

# SIX MONTHLY ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

*For*

*Naidupeta*

*'Industrial Park Naidupeta'*

Menakuru&Koneitirajupalem villages, Naidupeta

Mandal, S.P.S.R. Nellore District, Andhra Pradesh

*By*



**M/s Andhra Pradesh Industrial Infrastructure Corporation (APIIC)**

*Submitted to*

**Ministry of Environment and Forest,  
Regional Office,  
Handloom Export Promotion Council,  
34, Cathedral Garden Road,  
Nungambakkaam, Chennai – 600 034.**

**Prepared by**



**ENVIRONMENTAL CONSULTANT**

**HUBERT ENVIRO CARE SYSTEMS (P) LTD**

**CHENNAI**

**Dec 2017**

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## 1.0PROJECT DETAILS

Name of the Project	Industrial Park at IP-Naidupeta
Location	Konetirajupalem and Menakuru villages, NaidupetaMandai in S.P.S.R.Nellore District, Andhra Pradesh.
EC.No	<b>EC OBTAINED Vide File No F.No.21-140/2015-IA- III Dated: 30.05.2017 Annexure 1</b>
Total Plot Area	503.44 ha
Proposed Built Up Area	377.90 ha
Total Green Belt Area	26.94 ha
Total Parking area	12.25 ha is provided with 573 parking bays
Project Cost	Rs. 94.77 Crores.

## 2.0.SITE PHOTOGRAPHS



### 3.0 SIX MONTHLY ENVIRONMENTAL CLEARANCE COMPLIANCE STATEMENT

S. No	Conditions	Compliance
<b>Part – A: Special Conditions</b>		
<b>I. Construction Phase</b>		
1.	'Consent to Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	CFE is obtained. The copy of the same is enclosed in <b>Annexure-6</b> .  <b>Vide order</b> No. 235 /APPCB/CFE/RO-NLR/HO/2017 Dt: 06.09.2017.
2.	To achieve the Zero Liquid Discharge, waste water generated from different industrial operations shall be properly collected, treated to the prescribed standards and then recycled or used for the identified purposes.	Accepted and noted.
3.	Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-BOUndary Movement) Rules, 2016, Solid waste management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	Accepted and Noted.
4.	Air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016	Accepted and Noted.

S. No	Conditions	Compliance
5.	As per the provisions of the Notification dated 9th December, 2016 amending the Principal EIA Notification, 2006, all the building and construction projects (built up area 5000 sqm - 150000 sqm) in the industrial area, shall require clearances for their building plans from the State/local bodies, as applicable. In case of project sizes having built up areas more than 150000 sqm, environmental clearances shall continue to be required from the concerned regulatory authorities.	Accepted and Noted.
6.	For all the individual units/infrastructure requirements, environmental clearances as applicable, shall be obtained from the respective regulatory authorities.	Accepted and Noted.
7.	A site specific biodiversity conservation plan including mitigation measures for local biodiversity to be developed from a recognized institute of repute with appropriate financial allocation for its implementation.	Accepted and Noted.
8.	There shall be a continuous green belt along the plant premises using local tree and shrub species, except at the designated entry and exit points. There shall not be exotic species to be used for green belt development.	Plantation is developed in IP Naidupeta by under going <b>MOU</b> with Social forest deptment. 6,666 numbers of plants planted in 6 Ha as block plantation and 2,620 numbers of plants as Avenue Plantation in 6.55 Km On both sides of the roads.

S. No	Conditions	Compliance
9.	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six Monthly Monitoring reports.	Noted.
10.	Special purpose vehicle shall be established for implementation, monitoring and compliance of the environmental safeguards.	Accepted and will be followed.
11.	All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to RO, MoEF&CC along with half yearly compliance report.	Condition agreed upon.
12.	The member units shall provide effluent storage tanks for monitoring the effluent characteristics before taking it to CETP for further treatment. Member industries shall treat the effluent to meet the prescribed CETP inlet norms.	Accepted and informed to the individual industries to strictly treat the effluents upto CETP inlet standards.
13.	Proper meters with recording facilities shall be provided to monitor the effluent quality and quantity from the individual industries to the CETP and from CETP to the final disposallre-use on a continuous basis.	Accepted and Noted.

S. No	Conditions	Compliance
14.	The project proponent shall establish an environmental monitoring cell with all the potential polluting units as members to review the environmental monitoring data and suggest for improvements.	Accepted and noted
15.	Internal Road widths within the industrial area shall be minimum 24 m ROW.	Master plan is prepared and Minimum ROW are prepared and followed.
16.	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	Accepted and noted
17.	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Monitoring was carried out and test results attached as <b>Annexure-4</b> . The results shows that there is no change to ground water quality.
18.	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Noted and will be followed.
19.	Parking space to accommodate trucks, cars, two wheelers and bicycles shall be provided as per the norms.	Parking area of 12.25 ha is provided with 573 parking bays.

S. No	Conditions	Compliance
20.	Any hazardous waste generated during developmentU construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	Accepted and is being followed.
21.	The DG sets to be used during development/ construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	As per the requirement DG sets will be provided as back up power.
22.	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	Good condition vehicles will be used.
23.	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27 <sup>th</sup> August, 2003.	Noted and followed.
24.	Ready mixed concrete must be used in site development and building construction.	Ready mixed concrete will be used in building construction.
25.	Storm water control and its re-use as per CGWB and BIS standards for various applications to be ensured.	Noted and will be followed. So for 9.2 Km Storm water drain provided and rain water harvesting structures constructed.
26.	Water demand during development/ construction should be reduced by use of premixed concrete, curing agents and other best practices.	Noted and followed.

<b>S. No</b>	<b>Conditions</b>	<b>Compliance</b>
27.	Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.	Noted and followed.
28.	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.	Condition agreed upon,Noted and will be informed to individual industries to strictly follow.
29.	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.	Condition agreed upon,Noted and will be informed to individual industries to strictly follow.
30.	Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality low E value glass.	Condition agreed upon,Noted and will be informed to individual industries to strictly follow.
31.	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.	Condition agreed upon,Noted and will be informed to individual industries to strictly follow.
32.	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfill requirement.	Condition agreed upon,Noted and will be informed to individual industries to strictly follow.

S. No	Conditions	Compliance
33.	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.	At the time of Building Plan approval, it will be checked that, the buildings are designed as per NBC norms.
34.	Regular supervision of the above and other measures for monitoring should be in place all through the development/ construction phase, so as to avoid disturbance to the surroundings.	Noted & followed.
35.	<p>Corporate Environment Responsibility:</p> <p>a) The Company shall have a well laid down Environment Policy approved by the Board of Directors. The Policy shall prescribe for standard operating process/ procedures to bring into focus any infringements/deviation/ violation of the environmental or forest norms/ conditions.</p> <p>b) 2% of the project cost shall be earmarked for Corporate Environment Responsibility activities.</p> <p>c) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large</p>	Accepted & Noted.

S. No	Conditions	Compliance
<b>I I. Operation Phase</b>		
1.	All the topsoil excavated during development/ construction activities should be stored for use in horticulture/landscape development within the project site.	Note and will be followed.
2.	Disposal of muck during development/ construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Note and will be followed.
3.	The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	Condition agreed upon and followed.

S. No	Conditions	Compliance
4.	Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. The location of the DG sets may be decided with in consultation with State Pollution Control Board.	As per the requirement DG sets will be provided as back up power.
5.	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	Accepted and Noted.. Noise levels is attached as <b>Annexure-4.4.B</b> . All Noise levels are with in limits in Industrial park of Naidupeta.
6.	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	15 Meters Green belt all along the periphery being provided.
7.	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.	Accepted and Noted. Will be provided as per the requirement.

S. No	Conditions	Compliance
8.	<p>Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.</p> <p>The borewell for rainwater recharging should be kept at least 4 mts. above the highest ground water table.</p>	Noted and followed.
9.	<p>The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.</p>	<p>Monitoring was carried out for quality of ground water. Reports attached in <b>Annexure-4.C</b></p>
10.	<p>Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking, loading and unloading should be fully internalized and no public space should be utilized.</p>	Noted and followed.
11.	<p>A Report on the energy conservation measures confirming to energy conservation norms finalise by Bureau of Energy Efficiency should be prepared incorporating details about building materials &amp; technology, R &amp; U Factors etc and submit to the Ministry in three months time.</p>	Noted and will be followed

S. No	Conditions	Compliance
12.	Energy conservation measures like installation of CFLs/ TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.	Accepted and Noted.
13.	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	Accepted and Noted.
<b>Part B : General Conditions</b>		
1.	The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.	Accepted and Noted.
2.	The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.	Accepted and Noted.
3.	Six monthly monitoring reports should be submitted to the Ministry and it's Regional Office, Chennai.	Accepted and being submitted.

S. No	Conditions	Compliance
4.	A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.	Condition complied.
5.	The project proponent shall set up a separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	Condition complied
6.	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purpose.	Noted & is being followed. Year wise expenditure should will be reported to the SEIAA and Ministry's Regional office located at Chennai.
7.	All the compliance would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.	Accepted and Noted.
8.	Officials from the Regional Office of MoEF&CC at Bangalore who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/	Accepted and Noted.

S. No	Conditions	Compliance
	data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF&CC should be forwarded to the CCF, Regional Office of MoEF&CCat Bangalore.	
9.	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.	Accepted and Noted.
10.	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Accepted and Noted.
11.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Noted and will be followed as applicable.
12.	The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the	Condition complied. Paper notification ia attached as <b>Annexure-5</b>

S. No	Conditions	Compliance
	<p>project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forests &amp; Climate Change at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a>. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bangalore.</p>	
13.	<p>This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.</p>	Accepted and Noted.
14.	<p>Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.</p>	<p>Noted, Till now there is no appeal against EC order.</p>
15.	<p>A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZilaParishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.</p>	Condition complied.

S. No	Conditions	Compliance
16.	<p>The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.</p>	Accepted and Noted.
17.	<p>The environmental statement for each financial year ending 31st March in Form-Vas is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&amp;CCbye-mail.</p>	Accepted and will be submitted Form-V for every financial end year 31 <sup>st</sup> March.

## **4.0 ENVIRONMENTAL CLEARANCE SIX MONTHLY REPORTS**

It is mandatory to submit six month compliance report to the MoEF Regional Office by the proponent. For the purpose of obtaining six month compliance certificate the environmental monitoring was carried out on site by M/s. Hubert Enviro Care Systems Pvt.Ltd.

### **4.1 Ambient air quality monitoring**

During construction phase particulate matter and gaseous emissions are likely to arise from the site due to soil excavation, movement of vehicles and the operation of DG sets, etc., the ambient air quality parameters such as suspended Particulate Matter (PM<sub>10</sub>), Respirable Particulate Matter (PM<sub>2.5</sub>), sulphur dioxide, Oxides of Nitrogen (NO<sub>x</sub>) and Carbon monoxide were monitored at 6 locations every month. The test report of ambient air quality for the period of Aug-2017 - Nov-2017 (24 reports) is enclosed as **Annexure-4.A**. The Ambient air quality has been monitored and it is observed that all the AAQ parameters are within limits.

### **4.2 Ambient Noise level monitoring**

During the construction phase the ambient noise level likely to be generated due to excavation, construction and movement of vehicles 6 locations was selected for monitoring the noise level every month. The test report of ambient noise level for the period of Aug-2017 - Nov-2017(4 reports) is enclosed as **Annexure-4.B**. Noise levels are within limits.

### **4.3 Water quality monitoring**

During construction phase the ground water may get polluted due to infiltration of rainwater mixed with soil contaminants in the site. The water was tested at 6 (per Month) locations for various water quality parameters including heavy metals. The test report of water quality for the period of Aug-2017 - Nov-2017 (24 reports) is enclosed as **Annexure-4.C**. There is no change in water quality parameters.

#### **4.4 Soil quality monitoring**

During construction phase soil contamination may occur due to oil spills from machinery, during maintenance and operation of DG sets on site. 6 (Yearly Once) locations was selected for monitoring the soil quality. The Soil samples were collected and analyzed for nutrients and heavy metals. The test report of soil quality monitoring for the period of Aug-2017 - Nov-2017 (6 reports) is enclosed as **Annexure-4.D**. Soil quality remains good.

### **5.0 CONCLUSION**

- 1.** The post environmental monitoring was carried out at site during the period of August 2017 - November 2017.
- 2.** All the conditions stipulated in Environmental clearance will be implemented.
- 3.** The monitored paramaters of air, ground water and soil quality and noise levels are within the stipulated standards.

# Annexure 1

## Environmental Clearance

F.No.21-140/2015-IA-III  
Government of India  
Ministry of Environment, Forest and Climate Change  
(IA.III Section)

Indira Paryavaran Bhawan,  
Jor Bagh Road, New Delhi – 3  
Dated: 30<sup>th</sup> May, 2017

To

The Chief Engineer-I,  
M/s Andhra Pradesh Industrial Infrastructure Corporation Ltd.,  
4<sup>th</sup> Floor, Parisrama Bhawan,  
5-9-58/B, Fateh Midan Road,  
**Hyderabad** – 500 004 (Andhra Pradesh)

**Sub: 'Naidupeta Industrial Park' at Menakuru & Koneitirajupalem villages, Naidupeta Mandal in District S.P.S.R. Nellore (AP) by Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC) - Environmental Clearance - reg.**

Sir,

This has reference to your application No. 129/VP(P)APIIC/EIA-IP-Naidupeta dated 14<sup>th</sup> December, 2016 submitting the above proposal to this Ministry for grant of Environmental Clearance (EC) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The proposal for '**Naidupeta Industrial Park**' at Menakuru & Konetirajupalem Villages, Naidupeta Mandal of District S.P.S.R. Nellore (Andhra Pradesh) by Andhra Pradesh Industrial Infrastructure Corporation Limited, was considered by the Expert Appraisal Committee (EAC) in the Ministry for Industrial Estate/Area, SEZ and Highways projects, in its meetings held on 16-17 January, 2017 and 6-7 April, 2017.

3. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above said EAC meetings, are reported to be as under:-

(i) The project involves development of Naidupeta Industrial Park (IP) at Konetirajupalem and Menakuru villages, Naidupeta Mandal in S.P.S.R.Nellore District, Andhra Pradesh.

(ii) Naidupeta Industrial Park proposed in an area of 503.44 ha, forms a part of Yerpedu-Srikalahasti node of proposed Vizag-Chennai industrial corridor. The proposed park in two parts on either side of the bulk land identified/allotted as undeveloping land in an area of 349.29 acres by APIIC, is on the newly designated State Highway.

(iii) The industries located within the undeveloping land have already obtained EC and Consent to Establish/Operate under the Air Act, 1981 and the Water Act, 1974.

(iv) In the developing land, industrial establishments are already in operation in the Naidupeta IP. These Industries are covered under the Naidupeta IP Master Plan and are having a valid EC, Consent to Establish/Operate from the concerned regulatory authorities. The infrastructure facilities need to be integrated for existing as well as proposed industries within the developing land seeking EC.



(v) Total land required for the proposed development of Naidupeta IP is 503.44 ha, with the land use details as under:-

S. No.	Land Use	Area (ha)	Percentage (%)
1.	Plotted Area	377.90	75.07
2.	Road Area	41.91	8.32
3.	Open Space	50.54	10.03
4.	CFC Area	6.15	1.23
5.	Buffer + Green Belt	26.94	5.35
<b>Total</b>		<b>503.44</b>	<b>100</b>

(vi) Total water requirement during the construction phase for the proposed IP is estimated to be 0.5-1.0 MLD, which would be supplied through road tankers/local municipal bodies. During operation phase, water requirement of 6.4 MLD of water will be met from Telugu Ganga Canal (TGC). APIIC has already obtained approval from the Irrigation and Command Area Development of the State Government to tap water from the TGC.

(vii) Naidupeta IP envisages to have mixed industrial use with the total waste water generation estimated as 4.5 MLD (sewage 0.7 MLD and industrial effluent of 3.8 MLD), when fully operational. Nearly 0.45 MLD (10%) of effluent will be generated from proposed IP during Initial stage of operation. 1.0 MLD capacity of CETP is proposed in the initial stage to treat the industrial effluents for the entire cluster. It is proposed that the CETP will be a Zero Liquid Discharge (ZLD) system. A part of the treated wastewater will be used for maintaining the greenbelt within the Cluster and the balance will be reused at the units as non-potable water for various applications.

(viii) Industries/CETP proposed in the Industrial Park shall have their independent hazardous/non-hazardous waste collection and segregation system. Segregated wastes shall be further compacted for volume reduction.

(ix) As per the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, industries shall have a temporary storage facility for 30 days detention.

(x) The project proponent has proposed new hazardous waste disposal site less than 35 km from the project location, which shall now be used to dispose of hazardous waste.

(xi) **Municipal solid waste disposal facility:** Biodegradable Waste will be 4.84 TPD, part will be disposed to bio compost and rest will be converted to local municipal bins. Total Recyclable Waste will be 19.16 TPD, this will be sold to Authorized recycling vendors.

(xii) **Power requirement and source:** The power demand estimation for various uses in the Naidupeta IP is 48.67 MVA which will be sourced from APSPDCL 132KV/33 KV substation located in Naidupeta IP through a 33 KV Overhead double line circuit up to 33/11 KV substations in Naidupeta IP.

(xiii) **Proposed energy saving measures:** Solar Power harnessing potential has been estimated for Naidupeta IP. Based available roof tap area it is estimated approximately 28 MW can be harnessed. Individual industries of IP will be installing the Solar PVs to extent possible. In addition, it is expected that individual units in the IP will be installing mechanical equipment's/process/ electrical appliances/ instrumentation systems etc., with inbuilt energy conservation measures.

(xiv) **RWH:** The proposed harvesting and recharge structures in IP are roof-top rainwater harvesting, Storage ponds/tanks of 15 in numbers, five recharge pits and five recharge shafts/wells.



Estimated RWH potential for Naidupeta IP is as follows:-

S. No.	Land Use Distribution in Naidupeta IP	Volume of run-off harvested (m <sup>3</sup> /day)
1.	Roof top Area	33294
2.	Roads Area	6462
3.	Open Space	3339
4.	CFC Area	203
5.	Buffer + Green Belt Area	1187
<b>Total</b>		<b>44485</b>

(xv) **Investment/Cost of the project:** The approximate cost for development of infrastructure is Rs. 94.77 Crores.

(xvi) **Car parking:** In Naidupeta IP, Parking area of 12.25 ha is provided with 573 parking bays.

(xvii) **Benefits of the project:** This project is going to benefit the entire region. The overall development of the region could be manifold. In order to augment the growth, the state has planned multitude of development options in all sectors (tourism, Water resources, Agriculture, urban development, education, etc.) including industrial sector. The proposed IP is one such development to improve economy and employment generation.

(xviii) **Employment potential:** During the three year construction phase a total of 350 employees will get employment. During the operation phase the Industrial Park is expected to bring a direct employment for 17,442 personnel with an indirect employment for 4500 personnel.

(xix) **Eco-Sensitive Zone in 10 km radius area:** No.

(xx) **Wildlife issues:** No.

(xxi) **Details of Forest land involved, if any:** No forest land is involved.

(xxii) **ToR details:** ToR was granted to the project vide letter No.21-140/2015-IA.III dated 29<sup>th</sup> February, 2016.

(xxiii) **Public Hearing:** Public hearing was conducted on 20<sup>th</sup> September, 2016.

4. The EAC, in its 169<sup>th</sup> meeting held on 6-7 April, 2017, has recommended the project for grant of Environmental Clearance. As per recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the above project '**Naidupeta Industrial Park**' at at Konetirajupalem and Menakuru villages, Naidupeta Mandal in S.P.S.R.Nellore District (Andhra Pradesh), promoted by Andhra Pradesh Industrial Infrastructure Corporation Limited, under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the specific and general conditions as under:-

## **PART A - SPECIFIC CONDITIONS**

### **I. Construction Phase**

- (i) 'Consent to Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) To achieve the Zero Liquid Discharge, waste water generated from different industrial operations shall be properly collected, treated to the prescribed standards and then recycled or used for the identified purposes.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste

Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.

- (iv) Air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016
- (v) As per the provisions of the Notification dated 9<sup>th</sup> December, 2016 amending the Principal EIA Notification, 2006, all the building and construction projects (built up area 5000 sqm - 150000 sqm) in the industrial area, shall require clearances for their building plans from the State/local bodies, as applicable. In case of project sizes having built up areas more than 150000 sqm, environmental clearances shall continue to be required from the concerned regulatory authorities.
- (vi) For all the individual units/infrastructure requirements, environmental clearances as applicable, shall be obtained from the respective regulatory authorities.
- (vii) A site specific biodiversity conservation plan including mitigation measures for local biodiversity to be developed from a recognized institute of repute with appropriate financial allocation for its implementation.
- (viii) There shall be a continuous green belt along the plant premises using local tree and shrub species, except at the designated entry and exit points. There shall not be exotic species to be used for green belt development.
- (ix) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six Monthly Monitoring reports.
- (x) Special purpose vehicle shall be established for implementation, monitoring and compliance of the environmental safeguards.
- (xi) All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to RO, MoEF&CC along with half yearly compliance report.
- (xii) The member units shall provide effluent storage tanks for monitoring the effluent characteristics before taking it to CETP for further treatment. Member industries shall treat the effluent to meet the prescribed CETP inlet norms.
- (xiii) Proper meters with recording facilities shall be provided to monitor the effluent quality and quantity from the individual industries to the CETP and from CETP to the final disposal/re-use on a continuous basis.
- (xiv) The project proponent shall establish an environmental monitoring cell with all the potential polluting units as members to review the environmental monitoring data and suggest for improvements.
- (xv) Internal Road widths within the industrial area shall be minimum 24 m ROW.
- (xvi) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- (xvii) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- (xviii) Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- (xix) Parking space to accommodate trucks, cars, two wheelers and bicycles shall be provided as per the norms.
- (xx) Any hazardous waste generated during development/ construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

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- (xxi) The DG sets to be used during development/ construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- (xxii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- (xxiii) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27<sup>th</sup> August, 2003.
- (xxiv) Ready mixed concrete must be used in site development and building construction.
- (xxv) Storm water control and its re-use as per CGWB and BIS standards for various applications to be ensured.
- (xxvi) Water demand during development/construction should be reduced by use of pre-mixed concrete, curing agents and other best practices.
- (xxvii) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- (xxviii) Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- (xxix) Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- (xxx) Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality low E value glass.
- (xxxi) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- (xxxii) Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- (xxxiii) The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.
- (xxxiv) Regular supervision of the above and other measures for monitoring should be in place all through the development/ construction phase, so as to avoid disturbance to the surroundings.
- (xxxv) Corporate Environment Responsibility:
  - a) The Company shall have a well laid down Environment Policy approved by the Board of Directors. The Policy shall prescribe for standard operating process/ procedures to bring into focus any infringements/deviation/ violation of the environmental or forest norms/ conditions.
  - b) 2% of the project cost shall be earmarked for Corporate Environment Responsibility activities.
  - c) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

## II. Operational Phase

- (i) All the topsoil excavated during development/construction activities should be stored for use in horticulture/landscape development within the project site.
- (ii) Disposal of muck during development/construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary

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precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

- (iii) The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- (iv) Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- (v) Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- (vi) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.
- (vii) Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.
- (viii) Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 4 mts. above the highest ground water table.
- (ix) The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- (x) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking, loading and unloading should be fully internalized and no public space should be utilized.
- (xi) A Report on the energy conservation measures confirming to energy conservation norms finalise by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months time.
- (xii) Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.
- (xiii) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.



## **PART – B: GENERAL CONDITIONS**

- i) The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.
- ii) The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
- iii) Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Bangalore.
- iv) A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
- v) The project proponent shall set up a separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- vi) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purpose.

5. The above stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and the EIA Notification, 2006.

6. Officials from the Regional Office of MoEF&CC at Bangalore who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF&CC should be forwarded to the CCF, Regional Office of MoEF&CC at Bangalore.

7. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.

8. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

9. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

10. The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance are available with the State Pollution Control Board and may also be seen on the website of the Ministry of

Environment, Forest and Climate Change at <http://www.envfor.nic.in>. The advertisement should be made within seven days from the receipt of the Clearance and a copy of the same should be forwarded to the Regional office of this Ministry at Bangalore.


11. This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

12. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

13. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.


14. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

15. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

  
30/5/2017  
**(S.K. Srivastava)**  
**Scientist E**

Copy to:

1. The Secretary, Department of Environment, Govt. of Andhra Pradesh, Hyderabad.
2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32.
3. The Member Secretary, Andhra Pradesh Pollution Control Board, Paryarana Bhawan, A-III, Industrial Area, Sanathnagar, Hyderabad - 18.
4. The APCCF (C), MoEF&CC, Regional Office (SZ), 1st and 2nd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai - 34.
5. IA Division, Monitoring Cell, MOEF&CC, New Delhi - 3.
6. Guard file.

  
30/5/2017  
**(S.K. Srivastava)**  
**Scientist E**

# Annexure 2

## Site Layout



**A. P. I. I. C LIMITED HYDERABAD**



**COMPREHENSIVE LAYOUT PLAN FOR INDUSTRIAL PARK AT NAIDUPET IN SY.NOS. 1 TO 29,46 TO 30, PART IN SY. NOS.40, 43, 45 OF KONETRALPALEM VILLAGE AND IN SY. NOS.15, 17, 22 to 28, 30 to 34, 36, 35 to 37, 39 to 73, 235 to 241, 249 to 254, 272 to 272, 273, 283 to 297 PART IN SY. NOS.2, 4, 7, 5, 12, 15, 18, 30, 22, 29, 35, 37, 58, 242, 243, 247, 248, 256, 261, 273, 274, 281, 282, 298 OF MENAKUR VILLAGE, NAIIDUPET MANDAL, SPNR, NELLORE DISTRICT**

**LAND USE ANALYSIS**

LAYOUT BOUNDARY		<b>PROPOSED LAYOUT AREA</b> (BLOCK A + BLOCK B + BLOCK C)	Ac. 1244.02	100.00 %
EXISTING ROADS		<b>PLOTTED AREA</b>	Ac. 933.81	75.07 %
PROPOSED ROADS		<b>ROADS AREA</b>	Ac. 103.56	8.32%
<b>BLOCK (A &amp; C) AREA</b>	=	<b>OPEN SPACE</b>	Ac. 124.88	10.03 %
<b>BLOCK (B) AREA</b>	=	<b>CFC AREA</b>	Ac. 15.20	1.23%
<b>TOTAL</b>	=	<b>BUFFER + GREEN BELT</b>	Ac. 66.57	5.35 %
<b>PRODUCT PLANTAL</b>	= (-)			
<b>PRODUCT GRAVEYARD</b>	= (-)			

4/5/20  
 CE ED(D) ED(D) VC&MD  
 M(E) DGM(E)

**Annexure 3**  
**Site Photographs**

# Site Photographs



# Annexure 4

## Monitoring Reports

**Hubert Enviro Care Systems (P) Ltd.**  
 # 18, 92nd Street, Ashok Nagar,  
 Chennai - 600 083.  
 Ph: 42985555 Fax : 42985500  
 E-mail : labsales@hecs.in

**Laboratory Services Division**  
 Accredited by NABL in the fields  
 of Chemical & Biological Testing  
 Recognized by MoEF.  
 FSSAI Notified Laboratory  
 ISO 9001, 14001 & OHSAS 18001 Certified.

**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC -Naidupettah.,  
 Address of the Client : Naidupettah

Report No. : HECSL/A/001/220817  
 Report Date : 29/08/2017

Sample Description : Ambient Air Quality  
 Sampling Location : Naidupeta, Menkuru, Angawadi Building top  
 Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
 Sampling/received Date : 22/08/2017 -23/08/2017  
 Analysis Commenced On : 23/08/2017

Completed On : 29/08/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.82	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	30.16	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	40.26	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	29.45	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	12.33	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	8.24	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
 mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
 Authorized Signatory

**C .P. SIVARAMAN**  
 Laboratory Manager

1. The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or otherwise mentioned 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items.

# Hubert Enviro Care Systems (P) Ltd.

# 18, 92nd Street, Ashok Nagar,  
Chennai - 600 083.  
Ph: 42985555 Fax : 42985500  
E-mail : labsales@hecs.in

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ISO 9001, 14001 & OHSAS 18001 Certified.

### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/002/220817  
Report Date : 29/08/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Konetirajupalem Village, Corner  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017 -23/08/2017  
Analysis Commenced On : 23/08/2017

Completed On : 29/08/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	20.76	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	29.56	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	35.16	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	22.56	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	$\text{mg}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	BDL(DL10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	BDL(DL5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	$\text{ng}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	$\text{ng}/\text{m}^3$	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	$\text{ng}/\text{m}^3$	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit,  $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter,  
 $\text{mg}/\text{m}^3$ - Milligrams per cubic meter,  $\text{ng}/\text{m}^3$ - Nanograms per cubic meter.

\*\*\*End of Report\*\*\*

  
Authorized Signatory

C. P. SIVARAMAN  
Laboratory Manager

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/003/220817  
Report Date : 29/08/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Konefirajupalem, Village Corner, School Building  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017 -23/08/2017  
Analysis Commenced On : 23/08/2017

Completed On : 29/08/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.72	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	30.42	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	42.16	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	25.26	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	BDL(DL10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	BDL(DL5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory  
C.P. SIVARAMAN  
Laboratory Manager

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ISO 9001, 14001 & OHSAS 18001 Certified.

**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/004/220817  
Report Date : 29/08/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Mumaihalem, Village Prawite House  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017 -23/08/2017  
Analysis Commenced On : 23/08/2017

Completed On : 29/08/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.74	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	28.49	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	42.16	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	29.46	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	BDL(DL10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	BDL(DL5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter, mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

**C.P. SIVARAMAN**  
Laboratory Manager

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## Laboratory Services Division

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC -Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/005/220817  
Report Date : 29/08/2017

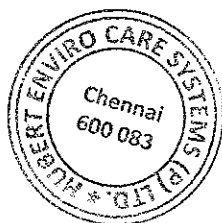
Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Manawali, AAW, Prawite House  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017 -23/08/2017  
Analysis Commenced On : 23/08/2017

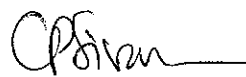
Completed On : 29/08/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	20.67	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	31.23	IS : 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	42.16	IS : 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	30.26	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	$\text{mg}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-22) : 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	BDL(DL 5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BDL(DL 1)	IS : 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	$\text{ng}/\text{m}^3$	BDL(DL 1)	IS : 5182 (P-12) : 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	$\text{ng}/\text{m}^3$	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	$\text{ng}/\text{m}^3$	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit,  $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter,  
 $\text{mg}/\text{m}^3$ - Milligrams per cubic meter,  $\text{ng}/\text{m}^3$ - Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



  
Authorized Signatory  
**C.P. SIVARAMAN**  
Laboratory Manager

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/006/220817  
Report Date : 29/08/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Menkuru, Near ATM Building top  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017 -23/08/2017  
Analysis Commenced On : 23/08/2017

Completed On : 29/08/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	11.93	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	20.81	IS : 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	29.45	IS : 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	BDL(DL5)	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	$\text{mg}/\text{m}^3$	BDL(DL10)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	16.43	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	6.97	IS : 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	$\text{ng}/\text{m}^3$	BDL(DL 1)	IS : 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	$\text{ng}/\text{m}^3$	BDL(DL 1)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	$\text{ng}/\text{m}^3$	BDL(DL 2)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit,  $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter,  
 $\text{mg}/\text{m}^3$ - Milligrams per cubic meter,  $\text{ng}/\text{m}^3$ - Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

C . P. SIVARAMAN  
Laboratory Manager

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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/001/220817  
Report Date : 29/08/2017

Sample Description : Water  
Sample Mark : Naidupeta, Manawali, AAW, Prawite House (GW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017- 22/08/2017  
Analysis Commenced On : 22/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Brownish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Turbidity	NTU	54	IS:3025:(Pt-10):1984(Reaff:2006)
3	pH (at 25 °C)	-	7.26	IS 3025 (Part11)-1983(Reaff:2006)
4	Total Hardness as CaCO <sub>3</sub>	mg/l	40	IS 3025 (Part14) 1983(Reaff:2006)
5	Calcium as Ca	mg/l	8.82	IS 3025:1(Pt 16)-1984(Reaff 2006)
6	Magnesium as Mg	mg/l	4.38	IS 3025 (Part 17)-1984
7	Chloride as Cl	mg/l	9.9	IS 3025,1 (Pt 23)-1986(Reaff 2009)
8	Sulphate as SO <sub>4</sub>	mg/l	28.92	IS 3025 (Part21)-1983(Reaff 2006)
9	Nitrate as NO <sub>3</sub>	mg/l	1.21	IS 3025 (P140)-1991(Reaff 2009)
10	Fluoride	mg/l	0.21	IS 3025 (Pt 46)-1994(Reaff 2009)
11	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
12	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
13	Iron as Fe	mg/l	12.94	IS 3025 (Pt 32):1988(Reaff 2009)
14	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
15	Odour	-	Agreeable	--
16	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
17	Phenols	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	FRC	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	68	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

*C. P. Sivaraman*  
Authorized Signatory

**C. P. SIVARAMAN**  
Laboratory Manager



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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APHC – Naidupettah.,  
Address of the Client : Naidupettah  
Sample Description : Water  
Sample Mark : Naidupeta, Menkuru(GW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017- 22/08/2017  
Analysis Commenced On : 22/08/2017


Report No. : HECSL/W/002/220817  
Report Date : 29/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Brownish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Turbidity	NTU	49	IS:3025:(Pt-10):1984(Reaff:2006)
3	pH (at 25 °C)	-	7.26	IS 3025 (Part11)-1983(Reaff:2006)
4	Total Hardness as CaCO <sub>3</sub>	mg/l	44	IS 3025 (Part14) 1983(Reaff:2006)
5	Calcium as Ca	mg/l	9.02	IS 3025:1(Pt 16)-1984(Reaff 2006)
6	Magnesium as Mg	mg/l	3.4	IS 3025 (Part 17)-1984
7	Chloride as Cl	mg/l	26.72	IS 3025,1 (Pt 23)-1986(Reaff 2009)
8	Sulphate as SO <sub>4</sub>	mg/l	33.41	IS 3025 (Part21)-1983(Reaff 2006)
9	Nitrate as NO <sub>3</sub>	mg/l	1.98	IS 3025 (Pt40)-1991(Reaff 2009)
10	Fluoride	mg/l	0.31	IS 3025 (Pt 46)-1994(Reaff 2009)
11	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
12	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
13	Iron as Fe	mg/l	10.52	IS 3025 (Pt 32):1988(Reaff 2009)
14	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
15	Odour	-	Agreeable	--
16	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
17	Phenols	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	FRC	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	71	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C .P. SIVARAMAN  
Laboratory Manager



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/003/220817  
Report Date : 29/08/2017

Sample Description : Water  
Sample Mark : Naidupeta, Menkuru, Angawadi (GW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017- 22/08/2017  
Analysis Commenced On : 22/08/2017

Completed On : 29/08/2017

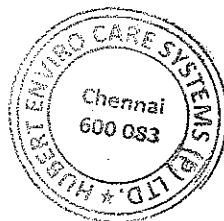
S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Light Yellowish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Turbidity	NTU	18	IS:3025:(Pt-10):1984(Reaff:2006)
3	pH (at 25 °C)	-	7.11	IS 3025 (Part11)-1983(Reaff:2006)
4	Total Hardness as CaCO <sub>3</sub>	mg/l	38	IS 3025 (Part14) 1983(Reaff:2006)
5	Calcium as Ca	mg/l	8.82	IS 3025:1(Pt 16)-1984(Reaff 2006)
6	Magnesium as Mg	mg/l	3.89	IS 3025 (Part 17)-1984
7	Chloride as Cl	mg/l	10.89	IS 3025,1 (Pt 23)-1986(Reaff 2009)
8	Sulphate as SO <sub>4</sub>	mg/l	4.61	IS 3025 (Part21)-1983(Reaff 2006)
9	Nitrate as NO <sub>3</sub>	mg/l	1.41	IS 3025 (Pt40)-1991(Reaff 2009)
10	Fluoride	mg/l	0.27	IS 3025 (Pt 46)-1994(Reaff 2009)
11	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
12	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
13	Iron as Fe	mg/l	9.74	IS 3025 (Pt 32):1988(Reaff 2009)
14	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
15	Odour	-	Agreeable	--
16	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
17	Phenols	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	FRC	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	58	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

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Laboratory Manager



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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,

Report No. : HECSL/W/004/220817

Address of the Client : Naidupettah

Report Date : 29/08/2017

Sample Description : Water

Sample Mark : Naidupeta, Konetirajupalem Village, Corner (SW)

Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd

Sampling/received Date : 22/08/2017- 22/08/2017

Analysis Commenced On : 22/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	BDL(DL 1)	IS 3025(Part 4):1983(Reaff:2006)
2	Turbidity	NTU	BDL(DL 0.1)	IS:3025:(Pt-10):1984(Reaff:2006)
3	pH (at 25 °C)	-	7.29	IS 3025 (Part11)-1983(Reaff:2006)
4	Total Hardness as CaCO <sub>3</sub>	mg/l	240	IS 3025 (Part14) 1983(Reaff:2006)
5	Calcium as Ca	mg/l	48.1	IS 3025:1(Pt 16)-1984(Reaff 2006)
6	Magnesium as Mg	mg/l	29.16	IS 3025 (Part 17)-1984
7	Chloride as Cl	mg/l	94.97	IS 3025,1 (Pt 23)-1986(Reaff 2009)
8	Sulphate as SO <sub>4</sub>	mg/l	67.45	IS 3025 (Part21)-1983(Reaff 2006)
9	Nitrate as NO <sub>3</sub>	mg/l	5.14	IS 3025 (Pt40)-1991(Reaff 2009)
10	Fluoride	mg/l	0.6	IS 3025 (Pt 46)-1994(Reaff 2009)
11	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
12	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
13	Iron as Fe	mg/l	BDL(DL0.02)	IS 3025 (Pt 32):1988(Reaff 2009)
14	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
15	Odour	-	Agreeable	-
16	Taste	-	Agreeable	IS 3025 Part (23):1986 Reaff:2006
17	Phenols	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	FRC	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	412	IS:3025:1(Pt. 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
 Authorized Signatory

**C.P. SIVARAMAN**  
 Laboratory Manager


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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/005/220817  
Report Date : 29/08/2017


Sample Description : Water  
Sample Mark : Naidupeta, Konetirajupalem , Village Corner(SW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017- 22/08/2017  
Analysis Commenced On : 22/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Brownish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Turbidity	NTU	45	IS:3025:(Pt-10):1984(Reaff:2006)
3	pH (at 25 °C)	-	7.36	IS 3025 (Part11)-1983(Reaff:2006)
4	Total Hardness as CaCO <sub>3</sub>	mg/l	56	IS 3025 (Part14) 1983(Reaff:2006)
5	Calcium as Ca	mg/l	9.89	IS 3025:1(Pt 16)-1984(Reaff 2006)
6	Magnesium as Mg	mg/l	5.45	IS 3025 (Part 17)-1984
7	Chloride as Cl	mg/l	10.12	IS 3025,1 (Pt 23)-1986(Reaff 2009)
8	Sulphate as SO <sub>4</sub>	mg/l	25.26	IS 3025 (Part21)-1983(Reaff 2006)
9	Nitrate as NO <sub>3</sub>	mg/l	1.56	IS 3025 (Pt40)-1991(Reaff 2009)
10	Fluoride	mg/l	0.35	IS 3025 (Pt 46)-1994(Reaff 2009)
11	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
12	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
13	Iron as Fe	mg/l	12.94	IS 3025 (Pt 32):1988(Reaff 2009)
14	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
15	Odour	-	Agreeable	-
16	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
17	Phenols	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	FRC	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	48	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C.P. SIVARAMAN  
Laboratory Manager



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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/006/220817  
Report Date : 29/08/2017

Sample Description : Water  
Sample Mark : Naidupeta, Mumaihpalem (SW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017- 22/08/2017  
Analysis Commenced On : 22/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Light Yellowish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Turbidity	NTU	15	IS:3025:(Pt-10):1984(Reaff:2006)
3	pH (at 25 °C)	-	7.22	IS 3025 (Part11)-1983(Reaff:2006)
4	Total Hardness as CaCO <sub>3</sub>	mg/l	42	IS 3025 (Part14) 1983(Reaff:2006)
5	Calcium as Ca	mg/l	8.45	IS 3025:1(Pt 16)-1984(Reaff 2006)
6	Magnesium as Mg	mg/l	4.06	IS 3025 (Part 17)-1984
7	Chloride as Cl	mg/l	9.65	IS 3025,1 (Pt 23)-1986(Reaff 2009)
8	Sulphate as SO <sub>4</sub>	mg/l	5.01	IS 3025 (Part21)-1983(Reaff 2006)
9	Nitrate as NO <sub>3</sub>	mg/l	1.11	IS 3025 (Pt40)-1991(Reaff 2009)
10	Fluoride	mg/l	0.21	IS 3025 (Pt 46)-1994(Reaff 2009)
11	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
12	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
13	Iron as Fe	mg/l	9.74	IS 3025 (Pt 32):1988(Reaff 2009)
14	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
15	Odour	-	Agreeable	---
16	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
17	Phenols	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	FRC	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	74	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C. P. SIVARAMAN  
Laboratory Manager



**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah,  
 Address of the Client : Naidupettah

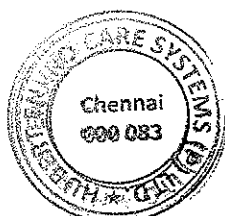
Report No. : HECSL/SD/001/220817  
 Report Date : 29/08/2017

Sample Description : SOIL  
 Sample Mark : Konetirajupalem  
 Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
 Sampling/received Date : 22/08/2017 - 23/08/2017  
 Analysis Commenced On : 23/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Soil Texture i) Sand	%	52.29	HECS/SO/SOP/031
2	Soil Texture ii) Silt	%	27.23	HECS/SO/SOP/031
3	Soil Texture iii) Clay	%	20.48	HECS/SO/SOP/031
4	pH	-	8.1	IS:2720(P-26,1987)
5	Electrical Conductivity	µS/cm	458	IS:14767,2000
6	Infiltration Rate	cm/hr	12	-
7	Bulk density	gm/cc	1.2	HECS/SO/SOP/025
8	Moisture Content	%	2.62	IS 2720 part 2 Reaff:2000
9	Organic Matter	%	0.22	IS:2720 (P-22, 1972)
10	Nitrogen	mg/kg	412.6	IS 14684:1999 RA 2008
11	Phosphorus	mg/kg	18.14	USDA, APHA-4500PC
12	Potassium	mg/kg	16	EPA 3050 B/EPA 7770
13	Calcium as Ca	mg/kg	240	EPA 3050 B/EPA 7140
14	Magnesium as Mg	mg/kg	48	EPA 3050 B/EPA 7450
15	Boron	mg/kg	BDL(DL0.1)	HECS/SO/SOP/028
16	Chromium	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7090
17	Iron	mg/kg	34948.52	USEPA Method 3050B&EPA 2008
18	Manganese	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7000 B
19	Sodium	mg/kg	41	HECS/SO/SOP/003
20	Chloride	mg/kg	110	SW 846 9253 9077
21	Sulphate	mg/kg	27	IS 14685 (1999) Reaffirmed 2014
22	Sodium Absorption Ratio	%	0.8	HECS/SO/SOP/048
23	Residual Sodium Carbonate	%	0.21	HECS/SO/SOP/049

Note:- % - Percentage, mg/kg - Milligrams per kilogram, cm/hr - Centimeters per hour, gm/cc - Grams per Cubic Centimete.  
 \*\*\*End of Report\*\*



*C.P. Sivaraman*  
 Authorized Signatory  
**C.P. SIVARAMAN**  
 Laboratory Manager

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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – IT Naidupettah.,  
 Address of the Client : Naidupettah  
 Sample Description : SOIL  
 Sample Mark : Menakuru  
 Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
 Sampling/received Date : 22/08/2017 - 23/08/2017  
 Analysis Commenced On : 23/08/2017

Report No. : HECSL/SD/002/220817  
 Report Date : 29/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Soil Texture i)Sand	%	62.48	HECS/SO/SOP/031
2	Soil Texture ii)Silt	%	16.22	HECS/SO/SOP/031
3	Soil Texture iii)Clay	%	21.3	HECS/SO/SOP/031
4	pH	-	8.28	IS:2720(P-26,1987)
5	Electrical Conductivity	µS/cm	468	IS:14767,2000
6	Infiltration Rate	cm/hr	18	-
7	Bulk density	gm/cc	1.26	HECS/SO/SOP/025
8	Moisture Content	%	3.67	IS 2720 part 2 Reaff:2000
9	Organic Matter	%	0.34	IS:2720 (P-22, 1972)
10	Nitrogen	%	424.62	IS 14684:1999 RA 2008
11	Phosphorus	%	21.74	USDA, APHA-4500PC
12	Potassium	%	18	EPA 3050 B/EPA 7770
13	Calcium as Ca	%	320	EPA 3050 B/EPA 7140
14	Magnesium as Mg	%	62	EPA 3050 B/EPA 7450
15	Boron	mg/kg	BDL(DL0.1)	HECS/SO/SOP/028
16	Chromium	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7090
17	Iron	mg/kg	36342.1	USEPA Method 3050B&EPA 2008
18	Manganese	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7000 B
19	Sodium	mg/kg	63	HECS/SO/SOP/003
20	Chloride	mg/kg	59	SW 846 9253 9077
21	Sulphate	mg/kg	21	IS 14685 (1999) Reaffirmed 2014
22	Sodium Absorption Ratio	%	0.9	HECS/SO/SOP/048
23	Residual Sodium Carbonate	%	0.13	HECS/SO/SOP/049

Note:- % - Percentage, mg/kg - Milligrams per kilogram, cm/hr - Centimeters per hour, gm/cc - Grams per Cubic Centimete.  
 \*\*\*End of Report\*\*



*C.P. Sivaraman*  
 Authorized Signatory

**C . P. SIVARAMAN**  
 Laboratory Manager

**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APHC – Naidupettah.,  
 Address of the Client : Naidupettah

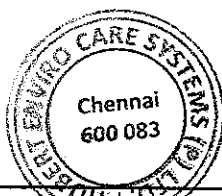
Report No. : HECSL/SD/003/220817  
 Report Date : 29/08/2017

Sample Description : SOIL  
 Sample Mark : Menakuru(HW)  
 Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
 Sampling/received Date : 22/08/2017 - 23/08/2017  
 Analysis Commenced On : 23/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Soil Texture i)Sand	%	65.82	HECS/SO/SOP/031
2	Soil Texture ii)Silt	%	14.47	HECS/SO/SOP/031
3	Soil Texture iii)Clay	%	19.71	HECS/SO/SOP/031
4	pH	-	8.32	IS:2720(P-26,1987)
5	Electrical Conductivity	µS/cm	510	IS:14767,2000
6	Infiltration Rate	cm/hr	24	-
7	Bulk density	gm/cc	1.36	HECS/SO/SOP/025
8	Moisture Content	%	5.64	IS 2720 part 2 Reaff:2000
9	Organic Matter	%	0.46	IS:2720 (P-22, 1972)
10	Nitrogen	%	483.54	IS 14684:1999 RA 2008
11	Phosphorus	%	26.42	USDA, APHA-4500PC
12	Potassium	%	12	EPA 3050 B/EPA 7770
13	Calcium as Ca	%	380	EPA 3050 B/EPA 7140
14	Magnesium as Mg	%	68	EPA 3050 B/EPA 7450
15	Boron	mg/kg	BDL(DL0.1)	HECS/SO/SOP/028
16	Chromium	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7090
17	Iron	mg/kg	38141.14	USEPA Method 3050B&EPA 2008
18	Manganese	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7000 B
19	Sodium	mg/kg	68	HECS/SO/SOP/003
20	Chloride	mg/kg	67	SW 846 9253 9077
21	Sulphate	mg/kg	25	IS 14685 (1999) Reaffirmed 2014
22	Sodium Absorption Ratio	%	0.7	HECS/SO/SOP/048
23	Residual Sodium Carbonate	%	0.15	HECS/SO/SOP/049

Note:- % - Percentage, mg/kg - Milligrams per kilogram, cm/hr - Centimeters per hour, gm/cc - Grams per Cubic Centimete.  
 \*\*\*End of Report\*\*



*C.P. Sivaraman*  
 Authorized Signatory

**C.P. SIVARAMAN**  
 Laboratory Manager

# Hubert Enviro Care Systems (P) Ltd.

# 18, 92nd Street, Ashok Nagar,  
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## Laboratory Services Division

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah  
Sample Description : SOIL  
Sample Mark : Mumaiah palem(ST Colony)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017 - 23/08/2017  
Analysis Commenced On : 23/08/2017

Report No. : HECSL/SD/004/220817  
Report Date : 29/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Soil Texture i)Sand	%	68.4	HECS/SO/SOP/031
2	Soil Texture ii)Silt	%	12.74	HECS/SO/SOP/031
3	Soil Texture iii)Clay	%	18.86	HECS/SO/SOP/031
4	pH	-	7.52	IS:2720(P-26,1987)
5	Electrical Conductivity	µS/cm	440	IS:14767,2000
6	Infiltration Rate	cm/hr	18	-
7	Bulk density	gm/cc	1.18	HECS/SO/SOP/025
8	Moisture Content	%	3.64	IS 2720 part 2 Reaff:2000
9	Organic Matter	%	0.46	IS:2720 (P-22, 1972)
10	Nitrogen	%	712.3	IS 14684:1999 RA 2008
11	Phosphorus	%	20.64	USDA, APHA-4500PC
12	Potassium	%	14	EPA 3050 B/EPA 7770
13	Calcium as Ca	%	240	EPA 3050 B/EPA 7140
14	Magnesium as Mg	%	24	EPA 3050 B/EPA 7450
15	Boron	mg/kg	BDL(DL0.1)	HECS/SO/SOP/028
16	Chromium	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7090
17	Iron	mg/kg	32458.16	USEPA Method 3050B&EPA 2008
18	Manganese	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7000 B
19	Sodium	mg/kg	72	HECS/SO/SOP/003
20	Chloride	mg/kg	78	SW 846 9253 9077
21	Sulphate	mg/kg	23	IS 14685 (1999) Reaffirmed 2014
22	Sodium Absorption Ratio	%	1.1	HECS/SO/SOP/048
23	Residual Sodium Carbonate	%	0.13	HECS/SO/SOP/049

Note:- % - Percentage, mg/kg - Milligrams per kilogram, cm/hr - Centimeters per hour, gm/cc - Grams per Cubic Centimeter.  
\*\*\*End of Report\*\*



  
Authorized Signatory  
**C. P. SIVARAMAN**  
Laboratory Manager

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APHC – Naidupettah.,  
Address of the Client : Naidupettah

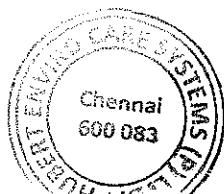
Report No. : HECSL/SD/005/220817  
Report Date : 29/08/2017

Sample Description : SOIL  
Sample Mark : Near Greentech Industry  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017 - 23/08/2017  
Analysis Commenced On : 23/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Soil Texture i)Sand	%	70.46	HECS/SO/SOP/031
2	Soil Texture ii)Silt	%	16.42	HECS/SO/SOP/031
3	Soil Texture iii)Clay	%	13.02	HECS/SO/SOP/031
4	pH	-	7.68	IS:2720(P-26,1987)
5	Electrical Conductivity	µS/cm	472	IS:14767,2000
6	Infiltration Rate	cm/hr	22	-
7	Bulk density	gm/cc	1.26	HECS/SO/SOP/025
8	Moisture Content	%	4.22	IS 2720 part 2 Reaff:2000
9	Organic Matter	%	0.42	IS:2720 (P-22, 1972)
10	Nitrogen	%	745.62	IS 14684:1999 RA 2008
11	Phosphorus	%	27.42	USDA, APHA-4500PC
12	Potassium	%	18	EPA 3050 B/EPA 7770
13	Calcium as Ca	%	310	EPA 3050 B/EPA 7140
14	Magnesium as Mg	%	42	EPA 3050 B/EPA 7450
15	Boron	mg/kg	BDL(DL0.1)	HECS/SO/SOP/028
16	Chromium	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7090
17	Iron	mg/kg	33124.14	USEPA Method 3050B&EPA 2008
18	Manganese	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7000 B
19	Sodium	mg/kg	53	HECS/SO/SOP/003
20	Chloride	mg/kg	81	SW 846 9253 9077
21	Sulphate	mg/kg	18	IS 14685 (1999) Reaffirmed 2014
22	Sodium Absorption Ratio	%	0.9	HECS/SO/SOP/048
23	Residual Sodium Carbonate	%	0.18	HECS/SO/SOP/049

Note:- % - Percentage, mg/kg - Milligrams per kilogram, cm/hr - Centimeters per hour, gm/cc - Grams per Cubic Centimeter.  
\*\*\*End of Report\*\*



*C.P. Sivaraman*  
Authorized Signatory

C. P. SIVARAMAN  
Laboratory Manager

# Hubert Enviro Care Systems (P) Ltd.

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APHC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/SD/006/220817  
Report Date : 29/08/2017

Sample Description : SOIL  
Sample Mark : Betwwen Konetirajupalem &menakuru  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 22/08/2017 - 23/08/2017  
Analysis Commenced On : 23/08/2017

Completed On : 29/08/2017

S.No.	Parameters	Units	Results	Test Method
1	Soil Texture i)Sand	%	77.16	HECS/SO/SOP/031
2	Soil Texture ii)Silt	%	13.42	HECS/SO/SOP/031
3	Soil Texture iii)Clay	%	9.42	HECS/SO/SOP/031
4	pH	-	7.72	IS:2720(P-26,1987)
5	Electrical Conductivity	$\mu$ S/cm	505	IS:14767,2000
6	Infiltration Rate	cm/hr	28	-
7	Bulk density	gm/cc	1.68	HECS/SO/SOP/025
8	Moisture Content	%	5.8	IS 2720 part 2 Reaff:2000
9	Organic Matter	%	0.68	IS:2720 (P-22, 1972)
10	Nitrogen	%	810.2	IS 14684:1999 RA 2008
11	Phosphorus	%	32.16	USDA, APHA-4500PC
12	Potassium	%	22	EPA 3050 B/EPA 7770
13	Calcium as Ca	%	380	EPA 3050 B/EPA 7140
14	Magnesium as Mg	%	58	EPA 3050 B/EPA 7450
15	Boron	mg/kg	BDL(DL0.1)	HECS/SO/SOP/028
16	Chromium	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7090
17	Iron	mg/kg	36241.17	USEPA Method 3050B&EPA 2008
18	Manganese	mg/kg	BDL(DL0.1)	EPA 3050B/EPA 7000 B
19	Sodium	mg/kg	46	HECS/SO/SOP/003
20	Chloride	mg/kg	85	SW 846 9253 9077
21	Sulphate	mg/kg	23	IS 14685 (1999) Reaffirmed 2014
22	Sodium Absorption Ratio	%	0.6	HECS/SO/SOP/048
23	Residual Sodium Carbonate	%	0.19	HECS/SO/SOP/049

Note:- % - Percentage, mg/kg - Milligrams per kilogram, cm/hr - Centimeters per hour, gm/cc - Grams per Cubic Centimete.  
\*\*\*End of Report\*\*



*C.P. Sivaraman*  
Authorized Signatory

C.P. SIVARAMAN  
Laboratory Manager

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APHC - Naidupettah.,  
Address of the Client : Naidupettah  
Sample Description : Noise Monitoring  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling Date : 22/08/2017

Report No. : HECSL/N/001-002/220617  
Report Date : 29/09/2017

S.No.	Location	Noise Level in dB (A)
1	Naidupeta, Manawali, AAW, Prawite House	64.2
2	Naidupeta, Menkuru, Near ATM Building top	64.0
3	Naidupeta, Menkuru, Angawadi Building top	62.8
4	Naidupeta, Konetirajupalem Village, Corner	63.5
5	Naidupeta, Konetirajupalem, Village Corner, School Building	64.3
6	Naidupeta, Mumaihalem, Village Prawite House	62.9

#### Limits set by CPCB:

- |      |                  |                       |                       |
|------|------------------|-----------------------|-----------------------|
| i.   | Industrial Area  | : Day Time-75 dB (A); | Night Time-70 dB (A). |
| ii.  | Commercial Area  | : Day Time-65 dB (A); | Night Time-55 dB (A). |
| iii. | Residential Area | : Day Time-55 dB (A); | Night Time-45 dB (A). |
| iv.  | Silence Zone     | : Day Time-50 dB (A); | Night Time-40 dB (A). |
| v.   | Working Area     | : Day Time-90 dB (A); | Night Time-90 dB (A). |

  
Authorized Signatory

**C. P. SIVARAMAN**  
Laboratory Manager



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC - Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/001/200917  
Report Date : 26/09/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Konefirajupalem, Pravite House, Near Road side  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 20/09/2017 - 21/09/2017  
Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	19.46	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	27.23	IS : 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	40.16	IS : 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	29.56	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	$\text{mg}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	11.29	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	7.03	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BDL(DL 1)	IS : 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	$\text{ng}/\text{m}^3$	BDL(DL 1)	IS : 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	$\text{ng}/\text{m}^3$	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	$\text{ng}/\text{m}^3$	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit,  $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter,  
 $\text{mg}/\text{m}^3$ - Milligrams per cubic meter,  $\text{ng}/\text{m}^3$ - Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory  
C. P. SIVARAMAN  
Laboratory Manager

**Hubert Enviro Care Systems (P) Ltd.**

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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,

Address of the Client : Naidupettah

Report No. : HECSL/A/002/200917

Report Date : 26/09/2017

Sample Description : Ambient Air Quality

Sampling Location : Naidupeta, Konetirajupalem, Pravite House, Middle in Village

Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd

Sampling/received Date : 20/09/2017 -21/09/2017

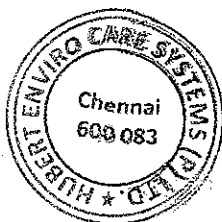
Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.36	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	28.79	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	42.16	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	28.16	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	BDL(DL5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter, mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

**C.P. SIVARAMAN**  
Laboratory Manager

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ISO 9001, 14001 & OHSAS 18001 Certified.

### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/003/200917  
Report Date : 26/09/2017

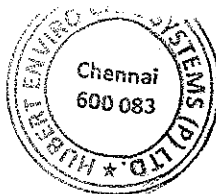
Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Menkuru, Anganwadi School(AAW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 20/09/2017 -21/09/2017  
Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	19.46	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	27.84	IS : 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	40.62	IS : 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	23.18	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	7.28	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	4.12	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS : 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS : 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

C. P. SIVARAMAN  
Laboratory Manager

**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
 Address of the Client : Naidupettah

Report No. : HECSL/A/004/200917  
 Report Date : 26/09/2017

Sample Description : Ambient Air Quality  
 Sampling Location : Naidupeta, Menkuru, Veterinary Hospital  
 Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
 Sampling/received Date : 20/09/2017 -21/09/2017  
 Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.36	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	28.79	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	71.46	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	33.94	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	BDL(DL 5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter, mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
 Authorized Signatory

**C.P. SIVARAMAN**  
 Laboratory Manager

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC -Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/005/200917  
Report Date : 26/09/2017

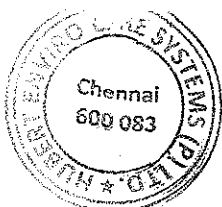
Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Mumaihalem, MPP School  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 20/09/2017 -21/09/2017  
Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	19.56	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	28.16	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	50.13	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	32.16	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	BDL(DL 5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

**C.P. SIVARAMAN**  
Laboratory Manager

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/006/200917  
Report Date : 26/09/2017


Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Konetirajupalem, Pravite House  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 20/09/2017 -20/09/2017  
Analysis Commenced On : 20/09/2017

Completed On : 26/09/2017

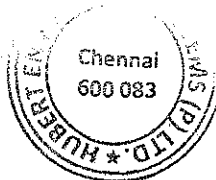
S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	20.43	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	29.81	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	40.62	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	28.54	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	$\text{mg}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	BDL(DL 5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	$\text{ng}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	$\text{ng}/\text{m}^3$	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	$\text{ng}/\text{m}^3$	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit,  $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter,  
 $\text{mg}/\text{m}^3$ - Milligrams per cubic meter,  $\text{ng}/\text{m}^3$ - Nanograms per cubic meter.

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Authorized Signatory

C. P. SIVARAMAN  
Laboratory Manager



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/001/200917  
Report Date : 26/09/2017

Sample Description : Water  
Sample Mark : Naidupeta,Mumaihpaalem,MPP School(GW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 20/09/2017- 21/09/2017  
Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Brownish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	---
3	Taste	-	Disagreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	58	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.36	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	38	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	8.69	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	5.19	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	10.21	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	29.1	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	1.33	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.28	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	13.41	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	52	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C . P. SIVARAMAN  
Laboratory Manager



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/002/200917  
Report Date : 26/09/2017

Sample Description : Water  
Sample Mark : Naidupeta, Konetirajupalem, Pravite House (GW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 20/09/2017- 21/09/2017  
Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	BDL(DL 1)	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	Agreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	BDL(DL 0.1)	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.65	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	231	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	46.38	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	28.25	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	98.49	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	65.02	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	4.98	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.8	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	BDL(DL0.02)	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	395	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C.P. SIVARAMAN  
Laboratory Manager



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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/003/200917  
Report Date : 26/09/2017

Sample Description : Water  
Sample Mark : Naidupeta, Konetirajupalem, Pravite House, Near Road side (GW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 20/09/2017- 21/09/2017  
Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Brownish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	45	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.61	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	48	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	11.32	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	3.9	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	25.61	IS 3025, I (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	32.47	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	1.34	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.35	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	11.08	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	69	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*



*C.P. Sivaraman*  
Authorized Signatory

**C.P. SIVARAMAN**  
Laboratory Manager

1. The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or otherwise mentioned 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss/ damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items.

**Hubert Enviro Care Systems (P) Ltd.**

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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/004/200917  
Report Date : 26/09/2017

Sample Description : Water  
Sample Mark : Naidupeta, Konetirajupalem, Middle in Village (SW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 20/09/2017- 21/09/2017  
Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	BDL(DL 1)	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	Agreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	BDL(DL 0.1)	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.55	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	311	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	51.31	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	30.12	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	89.26	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	65.21	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	4.99	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.7	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	BDL(DL0.02)	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	523	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C .P. SIVARAMAN  
Laboratory Manager



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/005/200917  
Report Date : 26/09/2017

Sample Description : Water  
Sample Mark : Naidupeta, Menkuru, Anganwadi School(AAW)(SW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 20/09/2017- 21/09/2017  
Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Light Yellowish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	18	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.29	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	43	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	8.11	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	3.98	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	10.42	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	4.85	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	1.33	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.28	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	10.23	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	61	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C.P. SIVARAMAN  
Laboratory Manager



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/006/200917  
Report Date : 26/09/2017

Sample Description : Water  
Sample Mark : Naidupeta, Menkuru, Veterinary Hospital(SW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 20/09/2017- 21/09/2017  
Analysis Commenced On : 21/09/2017

Completed On : 26/09/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	BDL(DL 1)	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	Agreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	BDL(DL 0.1)	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.12	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO3	mg/l	249	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	45.26	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	28.37	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	97.14	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO4	mg/l	61.44	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO3	mg/l	5.08	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.6	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	BDL(DL0.02)	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	416	IS:3025:1 (Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C.P. SIVARAMAN  
Laboratory Manager



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC - Naidupettah.,  
Address of the Client : Naidupettah  
Sample Description : Noise Monitoring  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling Date : 22/09/2017

Report No. : HECSL/N/001-002/200917  
Report Date : 26/09/2017

S.No.	Location	Noise Level in dB (A)
1	Naidupeta, Mumaihpaalem, MPP School	64.8
2	Naidupeta, Konetirajupalem, Pravite House	62.9
3	Naidupeta, Konetirajupalem, Pravite House, Near Road side	63.5
4	Naidupeta, Konetirajupalem, Pravite House, Middle in Village	64.5
5	Naidupeta, Menkuru, Anganwadi School(AAW)	63.7
6	Naidupeta, Menkuru, Vetamary Hospital	61.9

#### Limits set by CPCB:

- |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|
| i. Industrial Area    | : Day Time-75 dB (A); | Night Time-70 dB (A). |
| ii. Commercial Area   | : Day Time-65 dB (A); | Night Time-55 dB (A). |
| iii. Residential Area | : Day Time-55 dB (A); | Night Time-45 dB (A). |
| iv. Silence Zone      | : Day Time-50 dB (A); | Night Time-40 dB (A). |
| v. Working Area       | : Day Time-90 dB (A); | Night Time-90 dB (A). |

  
Authorized Signatory

**C . P . SIVARAMAN**  
Laboratory Manager



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC - Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/001/251017  
Report Date : 30/10/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Mumaihpalem, MPP School  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 25/10/2017 - 26/10/2017  
Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	20.86	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	30.26	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	39.15	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	22.42	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	$\text{mg}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	BDL(DL5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	$\text{ng}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	$\text{ng}/\text{m}^3$	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	$\text{ng}/\text{m}^3$	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit,  $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter,  
 $\text{mg}/\text{m}^3$ - Milligrams per cubic meter,  $\text{ng}/\text{m}^3$ - Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

**C.P. SIVARAMAN**  
Laboratory Manager

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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah  
Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Menkuru, Anganwadi School  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 25/10/2017 -26/10/2017  
Analysis Commenced On : 26/10/2017

Report No. : HECSL/A/002/251017  
Report Date : 30/10/2017

Completed On : 30/10/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.24	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	30.34	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	42.19	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	24.65	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	BDL(DL5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C. P. Sivaraman*  
Authorized Signatory

**C .P. SIVARAMAN**  
Laboratory Manager

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/003/251017  
Report Date : 30/10/2017

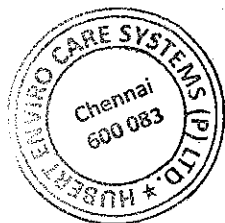
Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Menkuru, MPP School(AAW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 25/10/2017 -26/10/2017  
Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.16	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	30.34	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	43.16	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	23.19	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	BDL(DL5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

**C . P. SIVARAMAN**  
Laboratory Manager

**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
 Address of the Client : Naidupettah

Report No. : HECSL/A/004/251017  
 Report Date : 30/10/2017

Sample Description : Ambient Air Quality  
 Sampling Location : Naidupeta, Manawali, MPP School  
 Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
 Sampling/received Date : 25/10/2017 -26/10/2017  
 Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.74	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	31.28	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	40.32	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	26.19	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	BDL(DL5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
 mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
 Authorized Signatory

**C.P. SIVARAMAN**  
 Laboratory Manager

**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC -Naidupettah.,  
 Address of the Client : Naidupettah

Report No. : HECSL/A/005/251017  
 Report Date : 30/10/2017

Sample Description : Ambient Air Quality  
 Sampling Location : Naidupeta,Konetirajupalem,Pravite House  
 Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
 Sampling/received Date : 25/10/2017 -26/10/2017  
 Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	21.23	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	30.47	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	40.26	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	29.43	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	BDL(DL 5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
 mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
 Authorized Signatory

**C .P. SIVARAMAN**  
 Laboratory Manager

# Hubert Enviro Care Systems (P) Ltd.

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## Laboratory Services Division

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/006/251017  
Report Date : 30/10/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Konetirajupalem, Govt School  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 25/10/2017 - 26/10/2017  
Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.75	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	31.35	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	40.32	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	28.46	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	BDL(DL 5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

C.P. SIVARAMAN  
Laboratory Manager

**Hubert Enviro Care Systems (P) Ltd.**

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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,

Address of the Client : Naidupettah

Report No. : HECSL/W/001/251017

Report Date : 30/10/2017

Sample Description : Water

Sample Mark : Naidupeta, Konetirajupalem(GW)

Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd

Sampling/received Date : 25/10/2017- 26/10/2017

Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Brownish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	31	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.66	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	62	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	7.47	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	5.07	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	9.62	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	26.39	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	1.19	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.32	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	11.99	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	59	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
 Authorized Signatory

**C.P. SIVARAMAN**  
 Laboratory Manager


**Hubert Enviro Care Systems (P) Ltd.**

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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah,  
Address of the Client : Naidupettah

Report No. : HECSL/W/002/251017  
Report Date : 30/10/2017

Sample Description : Water  
Sample Mark : Naidupeta, Konetirajupalem, Govt School (GW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 25/10/2017- 26/10/2017  
Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Light Yellowish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	19	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.98	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	41	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	8.24	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	3.69	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	11.32	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	5.32	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	1.39	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.38	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	11.36	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	76	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

*C.P. Sivaraman*  
Authorized Signatory

C. P. SIVARAMAN  
Laboratory Manager



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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/003/251017  
Report Date : 30/10/2017

Sample Description : Water  
Sample Mark : Naidupeta, Mumaihalem, MPP School (GW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 25/10/2017- 26/10/2017  
Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	BDL(DL 1)	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	Agreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	BDL(DL 0.1)	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.33	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	325	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	46.39	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	27.12	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	98.65	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	63.11	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	5.18	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.8	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	BDL(DL0.02)	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	521	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

**C.P. SIVARAMAN**  
Laboratory Manager



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# Hubert Enviro Care Systems (P) Ltd.

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC - Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/004/251017  
Report Date : 30/10/2017

Sample Description : Water  
Sample Mark : Naidupeta, Menkuru, Anganwadi School(SW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 25/10/2017- 26/10/2017  
Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Brownish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	44	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.12	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	42	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	7.23	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	5.6	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	10.36	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	39.22	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	1.87	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.38	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	10.36	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	76	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C. P. SIVARAMAN  
Laboratory Manager



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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/005/251017  
Report Date : 30/10/2017

Sample Description : Water  
Sample Mark : Naidupeta, Menkuru, MPP School(AAW)(SW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 25/10/2017- 26/10/2017  
Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Light Yellowish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	14	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.89	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	44	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	8.26	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	4.56	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	11.24	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	5.06	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	1.55	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.37	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	12.36	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	72	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

*C.P. Sivaraman*  
Authorized Signatory

**C.P. SIVARAMAN**  
Laboratory Manager



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**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/006/251017  
Report Date : 30/10/2017

Sample Description : Water  
Sample Mark : Naidupeta, Manawali, MPP School (SW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 25/10/2017- 26/10/2017  
Analysis Commenced On : 26/10/2017

Completed On : 30/10/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	BDL(DL 1)	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	-
3	Taste	-	Agreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	BDL(DL 0.1)	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.69	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	231	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	44.32	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	29.41	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	97.36	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	61.25	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	6.71	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.5	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	BDL(DL0.02)	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	413	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

*C.P. Sivaraman*  
Authorized Signatory

**C. P. SIVARAMAN**  
Laboratory Manager



# Hubert Enviro Care Systems (P) Ltd.

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## Laboratory Services Division

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC - Naidupettah.,  
Address of the Client : Naidupettah  
Sample Description : Noise Monitoring  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling Date : 25/10/2017

Report No. : HECSL/N/001-002/251017  
Report Date : 30/10/2017

S.No.	Location	Noise Level in dB (A)
1	Naidupeta, Konetirajupalem, Pravite House	62.8
2	Naidupeta, Konetirajupalem, Govt School	64.1
3	Naidupeta, Mumaihalem, MPP School	63.5
4	Naidupeta, Menkuru, Anganwadi School	64.1
5	Naidupeta, Menkuru, MPP School(AAW)	66.3
6	Naidupeta, Manawali, MPP School	62.2

#### Limits set by CPCB:

- |      |                  |                       |                       |
|------|------------------|-----------------------|-----------------------|
| i.   | Industrial Area  | : Day Time-75 dB (A); | Night Time-70 dB (A). |
| ii.  | Commercial Area  | : Day Time-65 dB (A); | Night Time-55 dB (A). |
| iii. | Residential Area | : Day Time-55 dB (A); | Night Time-45 dB (A). |
| iv.  | Silence Zone     | : Day Time-50 dB (A); | Night Time-40 dB (A). |
| v.   | Working Area     | : Day Time-90 dB (A); | Night Time-90 dB (A). |

  
Authorized Signatory

**C.P. SIVARAMAN**  
Laboratory Manager



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC -Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/001/181117  
Report Date : 23/11/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Mumaihpaalem, MPP School  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 18/11/2017 -18/11/2017  
Analysis Commenced On : 18/11/2017

Completed On : 23/11/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	20.89	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	30.67	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	74.13	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	35.62	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	$\text{mg}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	12.78	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	8.35	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	$\text{ng}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	$\text{ng}/\text{m}^3$	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	$\text{ng}/\text{m}^3$	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit,  $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter,  
 $\text{mg}/\text{m}^3$ - Milligrams per cubic meter,  $\text{ng}/\text{m}^3$ - Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

**C . P. SIVARAMAN**  
Laboratory Manager

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/002/181117  
Report Date : 23/11/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Konetirajupalem, Pravite House  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 18/11/2017 -18/11/2017  
Analysis Commenced On : 18/11/2017

Completed On : 23/11/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.56	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	31.23	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	75.67	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	37.81	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	13.23	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	8.47	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

C. P. SIVARAMAN  
Laboratory Manager

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/003/181117  
Report Date : 23/11/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Konetirajupalem, Pravite House, Near Road side  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 18/11/2017 -18/11/2017  
Analysis Commenced On : 18/11/2017

Completed On : 23/11/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m <sup>3</sup>	20.64	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m <sup>3</sup>	30.57	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m <sup>3</sup>	73.16	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m <sup>3</sup>	35.58	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m <sup>3</sup>	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m <sup>3</sup>	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m <sup>3</sup>	12.64	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m <sup>3</sup>	8.26	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m <sup>3</sup>	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m <sup>3</sup>	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m <sup>3</sup>	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m<sup>3</sup>- Micrograms per cubic meter,  
mg/m<sup>3</sup>- Milligrams per cubic meter, ng/m<sup>3</sup>- Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
Authorized Signatory

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/004/181117  
Report Date : 23/11/2017

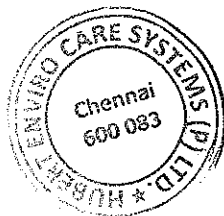
Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Konetirajupalem, Pravite House, Middle in Village  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 18/11/2017 - 18/11/2017  
Analysis Commenced On : 18/11/2017

Completed On : 23/11/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	20.47	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	30.46	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	75.58	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	37.46	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	$\text{mg}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	13.19	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	8.23	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	$\text{ng}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	$\text{ng}/\text{m}^3$	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	$\text{ng}/\text{m}^3$	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit,  $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter,  
 $\text{mg}/\text{m}^3$ - Milligrams per cubic meter,  $\text{ng}/\text{m}^3$ - Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



*C.P. Sivaraman*  
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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/A/005/181117  
Report Date : 23/11/2017

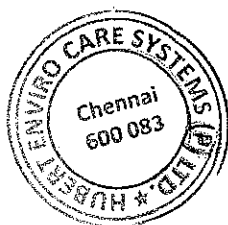
Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Menkuru, Anganwadi School(AAW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 18/11/2017 -18/11/2017  
Analysis Commenced On : 18/11/2017

Completed On : 23/11/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	20.47	IS : 5182 (P-2):2001 (Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	30.19	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	73.98	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	34.69	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	$\text{mg}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	12.64	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	8.34	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	$\text{ng}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	$\text{ng}/\text{m}^3$	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	$\text{ng}/\text{m}^3$	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit,  $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter,  
 $\text{mg}/\text{m}^3$ - Milligrams per cubic meter,  $\text{ng}/\text{m}^3$ - Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah,  
Address of the Client : Naidupettah

Report No. : HECSL/A/006/181117  
Report Date : 23/11/2017

Sample Description : Ambient Air Quality  
Sampling Location : Naidupeta, Menkuru, Veternary Hospital  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 18/11/2017 -18/11/2017  
Analysis Commenced On : 18/11/2017

Completed On : 23/11/2017

S.No	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	20.19	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	30.46	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	74.56	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$	36.98	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	$\text{mg}/\text{m}^3$	BDL(DL 0.05)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	13.42	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	8.42	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	$\text{ng}/\text{m}^3$	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	$\text{ng}/\text{m}^3$	BDL(DL 2)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	$\text{ng}/\text{m}^3$	BDL (DL 10)	HECS/AIR/Ambient/SOP007	20 (Annual)	20 (Annual)

Note:-BDL - Below Detection Limit, D.L- Detection Limit,  $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter,  
 $\text{mg}/\text{m}^3$ - Milligrams per cubic meter,  $\text{ng}/\text{m}^3$ - Nanograms per cubic meter.

\*\*\*End of Report\*\*\*



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C.P. SIVARAMAN  
Laboratory Manager

1. The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items.

# Hubert Enviro Care Systems (P) Ltd.

# 18, 92nd Street, Ashok Nagar,  
Chennai - 600 083.  
Ph: 42985555 Fax : 42985500  
E-mail : labsales@hecs.in

## Laboratory Services Division

Accredited by NABL in the fields  
of Chemical & Biological Testing  
Recognized by MoEF.  
FSSAI Notified Laboratory  
ISO 9001, 14001 & OHSAS 18001 Certified.

### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC - Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/001/181117  
Report Date : 23/11/2017

Sample Description : Water  
Sample Mark : Naidupeta, Mumaihpaalem, MPP School (GW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 18/11/2017- 19/11/2017  
Analysis Commenced On : 19/11/2017

Completed On : 23/11/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Brownish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	58	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.58	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO3	mg/l	44	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	9.29	IS 3025:1 (Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	5.03	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	10.31	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO4	mg/l	29.33	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO3	mg/l	1.64	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.26	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	13.25	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	76	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C.P. SIVARAMAN  
Laboratory Manager



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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/002/181117  
Report Date : 23/11/2017

Sample Description : Water  
Sample Mark : Naidupeta, Konetirajupalem, Pravite House(GW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 18/11/2017- 19/11/2017  
Analysis Commenced On : 19/11/2017

Completed On : 23/11/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	BDL(DL 1)	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	-
3	Taste	-	Agreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	BDL(DL 0.1)	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.99	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	279	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	41.67	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	29.12	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	91.36	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	59.51	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	5.57	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.7	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	BDL(DL0.02)	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	476	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C . P. SIVARAMAN  
Laboratory Manager



**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
 Address of the Client : Naidupettah

Report No. : HECSL/W/003/181117  
 Report Date : 23/11/2017

Sample Description : Water  
 Sample Mark : Naidupeta, Konetirajupalem, Pravite House, Near Road side (GW)  
 Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
 Sampling/received Date : 18/11/2017- 19/11/2017  
 Analysis Commenced On : 19/11/2017

Completed On : 23/11/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Light Yellowish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	16	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.02	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	49	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	8.41	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	4.01	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	12.36	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	6.41	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	1.48	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.31	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	12.45	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	76	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*



*C.P. Sivaraman*  
 Authorized Signatory

**C.P. SIVARAMAN**  
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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/004/181117  
Report Date : 23/11/2017

Sample Description : Water  
Sample Mark : Naidupeta, Konetirajupalem, Middle in Village (SW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 18/11/2017- 19/11/2017  
Analysis Commenced On : 19/11/2017

Completed On : 23/11/2017

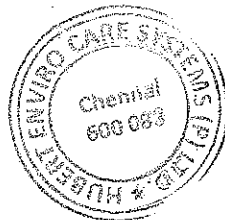
S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Brownish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	4815	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.22	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	63	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	7.54	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	4.92	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	8.98	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	25.36	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	1.45	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.39	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	10.78	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	114	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*

  
Authorized Signatory

C .P. SIVARAMAN  
Laboratory Manager



**TEST REPORT**

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
 Address of the Client : Naidupettah

Report No. : HECSL/W/005/181117  
 Report Date : 23/11/2017

Sample Description : Water  
 Sample Mark : Naidupeta, Menkuru, Anganwadi School(AAW)(SW)  
 Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
 Sampling/received Date : 18/11/2017- 19/11/2017  
 Analysis Commenced On : 19/11/2017

Completed On : 23/11/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	BDL(DL 1)	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	--
3	Taste	-	Agreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	BDL(DL 0.1)	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.11	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO3	mg/l	326	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	45.23	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	30.12	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	89.69	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO4	mg/l	65.12	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO3	mg/l	5.69	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.6	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	BDL(DL0.02)	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	493	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*



*C.P. Sivaraman*  
 Authorized Signatory

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC – Naidupettah.,  
Address of the Client : Naidupettah

Report No. : HECSL/W/006/181117  
Report Date : 23/11/2017

Sample Description : Water  
Sample Mark : Naidupeta, Menkuru, Veterinary Hospital (SW)  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling/received Date : 18/11/2017- 19/11/2017  
Analysis Commenced On : 19/11/2017

Completed On : 23/11/2017

S.No.	Parameters	Units	Results	Test Method
1	Colour	Hazen Unit	Light Yellowish Liquid	IS 3025(Part 4):1983(Reaff:2006)
2	Odour	-	Agreeable	-
3	Taste	-	DisAgreeable	IS 3025 Part (23):1986 Reaff:2006
4	Turbidity	NTU	15	IS:3025:(Pt-10):1984(Reaff:2006)
5	pH (at 25 °C)	-	7.15	IS 3025 (Part11)-1983(Reaff:2006)
6	Total Hardness as CaCO <sub>3</sub>	mg/l	48	IS 3025 (Part14) 1983(Reaff:2006)
7	Calcium as Ca	mg/l	8.06	IS 3025:1(Pt 16)-1984(Reaff 2006)
8	Magnesium as Mg	mg/l	5.12	IS 3025 (Part 17)-1984
9	Chloride as Cl	mg/l	12.26	IS 3025,1 (Pt 23)-1986(Reaff 2009)
10	Sulphate as SO <sub>4</sub>	mg/l	5.09	IS 3025 (Part21)-1983(Reaff 2006)
11	Nitrate as NO <sub>3</sub>	mg/l	1.41	IS 3025 (Pt40)-1991(Reaff 2009)
12	Fluoride	mg/l	0.32	IS 3025 (Pt 46)-1994(Reaff 2009)
13	Cyanide as CN	mg/l	BDL(DL0.01)	IS3025 ,5(Pt 45):1993 (Reaff 2006)
14	Total Chromium	mg/l	BDL(DL 0.01)	IS3025 ,5(Part45):1993(Reaff 2006)
15	Iron as Fe	mg/l	10.25	IS 3025 (Pt 32):1988(Reaff 2009)
16	Manganese	mg/l	BDL(DL0.01)	IS 3025(Pt 24):1986(Reaff:2009)
17	Phenolic Compounds	mg/l	BDL(DL0.001)	ASTM(part 31)1978
18	Residual Free Chlorine	mg/l	BDL(DL0.1)	IS 3025 (Part31)-1988
19	Total Dissolved Solids	mg/l	74	IS:3025:1(Pt 16) :1984 (Reaff 2006)

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

\*\*\*End of Report\*\*



*C.P. Sivaraman*  
Authorized Signatory

C.P. SVARAMAN  
Laboratory Manager

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### TEST REPORT

Page : 1 of 1

Name of the Client : M/s. APIIC - Naidupettah.,  
Address of the Client : Naidupettah  
Sample Description : Noise Monitoring  
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd  
Sampling Date : 18/11/2017

Report No. : HECSL/N/001-002/181117  
Report Date : 23/11/2017

S.No.	Location	Noise Level in dB (A)
1	Naidupeta, Mumaihalem, MPP School	63.2
2	Naidupeta, Konetirajupalem, Pravite House	64.3
3	Naidupeta, Konetirajupalem, Pravite House, Near Road side	62.8
4	Naidupeta, Konetirajupalem, Pravite House, Middle in Village	63.9
5	Naidupeta, Menkuru, Anganwadi School (AAW)	65.8
6	Naidupeta, Menkuru, Vetarnary Hospital	63.4

#### Limits set by CPCB:


- |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|
| i. Industrial Area    | : Day Time-75 dB (A); | Night Time-70 dB (A). |
| ii. Commercial Area   | : Day Time-65 dB (A); | Night Time-55 dB (A). |
| iii. Residential Area | : Day Time-55 dB (A); | Night Time-45 dB (A). |
| iv. Silence Zone      | : Day Time-50 dB (A); | Night Time-40 dB (A). |
| v. Working Area       | : Day Time-90 dB (A); | Night Time-90 dB (A). |



*C.P. Sivaraman*  
Authorized Signatory

**C.P. SIVARAMAN**  
Laboratory Manager

**Annexure 5**  
**Paper Advertisement Copy**

 ఆంధ్రప్రదేశ్ పారిశ్రామిక మౌలిక సదుపాయాల సంస్థ లిమిటెడ్  
(ఆంధ్రప్రదేశ్ ప్రభుత్వ రంగ సంస్థ)

59A-20/3/2A, 1వ అంతస్తు, శ్రీ శివ కాంప్లెక్స్, ఫన్ టైమ్స్ క్లబ్ రోడ్, టీచర్స్ కాలనీ,  
విజయవాడ - 520008, వెబ్సైట్ : [www.apiic.in](http://www.apiic.in) Ph: 0866 - 2428300, 2428323

### బహిరంగ ప్రకటన


శ్రీ పొట్టి శ్రీరాములు నెల్లూరు జిల్లాలోని నాయుడుపేట వద్ద ఇండస్ట్రియల్ పార్కును ఏపీఐఐసీ లిమిటెడ్ అభివృద్ధి చేస్తోందని, ఈ ఇండస్ట్రియల్ పార్కు కోసం EIA నోటిఫికేషన్ 2006 మరియు దాని తదుపరి సవరణలకు అనుగుణంగా F.No. 21-140/2015-IA-III తేది: 30 మే, 2017 పర్యావరణ, అటవీ మంత్రిత్వశాఖ (MOEF), న్యూఢిల్లీ పర్యావరణ క్లియరెన్స్ (EC)ని ఇచ్చిందని ఇందుమూలముగా తెలియజేయడమైనది. పర్యావరణ క్లియరెన్స్ వివరాలు APIIC వెబ్సైట్: [www.apiic.in](http://www.apiic.in)లో లభిస్తాయి.

ప్రదేశం : నెల్లూరు  
తేది : 21-07-2017

సం/- జోనల్ మేనేజర్



([https://d39gegkjaqduz9.cloudfront.net/TH\2017\07\22\VIJ\Vijayawada\TH\5\\_06\ebb5589d\\_133187\\_A6\\_mr.jpg](https://d39gegkjaqduz9.cloudfront.net/TH\2017\07\22\VIJ\Vijayawada\TH\5_06\ebb5589d_133187_A6_mr.jpg))

	<b>ANDHRA PRADESH INDUSTRIAL INFRASTRUCTURE CORPORATION LIMITED</b> (A Govt. of Andhra Pradesh Undertaking) 59A-20/3/2A, 1st Floor, Sri Siva Complex, Funtimes Club Road, Teachers Colony, Vijayawada - 520008. Website: <a href="http://www.apiic.in">www.apiic.in</a> Phone: 0866-2428300, 2428323
	<b>PUBLIC NOTIFICATION</b> It is hereby informed that APIIC Ltd., is being developed Industrial Park at Konetirajupalem & Menakuru Village, Naidupeta (M) in S.P.S.R. Nellore District, Andhra Pradesh and Ministry of Environment and Forest (MoEF), New Delhi has been accorded Environmental Clearance (EC) for this Industrial Park, vide F.No.21-140/2015-IA-III dated 30th May 2017, in terms of EIA notification 2006 and its subsequent amendments thereof. The details of Environmental Clearance are available in APIIC website : <a href="http://www.apiic.in">www.apiic.in</a> . Place : Nellore Date : 21-07-2017

**Sd/-  
Zonal Manager**

**Annexure 6**  
**CFE Approval**



**CONSENT ORDER FOR ESTABLISHMENT**

**Order No. 235 /APPCB/CFE/RO-NLR/HO/2017**

**Dt: 06.09.2017**

**Sub:** APPCB – CFE – M/s. Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC), for Development of Naidupet Industrial Park at Konetirajupalem & Menakur Villages, Naidupet Mandal, SPSR Nellore District - Consent for Establishment (CFE) of the Board under Sec.25 of Water (Prevention & Control of Pollution) Act, 1974 and Under Sec.21 of Air (Prevention & Control of Pollution) Act, 1981 - Issued - Reg.

**Ref:** 1. EC order dt. 30.05.2017 issued by MoEF&CC, Gol, New Delhi.  
 2. CFE application received through A.P. Single Desk Portal on 09.08.2017.  
 3. R.O's inspection report dt. 10.08.2017.  
 4. Proponent's Ir.dt. 28.08.2017.  
 5. CFE Committee meeting held on 29.08.2017.

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1. In the reference 2<sup>nd</sup> cited, an application was submitted to the Board seeking Consent for Establishment (CFE) for **Development of Industrial Park** project with a project cost of Rs. 167.561 Crores.

<b>Total area of the land</b>		:	<b>503.44 Ha (1244.02 Acres)</b>
<b>Land Break-up</b>			
i.	Plotted area	:	About 933.81 Acres (377.90 Ha)
ii.	Road area	:	About 103.56 Acres (41.91 Ha)
iii.	Open space	:	About 124.88 Acres (50.54 Ha)
iv.	Common facilities area	:	About 15.20 Acres (6.15 Ha)
v.	Buffer + Green Belt	:	About 66.57 Acres (26.94 Ha)

**Activity :** The type of industrial sectors/ Sub sectors to be developed in the Industrial Park are as follows :-

S.N	Type of industry sector	Sub Sector
1	Engineering	Fabricated metal products, industrial machinery and process control equipment, electrical machinery, consumer durables, light engineering and metal processing (pipes, tubes casting and forgins etc) Ceramics and refractories, glass and glassware, graphite, marbles, processed minerals, building products.
2	Pharma	Pharmaceutical formulations, Laboratory chemicals involving distillation, purification process, Herbal extraction, production of cosmetics, Manufacturing of soaps, Herbal medicines, Bio-pharmaceuticals.
3	Leather	Leather products excluding tanning & hide processing sports goods.
4	Textile	Cotton spinning & weaving, coil industries, Tailoring & Garment making, Cotton & woollen hosiery, Handloom weaving, shoelace manufacturing.
5	Food processing	Flour mills, Malted food, instant tea/coffee, coffee processing, Non-alcoholic beverages, food additives, Nutrients and flavours, Organic nutrients, parboiled rice mills, Atta Chakkies, Mineralised water, Dall mills, Bakery products, Biscuits, Supari & masala grinding, water softening & demineralised water plants.

2. As per the application, the above project is to be located at Konetirajupalem & Menakur Villages, Naidupet Mandal, SPSR Nellore District. The total site area is 503.44 Ha (1244.02 Acres).
3. The above site was inspected by Environmental Engineer, Regional Office, Nellore, A.P Pollution Control Board on 09.08.2017 and observed that the site is surrounded by

**North** : Agriculture lands  
**South** : Naidupet – Venkatagiri Highway Road  
**East** : Mamidikaluva  
**West** : Reserve Forest & APIIC SEZ lands.

4. The Board, after careful scrutiny of the application, verification report of Regional Officer and recommendations of the CFE Committee, hereby issues **CONSENT FOR ESTABLISHMENT** to your project Under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. **This order is issued to the activity as mentioned at Para (1) only.**
5. This Consent Order now issued is subject to the conditions mentioned in Schedule 'A' and Schedule 'B'.
6. This order is issued from pollution control point of view only. Zoning and other regulations are not considered.
7. **This order is valid for period of 7 years from the date of issue.**

Encl: Schedule 'A'  
Schedule 'B'

**MEMBER SECRETARY**

**To**

**The General Manager,  
M/s. Andhra Pradesh Industrial Infrastructure Corporation Limited,  
(Naidupet Industrial Park),  
Door No.59A-20/3/2A, 1<sup>st</sup> Floor,  
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sivareddy03@gmail.com,  
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**Copy to:** 1. The JCEE, Z.O., Vijayawada for information and necessary action.  
2. The E.E., R.O., Nellore for information and necessary action.

### SCHEDULE – A

1. Separate energy meter shall be provided for Sewage Treatment Plant (STP) to record energy consumed.
2. The proponent shall obtain Consent for Operation (CFO) from APPCB, as required Under Sec.25/26 of the Water (P&C of P) Act, 1974 and under sec. 21/22 of the Air (P&C of P) Act, 1981, before commencement of the activity.

### SCHEDULE – B

#### Water:

1. The source of water is Telugu Ganga canal. The APIIC proposed to construct the Water Treatment Plant of capacity 10MLD in two modules (for the entire cluster MPSEZ, Naidupeta Industrial Park & Attivaram Industrial Park) each considering the phased development and immediate water requirement. The maximum permitted water consumption is as following:

S. No	Purpose	Quantity in KLD		
		Fresh	Treated	Total
1.	Industrial use	3555.42	1914.45	5469.87
2.	Domestic use	783.30	---	783.30
3.	Greenbelt	142.75	---	142.75
4.	Others	44.27	---	44.27
	<b>Total</b>	<b>4525.74</b>	<b>1914.45</b>	<b>6440.19</b>

2. The maximum waste water generation shall not exceed the following:

S.No	Source	Quantity in KLD
1.	Industrial effluents	3825.49
2.	Domestic	704.97
	<b>Total</b>	<b>4530.47</b>

#### **Treatment & Disposal:**

Effluent Description	Treatment	Mode of final disposal
The total waste water generated is 4.5 MLD (sewage – 0.7 MLD & industrial Effluent – 3.8 MLD)	In the initial stage, the APIIC has proposed to construct 1.0 MLD capacity CETP. The CETP shall be a Zero Liquid Discharge system viz., Stripper, RO Plant, MEE followed by ATFD.	<ul style="list-style-type: none"><li>• RO permeate is re-used for development of greenbelt.</li><li>• Excess treated waste water is reused in units.</li></ul>

3. Dual plumbing system shall be adopted and separate tanks shall be provided to store fresh water and treated wastewater.
4. **No waste water shall be discharged outside the industrial park. There shall be no discharge into water bodies existing in the Industrial Park.**
5. During construction stage septic tank followed by soak pit shall be constructed to the temporary toilets / kitchen provided for the construction labour and shall be removed after completion of the project.
6. Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for Domestic and flushing purposes.

**Air:**

7. Air pollution Control equipment shall be installed along with the commissioning of the activity and shall comply with the following for controlling air pollution.

a)	Attached to:	D.G. Set
b)	Capacity	1 x 1250 KVA
c)	Fuel :	Diesel
d)	Stack height above roof (m.)	7.25 m.
e)	Air Pollution Control Equipment:	Acoustic enclosures

8. Diesel generator sets shall be installed in a closed area with silencers and suitable noise absorption systems. The ambient noise level shall not exceed 75 dB (A) during day time and 70 dB (A) during night time.
9. Necessary provisions should be made by providing tarpaulin / GI Sheets around the construction site to reduce the fugitive emissions to the surrounding area.

**Solid Waste:**

10. The proponent shall comply with the following:

S.N	Solid / Hazardous Waste	Units	Quantity	Disposal
1	Production of iron and steel including other ferrous alloys (electric furnaces; steel rolling)	HW from engineering industries	1.25 TPD	To the agencies authorised by the APPCB/ Recycled / TSDF for further disposal.
2	Production of canvas & textiles	HW from textile units	2.48 TPD	
3	Production/formulation of drugs/ pharmaceuticals/ health care product	HW from pharma	21.91 TPD	
4	Leather tanneries	HW from leather units	1.86 TPD	
5	Biodegradable waste	Engineering units	0.62 TPD	
6	Biodegradable waste	Textile units	0.24 TPD	
7	Biodegradable waste	Pharma units	1.87 TPD	
8	Biodegradable waste	Leather units	0.49 TPD	
9	Biodegradable waste	Food industries	1.62 TPD	
10	Biodegradable waste		0.16 TPD	

11. The solid waste generated shall be properly collected and segregated before disposal to the city municipal facility. Waste paper, cartons, thermocol, plastic waste, glass etc., shall be disposed to recycling units. E-waste shall be disposed to authorized recycling units. The in-vessel bio-conversion technique shall be used for composting the organic waste.
12. All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
13. Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and shall be disposed taking the necessary precautions for general safety and health aspects of people, and it shall be disposed only in approved sites with the approval of competent authority.
14. The following rules and regulations notified by the MoE&F, Gol shall be implemented.
- Solid Waste Management Rules, 2016.
  - Hazardous waste and other wastes (Management, and Transboundary Movement) Rules, 2016 and amendments thereof.
  - Batteries (Management & Handling) Amendment Rules, 2010.
  - E-Waste (Management) Rules, 2016.
  - Construction and Demolition waste Management Rules, 2016.

**Other Conditions:**

15. The individual industries shall pre-treat the effluents and shall be transported from the individual industries to the CETP with proper manifest system.
16. Industrial units shall obtain CFE / CFO of the Board as required under relevant provisions of Pollution Control Acts.
17. The proponent shall create corpus fund and maintain separate account with adequate budget to meet operational cost of CETP & STP.
18. The proponent shall ensure that there should be proper legal frame work for meeting recurring expenses by occupants for implementation of conditions stipulated.
19. Solar energy and LED bulbs shall be used to reduce electricity requirements.
20. As proposed, the green belt shall be developed in 33% of total park area 503.44 Ha i.e., 166.14 Ha. Out of that, the developer has to develop greenery in 15 % of park area i.e., 75.50 Ha and individual plot owners shall develop greenery in 18% of park area i.e., 90.64 Ha.
21. **The proponent shall obtain necessary permissions for the proposed activity, from the concerned Government Departments and other competent authorities.**
22. As per the provision of Fly ash Notification No.S.O.2804 (E), dt. 03.11.2009 and its amendments thereof, every construction agency engaged in the construction of building within a radius of 300 km from a coal or lignite based thermal power plant shall use only fly ash based products for construction, such as cement or concrete, fly ash bricks or tiles or clay fly ash bricks, blocks or tiles or cement fly ash bricks or bricks or blocks or similar products or a combination or aggregate of them in every construction project.
23. The proponent shall use Ready mix concrete for construction of the building.
24. The proponent shall provide proper centralized air exhaust system in all the cellar areas to avoid suffocation.
25. The proponent shall provide sufficient parking space for visitor vehicles.
26. The proponent shall comply with Energy efficient practices and energy audit practices. Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement. Wherever feasible, green building concepts shall be adopted.
27. Application of Solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision of solar water heating.
28. Concealing the factual data or submission of fabricated data and failure to comply with any of the conditions mentioned in this order attracts action under the provisions of relevant pollution control Acts.
29. Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves its right and power Under Sec. 27(2) of Water (Prevention and Control of Pollution) Act, 1974 and Under Sec.21(4) of Air (Prevention and Control of Pollution) Act, 1981 to revoke the order, to review any or all the conditions imposed herein and to make such modifications as deemed fit and stipulate any additional conditions by the Board.

30. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules, 1982, to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of Water (Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air (Prevention and Control of Pollution) Act, 1981.

**MEMBER SECRETARY**

**To**

**The General Manager,  
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(Naidupet Industrial Park),  
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