot in the Southern side have been evacuated and the evacuated sit will be used for some other general cargo.



**Photo- 15** Coal Plots Evacuated



**Photo- 16** Coal Plots at Mechanized Conveyor Area

The number of equipment used before Mechanisation were 75 tippers, 30 loaders, 20 excavators and after the Mechanisation, it has been reduced to 30 tippers, 15 Loaders, 8 excavators for the use.

#### **K. Status of Coal Storage Yard:**

The stock yard used for storing the coal before the commissioning mechanization is now evacuated and entire quantity of coal is now stored at new plots near to the conveyer systems. The coal in the stockyard is stored at less than 10 meters height as stipulated in the consent. The stockyard is not having proper demarking, labelling about the size of coal yard, identity of plot, quantity stored, and details of receipt of coal. Adequate water is sprinkled which reflects no smoke, fire and carryover of fine particles from coal yard is observed during three days of inspection. However, it was observed that some sprinklers were leaking and few were not sprinkling adequately which required to be repaired from time to time following preventive maintenance.

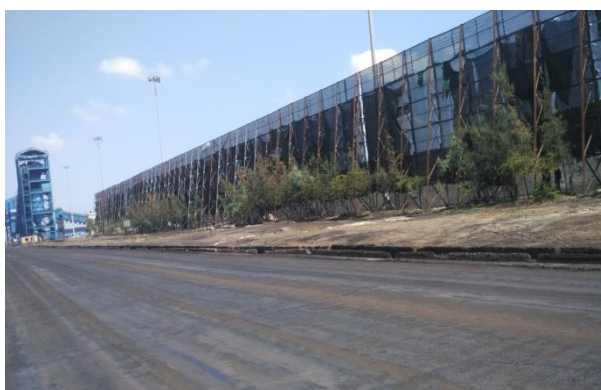
#### **L. Status of Wind Screens:**

The Karaikal Port has erected Wind Screens at many places of which is summarized below in table-7.

**Table-7: Status of Wind Screens**

<b>Height of Wind Screens</b>	<b>Length in mtrs</b>	<b>Locations</b>	<b>Present Status</b>
6 Meters (HDPE)	300	North end railway siding towards Vadaka Vanjore	Partially damaged
15 Meters (HDPE)	1052	Along road no-2 & 8A near coal yards	In position
15 Meters (Corrugated Metal Sheet)	260	Northern side of WLS along railway siding towards Keezhavanjore	In Position
15 Meters (Corrugated Metal Sheet)	190	Southern side of WLS along railway siding towards Keezhavanjore	In Position
15 Meters (HDPE)	260	Northern side of WLS along railway siding towards Keezhavanjore	Damaged due to Gaja cyclone
12 Meters (Water Curtain)	100	Along Southern Side compound wall Towards Nagore side	Under trial run

Note: Water Curtains are provided and is being operated under trial basis at the south west of port near container yard towards Nagore. The curtains operates under pressure, discharges fog to suppress the dust. These curtains are installed at 1.5 mts each to a distance of 100 meter up to a 12 meters height.



**Photo-17** Wind screen towards Coal Yard



**Photo-18** Wind Screen Towards Keezhavanjore Village



**Phpto-19** Partially damaged Wind Screen towards Keezhavanjore



**Photo-20** Water Curtains under trial run

#### **M. Status of Green Belt:**

The Port has planted nearly 202,155 hybrid Casuarina saplings/ eucalyptus including other variety plants all around the periphery of Port premises and the coal plots from the year 2009 to the present out of which about 75% numbering approximately 1,51,616 of the plants are in survival which helps in curtailing the dust carryover all around the area.

#### **N. Corporate Social Responsibilities:**

During the survey of the surrounding villages, the Joint Inspection Team came across people talking about the CSR activities carried out by the Karaikal Port in respect of Health, Education, Women Empowerment, Skill Development and General welfare activities. These include regular weekly Medical Camps, Ambulances, Fire Services, School Buses, Tuition Centres, Drinking Water Supplies, Tree Plantation, Skill development and Community developmental activities. Karaikal Port further stated in detail the benefits to the villages and the neighborhood areas due to establishment of women Self Help Groups by KPPL. It was reported that an average of Rs. one Crore is spent per year on CSR since the start of the Port. Annexure for the last three years (**ANNEXURE-C**)

#### **O. The Field Survey in the Premises of Karaikal Port:**

- Inspection made to verify the activities and measures adopted for controlling the Pollution in the Karaikal Port by the team of Joint Committee along with Petitioner. The endorsement of Petitioner Participation in the field at Nagore, Keelavanjur and in the inspection of Karaikal Port is enclosed in **annexure-L7**.
- The representative of the Karaikal Port demonstrated about the activities of Ship Unloaders (SUL), Receiving & Dispatching Conveyors & Stacker Cum Reclaimer



(SCR), Sprinkler Based Dust Suppression Systems (DSS), Central Control Room of Mechanisation System, areas of the coal storage yards, Wagon Loading System (WLS), Truck Loading System (TLS), ETPs, Vehicle wash, Tyre Wash and other related areas.

**P. Salient Observations of the Survey made in Karaikal Port by the Joint Committee Members**

- Port involved in transporting coal, fertilizers, wheat, sugar, edible oil, clinker, limestone etc out of which Edible oil transported through a closed loop to the tank farm wherein no oil spillage is found, Other items like except coal and limestone are transported through trucks to the closed storage shed.
- The number of loading and unloading equipments used before Mechanisation has been significantly reduced.
- Due to evacuation of old coal plots space for handling coal has been reduced and now found the coal storage is restricted within Mechanisation area.
- It has been reported, the advanced sprinklers are installed and rectified the existing ones so as to optimise the sprinkling.
- It has seen that water monitors and the water points are provided from which the Cargo wetting is done to ensure complete wetting of the coal to prevent any coal carry over due to wind.
- It is observed from the records that 57,820 trucks and 1,450 rail wagons (664 of bottom opening and 786 normal wagons) loaded with coal moved out of Karaikal Port during the period February 2018 to February 2019 which averages to minimum of 104 trucks and maximum of 181 with an average of 148 trucks per day.
- There are layers of windscreens, rows of plantations to suppress the dust flying towards Keelavanjore village. However some portion of windscreens towards Keezhavanjore were found damaged during Gaja cyclone.
- Coal transported to customer by Road or by Rail Wagon are adequately wetted and covered with Tarpaulin to avoid spillage while in motion as shown below:



**Photo-21** Truck carrying coal covered with tarpaulin



**Photo-22** Rail wagon carrying coal covered with tarpaulin

Bye road truck parking area outside the main gate has been replaced with paver block flooring park which can accommodate 100 trucks at a time and brought into operation as advised by CPCB and PPCC in their earlier report of July 2017. This enhancement of the floor minimised the natural dust added with coal carry over through tyres of the trucks towards the Highways.



**Photo- 23.** Concreted floor for vehicle Parking

- It is observed that the dust suppressing system are adopted in Ship Unloader Grab and Discharge Points, Transfer Points of Conveyors, Coal Storage Yard, Stacker cum Reclaimer, Wagon Loading System at the discharge.

In addition, in order to mitigate the dust emissions the following dust controlling equipments are put in operation:

- High pressure Sprinklers of 52 nos., Mobile Water Tankers attached with rear bar spreaders, Tower (DSS 200) and Truck (DSS 150) mounted Fogging Machines, Dry Fog Dust Suppression System at the transfer points for all conveyors.
- It is observed the wind screens are in place but at a few places towards North end railway sidings (Vadaku Vanjore) about 50% of the length is damaged and wind screen at Northern side of WLS along railway siding towards Keezhavanjore is fully damaged for distance of about 300 mts.



- Karaikal Port has demonstrated about the newly erected Water Curtains towards the South side (Nagore side) having the length 100 mts and height 12 mtrs in which this foggers are fixed in the interval of 1.5 mtrs distance. The performance of this foggers once established, it is informed by the Karikal Port that same shall be extended to install further.

### **Continuous Ambient Air Quality Monitoring Station (CAAQMS) Operated by KPPL**

Verified the performance of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) installed by Karaikal Port at three locations and asked the operator to demonstrate the calibration of the analysers at Main Gate. It is found that the analysers were responding satisfactorily.



**Photo-24** Demonstration of Calibration in CAAQMS



Joint Committee observed the operations of the ETPs, RO system and Vehicle wash and Tyre Wash areas. It is found while washing tyre, the sprinkled water is not properly routed to the ETP and some portion of water overflowing out of the collection system.

**Photo-25**

- It is observed that effective numbers of plantation are developed by the Karaikal Port which mainly helps in curtailing the dust emanated from the various operations of the Port.



**Photo 26.** Plantation towards the boundary of Keelavanjore Village and in the premises of Karaikal Port

#### **Q. Ambient Air Quality Status in the Premises of Karaikal Port**

##### **Continuous Ambient Air Quality Monitoring Stations (CAAQMS)**

The Karaikal Port Authority has installed three Continuous ambient air quality monitoring stations (CAAQMS) supplied and maintained by M/s Thermo Fisher under comprehensive annual maintenance contract at the following locations nearby the boundaries of the premises based on the predominant wind direction and the same is reflected in **table no.8** and in **figure-6**

**Table-8: Locations of Continuous Ambient Air quality Monitoring Stations (CAAQMS)**

<b>CAAQMS</b>	<b>Locations of Continuous Ambient Air Quality Monitoring Stations</b>	<b>Geographical Position</b>	<b>Distance from Main Gate</b>
CAAQMS-1	Near Main Gate, Helipad Area, Karaikal Port Private Limited , Keezhavanjore Village, Karaikal	Lat: 10° 49' 58.48" N Lan: 79° 50' 29.29" E	150 Mts
CAAQMS-2	Near Tank farm area, Karaikal Port Private Limited, Keezhavanjore Village, Karaikal	Lat: 10° 49' 43.51" N Lan: 79° 50' 59.94" E	1.0 to 1.5 kms
CAAQMS-3	Pump House area, Karaikal Port Private Limited , Keezhavanjore Village, Karaikal	Lat: 10° 50' 51.43" N Lan: 79° 50' 35.79" E	1.5 to 2 kms

**Fig-6 Locations of Continuous Ambient Air Quality Monitoring Stations in the Premises of Karaikal Port , Karaikal**



All these three continuous ambient quality monitoring stations are working. The data generated by these monitoring stations are networked through their local server and to the server of Pondicherry Pollution Control Board. Also it is reported that this station is connected with the server of G-lens installed in CPCB but the same is not connected with server of CPCB



**Photo-27** Continuous Ambient Quality Monitoring Stations

The parameters measured are PM<sub>10</sub>, PM<sub>2.5</sub> and Carbon Monoxide (CO). The historical data of hourly average generated from each monitoring station for the period from January 2018 to January 2019 (13 months) were obtained from the Karaikal port.

These hourly data computed to 24 hourly average concentration of every day for the period from January 2018 to December 2018 as to compare with the standard limits prescribed for 24 hrly average by the Central Pollution Control Board (**Table below-9**). Out of every 24 hrly average concentration, the minimum and maximum of the everyday computed and the average of these days of computed to month average concentration. The

table below depicts the minimum and maximum concentration of the every day of the month and average concentration of the month.

**Table-9: 24 hrly concentration of Particulate Matter PM<sub>10</sub> & PM<sub>2.5</sub> Measured in the Continuous Ambient Air Quality Monitoring Stations Operated in the Premises of Karaikal Port During the Period January 2018 to December 2018.**

Date	Jan-18	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec-18
<b>CAAQMS-1 at Main Gate: Particulate Matter PM<sub>10</sub> Concentration</b>												
<b>Min</b>	11.0	11.0	11.0	11.8	11.4	12.9	5.6	9.2	9.5	13.6	4.6	13.0
<b>Max</b>	45.0	62.0	40.0	43.0	25.4	31.9	30.9	24.2	41.9	100.	82.3	68.5
<b>Avg</b>	28.4	24.6	22.9	23.4	17.9	24.8	18.0	17.7	25.9	47.0	42.0	41.2
<b>CAAQMS-2 Near Tank Form: Particulate Matter PM<sub>10</sub> Concentration</b>												
<b>Min</b>	7.0	8.0	7.0	8.4	3.3	9.3	8.0	6.9	15.5	19.1	NV	4.6
<b>Max</b>	38.0	52.0	35.0	35.3	39.4	44.7	36.5	30.5	37.6	104	NV	55.1
<b>Avg</b>	23.0	23.2	23.5	18.0	15.9	26.6	21.0	20.2	25.0	53.1	NV	29.1
<b>CAAQMS-3 Near Pump House: Particulate Matter PM<sub>10</sub> Concentration</b>												
<b>Min</b>	5.0	7.0	5.0	5.0	9.2	8.1	5.1	14.7	5.3	4.8	NW	6.7
<b>Max</b>	18.0	26.0	46.0	45.0	41.1	45.1	54.2	49.7	73.7	79.1	NW	50.7
<b>Avg</b>	13.0	11.4	15.2	14.6	18.1	22.6	21.6	29.2	31.2	31.5	NW	26.8
<b>CAAQMS-1 at Main Gate: Particulate Matter PM<sub>2.5</sub> Concentration</b>												
<b>Min</b>	3.0	4.0	3.0	4.0	3.6	4.8	4.5	5.2	5.9	13.1	9.7	4.9
<b>Max</b>	11.0	19.0	19.0	18.8	14.9	10.6	12.5	15.5	18.3	66.3	35.9	47.3
<b>Avg</b>	7.8	9.3	10.2	9.7	7.2	7.1	9.1	8.9	12.3	30.8	18.8	22.8
<b>CAAQMS-2 Near Tank Form: Particulate Matter PM<sub>2.5</sub> Concentration</b>												
<b>Min</b>	5.0	5.0	5.0	4.6	3.2	3.4	6.1	3.0	4.6	3.1	NV	6.5
<b>Max</b>	26.0	47.0	39.0	28.8	13.7	13.2	13.2	16.0	17.5	59.9	NV	36.1
<b>Avg</b>	17.3	18.3	20.1	12.0	7.6	9.0	10.0	9.1	11.6	33.6	NV	21.0
<b>CAAQMS-3 Near Pump House: Particulate Matter PM<sub>2.5</sub> Concentration</b>												
<b>Min</b>	4.0	6.0	4.0	4.0	4.5	7.8	8.2	7.9	5.0	4.2	NW	5.3
<b>Max</b>	32.0	44.0	41.0	30.0	15.9	17.7	21.3	31.3	30.1	44.8	NW	44.3
<b>Avg</b>	20.0	21.0	16.9	12.2	9.7	13.3	15.3	17.9	17.9	23.1	NW	24.1
<b>Note : All values are in µg/m<sup>3</sup></b>												

The 24 hrly measured concentration reveals that none of the maximum concentration exceeded the standard limit prescribed for Particulate Matter  $PM_{10}$   $100 \mu\text{g}/\text{m}^3$  &  $PM_{2.5}$   $60\mu\text{g}/\text{m}^3$ . However, the daily averages of the every month of the year 2018 found to be ranging from  $17.7 \mu\text{g}/\text{m}^3$  to  $47.0 \mu\text{g}/\text{m}^3$  with an average of  $27.8 \mu\text{g}/\text{m}^3$  at the Main Gate,  $11.4 \mu\text{g}/\text{m}^3$  to  $31.5 \mu\text{g}/\text{m}^3$  with an average of  $21.3 \mu\text{g}/\text{m}^3$  at the Tank Farm and  $10.2 \mu\text{g}/\text{m}^3$  to  $31.5 \mu\text{g}/\text{m}^3$  with an average of  $20.9 \mu\text{g}/\text{m}^3$  at the Pump House in the premises of Karaikal Port. The concentration of Carbon Monoxide, in terms of hourly average of the whole period of the year 2018 was found to be within the prescribed standard limit of  $2 \text{ mg}/\text{m}^3$ . During the inspection of the committee, the third party operating under comprehensive annual maintenance contract was asked to calibrate the analysers measuring the particulate matter. The analysers responded to the calibration and were found to be working properly.

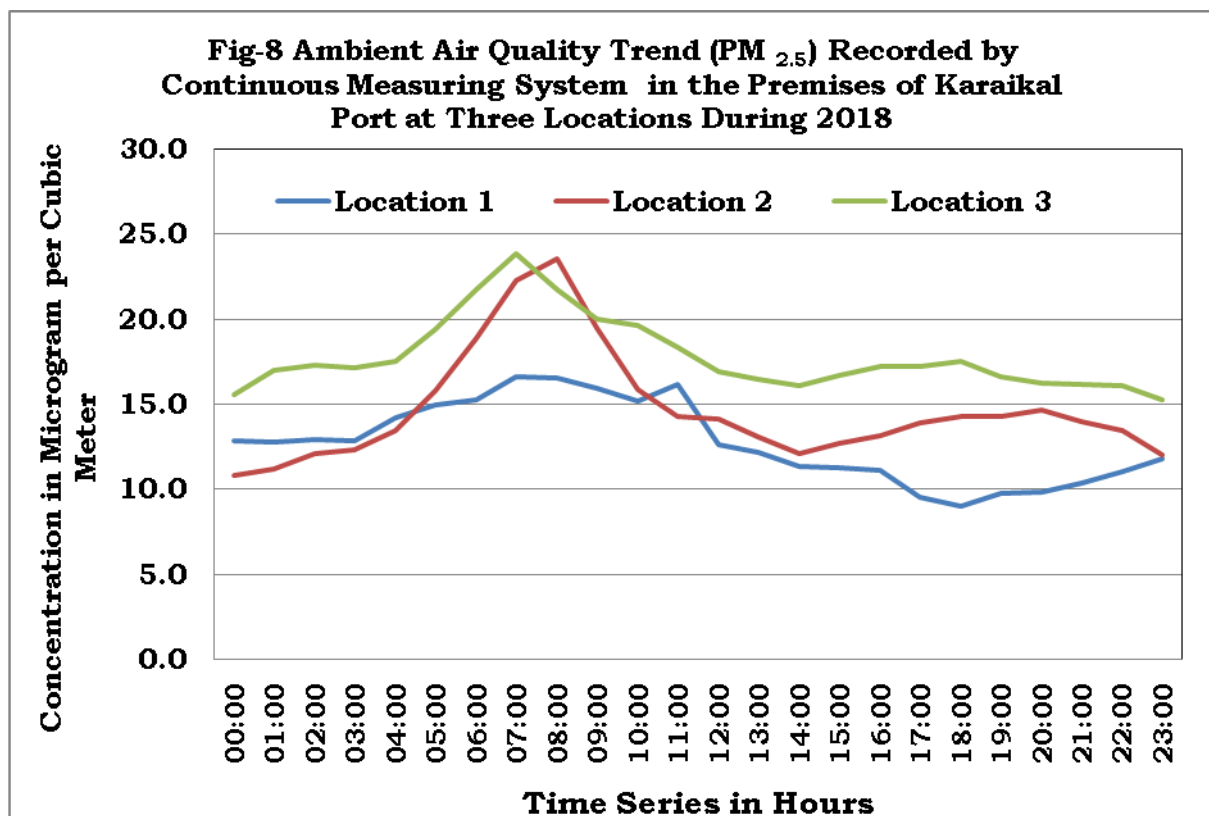
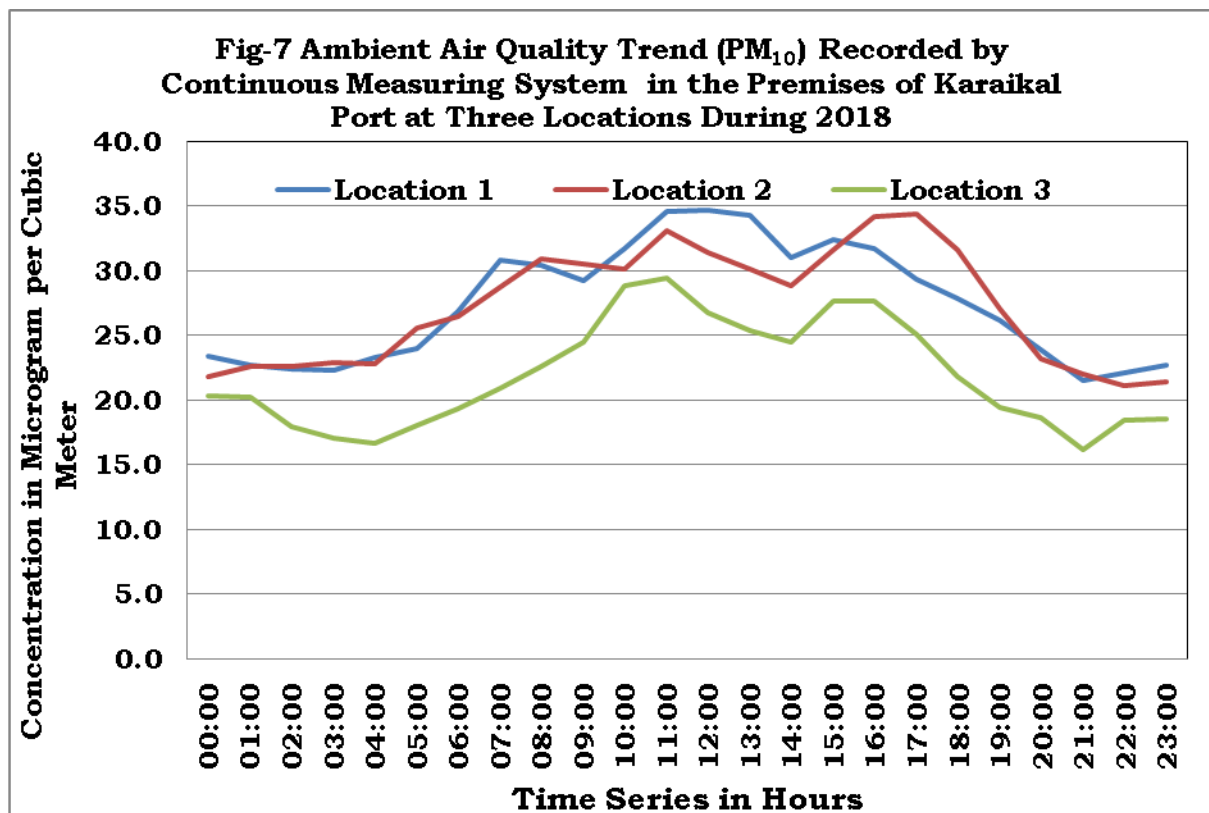
However, since all the 24 hourly concentrations were found to be within the prescribed limits, further evaluated the hourly concentrations of every day of the whole year 2018 and for the period January 2019. The statistical interpretation revealed that out of 28512 hours of three parameters  $PM_{10}$ ,  $PM_{2.5}$  and Carbon Monoxide (CO) in thirteen months 26730 hours of data at the rate of 93.8% were captured out of which 82% of data found to be valid in the monitoring station operated near Main Gate. The hourly average concentration of exceedance of particulate matter ( $PM_{2.5}$ ) with respect to 24 hrly found to be 1.5% and for particulate matter ( $PM_{10}$ ) is 0.7%.

Whereas at Tank farm, the compilation reveals that out of 28512 hours of three parameters  $PM_{10}$ ,  $PM_{2.5}$  and Carbon Monoxide (CO) in thirteen months 23263 hours of data at the rate of 82% were captured out of which 72% found to be valid data. The average percentage of exceedance of particulate matter ( $PM_{2.5}$ ) with respect to 24 hrly found to be 2.0% and for particulate matter ( $PM_{10}$ ) is 1.6%.

The hourly measurement made at Pump House, revealed that out of 28512 hours of three parameters in thirteen months 24173 hours of data at the rate of 84% were captured out of which 81.2% found to be valid. The average percentage of exceedance of particulate matter ( $PM_{2.5}$ ) with respect to 24 hrly found to be 1.3% and for particulate matter ( $PM_{10}$ ) is 1.0%. The statistical data also revealed that highest exceedance of particulate matters  $PM_{10}$  &  $PM_{2.5}$  found to be during the month of November 2018 partially during September 2018.



The hourly time series of the hourly data of the Particulate matter PM<sub>10</sub> & PM<sub>2.5</sub> of the three monitoring stations operated by Karaikal Port are depicted as below:



## **R. Manual Monitoring of Ambient Air Quality During the Joint Committee Inspection:**

### **Joint Survey by CPCB & PPCC.**

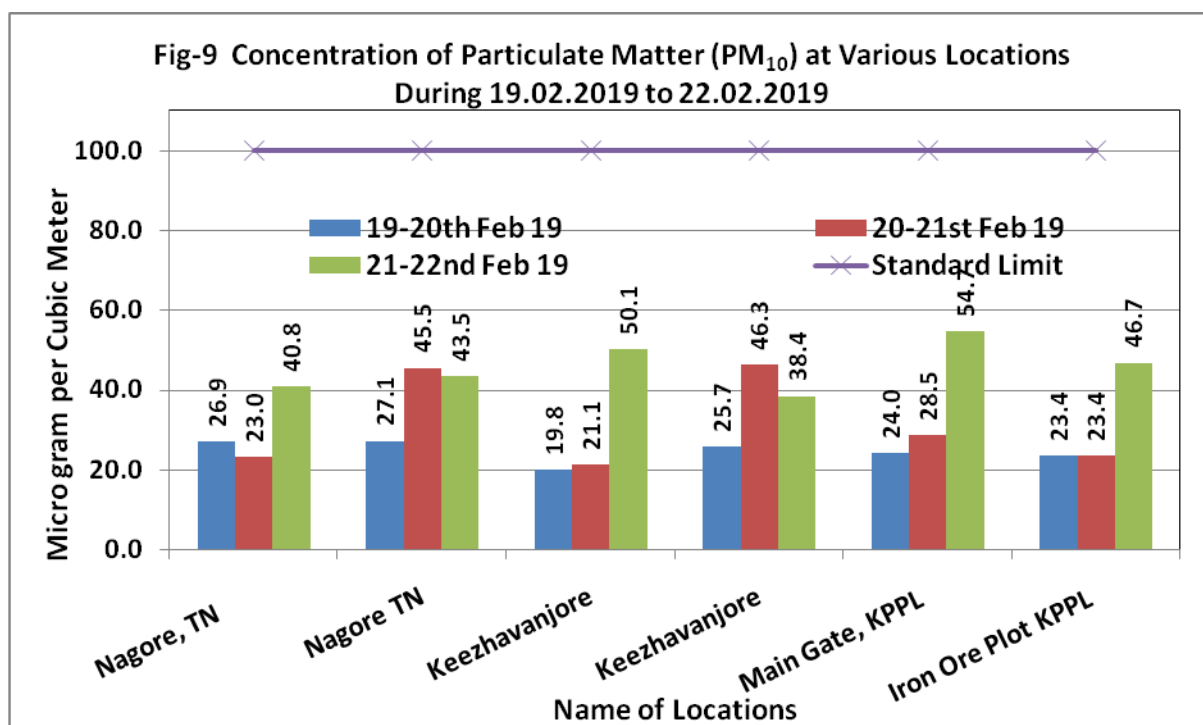
Ambient Air Quality Monitoring was carried out by the team of CPCB and PPCC during 19.02.2019 to 22.02.2019.

Six air quality monitoring locations were mutually selected by the inspection team along with the petitioner considering nature of complaint and predominant wind pattern. Among the six locations two locations are in Nagore in Tamil Nadu, two locations in Keelavanjore village of Puducherry and two locations in the up and down wind direction of the Karaikal Port premises. The monitoring was carried out for three days from 19-02-2019 to 22.02.2019 for 72 hours out of which 54 samples of Particulate Matter (PM<sub>10</sub>) and 252 Gaseous samples for both Sulphur Dioxide (SO<sub>2</sub>) and Nitrogen Dioxide (NO<sub>2</sub>) were collected. The gaseous samples were analysed in the laboratory of PPCC and filter papers for Particulate Matter (PM<sub>10</sub>) and Heavy Metals are analysed in CPCB.

The analysis report revealed that 24 hourly average concentration of Particulate Matter (PM<sub>10</sub>) is ranging from 23 µg/m<sup>3</sup> to 45.5 µg/m<sup>3</sup> in Nagore. In Keezhavanjore it is ranged from 19.8 µg/m<sup>3</sup> to 50.1 µg/m<sup>3</sup>. The concentration of PM was ranged from 23.4 µg/m<sup>3</sup> to 54.7 µg/m<sup>3</sup> inside the Karaikal Port during the three days monitoring period. The concentrations of Particulate Matter (PM<sub>10</sub>) measured both on 8 hourly basis and 24 hourly concentrations are within the prescribed standard limit of 100 µg/m<sup>3</sup>. The gaseous samples of Sulphur dioxide and Nitrogen dioxide are found to be within the prescribed limit of 80 µg/m<sup>3</sup> on all three days.

There was an attempt of intentional physical interruption during the collection of air samples at both the locations of Nagore which have resulted in abnormal concentration as compared to the results obtained at different timing of the same place. Hence, this sample is discarded and only 16 hourly average concentrations is computed for interpretation for that date.

The results of Ambient Air Quality Monitoring carried out at six locations during from 19-02-2019 to 22.02.2019 are reflected in **figure 9.** and **table. No.9**



**Table-10** Analysis Results of Manual Monitoring of Ambient Air Quality Jointly Carried out by CPCP & PPCC during 19-02-2019 to 22.02.2019

Number of Days	Day-1			Day-2			Day-3		
Name of Locations	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>
No.5, Panankollai Street, Yousufia Nagar, Nagore, Nagapattinam Dt. Tamilnadu	2.0	4.5	26.9	4.4	5.8	23*	3.5	6.8	40.8
ATM Towers, Kalpandaga Salai, Nagore, Nagapattinam Dt, Tamilnadu	2.1	4.5	27.1	2.1	4.5	45.5*	2.6	7.3	43.5
No. 15, North Street, Keezhavanjore, Karaikal, Puducherry UT.	2.6	4.7	19.8	2.0	5.4	21.1	2.0	5.4	50.1
Community Hall, Keezhavanjore, Karaikal, Puducherry UT.	2.0	4.5	25.7	2.0	5.2	46.3	2.0	4.5	38.4
CAAQM Station I Upstairs, M/s. Karaikal Port Private Limited., Karaikal	2.6	4.5	24.0	2.0	11.5	28.5	2.0	4.9	54.7
Near Iron Ore Plot area,	2.0	4.5	23.4	2.0	4.5	23.4	2.0	4.5	46.7



M/s. M/s. Karaikal Port Private Limited., Karaikal									
<b>Standard limit for 24 Hours</b>	<b>80</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>80</b>	<b>100</b>
<p><b>Note: All Values are in <math>\mu\text{g}/\text{m}^3</math>,</b></p> <p>* Denotes that two eight hourly (16 hrs) average concentration was taken for computation since public have attempted to add additional dust on the sampling system which has caused to result <math>164 \mu\text{g}/\text{m}^3</math> during the third sample of the second day on at Sh. Shahul Hameed House No.5, Panankolli, Nagor and another sample collected at ATM Towers, Nagore resulted <math>308 \mu\text{g}/\text{m}^3</math> during the second sample on second day.</p>									

#### **S. Air Quality Status Measured through CAAQMS By KPPL During Survey Period:**

Karaikal Port Authority is operating three Continuous ambient air quality monitoring stations (CAAQMS) at three locations namely Main Gate, Tank farm and Pump House. The 24hourly average data generated by these monitoring stations were collected for the period 19.02.2019 to 21.02.2019.

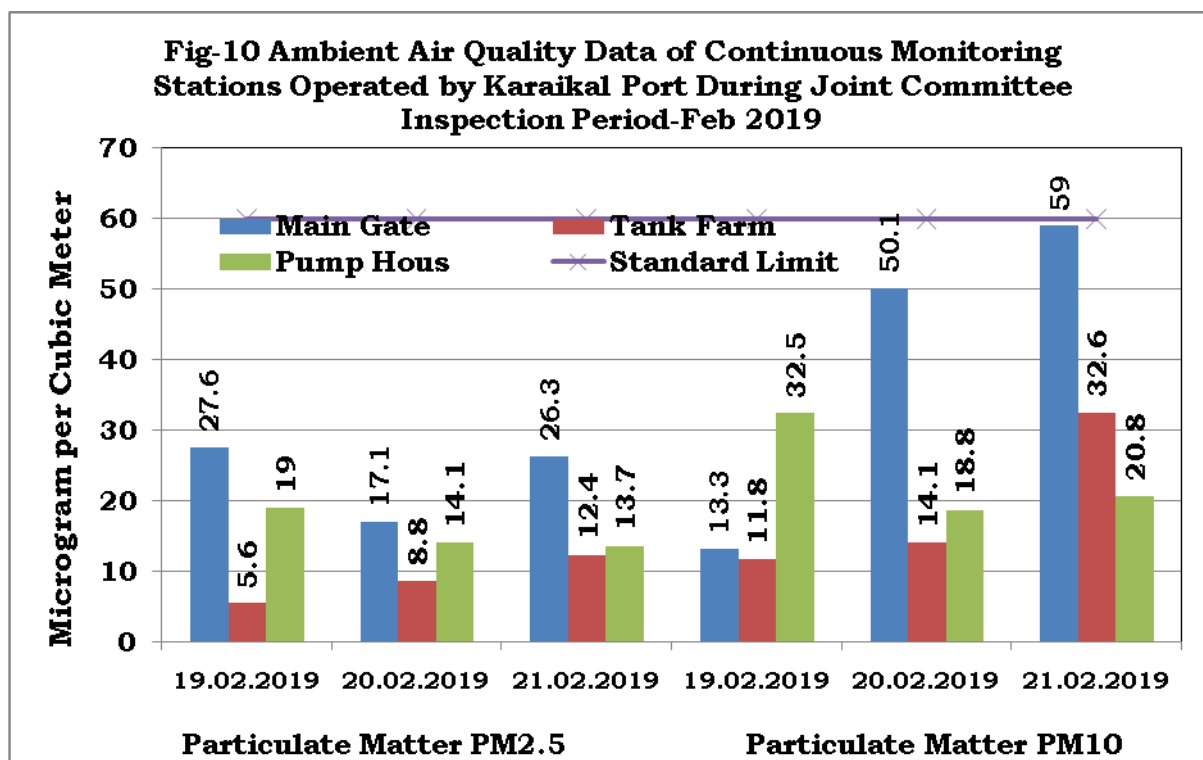
The 24 hourly average data reveals that the minimum concentration Particulate Matter (PM<sub>2.5</sub>) found to be  $3.1 \mu\text{g}/\text{m}^3$  while maximum was  $56.3 \mu\text{g}/\text{m}^3$  with an average of  $8.9 \mu\text{g}/\text{m}^3$  whereas the concentration of Particulate Matter PM<sub>10</sub> is ranging from  $9.1 \mu\text{g}/\text{m}^3$  to  $82.8 \mu\text{g}/\text{m}^3$  with an average of 19.5 on all three days at Tank Farm.

In a similar line the 24 hourly average data of Pump House revealed that the minimum concentration Particulate Matter (PM<sub>2.5</sub>) found to be  $5.4 \mu\text{g}/\text{m}^3$  while maximum was  $23.2 \mu\text{g}/\text{m}^3$  with an average of  $15.6 \mu\text{g}/\text{m}^3$  whereas the concentration of Particulate Matter PM<sub>10</sub> is ranging from  $3.3 \mu\text{g}/\text{m}^3$  to  $42.2 \mu\text{g}/\text{m}^3$  with an average of 24 on all three days.

The measurement results are within the prescribed limit of 24 hourly average concentration for Particulate Matter PM<sub>2.5</sub> and PM<sub>10</sub> during the joint Committee monitoring period. The minimum and maximum concentration of data for three days are depicted in table no-10 and 24 hourly data for three days in figure.

Ambient air quality data of continuous monitoring stations operated by Karaikal Port during the Joint Committee inspection in **Table-10**

	Particulate Matter(PM <sub>2.5</sub> )			Particulate Matter(PM <sub>10</sub> )		
Stat.	19.02.2019	20.02.2019	21.02.2019	19.02.2019	20.02.2019	21.02.2019
Min	3.6	3.1	6.8	10.2	18.1	27.4
Max	28.1	46.8	56.3	33.6	88.2	94.4
Avg	27.6	17.1	26.3	13.3	50.1	59.0
Min	5.6	4.3	12.3	9.1	11.9	11.3
Max	16.7	24.4	19.5	18.0	66.7	82.8
Avg	5.6	8.8	12.4	11.8	14.1	32.6
Min	5.4	6.0	9.7	3.3	4.2	10.0
Max	23.2	19.2	23.1	32.5	42.2	39.2
Avg	19.0	14.1	13.7	32.5	18.8	20.8
Note: All values are in µg/m <sup>3</sup>						



#### **T. Air Quality Measured through CAAQMS By CPCL During Survey Period:**

Air quality data of 24 hourly average concentration measured by two continuous monitoring stations for the period from January 2018 to 21<sup>st</sup> February 2019 were obtained from Chennai Petroleum Corporation, Nagore, Nagapatinam. The data revealed that the minimum concentration recorded is 5.7  $\mu\text{g}/\text{m}^3$  and maximum is 94  $\mu\text{g}/\text{m}^3$  with an average of 33  $\mu\text{g}/\text{m}^3$  for Particulate Matter( $\text{PM}_{10}$ ) and  $\text{PM}_{2.5}$  the minimum is 3.1 and maximum is 81  $\mu\text{g}/\text{m}^3$  with an average of 23  $\mu\text{g}/\text{m}^3$  at one location and at other location the concentration recorded are 3.2  $\mu\text{g}/\text{m}^3$  and maximum is 79  $\mu\text{g}/\text{m}^3$  with an average of 24  $\mu\text{g}/\text{m}^3$  for Particulate Matter( $\text{PM}_{10}$ ) and 3.7  $\mu\text{g}/\text{m}^3$  and maximum is 43  $\mu\text{g}/\text{m}^3$  with an average of 15  $\mu\text{g}/\text{m}^3$ .

The 24 hourly average results of the period from January 2018 to 21<sup>st</sup> February 2019 found to exceeded 1.2% of the Particulate Matter ( $\text{PM}_{2.5}$ ) at monitoring station-1 of the Chennai Petroleum Corporation.

#### **U. Review of Historical Data of Air Quality:**

Based on the various complaints received, the Puducherry Pollution Control Committee took considerable actions and the chronology of the same is enclosed in **Annexure-A**. Followed by the Central Pollution Control Board (CPCB) and Puducherry Pollution Control Committee carried out various inspections and ambient air quality monitoring. In addition ambient air quality monitoring were carried out engaging the third parties empanelled under Pollution Control Committee by Puducherry Pollution Control Committee and Karaikal Port.

Various agencies mentioned in the **table-11** including Central Pollution Control Board and Puducherry Pollution Control Committee were carried out ambient air quality monitoring at various occasions at different locations as reflected in figure-11, out of which the monitoring carried out for few years alone considered for interpretation of the air quality data.



**Figure-11**

- |                         |                                    |                                       |
|-------------------------|------------------------------------|---------------------------------------|
| 1. North Vanjore        | 6. Naduthuru – Keezha Vanjore      | 10. Pandagasalai – Nagore             |
| 2. Iron Ore Plot        | 7. Community Hall – Keezha Vanjore | 11. Pattinumcherry – Nagore           |
| 3. Near High Mast-20    | 8. Keezha Vanjore Village          | 12. ATM Tower – Pandagasalai (Nagore) |
| 4. Berth-9 (Near MCT)   | 9. Nagore Village – Ice Factory    | 13. Yusefia Nagar – Nagore            |
| 5. Opposite to CSR Shed |                                    |                                       |

**Table-11**

Sl.No	Name of Agency	Duration	Status of Air Quality in terms of Standard Limit
1.	Measured by Chennai Petroleum Corporation Limited (CPCL)	1 <sup>st</sup> Jan to 21 <sup>st</sup> Feb 2019	Found no exceedance with respect to Standard Limits
2.	Karaikal Port engaging Thirty party accredited by NABL	April 2018 to January 2019	Found no exceedance with respect to Standard Limits
3.	Puducherry Pollution Control Committee engaging Thirty party accredited by NABL	August 2017 to August 2018	Found no exceedance with respect to Standard Limits
4.	Jointly with CPCB & PPCC	16-07-2017 to 18-07-2017	Found no exceedance with respect to Standard Limits

**Review of Historical Data of above and its Status annexed separately- Annecure-A.**

## **V. Water Quality Monitoring in and around Karaikal Port:**

Two ground water grab samples, one in Karaikal Port and another at Mela Vanjure were collected. Similarly water samples in River Vettar and Paravadaiyar were collected adjacent to the Karaikal Port as to assess the contamination of the Coal deposits. The water samples were analysed in the laboratory of Puducherry Pollution Control Committee following American Public Health Association (APHA 23<sup>rd</sup> Edition) for sample collection and analysis. The Analysis result reveals that there is no contamination of water with respect to coal deposit whereas due to influence of sea water, the characteristics of inorganic constitutions were observed.

## **W. Conclusion:**

In Respect complaints raised in the Original Application No.08 of 2018 of the Petitioner Sh. Shahul Hameed, the Joint Investigation team from Central Pollution Control Board, Bangalore and Pondicherry Pollution Control Committee, Karaikal & Puducherry have surveyed thoroughly at nearby villages of Karaikal Port and the activities of Karaikal Port along with the Petitioner during 19.02.2019 to 22.02.2019 in compliance to order of Hon'ble NGT.

On carrying out the detailed study, the Joint Committee Summarized the Replies Point wise of the Complaints are **tabulated-11** as below:

<b>Sl.No</b>	<b>Points of Complainant</b>	<b>Reply By Respondent 1 &amp; 2</b>
1.	KPPL is not adopted any measures to curb emissions of pollutants to the air	Investigation revealed that KPPL has adopted considerable measures to curb emissions.
2.	Violates all applicable environmental related laws and guidelines	From the available Records, KPPL operates on obtaining the consent or NOC
3.	KPPL is causing Pollution and environmental damage in the surrounding areas such as Nagore Town, Nearby villages in the state of Tamil Nadu and in villages such as Keezhavanjore, Vanjur	Physical survey and Monitoring results of present study and past record shows that air quality is within the prescribed norms of CPCB in all the places of Keezhavanjore, Karaikal and Nagore,

	Kuppam and NARTHVANJUR in UT Puducherry	Tamil Nadu.
4.	Dust emitted from the fugitive emission points are polluting air and there by residence of above said areas are suffering from respiratory illness, skin afflictions and eye & ear problems	Observed patches of coal dust in few locations at Keezhavanjore but not found uniformly in all places on floors, trees and terrace of the buildings.
5.	The flora and fauna of agriculture crops in the above said and nearby areas and water sources are being damaged	No physical damages have been observed. However, these aspects may be examined by any Agricultural Universities.
6.	Coal dust entering the households nearby areas and getting settled in the floors and terrace of the building thereby resulting unhealthy environment and affects the quality of life	Moderate deposit in few houses, Light deposit in some houses were observed but not on all houses. Even light deposit which is below the prescribed limit, on prolonged exposure may affect the health, if it is not properly contained.
7.	Air pollution affecting the workers in the port and nearby areas	The medical report does not indicate any adverse health implication of the workers.
8.	Air pollution preventing pilgrims visiting Nagore, Darga and denying the right to worship	Ambient air quality survey present and past shows within the prescribed norms of CPCB.
9.	Coal dust emitted from the coal handling area are settling in the rivers Pravadar on the North and Vettar on the South of the Karaikal Port and consequently affecting the ground water	The fine coal dust emanating from KPPL have tendency to travel all around the areas and may settle. But it will not affect ground water to that effect.
10.	Setting up and operationalising mechanized coal handling system	KPPL is operating the Mechanised System and Sequential Stabilization of the operation is in progress.
11.	Trucks transporting coal adequately not covered and not confirming	During survey observed that the trucks and wagons are properly covered and



	environmental and transportation related laws	these are checked by CCTV and Security control.
12.	Wind screens not adequate to arrest the dust flyover	Effective numbers of wind screens provided but time to time replacement on wear and tear is required. The wind screens damaged towards Keezhavanjore is yet to be replaced.

The Joint Committee, has observed some patches/thin layers of fine coal dust at some places on the dish antenna, overhead tanks and floors of the houses and more deposit in closed/unused houses during the survey but these deposit is not uniformly found to be seen at all the terraces, vegetation, houses. The floors of open area, streets, lands and water ponds such deposit could not be seen. Team also observed that no such physical damages as reported by petitioner found to be seen except at railway sidings with significant quantity of coal deposit and light coal deposits at humps, curvatures, bends of the high ways.

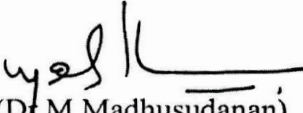
In addition, the monitoring results of hourly and 24 hourly average concentration of Pollutants: Particulate Matter (PM<sub>10</sub>), Particulate Matter (PM<sub>2.5</sub>) and Gaseous concentration of Sulphur Dioxide (SO<sub>2</sub>) and Nitrogen Dioxide (NO<sub>2</sub>) carried out at many locations on various occasions in and around Karaikal Port and Keezhavanjore village and Nagore town from past 2017 to 2019 years are found to be within the prescribed standard limit of 100µg/m<sup>3</sup> & 60µg/m<sup>3</sup> for Particulate Matter (PM<sub>10</sub>) & Particulate Matter (PM<sub>2.5</sub>) and 80 µg/m<sup>3</sup> for Gaseous of Sulphur Dioxide (SO<sub>2</sub>) and Nitrogen Dioxide (NO<sub>2</sub>) respectively. The ambient air quality results obtained includes the sources such as the vehicular movements in the towns, state and national highways and emissions from various industries and continuous emissions from burning of municipal solid waste.

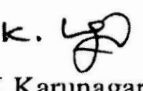
#### **X. Recommendations:**

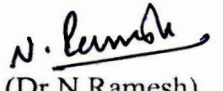
- i) M/s. Karaikal Port shall ensure to handle most of the coal through a mechanized system throughout the period.
- ii) Optimized water sprinkling shall be carried out at all the points of unloading and loading from ship to conveyor, conveyor to storage yard, storage yard to dispatch.
- iii) Should minimize the intermittent interruption of the mechanized process operations and adopt sequential start and stop operations.


- iv) Ensure all the pollution control measures are proper and continuously functioning at all times.
- v) Green belt shall be strengthened further around the Karaikal Port premises particularly towards Keeelavanjur Village.
- vi) Improved version of windscreens shall be erected and damaged windscreens shall be rectified periodically.
- vii) All the loaded vehicles (Truck & Wagons) shall be covered by Tarpaulin before it leaves Port premises.
- viii) Additional precautionary measures shall be implemented in controlling the surge loads of the emissions emanating from the operation process by adopting backup power supply to all essential operations and dust suppression systems.
- ix) Areas like vehicles and tyre washing and its waste water collection system shall be improved without any spillage on the ground and to properly collect and adequately treat the waste water.
- x) The air quality data measured by continuous ambient air quality monitoring stations shall be analysed time to time so as to satisfy with all plausibility checks to take action on higher concentrations measured and to display true concentration of the Particulate Matters to the public at large.
- xi) KPPL shall continue to serve and further strengthen the corporate social response (CSR) activities in the neighborhood which includes School Buses for the School children, Tution Centres, Self Help Group (SHG) for the ladies from the neighboring villages, Medical Centre camps etc. This shall improve the better confidence on their health among the public.


**Signature of Joint Inspection Committee Members**

  
(Dr. M. Madhusudanan)  
Scientist-E/  
Additional Director

  
(K. Karunakaran)  
Senior Technical  
Supervisor

  
(Dr. N. Ramesh)  
Senior Environmental  
Engineer

  
(C. Poogajendy)  
Junior Engineer

  
(P. Ashok Kumar)  
Junior Laboratory Assistant

**Review of Historical Data and Inspections Carried out by Puducherry Pollution  
Control Committee & Central Pollution Control Board.**

# **ACTION TAKEN AND STATUS REPORT**

**OF POLLUTION MITIGATION MEASURES  
IMPOSED AND DIRECTED**

**TO**

**M/s. KARAIKAL PORT PVT., LTD., KARAIKAL**



**DEPARTMENT OF SCIENCE, TECHNOLOGY & ENVIRONMENT  
PUDUCHERRY POLLUTION CONTROL COMMITTEE**



**GOVERNMENT OF PUDUCHERRY  
As on 19.02.2019**

## Review of Historical Data and Inspections Carried out by Puducherry Pollution Control Committee, Central Pollution Control Board and Karaikal Port.

The chronological order of action taken and status report by the Puducherry Pollution Control Committee/ Department of Science, Technology & Environment is reflected from page no 40 to 50. And monitoring carried out by various agencies and by Central Pollution Control Board are depicted from page no.51 to 60

### INVESTIGATION / STATUS REPORT ON M/s. KARAIKAL PORT PVT. LTD., KEEZHAVANJORE VILLAGE, T.R.PATTINAM, KARAIKAL FROM THE POLLUTION ANGLE

#### I. General Details :

Name of the unit	M/s. Karaikal Port Pvt. Ltd.,	
Location of the unit	Keezhavanjore Village, T.R.Pattinam, Karaikal.	
Size and Category of the unit	Large / Red	
Area of the unit	602 Acres	
Air & Water Consent Orders Validity	31.03.2019.	
Activities permitted	Multipurpose Minor Port permitted to handle the following cargo.	
	(a) Coal *	- 10.0 MMTPA
	(b) General Cargo	- 3.5 MMTPA
	(c) Crude Oil & Other Petroleum Products	- 1.0 MMTPA
	(d) Edible Oil	- 0.5 MMTPA
	(e) Sand <sup>#</sup>	- 1.0 MMTPA
	(f) Cement in Bulk <sup>†</sup>	- 0.5 MMTPA
(a) Total Capacity permitted by PPCC, so far, till date		- 16.5 MMTPA
(b) Total Capacity permitted by MoEF&CC, New Delhi, vide EC Clearance		- 21.5 MMTPA
NOTE : NOC issued by PPCC and KPPL has to obtain CTO		
*	The handling capacity of Coal has been reduced from 10 MMTPA to 5 MMTPA by PPCC, in its 157th Meeting held on 05.03.2018, due to non-compliance in erection and commissioning of Mechanized Coal Handling. KPPL has completed erection and commissioning of Mechanized Coal Handling and hence, the restricted Coal Handling Capacity of 5 MMTPA has been restored to 10 MMTPA, by PPCC, in its 162 <sup>nd</sup> Meeting held on 10.12.2018.	
#	In-principle clearance for <b>handling sand</b> upto 1 MMTPA, was issued by PPCC, vide its 157 <sup>th</sup> Meeting held on 05.03.2018. NOC for handling the same was issued subsequently, subject to conditions, by PPCC, in its 162 <sup>nd</sup> Meeting held on 10.12.2018.	
†	Cement in Bulk was proposed to be handled by M/s. Penna Cement Industries Ltd., Hyderabad, by setting up of a separate unit, inside the premises of KPPL and NOC was issued for the same, by PPCC, vide its 157 <sup>th</sup> Meeting held on 05.03.2018.	

#### II. Chronology of Regulatory actions imposed by PPCC, on the operation of M/s. Karaikal Port Pvt. Ltd., Karaikal, on Environment Management and Mitigative Measures:

Chronology of Regulatory and Mitigative Measures imposed by the Puducherry Pollution Control Committee, Puducherry, on M/s. Karaikal Port Pvt. Ltd., Keezhavanjore Village, T.R.Pattinam, Karaikal, under the Provisions of the Environment (Protection) Act, 1986, Air (Prevention and Control of Pollution)

Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, as amended till date, are tabulated below.

Date	Particulars
09.02.2006	NOC from Pollution Angle, issued for construction of Port at Karaikal District.
06.05.2006	Coastal Regulation Zone Clearance, issued by the Ministry of Environment and Forest, New Delhi, for development of Karaikal Port by the Department of Industrial Development (Port), Government of Puducherry, at Karaikal, under Build, Operate and Transfer (BOT) basis.
22.09.2009	Environmental and Coastal Regulation Zone clearance for expansion of Karaikal Port (Phase II), issued by the Ministry of Environment and Forest, New Delhi.
08.12.2009	Consent to Operate (Phase I) issued with validity up to 30.04.2010.
07.06.2010	Consent Renewal (Phase I) issued with validity up to 30.04.2011.
23.06.2010	Direction issued for dust emission based on Complaint, regarding dust emission due to handling of Coal, to comply with the conditions, such as, reduction of height of the Coal heaps, increase the height of already installed Dust Separation walls, made of high resistant polymer meshes and to extend the same in the north-western direction also and to increase the periodicity of sprinkling of water over coal stock yard and during handling of Coal.
28.12.2010	Direction issued for dust emission and spillage during transportation based on complaints, to adopt suitable measures to control dust emissions and spillage during transportation of coal, white clay and other unpacked materials.
28.02.2011	Show Cause Notice issued for coal dust emission based on complaints and News items in papers.
12.05.2011	An Expert Team was constituted to inspect M/s. Chennai Port Trust, M/s. Ennore Port Ltd., and M/s. Karaikal Port Pvt., Ltd., based on public complaints and submitted its report with immediate implementation and implementation within six months period.
06.06.2011	Direction issued to comply with immediate implementation and implementation within six months period, including the mitigation measures imposed in the previous Directions and Show Cause Notice and the recommendations of the report of the above Expert team.
07.10.2011	Direction issued to submit undertaking for immediate implementation and implementation within six months period, <i>i.e.</i> , 31.12.2011.
24.10.2011	Consent Renewal (Phase I) issued with restricted validity up to 31.12.2011, based on the undertaking obtained from the unit.
08.06.2012	Direction to comply 06.06.2011 directives of Mechanization of coal handling with Bank Guarantee of Rs. 50 Lakhs by 10.07.2012.
31.07.2012	Show Cause Notice issued to show cause why action shall not be taken against the unit, to ban the handling on Coal, for non-compliance of the above said direction.
19.12.2012	127 <sup>th</sup> Meeting of the Puducherry Pollution Control Committee, Puducherry decided to issue Consent to Operate for Clean Cargo only, without insisting on Bank Guarantee, with specific conditions to conduct Ambient Air Quality Monitoring in the port premises and submit monthly reports of the same.
23.09.2013	Direction issued for not complying with the Mechanization of Coal Handling and to submit action plan for the same.
28.11.2013	135 <sup>th</sup> Meeting of the Puducherry Pollution Control Committee, Puducherry decided that, coal handling shall be stopped 45 days from the date of issue and Air and Water Consent Orders be renewed up to 30.04.2014, except coal. Action Plan with timelines for completion of automation is 10.5 Months.

02.01.2014	Consent Renewal (Phase I) issued with validity up to 30.04.2014.
22.01.2014	Direction issued to continue coal handling due to considerable progress shown and subject to conditions to submit monthly report and shall strictly adhere to the Timeline of October / November 2014.
06.02.2014	Show Cause Notice issued for not adhering to the action plan.
19.02.2014	Consent to Operate (Phase II) with validity upto 30.04.2014.
19.05.2014	137 <sup>th</sup> Meeting of the Puducherry Pollution Control Committee, Puducherry decided that, works for electrical preparedness shall be completed by 15.05.2014, since receipt of Electrical Power was highlighted by the unit, for non-compliance of the completion of the Mechanization of Coal Handling.
24.07.2014	Consent Renewal (Phase I & II) with validity up to 30.04.2015.
23.09.2014	Direction not to handle coal in the event of not adhering to the timeline of October / November 2014.
06.11.2014	140 <sup>th</sup> Meeting of the Puducherry Pollution Control Committee, Puducherry dated 29.10.2014 decided that the time limit of 30.04.2015 shall be final subject to Bank Guarantee of Rs. 25 Lakhs and undertaking.
16.02.2015	Status Review at 142 <sup>nd</sup> Meeting of the Puducherry Pollution Control Committee, Puducherry, dated 23.01.2015 communicated that timelines committed shall be strictly adhered.
04.05.2015	145 <sup>th</sup> Meeting of the Puducherry Pollution Control Committee, Puducherry held on 30.04.2015 decided that the deadline for commissioning and operating the mechanized coal handling system is extended up to 31.01.2016, subject to payment of Rs. 25 Lakhs instead of forfeiting the Bank Guarantee and additional Rs. 25 Lakhs Bank Guarantee. The Committee further decided to conduct Ambient Air Quality Monitoring, throughout the year in all seasons, for five days, each, by NABL Accredited Laboratories, to keep track of the effectiveness of the mitigation measures practiced by the unit.
22.06.2015	146 <sup>th</sup> Meeting of the Puducherry Pollution Control Committee, Puducherry decided that Consent Renewal (Phase I & II) shall be renewed up to 31.01.2016 and further renewal shall be based on completion of Mechanization of Coal Handling.
16.07.2015	Consent Renewal for Phase I and II was issued with validity restricted to 31.01.2016.
05.10.2015	M/s. Karaikal Port Pvt. Ltd., has applied for NOC for proposal of LNG handling terminal. PPCC has kept the proposal in abeyance, since the validity of ToR, for the said proposal was only till 13.11.2015.
09.11.2015	148 <sup>th</sup> Meeting of the Puducherry Pollution Control Committee, Puducherry held on 28.10.2015, confirmed the stand of the Puducherry Pollution Control Committee, Puducherry, of the decision of the 145 <sup>th</sup> Meeting of the Puducherry Pollution Control Committee, Puducherry held on 30.04.2015.
17.12.2016	M/s. Karaikal Port Pvt. Ltd., has submitted a copy of the ToR, with extended validity upto 13.11.2016.
01.01.2016	149 <sup>th</sup> Meeting of the Puducherry Pollution Control Committee, Puducherry held on 29.12.2015, decided that, the Bank Guarantee imposed on the unit of Rs. 50 Lakhs, has been forfeited due to non-compliance of the completion of the Mechanization of the Coal Handling and extending the time line for completion of the same upto 30.09.2016, with a Bank guarantee of Rs. 50 Lakhs.
06.01.2016 to 07.01.2016	Thiru. S. V. Reddy, Scientist F, Ministry of Environment, Forest and Climate Change, Regional Office, Chennai, has conducted inspection for the compliance status of the Conditions specified in the Environment Clearance, issued by Ministry of Environment,



	Forest and Climate Change, New Delhi, at M/s. Karaikal Port Pvt. Ltd.
01.02.2016	Consent Renewal for Phase I & II, issued with restricted validity up to 30.09.2016, further Renewal would be based on the completion of the Mechanization of Coal Handling.
04.02.2016	The proposal of LNG Handling Terminal has been deferred by the Committee, in the 150 <sup>th</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 04.02.2016.
08.09.2016	The proposal of enhancement of coal handling from 6 MMTPA to 12 MMTPA, Renewal of Air and Water Consent Orders upto 30.04.2018 and Amendment in the list of General Cargo to include Wood Chips, Agregates, Dolomite and Clinkers were considered in 152 <sup>nd</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 08.09.2016. The Committee, permitted Consent Renewal upto 30.04.2018, Amendment in the list of General Cargo and Enhancement of Coal Handling upto 10 MMTPA, provided KPPL to operate within the Ambient Air Quality Standards.
26.10.2016	Public Hearing was conducted for the proposal of LNG Handling Terminal at KPPL, at Karaikal, as per provisions.
04.11.2016	The outcome of the Public Hearing for the LNG Handling Terminal was sent to MoEF&CC, New Delhi for consideration.
22.11.2016	Amendment in the list of General Cargo issued, incorporating Wood Chips, Agregates, Dolomite and Clinkers.
12.12.2016	NOC issued for enhancement of Coal Handling from 6 MMTPA to 10 MMTPA.
06.02.2017	Direction issued to KPPL to comply with the connection of Online Continuous Monitoring stations at 3 locations to PPCC server, on or before 31.05.2017.
09.02.2017	PPCC requested CPCB to conduct a comprehensive inspection and monitoring at KPPL.
31.05.2017	KPPL complied with the above direction.
14.07.2017 to 17.07.2017	CPCB conducted comprehensive inspection and monitoring at KPPL and submitted reports dated 01.08.2017.
04.09.2017	Direction issued by PPCC to KPPL to comply with the recommendations of CPCB comprehensive inspection and monitoring report and to furnish the time bound action plan on or before 15.09.2017
14.09.2017	KPPL submitted time bound action plan varying between Jan 2018 to April 2018.
31.10.2017	The time bound action plan of KPPL placed in the 156 <sup>th</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 31.10.2017. The Chairman – PPCC, along with the Member Secretary, conceived to inspect KPPL.
07.12.2017	The Chairman – PPCC, along with the Member Secretary, inspected KPPL.
19.12.2017	Recommendations of the Chairman – PPCC, especially for Erection and Commissioning of Mechanization of Coal handling, directed KPPL to stick to the specified timelines of 30.04.2018.
02.02.2018	PPCC requested to District Collector, to conduct a comprehensive health checkup for the local residents of surrounding villages in light of the series of Public Complaints popping up against the unit.
05.03.2018	Consent Renewal, NOC for permitting Sand – 1 MMTPA, under General cargo was placed in the 157 <sup>th</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 05.03.2018. Consent Orders was renewed upto 31.03.2019, so as the timeline for completion of Mechanization of Coal handling, the progress of which may be reviewed in October 2018. PPCC has permitted KPPL to handle Sand – 1.0 MMTPA and Cement (in Bulk) – 0.5

	MMTPA, separately. Restricted Coal handling Capacity from 10.0 MMTPA to 5.0 MMTPA, and Edible Oil from 2.5 MMTPA to 0.5 MMTPA. Enhanced General Cargo handling capacity from 2.0 MMTPA to 3.5 MMTPA. KPPL was directed to obtain revalidation of EC Clearance and amendment in the EC Clearance, specifying the Cargo handled in conformance with the Guidelines of MoEF&CC, for Ports and Harbours. Bank Guarantee of Rs. 50 Lakhs extended upto March 2019.
12.10.2018	The proposal of issuing NOC for Handling sand subsequently was discussed in 160 <sup>th</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 12.10.2018 and the Committee decided to visit that a Team of officials of this Committee shall visit V.O. Chidambaranar Port Trust, Tuticorin and Chennai Port Trust, Chennai for assessment of pollution mitigation measures provided while handling the sand and shall submit a report of to this Committee for further consideration of the proposal.
21.11.2018	Chairman – PPCC, accompanied by the Junior Engineer, DSTE, Puducherry visited M/s. Kamarajar Port Ltd., Ennore, Chennai as per the decision of 160 <sup>th</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 12.10.2018.
23.11.2018	MS-PPCC along with the Senior Environmental Engineer, DSTE, Puducherry and the Professor & Head, Department of Chemical Engineering, Pondicherry Engineering College, Puducherry, visited M/s. V.O. Chidambaranar Port Trust, Tuticorin, as per the decision of 160 <sup>th</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 12.10.2018.
27.11.2018	The above said reports of the two inspection teams was placed in 161 <sup>st</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 27.11.2018 and the Committee approved the proposal of handling sand 1 MMTPA at the premises of KPPL subject certain conditions.
06.12.2018	KPPL was inspected by the Senior Environmental Engineer, DSTE, Puducherry and Junior Engineer, DSTE, Puducherry, for ascertainment of the submission of the unit, towards Completion of erection and Commissioning of Mechanized Coal Handling and submitted the report of the same before the Committee.
10.12.2018	The observation of the above team on erection and commissioning of Mechanized Coal Handling was placed before the 162 <sup>nd</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 10.12.2018 and the Committee accepted the compliance of the unit and restored the Capacity of Coal handling from 5 MMTPA to 10 MMTPA, subject to conditions. Decision on release of the Bank Guarantee of Rs. 50 Lakhs, valid till 31.05.2019, was deferred. KPPL was permitted to handle coal by semi mechanized mode upto 1.5 MMTPA, subject to conditions.
02.01.2019	NOC issued for handling Sand to KPPL, incorporating the decision of 161 <sup>st</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 27.11.2018.
01.02.2019	NOC issued for restoration of Coal Handling Capacity from 5.0 MMTPA to 10.0 MMTPA, upon completion of Mechanization of Coal Handling by KPPL, incorporating decisions of 162 <sup>nd</sup> Meeting of Puducherry Pollution Control Committee, Puducherry, held on 10.12.2018.

### III. Ambient Air Quality Monitoring :

Ambient Air Quality Monitoring conducted for Parameters, such as Particulate Matter<sub>10</sub>, Sulphur di oxide and Nitrogen di oxide, by this Committee and the outcome are tabulated below.

S. No.	Date of Monitoring	Location	Results	Remarks
1.	13.03.2010	Regular monitoring – Inside Port – 4 Sampling Points – 24 Hrs	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	-

2.	17.02.2011 to 18.02.2011	Case Study – Keezhavanjore Village – 24 Hrs	PM <sub>10</sub> above the limit.	Based on the results, Direction issued along with the Expert Team Recommendations.
3.	29.03.2011 to 30.03.2011	Case Study – Keezhavanjore Village – 24 Hrs	PM <sub>10</sub> above the limit.	
4.	08.05.2011 to 10.05.2011	Regular monitoring – Inside Port – 5 Sampling Points – 24 Hrs	PM <sub>10</sub> above the limit.	Direction issued
5.	07.07.2011 to 08.07.2011	Case Study – Vadakku Vanjore Village – 24 Hrs	PM <sub>10</sub> above the limit.	Based on the results, Direction issued along with the Expert Team Recommendations.
6.	29.09.2011 to 30.09.2011	Case Study – Vadakku Vanjore Village – 24 Hrs	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	
7.	12.01.2012 to 13.01.2012	Case Study – Keezhavanjore Village – 24 Hrs	PM <sub>10</sub> above the limit.	
8.	29.02.2012 to 01.03.2012	Case Study – Keezhavanjore Village – 24 Hrs	PM <sub>10</sub> above the limit.	
9.	02.05.2012 to 03.05.2012	Regular monitoring – Inside Port – 4 Sampling Points – 16 Hrs	PM <sub>10</sub> above the limit.	Direction issued
10.	27.05.2013 to 28.05.2013	Regular monitoring – Inside Port – 6 Sampling Points – 24 Hrs	PM <sub>10</sub> above the limit.	Direction issued
11.	27.05.2014 to 28.05.2014	Regular monitoring – Inside Port – 6 Sampling Points – 24 Hrs	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	-
12.	14.05.2015 to 15.05.2015	Regular monitoring – Inside Port – 6 Sampling Points – 24 Hrs	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	-
13.	10.08.2015 to 15.08.2015	NABL Accredited Laboratory monitoring – Inside Port – 4 Sampling Points – 24 Hrs – 5 Days	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	As per the decision of 145 <sup>th</sup> Meeting of this Committee, held on 30.04.2015.
14.	19.01.2016 to 24.01.2016	NABL Accredited Laboratory monitoring – Inside Port – 4 Sampling Points – 24 Hrs – 5 Days	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	
15.	23.02.2016 to 28.02.2016	NABL Accredited Laboratory monitoring – Inside Port – 4 Sampling	Within the prescribed Standard Limits specified by Central Pollution Control	

		Points – 24 Hrs – 5 Days	Board, New Delhi.	
16.	30.05.2016 to 04.06.2016	NABL Accredited Laboratory monitoring – Inside Port – 4 Sampling Points – 24 Hrs – 5 Days	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	
17.	10.08.2016 to 11.08.2016	Regular monitoring – Inside Port – 6 Sampling Points – 24 Hrs	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	-
18.	23.08.2017 to 28.08.2017	NABL Accredited Laboratory monitoring – Outside Port – Keezhavanjore Village and Nagore - 02 Sampling Points each – 24 Hrs – 5 Days	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	Based on the Meeting conducted with the District Collector, Karaikal. To assess the credibility of the public complaints.
19.	28.10.2017 to 30.10.2017	Regular monitoring – Inside Port – 6 Sampling Points – 24 Hrs	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi, except 3 out of 42 samples of PM <sub>10</sub> .	-
20.	20.11.2017 to 24.11.2017	NABL Accredited Laboratory monitoring – Outside Port – Keezhavanjore Village and Nagore - 02 Sampling Points each – 24 Hrs – 5 Days	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	Based on the Meeting conducted with the District Collector, Karaikal. To assess the credibility of the public complaints.
21.	28.12.2017 to 01.01.2018	NABL Accredited Laboratory monitoring – Outside Port – Keezhavanjore Village and Nagore - 02 Sampling Points each – 24 Hrs – 5 Days	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	Based on the Meeting conducted with the District Collector, Karaikal. To assess the credibility of the public complaints.
22.	01.02.2018 to 06.02.2018	NABL Accredited Laboratory monitoring – Outside Port – Keezhavanjore Village and Nagore - 02 Sampling Points each – 24 Hrs – 5 Days	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	
23.	21.05.2018 to 26.05.2018	NABL Accredited Laboratory monitoring – Outside Port – Keezhavanjore Village and Nagore - 02 Sampling Points each – 24 Hrs – 5 Days	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	

24.	30.07.2018 to 03.08.2018	NABL Accredited Laboratory monitoring – Outside Port – Keezhavanjore Village and Nagore - 02 Sampling Points each – 24 Hrs – 5 Days	Within the prescribed Standard Limits specified by Central Pollution Control Board, New Delhi.	
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#### IV. Present Status of the Mitigation Measures :

Based on the action taken by the Puducherry Pollution Control Committee, Puducherry, by the series of Directions and Show Cause Notices, under the Provisions of the Environment (Protection) Act, 1986, Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, as amended till date, M/s. Karaikal Port Pvt. Ltd., has complied with the mitigation measures, imposed by the Puducherry Pollution Control Committee, Puducherry, which are as follows.

##### A. Conditions imposed by PPCC for Coal Handling :

(a) 105 Nos. of Water Sprinklers has been provided all along the Stockyard area and are being operated, so as to wet the coal heaps, constantly, thereby preventing carryover of dust particles by wind.



(b) Water Tanker with rear spreading bar and high pressure sprinkler nozzle, are deployed and are being operated for Road wetting to mitigate the dust emission arising due to plying of trucks and vehicles, inside the premises of the Port.



(c) Dust Separation Wall of 15 m height, with high resistant polymer meshes are installed on the Western side of the Coal Stock yard, the length of which is around 2 Km, since the predominant wind direction North East.



(d) Coal is being loaded in the trucks only in the wet condition after sprinkling water, thereby preventing carryover of dust particles by wind.



**Dust Separation Walls around the Coal Stock Yard.**



**Dust Separation Wall-Wagon loading area**

**Around the Port, in all other areas.**

(e) 3 Nos. of Mistifiers, out of which 2 Nos. are fixed and 1 No. is mobile, to generate water mist, so as to capture dust particles of coal in wind, are being operated throughout the time of handling Coal.

(f) The trucks transporting Coal out of the premises are subjected to wash using the Automated Tyre Wash System, before exiting the premises, thereby preventing Coal from taken to roads out of the Port.



**Automatic Tyre Wash System**

(g) The trucks transporting Coal out of the premises are covered using tarpaulins to avoid spillage of Coal on the roads, during transportation, of the same.



**Trucks covered using Tarpaulins for transporting Coal.**



(h) 3 Nos. of the Automated Ambient Air Quality Continuous Monitoring stations have been installed at the following locations and are being operated round the clock and monthly consolidated reports are being submitted to the Puducherry Pollution Control Committee, Puducherry.

- 1 No., at the Truck rest area, near the Wagon Loading Area, which at the North western side of the Port.
- 1 No., near the Pump House, at the Northern side of the Port.
- 1 No., near the Edible Oil storage area, which is at the Southern side of the Port.

It is pertinent to note that, the predominant wind direction is North east. The first two stations above, covers the emissions at the predominant wind direction and the third is used as reference.

(i) As per the direction of the Puducherry Pollution Control Committee, Puducherry, the unit has linked the Automated Ambient Air Quality Continuous Monitoring station, to the server of PPCC and the data are being received and are being monitored for deviations.

(j) **Mechanization of Coal Handling:** The Erection and Commissioning of Mechanization of Coal Handling has been complied by November 2018. PPCC has inspected the unit and the compliance verified.

	
<b>Ship Unloaders</b>	<b>Belt Conveyors</b>
	
<b>Transfer Towers</b>	<b>Stacker Cum Reclaimer</b>
	
<b>Truck Loading System</b>	<b>Wagon Loading System</b>

**B. Water Management :**

(a) Water Requirement for the operation of M/s. Karaikal Port Pvt. Ltd., Karaikal and the respective discharge are tabulated below.

S.No	Water based on usage	Requirement (KLD)	Discharge (KLD)
1.	Domestic	40.0	32.0
2.	Supply to Ships	100.0	-
3.	Gardening	40.0	-
4.	Fire Service & Pollution Control	160.0	-
5.	Miscellaneous	10.0	-
	<b>Total</b>	<b>350.0</b>	<b>32.0</b>

**(b) Source of Water :**

- KPPL has an Official Borewell maintained by M/s. PASIC, inside the premises of the Port and have obtained clearance from the State Ground Water Unit and Soil Conservation, Puducherry.
- Further for the purpose of Road Wetting the unit is drawing water from the Sea.
- For Coal Heap Wetting, the unit uses the RO treated water from the RO Plant, installed or Sea Water based on the Ash Content criteria of the Coal by the Customers.

**(c) Treatment System :**

- The unit has installed and operating an ETP of 16 KLD capacity, for vehicle wash area, which physically separates the Coal particles from the wash water and the clear water is being recycled. The Coal thus collected is being recycled to the Coal Stock Yard.
- Similar Treatment system of 25 KLD capacity is provided for the Tyre Wash System and the same principle of operation is being followed.
- The unit has two dedicated ETPs of 50 KLD Capacity each, for the treatment of Storm Water Drain which also operates under the above principle.
- The unit has a STP of 25 KLD capacity, for treatment of Domestic Waste Water generated by the unit, the treated water of which is being used for gardening.

**C. Conclusion Remarks :**

It is submitted that, the Puducherry Pollution Control Committee, Puducherry, is in a constant vigil for effective mitigation measures for pollution abatement at M/s. Karaikal Port Pvt. Ltd., Keezhavanjore, Karaikal, as per the provisions of the Environment (Protection) Act, 1986.

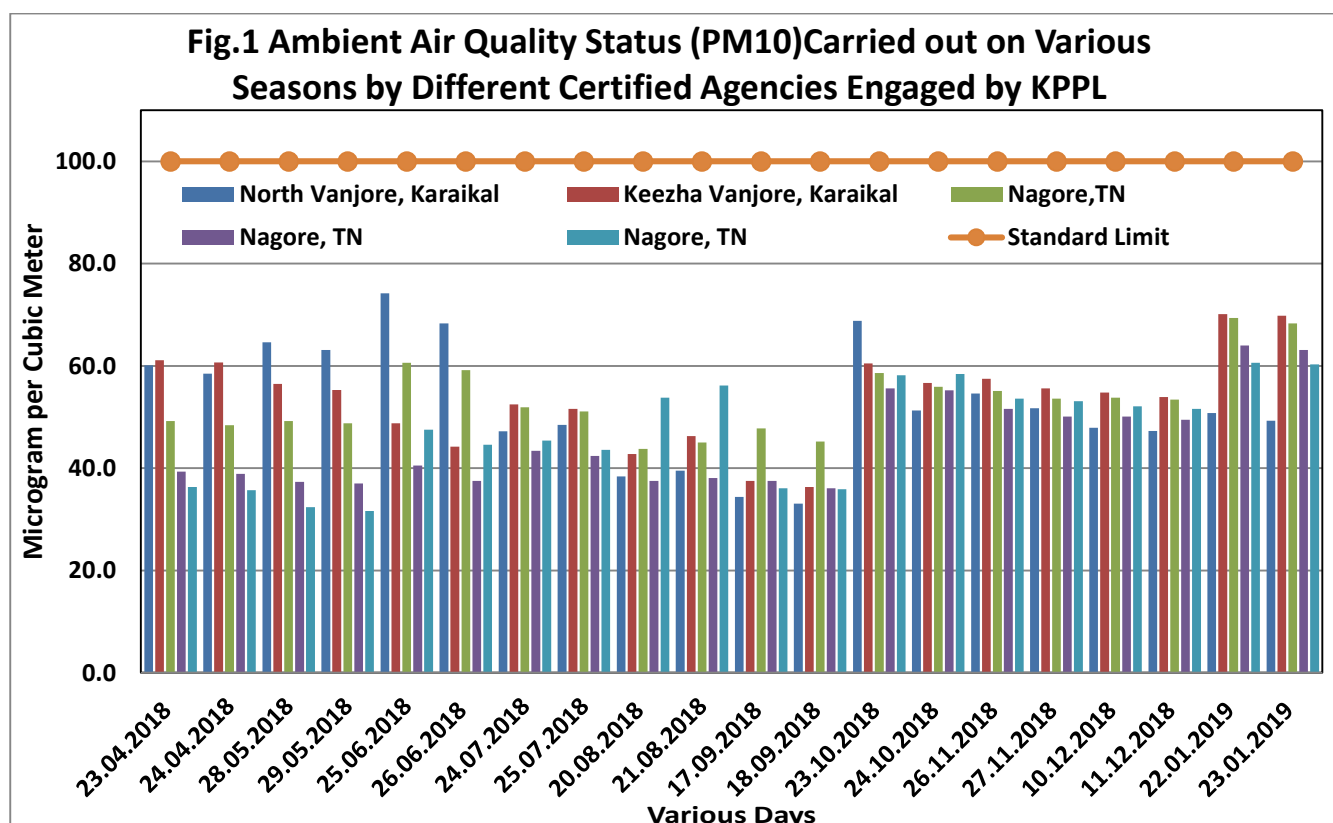
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## Central Pollution Control Board, Regional Directorate, Bangalore, Karnataka

### Review of Historical Data

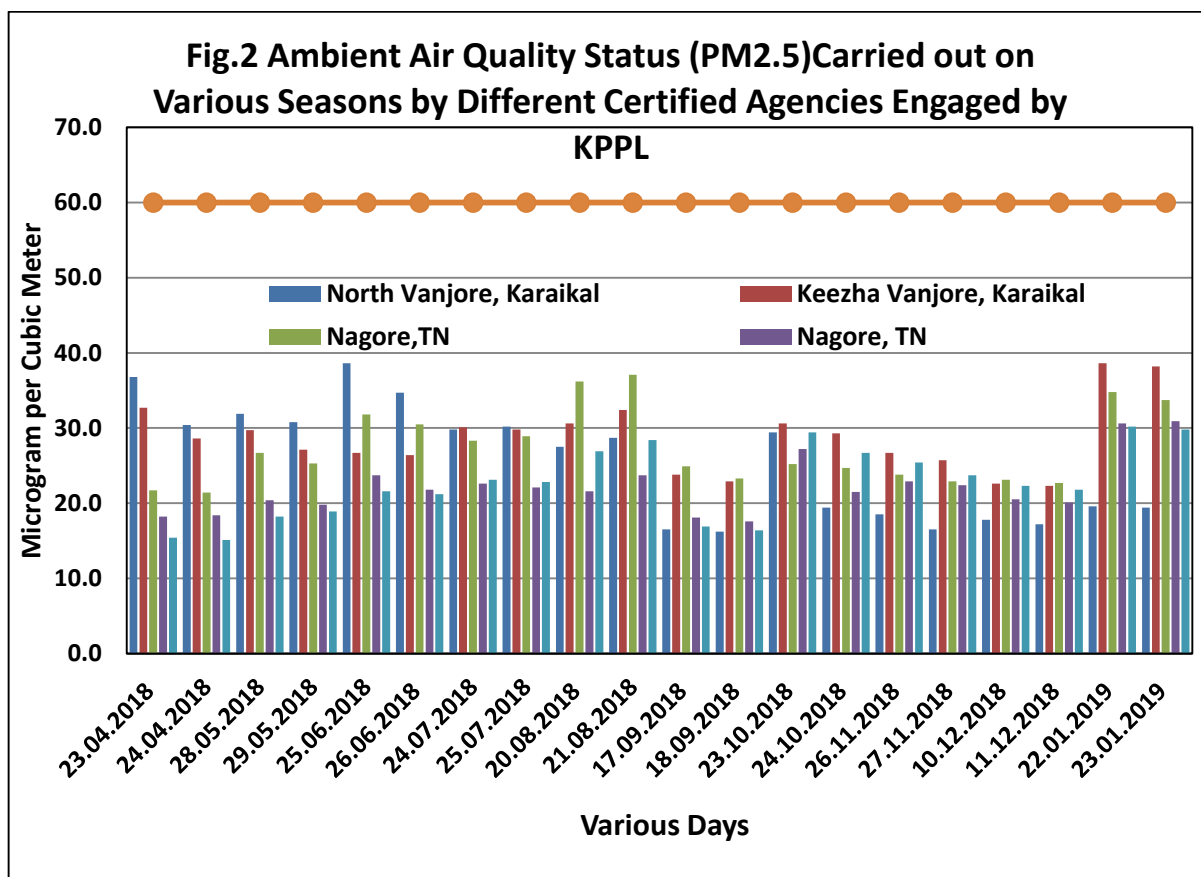
#### A. Review of Historical Data of Ambient Air Quality Monitoring carried out by Karaikal Port engaging Thirty party.

Based on the various complaints received by Puducherry Pollution Control committee, it has directed Karaikal Port to carry out the ambient air quality monitoring at various occasions engaging different NABL accredited laboratories empanelled under the PPCC. Accordingly Karaikal Port carried out ambient air quality monitoring selecting locations in consultation with Puducherry Pollution Control Committee (PPCC) for period from April 2018 to January 2019 covering five days in each season for twenty days. The analysis results of various agencies on different seasons depicted in fig.1 and in table -2. The daily 24 hourly concentration of particulate matter (PM<sub>10</sub>) and particulate matter (PM<sub>2.5</sub>) at all five locations (three in Tamil Nadu & two in Karaikal) are within the stipulated standard limits of 100µg/m<sup>3</sup> & 60µg/m<sup>3</sup> respectively.



**Table-1 Particulate Matter PM<sub>10</sub> Concentrations:**

Days	North Vanjore	Keezha Vanjore	Nagore, Ice Factory (Near CPCL Office)	Nagore, Pandagasal ai Street	Nagore, Pattinumcherry
Geography ->	Lat: N 10° 51'08.8012" Long: E 79° 50'49.0668"	Lat: N 10° 50'06.2628" Long: E 79° 50'23.1006"	Lat: N 10°49'20.9676" Long: E 79° 50'23.3772"	Lat: N 10° 49'23.7072" Long: E 79° 50'39.1596"	Lat: N 10° 49'20.5860" Long: E 79° 50'46.5684"
23.04.2018	60.1	61.1	49.2	39.3	36.3
24.04.2018	58.5	60.7	48.4	38.9	35.7
28.05.2018	64.6	56.5	49.2	37.3	32.4
29.05.2018	63.1	55.3	48.8	37.0	31.6
25.06.2018	74.2	48.8	60.6	40.5	47.5
26.06.2018	68.3	44.2	59.2	37.5	44.6
24.07.2018	47.2	52.5	51.9	43.4	45.4
25.07.2018	48.5	51.6	51.1	42.4	43.6
20.08.2018	38.4	42.8	43.8	37.5	53.8
21.08.2018	39.5	46.3	45.0	38.1	56.2
17.09.2018	34.4	37.5	47.8	37.5	36.1
18.09.2018	33.1	36.3	45.2	36.1	35.9
23.10.2018	68.8	60.5	58.6	55.6	58.2
24.10.2018	51.3	56.7	55.9	55.2	58.4
26.11.2018	54.6	57.5	55.1	51.6	53.6
27.11.2018	51.7	55.6	53.6	50.1	53.1
10.12.2018	47.9	54.8	53.8	50.1	52.1
11.12.2018	47.3	53.9	53.4	49.5	51.6
22.01.2019	50.8	70.1	69.4	64.0	60.6
23.01.2019	49.3	69.8	68.3	63.1	60.3
<b>Min</b>	<b>33.1</b>	<b>36.3</b>	<b>43.8</b>	<b>36.1</b>	<b>31.6</b>
<b>Max</b>	<b>74.2</b>	<b>70.1</b>	<b>69.4</b>	<b>64.0</b>	<b>60.6</b>
<b>Average</b>	<b>52.6</b>	<b>53.6</b>	<b>53.4</b>	<b>45.2</b>	<b>47.4</b>



**Table-2 Particulate Matter PM<sub>2.5</sub> Concentrations:**

Days	North Vanjore	Keezha Vanjore	Nagore, Ice Factory (Near CPCL Office)	Nagore, Pandagasala i Street	Nagore, Pattinumcherry
Geography ->	Lat: N 10° 51'08.8012" Long: E 79° 50'49.0668"	Lat: N 10° 50'06.2628" Long: E 79° 50'23.1006"	Lat: N 10°49'20.9676" Long: E 79° 50'23.3772"	Lat: N 10° 49'23.7072" Long: E 79° 50'39.1596"	Lat: N 10° 49'20.5860" Long: E 79° 50'46.5684"
23.04.2018	36.8	32.7	21.7	18.2	15.4
24.04.2018	30.4	28.6	21.4	18.4	15.1
28.05.2018	31.9	29.7	26.7	20.4	18.2
29.05.2018	30.8	27.1	25.3	19.8	18.9
25.06.2018	38.6	26.7	31.8	23.7	21.6
26.06.2018	34.7	26.4	30.5	21.8	21.2
24.07.2018	29.8	30.1	28.3	22.6	23.1
25.07.2018	30.2	29.8	28.9	22.1	22.8
20.08.2018	27.5	30.6	36.2	21.6	26.9
21.08.2018	28.7	32.4	37.1	23.7	28.4

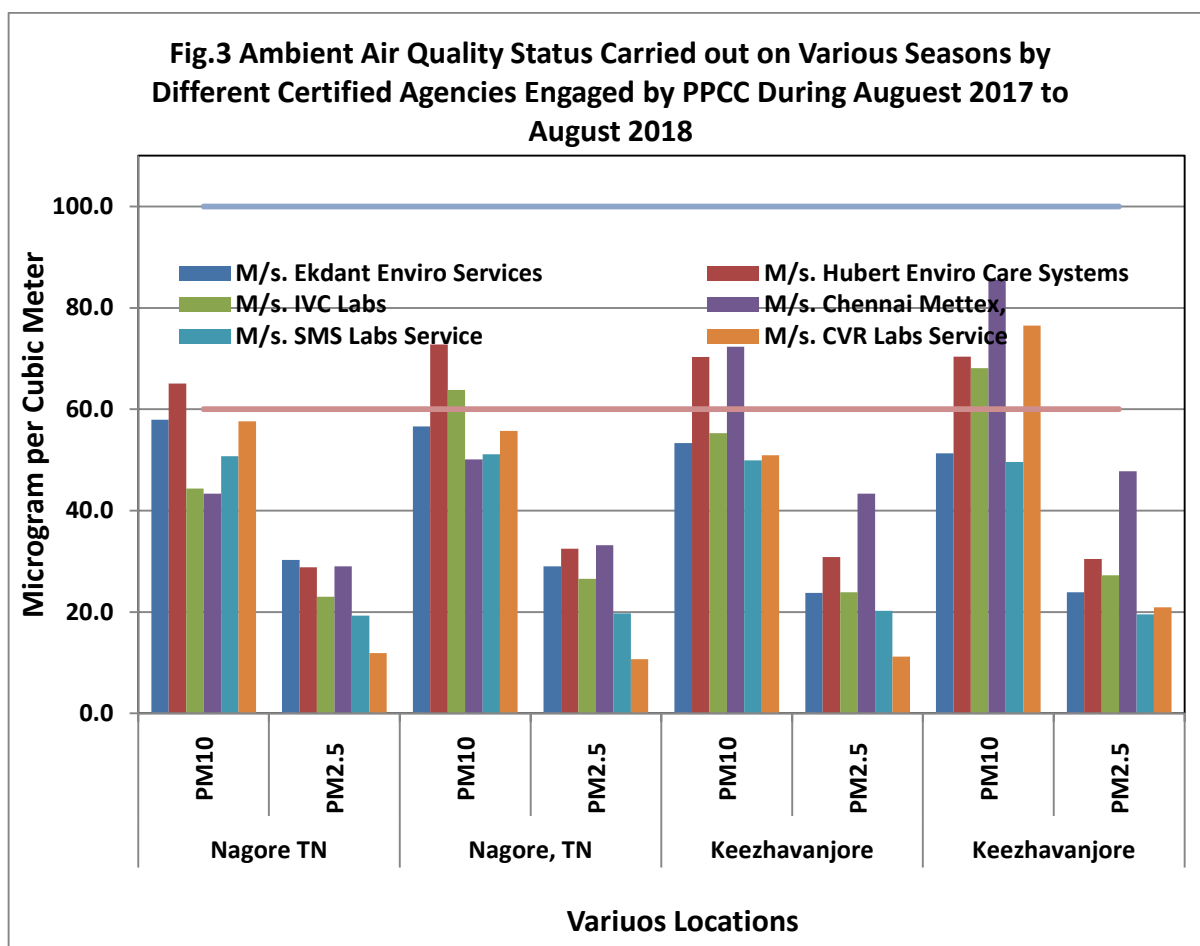
17.09.2018	16.5	23.8	24.9	18.1	16.9
18.09.2018	16.2	22.9	23.3	17.6	16.4
23.10.2018	29.4	30.6	25.2	27.2	29.4
24.10.2018	19.4	29.3	24.7	21.5	26.7
26.11.2018	18.5	26.7	23.8	22.9	25.4
27.11.2018	16.5	25.7	22.9	22.4	23.7
10.12.2018	17.8	22.6	23.1	20.5	22.3
11.12.2018	17.2	22.3	22.7	20.1	21.8
22.01.2019	19.6	38.6	34.8	30.6	30.2
23.01.2019	19.4	38.2	33.7	30.9	29.8
<b>Min</b>	<b>16.2</b>	<b>22.3</b>	<b>21.4</b>	<b>17.6</b>	<b>15.1</b>
<b>Max</b>	<b>38.6</b>	<b>38.6</b>	<b>37.1</b>	<b>30.9</b>	<b>30.2</b>
<b>Average</b>	<b>25.5</b>	<b>28.7</b>	<b>27.4</b>	<b>22.2</b>	<b>22.7</b>

**B. Review of Historical Data of Ambient air quality monitoring carried out by Puducherry Pollution Control Committee engaging Thirty party.**

In similar line, Puducherry Pollution Control Committee as part of ensuring air quality in and around the Karaikal Port, the ambient air quality monitoring was carried out by different NABL accredited laboratories empanelled under the PPCC at various occasions during August 2017 to August 2018.

The monitoring was carried out at four locations for five days in each season for twenty days. The analysis results of various agencies on different seasons depicted in fig.3 and in table-3. The daily 24 hourly concentration of particulate matter (PM<sub>10</sub>) and particulate matter (PM<sub>2.5</sub>) at all five locations (three in Tamil Nadu & two in Karaikal) are within the stipulated standard limits of 100µg/m<sup>3</sup> & 60µg/m<sup>3</sup> respectively.





### C. Ambient Air Quality Status– Manual by CPCB and PPCC

On the basis of complainants of received from Mr.Sahul Amid, Mr.Shahul Hamed form Nagore, Tamil Nadu and Mr.R.K.Baskaran, Panchatat Leader, Mr.R.Murugesan, Treasurer, Mr.K.Sasikumar, Secretary from Keelavanjore village, Puducherry Central Pollution Control Board investigated field survey by the team of officials from CPCB and PPCC and carried out the, the ambient air quality monitoring at six locations covering two locations in Nagore area in Tamil Nadu, two locations in Keelavanjore village of Puducherry and two locations in the up and down wind direction of the Karaikal Port premises. The monitoring was carried out for two days from 16-07-2017 06.45 Am to 18-07-2017 09.30AM for 48 hours.

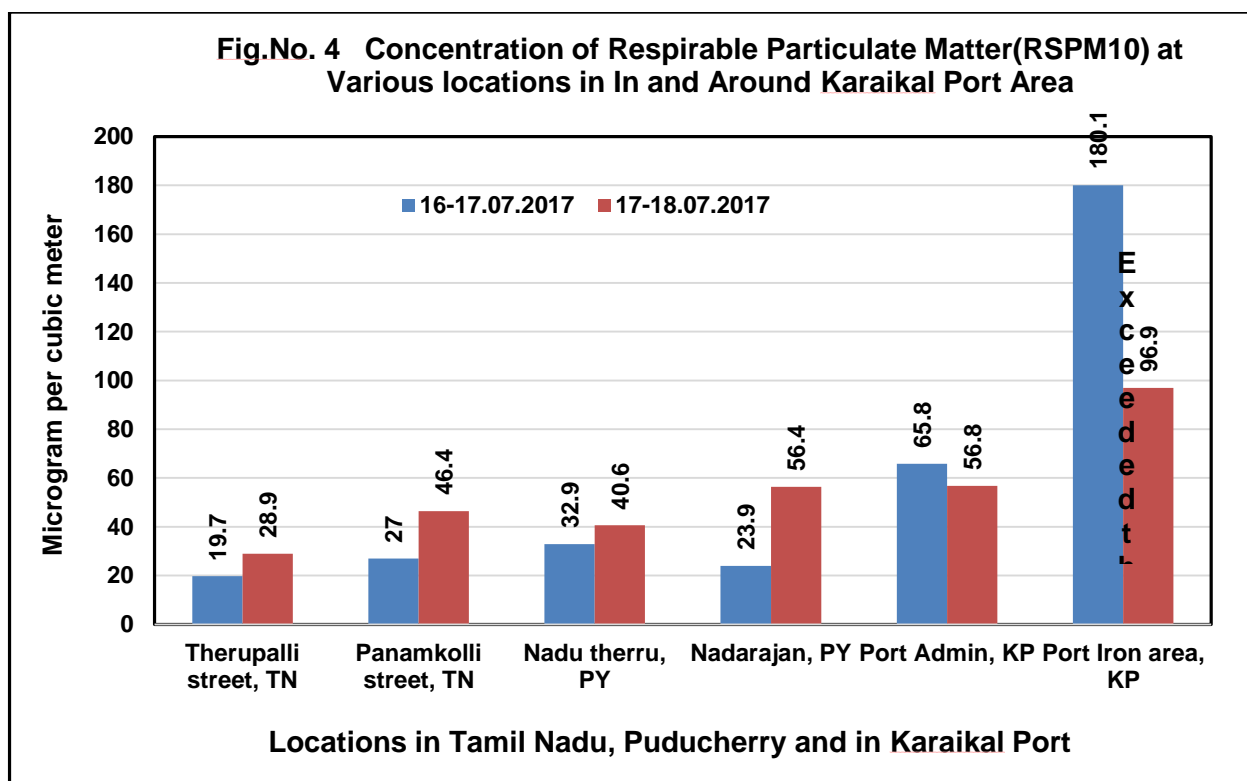
Respirable Suspended Particulate Matter (RSPM<sub>10</sub>) samples of 36 filter papers were collected on eight hourly basis and the same was analyzed in the laboratory of Central pollution Control Board, Bengaluru. The gaseous samples for Sulphur Dioxide(SO<sub>2</sub>) and Nitrogen Dioxide(NO<sub>2</sub>) were collected on 4 hourly basis and all together 120 samples were analysed by the laboratory of Pondicherry Pollution Control Committee.

The results of Ambient Air Quality Monitoring Carried out at six locations are reflected in table no.6 and figure no.26 also enclosed in annexure-VII.

**Table no.3 Analysis Results of Ambient air quality monitoring carried out CPCP jointly with PPCC**

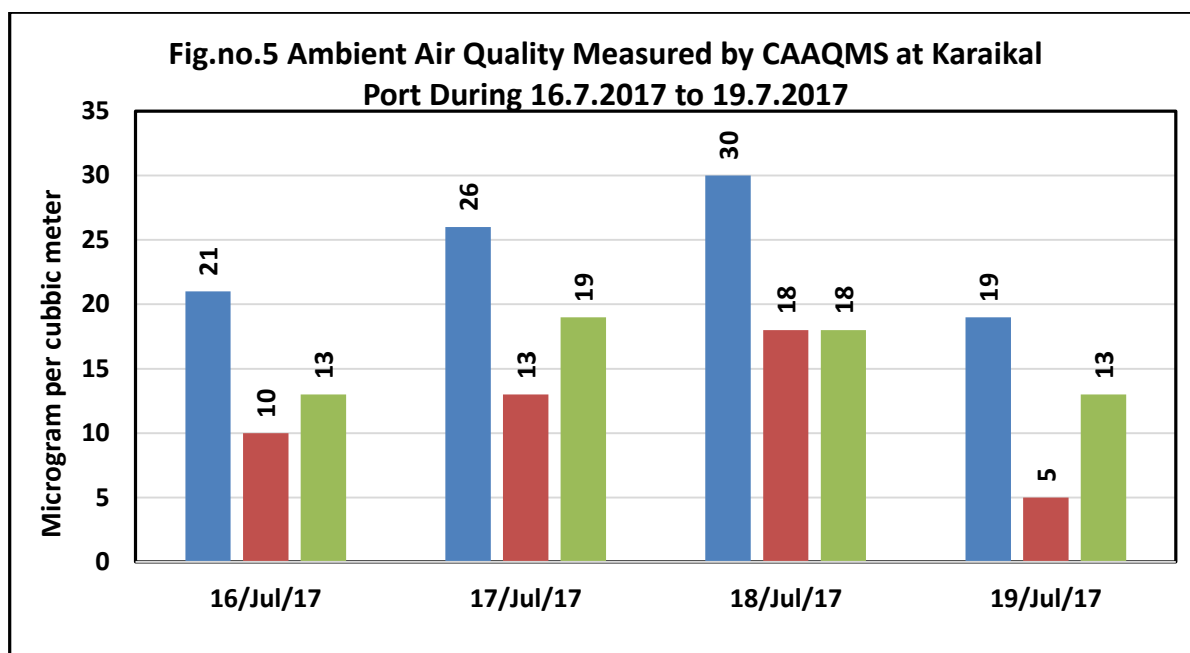
Sl. No	Date of Monitoring	16-17.07.2017	17-18.07.2017	16-17.07.2017	17-18.07.2017	16-17.07.2017	17-18.07.2017	Distance from KPPL Main gate
	Locations	RSPM (PM10) $\mu\text{g}/\text{m}^3$		SO <sub>2</sub> $\mu\text{g}/\text{m}^3$		NO <sub>2</sub> $\mu\text{g}/\text{m}^3$		
1.	Mr.Shahul Amid S/o Kunju Mohamed, House No.29, Therupalli Theru, Nagoor, Nagapatinam <b>Tamil Nadu</b> -611 002.	19.7	28.9	2.0	2.0	5.4	4.9	1-1.5 kms
2.	Mr.Shahul Hahamed, S/o Syed Ahamed, No.5, Panam Kolli, Yusufia Nagar, Nagoor, <b>Tamil Nadu</b> -611 002	27	46.4	2.3	2.0	4.5	4.5	1.5-2.0 kms
3.	Mr.Tamilaran S/o House No.15, Nadu Theru, Keelavanjore, Karaikal, <b>Puducherry</b> -611 002	32.9	40.6	2.0	2.0	5.1	5.5	0.5-0.75 kms
4.	Mr.Nadarajan S/o Veeraputran No.5, Pallivasal Theru, Keelavanjore, Karaikal, <b>Puducherry</b> -611 002	23.9	56.4	2.0	2.0	7.0	5.2	0.5-0.75 kms
5.	Near Admin Building, <b>Karaikal Port</b> Premises, Karaikal, Puducherry ( <b>Up wind</b> )	65.8	56.8	2.5	2.0	8.2	7.5	0.5 mtrs
6.	Port Iron area, <b>Karaikal Port</b> Premises.( <b>Down Wind</b> )	180.1	96.9	NM	NM	NM	NM	1.5-2.0 kms
	<b>Standard limit for 24hours</b> $\mu\text{g}/\text{m}^3$	<b>100</b>		<b>80</b>		<b>80</b>		

The manual monitoring results carried out by Central Pollution Control Board jointly with Pondicherry Pollution Control Committee, reveals that the 24 hourly average Respirable Suspended Particulate Matter(RSPM<sub>10</sub>) concentration is ranging from 19.7 µg/m<sup>3</sup> to 180.1 µg/m<sup>3</sup> on first day and while in second day it varies from 28.9 µg/m<sup>3</sup> to 96.9 µg/m<sup>3</sup> at all six locations. The highest concentration 180.1 µg/m<sup>3</sup> that has exceeded the 24 hourly standard limit of 100 µg/m<sup>3</sup> is observed at Iron ore area in the premises of Karaikal Port. The concentration is high since the prevailing wind direction is towards land to sea i.e Southwest to Northeast. The instrument is placed near to the iron ore area in the down wind direction. The concentration of Sulphur dioxide is ranged from 2 µg/m<sup>3</sup> to 2.15 µg/m<sup>3</sup> for both the days whereas the concentration of Nitrogen dioxide varies from 4.50 µg/m<sup>3</sup> to 8.22 µg/m<sup>3</sup>. Out of six locations, gaseous sampling was carried out at five locations and the concentrations both SO<sub>2</sub> and NO<sub>2</sub> are well within the standard limit. The 24 hourly average concentration of Respirable Suspended Particulate Matter (RSPM<sub>10</sub>) is also reflected in Fig.no.4.



#### **D. Ambient Air Quality Status - CAAQMS by Karaikal Port**

The ambient air quality data measured by continuous ambient air quality monitoring stations at by Karaikal port is obtained for the period from 16.07.2017 to 19.07.2017. The concentration of Respirable Suspended Particulate Matter (RSPM<sub>10</sub>) on time series basis and on daily average basis are within the prescribed limit of 100µg/m<sup>3</sup>. Data also enclosed in annexure-VII.



#### **E. Review of Ambient air quality monitoring carried out by Pondicherry Pollution Control Committee engaging Thirty party**

The Pondicherry Pollution Control Committee has engaged various NABL accredited private laboratories to carry out the ambient air quality monitoring for five days season wise at three locations in the premises of Karaikal port ltd. The analysis results of various parties on different seasons from August 2015 to June 2016 are tabulated and enclosed in the annexure. The five days average concentration of RSPM<sub>10</sub> and RSPM<sub>2.5</sub> at all four locations are within the stipulated standard limit.

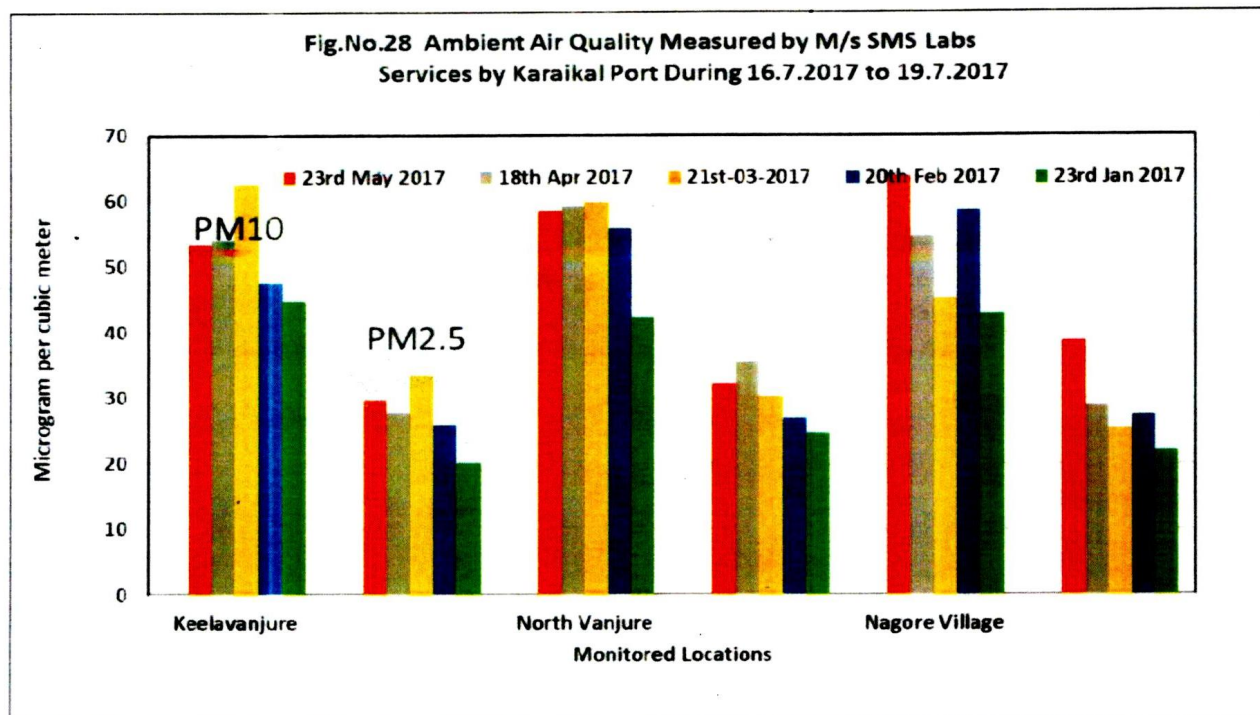
<b>Table.4 PPCC - 3rd Party 04 Seasonal Monitoring Results - Particulate Matters (Averages)</b>								
	<b>Season 1</b>		<b>Season 2</b>		<b>Season 3</b>		<b>Season 4</b>	
<b>Name of Thirty Parties ---&gt;</b>	M/s. Bureau Veritas Consumer Products Services India Pvt ltd		M/s. Green Chem Solutions Pvt Ltd		M/s. Ecoservices Pvt Ltd		M/s. ABC Techno Labs India Pvt Ltd.	
<b>Date of Monitoring -&gt;</b>	10th to 15th of Aug 2015		19 <sup>th</sup> to 24 <sup>th</sup> Jan 2016		23 <sup>rd</sup> to 28 <sup>th</sup> Feb 2016		30 <sup>th</sup> May to 04 <sup>th</sup> June 2016	
<b>Locations</b>	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>
Iron Ore Plot (Near North BW)	55.0	29.5	63.8	28.8	67.6	27.0	62.5	26.6
DS 200 (Near Highmass 20)	61.8	28.2	51.0	20.8	57.7	24.7	57.3	24.0
Berth 9 (Near MCT)	72.6	37.2	73.2	34.6	45.7	18.6	49.1	21.6
Admin (Between Admin & Customs)	49.0	22.8	88.8	34.8	72.0	33.3	54.8	23.5

**F. Review of Ambient air quality monitoring carried out by m/s SMS Labs Services Pvt ltd for Karaikal Port Pvt ltd.**


Karaikal Port has engaged M/s SMS Labs Services Pvt ltd to carry out the ambient air quality monitoring for five days season wise at three locations in the premises of Karaikal port ltd. The analysis results of various parties on different seasons from August 2015 to June 2016 are tabulated and enclosed in the Annexure-VIII. The five days average concentration of RSPM<sub>10</sub> and RSPM<sub>2.5</sub> at all four locations are within the stipulated standard limits.

<b>Table 5 Ambient air quality monitoring results carried out by M/s SMS Labs engaged by M/s Karaikal Port pvt ltd during 23rd May 2017 to 23rd Jan 2017</b>						
<b>Date of Monitoring</b>	<b>Keelavanjore</b>		<b>North Vanjore</b>		<b>Nagore Village</b>	
	<b>PM10</b>	<b>Pm2.5</b>	<b>PM10</b>	<b>Pm2.5</b>	<b>PM10</b>	<b>Pm2.5</b>
23rd May 2017	53.2	29.7	58.4	32.2	63.7	38.7
18th Apr 2017	54	27.8	59.1	35.6	54.6	28.9
21st-03-2017	62.6	33.5	59.7	30.2	45.2	25.4
20th Feb 2017	47.5	26	55.8	27	58.6	27.5
23rd Jan 2017	44.8	20.2	42.3	24.7	42.8	22.1


The 24 hourly concentration of RSPM<sub>10</sub> and RSPM<sub>2.5</sub> at three locations on the five days monitored are within the stipulated standard limit of 100µg/m<sup>3</sup> and the same is presented in figure no.28.




**Signature of Joint Inspection Committee Members**

  
(Dr. M. Madhusudanan)  
Scientist-E/Additional  
Director

  
(K. Karunakaran)  
Senior Technical  
Supervisor

  
(Dr. N. Ramesh)  
Senior Environmental  
Engineer

  
(C. Poogajendy)  
Junior Engineer

  
(P. Ashok Kumar)  
Junior Laboratory Assistant



**KARAIKAL PORT PVT LTD**  
**CORPOREATE SOCIAL RESPONSIBILITY**

**FY 2018 – 2019**

**AMOUNT SPENT : RS. 22,171,847/-**

**REGULAR ACTIVITIES :**

**Health**

- **Rural health center** in three villages. Total beneficiaries – 3789 (male - 1132, female - 2272, children – 385)
- Emergency based ambulance support to near by villages

**Education**

- **Evening study centers** at four villages like keezhvanjore, melevanjore vadaku vanjore and mudalaimeedu. **225 students** were given special coaching with well-trained **teaching 9 staff**.
- **School bus shuttle service** from three villages. More than 237 students were benefitted through this initiative.

**Women empowerment**

- **SHG formation and livelihood linkage** as part of women development program **92 women** from local villages.

**Green environment**

- **Tree plantings** schools and other nearby villages in nagapattinam.

**Welfare activities:**

- Weekly annadhanam to orphanage homes in karaikal in every week and **150 beneficiaries** benefited in this initiatives.
- Compensation for ground nut land in Keezhavanjore and fish net damages in Nagore
- Welfare schemes for loadman association in keezhavanjore village.
- Truck park area toilet maintenance by keezhavanjore village

- Regularly cleaning done road from Port to Kandalancherry and Railway line upto Nagapattinam Railway Station.

#### NEED BASED :

- Karaikal port supports students to showcase innovative science models at expo and class and 100 students benefitted in karaikal dist.
- To support Puducherry and Karaikal dist school for teachers honorarium
- Sponsorship was given for promoting educational development initiatives at Bharathiyar college of engineering at karaikal and Pondicherry science forum
- Drinking water facility in nearby villages
- Tailoring training for women to distribute **4 nos** sewing machine and give training to **20 women at nagore**
- To support swaach bharat mission in pondicherry and receive award for recognizing **their services towards a water rich, Puducherry**
- To support drainage cleaning at Pondicherry
- **Extends relief to victims of Gaja Cyclone nearby village & Nagapattinam Dist**
- **Skill training for youth** training and employment program in association with L&T, selected 213 student and training started at Kanchipuram
- **Garbage removal** : To support Neravy commune Panchayat and village level garbage cleaning work done in every year.
- To support Karaikal Police Dept. start gym in police person
- To support Nagapattinam Police for Road safety Barricade
- Nagapattinam beach summer festival 2018
- Nagore Dargah ramzan-2018 gift to give the public
- To donation given Nagore Dargah Kanthuri festival cultural programe and annathanam
- To give pressure cooker for adopted villages for Port anniversary
- To donate Punitha Sagaya Matha Church at Melavanjore
- To develop rural sport and other activities in adopted village and Thirunallar Commune
- Sponsored Thirunallar Temple Kumbabisekam
- Sponsorship was given for Vinayakachathurthy festival and other temple festivals

**KARAIKAL PORT PVT LTD**  
**CORPORAATE SOCIAL RESPONSIBILITY**  
**FY 2017 – 2018**

**AMOUNT SPENT : RS. 7,532,531/-**

**REGULAR ACTIVITIES :**

- **Health center** is operating at three villages and total beneficiaries – 5749 (male - 1639, female - 3369, children – 741)
- Emergence based ambulance support to near by villages
- **Evening study centre** : to improve the educational standard of the rural children, study centers were opened at four villages **250 students** were given special coaching with well-trained **teaching 9 staff**.
- **School bus shuttle service** to reduce the school dropout and school absenteeism due to the distance of the villages. More than 237 students were benefit through this initiative.
- **SHG formation and livelihood linkage:** As part of women development program **85 women** from local villages were formed groups and comes under the name “ **uzhaikkum karangal**
- **Green environment - Tree plantings** has been undertaken in the port premises, Keelavanjore, Melavanjore, North vanjore villages, schools and other nearby villages in Nagapattinam.
- Weekly annadhanam to orphanage homes at karaikal
- Compensation for Groundnut and fish net damages
- Welfare schemes for loadman association in keezhavanjore village.
- Truck park area toilet maintenance by Keezhavanjore village
- Regularly cleaning done road from Port to Kangalancherry and Railway line upto Nagapattinam Railway station.
- Lack of last mile vehicle connectivity to North Vanjore, vehicle pick up for 20 SHG was implemented and Tea expenses for the women

**NEED BASED :**

- IAS Coaching Class at Karaikal
- Table & Chair to provide at Tuition Centre and Melavanjore Govt Primary School
- Computer Donation to Electricity Department, Karaikal
- Womens Day Celebration within Port
- Canal Renovation at Keezhavanjore village
- Julifeora Cleaning at T.R.Pattinam Commune and Nearby villages
- Promoting Rural sports and Games nearby villages & Karaikal, Nagapattinam Dist
- Community festival and Temple Donation
- St. Fathima Church Prayer Stage Construction at Nagore
- Sponsorship for Sub Junior Common Wealth game at Nagapptinam
- Compensation was distributed to the farmers of Keezhavanjore village to Groundnut land
- Relief was distributed to the fire accident victims at Karaikal
- Purchased Barricade at Karaikal Police Dept.
- Painting work for the Kanthoori Festival Nagore was completed.
- To donation given Thirunallar Sanipeyarchi festival
- Safe drinking water to provide at adopted village

**KARAIKAL PORT PVT LTD**  
**CORPOREATE SOCIAL RESPONSIBILITY**  
**FY 2016 – 2017**

**AMOUNT SPENT : RS. 10,851,630/-**

**REGULAR ACTIVITIES :**

- **Health** : Rural health center in three villages. Total beneficiaries – 6539 ( Male – 1990, Female – 3670, Children – 879)
- Emergency based ambulance support to nearby villages

- **Nagore Carbage Cleaning** : Sponsoring monthly salary for driver and cleaner involved in the project
- **Evening study centre : 250 students** were given special coaching with well-trained **teaching 8 staff** in vanjore villages
- **School bus shuttle service:** to reduce the school dropout and school absenteeism due to the distance of the school, More than 225 students got benefitted through this initiative.
- **SHG formation and livelihood linkage: 85 women** from local villages were formed groups and comes under the name “ **uzhaikkum karangalGreen environment**
- **Tree plantings** schools, nearby villages
- **Weekly annadhanam to orphanage homes at Karaikal** every week and **150 beneficiaries** benefited in this initiatives.
- **Compensation for ground nut** at Keezhavanjore **and fish net damages** at Nagore
- Welfare schemes for loadman association in Keezhavanjore village.

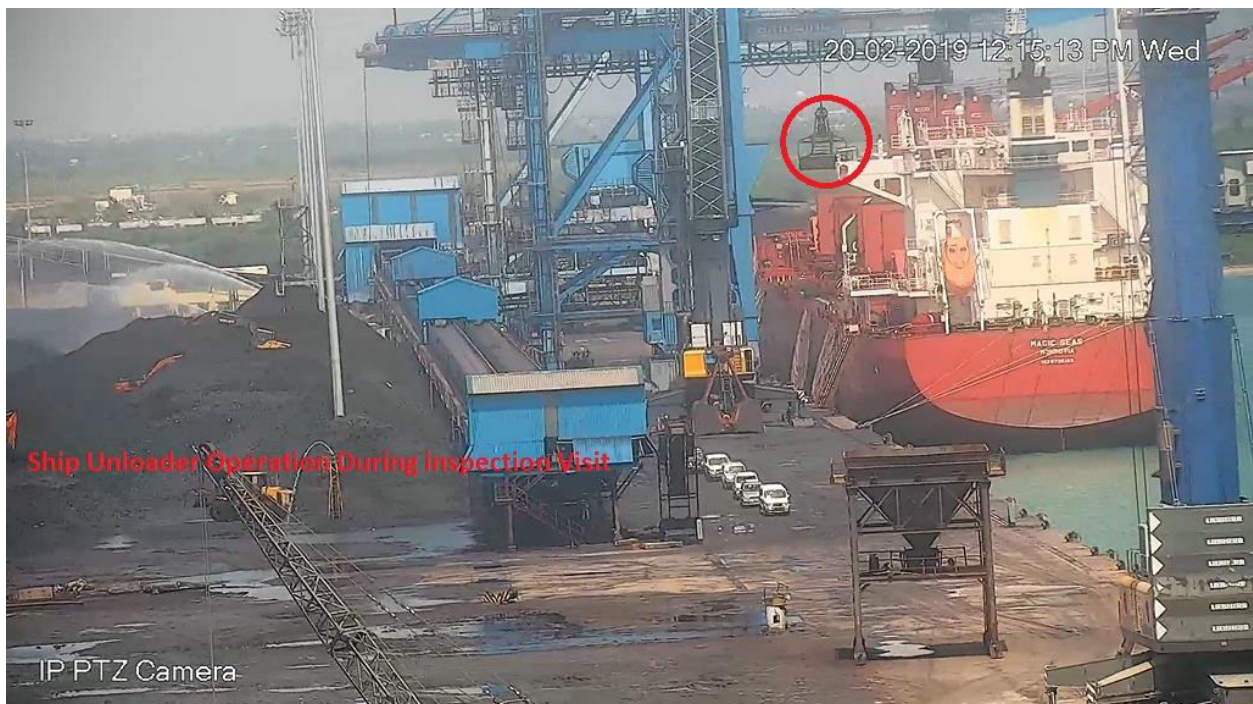
#### **NEED BASED :**

- Under the Community Development programe 125 Toilet was construct in the Keezhavnajore village
- To support Safe drinking water given to the nearby village
- To support Vanjore village women for temple cleaning work
- Canal Renovation work at Keezhavanjore
- To donation given at Nagore Kanthoori Festival musical Program
- Donation given to Volly Ball Sports Club, Nedungadu
- Promoting Rural sports and Games at Keezhavnajore and other villages
- Donation given to Community festival
- Sweet was distributed on Ayutha Pooja & Diwali celebration
- To support Kanthoori festival at Keezhavanjore

**Photos of Mechanized System in Karaikal Port Verified by the Joint Investigating Committee along with Petitioner During 19<sup>th</sup> to 22<sup>nd</sup> February 2019**



**Plate-1 Ship Unloader Inspection**



**Plate-2 Coal unloading from Ship to Conveyor System**





**Plate-3 Ship Unloader in operation**



**Plate-4 Overall View of Coal yards, Conveyers, transfer towers and dispatch loading system**



**Plate-5 Overall View of Reclaimer /Stacker, Closed Conveyers, Transfer Towers and Coal dispatch to Truck & Wagon**



**Plate-6 Inspection team in coal yard along with Petitioner (Mr. Shaul Hameed)**





**Plate-7 Evacuated Southern Coal Plots at Karaikal port**



**Plate-8 Transfer Tower of the Mechanized System**

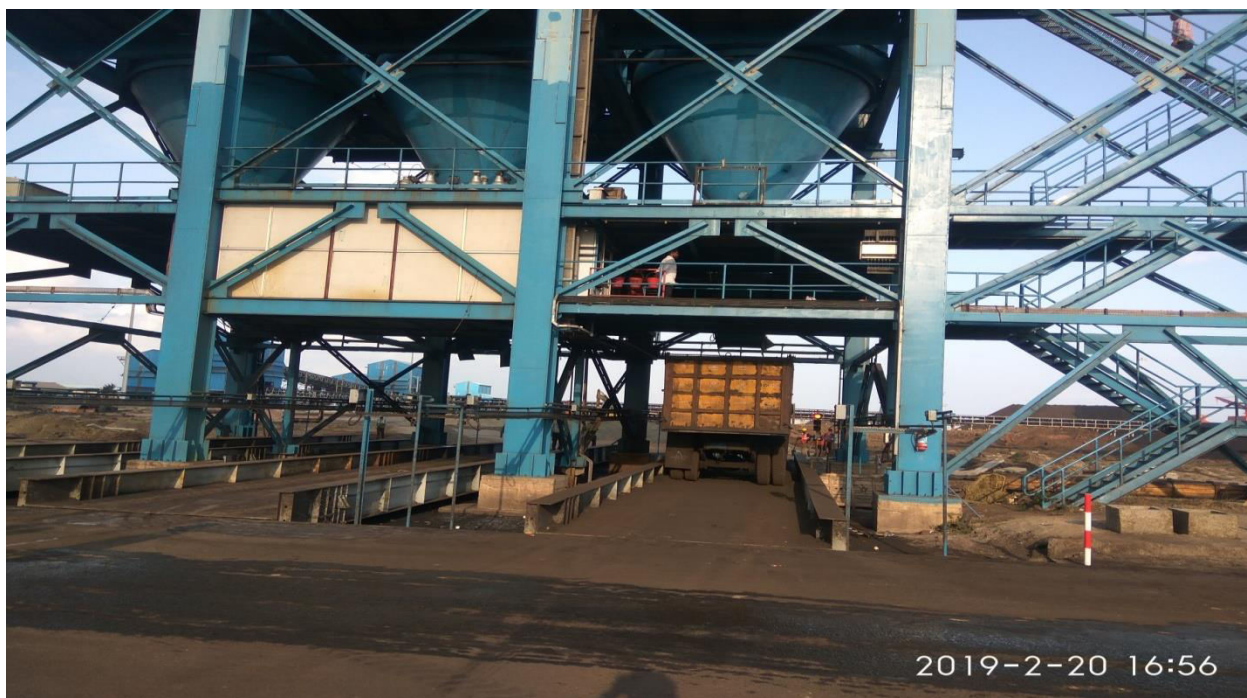


**Plate-9 Inside of Transfer Tower of the Mechanized System**



**Plate-10 Coal Loading through Mechanized System to Railway wagon with Dust Suppression System**





**Plate – 11 Coal Loading through Mechanized System (Truck Loading System) in to Trucks**



**Plate – 12 Joint Inspection Team at Dump Bond near Storage Yard**



**Plate – 13 Control Room for Mechanized System**



**Plate-14 Ambient Air quality Monitoring in Karaikal Port**



**Photos of Joint Investigation Committee from Central Pollution Control Board and Puducherry Pollution Control Committee along with Petitioner at Nagore Town and survey at Railway Tracks & Roadways during 19<sup>th</sup> to 22<sup>nd</sup> February 2019**



Plate-1 TVM in Nagore Town fixing of air quality monitoring station



Plate -2 Found light Coal dust Over head Tank at Nagore



Plate -3 Coal dust shown in Mr.Shahul House at Nagore



Plate 4 Over View of Karaikal Port from Nagore





Plate-5 Overall Plantation views from Mr. Shahul House, Nagore



Plate-6 Aerial view of Roof tops of the houses at Nagore



Plate-7 Floor of the Railway station and its building at Nagore



Plate-8 Overview of Building and plants found no coal deposit at Nagore





Plate-9 Coal spillage on railway track at Nagore Railway station



Plate-10 Coal spillage on railway track at Nagore Railway station



Plate-11 Track at first platform found clean at Nagore Railway station



Plate-12 Hump on highway towards IOC from Nagore found no coal deposit due to cleaning practice followed





Plate-13 &14 Team verifying the cleanness near Sri Vinayaga tyres shop in the curve road near Indian oil towards Thiruvarur

## Annexure-F2

**Photos of Joint Investigation Committee from Central Pollution Control Board and Puducherry Pollution Control Committee along with Petitioner at Keelavajur Village during 19<sup>th</sup> to 22<sup>nd</sup> February 2019**



Plate-1 Team at Keelavanjure Village along with Petitioner



Plate-2 Coal Deposit on leafs of the vegetations at few houses of Keelavajur village



Plate-3 Coal Deposit in the floor of the closed house in Keelavajur village





Plate-4 Plants not having coal dust deposit at ground level near to Karaikal port in Keelavanjur village



Plate-5 Team Member from CPCB surveying floor condition in field behind Karikal, port near Keelavanjur village



Plate-6 Open area found to be no coal deposit between Keelavanjur and outside the karaikal port boundary





Plate -7 Periphery drain of the Keelavanjue village very close to the boundary of karikal port found no deposit of coal in the stagnated water



Plate-8 Overview of concrete road in Keelavanjur having no coal deposit

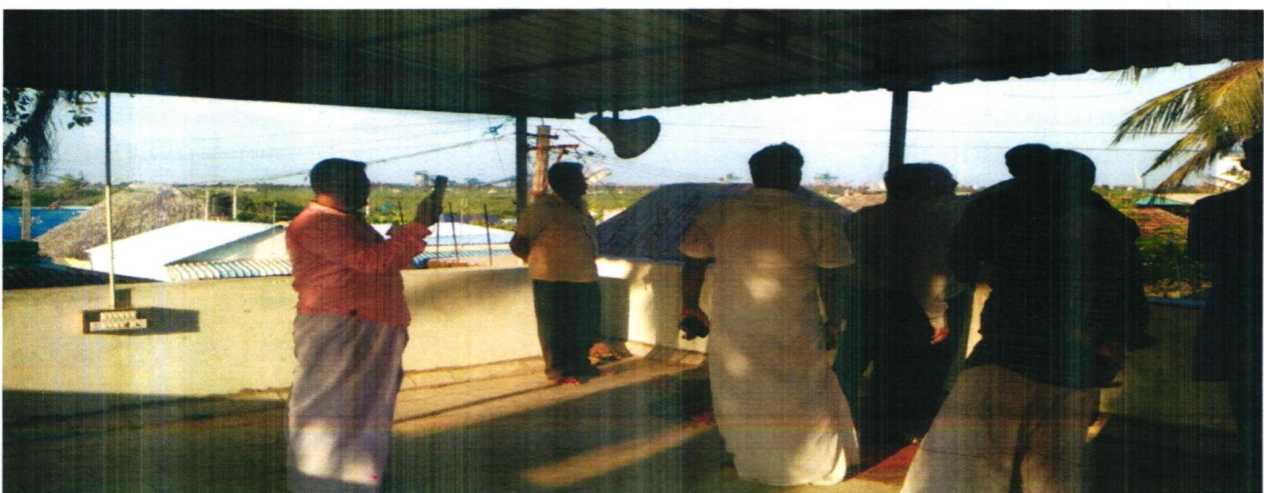


Plate-9 Visit of Team at Majid, Melavanure





Plate – 10 Over view of roof tops of the few houses in Melavanjore found no coal deposit



Plate – 11 Over view of roof tops of the houses in Melavanjore found no coal deposit

*was*  
(Dr.M.Madhusudanan)  
Scientist-E/Additional  
Director

**Signature of Joint Inspection Committee Members**

*K. Logo*  
(K.Karunakaran)  
Senior Technical  
Supervisor

*N. Ramesh*  
(Dr.N.Ramesh)  
Senior Environmental  
Engineer

*P. Kogajendy*  
(P. Kogajendy)  
Junior Engineer

*P. Ashok Kumar*  
(P.Ashok Kumar)  
Junior Laboratory Assistant

BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
(Through Video Conferencing)

Original Application No. 08/2018 (SZ)

Shahul Hameed

Versus

Applicant(s)

Puducherry Pollution Control Committee & Ors.

Respondent(s)

Date of hearing: 05.12.2018

**CORAM :** **HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER**  
**HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER**  
**HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Applicant(s): Mr. Vipin Warriar & Vidyalakshmi Vipin, Advocates

For Respondent (s): Ms. A. Sathya Bama, Advocate for PPCC  
Mr. G.M.S.N. Sheriff, Sayed Nurullah Sheriff,  
Advocate for MoEF&CC  
Ms. P. Jayalakshmi, Advocate for CPCB  
Mr. A. Gandhiraj, Govt. Pleader for R-4  
Mr. U.M. Shivakumar and Suresh, Advocates for R-6

**ORDER**

1. Issue Notice, returnable in three weeks.
2. Requisites to be filed within a week from hence.
3. List the case on 23.01.2019.
4. Notice stands dispensed with in respect of Respondent Nos. 1, 2, 3, 4 and 6 as Ms. Sathya Bama, learned Counsel, Ms. P. Jayalakshmi, learned Counsel, Mr. Sayed Nurullah Sheriff, learned Counsel, Mr. Gandhiraj, Government Pleader and Mr. Shiva Kumar, learned Counsel respectively accept notices.
5. In the meanwhile, we direct constitution of a Joint Committee constituted by the Central Pollution Control Board (CPCB) and the Puducherry Pollution Control Committee (PPCC). The team shall jointly inspect the area in question and verify on the statements made in the original application. If any infraction as



alleged is found to be correct, they are at liberty to take appropriate action in accordance with law and submit a report to this Tribunal on the next date of hearing.

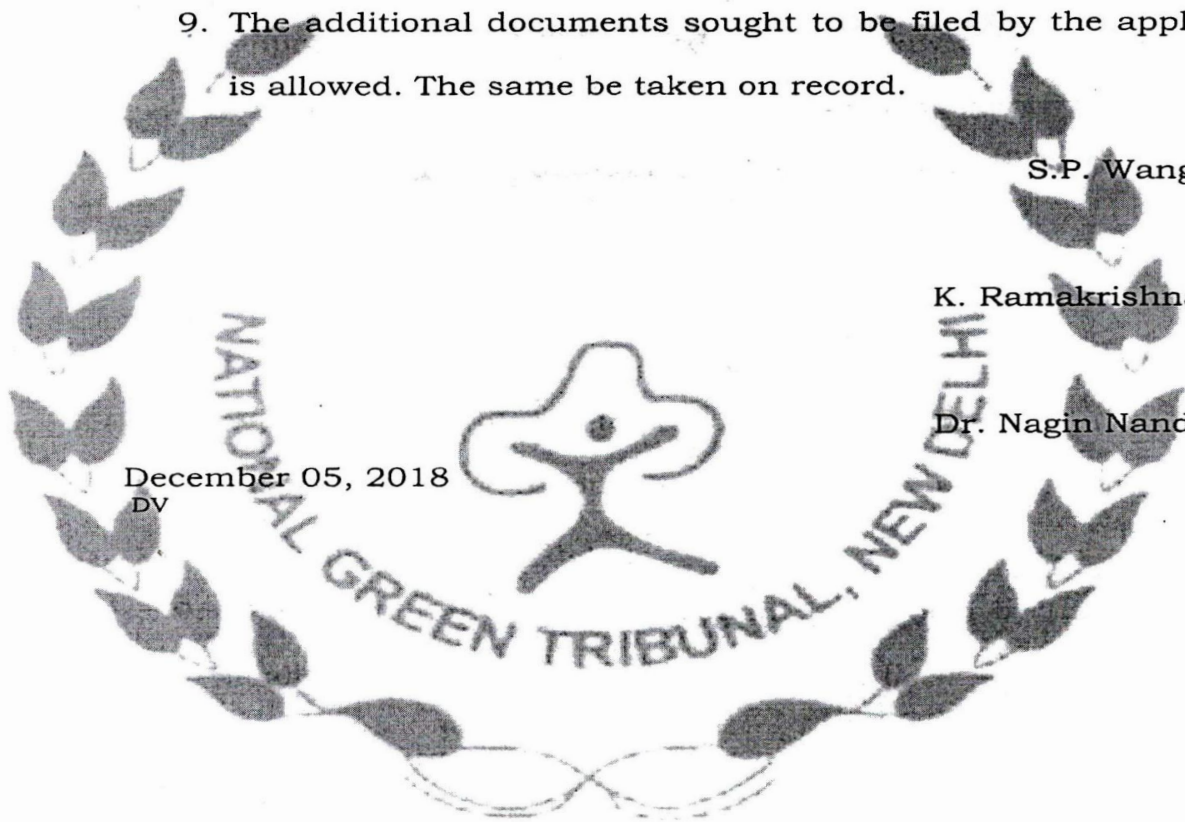
6. The Puducherry Pollution Control Committee shall be the Nodal Agency.
7. A copy of this order be forwarded to the concerned authorities by e-mail.
8. We also grant liberty to the applicant to be present during the inspection and render his assistance to the Committee in carrying out the task.
9. The additional documents sought to be filed by the application is allowed. The same be taken on record.

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

December 05, 2018  
DV





IN THE HIGH COURT OF JUDICATURE AT MADRAS

( Special Original Jurisdiction )

Wednesday, the Nineteenth day of December Two Thousand Eighteen

PRESENT

THE HON'BLE MR JUSTICE M.M.SUNDRESH

and

THE HON'BLE MR.JUSTICE KRISHNAN RAMASAMY

WP No.33942 of 2018

and WMP Nos.39408 & 39416 of 2018

KARAIKAL PORT PVT LTD  
CIN NO.U45203PY2006PTC001945  
HAVING ITS REGISTERED OFFICE  
AT KHEZHAVANJOOR VILLAGE,  
T.R.PATTINAM, KARAIKAL,  
INDIA - 609 602,  
REP.BY ITS AUTHORIZED SIGNATORY,  
MR.MURALIDHARAN K.

[ PETITIONER IN ALL the  
PETITIONS ]

Vs

1 THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE BENCH, KALAS MAHAL,  
KAMARAJAR SALAI, PWD ESTATE,  
CHEPAUK, TRIPPLICANE,  
CHENNAI, TAMIL NADU-600 005.

[ RESPONDENTS IN ALL the  
PETITIONS ]

2 THE PUDUCHERRY POLLUTION  
CONTROL COMMITTEE,,  
DEPARTMENT OF SCIENCE,  
TECHNOLOGY AND ENVIRONMENT,  
GOVERNMENT OF PUDUCHERRY,  
3RD FLOOR, PH BUILDING, ANNA NAGAR,  
PUDUCHERRY - 605 005.

3 THE CENTRAL POLLUTION CONTROL  
BOARD, PARIVESH BHAVAN,  
ARJUN NAGAR, NEW DELHI - 110032.

4 MINISTRY OF ENVIRONMENT,  
FOREST AND CLIMATE CHANGE,,  
UNION OF INDIA,  
PARYAVARAN BHAWAN, CGO COMPLEX,  
LODHI ROAD, NEW DELHI - 110 003.

✓ S/EE/JET



5 UNION TERRITORY OF PUDUCHERRY  
REPRESENTED BY THE CHIEF SECRETARY,  
CHIEF SECRETARY, BEACH ROAD,  
PUDUCHERRY- 605 001.

6 THE GOVERNMENT OF TAMIL NADU,  
HEALTH AND FAMILY WELFARE DEPARTMENT,  
NAMARKAL KAVIGNAR MAALIGAI, FORT ST. GEORGE,  
CHENNAI - 600 009.

7 SHAHUL HAMEED,

Writ Petitions under article 226 of the Constitutions of India praying that in these circumstances stated therein and in the respective affidavits filed therewith the High Court will be pleased to

(1) issue a Writ of Certiorari to Call for the records of the 1st respondent - Honorable National Green Tribunal Southern Zone Bench, Chennai culminating in the order dated 05.12.2018 made in Original Application No.08 of 2018 (SZ) and quash the same and consequently dismiss the original Application No.08 of 2018 (SZ) in the files of the 1st respondent as infructuous (in WP.33942/2018);

(2) To grant an order of interim stay of the operation of the further proceedings of Original Application No.08 of 2018 (SZ) before the 1st respondent - Honorable National Green Tribunal, Southern Zone Bench, Chennai, (in WMP.39408/2018) and

(3) Stay of the operation of the impugned order dated 05.12.2018 made in original Application No.08 of 2018 (SZ) by the 1st respondent - Honorable National Green Tribunal, Southern Zone Bench, Chennai, (in WMP.39416/2018) respectively pending WP.No.33942 of 2018.

Order :These petitions coming on for orders upon perusing the petitions and the respective affidavits filed in support thereof and upon hearing the arguments of MR.AR.L.SUNDARESAN SENIOR COUNSEL for M/S.FOX MANDAL AND ASSOCIATES, Advocate for the petitioner in all the petitions and of M/S.A.SATHYA BAMA Advocate for the 2<sup>nd</sup> respondent and of M/S.M.SWARNALATHA Advocate for the 3<sup>rd</sup> respondent and of MR.B.BALAVIJAYAN GOVT.ADVOCATE for the 5<sup>th</sup> respondent and of M/S.A.SRIJAYANTHI SPL.GOV.T.PLEADER for the 6<sup>th</sup> respondent in all the petitions the court made the following order:-

(Order of the Court was made by M.M. SUNDRESH, J.)

This writ petition has been filed challenging the order of the first respondent by which certain directions have been issued on



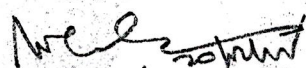
the basis of the averments made in the Original Application which is inclusive of formation of Committee for joint inspection.

2. Learned senior counsel appearing for the petitioner submitted that there was a due compliance subsequent to the filing of the original application. The original application was filed in the month of March, 2018. Thereafter, all the directions issued have been complied with by the State Government as well as the petitioner to the satisfaction of the second respondent. Unfortunately, these factors were not taken note of while passing the order and the Tribunal also did not go into the merits of the case.

3. Therefore, from the above, we are inclined to grant an order of interim stay. Accordingly, there shall be an order of interim stay. Issue notice and private notice returnable by four weeks.

-sd/-  
19/12/2018

/ TRUE COPY /

  
Sub-Assistant Registrar ( Statistics / C.S. )  
High Court, Madras - 600 104.

TO

1 THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE BENCH, KALAS MAHAL,  
KAMARAJAR SALAI, PWD ESTATE,  
CHEPAUK, TRIPPLICANE,  
CHENNAI, TAMIL NADU-600 005.

2 THE PUDUCHERRY POLLUTION  
CONTROL COMMITTEE, DEPARTMENT OF SCIENCE,  
TECHNOLOGY AND ENVIRONMENT, GOVERNMENT OF  
PUDUCHERRY, 3RD FLOOR, PH BUILDING,  
ANNA NAGAR, PUDUCHERRY.

3 THE CENTRAL POLLUTION  
CONTROL BOARD, PARIVESH BHAVAN,  
ARJUN NAGAR, NEW DELHI - 110032.

4 MINISTRY OF ENVIRONMENT,  
FOREST AND CLIMATE CHANGE,, UNION OF INDIA,  
PARIVARAN BHAVAN, CGO COMPLEX, LODHI ROAD,  
NEW DELHI - 110 003.



5 THE CHIEF SECRETARY  
UNION TERRITORY OF PUDUCHERRY ,  
BEACH ROAD, PUDUCHERRY- 605 001.

6 THE GOVERNMENT OF TAMIL NADU,  
HEALTH AND FAMILY WELFARE DEPARTMENT,  
NAMAKKAL KAVIGNAR MAALIGAI,  
FORT ST. GEORGE, CHENNAI - 600 009.

C.C. to M/S.FOX MANDAL AND ASSOCIATES Advocate SR.NO. 1724

The Government Pleader, (Pondy) High Court, Madras - 104 SR.NC  
15710

Order

in

WP No.33942 of 2018

and WMP Nos.39408 & 39416 of 2018

Date :19/12/2018

From 26.2.2001 the Registry is issuing certified  
copies of the Interim Orders in this format  
VS 20.12.2018 (I.T)

## IN THE HIGH COURT OF JUDICATURE AT MADRAS

Dated : 29.01.2019

CORAM:

THE HONOURABLE MR. JUSTICE M.M. SUNDRESH  
AND

THE HONOURABLE MR. JUSTICE KRISHNAN RAMASAMY

W.P. No. 33942 of 2018

Karaikal Port Private Limited  
CIN No: U45203PY2006PTC001945  
Having its registered office at  
Kezhavanjoor Village,  
T.R.Pattinam, Karaikal,  
India - 609 602  
rep. By its Authorized Signatory,  
Mr. Muralidheran K.,

...Petitioner

Vs.

1. The National Green Tribunal,  
Southern Zone Bench,  
Kalas Mahal, Kamarajar Salai,  
PWD Estate, Chempauk,  
Triplicane,  
Chennai, Tamil Nadu - 600 005.
2. The Puducherry Pollution Control Committee,  
Department of Science, Technology and Environment  
Government of Puducherry,  
3<sup>rd</sup> Floor, PH Building, Anna Nagar,  
Puducherry - 605 005.
3. The Central Pollution Control Board,  
Parivesh Bhavan, Arjun Nagar,  
New Delhi - 110 032
4. Ministry of Environment, Forest and Climate Change,  
Union of India,  
Paryavaran Bhawan,  
CGO Complex, Lodhi Road,  
New Delhi - 110 003.
5. Union Territory of Puducherry,  
Rep. By its Chief Secretary,  
Chief Secretariat,  
Beach Road, Puducherry - 605 001.



6. The Government of Tamil Nadu  
Health and Family Welfare Department,  
Namakkal Kavingar Maaligai  
Fort St. George, Chennai - 600 009.

7. Shahul Hameed

... Respondents

Prayer: Writ Petition filed under Article of 226 of the Constitution of India praying for issuance of a writ of certiorarified mandamus calling for the records of the 1<sup>st</sup> respondent - Hon'ble National Green Tribunal, southern Zone Bench, Chennai culminating in the order dated 05.12.2018 made in Original Application No.08 of 2018(S2) and quesh the same and consequently dismiss the Original Application No. 08 of 20189 (S2) in the files of the 1<sup>st</sup> respondent as infructuous.

For Petitioner : Mr.A.R.L.Sunderesan, Senior Counsel  
for S. Aravindan

For Respondents : R1 - Green Tribunal  
Ms. A. Sathya Bama for R2  
Ms. M.Swarnalatha for R3  
Mr. B. Balavijayan,  
Govt.Advocate for R5  
Ms.A.Sri Jayanthi,  
Spl. Government Pleader for R6  
M/s. Vipin Warriar for R7  
Tapal Due for R4.

#### ORDER

(Order of the Court was made by M.M.SUNDRESH, J.)

This writ petition has been filed by the sixth respondent before the National Green Tribunal in Original Application No.8 of 2018 (S2), aggrieved over the interim order passed, by which, direction was issued for the constitution of Joint Committee with the participation of Central Pollution Control Board (hereinafter referred as 'CPCB') and the Puducherry Pollution Control Committee (hereinafter referred as 'PPCC'). Incidentally, the private respondent before us, who was the petitioner before the Tribunal, was also permitted to take part during the inspection.

2. The aforesaid order is sought to be assailed before us on the premise that no opportunity was given to put forth the case of the petitioner. Learned Senior Counsel would submit that the main contention of the private respondent is that the petitioner has not established the Mechanised Coal Handling System. However, the same has been done, pursuant to which the PPCC has given consent to operate. Had this fact been brought forth



before the Tribunal, the order would not have been passed. Consequently, it has been submitted that Section 16 of The Air (Prevention of Control of Pollution) Act, 1981 cannot be pressed into service as it is for the State Boards to undertake the aforesaid exercise under Section 17 read with Sections 23 and 24 of the Act. Incidentally, learned Senior Counsel submitted that the Tamil Nadu State Pollution Control Board has got no role to play and, therefore, the said authority is not required to be a part of the Joint Committee.

3. Learned counsel appearing for the private respondent has submitted that Section 16 has to be read along with Section 17. There was already a joint inspection conducted which has given the outer limit for the purpose of establishing Merchandise Coal Handling System. The power of the Tribunal is rather wide. The establishment of the Merchandise Coal Handling System coupled with consent came into being subsequent to the filing of the Original Application before the Tribunal, though consent was granted earlier. Therefore, no interference is required.

4. By way of reply, learned Senior Counsel appearing for the petitioner would submit that without giving opportunity to the petitioner, liberty was given to the authority to take appropriate action based upon the inspection to be made when the petitioner had obtained all necessary consents.

5. Insofar as the constitution of Committee is concerned, we are of the view that the order of the Tribunal does not require interference with specific reference to the Joint Inspection to be made by the CPCB and the PPCC. After all, the power of the Tribunal is plenary qua environmental issues. We also note that such an exercise was already undertaken at an earlier point of time. Therefore, the order of the Tribunal has to be seen in the context of the earlier decision made pursuant to the joint inspection made. It is not as if the petitioner was not aware of the earlier direction made and complied by the Joint Committee. In such view of the matter, we do not find any error with respect to the joint inspection ordered in the presence of the CPCB and the PPCC.

6. However, we make it clear that the role of the CPCB is rather limited as against the PPCC. We do not wish to go much into those things. The report has to be made jointly by both the authorities. They should sit together and prepare the report. Neither the Tamil Nadu Pollution Control Board nor the State of Tamil Nadu has any role to play at this juncture. Therefore, we make it clear that the said authorities are not required to be part of the Committee. As of now, they have not expressed any grievance. In fact, we are of view at this stage that the authority is not required. However, we do not find anything wrong in the presence of the private respondent along with the



Committee during the inspection. After all, it is the private respondent who has raised the issues before the Hon'ble Tribunal, therefore, his presence will help the Committee in filing its report. Though it has been stated that the private respondent has to render assistance to the Committee, it has to be construed that his role is to point out the alleged violation, if any. Accordingly, we clarify the presence of the private respondent to that extent.

7. The only other question to be considered is with respect to the proposed action to be taken. We feel that such an action can be taken after the report is filed before the Hon'ble National Green Tribunal. We request the Hon'ble Tribunal to hear the parties, namely, the petitioner herein and the private respondent, who is the applicant before it, on the report to be filed, copies of which to be furnished, and thereafter pass appropriate orders. Similarly, the petitioner has to be heard before initiating any action on the report.

8. Inasmuch as the Committee has already been constituted, it can make a visit sans the Tamil Nadu Pollution Control Board as directed by the Hon'ble Tribunal and submit the report within a period of six weeks from the date of receipt of a copy of the order before the Hon'ble National Green Tribunal.

In view the above, this writ petition stands disposed of. Consequently, connected WMP. Nos. 1509, 1511 of 2019 and WMP Nos. 39408, 39416 of 2018 stand closed.

-s/d-

Assistant Registrar (CS-IV)

True Copy

Sub-Assistant Registrar

SSM

To

1. The Registrar

National Green Tribunal,  
Southern Zone Bench,  
Kalas Mahal, Kamarajar Salai,  
PWD Estate, Chepauk, Triplicane,  
Chennai, Tamil Nadu - 600 005.

2. The Puducherry Pollution Control Committee,

Department of Science, Technology and Environment  
Government of Puducherry, 3<sup>rd</sup> Floor, PH Building, Anna Nagar,  
Puducherry - 605 005.



3. The Central Pollution Control Board,  
Parivesh Bhavan, Arjun Nagar,  
New Delhi - 110 032

4. The Secretary  
Ministry of Environment, Forest and Climate Change,  
Union of India,  
Paryavaran Bhawan,  
CGO Complex, Lodhi Road,  
New Delhi - 110 003.

5. The Chief Secretary,  
Union Territory of Puducherry,  
Chief Secretariat,  
Beach Road, Puducherry - 605 001.

6. The Secretary to Government  
Government of Tamil Nadu  
Health and Family Welfare Department,  
Namakkal Kavingar Meeligaai  
Fort St. George, Chennai - 600 009.

+1 CC to M/s. Vipin Warriar, Advocate sr 8417.  
+1 CC to Foz Mandal Associates sr 7027.

W.P. No. 33942 of 2018

KAN(CO)  
SP(01/02/2019)





## केन्द्रीय प्रदूषण नियंत्रण बोर्ड CENTRAL POLLUTION CONTROL BOARD

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार  
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA

P.No.Tech/38/PC-Pondi/RDS/2018-2019/

07 February 2019

To

The Member Secretary  
Puducherry Pollution Control Committee  
3rd Floor, PHB Building, Anna Nagar  
Puducherry-605 005

Sub: Joint Inspection and Monitoring of Karaikal Port to comply with the direction of Hon'ble NGT against original Application No.08 of 2018 & on the verdict of Hon'ble High Court of Judicature at Madras dt 29.01.2019 and to investigate VIP complaint of Thiru. Dr.K.Gopal, MBBS, Hon'ble Member of Parliament (Lok Sabha on Implementation of Directions issued by PPCC and environmental degradation caused by Marg Port-Karaikal.

Sir,

With reference to the verdict of Hon'ble High Court of Judicature at Madras dt 29.01.2019 against W.P No. 33942 of 2018, Karaikal Port Pvt Ltd Vs NGT and 6 others against original Application No.08 of 2018(SZ) (copy enclosed) and to investigate the VIP complaint, it is proposed to conduct joint inspection and ambient air quality monitoring of the Karaikal Port and surrounding villages of Nagapatinam, Tamil Nadu, Keelavanjur Puducherry along with CPCB & PPCC during 18<sup>th</sup> to 22<sup>nd</sup> February 2019.

In this regard, Dr.Madhusudan, Additional Director (Mobile:9448019014, mail:madhu1960@gmail.com) and Sh.Karunakaran STS (mobile:9844030141, mail:karunacpcb@gmail.com) are nominated as members of Committee.

PPCC is requested to nominate the official and shall ensure availability of adequate nos of ambient air quality measuring equipment (PM10 & PM2.5), its proper functioning and man power for monitoring. The required filter papers shall be brought by CPCB and reagents (observing solutions) for SO<sub>2</sub> & NO<sub>2</sub> shall be arranged by PPCC. The ambient air quality monitoring shall be carried out during 18<sup>th</sup> to 22<sup>nd</sup> February 2019. The report shall be submitted on or before first week of March 2019 through e-filing.

A line of confirmation is appreciated.

S. Suresh  
7/2/2019

(S.Suresh)

Regional Director

Encls: As above

क्षेत्रीय निदेशालय (दक्षिण) : निसर्ग भवन, ए-ब्लॉक, प्रथम एवं द्वितीय तल, तिममय्या रोड, 7-डी मैन, शिवनगर, बेंगलूरु - ५६० ०७९.

Regional Directorate (South) : " Nisarga Bhawan ", A-Block, 1<sup>st</sup> & 2<sup>nd</sup> Floors, Thimmaiah Road, 7<sup>th</sup> D - Main, Shivanagar, Bengaluru - 560 079.

दूरभाष / Telephone : 080-23233739, 23233827, 23233996, 23233600, 23232559, 23226002, 23222539, Fax : 080-23234059

ई-मेल / E-mail : cpcbszo@yahoo.com, zobangalore.cpcb@nic.in

प्रधान कार्यालय : परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली- ११० ०३२.

Head Office : Parivesh Bhawan, East Arjun Nagar, Delhi - 110 032.

दूरभाष / Telephone : 011-43102030, Fax : 22305793, 22307078, 22307079, 22301932, 22304948

ई-मेल / E-mail : cpcb@nic.in वेबसाइट / Website : www.cpcb.nic.in

**Central Pollution Control Board**  
**Regional Directorate,**  
**Nisarga Bhawan, 7<sup>th</sup> –D Thimmaiya Road,**  
**Shivanagar, Bengaluru-560 079**

07 February 2019

**Proposed Schedule of Inspection and Ambient Air Quality Monitoring of Karaikal Port  
and Nearby Villages**

<b>Date</b>	<b>Activities</b>	<b>Arrangement and Coordination</b>
18.02.2019	Team from CPCB, Bangalore arriving at Karaikal by evening	
19.02.2019, 9AM to 10.30AM	Preliminary meeting with PPCC and Complainant	Recording <sup>ok</sup> issues raised by complainant
19.02.2019, 11AM to 13.30AM	Re- verification of suitability of ambient air quality monitoring sites selected during August 2017 and to find any other suitable locations	Team of official from CPCB, PPCC, & Complainant (power supply and safety of the equipment shall be ensured)
19.02.2019, 14.00 to 18.00	Installation of Respirable Dust Sampler PM <sub>10</sub> (RDS) and gaseous sampling for SO <sub>2</sub> and NO <sub>2</sub> at six ambient air quality monitoring sites and starting of monitoring	PPCC shall ensure adequate numbers of monitoring equipment in working condition along with calibration certificates and required manpower CPCB shall bring filter papers required for 48 hours monitoring and Reagents for gaseous pollutants shall be prepared by PPCC
20.02.2019, 08.00 to 10.00 hrs	Ensuring the operation of Ambient air quality monitoring stations at all locations	Monitoring and sampling shall continue till 21.02.2019 evening.
20.02.2019 14.00hrs to 18.00 hrs	Physical survey in the area of Nagor, Nagapatinam, railway station and road ways transported coal	Team of Official from CPCB, PPCC, & Complainant and Representative from Karaikal Port shall conduct. If any water and soil samples to be collected
21.02.2019 09.00hrs to 18.00 hrs	Physical survey inside the Karikal Port. Verification of directions of the points and operation of Mechanisation installed	Team of Official from CPCB, PPCC and Representative from Karaikal Port shall conduct jointly
22.02.2019 09.00hrs to 14.00 hrs	Winding up of ambient monitoring and collection of all samples.	Team of Official from CPCB, PPCC and Representative from Karaikal Port shall conduct the activities.



22.02.2019 14.30hrs to 17.00 hrs	Discussion on any other points or contaminating zones to be verified	Team of Official from CPCB, PPCC, Complainant and Representative from Karaikal Port shall conduct.
--	---	--

**Note:**

1. All the sampled filter papers shall be brought back to CPCB for further analysis in the laboratory.
2. Sampled gaseous parameters shall be analysed in the laboratory of PPCC at Karaikal itself and analysed results shall be reported to CPCB on or before 27th February 2019.
3. PPCC is requested to provide any such monitoring results recently carried out in the area.
4. Karaikal port should ensure proper functioning of CAAQMS installed in the premises and to provide the historical data as desired by the committee at least for one year.
5. The Monitoring locations carried out in the previous inspection are annexed for comments and at same locations proposed to carry out ambient air quality monitoring. If any changes required may be intimated to the committee before the commencement of monitoring.

S. Suresh  
7/2/2019  
(S.Suresh)  
Regional Director

## Annexure-1

Sl.No	Locations of Ambient Air Quality Monitoring Carried out Jointly during 16-07-2017 to 18-07-2017 <b>and same locations are proposed for further monitoring to be carried during 18<sup>th</sup> to 22nd February 2019</b>	<b>Aerial Distance from Main gate of KPPL</b>
1.	Mr.Shahul Amid S/o Kunju Mohamed, House No.29, Therupalli Theru, Near IOB Bank, Nagoor, Nagapatinam <b>Tamil Nadu</b> -611 002	1-1.5 Kms
2.	Mr.Shahul Hahamed, S/o Syed Ahamed, No.5, Panam Kolli, Yusufia Nagar, Nagoor, <b>Tamil Nadu</b> -611 002	1.5-2.0 Kms
3.	Mr.Tamilaran S/o House No.15, Nadu Theru, Keelavanjore, Karaikal, <b>Puducherry</b> -611 002	0.5-0.75 Kms
4.	Mr.Nadarajan S/o Veeraputran No.5, Pallivasal Theru, Keelavanjore, Karaikal, <b>Puducherry</b> -611 002	0.5-0.75 Kms
5.	Near Admin Building, <b>Karaikal Port</b> Premises,Karaikal, Puducherry	200 mts
6.	Near Iron Ore storage plot, Near Northern Break waters <b>Karaikal Port</b> Premises, Karaikal, Puducherry	1.5-2.0 Kms

S. Suresh  
7/2/2019  
(S.Suresh)  
Regional Director



NO.DSTE/JIC/CPCB/SEE/2019/  
GOVERNMENT OF PUDUCHERRY  
DEPARTMENT OF SCIENCE, TECHNOLOGY & ENVIRONMENT  
PUDUCHERRY POLLUTION CONTROL COMMITTEE  
3<sup>RD</sup> FLOOR, PHB BUILDING, ANNA NAGAR, PUDUCHERRY – 5  
Phone No: (0413) 2201256      Telefax: (0413) 2203494

\* \* \*

Puducherry dt.

**13 FEB 2019**

To

~~The~~ Regional Director  
Central Pollution Control Board,  
A-Block, Nisarga Bhavan,  
1st and 2nd Floors, 7th D Cross,  
Thimmaiah Road, Shivanagar,  
Bengaluru-560 079,

Sir

Sub: PPCC – Nomination of Officer for carrying out inspection of  
M/s. Karaikal Port Pvt. Ltd., - Reg.


Ref: Your letter F.No. Tech/38/PC-Pondi/RDS/2018-2019/2013 dt.  
07.02.2019.

\*\*\*

With reference to the above mentioned subject, the following officers are nominated to carry out inspection of M/s. Karaikal Port along with team of Central Pollution Control Board.

- i). Dr. N. Ramesh, Senior Environmental Engineer
- ii). C. Poogajendy, Junior Engineer
- iii). P. Ashok Kumar, Junior Laboratory Assistant

Yours sincerely,

  
(SMITHA .R)  
MEMBER SECRETARY  
(PPCC)

Copy to:  
Guard file



केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
CENTRAL POLLUTION CONTROL BOARD

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार  
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA

P.No.Tech/38/PC-Pondi/RDS/2018-2019/

07 February 2019

To

Thiru. Shahul Hameed  
S/o Mr.Syed Ahamed  
5, Panankollai, Yusufia Nagar  
Nagur-6110002, Tamil Nadu.

Sub: Joint Inspection and Monitoring of Karaikal Port to comply with the direction of Hon'ble NGT against original Application No.08 of 2018 & on the verdict of Hon'ble High Court of Judicature at Madras dt 29.01.2019 and to investigate VIP complaint of Thiru. Dr.K.Gopal, MBBS, Hon'ble Member of Parliament (Lok Sabha on Implementation of Directions issued by PPCC and environmental degradation caused by Marg Port-Karaikal.

Sir,

With reference to the verdict of Hon'ble High Court of Judicature at Madras dt 29.01.2019 against W.P No. 33942 of 2018, Karaikal Port Pvt Ltd Vs NGT and 6 others against original Application No.08 of 2018(SZ) (copy enclosed) and to investigate the VIP complaint, it is proposed to conduct joint inspection and ambient air quality monitoring of the Karaikal Port and surrounding villages of Nagapatinam, Tamil Nadu, Keelavanjur Puducherry along with CPCB & PPCC during 18<sup>th</sup> to 22<sup>nd</sup> February 2019.

In this regard, Dr.Madhusudan, Additional Director (Mobile:9448019014, mail:madhu1960@gmail.com) and Sh.Karunakaran STS (mobile:9844030141, mail:karunacpcb@gmail.com) are nominated as members of Committee.

It is requested to join and to render assistance to the committee to point out the alleged violation if any during 18<sup>th</sup> to 22<sup>nd</sup> February 2019. In addition, if any physical damages or evidences of health and environmental degradation of the area caused by Karaikal port activities are available, the same may be furnished to the committee so as to enable to plan for appropriate sampling and record in the report.

S. Suresh  
7/2/2019  
(S.Suresh)

Regional Director

Encls: As above

Copy to

The District Environmental Engineer  
Tamil Nadu Pollution Control Board  
No.14, Perumalsannathi street  
Nagapattinam - 611 001, Tamil Nadu

For information pls

क्षेत्रीय निदेशालय (दक्षिण) : निसर्ग भवन, ए-ब्लॉक, प्रथम एवं द्वितीय तल, तिममय्या रोड, 7-डी मैन, शिवनगर, बेंगलूरु - ५६० ०७९.

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ई-मेल / E-mail : cpcbszo@yahoo.com, zobangalore.cpcb@nic.in

प्रधान कार्यालय : परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली- ११० ०३२.

Head Office : Parivesh Bhawan, East Arjun Nagar, Delhi - 110 032.

दूरभाष / Telephone : 011-43102030, Fax : 22305793, 22307078, 22307079, 22301932, 22304948

ई-मेल / E-mail : cpcb@nic.in वेबसाइट / Website : www.cpcb.nic.in



Preliminary Meeting held on coal dust emissions at Nagore and Keezhavanjore by operation of Karaikal Port Pvt. Ltd., Karaikal, as per the Order of the Hon'ble High Court of Madras, by Joint Committee comprising of CPCB, PPCC, KPPL and Complainant.

Venue : Department of Science, Technology and Environment,  
Puducherry Pollution Control Committee,  
Karaikal District, U.T. of Puducherry.

Date : 19.02.2019

S.No.	Name of the Participant	Designation	Contact No. / email	Signature
1	S. Shahul Hameed	Petitioner	9789548566	Hameed
2	K. Muvalidhavan	CEO Karaikal Port	8879972997	HM
3	A. R. Ramanayyan	GM - Legal Karaikal Port	9500097805	AR
4	M. SEKHAR	GM - EHS Karaikal Port	8854417461	seks
5	K. RAJENDIRANI	Dy Manager, EHS Karaikal Port	8754417465	Rajend-7
6	POOGAJENDY. C.	JE / DSTE / PPCC	ambitiondrives@gmail.com 9943386622 je@dste.py@gov.in	Poojendy
7	P. ASHOKKUMAR	JLA / DSTE / PPCC Karaikal	akps1962@gmail.com 9486278771	ashok
8	K. KARUNAKUMAR	STS, CPCB Bayel	9844030141 karunacpb@gmail.com	KLP
9	Dr. N. RAMESH	Senior Envt. Enginr	9443329141	N. Ramesh
10	Dr Madhusudanan	Additional Director	944809014	upst
11				
12				
13				
14				

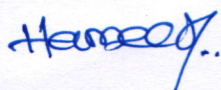


February 21, 2019

**Whomsoever it may Concern**

This to certified that I Mr . S.Shahul hameed , the Petitioner in Original application No: 08/2018 ( SZ) , as per the order of NGT on 05.12.2018 and further order of high court of judicature at Madras on 29.01.2019 , I was present with the team of officials from central pollution control board , Puducherry pollution control committee and officials karaikal port in the discussions , investigation and ambient air quality monitoring activities in and around karaikal port , keelavanjure, melavanjure , north vanjure , Nagore , interaction with the public same area and road survey to assess the coal deposit due to movements of vehicles during the period from 19.02.2019 to 21.02.2019

Yours truly



S.Shahul hameed



**GOVERNMENT OF PUDUCHERRY**  
**DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT**  
**PUDUCHERRY POLLUTION CONTROL COMMITTEE**  
**3<sup>rd</sup> Floor, PHB Building, Anna Nagar**  
**Puducherry – 605 005.**

\*\*\*

Phone : (0413) 2201256  
 Telefax : (0413) 2203494

**AIR CONSENT ORDER (RENEWAL)**

No. PPCC/CON/AIR/TRP/KKL/JE/2018/

Puducherry, the **29 MAR 2018**

Consent is hereby granted under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 and orders made thereunder to **M/s. Karaikal Port Private Limited**, located at, **Keezhavanjore Village, T. R. Pattinam Commune, Karaikal**, authorizing them to operate their plant in the air pollution control area as notified subject to the conditions mentioned below:

**I. Notwithstanding anything contained in any other Laws, Rules and Notifications, this Consent (Renewal) is purely given from the pollution angle.**

**II. Consent is valid upto : 31.03.2019**

**III. Products permitted to be handled : Multi - purpose port, permitted to handle different types of cargo, as mentioned below:**

- |  |             |
|--|-------------|
| (a) Coal   | – 5.0 MMTPA |
| (b) General Cargo {Textiles, Machinery, Timber, Steel, Containers, Granite, Marble Slabs, Iron Ore, Fertilizers, Clay, Gypsum, Limestone, Agro Products like Sugar, Red Chillies, Wheat, Corn etc., Salt and Cement (in Bags Only), Wood Chips, Aggregates, Dolomite and Clinkers} | – 3.5 MMTPA |
| (c) Crude Oil and Other Petroleum Products   | – 1.0 MMTPA |
| (d) Edible Oil   | – 0.5 MMTPA |
| (e) Sand   | – 1.0 MMTPA |
| (f) Cement in Bulk   | – 0.5 MMTPA |

**IV. (i) Size : Large (ii) Category : Red (iii) Location : Mixed (iv) Area : 602 Acres.**

**V. Specific Conditions:**

**1. Conditions imposed vide 157<sup>th</sup> PPCC Meeting held on 05.03.2018 :**

- (a) The timeline for completion of Erection and Commissioning of Mechanization of Coal Handling is further extended to one year *i.e.*, upto March 2019 and is subject to the satisfactory progress of mechanization activity, which shall be reviewed in October 2018, by this Committee.
- (b) The unit shall extend the bank guarantee for one more year upto March 2019, completion of Erection and Commissioning of Mechanization of Coal Handling and the same shall be submitted to this Committee, on or before 30.04.2018.
- (c) Handling of Sand – 1.0 MMTPA and Cement in Bulk – 0.5 MMTPA, as specified in (III) (e) & (f) above, is only in-principle, subject to the condition that, the unit shall obtain Extension of validity of EC and an amendment in the EC Clearance for Phase I and Phase II, amending the categorization of Cargoes, in compliance with the EIA Guidance Manual for Ports and Harbours, prepared by the Administrative Staff College, Hyderabad, for the MoEF&CC, New Delhi, in February 2010, along with the capacity of the same.
- (d) The Committee has No-Objection in according in-principle clearance for import of sand, subject to the condition that the unit shall obtain and submit copies of all other statutory clearances, such as Revenue Department and Agriculture Department, Government of Puducherry.
- (e) The unit shall obtain and submit copy of the EC Clearance extension of validity, as decided by the 21<sup>st</sup> Meeting of the Expert Appraisal Committee, held between 21.08.2017 to 24.08.2017, to this Committee, at the earliest.

- Continued in Page No. 02 -

21

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**Air Consent Order (Renewal)**

**M/s. Karaikal Port Pvt. Ltd.**

- (f) The unit shall handle Sand and Cement in Bulk, as specified in (III) above, only after obtaining the clearances specified in (b), (c) and (d) above and submitting copies of the same to this Committee.
- 2. For Handling of General Cargo, the following systems shall be regularly utilized to meet the standards:**
- (a) **The Total Handling Capacity of the General Cargo, permitted to be handled by the unit shall not exceed 3.5 MMTPA.**
  - (b) Cargoes as specified alone shall be handled and clearance from this Committee shall be obtained in case of any other items to be handled, afresh.
  - (c) Iron Ore shall be wetted by constant sprinkling of water to prevent dust emissions while handling.
  - (d) Fertilizers and Salt shall be handled in hoppers only and shall be carried to the closed warehouses in trucks covered by tarpaulins without any spillage due to transportation.
  - (e) Agro Products such as, Red Chillies, Sugar, Wheat, Corn etc., shall be handled with utmost care, with closed Hoppers and Closed Bagging in warehouses.
  - (f) Gypsum, Limestone and Clay shall be handled with care and shall be covered by tarpaulins during transportation to avoid any spillage.
  - (g) There shall be no increase in the pollution load from the handling process.
- 3. To control fugitive emission at the Coal Stockyard the following systems shall be regularly utilized to meet the standards:**
- (a) Coal shall not be handled more than 5.0 MMTPA, as specified in (III) (a) above.
  - (b) Water Sprinklers provided all along the Stockyard area.
  - (c) Water Tanker with rear spreading bar and high pressure sprinkler nozzle.
  - (d) Dust Separation Wall, with high resistant polymer meshes, provided around the Coal Stock Yard and along the Railway sidings, shall be immediately mended / replaced, as and when damaged.
  - (e) Coal shall be loaded in the trucks only in the wet condition after sprinkling water.
  - (f) The height of the Coal heaps shall not exceed 10 metres.
  - (g) Mobile mistifiers shall be operated throughout the time of handling Coal.
  - (h) The trucks transporting Coal out of the premises shall be subjected to wash using the Automated Tyre Wash System, before exiting the premises.
  - (i) The trucks transporting Coal out of the premises shall be covered using tarpaulins to avoid spillage of Coal on the roads.
  - (j) The Automated Ambient Air Quality Monitoring stations (3 Nos.) connected to the server of this Committee, for parameters, PM10, PM2.5 and CO, shall be maintained at all times and any corrective actions shall be carried out immediately and the same shall be reported to this Committee.
  - (k) The Ambient Air Quality, in and around the unit, shall be maintained within the prescribed standards and if exceeded at any point of time, the enhancement of handling capacity of Coal, awarded herewith, is liable to be revoked by this Committee.
  - (l) No further enhancement of Coal Handling capacity shall be permitted, without completion of the Erection and Commissioning of mechanization of Coal Handling.
- 4. For Crude Oil and Other Petroleum Products:**
- (a) There shall be no storage of crude oil and other petroleum products at any point of time inside the premises.
  - (b) No Construction activities shall be carried out and the applicant shall not undertake any expansion, modernization, diversification, change of location, storage etc., without the prior approval / clearance from this authority.
  - (c) Coast Guard approved Oil Spill Contingency Plan (OSCP) shall be strictly adhered to.

- Continued in Page No. 03 -



- (d) All the measures adopted in Oil Spill Risk Assessment (OSRA) and Environmental Management Plan (EMP) shall be strictly adhered to.
- (e) Fire fighting systems OISD (Oil Industries Safety Directorate) – 156 Standards shall be strictly adhered to.
- (f) Provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any fire hazard to human beings, other living creatures, plants and properties while handling hazardous substances shall be strictly adhered to.
- (g) Periodical mock drills, for all personnel to be involved in transportation of crude oil and petroleum products through pipeline, by updating their technical skills from time to time, so as to control actual leakage of hazardous materials in the quickest possible time, is mandatory.
- (h) The unit shall comply with the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

**5. For Edible Oil:**

- (a) Certified storage tanks shall be utilized for storing edible oil. The validity of the certifications, if any, shall be reviewed and updated, periodically.
- (b) There shall be no spillage of Oil, on land, in and around the premises.

**6. The Ambient Air Quality within the premises shall not exceed the following standards:**

PM <sub>10</sub>	-	100	µg/m <sup>3</sup>
SO <sub>2</sub>	-	80	µg/m <sup>3</sup>
NO <sub>x</sub>	-	80	µg/m <sup>3</sup>
CO	-	2000	µg/m <sup>3</sup>

- 7. The noise level at the boundary shall not exceed 65 and 55 dB (A) during day and night time respectively.
- 8. For 2 x 500 KVA D.G. Set the unit shall comply with the standards for Diesel Generators notified under Environment (Protection) Rules, 1986.

**VI. General Conditions:**

- 1. Notwithstanding anything contained in this No-Objection Certificate from Pollution Angle, the Puducherry Pollution Control Committee hereby reserves its right and power under Section 21 (4) of the Air (Prevention and Control of Pollution) Act, 1981 to **Review / Revoke** any or all the conditions imposed herein and to cancel, refuse, modify or stipulate additional conditions for the purpose of the Act by the Committee, if conditions of the consent granted are not fulfilled.
- 2. Puducherry Pollution Control Committee reserves the right to revoke this clearance, if implementation of any of the conditions stipulated above is violated.
- 3. The applicant shall not undertake any expansion, modernization, diversification, change of location, change of process, change of products etc., without the prior approval / clearance from this authority.
- 4. The applicant shall take all possible measures to create pollution free surroundings.
- 5. Sufficient green belt shall be provided all around the unit.
- 6. This Consent (Renewal) Order shall be exhibited in the office room and must be made available to the inspecting officers of this Committee.
- 7. Housekeeping shall be maintained clean.
- 8. All the conditions shall be enforced under the provisions of the Environment (Protection) Act, 1986, along with its amendments, from time to time.

**VII. For Better Environmental Management:**

- 1. Energy conservation measures like installation of energy efficient lighting systems, like LED's for lighting the areas inside and outside the building should be integral part of the design. Used CFL's/TFL's/LED's should be properly collected and disposed off / sent to for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid toxic contamination.

*gm*

*[Signature]*



**Air Consent Order (Renewal)**

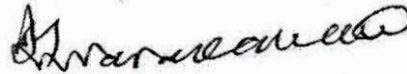
**M/s. Karaikal Port Pvt. Ltd.**

2. Use of Solar panels may be adopted to the maximum extent possible, especially for street lights within the campus.
3. Energy Audit and annual reduction pattern to be planned and intimated to this committee.
4. Systematic Plantation of suitable varieties of trees, shrubs and climbers etc., shall be done in phased manner, with plan budget over a period of years covering the entire available vacant area.
5. Appropriate rain water harvesting structures and Farm Ponds shall be established on scientific basis.

**VIII. Implementation Schedule :**

1. The unit shall ensure compliance the Direction issued by this Committee, dated 04.09.2017, on or before the said timelines i.e., April 2018 and the report of the same shall be submitted to this Committee. No further extension of the above timelines will be permitted and the unit is strictly advised to stick to the said timelines.
2. **This Consent (Renewal) shall be reviewed and / or revoked, in accordance with the conditions, specified above, in case, of the unit, failing to comply with the above conditions, within above specified timelines.**

For & on behalf of PPCC



(M. DWARAKANATH)

MEMBER SECRETARY

PUDUCHERRY POLLUTION CONTROL COMMITTEE

✓ To  
M/s. Karaikal Port Private Limited, Post Box No. 33, Karaikal - 609 602.

Copy to:  
Standing Guard File.



**GOVERNMENT OF PUDUCHERRY**  
**DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT**  
**PUDUCHERRY POLLUTION CONTROL COMMITTEE**  
3<sup>rd</sup> Floor, PHB Building, Anna Nagar  
Puducherry – 605 005.

\*\*\*

Phone : (0413) 2201256  
Telefax : (0413) 2203494

**WATER CONSENT ORDER (RENEWAL)**

No. PPCC/CON/WTR/TRP/KKL/JE/2018/

Puducherry, the **29 MAR 2018**

Consent is hereby renewed for discharge of effluents to M/s. Karaikal Port Private Limited, located at, Keezhavanjore Village, T.R.Pattinam Commune, Karaikal, under the Section 25 of the Water (Prevention and control of Pollution) Act, 1974, subject to the following terms and conditions:

**I. Notwithstanding anything contained in any other Laws, Rules and Notifications, this Consent (Renewal) is purely given from the pollution angle.**

**II. Consent is valid upto : 31.03.2019**

**III. Products permitted to be handled : Multi - purpose port, permitted to handle different types of cargo, as mentioned below:**

- |  |             |
|--|-------------|
| (a) Coal   | – 5.0 MMTPA |
| (b) General Cargo {Textiles, Machinery, Timber, Steel, Containers, Granite, Marble Slabs, Iron Ore, Fertilizers, Clay, Gypsum, Limestone, Agro Products like Sugar, Red Chillies, Wheat, Corn etc., Salt and Cement (in Bags Only), Wood Chips, Aggregates, Dolomite and Clinkers} | – 3.5 MMTPA |
| (c) Crude Oil and Other Petroleum Products   | – 1.0 MMTPA |
| (d) Edible Oil   | – 0.5 MMTPA |
| (e) Sand   | – 1.0 MMTPA |
| (f) Cement in Bulk   | – 0.5 MMTPA |

**IV. (i) Size : Large (ii) Category : Red (iii) Location : Mixed (iv) Area : 602 Acres.**

**V. Specific Conditions:**

**1. Conditions imposed vide 157<sup>th</sup> PPCC Meeting held on 05.03.2018 :**

- (a) The timeline for completion of Erection and Commissioning of Mechanization of Coal Handling is further extended to one year i.e., upto March 2019 and is subject to the satisfactory progress of mechanization activity, which shall be reviewed in October 2018, by this Committee.
- (b) The unit shall extend the bank guarantee for one more year upto March 2019, completion of Erection and Commissioning of Mechanization of Coal Handling and the same shall be submitted to this Committee, on or before 30.04.2018.
- (c) Handling of Sand – 1.0 MMTPA and Cement in Bulk – 0.5 MMTPA, as specified in (III) (e) & (f) above, is only in-principle, subject to the condition that, the unit shall obtain Extension of validity of EC and an amendment in the EC Clearance for Phase I and Phase II, amending the categorization of Cargoes, in compliance with the EIA Guidance Manual for Ports and Harbours, prepared by the Administrative Staff College, Hyderabad, for the MoEF&CC, New Delhi, in February 2010, along with the capacity of the same.
- (d) The Committee has No-Objection in according in-principle clearance for import of sand, subject to the condition that the unit shall obtain and submit copies of all other statutory clearances, such as Revenue Department and Agriculture Department, Government of Puducherry.
- (e) The unit shall obtain and submit copy of the EC Clearance extension of validity, as decided by the 21<sup>st</sup> Meeting of the Expert Appraisal Committee, held between 21.08.2017 to 24.08.2017, to this Committee, at the earliest.
- (f) The unit shall handle Sand and Cement in Bulk, as specified in (III) above, only after obtaining the clearances specified in (b), (c) and (d) above and submitting copies of the same to this Committee.

- Continued in Page No. 02 -

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2. **For Handling of General Cargo, the following systems shall be regularly utilized to meet the standards:**
- (a) **The Total Handling Capacity of the General Cargo, permitted to be handled by the unit shall not exceed 3.5 MMTPA.**
  - (b) Cargoes as specified alone shall be handled and clearance from this Committee shall be obtained in case of any other items to be handled, afresh.
  - (c) Iron Ore shall be wetted by constant sprinkling of water to prevent dust emissions while handling.
  - (d) Fertilizers and Salt shall be handled in hoppers only and shall be carried to the closed warehouses in trucks covered by tarpaulins without any spillage due to transportation.
  - (e) Agro Products such as, Red Chillies, Sugar, Wheat, Corn etc., shall be handled with utmost care, with closed Hoppers and Closed Baggings in warehouses.
  - (f) Gypsum, Limestone and Clay shall be handled with care and shall be covered by tarpaulins during transportation to avoid any spillage.
  - (g) There shall be no increase in the pollution load from the handling process.
3. **To control fugitive emission at the Coal Stockyard the following systems shall be regularly utilized to meet the standards:**
- (a) Coal shall not be handled more than 5.0 MMTPA, as specified in (III) (a) above.
  - (b) Water Sprinklers provided all along the Stockyard area.
  - (c) Water Tanker with rear spreading bar and high pressure sprinkler nozzle.
  - (d) Any damage(s) to Dust Separation Wall with high resistant polymer meshes shall be immediately replaced.
  - (e) Coal shall be loaded in the trucks only in the wet condition after sprinkling water.
  - (f) The height of the Coal heaps shall not exceed 10 metres.
  - (g) Mobile mistifiers shall be operated throughout the time of handling Coal.
  - (h) The trucks transporting Coal out of the premises shall be subjected to wash using the Automated Tyre Wash System, before exiting the premises.
  - (i) The trucks transporting Coal out of the premises shall be covered using tarpaulins to avoid spillage of Coal on the roads.
  - (j) The Automated Ambient Air Quality Monitoring stations (3 Nos.) connected to the server of this Committee, for parameters, PM10, PM2.5 and CO, shall be maintained at all times and any corrective actions shall be carried out immediately and the same shall be reported to this Committee.
  - (k) The Ambient Air Quality, in and around the unit, shall be maintained within the prescribed standards and if exceeded at any point of time, the enhancement of handling capacity of Coal, awarded herewith, is liable to be revoked by this Committee.
  - (l) No further enhancement of Coal Handling capacity shall be permitted, without completion of the Erection and Commissioning of mechanization of Coal Handling.
1. **For Crude Oil and Other Petroleum Products:**
- (a) There shall be no storage of crude oil and other petroleum products at any point of time inside the premises.
  - (b) No Construction activities shall be carried out and the applicant shall not undertake any expansion, modernization, diversification, change of location, storage etc., without the prior approval / clearance from this authority.
  - (c) Coast Guard approved Oil Spill Contingency Plan (OSCP) shall be strictly adhered to.
  - (d) All the measures adopted in Oil Spill Risk Assessment (OSRA) and Environmental Management Plan (EMP) shall be strictly adhered to.



- (e) Fire fighting systems OISD (Oil Industries Safety Directorate) – 156 Standards shall be strictly adhered to.
- (f) Provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any fire hazard to human beings, other living creatures, plants and properties while handling hazardous substances shall be strictly adhered to.
- (g) Periodical mock drills, for all personnel to be involved in transportation of crude oil and petroleum products through pipeline, by updating their technical skills from time to time, so as to control actual leakage of hazardous materials in the quickest possible time, is mandatory.
- (h) The unit shall comply with the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

**2. For Edible Oil:**

- (a) Certified storage tanks shall be utilized for storing edible oil. The validity of the certifications, if any, shall be reviewed and updated, periodically.
- (b) There shall be no spillage of Oil, on land, in and around the premises.

**3. The maximum daily water requirement / effluent discharge shall not exceed the following (in KLD):**

S.No	Water based on usage	Requirement	Discharge
1.	Domestic	40.0	32.0
2.	Supply to Ships	100.0	-
3.	Gardening	40.0	-
4.	Fire Service & Pollution Control	160.0	-
5.	Miscellaneous	10.0	-
	<b>Total</b>	<b>350.0</b>	<b>32.0</b>

4. The accounts of water consumption, with the source of water, shall be maintained separately for the above usage requirements and discharge along with treated water. The copy of the above said records shall be submitted to this committee on a monthly basis.
5. The operation of the R.O.System shall be recorded in a log book, indicating the quantity of intake and reject, source of water, discharge of the reject, along with their qualitative analysis data tested by a NABL accredited laboratories and the report of the same shall be submitted to this Committee on a monthly basis.
6. The domestic wastewater treated in Sewage Treatment Plant shall be used for gardening purpose. The accounts of water treated and reused shall be recorded in a log book and the same shall be submitted to this committee on a monthly basis, along with the qualitative analysis data tested by a NABL accredited laboratories.
7. The Storm Water Drain system shall be maintained regularly. The Effluent Treatment Plants linked to the Storm Water Drain System shall be ensured for its operability and shall be used for the very purpose. The records of the water treated and reused of the same shall be submitted to this Committee, on a monthly basis.
8. The treated water from the STP shall conform to the following standards, as applicable :

S.No.	Parameters	Standard Limits	Units
1	pH	6.5 – 9.0	-
2	Total Suspended Solids	< 20	mg/l
3	Biological Oxygen Demand	< 10	mg/l
4	Chemical Oxygen Demand	< 50	mg/l
5	NH <sub>4</sub> -N (Ammoniacal Nitrogen)	< 5	mg/l
6	N-Total (Total Nitrogen)	< 10	mg/l
7	Fecal Coliform	< 100	MPN/100 ml



**VI. General Conditions:**

1. Notwithstanding anything contained in this conditional letter or Consent the Puducherry Pollution Control Committee reserves to it the right and power under Section 27 (2) of the Water (Prevention and Control of Pollution) Act, 1974 to **review / revoke** any one or all the conditions imposed herein and to make such variations as deemed fit for the purpose of the Act by the Committee, if the conditions of the consent are not fulfilled.
2. **The applicant shall make an application for renewal of consent in the prescribed form at least 30 days before the date of expiry of the Consent or 30 days before the new or altered outlet is proposed to be commissioned and / or a new discharge is proposed to be made, whichever is earlier.**
3. This Consent (Renewal) Order shall be exhibited in the office room and must be made available to the inspecting officers of this Committee.
4. Housekeeping shall be properly maintained.

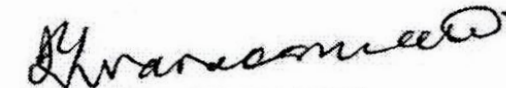
**VII. For Better Environmental Management Practices:**

1. Energy Conservation measures like installation of Energy Efficient Lighting System like LEDs for lighting the areas inside and outside the building shall be adopted. Used LEDs/CFLs/TFLs should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid toxic contamination.
2. Use of Solar panels may be adopted to the maximum extent possible, especially for street lights within the campus.
3. Energy Audit and annual reduction pattern to be planned and intimated to this committee. The unit shall submit a report annually.
4. Systematic Plantation of suitable varieties of trees, shrubs and climbers etc., shall be done in phased manner, with plan budget over a period of years covering the entire available vacant area. The unit shall submit a report annually.
5. Appropriate rain water harvesting structures and Farm Ponds shall be established on scientific basis.

**VIII. Implementation Schedule :**

1. M/s. Karaikal Port Pvt. Ltd., shall submit the clearance from the State Ground Water Unit & Soil Conservation, Puducherry for drawal of 350 KLD of water, to this Committee, at the earliest.
2. **This Consent (Renewal) shall be reviewed and / or revoked, in accordance with the conditions, specified above, in case, of the unit, failing to comply with the above conditions, within above specified timelines.**

For & on behalf of PPCC



(M. DWARAKANATH)  
MEMBER SECRETARY

PUDUCHERRY POLLUTION CONTROL COMMITTEE



✓ To  
M/s. Karaikal Port Private Limited, Post Box No. 33, Karaikal – 609 602.

Copy to:  
Standing Guard File.



**GOVERNMENT OF PUDUCHERRY**  
**DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT**  
**PUDUCHERRY POLLUTION CONTROL COMMITTEE**  
**3<sup>rd</sup> Floor, PHB Building, Anna Nagar**  
**Puducherry – 605 005.**

\*\*\*

Phone : (0413) 2201256  
Telefax : (0413) 2203494

No. PPCC/NOC/CHR/TRP/KKL/JP/2019/1367

Puducherry, the - 1 FEB 2019

**NO-OBJECTION CERTIFICATE FROM POLLUTION ANGLE  
FOR RESTORATION OF HANDLING CAPACITY OF COAL**

Sub : PPCC – No Objection Certificate (NOC) from pollution angle, to M/s. Karaikal Port Pvt. Ltd., located and operating at, Keezhavanjore Village, T. R. Pattinam, Karaikal, for restoration of handling capacity of Coal from 5.0 MMTPA to 10.0 MMTPA - Issued.

- Ref : (1) Your Letter No. KPPL/ENV/PPCC/2018/48 dated 21.11.2018.  
(2) Minutes of 157<sup>th</sup> Meeting of this Committee, held on 05.03.2018.  
(3) Minutes of 162<sup>st</sup> Meeting of this Committee, held on 10.12.2018.  
(4) PPCC - Air and Water Consent Orders (Renewal), issued by PPCC, dated 29.03.2018, valid upto 31.03.2019.

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With reference to the above, it is informed that the Puducherry Pollution Control Committee has No Objection in according permission to M/s. Karaikal Port Pvt. Ltd., located and operating at, Keezhavanjore Village, T. R. Pattinam, Karaikal, to restore the handling capacity of Coal, from 5.0 MMTPA to 10.0 MMTPA, subject to the following conditions:

I. Notwithstanding anything contained in any other Laws, Rules and Notifications, this No-Objection Certificate is purely given from pollution angle only.

II. (i) Size : Large (ii) Category : Red (iii) Location : Mixed (iv) Area : 602 Acres.

III. Validity of this No-Objection Certificate :

1. This No Objection Certificate is valid for a period of Five (05) years only, upto 31.01.2023.
2. The unit shall install necessary machineries and provide necessary arrangements, in the above said premises within the validity period of this No Objection Certificate and no further extension of the validity of the same shall be considered by this Committee.
3. The unit shall apply for obtaining Consent to Operate, before Thirty (30) days of the expiry of this No Objection Certificate, as imposed in (1) above or before Thirty (30) days of commencement of operation, whichever is earlier, in prescribed forms, duly filled in, as per prevailing orders.
4. If the unit fails to install and commence the operation within the validity period of this No Objection Certificate, as imposed in (1) above, in which case this No Objection Certificate becomes void and that, the unit shall obtain a fresh clearance from this authority.

IV. Specific Conditions:

1. The overall handling capacity of the unit shall not exceed 16.5 MMTPA, as permitted by this Committee, vide Air and Water Consent Orders (Renewal), issued by this Committee, vide reference (4) cited above, read with this No-Objection Certificate, issued by this Committee, vide reference (3) cited above. The unit shall submit a consolidated report of the quantity of the Cargoes handled, cargo wise and month wise, at the end of every financial year, to this Committee.
2. The unit shall handle Coal through Mechanized mode only.
3. Considering operational constraints to cater to small customers, semi mechanized operation mode through hoppers and conveyors, is permitted to a maximum capacity of 1.5 MMTPA.
4. The validity of the Bank Guarantee of Rs. 50,00,000/- (Rupees Fifty Lakhs Only), being till 31.05.2019, shall be held with this Committee, till the validity and the decision on releasing the same shall be made subsequently.

- Continued in Page No. 02 -



**No-Objection Certificate  
(Restoration of Coal Handling Capacity)**

M/s. Karaikal Port Pvt. Ltd.

5. The Mechanization of the Coal Handling System shall be provided with Water Sprinkling System, Mistifiers or Fogging machines, at all points of dust prone areas of the same and the present provisions and action plans for the proposed areas shall be submitted to this Committee.
6. At any point of time, Coal shall not be transferred to or be stored on the berths. Storage of Coal shall be limited to Coal Stock Yard only, meticulously following the conditions imposed by this Committee, so far, at all points of time.
7. **All other conditions specified in the Air and Water Consent Orders (Renewal), issued by this Committee, vide reference (4) cited above, remains valid and in force.**

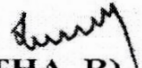
**V. General Conditions:**

1. Notwithstanding anything contained in this No-Objection Certificate from Pollution Angle, the Puducherry Pollution Control Committee hereby reserves its right and power under Section 27 (2) of the Water (Prevention and Control of Pollution) Act, 1974 and Section 21 (4) of the Air (Prevention and Control of Pollution) Act, 1981 to **Review / Revoke** any or all the conditions imposed herein and to cancel, refuse, modify or stipulate additional conditions for the purpose of the Act by the Committee, if conditions of the consent granted are not fulfilled.
2. Puducherry Pollution Control Committee reserves the right to revoke this clearance, if implementation of any of the conditions stipulated above is violated.
2. The applicant shall not undertake any expansion, modernization, diversification, change of location, change of process, change of products etc., without the prior approval / clearance from this authority.
3. The applicant shall take all possible measures to create pollution free surroundings.
4. Sufficient green belt shall be provided all around the unit.
5. This No-Objection Certificate from Pollution Angle shall be exhibited in the office room and must be made available to the inspecting officers of this Committee.
6. Housekeeping shall be maintained clean.
7. All the conditions shall be enforced under the provisions of the Environment (Protection) Act, 1986, along with its amendments, from time to time.

**VI. Implementation Schedule :**

1. All the wind screen, damaged by the Gaja Cyclone, shall be rectified immediately. The unit shall strictly adhere to the maintenance of the same and shall not take advantage of any natural calamities for non-compliance, in future. The report of the same shall be submitted to this Committee **on or before 31.01.2019.**
2. **This No-Objection Certificate shall be reviewed, in accordance with the conditions, specified above. In case, of the unit, failing to comply with the above conditions, within above specified timelines, necessary enforcement action, as deemed fit may be initiated.**

For & on behalf of PPCC

  
(SMITHA. R)

MEMBER SECRETARY

PUDUCHERRY POLLUTION CONTROL COMMITTEE

To

✓ M/s. Karaikal Port Pvt. Ltd., P.B.No.33, Karaikal – 609 602.

Copy submitted to :

The District Collector,  
District Collectorate,  
Karaikal District – 609 602.

} - For kind information please.

Copy to :

1. The Commissioner, T.R. Pattinam Commune Panchayat, T.R. Pattinam, Karaikal – 609 606.
2. Standing Guard File.



Ref No: KPPL/ENV/PPCC/2019/04

Date: 25.02.2019

To  
**The Member Secretary,**  
Puducherry Pollution Control Committee,  
Department of Science, Technology & Environment,  
Puducherry – 605 005.



Sub: Application & Fee for the Renewal of Air & Water Consents (Apr 2020 to Mar 2022) - Regarding

Ref:

1. PPCC No. PPCC/CON/AIR/TRP/KKL/JE/2018/ & No. PPCC/CON/WTR/TRP/KKL/JE/2018 dated 29.03.2018
2. PPCC NOC for handling Sand No. PPCC/NOC/SAND/TRP/KKL/JE/2018/1264 dated 03.01.2019
3. PPCC NOC for Coal (10 MMTPA) No. PPCC/NOCCHR/TRP/KKL/JE/2019/1367 dated 01.02.2019
4. KPPL Representation (Sand Handling) KPPL/ENV/PPCC/2019/01 dated 05.01.2019
5. KPPL Representation (Coal Handling) KPPL/ENV/PPCC/2019/02 dated 05.01.2019
6. KPPL Representation KPPL/ENV/PPCC/2019/03 dated 07.01.2019

Madam,

Please find attached Form I for Air Consent and Form XIII for Water consent along with the prescribed fees vide DD No: 696918, dated 25.02.2019 for Rs. 3,10,100 /- (Rupees three lakhs ten thousand one hundred only) has drawn on Indian bank Harbour - 00087 branch towards air consent application fees. DD No: 696917, dated 25.02.2019 for Rs. 15,100/- (Rupees Fifteen thousand one hundred only) has drawn on Indian bank Harbour - 00087 branch towards Water Consent application fees.

The validity of the Air and Water consents will be over by 31<sup>st</sup> March 2019. Our fees for the same has been paid upto into March 2021 including the payment which is being made now. Hence the renewal may be made for two years viz Mar 2021.

<b>DD RECEIVED</b>	
Recd	Cheq. No.: 8716
Amount	15,100
DD. No.	696917

**KARAIKAL PORT PRIVATE LIMITED**

CIN: U45203PY2006PTC001945

Registered Office

Corporate Office

Page 1 of 2

Kheezhavanjoor Village, T.N. Pattinam, PB No. 33, Karaikal - 609 606. Tel. : +91 4365 256600 (5 Lines) Fax : +91 4365 256603

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New No.145 (Old No. 81) Royapettah High Road, Mylapore, Chennai - 600 004. Tel. : +91 44 4562 2000 Fax : +91 44 4562 2082

The above referred communication (NOCs) may be considered while renewing the Consents as the necessary infrastructure is in place for the same.

Our representation for considering the revision in the conditions in the NOC may be considered while the Consent is renewed. The copies of the requests are attached for easy reference

We request you to kindly issue the renewed Air & Water consents with enhanced coal quantity for a further period of two years up to Mar 2021.

We would remain highly obliged for your kind consideration.

Thanking you.

Yours Sincerely,



Capt Thiyagarajan K.  
AVP, Operations



(MSEK HAN)

Encl: As above.



**GOVERNMENT OF PUDUCHERRY**  
**DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT**  
**PONDICHERRY POLLUTION CONTROL COMMITTEE**

III Floor, Housing Board Building, Anna Nagar, Puducherry-605 005

Phone : 0413-2201256

Fax : 0413-2203494

**FORM -1**

Application for Consent for Emission/Continuation of Emission under Section 21 of the Air  
(Prevention and Control of Pollution) Act, 1981.

From

Karaikal Port Private Limited  
Post Box No: 33  
Karaikal.  
Pincode: 609602

To

The Member Secretary  
Puducherry Pollution Control Committee  
Puducherry.

Sir,

I hereby apply for Consent to operate / renewal under section 21 of the Air  
(Prevention and Control of Pollution) Act, 1981 (14 of 1981) to bring into use a new/alterd  
stack for the discharge of emission/to begin to make discharge of emission/to continue to  
discharge emission from stack in industry owned by Karaikal Port Private Limited

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**The relevant details are as below :**

1. Full name of applicant, designation  
with address and telephone no.

Capt. Thiyagarajan K.  
AVP, Operations  
Karaikal Port Private Limited  
Post Box No: 33  
Karaikal - 609602  
Phone-04365-256600 (5 lines)  
Fax:- 04365-256603  
thiyagarajan.k@karaikalport.com



- |  |  |
|--|--|
| 2. Names of full-time Directors with address and Telephone nos                   | Mr. G.R.K. Reddy<br>Director<br><br>Karaikal Port Pvt Ltd<br><br>New No 145 (Old No 81)<br>Royapettah High Road,<br>Mylapore.Chennai.600004.<br>Phone 0444562 2000<br>Fax 0444562 2080<br><br><a href="mailto:grk@karaikalport.com">grk@karaikalport.com</a>     |
| 3.(a) Full factory address (with name of plot/ Premises) and telephone no        | Karaikal Port Pvt.Ltd<br>Kheezhavanjoor (village)<br>T.R.Pattinam<br>Karaikal- 609 606<br><br>Phone-04365-256600 (5 lines)<br>Fax:- 04365-256603<br><br>For correspondence<br><br>Karaikal Port (P) Ltd,<br>Regd.Office : Post Box No. 33,<br>Karaikal - 609 602 |
| 3.(b) Extent of land acquired/proposed to be Acquired                            | 602 Acres  |
| 3.(c) Existing/proposed- built up area   | 441 Acres  |
| 4. Date of commissioning of factory or Proposed Date of commissioning of factory | 15 <sup>th</sup> April 2009  |
| 5. Capital Investment made (Rs in lakhs):  | 2700 Crores  |
| (i) Land   |  |
| (ii) Building  |  |
| (iii) Machinery  |  |
| (iv) Miscellaneous   |  |



6. Total number of employees

180

7.(a) Name of the product and their quantities

Product	Quantity as as per PPCC (MMTPA)
Coal	10
General Cargo	3.5
Edible Oil	0.5
Crude+Petroleum	1
Sand	1
Cement in Bulk	0.5

7.(b) Licensed annual capacity of the factory

21.5 MMTPA (MoEFCC)

7.(c) Attach a brief description of the manufacturing process along with a flow diagram and the position of corresponding stack on the plot plan

NA

7.(d) Power requirement (HP)

12.1 MW

8. State the number of boilers, heater, furnaces installed in the factory along with their capacity, type/quantity of fuel used and the emissions from the stacks

Nil

9. Stack details:

NA

(a) Number of stacks

(b) ID fan/ FD fan/ Natural draft

(c) Material of Construction of stack

(d) Stack Height

(i) Above ground-level  
(Metres)

(ii) Above factory roof (Metres)



10. Attach drawing on air pollution control equipment in respect of each of the stacks listed in item 9 above.

Also provide information about stand-by pollution control equipment.

- (a) Name of the equipment
- (b) Existing or proposed and for which pollutant and date of installation
- (c) Reduction efficiency guaranteed by the manufacturer
- (d) Quantity and quality of current/expected emission
- (e) Whether the industry works in general shift or 2 shift or round the clock
- (f) What monitoring is being done or proposed
- (g) Energy meter reading for the air

Pollution Control systems (Attach previous statement of readings)

11. Attach information on compliance of emissions with respect to the standards (Analysis report to be enclosed)

12. I/We declare that the information furnished above is correct to the best of my/our knowledge.

NA

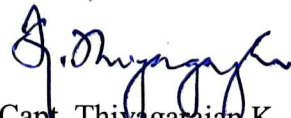
PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, SO<sub>2</sub>, CO (Ambient)

Monitoring reports and CAAQM reports are being submitted to PPCC on monthly basis

13. I/We hereby submit that in case of change either of the point of the emission or its quality a fresh application for consent shall be made and until such consent is granted no emissions shall be made.
14. I/We hereby agree to submit the Department of Science, Technology and Environment/Pondicherry Pollution Control Committee, Puducherry an application for renewal of consent one month in advance of the date of expiry of the consented period for stack emissions if to be continued thereafter.
15. I/We undertake to furnish any information within one month of its being called by the Department of Science, Technology and Environment / Pondicherry Pollution Control Committee, Puducherry.

I/We enclose herewith Demand/Banker's Draft No. 696918 from Indian Bank, dated 25.02.2019 for Rs. 3,10,100 (Rupees Three Lakh Ten Thousand & One Hundred only) in favour of the Member Secretary, Puducherry Pollution Control Committee, Puducherry as fees payable under section 25 of the Act.

Yours faithfully

  
Capt. Thiagarajan K  
AVP, Operations

  
M. SEK HAR



**GOVERNMENT OF PUDUCHERRY**  
**DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT**  
**PONDICHERRY POLLUTION CONTROL COMMITTEE**

III Floor, Housing Board Building, Anna Nagar, Puducherry-605 005

Phone : 0413-2201256

Fax : 0413-2203494

**FORM -XIII**

(See rule 32)

Application for consent for establishment or taking any steps for establishment of  
industry/operation/process/or any treatment/disposal system for discharge or  
continuation of discharge under section 25 or Section 26 of the Water

(Prevention and Control of Pollution) Act, 1974

From

Karaikal Port Private Limited  
Keezhavanjore Village  
T.R.Pattinam  
Pincode: 609606

To

The Member Secretary  
Pondicherry Pollution Control Committee  
Puducherry.

Madam,

I/We hereby apply for Consent to operate / renewal under section 25 or section 26 of the Water (Prevention and Control of Pollution) Act. 1974 (6 of 1947) for establishing or taking any steps for establishment of industry/Operation/Process/or any/ treatment/disposal system to bring into use any new / altered outlet for discharge of sewage/trade effluent / to continue to discharge sewage/Trade effluent from land / premise owned by Karaikal Port Private Limited.

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**The relevant details are as below :**

- |    |  |  |
|----|--|--|
| 1. | Full name of the applicant               | Capt. Thiyagarajan K.<br>AVP, Operations |
| 2. | Nationality of the applicant             | Indian                                   |
| 3. | Status of the applicant of registration, | Private Limited Company                  |





Incorporation etc.

- (a) Individual
- (b) Proprietary concern
- (c) Partnership firm (Whether registered or unregistered)
- (d) Joint family concern
- (e) **Private limited company**
- (f) Public limited Company
- (g) Government company
  - 1. State Government
  - 2. State Government
  - 3. Union Territory
- (h) Any other association or body

4. Name of the Person authorized to sign this form (the original authorization except in the case of individual/propriety concern is to be enclosed.

Capt. Thiagarajan K.  
AVP, Operations  
Karaikal Port Private Limited  
Post Box No: 33  
Karaikal - 609602  
Ph-04365-256600 (5lines)  
Fax:- 04365-256603  
thiyagarajan.k@karaikalport.com

5. Name, address and telephone Nos. of the applicant - the full list of individuals, partners persons, Chairman ( Full - time or Part time), Managing Directors, Managing partners, Directors (Full time or Part time), other kinds of office-bearers are to be furnished with their period of tenure in the respective office with telephone Nos and address

- (i) Full name of applicant, designation with address and telephone no.

Capt. Thiagarajan K.  
AVP, Operations  
Karaikal Port Private Limited  
Post Box No: 33  
Karaikal - 609602  
Phone-04365-256600 (5 lines)  
Fax:- 04365-256603  
thiyagarajan.k@karaikalport.com

- (ii) Names of full-time Directors with address and Telephone nos

Mr. G.R.K Reddy  
Director  
Karaikal Port Pvt Ltd  
New No 145 (Old No 81)



Royapettah High Road,  
Mylapore.Chennai.600004.  
Phone 04445622000  
Fax 0444562 2080  
[grk@karaikalport.com](mailto:grk@karaikalport.com)

6. Address of the industry ( Survey No, Karaikal Port Private Limited  
Cadastre No,location as per the Revenue Keezhavanjore Village  
records. Village, Firaka, Tehsil, District, T.R.Pattinam  
Police Station or SHO.) jurisdiction of the Pincode: 609606  
First Class Magistrate) Phone-04365-256600 (5 lines)
- 6.(a) Extent of land acquired/proposed to be 602 Acres  
Acquired
- 6.(b) Existing/proposed- built up area 441 Acres
7. Details of commissioning etc Commissioned on 15.04.2009
- 7.(a) Approximate date of the proposed  
commissioning of work
- 7.(b) Expressed date of production
8. Total number of employees expected to be 180  
employed
- 8.(a) Cost of the project 2700 Crores  
(i) Land  
(ii) Building  
(iii) Machinery  
(iv) Miscellaneous
9. Details of license, if any obtained under the NA  
provisions of industrial Development  
Regulations Act, 1951
- 10.(a) Attach the list of all raw materials and Nil  
chemicals used per month.
- 10.(b) Licensed annual capacity of the 21.5 MMTPA  
factory/Industry

10.(c) Name of the product and their quantities

Product	Quantity as as per PPCC (MMTPA)
Coal	10
General Cargo	3.5
Edible	0.5
Crude+ Petroleum	1
Sand	1
Cement in Bulk	0.5

11 Source of Water

PASIC water, RO & Sea

11.(a) State daily quantity of water utilized in  
Kilolitres

Existing Qty as  
per Water  
Consent (KLD)

(i) Supply to Ships	100
(ii) Supply to Port Staffs	40
(iii) Pollution Control and Fire fighting	160
(iv) Gardening	40
(v) Miscellaneous	10
(vi) Total Quantity	350

12.(a) State the daily maximum quantity of  
effluents and mode of disposal (Sewer or  
strains or river)

The STP treated water is reused for  
Green Belt Development and Pollution  
Control Measures.

Also attach the analysis report of the  
effluents, type of effluent quantity in  
Kilolitres, mode of disposal

- (i) Process
- (ii) Cooling
- (iii) Boiler
- (iv) Domestic
- (v) Gardening



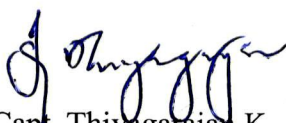
(vi) Washing (Floor and Vessels)


- 12.(b) Quality of effluent currently being discharged or expected to be discharged
- The STP treated water is re-used for Green Belt Development and Pollution Control Measures.
- 12.(c) What monitoring arrangement is currently there or proposed ?
- Monthly Monitoring of Water Quality in terms of Physio-chemical, Nutrients, Heavy metals and Biological parameters.
13. State whether you have any treatment plant for Industrial, domestic or combined effluents If Yes, attach a description of the process of the treatment in brief. Attach information on the quality of treated effluents vis standards
- Yes  
A Sewage Treatment Plant of 25 KL capacity is established. Vehicle wash ETP (16KL) & Three Coal wash (Storm Water ETP's (50 KL each) are established.
14. State details of solid wastes generated in the process or during waste treatment
- (i) Characteristics  
(ii) Description  
(iii) Quantity  
(iv) Name of the solid waste  
(v) Method of disposal  
(vi) Method of treatment
- Nil
15. I/We declare that the information furnished above is correct to the best of my/our knowledge.
16. I/We hereby submit that in case of change either of the point of discharge or its quality, a fresh application for consent shall be made and until such consent is granted no change shall be made.
17. I/We hereby agree to submit to the Department of Science, Technology and Environment/Pondicherry Pollution Control Committee, Puducherry an application for renewal of consent one month in advance of the date of expiry of the consented period for outlet and discharge if to be continued thereafter.
18. I/We undertake to furnish any other information within one month of its being called by the Department of Science, Technology and Environment / Pondicherry Pollution Control Committee, Puducherry.



I/We enclose herewith a Banker's Demand Draft from Indian Bank, DD No. 696917 dated 25.02.2019 for Rs.15,100 (Rupees Fifteen Thousand & One Hundred Only) in favour of the Member Secretary, Puducherry Pollution Control Committee, Puducherry as fees payable under section 25 of the Act.

Yours faithfully

  
Capt. Thiyagarajan K  
AVP, Operations

  
(M. S. KUMAR)

