BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE BENCH, AT CHENNAI

O.A. No.314 of 2024

In the matter of:

Tribunal on its own motion **SUO MOTU** based on the News Item in The Hindu dt: 04.11.2024 titled, "***Residents stage protest against pollution caused by Vijayawada Thermal Power Station***".

And

Andhra Pradesh Pollution Control Board and Ors. … Respondents

ANNEXURES FILED ALONG WITH REPLY STATEMENT ON BEHALF OF RESPONDENT NO.5

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1.	2011 - 2012	Report on impact of air pollution on the crops in the vicinity of Respondent No.5 submitted by Environment Protection Training and Research Institute (EPTRI)	1 – 87
2.	12.03.2018	Studies on Air Pollution Status and Human Health conditions in Influence Zone and Non-Influence Zone of Dr.NTTPS	88 – 250
3.	29.10.2018	Study Report on health of animals in in Influence Zone and Non-Influence Zone of Dr.NTTPS	251 – 291
4.	20.01.2023	Circular of Central Electricity Authority (CEA) on aged coal-fired Thermal Power Station	292 – 300
5.	24.04.2023	Consent Order: APPCB/VJA/VJA/24/CFO/HO/2016	301 – 312
6.	28.04.2023	Consent Order No: APPCB- 11022/66/2022- TEC-CFO-APPCB	313 – 320
7.	05.09.2023	Letter from APGENCO to Singareni Collieries Company Ltd on supply of higher quality coal	321
8.	13.09.2024	Letter from the Chief Engineer, Operation & Maintenance to the Collector & District Magistrate, Vijaywada with details of the amounts furnished by the 5th Respondent	322 – 324
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		Vijaywada furnishing a cheque of Rs.4.00 Crores by 5th Respondent to take up works relating to road, drainage, leveling, building of compound walls for burial grounds, etc., in the villages surrounding the Power Station	
10.	11.01.2024	Letter from APGENCO to Singareni Collieries Company Ltd on supply of higher quality coal	326 – 327
11.	02.04.2024	Letter from Respondent No.5 to the District Medical and Health officer (Vijayawada), Acharya Nagarjuna University, Dr. Y.S.R University of Health Sciences, AIIMs (Mangalagiri) for conducting health studies.	328 – 335
12.	10.01.2025	Directions issued by Monitoring (TF) Committee of the Respondent No.1 to Respondent No.5	336 – 343
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Dated at Chennai on this the 11th day of June, 2025.

COUNSEL FOR RESPONDENT NO. 5

Original final report

1

Sl. No: 1

FINAL PROJECT REPORT
ON

IMPACT OF AIR POLLUTION ON THE CROPS IN THE VICINITY OF DR. NARLA TATA THERMAL POWER STATION



Submitted To:

APGENCO/VIDYUT SOUDHA

Hyderabad, Andhra Pradesh

Submitted By:

ENVIRONMENT PROTECTION TRAINING AND RESEARCH INSTITUTE

91/4, Gachibowli, Hyderabad

Final Report on Impact of Air Pollution on Crops in the Vicinity of Dr. NTTPS, Ibrahimpatnam

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II. Soil data for the year 2010-11
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Final Report on Impact of Air Pollution on Crops in the Vicinity of Dr. NTTPS, Ibrahimpatnam

1. Introduction:

Andhra Pradesh Power Generation Corporation (APGENCO) is a unique one in the country with respect to its layout and numerous facilities that are available for its easy operation and maintenance. It is located in Ibrahimpatnam village about 22 Km by road from Vijayawada, Andhra Pradesh. Administratively, Ibrahimpatanam falls in Krishna district, Geographically Ibrahimpatnam is located on Northern Latitude of 16° 35' 56" North & 80° 32' 40" East. River Krishna, a major river in Andhra Pradesh passes through Ibrahimpatanam. The present power generation capacity is 1760 MW with its six units of 6 x 210 MW each and one unit with 500 MW (Table-1). These units are installed and commissioned in different stages. The details of commissioning are as follows.

Table-1: Details of the Stages of Commissioning

Stage No.	Unit No.	Capacity	Date of Commissioning
I	1	210 MW	01.11.1979
	2	210 MW	10.10.1980
II	1	210 MW	05.10.1980
	2.	210 MW	23.08.1990
III	1	210 MW	31.03.1994
	2.	210 MW	24.02.1995

To control air pollution from the plant, electrostatic precipitators have been installed at these units. The APGENCO has entrusted seasonal study on Impact of Air Pollution on the Crops in the villages surrounding it. In order to assess the impact of pollution on crops, the **Environment Protection Training and Research Institute (EPTRI)** has taken up the study in the villages surrounding the Dr. NTTTPS in 5 Km, 10 Km, 15 Km, 20 Km and 25 Km radius. Before starting the actual work, team of EPTRI met Sri. Ch. Ram Koti Lingeswar Rao, Superintendent Engineer, Sri. K. Venkata Reddy, Executive Engineer (Civil), Quality Control and Environment and Sri. G. Bhaskar Rao, Assistant Executive Engineer (Civil and Environment) of Dr.NTTPS, Ibrabimpatnam and explained the detailed methodology of work

and initiated on the same day. The study for summer season was started during May 2011. Similar studies were carried out in monsoon and winter seasons during 2011 and 2012.

Plants provide an enormous leaf area for impingement, absorption and accumulation of air pollutants to reduce the pollutant level in the air environment (Escobedo et al, 2008) with a various extent for different species. (Hove et al., 1999) Air pollutants can directly affect plants via leaves or indirectly via soil acidification. When exposed to airborne pollutants, most plants experienced physiological changes before exhibiting visible damage to leaves. Ascorbic acid (AA), Chlorophyll content, leaf extract pH, and relative water content were used to estimate air pollution impact on plants. However, these separate parameters gave conflict result for the same species. As single parameter may not provide a clear picture of the pollution-induced changes, air pollution tolerance index (APTI) based on four important parameters has been used for identifying tolerance levels of plant species. (Singh et. al., 1991)

In this study we aim to evaluate pollution tolerance of crops including plantations like mango, guava etc currently growing in the vicinity of Dr.NTTPS by using APTI method during the growing season from the hot summer season (June) to the cooler winter season (January) including monsoon season (September) in the year 2011-12. Thus we could analyze seasonal variation of the parameters which influence pollution tolerance.

1.1 Objectives

The main objective of the study is investigating the impact of air pollution on the crops in the vicinity of Dr. Narla Tata Thermal Power Station (Dr. NTTPS), at Ibrahimpatnam, Vijayawada.

1.2 Scope of Work

The scope is covering the following

- To prepare land use and land cover in the study area for identifying the sampling locations for different crops on GIS platform
- Inventorization of flora of the surrounding area in 10 km, 20 km, & 25 km radius
- To carry out the study of impact of air pollution on the crops in the villages surrounding Dr.NTTPS in 5 km, 10 km, 15 km, 15 km, 20 km and 25km radius (The

study needs to be focused in the 10 km radius and extended to 25 kms radius based on the intensity of the impact.

- ❖ To collect soil data from secondary sources

1.3 Study Area

The study area covers 25 km from the existing stack locations of Dr. Narla Tata Rao Thermal Power Station (DrNTTPS), Ibrahimpatnam, Vijayawada in Krishna district. The study area falls within the geographical area of 80° 32' 07.26" and 80° 32' 11.48" East and 16° 35' 58.49" and 16° 35' 59.16" North. The study area falls under Survey of India Toposheets No: 65D5, 65D6, 65D7, 65D9, 65D10, 65D11, 65D13, 65D14 and 65D15.

2. Methodology

The methodology adopted for land use land cover classification on GIS platform, inventorization of flora and impact of air pollution on crops is as follows.

2.1 Land Use Land Cover Classification - GIS Platform

The detail methodology of selection of satellite data, pre processing of data and land use / land cover classification are as follows.

2.1.1 Selection of Satellite Data

For the analysis of land use & land cover in the study area, satellite data of IRS LISS III of 23.5 meters resolution which covered the area of interest on 25th September, 2010 covering Kharif season and 17th March, 2010 Rabi season is taken.

2.1.2 Pre Processing of Data

The satellite data is geometrically corrected with respect to Survey of India Toposheets. To carry out the same, ground control points (GCPs) were identified on the Toposheets and raw satellite data. The coefficients for two co-ordinate transformation equations were computed based on polynomial regression between GCPs on map and satellite data. Alternate GCPs were generated till the Root Mean Square (RMS) error was less than 0.5 pixels and then both the images were co-registered.

2.1.3 Land use / Land cover Classification

Based on the scale and the satellite resolution the Land Use/Land Cover classification can be made. Level III classification has been adopted while carrying out the analysis. Digital image processing is carried out to delineate various land use / land cover categories viz., Built up land, Built- up land – I.E, Built-Upland (Layouts), Transportation, Poultry farms, Crop land-double, Crop land-single, Single crop, Agriculture plantations, Forest blank, Scrub forest, Open/Degrade forest, Forest plantations, Ash pond, Barren rocky/stony waste, Open scrub, Land with or without scrub, Sandy area- riverine, Aquaculture, River/stream/canal/drain, and water bodies. The delineation is based on tone, texture, size, shape, pattern and location information. The interpreted land use classification was verified on ground at limited points and final land use / land cover map was prepared.

2.2 Inventorization of Flora

The study area of Dr.NTTPS was surveyed through criss-cross walking in various places arount 25 km radius and collected plant specimens for the study of floristic diversity and inventorization the floral resources for summer, monsoon and winter season (2011 -2012) separately. The presence of various species with in 10 Km, 10-20 Km and 20-25 Km radius was studied in detail. All the species encountered were identified and recorded. Identification of plants was done using different regional flora books [Gamble (1915-36), Saxena and Brahmam (1994-96), Pullaiah and Chennaiah (1997), Pullaiah and Ali Moulali (1997) and Pullaiah (1997) and Chetty *et. al.,* (2007)]

2.3 Impact of Air Pollution on Crops

To assess the impact of air pollution on crop and vegetation Air Pollution Tolerance Index (APTI) method was adopted. It has been reported that gaseous forms of pollutants are absorbed by the leaves while the particulate forms are absorbed through the outer surface of the plants. Affected plant shows some common effects such as chlorophyll necrosis, inhibition in photosynthesis and decreasing plant growth (Davison and Blackemore, 1976). Of all part of the plant, leaf is the most sensitive part to air pollutions and several other external factors (Lalman and Singh, 1990).

The major air pollutants envisaged from the DrNTTPS are particulate matter (PM), SO_2 and NOx. In general the PM settles more in the nearby areas around the thermal plant than distance places in calm weather. Also it depends on the wind velocity and direction. Meteorological data was for the year of 2011-12 was obtained from the Department of Disaster Management, AP secretariat and prepared Windrose pattern to examine the direction of wind. (Fig.-1) Control site was selected that located 20-25 km radius away from the thermal power plant in the opposite direction of wind. APTI values are compared between other sites with control site to check the impact of air pollution.

Andhra Pradesh Climate is generally hot and humid. The major role in determining the climate of the state is played by South-West Monsoons. Summers in Andhra Pradesh last from the month of March to June. During these months the mercury level is quite high. July to September is the season for tropical rains in Andhra Pradesh. The state receives heavy rainfall during these months. About one third of the total rainfall in Andhra Pradesh is brought by the North- East Monsoons followed by winter season from November to February.

Leaf samples from the different crop plants were collected within 5 Km, 5 to 10 Km, 10 to 15 Km, 15 to 20 Km and 20 to 25 km radius of the Dr. NTTTPS during summer, monsoon and winter seasons. Samples were quickly transported to the laboratory in a heat proof container. Leaf fresh weight was taken immediately upon returning to the laboratory. Air Pollution Tolerance Index (APTI) was calculated to know the impact of air pollution on the crops based on following method compared between controlled and other sites of experiment.

2.3.1 Air Pollution Tolerance Index (APTI)

The Air Pollution Tolerance Index (APTI) of a species is calculated by the method of (Singh and Rao, 1983).

$$\text{APTI} = \frac{A\,(T + P) + R}{10}$$

Where,

A = Ascorbic Acid content of leaf mg/g,

P = pH of leaf material, T=Total Chlorophyll mg/g

R = Relative water content of leaf tissue.

2.3.2 Estimation of Ascorbic acid:

Principle: Ascorbic Acid (AA) is a strong reducing agent. Ascorbic acid can be measured by means of its reducing property. It is oxidized in the presence of colored dye 2,6 dichlorophenol- indophenol to dehydroascorbic acid. The chemical and procedure to estimate ascorbic acid of leaf are as follows.

- 2, 6, dichlorophenol indophenol: 250mg/1000 ml DW.
- Ascorbic acid (Standard Solution): 10mg/100 ml (5% oxalic acid).
- Oxalic acid (5%): 5g/100ml DW

10 ml of standard Ascorbic Acid solution is taken and titrated with 2, 6 dichlorophenol indophenol dye. The appearance of pink color indicates the end point. Similarly, 10 ml of unknown solution is taken and titrated with the dye. For the blank 10ml of 5% oxalic acid is taken and titrated with the dye. The Ascorbic Acid present in the unknown sample is calculated as:

$$\mathbf{APTI} = \frac{\mathbf{U.T-B1}}{\mathbf{S.T-B1}} \mathbf{X\ 1\ mg\ x} \frac{\mathbf{100}}{\mathbf{10}} \mathbf{\ldots\ldots mg/100\ ml.}$$

Where

U.T= Titre value of unknown solution,

S.T = Titre value of standard Ascorbic Acid solution,

B1= Titre value of Oxalic acid solution

2.3.3 Relative Leaf Water Content (RWC):

Leaf RWC was determined and calculated with the formula RWC= (Wf-Wd) x100/ (Wt-Wd) Wf, which is fresh weight, was gained by weighing the fresh leaf pieces on a 4-digit balance. Then, these leaf pieces were weighed after immersing in water overnight to get Wt, which is turgid weight. Next, leaf pieces were blotted to dryness and placed in a dryer at 60^0C for (3 hrs) and reweigh to get dry weight (Wd).

2.3.4 Total Chlorophyll Content:

One gram of the greenest leaves of the plants were selected and cleaned thoroughly with water and dried in room temperature and macerated in a pestle with mortar adding 20-25 ml of 80% acetone. A pinch of magnesium carbonate is also added to the leaf material while grinding. The content centrifuged at 2000 r.p.m for 15 minutes. Transferred the extract to a

volumetric flask and made up to volume of 50 ml using 80% acetone. The absorbance of this green solution is read at 645 and 663 nm, and the total chlorophyll is calculated with the following formula.

Total chlorophyll = $\mathbf{20.2XA_{645}+8.02XA_{663}}$ **(mg/g)**

2.3.5 Leaf Extract pH:

About 4 g of fresh leaves was homogenized in 40 ml deionized water and centrifuged at 7000 g. Extract pH was measured with a photo volt pH meter at 25°C.

2.4 Soil Status

The data on quality of soil collected from secondary source.

2.5 Air Quality and Wind Direction

The data on ambient air quality, stack monitoring data wind direction collected from secondary source.

3. RESULTS

3.1 Land Use Land Cover Classification - GIS Platform

The study area as captured by satellite is presented in **figure 2.** The Land use and land cover of the study area pertaining to transport, settlement and water bodies are depicted in **figure 3** and Land use and land cover describing all features is presented at **figure 4.** The areas of various Land Use / Land Cover Classes pertaining to the study area are given in **Table 2** and the same is depicted in pie diagram in **figure 5.**

Figure 2: Satellite Image

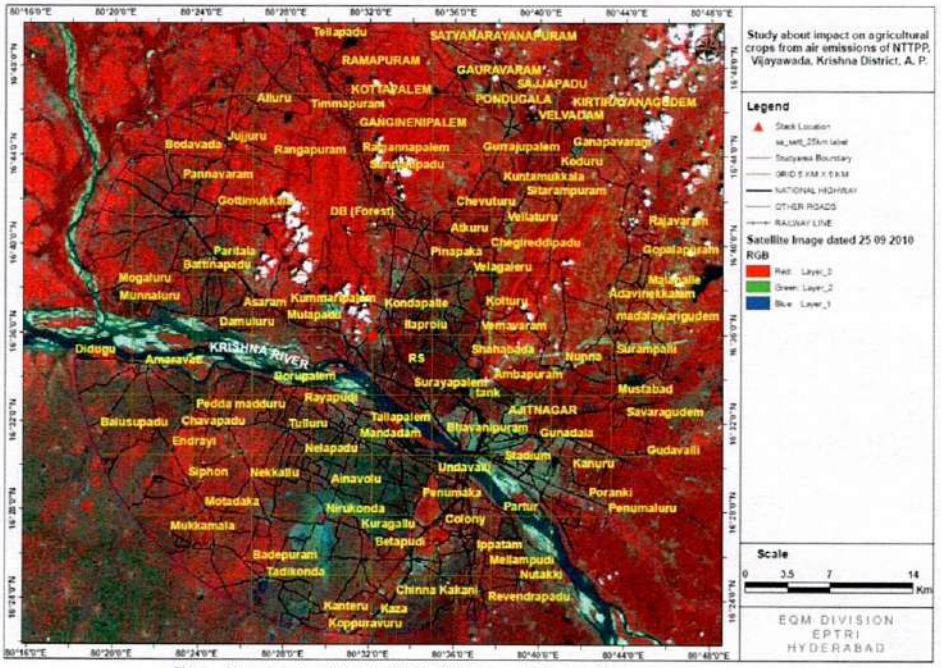


Fig : Map showing IRS Liss III Satellite image of the study area

Figure 3: Land Use Land Cover (Transport, Settlement and Water bodies)

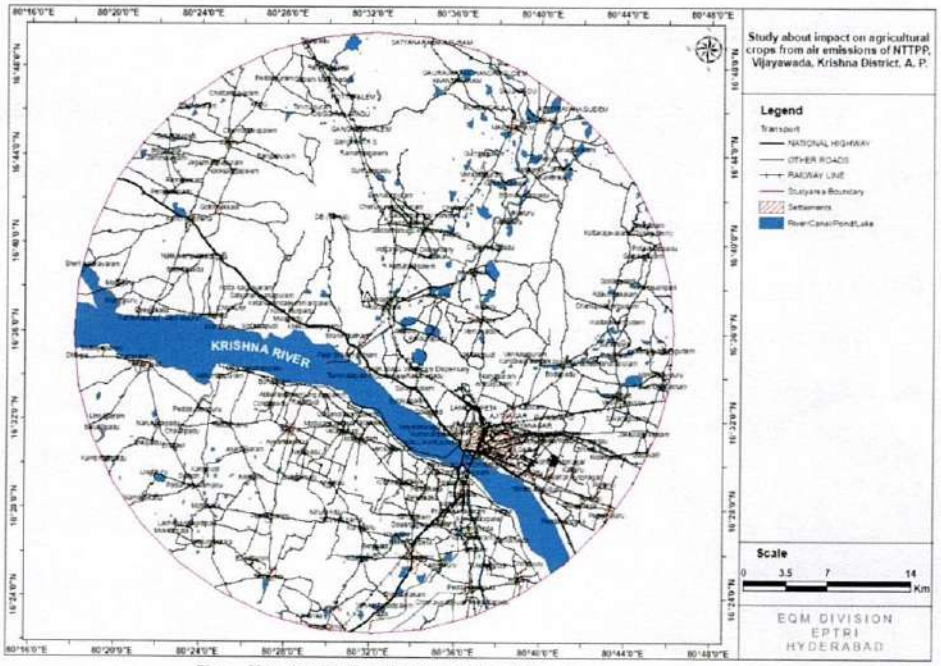


Fig : Map showing Base Features in the study area

Figure 4: Land Use Land Cover Describing All Features

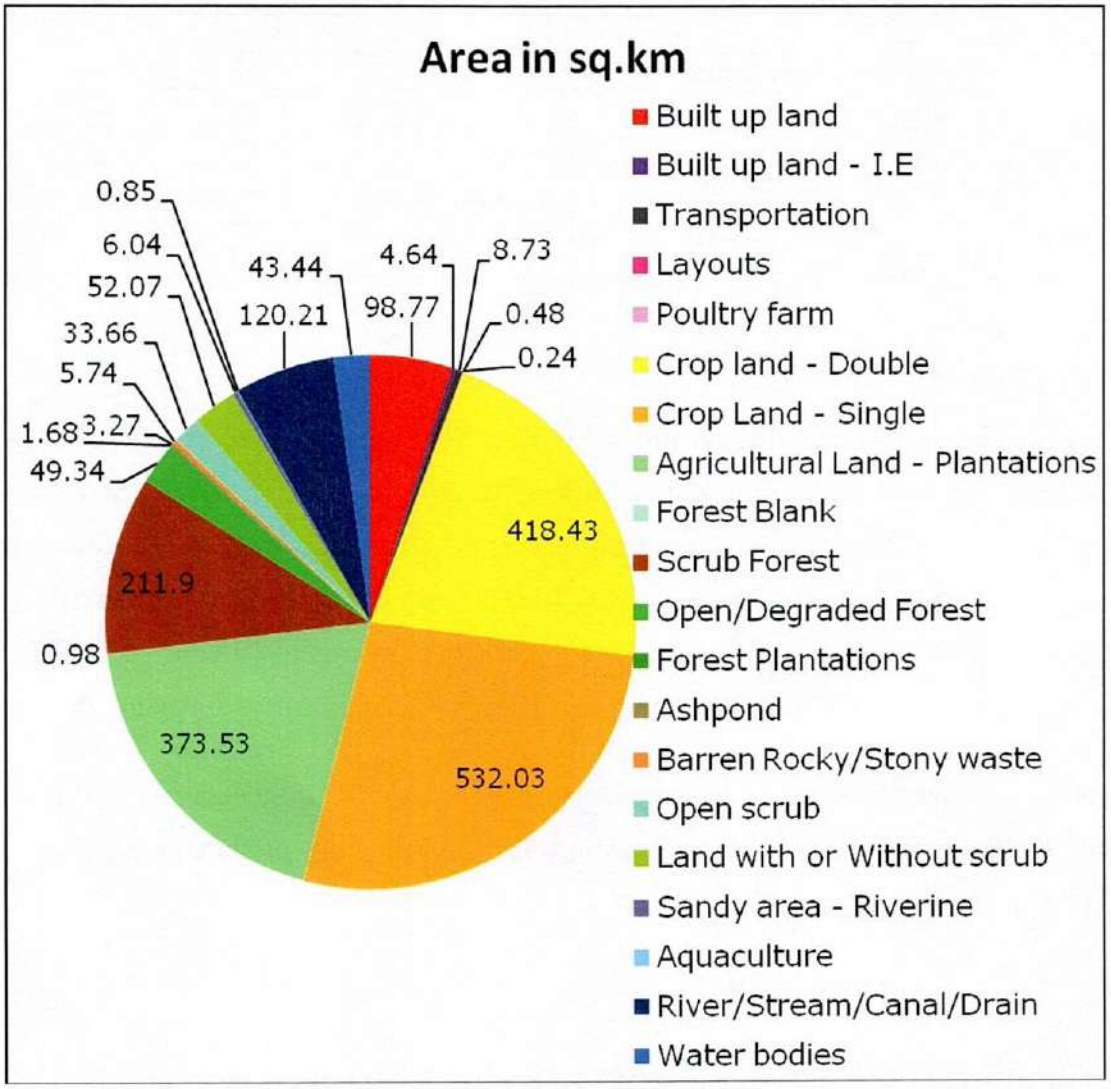


Table 2: Land use and Land Cover in the Study Area			
1.	**Land Use/Land Cover Category**	**Area in Sq. km.**	**% of Study Area**
2.	Built up land	98.77	5.02
3.	Built up land – I.E	4.64	0.24
4.	Transportation	8.73	0.44
5.	Layouts	0.48	0.02
6.	Poultry farm	0.24	0.01
7.	Crop land – Double	418.43	21.28
8.	Crop land – Single	532.03	27.06
9.	Agriculture Plantations	373.53	19.00
10.	Forest blank	0.98	0.05
11.	Scrub forest	211.90	10.78
12.	Open/Degraded forest	49.34	2.51
13.	Forest Plantations	1.68	0.09
14.	Ash pond	3.27	0.17

15.	Barren Rocky/Stony waste	5.74	0.29
16.	Open scrub	33.66	1.71
17.	Land with or without scrub	52.07	2.65
18.	Sandy area – riverine	6.04	0.31
19.	Aquaculture	0.85	0.04
20.	River/Stream/Canal/Drain	120.21	6.11
21.	Water bodies/River	43.44	2.21
	Total Area	**1966.03**	**100**

3.2 Inventorization of Flora

The details of presence of flora with in 10 Km, 10-20 Km and 20-25 Km radius are studied.The available vegetation within 10 km, 10-20 km and 20-25 km radius area of Dr.NTTPS is basically dry deciduous forest type as per Champion and Seth Classification's revised forest types of India. As per IUCN Redlist, **no endangered or endemic flora of Andhra Pradesh** was encountered during the present study around 10 Km, 10-20 Km and 20-25 Km radius areas of Dr.NTTPs, Ibrahimpatnam in Krishna District of Andhra Pradesh.

A total of 428 plant species were recorded and they belong to 318 genera and 111 families within 25 Km radius of Dr.NTTPS, Ibrahimpatnam. Availability of flora season wise and area wise is as follows.

3.2.1 Flora within 10 Km Radius

In total 307 plant species belonging to 248 genera and 86 families were recorded within 10 Km radius area of Dr.NTTPS. The list of plants is given in **Table-3.** The family Fabaceae is the most represented family with 25 species. The terrestrial and aquatic flora in 10 Km radius area of Dr.NTTPS consists of 88 trees, 59 shrubs, 129 herbs and 32 climbers. Among 307 species recorded from both terrestrial and aquatic ecosystems within 10 km radius of Dr.NTTPS, 97 species are medicinally important. A total of 10 species of aquatic plants were recorded within 10 km radius area of Dr.NTTPS.

In **summer season** a total of 285 plant species belonging to 240 genera and 81 families were recorded within 10 Km radius area of Dr.NTTPS. In **monsoon season** a total of 306 plant species belonging to 248 genera and 82 families were recorded within 10 Km radius area of Dr.NTTPS. In **winter season** a total of 297 plant species belonging to 244 genera and 83 families were recorded within 10 Km radius area of Dr.NTTPS.

The follwing plants are found only in monsoon season but not found in the summer as well as winter season within 10 Km radius area of Dr.NTTPS, namely, *Acalypha lanceolata, Aerva javanica, Aristolochia brachiolata, Cassia uniflora, Cleome gynandra, Crotolaria bifaria, Dicanthium annulatum, Euphorbia heterophylla* and *Lemna gibba* where as *Vigna mungo and Vigna radiata* are not found in monsoon season. Similarly *Catharanthus pusillus, Coldenia procumbens, Emilia sonchifolia, Eragrostis coarctata, Murdannia nudiflora, Ocimum tenuiflorum, Pupalia lappacea, Ehretia pubescens, Glycosmis pentaphylla, Grewia villosa, Bauhinia racemosa, Phragmites karka* and *Sida rhombifolia* were found in winter and monsoon seasons but not found in summer season.

Table-3: List of Plants Within 10 Km Radius of Dr.NTTPS, Ibrahimpatnam

Sl.No	Name	Vernacular name	Family	Habit	SS	MS	WS
1.	*Abrus precatorius* L.	Guriginja	Fabaceae	C-M	□	□	□
2.	*Antigonon leptopus* Hook & Arn.	Batanipulu	Polygonaceae	C	□	□	□
3.	*Aristolochia indica* L.	Nala Ishwari teega	Aristolochiaceae	C-M	□	□	□
4.	*Artobotrys hexapetalus* (L.f.) Bhandari	Manoranjitham	Annonaceae	C-M	□	□	□
5.	*Canavalia gladiata* (Jacq.) DC.	Thamba jalari,	Fabaceae	C	□	□	□
6.	*Cardiospermum halicacabum* L.	Buddaburaga teega	Sapindaceae	C-M	□	□	□
7.	*Cissampelos pareira* L.	Adivibanka teega	Menispermaceae	C-M	□	□	□
8.	*Clitoria ternatea* L.	Dintena teega	Fabaceae	C-M	□	□	□
9.	*Coccinia grandis* (L.) Voigt.	Lady's finger	Cucurbitaceae	C	□	□	□
10.	*Cocculus hirsutus* (L.) Diels.	Chinnadusar teega	Menispermaceae	C-M	□	□	□
11.	*Cuscuta reflexa* Roxb.	Bangaruteega	Cuscutaceae	C	□	□	□
12.	*Derris scandens* (Roxb.) Benth.	Nallateega	Fabaceae	C	□	□	□
13.	*Dioscorea oppositifolia* L.	Yella gadda	Dioscoreaceae	C	□	□	□
14.	*Diplocyclos palmatus* (L) Jeffrey	Linga Lady's finger	Cucurbitaceae	C	□	□	□
15.	*Dregea volubilis* (L.f.) Benth.ex Hook.f.	Bandigurija teega	Asclepiadaceae	C	□	□	□
16.	*Gymnema sylvestre* (Retz.) R. Br.	Podapatri	Asclepiadaceae	C-M	□	□	□
17.	*Hemidesmus indicus* (L.) R. Br.	Sugandhapala	Periplocaceae	C-M	□	□	□
18.	*Hugonia mystax* L.	Kakibeera	Linaceae	C	□	□	□
19.	*Ipomoea obscura* (L.) Ker.-Gawl.	Kisaraaku teega	Convolvulaceae	C	□	□	□
20.	*Merremia gangetica*	Yelukachevula teega	Convolvulaceae	C	□	□	□
21.	*Merremia tridentata* (L.) Hall.	Mududantla	Convolvulaceae	C	□	□	□
22.	*Momordica carantia* L.	Karaka	Cucurbitaceae	C	□	□	□
23.	*Oxystelma esculentum* (L.f.) R. Br.ex Sch.	Dudipala	Asclepiadaceae	C	□	□	□
24.	*Passiflora foetida* L.	Tellajumiki	Passifloraceae	C	□	□	□
25.	*Pergularia daemia* (Forsk.) Chiov.	Dustapa teega	Asclepiadaceae	C-M	□	□	□
26.	*Quisqualis indica* L.	Rangoon malle	Combetaceae	C	□	□	□

27.	*Rhynchosia minima* (L.) DC.	Gaddi chikkudu	Fabaceae	C	□	□	□
28.	*Tephrosia villosa* (L.) Pers.	Nuguvempali	Fabaceae	C	□	□	□
29.	*Tinospora cordifolia* (Willd.) Miers.	Tipa teega	Menispermaceae	C-M	□	□	□
30.	*Tylophora indica* (Burm.f.) Merr.	Telegapala	Asclepiadaceae	C-M	□	□	□
31.	*Wattakaka volubilis*(L.f.) Stap.	Kalisaku	Asclepiadaceae	C	□	□	□
32.	*Ziziphus oenoplia* (L.) Mill.	Pariki kampa	Rhamnaceae	C	□	□	□
33.	*Abutilon indicum* (L.) Sweet	Thuttutubenda	Malvaceae	H	□	□	□
34.	*Acalypha indica* L.	Muripinda	Euphorbiaceae	H	□	□	□
35.	*Acalypha lanceolata* Willd.		Euphrbiaceae	H	X	□	X
36.	*Achyranthes aspera* L.	Uttareni	Amaranthaceae	H-M	□	□	□
37.	*Aerva javanica* (Burm.f.) Jussa.ex Schult.	Magabeera	Amaranthaceae	H-M	X	□	X
38.	*Aerva lanata* (L.) Juss.ex Schult.	Thelaga pindi	Amaranthaceae	H-M	□	□	□
39.	*Ageratum conyzoides* L.	Vasavi	Asteraceae	H-M	□	□	□
40.	*Alternanthera bettzickiana* (Regel) Nicols.		Amaranthaceae	H	x	□	□
41.	*Alternanthera sessilis* (L.) R.Br.	Ronaganthi aku	Amaranthaceae	H	□	□	□
42.	*Alysicarpus vaginalis* (L.) DC.	Baramthalu chettu	Fabaceae	H	□	□	□
43.	*Amaranthus spinosus* L.	Mulla thotakoora	Amaranthaceae	H-M	□	□	□
44.	*Amaranthus viridis*	Chilakathotakoora	Amaranthaceae	H-M	□	□	□
45.	*Ammannia baccifera* L.	Agnivendrapakku	Lythraceae	H	□	□	□
46.	*Andrographis echioides* (L.) Nees	Noogu Nelayemi	Acanthaceae	H-M	□	□	□
47.	*Andrographis paniculata* Wall.ex Nees.	Belavemu	Acanthaceae	H-M	□	□	□
48.	*Apluda mutica* L.	Adavikorre gaddi	Poaceae	H	□	□	□
49.	*Aristida setacea* Retz.	Cheepuru	Poaceae	H	□	□	□
50.	*Aristolochia bracteolata* Lam.	Gadidagadapa	Aristolochiaceae	H	X	□	X
51.	*Asparagus racemosus* Willd.	Pilli teegalu	Asparagaceae	H-M	□	□	□
52.	*Asystasia gangetica* (L.) T.And. In Thw.	Podabeera	Acanthaceae	H	□	□	□
53.	*Atylosia scarabaeoides* (L.) Benth.	Kaaru Kandi	Fabaceae	H	□	□	□
54.	*Barleria prionitis* L.	Mullagorinta	Acanthaceae	H	□	□	□
55.	*Blepharis maderaspatensis* Heyne ex Roth.		Acanthaceae	H	□	□	□
56.	*Blumea mollis* (D. Don.) Merr.	Kukkapogaku	Asteraceae	H	□	□	□
57.	*Boerhaavia chinensis* Asch.et Schw.	Kanne komali	Nyctaginaceae	H	□	□	□
58.	*Boerhavia diffusa* L.	Atikimamidi	Nyctaginaceae	H-M	□	□	□
59.	*Brassica rapa*L.	Wild turnip	Brassicaceae	H-M	□	□	□
60.	*Byttneria herbacea* Roxb.	Magasirigedda	Sterculiaceae	H	□	□	□
61.	*Capsicum frutescens* L.	Mirapa	Solanaceae	H	□	□	□
62.	*Cassia occidentalis* L.	Kasinda	Caesalpiniaceae	H	□	□	□
63.	*Cassia tora* L.	Thantepu mokka	Caesalpiniaceae	H	□	□	□
64.	*Cassia uniflora* Mill.		Caesalpiniaceae	H	X	□	X
65.	*Cassytha filiformis* L.	Paachi teega	Cassythaceae	H	□	□	□
66.	*Catharanthus pusillus* (Murr.) G.Don	Erri-Mirappa	Apocynaceae	H	X	□	□
67.	*Catharanthus roseus* (L.) Don	Billaganneru	Apocynaceae	H-M	□	□	□
68.	*Celosia argentea* L.	Gunugu koora	Amaranthaceae	H	□	□	□
69.	*Chloris barbata* Sw.	Jadakunchula	Poaceae	H	□	□	□

		gaddi					
70.	*Chrozophora rottleri* (Geis.) Juss.ex Spr.	Linga Miriyaalu	Euphorbiaceae	H	□	□	□
71.	*Cleome gynandra* L.	Vaminta	Cleomaceae	H	X	□	X
72.	*Cleome viscosa* L.	Kukka vominta	Cleomaceae	H	□	□	□
73.	*Clerodendrum inerme* (L.) Gaertn.	Nilla vuppi	Verbenaceae	H	□	□	□
74.	*Coldenia procumbens* L.		Boraginaceae	H	X	□	□
75.	*Commelina benghalensis* L.	Yanadra aku	Commelinaceae	H	□	□	□
76.	*Corchorus aestuans* L.	Nela beera	Tilliaceae	H	□	□	□
77.	*Costus speciosus* (Koen.) Smith	Kevukanda	Costaceae	H-M	□	□	□
78.	*Crotalaria bifaria* L.		Fabaceae	H	X	□	X
79.	*Crotalaria hirsuta* Willd.		Fabaceae	H	□	□	□
80.	*Crotalaria retusa* L.	Pottigiligicha	Fabaceae	H	□	□	□
81.	*Croton bonplandianum* Baill.	Vanamokka	Euphorbiaceae	H	□	□	□
82.	*Cynodon dactylon* (L.) Pers.	Garika	Poaceae	H	□	□	□
83.	*Cyperus arenarius* Retz.		Cyperaceae	H	□	□	□
84.	*Cyperus rotundus* L.	Tunga gadda	Cyperaceae	H	□	□	□
85.	*Dactyloctenium aegyptium* (L.) Beauv.	Nela ragi	Poaceae	H	□	□	□
86.	*Desmodium triflorum* (L.) DC.	Nela Aninta	Fabaceae	H	□	□	□
87.	*Desmodium velutinum* (Willd.) DC.	Chiva modhu	Fabaceae	H	□	□	□
88.	*Dichanthium annulatum* (Forssk.) Stapf.		Poaceae	H	X	□	X
89.	*Eclipta prostrata* (L.) L. Mant.	Guntagalagara	Asteraceae	H-M	□	□	□
90.	*Eichhornia crassipes* (Mart.) Solms-Laub.	Gurrapu dekka	Pontederiaceae	H-A	□	□	□
91.	*Emilia sonchifolia* (L.) DC.		Asteraceae	H	---	□	□
92.	*Eragrostis ciliaris* (L.) R.Br.		Poaceae	H	□	□	□
93.	*Eragrostis coarctata* Stapf.		Poaceae	H	X	□	□
94.	*Eragrostis tenuifolia* (Rich.) Hochst.		Poaceae	H	□	□	□
95.	*Euphorbia heterophylla* L.		Euphrbiaceae	H	X	□	X
96.	*Euphorbia hirta* L.	Nanubalu	Euphorbiaceae	H-M	□	□	□
97.	*Evolvulus alsinoides* (L.) L.	Vishnukrantha	Convolvulaceae	H-M	□	□	□
98.	*Evolvulus nummularius* (L.) L.	Chiti elukacheviaku	Convolvulaceae	H-M	□	□	□
99.	*Gisekia pharnaceoides* L.	Isakadasarikoora	Molluginaceae	H	□	□	□
100	*Gomphrena globosa* L.	Bendumalli	Amaranthaceae	H	□	□	□
101	*Hedyotis umbellata* (L.) Lam.	Chiriveru	Rubiaceae	H	□	□	□
102	*Heteropogon contortus* (L.) Beauv.	Eddigaddi	Poaceae	H	□	□	□
103	*Hybanthus enneaspermus* (L.) Muell.	Ratna purusha	Violaceae	H-M	□	□	□
104	*Hydrilla verticillata* (L.f.) Royle.	Valakada	Hydrocharitaceae	H-A	□	□	□
105	*Hygrophila auriculata* (Schum.) Heine	Mulla gobbi	Acanthaceae	H-A	□	□	□
106	*Hyptis suaveolens* (L.) Roit.	Danthitulasi	Lamiaceae	H	□	□	□
107	*Indigofera linifolia* (L.f.) Retz.	Baraputram	Fabaceae	H	□	□	□
108	*Indigofera linnaei* Ali	Yerrapalleru	Fabaceae	H	□	□	□
109	*Ipomoea aquatica* Forssk.	Thootiloora	Convolvulaceae	H-A	□	□	□
110	*Lagascea mollis* Cav.	Talla gaayapaaku	Asteraceae	H	□	□	□
111	*Lemna gibba* L.		Lemnaceae	H-A	X	□	X

112	*Lepidagathis cristata* Willd.	Nakka pintuka	Acanthaceae	H-M	□	□	□
113	*Leucas aspera* (Willd.) Link.	Tummi	Lamiaceae	H-M	□	□	□
114	*Lindernia antipoda* (L.) Alston	_	Scrophulariaceae	H	X	□	X
115	*Malvastrum coromandelianum* (L.) Garcke.	Gaayapu alam	Malvaceae	H-M	□	□	□
116	*Mimosa pudica* L.	Attipathi	Mimosaceae	H-M	□	□	□
117	*Mirabilis jalapa* L.	Badhrashi	Nyctaginaceae	H-M	□	□	□
118	*Mollugo nudicaulis* Lam.	Peddaparapatakamu	Molluginaceae	H	□	□	□
119	*Mollugo oppositifolia* L.	Chayunta rashiaku	Molluginaceae	H	□	□	□
120	*Murdannia nudiflora* (L.) Brenan		Commelinaceae	H	X	□	□
121	*Nymphaea nouchalli* Burm.f.	Kluva	Nymphaeaceae	H-A	□	□	□
122	*Nymphaea pubescens* Willd.	Alli tamara	Nymphaeaceae	H-A	□	□	□
123	*Ocimum basilucum* L.	Kammagaggiri aku	Lamiaceae	H-M	□	□	□
124	*Ocimum tenuiflorum* L.	Thulasi	Lamiaceae	H-M	□	□	□
125	*Oxalis latifolia* Kunth.	Vullichinta	Oxalidaceae	H	□	□	□
126	*Parthenium hysterophorus* L.	Vayyaribhama	Asteraceae	H	□	□	□
127	*Pavonia seylanica* (L.) Cav.	Karubenda	Malvaceae	H	□	□	□
128	*Pedalium murex* L.	Yenugupalleru	Pedaliaceae	H	□	□	□
129	*Pedilanthus tithymaloides* (L.) Poit.	Addala kalli	Euphorbiaceae	H	□	□	□
130	*Perotis indica* (L.) Ktze.	Nakka thoka	Poaceae	H	□	□	□
131	*Phyla nodiflora* (L.) Greene	Bokkenaku	Verbenaceae	H	□	□	□
132	*Phyllanthus amarus* Schum. & Thonn.	Nelausiri	Euphorbiaceae	H-M	□	□	□
133	*Phyllanthus virgatus* Forst.	Gadhausiri	Euphorbiaceae	H	□	□	□
134	*Physalis minima* L.	Budda bhushada	Solanaceae	H	□	□	□
135	*Pupalia lappacea* (L.) Juss.var.lappacea	Erra Uttareni	Amaranthaceae	H	X	□	□
136	*Rhynchosia suaveolens* (L.f.) DC.	Adivi kandi	Fabaceae	H	□	□	□
137	*Rostellularia prostrata* (Roxb.) Majumdar		Acanthaceae	H	□	□	□
138	*Rungia repens* (L.) Nees. In Wall	Parpat alam	Acanthaceae	H	□	□	□
139	*Saccharum officinarum* L.	Cherukugada	Poaceae	H	□	□	□
140	*Sansevieria roxburghiana* Schult.&Schult.f.	Nela kithalu	Agavaceae	H-M	□	□	□
141	*Schoenoplectus articulatus* (L.) Palla		Cyperaceae	H-A	□	□	□
142	*Sida cordata* (Burm.f.) Dorss.	Nela benda	Malvaceae	H	□	□	□
143	*Sida cordifolia* L.	Bala, Tellagorra	Malvaceae	H	□	□	□
144	*Sida rhombifolia* L.		Malvaceae	H	X	□	□
145	*Solanum melongena* L.	Mulla vankaya	Solanaceae	H	□	□	□
146	*Spermacoce hispida* L.	Madhanakattu	Rubiaceae	H	□	□	□
147	*Tephrosia purpurea* (L.) Pers.	Vempali	Fabaceae	H	□	□	□
148	*Tragia involucrata* L.	Teega dulagondi	Euphorbiaceae	H	□	□	□
149	*Tribulus terrestris* L.	Palleru	Zygophyllaceae	H	□	□	□
150	*Tridex procumbens* L.	Bella paku	Asteraceae	H-M	□	□	□
151	*Triumfetta rhomboidea* Jacq.	Dhekki	Tilliaceae	H	□	□	□
152	*Typha angustata* Bory & Chaub.	Jammu	Typhaceae	H-A	□	□	□
153	*Urena lobata* L.	Anturasam	Malvaceae	H	□	□	□
154	*Vernnonia cinerea* (L.) Less.	Sahadevi	Asteraceae	H	□	□	□

155	*Vigna mungo* (L.) Hepp.	Minumulu	Fabaceae	H	□	X	□
156	*Vigna radiata* (L.) Wilez.	Pesalu	Fabaceae	H	□	X	□
157	*Waltheria indica* L.	Nallabenda	Sterculiaceae	H	□	□	□
158	*Xanthium indicum* Koen.	Marulamathangi	Asteraceae	H-M	□	□	□
159	*Zea mays* L.	Mokka jonna	Poaceae	H	□	□	□
160	*Zornia diphylla* (L.) Pers.	Uhunnali	Fabaceae	H	□	□	□
161	*Abelmoschus esculentus* (L.) Moench.	Benda	Malvaceae	S	□	□	□
162	*Acacia chundra* (Rottler) Willd.	Sundra	Mimosaceae	S	□	□	□
163	*Acacia torta* (Roxb.) Craib.	Korinta teega	Mimosaceae	S	□	□	□
164	*Adhatoda vasica* Nees.	Addasaram	Acanthaceae	S-M	□	□	□
165	*Azima tetracantha* Lam.	Tella uppili	Salvadoraceae	S-M	□	□	□
166	*Bougainvillea spectabilis* Willd.	Kaagitam poolu	Nyctaginaceae	S	□	□	□
167	*Caesalpinia bonduc* (L.) Roxb.	Gachakaaya	Caesalpiniaceae	S	□	□	□
168	*Cajanus cajan* (L.) Mill.	Kandhi	Fabaceae	S	□	□	□
169	*Calotropis gigantea* (L.) R.Br.	Tella Jilledu	Asclepiadaceae	S-M	□	□	□
170	*Calotropis procera* (Ait.) R. Br.	Erra Jilledu	Asclepiadaceae	S-M	□	□	□
171	*Canthium parviflorum* Lam.	Balusu	Rubiaceae	S	□	□	□
172	*Caparis zeylanica* L.	AaLady's finger	Capparaceae	S	□	□	□
173	*Carissa carandas* L.	Pedda kalimi	Apocynaceae	S	□	□	□
174	*Caryota urens* l.	Jeelugu chettu	Arecaceae	S	□	□	□
175	*Cassia auriculata* L.	Thangedi	Caesalpiniaceae	S	□	□	□
176	*Catunaregam spinoa* (Thunb.) Tirven.	Manga	Rubiaceae	S	□	□	□
177	*Cipadessa baccifera* (Roth.) Miq.	Chedubira	Meliaceae	S	□	□	□
178	*Citrus aurantifolia* (Christm.) Swingle	Nimma	Rutaceae	S-M	□	□	□
179	*Cleistanthus collinus* Benth.ex Hook.f.	Wodisiaku	Euphorbiaceae	S-M	□	□	□
180	*Cocos nucifera* L.	Kobbari	Arecaceae	S-M	□	□	□
181	*Datura innoxia* Mill.	Karu ummetta	Solanaceae	S-M	□	□	□
182	*Datura stramonium* L.	Umetta	Solanaceae	S-M	□	□	□
183	*Dendropthoea falcata* (L.f.) Ett.	Urrinka	Loranthaceae	S	□	□	□
184	*Dodonea viscosa* (L.) Jacq.	Banderu	Sapindaceae	S	□	□	□
185	*Duranta repens* L.	Duranta	Verbenaceae	S	□	□	□
186	*Ehretia pubescens* Benth.in Royle		Boraginaceae	S	X	□	□
187	*Euphorbia tirucalli* L.	Kaada Jemudu	Euphorbiaceae	S-M	□	□	□
188	*Flacourtia indica* (Burm.f.) Merr.	Kaana Regu	Flacourtiaceae	S	□	□	□
189	*Glycosmis pentaphylla* (Retz.) DC.		Rutaceae	S	X	□	□
190	*Gmelina asiatica* L.	Adavigummadi	Verbenaceae	S	□	□	□
191	*Gossypium herbaceum L.*	Patti, Pishuvu	Malvaceae	S	□	□	□
192	*Grewia hirsuta* Vahl.	Nalla Kattelu	Tilliaceae	S	□	□	□
193	*Grewia villosa* Willd.		Tiliaceae	S	X	□	□
194	*Helictres isora* L.	Gooba thada	Sterculiaceae	S	□	□	□
195	*Hibiscus rosa-sinensis* L.	Dhasari	Malvaceae	S-M	□	□	□
196	*Ipomoea carnea* Jack.	Pandiri thooti	Convolvulaceae	S-A	□	□	□
197	*Jasminum arborescens* Roxb.	Tivva malli	Oleaceae	S	□	□	□
198	*Jasminum sambac* (L.) Ait.	Malli	Oleaceae	S	□	□	□

199	*Jatropha gladulifera* Roxb.	Dundigamu	Euphorbiaceae	S	□	□	□
200	*Justicia adhatoda* L.	Addasaramu	Acanthaceae	S-M	□	□	□
201	*Lantana camara* L.	Seesa kammari	Verbenaceae	S	□	□	□
202	*Lawsonia inermis* L.	Gorinta	Lythraceae	S-M	□	□	□
203	*Lycopersicon esculantum* Mill.	Tamato	Solanaceae	S-M	□	□	□
204	*Manihot esculenta* Crantz.	Koyyaganusagadda	Euphorbiaceae	S	□	□	□
205	*Murraya koenigii* (L.) Spr.	Karivepaku	Rutaceae	S-M	□	□	□
206	*Narigni crenulata* (Roxb.) Nicol.	Kukka velaga	Rutaceae	S	□	□	□
207	*Opuntia dillenii* (Ker.-Gawl.) Haw.	Nagamullu	Cactaceae	S	□	□	□
208	*Phoenis sylvestris* (L.) Roxb.	Etha chettu	Arecaceae	S	□	□	□
209	*Phragmites karka* (Retz.) Trin ex Steud.var.Karka		Poaceae	S	X	□	□
210	*Phyllanthus reticulatus* Poir.	Purugudu	Euphorbiaceae	S	□	□	□
211	*Plumbago zeylanica* L.	Tellachitramulamu	Plumbaginaceae	S-M	□	□	□
212	*Rauwolfia tetraphylla* L.	Papataku	Apocynaceae	S-M	□	□	□
213	*Ricinus communis* L.	Amudamu	Euphorbiaceae	S-M	□	□	□
214	*Sida acuta* Burm.f.	Katari kaanaaku	Malvaceae	S	□	□	□
215	*Tabaernemontana divaricata*L.	Nandivardhanam	Apocynaceae	S	□	□	□
216	*Tarena asiatica* (L.) Kuntz.ex schum	Kommi chettu	Rubiaceae	S	□	□	□
217	*Toddalia asiatica* (L.) lam.	Mirapa gandra	Rutaceae	S	□	□	□
218	*Vitex negundo* L.	Nalla vavilli	Verbenaceae	S-M	□	□	□
219	*Ziziphus numularia* (Burm.f.) Wt. & Arn.	Nelaregu	Rhamnaceae	S	□	□	□
220	*Acacia leucophloea* (Roxb.) Willd.	Tella thumma	Mimosaceae	T	□	□	□
221	*Acacia nilotica* (L.) Willd.ex Del.	Nalla thumma	Mimosaceae	T-M	□	□	□
222	*Aegle marmelos* (L.) Corr.	Maredu, Bilvumu	Rutaceae	T-M	□	□	□
223	*Ailanthus excelsa* Roxb.	Pedda manu	Simaroubaceae	T	□	□	□
224	*Alangium salvifolium* (L.f.) Wang.	Nallaoodaga	Alangiaceae	T	□	□	□
225	*Albizia amara* (Roxb.) Boivin	Konda sigara	Mimosaceae	T	□	□	□
226	*Albizia lebbeck* (L.) Benth.	Bagichettu	Mimosaceae	T	□	□	□
227	*Alstonia scholaris* (L.) R. Br.	Yedakula paala	Apocynaceae	T-M	□	□	□
228	*Anacardium occidentale* L.	Jidi mamidi	Anacardiaceae	T	□	□	□
229	*Annona reticulata* L.	Ramaphalamu	Annonaceae	T-M	□	□	□
230	*Annona squmosa* L.	Seetaphalam	Annonaceae	T-M	□	□	□
231	*Anogeissus latifolia* Guill. & Perr.	Sirimanu	Combetaceae	T	□	□	□
232	*Artocarpus heterophyllus* Lam.	Panasa	Moraceae	T	□	□	□
233	*Azadirachta indica* A. Juss.	Vepa chettu	Meliaceae	T-M	□	□	□
234	*Bambusa arundinacea* (Retz.) Roxb.	Veduru	Poaceae	T	□	□	□
235	*Barringtonia acutangula* (L.) Gaertn.	Kadimi chettu	Barringtoniaceae	T	□	□	□
236	*Bauhinia purpurea* L.	Bodhanta	Caesalpiniaceae	T	□	□	□
237	*Bauhinia racemosa* Lam.		Caesalpiniaceae	T	X	□	□
238	*Bauhinia variegata* L.	Madapaku	Caesalpiniaceae	T	□	□	□
239	*Bombax ceiba* L.	Buruga	Bombaceceae	T-M	□	□	□
240	*Borassus flabellifer* L.	Tati	Arecaceae	T	□	□	□
241	*Buchanania lanzan* Spr.	Morli chettu	Anacardiaceae	T	□	□	□
242	*Butea monosperma* (Lam.) Taub.	Modhuga	Fabaceae	T-M	□	□	□

243	*Calophyllum inophyllum* L.	Ponna	Clusiaceae	T-M	□	□	□
244	*Carica papaya* L.	Boppaya	Caricaceae	T-M	□	□	□
245	*Cassia fistula* L.	Rela chettu	Caesalpiniaceae	T-M	□	□	□
246	*Cassia siamea* L.	Seema thangedu	Caesalpiniaceae	T	□	□	□
247	*Casuarina littorea* L.	Chavuka chettu	Casuarinaceae	T	□	□	□
248	*Ceiba pentandra* (L.) Gaertn.	Tella buruga	Bombacaceae	T-M	□	□	□
249	*Cordia dichotoma* Forst.f	Iriki	Cordiaceae	T	□	□	□
250	*Dalbergia latifolia* Roxb.	Pachari	Fabaceae	T	□	□	□
251	*Dalbergia sisso* Roxb	Sissam	Fabaceae	T	□	□	□
252	*Delonix regia* (Boj.ex Hook.) Rafin	Agnipoolu	Caesalpiniaceae	T	□	□	□
253	*Dichrostachys cinerea* (L.) Wt. & Arn.	Yentur chettu	Mimosaceae	T	□	□	□
254	*Dillenia pentagyna* Roxb.	Chainna kalinga	Dilleniaceae	T	□	□	□
255	*Diospyros chloroxylon* Roxb.	Ullinda	Ebenaceae	T	□	□	□
256	*Diospyros melanoxylon* Roxb.	Beediakulu	Ebenaceae	T	□	□	□
257	*Dolichandrone falcata* (DC.) Seem.	Voddi chettu	Bignoniaceae	T	□	□	□
258	*Erythroxylum monogynum* Roxb.	Devadaru	Erythroxylaceae	T	□	□	□
259	*Eucalyptus globulus* Labill.	Neelagiri thylam	Myrtaceae	T-M	□	□	□
260	*Ficus benghalensis* L.	Marri	Moraceae	T-M	□	□	□
261	*Ficus hispida* L.f.	Bemmedu akulu	Moraceae	T	□	□	□
262	*Ficus racemosa* L.	Medi	Moraceae	T	□	□	□
263	*Ficus religiosa* L.	Ravi chettu	Moraceae	T-M	□	□	□
264	*Gardenia latifolia*Ait.	Pedda bikki	Rubiaceae	T	□	□	□
265	*Gmelina arborea* Roxb.	Gummadi teku	Verbenaceae	T	□	□	□
266	*Grewia subinequalis* DC.	Palsa chettu	Tilliaceae	T	□	□	□
267	*Guazuma ulmifolia* L.	Bhadraksha	Sterculiaceae	T	□	□	□
268	*Holarrhena pubescens* (Buch.-Ham.) Don	Kolamukhi	Apocynaceae	T-M	□	□	□
269	*Ixora arborea* Roxb.ex Sm.	Korivi chettu	Rubiaceae	T	□	□	□
270	*Lagerstroemia parviflora* Roxb.	Chennangi	Lythraceae	T	□	□	□
271	*Lannea coromandelica* (Houtt.) Mann.	Gumpana chettu	Anacardiaceae	T	□	□	□
272	*Leucaena leucocephala*(Lam.) de Wit.	Subabulu	Mimosaceae	T-M	□	□	□
273	*Limonia acidissima* L.	Velaga	Rutaceae	T-M	□	□	□
274	*Madhuca latifolia* (Roxb.) Cheval	Ippa	Sapotaceae	T-M	□	□	□
275	*Mangifera indica* L.	Mamidi	Anacardiaceae	T-M	□	□	□
276	*Manilkara zapota* (L.) P Royen	Sapota	Sapotaceae	T-M	□	□	□
277	*Michelia champaka* L.	Sampangi chettu	Magnoliaceae	T-M	□	□	□
278	*Millingtonia hortensis* L.f.	Manumalli	Bignoniaceae	T	□	□	□
279	*Morinda pubescens* J. E. Smith	Togaru	Rubiaceae	T	□	□	□
280	*Moringa oleifera* Lam.	Munanga	Moringaceae	T	□	□	□
281	*Musa paradisiaca* L.	Arati	Musaceae	T-M	□	□	□
282	*Neolamarckiana cadamba* (Roxb.) Boss.	Kadambamu	Rubiaceae	T	□	□	□
283	*Nyactanthes arbortristis* L.	Parijatham	Oleaceae	T-M	□	□	□
284	*Peltophorum pterocarpum* (DC.) Baker	Kondachintha	Caesalpiniaceae	T	□	□	□

285	*Pithecellobium dulce* (Roxb.) Benth.	Seemasinthaguddu	Mimosaceae	T	□	□	□
286	*Plumeria alba* L.	Tella devaganneru	Apocynaceae	T	□	□	□
287	*Polyalthia lingifolia* (Sonner) Thw.	Naramadidi	Annonaceae	T	□	□	□
288	*Pongamia pinnata* (L.) Pier.	Kanuga	Fabaceae	T-M	□	□	□
289	*Prosopis chilensis* (Molina) Stuntz.	Karkar tumma	Mimosaceae	T	□	□	□
290	*Psidium guajava* L.	Jama	Myrtaceae	T-M	□	□	□
291	*Punica granatum* L.	Daanimma	Punicaceae	T-M	□	□	□
292	*Samanea saman* (Jacq.) Druce.	Nidraganeru	Mimosaceae	T	□	□	□
293	*Sapindus emarginatus* Vahl.	Knkudu	Sapindaceae	T	□	□	□
294	*Shorea robusta* Gaertn.	Pedda jalari	Dipterocarpaceae	T-M	□	□	□
295	*Sterculia urens* Roxb.	Errapoliki	Sterculiaceae	T-M	□	□	□
296	*Strebulus asper* Lour	Barraniki	Moraceae	T-M	□	□	□
297	*Strychnos nux-vomica* L.	Mustichettu	Strychnaceae	T-M	□	□	□
298	*Syzigium cumini* (L.) Skeels.	Neredu chettu	Myrtaceae	T-M	□	□	□
299	*Tamarindus indica* L.	Chinta	Caesalpiniaceae	T-M	□	□	□
300	*Tecoma stans* (L.) Kunth.	Pasupu ganneru	Bignoniaceae	T	□	□	□
301	*Tectona grandis* L.	Teku	Verbenaceae	T	□	□	□
302	*Terminalia arjuna* (Roxb.) Wt. & Arn.	Tellamaddhi	Combetaceae	T-M	□	□	□
303	*Terminalia bellirica* (Gaertn.) Roxb.	Thandra	Combetaceae	T-M	□	□	□
304	*Terminalia catappa* L.	Badham chettu	Combetaceae	T	□	□	□
305	*Thevetia peruviana* (Pers.) Merr.	Patch ganeru	Apocynaceae	T-M	□	□	□
306	*Wrightia tinctoria* (Roxb.) R. Br.	Reppala	Apocynaceae	T	□	□	□
307	*Ziziphus xylopyrus* (Retz.) Willd.	Gotti	Rhamnaceae	T	□	□	□

Abbreviations: C-climber, H-Herbs, S-Shrubs, T-Trees, M-Medicinal, A-Aquatic, SS-Sumer Season, MS-Monsoon Season, WS- Winter Season, □-present, X- absent

3.2.2 Flora within 10-20 Km Radius

In total 375 plant species belong to 293 genera and 98 families were recorded within 10-20 Km radius areas of Dr.NTTPS. The list of plants is at **Table-4**. The family Euphorbiaceae is the most specious family with 26 species. The terrestrial flora in 10-20 Km radius area of Dr.NTTPS consists of 107 trees, 64 shrubs, 163 herbs and 41 climbers. Among 375 species recorded from both terrestrial and aquatic ecosystems within 10-20 km radius of Dr.NTTPS, 176 species are medicinally important. A total of 12 species of aquatic plants were recorded within 10-20 km radius area of Dr.NTTPS.

In **summer season** total of 354 plant species belonging to 285 genera and 100 families were recorded within 10 Km radius area of Dr.NTTPS. In **monsoon season** total of 376 plant species belonging to 299 genera and 101 families were recorded within 10 Km radius area of Dr.NTTPS.

In **winter season** total of 362 plant species belonging to 288 genera and 95 families were recorded within 10 Km radius area of Dr.NTTPS.

The follwing plants are found only in monsoon season within 10-20 Km radius area of Dr.NTTPS, namely, *Acalypha lanceolata, Aerva javanica, Aristida hystrix, Aristolochia brachiolata, Cassia uniflora, Cleome gynandra, Crotolaria bifaria, Dicanthium annulatum, Emilia sonchifolia, Euphorbia heterophylla, Lemna gibba* and *Lindernia antipoda, Sida cordifolia where as Vigna mungo and Vigna radiate are found in summer and winter but not found in monsoon season.* Similarly *Merremia tridentata, Alternanthera bettzickiana, Catharanthus pusillus, Coldenia procumbens, Desmodium triflorum, Eragrostis coarctata, Lagascea mollis, Murdannia nudiflora, Sida rhombifolia, Ehretia pubescens, Glycosmis pentaphylla, Grewia villosa, Bauhinia racemosa* and *Phragmites karka found in monsoon as well as winter seasons but not collected in summer season.*

Table-4: List of Plants within 10-20 Km Radius of Dr.NTTPS, Ibrahimpatnam

Sl.No.	Name	Vernacular name	Family	Habit	SS	MS	WS
1	*Abrus precatorius* L.	Guriginja	Fabaceae	C-M	□	□	□
2	*Antigonon leptopus* Hook & Arn.	Batanipulu	Polygonaceae	C	□	□	□
3	*Argyreia nervosa* (Burm.f) Boj.	Samudrapala teega	Convolvulaceae	C-M	□	□	□
4	*Aristolochia indica* L.	Nala Ishwari teega	Aristolochiaceae	C-M	□	□	□
5	*Canavalia gladiata* (Jacq.) DC.	Thamba jalari,	Fabaceae	C	□	□	□
6	*Cardiospermum helicacabum* L.	Budda buraga teega	Sapindaceae	C-M	□	□	□
7	*Cayratia pedata* (Lour.) A.L.Juss.	Edakula mandulamru	Vitaceae	C	□	□	□
8	*Cissampelos pareira* L.	Adivibanka teega	Menispermaceae	C-M	□	□	□
9	*Cissus quandrangulais* L.	Nalleru	Vitaceae	C-M	□	□	□
10	*Cissus vitiginea* L.	Adavi gummuduteega	Vitaceae	C-M	□	□	□
11	*Clitoria ternatea* L.	Dintena teega	Fabaceae	C-M	□	□	□
12	*Coccinia grandis* (L.) Voigt.	Lady's finger	Cucurbitaceae	C	□	□	□
13	*Cocculus hirsutus* (L.) Diels.	Chinnadusar teega	Menispermaceae	C-M	□	□	□
14	*Cryptolepis buchananii* Roem. & Schult.	Adavi pala teega	Periplocaceae	C	□	□	□
15	*Cucumis sativus* L.	Dosakaya	Cucurbitaceae	C	□	□	□
16	*Cucurbita maxima* Duch.ex Lam.	Tiyya Gummadi	Cucurbitaceae	C	□	□	□
17	*Cuscuta reflexa* Roxb.	Bangaruteega	Cuscutaceae	C	□	□	□
18	*Derris scandens* (Roxb.) Benth.	Nallateega	Fabaceae	C-M	□	□	□
19	*Dioscorea oppositifolia* L.	Yella gadda	Dioscoreaceae	C	□	□	□
20	*Dregea volubilis* (L.f.) Benth.ex Hook.f.	Bandigurija teega	Asclepiadaceae	C	□	□	□
21	*Gloriosa superba.*L.	Pothi Dumpa	Liliaceae	C-M	□	□	□
22	*Gymnema sylvestre* (Retz.) R. Br.	Podapatri	Asclepiadaceae	C-M	□	□	□
23	*Hemidesmus indicus* (L.) R. Br.	Sugandhapala	Periplocaceae	C-M	□	□	□
24	*Hugonia mystax* L.	Kakibeera	Linaceae	C-M	□	□	□
25	*Ichnocarpus frutescens* (L.) R. Br.	Nalla teega	Apocynaceae	C-M	□	□	□

26	*Ipomoea nil* (L.) Roth.	Kallivittulu	Convolvulaceae	C	□	□	□
27	*Ipomoea obscura* (L.) Ker.-Gawl.	Kisaraaku teega	Convolvulaceae	C	□	□	□
28	*Ipomoea pes-tigridis* L.	Meka madugu	Convolvulaceae	C	□	□	□
29	*Luffa acutangula* (L.) Roxb.	Beerakaya	Cucurbitaceae	C	□	□	□
30	*Merremia gangetica*	Yeluka chevula teega	Convolvulaceae	C	□	□	□
31	*Merremia tridentata* (L.) Hall.	Mududantla	Convolvulaceae	C	□	□	□
32	*Momordica carantia* L.	Karaka	Cucurbitaceae	C-M	□	□	□
33	*Mukia maderaspatana* (L.) Roem.	Kuturu budama teega	Cucurbitaceae	C	□	□	□
34	*Passiflora foetida* L.	Tellajumiki	Passifloraceae	C	□	□	□
35	*Pergularia daemia* (Forsk.) Chiov.	Dustapa teega	Asclepiadaceae	C-M	□	□	□
36	*Rhynchosia minima* (L.) DC.	Gaddi chikkudu	Fabaceae	C	□	□	□
37	*Sarcostemma secamone* (L.) bennet.	Chittipala	Asclepiadaceae	C-M	□	□	□
38	*Tephrosia villosa* (L.) Pers.	Nuguvempali	Fabaceae	C	□	□	□
39	*Tinospora cordifolia* (Willd.) Miers.	Tipa teega	Menispermaceae	C-M	□	□	□
40	*Tylophora indica* (Burm.f.) Merr.	Telegapala	Asclepiadaceae	C-M	□	□	□
41	*Ziziphus oenoplia* (L.) Mill.	Pariki kampa	Rhamnaceae	C	□	□	□
42	*Abutilon indicum* (L.) Sweet	Thuttutubenda	Malvaceae	H	□	□	□
43	*Acalypha indica* L.	Muripinda	Euphorbiaceae	H-M	□	□	□
44	*Acalypha lanceolata* Willd.		Euphorbiaceae	H	X	□	X
45	*Achyranthes aspera* L.	Uttareni	Amaranthaceae	H-M	□	□	□
46	*Aerva javanica* (Burm.f.) Jussa.ex Schult.	Magabeera	Amaranthaceae	H-M	X	□	X
47	*Aerva lanata* (L.) Juss.ex Schult.	Thelaga pindi	Amaranthaceae	H-M	□	□	□
48	*Ageratum conyzoides* L.	Vasavi, Vana Jira	Asteraceae	H	□	□	□
49	*Aloe vera* (L.) Burm.	Kuti kalabanda	Liliaceae	H-M	□	□	□
50	*Alternanthera bettzickiana* (Regel) Nicols.		Amaranthaceae	H	X	□	□
51	*Alternanthera sessilis* (L.) R.Br.	Ronaganthi aku	Amaranthaceae	H-M	□	□	□
52	*Alysicarpus vaginalis* (L.) DC.	Baramthalu chettu	Fabaceae	H	□	□	□
53	*Amaranthus spinosus* L.	Mulla thotakoora	Amaranthaceae	H-M	□	□	□
54	*Amaranthus viridis*	Chilakathotakoora	Amaranthaceae	H-M	□	□	□
55	*Ammannia baccifera* L.	Agnivendrapakku	Lythraceae	H-M	□	□	□
56	*Ananas comosus* (L.) Merr.	Anasa pandu	Bromeliaceae	H-M	□	□	□
57	*Andrographis echioides* (L.) Nees	Noogu Nelayemi	Acanthaceae	H-M	□	□	□
58	*Andrographis paniculata* (Burm.f.) Wall.ex Nees.	Belavemu	Acanthaceae	H-M	□	□	□
59	*Apluda mutica* L.	Adavikorre gaddi	Poaceae	H	□	□	□
60	*Argemone mexicana* L.	Pichi kusuma	Papaveraceae	H-M	□	□	□
61	*Aristida hystrix* L.f.		Poaceae	H	X	□	X
62	*Aristida setacea* Retz.	Cheepuru	Poaceae	H	□	□	□
63	*Aristolochia bracteolata* Lam.	Gadidagadapa	Aristolochiaceae	H	X	□	X
64	*Asparagus racemosus* Willd.	Pilli teegalu	Asparagaceae	H-M	□	□	□
65	*Asystasia gangetica* (L.) T.And. In Thw.	Podabeera	Acanthaceae	H	□	□	□
66	*Atylosia scarabaeoides* (L.) Benth.	Kaaru Kandi	Fabaceae	H	□	□	□
67	*Barleria prionitis* L.	Mullagorinta	Acanthaceae	H-M	□	□	□
68	*Blepharis maderaspatensis* (L.) Heyne ex Roth.		Acanthaceae	H	□	□	□
69	*Blumea mollis* (D. Don.) Merr.	Kukkapogaku	Asteraceae	H	□	□	□
70	*Boerhavia diffusa* L.	Atikimamidi	Nyctaginaceae	H-M	□	□	□

71	*Brachiaria distichya* (L.) Stapf.	Korannagaddi	Poaceae	H	□	□	□
72	*Brassica nigra* (L.) Koch.	Avalu, Nala avalu	Brassicaceae	H-M	□	□	□
73	*Byttneria herbacea* Roxb.	Magasirigedda	Sterculiaceae	H	□	□	□
74	*Capsicum frutescens* L.	Mirapa	Solanaceae	H	□	□	□
75	*Cassia occidentalis* L.	Kasinda	Caesalpiniaceae	H-M	□	□	□
76	*Cassia tora* L.	Thantepu mokka	Caesalpiniaceae	H	□	□	□
77	*Cassia uniflora* Mill.		Caesalpiniaceae	H	X	□	X
78	*Cassytha filiformis* L.	Paachi teega	Cassythaceae	H	□	□	□
79	*Catharanthus pusillus* (Murr.) G.Don	Erri-Mirappa	Apocynaceae	H	X	□	□
80	*Catharanthus roseus* (L.) Don	Billaganneru	Apocynaceae	H-M	□	□	□
81	*Celosia argentea* L.	Gunugu koora	Amaranthaceae	H	□	□	□
82	*Chloris barbata* Sw.	Jada kunchula gaddi	Poaceae	H	□	□	□
83	*Chrozophora rottleri* (Geis.) Juss.ex Spr.	Linga Miriyaalu	Euphorbiaceae	H	□	□	□
84	*Cleome gynandra*L.	Vaminta	Cleomaceae	H	X	□	X
85	*Cleome monophylla* L.	Gaddivominta	Cleomaceae	H	□	□	□
86	*Cleome viscosa* L.	Kukka vominta	Cleomaceae	H	□	□	□
87	*Clerodendrum inerme* (L.) Gaertn.	Nilla vuppi	Verbenaceae	H-M	□	□	□
88	*Coldenia procumbens* L.		Boraginaceae	H	X	□	□
89	*Coleus forskohlii* (Poir.) Briq.	Kolius	Lamiaceae	H-M	□	□	□
90	*Commelina benghalensis* L.	Yanadra aku	Commelinaceae	H-M	□	□	□
91	*Corchorus aestuans* L.	Nela beera	Tilliaceae	H	□	□	□
92	*Corchorus trilocularis* L.	Banki tutturu	Tilliaceae	H	□	□	□
93	*Coriandrum sativum* L.	Kothimira	Apiaceae	H-M	□	□	□
94	*Costus speciosus* (Koen.) Smith	Kevukanda	Costaceae	H-M	□	□	□
95	*Crotalaria bifaria* L.		Fabaceae	H	X	□	X
96	*Crotalaria hirsuta* Willd.		Fabaceae	H	□	□	□
97	*Crotalaria verrucosa*	Gilligicha	Fabaceae	H	□	□	□
98	*Croton bonplandianum* Baill.	Vanamokka	Euphorbiaceae	H	□	□	□
99	*Curculigo orchioides* Gaertn.	Nelathati	Hypoxidaceae	H-M	□	□	□
100	*Curcuma longa* L.	Pasupu	Zingiberaceae	H-M	□	□	□
101	*Cyanotis tuberosa* (Roxb.) Schult. & Schult.		Commelinaceae	H	□	□	□
102	*Cynodon dactylon* (L.) Pers.	Garika	Poaceae	H	□	□	□
103	*Cyperus rotundus* L.	Tunga gadda	Cyperaceae	H	□	□	□
104	*Cyperus taddyps* (Rottb.) Endl.		Cyperaceae	H	□	□	□
105	*Dactyloctenium aegyptium* (L.) Beauv.	Nela ragi	Poaceae	H	□	□	□
106	*Desmodium triflorum* (L.) DC.	Nela Aninta	Fabaceae	H	□	□	□
107	*Desmodium velutinum* (Willd.) DC.	Chiva modhu	Fabaceae	H	□	□	□
108	*Dichanthium annulatum* (Forssk.) Stapf.		Poaceae	H	X	□	X
109	*Digeria muricata* (L.) Mart.	Chenchela koora	Amaranthaceae	H-M	□	□	□
110	*Echinops echinatus* Roxb.	Mulla banti	Asteraceae	H	□	□	□
111	*Eclipta prostrata* (L.) L. Mant.	Guntagalagara	Asteraceae	H	□	□	□
112	*Eichhornia crassipes* (Mart.) Solms-Laub.	Gurrapu dekka	Pontederiaceae	H	□	□	□
113	*Elephantopus scaber* L.	Gobidi	Asteraceae	H-M	□	□	□
114	*Elytratia acaulis* (L.f.) Lindau.	Nela marri	Acanthaceae	H-M	□	□	□
115	*Emilia sonchifolia* (L.) DC.		Asteraceae	H	X	□	X

116	*Enicostema axillare* (Lam.) A. Rayanal	Resika	Gentianaceae	H	□	□	□
117	*Eragrostis coarctata* Stapf.		Poaceae	H	X	□	□
118	*Eragrostis tenella* (L.) Beauv. Ex Roem.	Chinna garikigaddi	Poaceae	H	□	□	□
119	*Eragrostis viscosa* (Retz.) Trin.	Banka sigarantha	Poaceae	H	□	□	□
120	*Euphorbia heterophylla* L.		Euphorbiaceae	H	X	□	X
121	*Euphorbia hirta* L.	Nanubalu	Euphorbiaceae	H-M	□	□	□
122	*Euphorbia indica* Lam.	Marieclaire	Euphorbiaceae	H-M	□	□	□
123	*Euphorbia pulcherrima* Willd.ex Klotz	Yerrakula jamudu	Euphorbiaceae	H	□	□	□
124	*Euphorbia thymifolia* L.	Chitti paalaaku	Euphorbiaceae	H	□	□	□
125	*Evolvulus alsinoides* (L.) L.	Vishnukrantha	Convolvulaceae	H-M	□	□	□
126	*Evolvulus nummularius* (L.) L.	Chiti elukacheviaku	Convolvulaceae	H-M	□	□	□
127	*Gisekia pharnaceoides* L.	Isakadasarikoora	Molluginaceae	H	□	□	□
128	*Gomphrena serrata* L.	Tella bendumalli	Amaranthaceae	H-M	□	□	□
129	*Hedyotis umbellata* (L.) Lam.	Chiriveru	Rubiaceae	H	□	□	□
130	*Heliotropium indicum* L.	Nagadanti	Boraginaceae	H	□	□	□
131	*Heteropogon contortus* (L.) Beauv.ex Roem & Schult.	Eddigaddi	Poaceae	H	□	□	□
132	*Hybanthus enneaspermus* (L.) Muell.	Ratna purusha	Violaceae	H-M	□	□	□
133	*Hydrilla verticillata* (L.f.) Royle.	Valakada	Hydrocharitaceae	H-A	□	□	□
134	*Hygrophila auriculata* (Schum.) Heine	Mulla gobbi	Acanthaceae	H-A	□	□	□
135	*Hyptis suaveolens* (L.) Roit.	Danthitulasi	Lamiaceae	H	□	□	□
136	*Indigofera hirsuta* L.	Kola pettitulu	Fabaceae	H	□	□	□
137	*Indigofera linifolia* (L.f.) Retz.	Baraputram	Fabaceae	H	□	□	□
138	*Indigofera linnaei* Ali	Yerrapalleru	Fabaceae	H	□	□	□
139	*Ipomoea aquatica* Forssk.	Thootiloora	Convolvulaceae	H-A	□	□	□
140	*Lagascea mollis* Cav.	Talla gaayapaaku	Asteraceae	H	□	□	□
141	*Lemna gibba* L.		Lemnaceae	H-A	X	□	X
142	*Lepidagathis cristata* Willd.	Nakka pintuka	Acanthaceae	H-M	□	□	□
143	*Leucas aspera* (Willd.) Link.	Tummi	Lamiaceae	H-M	□	□	□
144	*Leucas indica* (L.) R.Br.	Poolatummi	Lamiaceae	H	□	□	□
145	*Lindernia antipoda* (L.) Alston		Scrophulariaceae	H	X	□	X
146	*Ludwigia perennis* L.	Lavangakaya	Onagraceae	H-M	□	□	□
147	*Macaranga peltata* (Roxb.) Muell.-Arg.	Godugu gangpa	Euphorbiaceae	H-M	□	□	□
148	*Mimosa pudica* L.	Attipathi	Mimosaceae	H-M	□	□	□
149	*Mollugo nudicaulis* Lam.	Peddaparapatakamu	Molluginaceae	H	□	□	□
150	*Mollugo oppositifolia* L.	Chayunta rashiaku	Molluginaceae	H	□	□	□
151	*Mollugo pentaphylla* L.	Pichichatraku	Molluginaceae	H	□	□	□
152	*Murdannia nudiflora* (L.) Brenan		Commelinaceae	H	X	□	□
153	*Nymphaea nouchalli* Burm.f. (blue)	Kluva	Nymphaeaceae	H-A	□	□	□
154	*Nymphaea pubescens* Willd. (red)	Alli tamara	Nymphaeaceae	H-A	□	□	□
155	*Nymphoides hydrophylla*(Lour.) Kuntze.	Allitamara	Menynthaceae	H-A	□	□	□
156	*Ocimum basilucum* L.	Kammagaggiri aku	Lamiaceae	H-M	□	□	□
157	*Ocimum tenuiflorum* L. (Sanctum)	Thulasi	Lamiaceae	H-M	□	□	□
158	*Oriza sativa* L.	Vari	Poaceae	H	□	□	□
159	*Oxalis corniculata* L.	Pulichinta	Oxalidaceae	H-M	□	□	□
160	*Parthenium hysterophorus* L.	Vayyaribhama	Asteraceae	H	□	□	□

161	*Pavonia zeylanica* (L.) Cav.	Karubenda	Malvaceae	H-M	□	□	□
162	*Pedalium murex* L.	Yenugupalleru	Pedaliaceae	H-M	□	□	□
163	*Pedilanthus tithymaloides* (L.) Poit.	Addala kalli	Euphorbiaceae	H	□	□	□
164	*Perotis indica* (L.) Ktze.	Nakka thoka	Poaceae	H	□	□	□
165	*Phragmites karka* (Retz.) Trin ex Steud.var.Karka		Poaceae	H	X	□	□
166	*Phyla nodiflora* (L.) Greene	Bokkenaku	Verbenaceae	H-M	□	□	□
167	*Phyllanthus amarus* Schum.&Thonn.	Nelausiri	Euphorbiaceae	H-M	□	□	□
168	*Phyllanthus virgatus* Forst.	Gadhausiri	Euphorbiaceae	H-M	□	□	□
169	*Physalis minima* L.	Budda bhushada	Solanaceae	H	□	□	□
170	*Pisum sativum* L.	Batani	Fabaceae	H	□	□	□
171	*Polycarpea corymbosa* (L.) Lam.	Biyyam poola moka	Caryophyllaceae	H-M	□	□	□
172	*Pupalia lepacea* (L.) Juss.	Erra utareni	Amaranthaceae	H-M	□	□	□
173	*Rhynchosia suaveolens* (L.f.) DC.	Adivi kandi	Fabaceae	H	□	□	□
174	*Rostellularia prostrata* (Roxb.ex Clarke) Majumdar		Acanthaceae	H	□	□	□
175	*Rungia repens* (L.) Nees. In Wall	Parpat alam	Acanthaceae	H-M	□	□	□
176	*Saccharum officinarum* L.	Cherukugada	Poaceae	H	□	□	□
177	*Sansevieria roxburghiana* Schult. & Schult.f.	Nela kithalu	Agavaceae	H-M	□	□	□
178	*Schoenoplectus articulatus* (L.) Palla		Cyperaceae	H-A	□	□	□
179	*Schoenoplectus supinus* (L.) Palla		Cyperaceae	H-A	□	□	□
180	*Scoparia dulcis* (L.) G. Don	Potti boli	Scrophulariaceae	H-M	□	□	□
181	*Sida cordata* (Burm.f.) Dorss.	Nela benda	Malvaceae	H-M	□	□	□
182	*Sida cordifolia* L.	Chirubenda	Malvaceae	H	X	□	X
183	*Sida rhombifolia* L.		Malvaceae	H	X	□	□
184	*Sida spinosa* L.	Nagabala	Malvaceae	H-M	□	□	□
185	*Solanum melongena* L.	Mulla vankaya	Solanaceae	H	□	□	□
186	*Solanum surattense* Burm.f.	Nela vaakudu	Solanaceae	H-M	□	□	□
187	*Spermacoce hispida* L.	Madhanakattu	Rubiaceae	H	□	□	□
188	*Stemona tuberosa* Lour.	Kanupu tiga	Stemonaceae	H-M	□	□	□
189	*Tephrosia purpurea* (L.) Pers.	Vempali	Fabaceae	H	□	□	□
190	*Themeda triandra* Forssk.	Pedda yetra	Poaceae	H	□	□	□
191	*Tragia involucrata* L.	Teega dulagondi	Euphorbiaceae	H	□	□	□
192	*Trianthema portulacastrum* L.	Nadaraku	Aizoaceae	H-M	□	□	□
193	*Tribulus terrestris* L.	Palleru	Zygophyllaceae	H-M	□	□	□
194	*Trichuriella monsoniae* (L.f.) Bennet.	Era pindi	Amaranthaceae	H-M	□	□	□
195	*Tridex procumbens* L.	Bella paku	Asteraceae	H	□	□	□
196	*Triumfetta rhomboidea* Jacq.	Dhekki	Tilliaceae	H-M	□	□	□
197	*Typha angustata* Bory & Chaub.	Jammu	Typhaceae	H-A	□	□	□
198	*Urena lobata* L.	Anturasam	Malvaceae	H-M	□	□	□
199	*Vernnonia cinerea* (L.) Less.	Sahadevi	Asteraceae	H	□	□	□
200	*Vigna mungo* (L.) Hepp.	Mnumulu	Fabaceae	H	□	X	□
201	*Vigna radiata* (L.) Wilez.	Pesalu	Fabaceae	H	□	X	□
202	*Waltheria indica* L.	Nallabenda	Sterculiaceae	H-M	□	□	□
203	*Xanthium indicum* Koen.	Marulamathangi	Asteraceae	H	□	□	□
204	*Zea mays* L.	Mokka jonna	Poaceae	H	□	□	□

205	*Abelmoschus esculentus* (L.) Moench.	Benda	Malvaceae	S	□	□	□
206	*Acacia torta* (Roxb.) Craib.	Korinta teega	Mimosaceae	S	□	□	□
207	*Adhatoda vasica* Nees.	Addasaram	Acanthaceae	S-M	□	□	□
208	*Agave americana* L.	Kathai chettu	Agavaceae	S	□	□	□
209	*Allamanda cathartica* L.	Manjal patti	Apocynaceae	S	□	□	□
210	*Azima tetracantha* Lam.	Tella uppili	Salvadoraceae	S-M	□	□	□
211	*Bougainvillea spectabilis* Willd.	Kaagitam poolu	Nyctaginaceae	S	□	□	□
212	*Breynia vitis-idea* (Burm.f.) Fisch.	Nalla purugudu	Euphorbiaceae	S	□	□	□
213	*Caesalpinia bonduc* (L.) Roxb.	Gachakaaya	Caesalpiniaceae	S	□	□	□
214	*Cajanus cajan* (L.) Mill.	Kandhi	Fabaceae	S-M	□	□	□
215	*Calotropis gigantea* (L.) R.Br.	Tella Jilledu	Asclepiadaceae	S-M	□	□	□
216	*Calotropis procera* (Ait.) R. Br.	Erra Jilledu	Asclepiadaceae	S-M	□	□	□
217	*Canthium parviflorum* Lam.	Balusu	Rubiaceae	S	□	□	□
218	*Carissa carandas* L.	Pedda kalimi	Apocynaceae	S	□	□	□
219	*Carissa spinarum* L.	Chinna kalimi	Apocynaceae	S	□	□	□
220	*Cassia auriculata* L.	Thangedi	Caesalpiniaceae	S	□	□	□
221	*Catunaregam spinoa* (Thunb.) Tirven.	Manga	Rubiaceae	S	□	□	□
222	*Cipadessa baccifera* (Roth.) Miq.	Chedubira	Meliaceae	S-M	□	□	□
223	*Cleistanthus collinus* (Roxb.) Benth.ex Hook.f.	Wodisiaku	Euphorbiaceae	S-M	□	□	□
224	*Cocos nucifera* L.	Kobbari	Arecaceae	S-M	□	□	□
225	*Datura metel* L.	Nalls ummetta	Solanaceae	S-M	□	□	□
226	*Datura stramonium* L.	Umetta	Solanaceae	S-M	□	□	□
227	*Dendropthoea falcata* (L.f.) Ett.	Urrinka	Loranthaceae	S	□	□	□
228	*Dodonea viscosa* (L.) Jacq.	Banderu	Sapindaceae	S	□	□	□
229	*Duranta repens* L.	Duranta	Verbenaceae	S	□	□	□
230	*Ehretia pubescens* Benth.in Royle		Boraginaceae	S	X	□	□
231	*Euphorbia tirucalli* L.	Kaada Jemudu	Euphorbiaceae	S-M	□	□	□
232	*Flacourtia indica* (Burm.f.) Merr.	Kaana Regu	Flacourtiaceae	S	□	□	□
233	*Glycosmis pentaphylla* (Retz.) DC.		Rutaceae	S	X	□	□
234	*Gmelina asiatica* L.	Chinna adavigummadi	Verbenaceae	S-M	□	□	□
235	*Gossypium herbaceum L.*	Patti, Pishuvu	Malvaceae	S-M	□	□	□
236	*Grewia hirsuta* Vahl.	Nalla Kattelu	Tilliaceae	S	□	□	□
237	*Grewia villosa* Willd.		Tiliaceae	S	X	□	□
238	*Helictres isora* L.	Gooba thada	Sterculiaceae	S-M	□	□	□
239	*Hibiscus rosa sinensis* L.	Dhasari	Malvaceae	S-M	□	□	□
240	*Ipomoea carnea* Jack.	Pandiri thooti	Convolvulaceae	S-A	□	□	□
241	*Jasminum arborescens* Roxb.	Tivva malli	Oleaceae	S	□	□	□
242	*Jasminum sambac* (L.) Ait.	Malli	Oleaceae	S	□	□	□
243	*Jatropha curcas* L.	Nepaalam	Euphorbiaceae	S-M	□	□	□
244	*Jatropha gladulifera* Roxb.	Dundigamu	Euphorbiaceae	S-M	□	□	□
245	*Jatropha gossypifolia* L.	Adavi Aamudam	Euphorbiaceae	S	□	□	□
246	*Justicia adhatoda* L.	Addasaramu	Acanthaceae	S-M	□	□	□
247	*Lantana camara* L.	Seesa kammari	Verbenaceae	S-M	□	□	□
248	*Lawsonia inermis* L.	Gorinta	Lythraceae	S-M	□	□	□
249	*Leonitis nepetifolia* (L.) R. Br.	Ranabheri	Lamiaceae	S	□	□	□
250	*Lycopersicon esculantum* Mill.	Tamato	Solanaceae	S-M	□	□	□

251	*Manihot esculenta* Crantz.	Koyyaganusagadda	Euphorbiaceae	S	□	□	□
252	*Maytenus emarginata* (Willd.) Ding.	Danthi	Celastraceae	S-M	□	□	□
253	*Murraya paniculata* (L.) Jack.	Pulavelagu	Rutaceae	S-M	□	□	□
254	*Narigni crenulata* (Roxb.) Nicol.	Kukka velaga	Rutaceae	S-M	□	□	□
255	*Opuntia dillenii* (Ker.-Gawl.) Haw.	Nagamullu	Cactaceae	S	□	□	□
256	*Parkinsonia aculeata* L.	Simathumma	Caesalpiniaceae	S	□	□	□
257	*Phoenis sylvestris* (L.) Roxb.	Etha chettu	Arecaceae	S	□	□	□
258	*Phyllanthus reticulatus* Poir.	Purugudu	Euphorbiaceae	S-M	□	□	□
259	*Plumbago zeylanica* L.	Tellachitramulamu	Plumbaginaceae	S	□	□	□
260	*Rauwolfia tetraphylla* L.	Papataku	Apocynaceae	S-M	□	□	□
261	*Ricinus communis* L.	Amudamu	Euphorbiaceae	S-M	□	□	□
262	*Securinega virosa* (Roxb.ex Willd.) Baill	Tellapulicheri	Euphorbiaceae	S-M	□	□	□
263	*Sida acuta* Burm.f.	Katari kaanaaku	Malvaceae	S-M	□	□	□
264	*Tabaernemontana divaricata*L.	Nandivardhanam	Apocynaceae	S	□	□	□
265	*Tarena asiatica*(L.) Kuntz.ex schum	Kommi chettu	Rubiaceae	S	□	□	□
266	*Toddalia asiatica* (L.) lam.	Mirapa gandra	Rutaceae	S-M	□	□	□
267	*Vitex negundo* L.	Nalla vavilli	Verbenaceae	S-M	□	□	□
268	*Ziziphus numularia* (Burm.f.) Wt. & Arn.	Nelaregu	Rhamnaceae	S	□	□	□
269	*Acacia auriculiformis* A. Cunn. Ex Benth	Ari	Mimosaceae	T	□	□	□
270	*Acacia leucoceploea* (Roxb.) Willd.	Tella thumma	Mimosaceae	T	□	□	□
271	*Acacia nilotica* (L.) Willd.ex Del.	Nalla thumma	Mimosaceae	T-M	□	□	□
272	*Aegle marmelos* (L.) Corr.	Maredu, Bilvumu	Rutaceae	T-M	□	□	□
273	*Ailanthus excelsa* Roxb.	Pedda manu	Simaroubaceae	T-M	□	□	□
274	*Alangium salvifolium* (L.f.) Wang.	Nallaoodaga	Alangiaceae	T-M	□	□	□
275	*Albizia amara* (Roxb.) Boivin	Konda sigara	Mimosaceae	T-M	□	□	□
276	*Albizia lebbeck* (L.) Benth.	Bagichettu	Mimosaceae	T-M	□	□	□
277	*Alstonia scholaris* (L.) R. Br.	Yedakula paala	Apocynaceae	T-M	□	□	□
278	*Anacardium occidentale* L.	Jidi mamidi	Anacardiaceae	T-M	□	□	□
279	*Annona reticulata* L.	Ramaphalamu	Annonaceae	T-M	□	□	□
280	*Annona squmosa* L.	Seetaphalam	Annonaceae	T-M	□	□	□
281	*Anogeissus latifolia* (Roxb.ex DC) Guill . & Perr.	Sirimanu	Combetaceae	T-M	□	□	□
282	*Anthocephalus chinensis* Rich.ex Walp	Kadambam	Rubiaceae	T-M	□	□	□
283	*Artocarpus heterophyllus* Lam.	Panasa	Moraceae	T	□	□	□
284	*Atalantia monophylla* (L.) Corr.	Adavonimma	Rutaceae	T-M	□	□	□
285	*Azadirachta indica* A. Juss.	Vepa chettu	Meliaceae	T-M	□	□	□
286	*Bambusa arundinacea* (Retz.) Roxb.	Veduru	Poaceae	T	□	□	□
287	*Barringtonia acutangula* (L.) Gaertn.	Kadimi chettu	Barringtoniaceae	T-M	□	□	□
288	*Bauhinia purpurea* L.	Bodhanta	Caesalpiniaceae	T	□	□	□
289	*Bauhinia racemosa* Lam.		Caesalpiniaceae	T	X	□	□
290	*Bauhinia variegata* L.	Madapaku	Caesalpiniaceae	T	□	□	□
291	*Bombax ceiba* L.	Buruga	Bombaceceae	T-M	□	□	□
292	*Borassus flabellifer* L.	Tati	Arecaceae	T-M	□	□	□
293	*Bridellia montana* (Roxb.) Willd.	Balli Patangi	Euphorbiaceae	T-M	□	□	□
294	*Buchanania lanzan* Spr.	Morli chettu	Anacardiaceae	T-M	□	□	□
295	*Butea monosperma* (Lam.) Taub.	Modhuga, Modugu	Fabaceae	T-M	□	□	□
296	*Calophyllum inophyllum* L.	Ponna	Clusiaceae	T-M	□	□	□

297	*Canthium dicoccum* (Gaertn.) Teijsm.	Nalla balasa	Rubiaceae	T	□	□	□
298	*Careya arborea* Roxb.	Aima	Barringtoniaceae	T	□	□	□
299	*Carica papaya* L.	Boppaya	Caricaceae	T-M	□	□	□
300	*Casearia elliptica* Willd.	Girigudu	Flacourtiaceae	T	□	□	□
301	*Cassia fistula* L.	Rela chettu	Caesalpiniaceae	T-M	□	□	□
302	*Cassia siamea* L.	Seema thangedu	Caesalpiniaceae	T	□	□	□
303	*Casuarina littorea* L.	Chavuka chettu	Casuarinaceae	T	□	□	□
304	*Ceiba pendandra* (L.) Gaertn.	Tella buruga	Bombaceae	T-M	□	□	□
305	*Cordia dichotoma* Forst.f	Iriki	Cordiaceae	T	□	□	□
306	*Dalbergia sisso* Roxb	Sissam	Fabaceae	T	□	□	□
307	*Delonix regia* (Boj.ex Hook.) Rafin	Agnipoolu	Caesalpiniaceae	T	□	□	□
308	*Dichrostachys cinerea* (L.) Wt. & Arn.	Yentur chettu	Mimosaceae	T	□	□	□
309	*Dillenia pentagyna* Roxb.	Chainna kalinga	Dilleniaceae	T-M	□	□	□
310	*Diospyros chloroxylon* Roxb.	Ullinda	Ebenaceae	T	□	□	□
311	*Diospyros melanoxylon* Roxb.	Beediakulu	Ebenaceae	T	□	□	□
312	*Diospyros sylvatica* Roxb.	Tella gatha	Ebenaceae	T	□	□	□
313	*Dolichandrone falcata* (DC.) Seem.	Voddi chettu	Bignoniaceae	T	□	□	□
314	*Erythrina variegata* L.	Badisha	Fabaceae	T	□	□	□
315	*Erythroxylum monogynum* Roxb.	Devadaru	Erythroxylaceae	T-M	□	□	□
316	*Eucalyptus globulus* Labill.	Neelagiri thylam	Myrtaceae	T-M	□	□	□
317	*Ficus benghalensis* L.	Marri	Moraceae	T-M	□	□	□
318	*Ficus hispida* L.f.	Bemmedu akulu	Moraceae	T	□	□	□
319	*Ficus racemosa* L.	Medi	Moraceae	T-M	□	□	□
320	*Ficus religiosa* L.	Ravi chettu	Moraceae	T-M	□	□	□
321	*Gardenia latifolia* Ait.	Pedda bikki	Rubiaceae	T	□	□	□
322	*Gmelina arborea* Roxb.	Gummadi teku	Verbenaceae	T-M	□	□	□
323	*Grewia subinequalis* DC.	Palsa chettu	Tilliaceae	T	□	□	□
324	*Guazuma ulmifolia* L.	Bhadraksha	Sterculiaceae	T	□	□	□
325	*Hibiscus tiliaceus* L.	Yetigogu	Malvaceae	T	□	□	□
326	*Ixora arborea* Roxb.ex Sm.	Korivi chettu	Rubiaceae	T	□	□	□
327	*Lagerstroemia parviflora* Roxb.	Chennangi	Lythraceae	T	□	□	□
328	*Lannea coromandelica* (Houtt.) Mann.	Gumpana chettu	Anacardiaceae	T-M	□	□	□
329	*Leucaena leucocephala*(Lam.) de Wit.	Subabulu	Mimosaceae	T-M	□	□	□
330	*Limonia acidissima* L.	Velaga	Rutaceae	T-M	□	□	□
331	*Madhuca latifolia* (Roxb.) Cheval	Ippa	Sapotaceae	T-M	□	□	□
332	*Mangifera indica* L.	Mamidi	Anacardiaceae	T-M	□	□	□
333	*Manilkara hexandra* (Roxb.) Dubard	Pala chettu	Sapotaceae	T	□	□	□
334	*Manilkara zapota* (L.) P Royen	Sapota	Sapotaceae	T-M	□	□	□
335	*Melia azedarach* L.	Turuaka vepa	Meliaceae	T-M	□	□	□
336	*Michelia champaka* L.	Sampangi chettu	Magnoliaceae	T-M	□	□	□
337	*Millingtonia hortensis* L.f.	Manumalli	Bignoniaceae	T	□	□	□
338	*Mimusops elengi* L.	Pogada	Sapotaceae	T	□	□	□
339	*Morinda pubescens* J. E. Smith	Togaru, Pedda papidi	Rubiaceae	T	□	□	□
340	*Moringa oleifera* Lam.	Munanga	Moringaceae	T-M	□	□	□
341	*Muntingia calabura* L.	China cherry	Elaeocarpaceae	T	□	□	□
342	*Musa paradisiaca* L.	Arati	Musaceae	T-M	□	□	□
343	*Neolamarckiana cadamba* (Roxb.) Boss.	Kadambamu	Rubiaceae	T	□	□	□

344	*Nyactanthes arbortristis* L.	Parijatham	Oleaceae	T	□	□	□
345	*Peltophorum pterocarpum* (DC.) Baker ex Heyne	Kondachintha	Caesalpiniaceae	T	□	□	□
346	*Phyllanthus emblica* L.	Usirikaya	Euphorbiaceae	T-M	□	□	□
347	*Pithecellobium dulce* (Roxb.) Benth.	Seemasinthaguddu	Mimosaceae	T-M	□	□	□
348	*Plumeria alba* L.	Tella devaganneru	Apocynaceae	T	□	□	□
349	*Polyalthia lingifolia* (Sonner) Thw.	Naramadidi	Annonaceae	T-M	□	□	□
350	*Pongamia pinnata* (L.) Pier.	Kanuga	Fabaceae	T-M	□	□	□
351	*Prosopis chilensis* (Molina) Stuntz.	Sarkar tumma	Mimosaceae	T	□	□	□
352	*Prosopis cineraria* (L.) Druce	Karra thumma	Mimosaceae	T	□	□	□
353	*Psidium guajava* L.	Jama	Myrtaceae	T-M	□	□	□
354	*Pterospermum xylocarpum* (Gaertn.) Sant. & Wagh.	Duddika , Noliki	Sterculiaceae	T-M	□	□	□
355	*Punica granatum* L.	Daanimma	Punicaceae	T-M	□	□	□
356	*Samanea saman* (Jacq.) Druce.	Nidraganeru	Mimosaceae	T	□	□	□
357	*Santalum album* L.	Srigandhamu	Santalaceae	T-M	□	□	□
358	*Sapindus emarginatus* Vahl.	Knkudu	Sapindaceae	T-M	□	□	□
359	*Saraca asoca* (Roxb.) Wilde	Asoka chettu	Caesalpiniaceae	T-M	□	□	□
360	*Semecarpus anacardium* L.f.	Nalla jeedi	Anacardiaceae	T-M	□	□	□
361	*Shorea robusta* Gaertn.	Pedda jalari	Dipterocarpaceae	T-M	□	□	□
362	*Sterculia urens* Roxb.	Errapoliki	Sterculiaceae	T-M	□	□	□
363	*Strebusus asper* Lour	Barraniki	Moraceae	T-M	□	□	□
364	*Strychnos nux-vomica* L.	Mustichettu	Strychnaceae	T	□	□	□
365	*Strychnos potatorum* L.f.	Chillanginja chettu	Strychnaceae	T-M	□	□	□
366	*Syzigium cumini* (L.) Skeels.	Neredu chettu	Myrtaceae	T-M	□	□	□
367	*Tamarindus indica* L.	Chinta	Caesalpiniaceae	T-M	□	□	□
368	*Tecoma stans* (L.) Kunth.	Pasupu ganneru	Bignoniaceae	T	□	□	□
369	*Tectona grandis* L.	Teku	Verbenaceae	T	□	□	□
370	*Terminalia arjuna* (Roxb.ex DC.) Wt. & Arn.	Tellamaddhi	Combetaceae	T-M	□	□	□
371	*Terminalia bellirica* (Gaertn.) Roxb.	Thandra	Combetaceae	T-M	□	□	□
372	*Terminalia catappa* L.	Badham chettu	Combetaceae	T-M	□	□	□
373	*Terminalia chebula* Retz.	Nallakaraka	Combetaceae	T-M	□	□	□
374	*Wrightia tinctoria* (Roxb.) R. Br.	Reppala	Apocynaceae	T	□	□	□
375	*Ziziphus xylopyrus* (Retz.) Willd.	Gotti	Rhamnaceae	T	□	□	□

Abbreviations: C-climber, H-Herbs, S-Shrubs, T-Trees, M-Medicinal, A-Aquatic, SS-Sumer Season, MS-Monsoon Season, WS-Winter Season, □ - Present, X - absent

3.2.3 Flora within 20-25 Km Radius

In total 428 plant species belong to 318 genera and 111 families were recorded within 20-25 Km radius areas of Dr.NTTPS. The list of plants is at **Table-5.** The family Fabaceae is the most specious family with 32 species. The terrestrial flora in 20-25 Km radius area of Dr.NTTPS consists of 116 trees, 69 shrubs, 196 herbs and 47 climbers. Among 428 species

recorded from both terrestrial and aquatic ecosystems within 20-25 Km radius of Dr.NTTPS, 176 species are medicinally important. A total of 14 species of aquatic plants were recorded within 20-25 Km radius area of Dr.NTTPS.

In **summer season** total of 402 plant species belonging to 308 genera and 110 families were recorded within 10-20 Km radius area of Dr.NTTPS. In **monsoon season** total of 426 plant species belonging to 317 genera and 110 families were recorded within 10 Km radius area of Dr.NTTPS. In **winter season** total of 416 plant species belonging to 314 genera and 107 families were recorded within 10-20 Km radius area of Dr.NTTPS.

The follwing plants are found only in monsoon season but not in the summer as well as winter season within 10-20 Km radius area of Dr.NTTPS, namely, *Acalypha lanceolata, Aerva javanica, Aristida hystrix, Aristolochia brachiolata, Cassia uniflora, Cleome gynandra, Crotolaria bifaria, Dicanthium annulatum, Emilia sonchifolia, Euphorbia heterophylla, Lemna gibba* and *Lindernia antipoda, Sida cordifolia where as Vigna mungo and Vigna radiata are found in summer and winter seasons but not found in monsoon season.* Similarly *Merremia tridentata, Alternanthera bettzickiana, Catharanthus pusillus, Coldenia procumbens, Desmodium triflorum, Eragrostis coarctata, Lagascea mollis, Murdannia nudiflora, Sida rhombifolia, Ehretia pubescens, Glycosmis pentaphylla, Grewia villosa, Phragmites karka* and *Bauhinia racemosa* found in monsoon as well as winter seasons but not encountered in summer season.

Table-5: List of Plants within 20-25 Km Radius of Dr.NTTPS, Ibrahimpatnam

Sl. No.	Name	Vernacular name	Family	Habit	SS	MS	WS
1	*Abrus precatorius* L.	Guriginja	Fabaceae	C-M	□	□	□
2	*Antigonon leptopus* Hook & Arn.	Batanipulu	Polygonaceae	C	□	□	□
3	*Argyreia nervosa* (Burm.f) Boj.	Samudrapala teega	Convolvulaceae	C-M	□	□	□
4	*Aristolochia indica* L.	Nala Ishwari teega	Aristolochiaceae	C-M	□	□	□
5	*Artobotrys hexapetalus* (L.f.) Bhandari	Manoranjitham	Annonaceae	C-M	□	□	□
6	*Canavalia gladiata* (Jacq.) DC.	Thamba jalari,	Fabaceae	C	□	□	□
7	*Cardiospermum helicacabum* L.	Buddaburaga teega	Sapindaceae	C-M	□	□	□
8	*Cayratia pedata* (Lour.) A.L.Juss.	Edakulamandulamru	Vitaceae	C	□	□	□
9	*Cissampelos pareira* L.	Adivibanka teega	Menispermaceae	C-M	□	□	□
10	*Cissus quandrangulais* L.	Nalleru	Vitaceae	C-M	□	□	□
11	*Cissus vitiginea* L.	Gummuduteega	Vitaceae	C-M	□	□	□
12	*Clitoria ternatea* L.	Dintena teega	Fabaceae	C-M	□	□	□

13	*Coccinia grandis* (L.) Voigt.	Lady's finger	Cucurbitaceae	C	□	□	□
14	*Cocculus hirsutus* (L.) Diels.	Chinnadusar teega	Menispermaceae	C-M	□	□	□
15	*Cryptolepis buchananii* Roem. & Schult.	Adavi pala teega	Periplocaceae	C	□	□	□
16	*Cucumis sativus* L.	Dosakaya	Cucurbitaceae	C	□	□	□
17	*Cucurbita maxima* Duch.ex Lam.	Tiyya Gummadi	Cucurbitaceae	C	□	□	□
18	*Cucurbita moschata* (Duch.ex Lam.) Duch.ex Poiret.	Potti gummadi	Cucurbitaceae	C	□	□	□
19	*Cuscuta reflexa* Roxb.	Bangaruteega	Cuscutaceae	C	□	□	□
20	*Derris scandens* (Roxb.) Benth.	Nallateega	Fabaceae	C-M	□	□	□
21	*Dioscorea oppositifolia* L.	Yella gadda	Dioscoreaceae	C	□	□	□
22	*Diplocyclos palmatus* (L) Jeffrey	Linga Lady's finger	Cucurbitaceae	C	□	□	□
23	*Dregea volubilis* (L.f.) Benth.ex Hook.f.	Bandigurija teega	Asclepiadaceae	C	□	□	□
24	*Gloriosa superba*.L.	Pothi Dumpa	Liliaceae	C-M	□	□	□
25	*Gymnema sylvestre* (Retz.) R. Br.	Podapatri	Asclepiadaceae	C-M	□	□	□
26	*Hemidesmus indicus* (L.) R. Br.	Sugandhapala	Periplocaceae	C-M	□	□	□
27	*Hugonia mystax* L.	Kakibeera	Linaceae	C-M	□	□	□
28	*Ipomoea hederifolia* L.	Kasirathanlu	Convolvulaceae	C	□	□	□
29	*Ipomoea nil* (L.) Roth.	Kallivittulu	Convolvulaceae	C	□	□	□
30	*Ipomoea obscura* (L.) Ker.-Gawl.	Kisaraaku teega	Convolvulaceae	C	□	□	□
31	*Ipomoea pes-tigridis* L.	Meka madugu	Convolvulaceae	C	□	□	□
32	*Luffa acutangula* (L.) Roxb.	Beerakaya	Cucurbitaceae	C	□	□	□
33	*Merremia gangetica*	Yelukachevula teega	Convolvulaceae	C	□	□	□
34	*Merremia tridentata* (L.) Hallier f.		Convolvulaceae	C	X	□	□
35	*Momordica carantia* L.	Karaka	Cucurbitaceae	C-M	□	□	□
36	*Momordica dioica* Roxb.ex Willd.	Angakaraka	Cucurbitaceae	C	□	□	□
37	*Mukia maderaspatana* (L.) Roem.	Kuturubudama teega	Cucurbitaceae	C	□	□	□
38	*Passiflora foetida* L.	Tellajumiki	Passifloraceae	C	□	□	□
39	*Pergularia daemia* (Forsk.) Chiov.	Dustapa teega	Asclepiadaceae	C-M	□	□	□
40	*Piper nigrum* L.	Miriyalu	Piperaceae	C-M	□	□	□
41	*Quisqualis indica* L.	Rangoon malle	Combetaceae	C	□	□	□
42	*Rhynchosia minima* (L.) DC.	Gaddi chikkudu	Fabaceae	C	□	□	□
43	*Sarcostemma secamone* (L.) bennet.	Chittipala	Asclepiadaceae	C-M	□	□	□
44	*Tinospora cordifolia* (Willd.) Miers.	Tipa teega	Menispermaceae	C-M	□	□	□
45	*Tylophora indica* (Burm.f.) Merr.	Telegapala	Asclepiadaceae	C-M	□	□	□
46	*Wattakaka volubilis*(L.f.) Stap.	Kalisaku	Asclepiadaceae	C	□	□	□
47	*Ziziphus oenoplia* (L.) Mill.	Pariki kampa	Rhamnaceae	C	□	□	□
48	*Abutilon indicum* (L.) Sweet	Thuttutubenda	Malvaceae	H	□	□	□
49	*Acalypha indica* L.	Muripinda	Euphorbiaceae	H-M	□	□	□
50	*Acalypha lanceolata* Willd.		Euphrbiaceae	H	X	□	X
51	*Achyranthes aspera* L.	Uttareni	Amaranthaceae	H-M	□	□	□
52	*Aerva javanica* (Burm.f.) Jussa.ex Schult.	Magabeera	Amaranthaceae	H-M	X	□	X
53	*Aerva lanata* (L.) Juss.ex Schult.	Thelaga pindi	Amaranthaceae	H-M	□	□	□
54	*Ageratum conyzoides* L.	Vasavi	Asteraceae	H-M	□	□	□

55	*Aloe vera* (L.) Burm.	Kuti kalabanda	Liliaceae	H-M	□	□	□
56	*Alternanthera bettzickiana* (Regel) Nicols.		Amaranthaceae	H	X	□	□
57	*Alternanthera sessilis* (L.) R.Br.	Ronaganthi aku	Amaranthaceae	H	□	□	□
58	*Alysicarpus monilifer* (L.) DC.	Poosala mokka	Fabaceae	H	□	□	□
59	*Alysicarpus vaginalis* (L.) DC.	Baramthalu chettu	Fabaceae	H	□	□	□
60	*Amaranthus spinosus* L.	Mulla thotakoora	Amaranthaceae	H-M	□	□	□
61	*Amaranthus viridis*	Chilakathotakoora	Amaranthaceae	H-M	□	□	□
62	*Amischoplacelus axillaris* (L.) R. Rao	Adamad kaada	Commelinaceae	H	□	□	□
63	*Ammannia baccifera* L.	Agnivendrapakku	Lythraceae	H	□	□	□
64	*Ananas comosus* (L.) Merr.	Anasa pandu	Bromeliaceae	H	□	□	□
65	*Andrographis echioides* (L.) Nees	Noogu Nelayemi	Acanthaceae	H-M	□	□	□
66	*Andrographis paniculata* Wall.ex Nees.	Belavemu	Acanthaceae	H-M	□	□	□
67	*Anisomeles indica* (L.) Kuntz.	Adabeera	Lamiaceae	H	□	□	□
68	*Apluda mutica* L.	Adavikorre gaddi	Poaceae	H	□	□	□
69	*Aponogeton natans* (L.) Engler	Namma dumpa	Aponogetonaceae	H-A	□	□	□
70	*Argemone mexicana* L.	Pichi kusuma	Papaveraceae	H	□	□	□
71	*Aristida adscensionis* L.	Cheepuru	Poaceae	H	□	□	□
72	*Aristida hystrix* L.f.		Poaceae	H	X	□	X
73	*Aristida setacea* Retz.	Cheepuru	Poaceae	H	□	□	□
74	*Aristolochia bracteolata* Lam.	Gadidagadapa	Aristolochiaceae	H	X	□	X
75	*Asparagus racemosus* Willd.	Pilli teegalu	Asparagaceae	H-M	□	□	□
76	*Asystasia gangetica* (L.) T.And. In Thw.	Podabeera	Acanthaceae	H	□	□	□
77	*Atylosia scarabaeoides* (L.) Benth.	Kaaru Kandi	Fabaceae	H	□	□	□
78	*Barleria prionitis* L.	Mullagorinta	Acanthaceae	H	□	□	□
79	*Blepharis maderaspatensis* Heyne ex Roth.		Acanthaceae	H	□	□	□
80	*Blumea mollis* (D. Don.) Merr.	Kukkapogaku	Asteraceae	H	□	□	□
81	*Boerhaavia chinensis* Asch.et Schw.	Kanne komali	Nyctaginaceae	H	□	□	□
82	*Boerhavia diffusa* L.	Atikimamidi	Nyctaginaceae	H-M	□	□	□
83	*Brachiaria distichya* (L.) Stapf.	Korannagaddi	Poaceae	H	□	□	□
84	*Brassica nigra* (L.) Koch.	Nala Avalu	Brassicaceae	H-M	□	□	□
85	*Byttneria herbacea* Roxb.	Magasirigedda	Sterculiaceae	H	□	□	□
86	*Capsicum frutescens* L.	Mirapa	Solanaceae	H	□	□	□
87	*Caralluma lasiantha* (Wt.) N. E. Br.	Godugu jamudu	Asclepiadaceae	H-M	□	□	□
88	*Cassia obtusifolia* L.	Kukka bebbera	Caesalpiniaceae	H	□	□	□
89	*Cassia occidentalis* L.	Kasinda	Caesalpiniaceae	H-M	□	□	□
90	*Cassia tora* L.	Thantepu mokka	Caesalpiniaceae	H	□	□	□
91	*Cassia uniflora* Mill.		Caesalpiniaceae	H	X	□	X
92	*Cassytha filiformis* L.	Paachi teega	Cassythaceae	H	□	□	□
93	*Catharanthus pusillus* (Murr.) G.Don	Erri-Mirappa	Apocynaceae	H	X	□	□
94	*Catharanthus roseus* (L.) Don	Billaganneru	Apocynaceae	H-M	□	□	□
95	*Celosia argentea* L.	Gunugu koora	Amaranthaceae	H	□	□	□
96	*Chloris barbata* Sw.	Jadakunchula gaddi	Poaceae	H	□	□	□

97	*Chrozophora rottleri* (Geisel.) Juss.	Linga mirapa	Euphorbiaceae	H	□	□	□
98	*Cleome gynandra* L.	Vaminta	Cleomaceae	H	X	□	X
99	*Cleome monophylla* L.	Gaddivominta	Cleomaceae	H	□	□	□
100	*Cleome viscosa* L.	Kukka vominta	Cleomaceae	H	□	□	□
101	*Clerodendrum inerme* (L.) Gaertn.	Nilla vuppi	Verbenaceae	H-M	□	□	□
102	*Coldenia procumbens* L.		Boraginaceae	H	---	□	□
103	*Coleus forskohlii* (Poir.) Briq.	Kolius	Lamiaceae	H-M	□	□	□
104	*Colocasia asculanta* (L.) Schott.	Chama	Araceae	H	□	□	□
105	*Commelina benghalensis* L.	Yanadra aku	Commelinaceae	H-M	□	□	□
106	*Commelina longifolia* Lam.		Commelinaceae	H	□	□	□
107	*Corchorus aestuans* L.	Nela beera	Tilliaceae	H	□	□	□
108	*Corchorus capsularis* L.	Tella naara	Tilliaceae	H	□	□	□
109	*Corchorus trilocularis* L.	Banki tutturu	Tilliaceae	H	□	□	□
110	*Coriandrum sativum* L.	Kothimira	Apiaceae	H-M	□	□	□
111	*Costus speciosus* (Koen.) Smith	Kevukanda	Costaceae	H-M	□	□	□
112	*Crotalaria bifaria* L.		Fabaceae	H	X	□	X
113	*Crotalaria hirsuta* Willd.		Fabaceae	H	□	□	□
114	*Crotalaria retusa* L.	Pottigiligicha	Fabaceae	H	□	□	□
115	*Crotalaria verrucosa*	Gilligicha	Fabaceae	H	□	□	□
116	*Croton bonplandianum* Baill.	Vanamokka	Euphorbiaceae	H	□	□	□
117	*Curculigo orchioides* Gaertn.	Nelathati	Hypoxidaceae	H-M	□	□	□
118	*Curcuma aromatica* Salisb.	Kasturi pasupu	Zingiberaceae	H-M	□	□	□
119	*Curcuma longa* L.	Pasupu	Zingiberaceae	H-M	□	□	□
120	*Cyanotis cristata* (L.) D. Don.	Netha kina	Commelinaceae	H	□	□	□
121	*Cyanotis tuberosa* (Roxb.) Schult.&Schult.		Commelinaceae	H	□	□	□
122	*Cynodon dactylon* (L.) Pers.	Garika	Poaceae	H	□	□	□
123	*Cyperus arenarius* Retz.		Cyperaceae	H	□	□	□
124	*Cyperus rotundus* L.	Tunga gadda	Cyperaceae	H	□	□	□
125	*Dactyloctenium aegyptium* (L.) Beauv.	Nela ragi	Poaceae	H	□	□	□
126	*Daucus carota* L.	Gaajaragadda	Apiaceae	H-M	□	□	□
127	*Desmodium pulchellum* (L.) Benth.	Deyyapu mokka	Fabaceae	H	□	□	□
128	*Desmodium triflorum* (L.) DC.		Fabaceae	H	X	□	□
129	*Desmodium velutinum* (Willd.) DC.	Chiva modhu	Fabaceae	H	□	□	□
130	*Dichanthium annulatum* (Forssk.) Stapf.		Poaceae	H	X	□	X
131	*Digeria muricata* (L.) Mart.	Chenchela koora	Amaranthaceae	H-M	□	□	□
132	*Echinops echinatus* Roxb.	Mulla banti	Asteraceae	H	□	□	□
133	*Eclipta prostrata* (L.) L. Mant.	Guntagalagara	Asteraceae	H-M	□	□	□
134	*Eichhornia crassipes* (Mart.) Solms-Laub.	Gurrapu dekka	Pontederiaceae	H	□	□	□
135	*Elephantopus scaber* L.	Gobidi	Asteraceae	H-M	□	□	□
136	*Eleusine coracana* (L.) Gaertn.	Ragulu, Ragi	Poaceae	H-M	□	□	□
137	*Eleusine indica* (L.) Gaertn.	Thippa ragi	Poaceae	H	□	□	□
138	*Elytratia acaulis* (L.f.) Lindau.	Nela marri	Acanthaceae	H-M	□	□	□

139	*Emilia sonchifolia* (L.) DC.		Asteraceae	H	X	□	X
140	*Enicostema axillare* (Lam.) A. Rayanal	Resika	Gentianaceae	H	□	□	□
141	*Eragrostis ciliaris* (L.) R.Br.		Poaceae	H	□	□	□
142	*Eragrostis coarctata* Stapf.		Poaceae	H	X	□	□
143	*Eragrostis unioloides* (Retz.) Nees	Udara gaddi	Poaceae	H	□	□	□
144	*Eragrostis viscosa* (Retz.) Trin.	Banka sigarantha	Poaceae	H	□	□	□
145	*Eriocaulon truncatum* Buch.-Ham.		Eriocaulaceae	H	□	□	□
146	*Euphorbia heterophylla* L.		Euphrbiaceae	H	X	□	X
147	*Euphorbia hirta* L.	Nanubalu	Euphorbiaceae	H-M	□	□	□
148	*Euphorbia indica* Lam.	Marieclaire	Euphorbiaceae	H-M	□	□	□
149	*Euphorbia pulcherrima* Willd.ex Klotz	Yerrakula jamudu	Euphorbiaceae	H	□	□	□
150	*Euphorbia thymifolia* L.	Chitti paalaaku	Euphorbiaceae	H	□	□	□
151	*Evolvulus alsinoides* (L.) L.	Vishnukrantha	Convolvulaceae	H-M	□	□	□
152	*Evolvulus nummularius* (L.) L.	Chiti elukacheviaku	Convolvulaceae	H-M	□	□	□
153	*Gisekia pharnaceoides* L.	Isakadasarikoora	Molluginaceae	H	□	□	□
154	*Glinus oppositifolius* (L.) A. DC.	Chayunta rashiaku	Molluginaceae	H	□	□	□
155	*Gomphrena globosa* L.	Bendumalli	Amaranthaceae	H	□	□	□
156	*Gomphrena serrata* L.	Tella bendumalli	Amaranthaceae	H-M	□	□	□
157	*Hedyotis herbacea L.*	Udum chettu	Rubiaceae	H	□	□	□
158	*Hedyotis umbellata* (L.) Lam.	Chiriveru	Rubiaceae	H	□	□	□
159	*Heliotropium indicum* L.	Nagadanti	Boraginaceae	H	□	□	□
160	*Heteropogon contortus* (L.) Beauv.	Eddigaddi	Poaceae	H	□	□	□
161	*Hybanthus enneaspermus* (L.) Muell.	Ratna purusha	Violaceae	H-M	□	□	□
162	*Hydrilla verticillata* (L.f.) Royle.	Valakada	Hydrocharitaceae	H-A	□	□	□
163	*Hygrophila auriculata* (Schum.) Heine	Mulla gobbi	Acanthaceae	H-A	□	□	□
164	*Hyptis suaveolens* (L.) Roit.	Danthitulasi	Lamiaceae	H	□	□	□
165	*Indigofera hirsuta* L.	Kola pettitulu	Fabaceae	H	□	□	□
166	*Indigofera linifolia* (L.f.) Retz.	Baraputram	Fabaceae	H	□	□	□
167	*Indigofera linnaei* Ali	Yerrapalleru	Fabaceae	H	□	□	□
168	*Indigofera tinctoria* L.	Neeli	Fabaceae	H	□	□	□
169	*Ipomoea aquatica* Forssk.	Thootiloora	Convolvulaceae	H-A	□	□	□
170	*Lagascea mollis* Cav.		Asteraceae	H	X	□	□
171	*Lemna gibba* L.		Lemnaceae	H-A	X	□	X
172	*Lepidagathis cristata* Willd.	Nakka pintuka	Acanthaceae	H-M	□	□	□
173	*Leucas aspera* (Willd.) Link.	Tummi	Lamiaceae	H-M	□	□	□
174	*Leucas indica* (L.) R.Br.	Poolatummi	Lamiaceae	H-M	□	□	□
175	*Limnophyton obtusifolium* (L.) Miq.		Alismataceae	H-A	□	□	□
176	*Lindernia antipoda* (L.) Alston		Scrophulariaceae	H	X	□	X
177	*Ludwigia octovalvis* (Jacq.) Raven.	Neeru ananivadhrum	Onagraceae	H	□	□	□
178	*Ludwigia perennis* L.	Lavangakaya	Onagraceae	H-M	□	□	□
179	*Macaranga peltata* (Roxb.) Muell.-Arg.	Godugu gangpa	Euphorbiaceae	H-M	□	□	□
180	*Malvastrum coromandelianum* (L.) Garcke.	Gaayapu alam	Malvaceae	H	□	□	□
181	*Martynia annua* L.	Telikondikaya	Martyniaceae	H-M	□	□	□

182	*Mimosa pudica* L.	Attipathi	Mimosaceae	H-M	□	□	□
183	*Mollugo nudicaulis* Lam.	Peddaparapatakamu	Molluginaceae	H	□	□	□
184	*Mollugo oppositifolia* L.	Chayunta rashiaku	Molluginaceae	H	□	□	□
185	*Mollugo pentaphylla* L.	Pichichatraku	Molluginaceae	H	□	□	□
186	*Murdannia nudiflora* (L.) Brenan		Commelinaceae	H	X	□	□
187	*Nymphaea nouchalli* Burm.f. (blue)	Kluva	Nymphaeaceae	H-A	□	□	□
188	*Nymphaea pubescens* Willd. (red)	Alli tamara	Nymphaeaceae	H-A	□	□	□
189	*Nymphoides hydrophylla*(Lour.) Kuntze.	Allitamara	Menynthaceae	H-A	□	□	□
190	*Ocimum basilucum* L.	Kammagaggiri aku	Lamiaceae	H-M	□	□	□
191	*Ocimum tenuiflorum* L. (Sanctum)	Thulasi	Lamiaceae	H-M	□	□	□
192	*Oriza sativa* L.	Vari	Poaceae	H	□	□	□
193	*Oxalis corniculata* L.	Pulichinta	Oxalidaceae	H-M	□	□	□
194	*Parthenium hysterophorus* L.	Vayyaribhama	Asteraceae	H	□	□	□
195	*Pasplidium flavidum* (Retz.) Camus	Uda gaddi	Poaceae	H	□	□	□
196	*Pavonia zeylanica* (L.) Cav.	Karubenda	Malvaceae	H-M	□	□	□
197	*Pedalium murex* L.	Yenugupalleru	Pedaliaceae	H-M	□	□	□
198	*Pedilanthus tithymaloides* (L.) Poit.	Addala kalli	Euphorbiaceae	H	□	□	□
199	*Perotis indica* (L.) Ktze.	Nakka thoka	Poaceae	H	□	□	□
200	*Phyla nodiflora* (L.) Greene	Bokkenaku	Verbenaceae	H-M	□	□	□
201	*Phyllanthus amarus* Schum.&Thonn.	Nelausiri	Euphorbiaceae	H-M	□	□	□
202	*Phyllanthus virgatus* Forst.	Gadhausiri	Euphorbiaceae	H-M	□	□	□
203	*Physalis minima* L.	Budda bhushada	Solanaceae	H	□	□	□
204	*Pisum sativum* L.	Batani	Fabaceae	H	□	□	□
205	*Polycarpea corymbosa* (L.) Lam.	Biyyam poola moka	Caryophyllaceae	H-M	□	□	□
206	*Pupalia lepacea* (L.) Juss.	Erra utareni	Amaranthaceae	H-M	□	□	□
207	*Rhynchosia suaveolens* (L.f.) DC.	Adivi kandi	Fabaceae	H	□	□	□
208	*Rostellularia prostrata* (Roxb.) Majumdar		Acanthaceae	H	□	□	□
209	*Rungia repens* (L.) Nees. In Wall	Parpat alam	Acanthaceae	H-M	□	□	□
210	*Saccharum officinarum* L.	Cherukugada	Poaceae	H	□	□	□
211	*Sansevieria roxburghiana* Schult.&Schult.f.	Nela kithalu	Agavaceae	H-M	□	□	□
212	*Schoenoplectus articulatus* (L.) Palla		Cyperaceae	H-A	□	□	□
213	*Schoenoplectus juncoides* (Roxb.) Palla		Cyperaceae	H-A	□	□	□
214	*Schoenoplectus supinus* (L.) Palla		Cyperaceae	H-A	□	□	□
215	*Scoparia dulcis* (L.) G. Don	Potti boli	Scrophulariaceae	H-M	□	□	□
216	*Sida cordata* (Burm.f.) Dorss.	Nela benda	Malvaceae	H-M	□	□	□
217	*Sida cordifolia* L.	Chirubenda	Malvaceae	H	X	□	X
218	*Sida rhombifolia* L.		Malvaceae	H	X	□	□
219	*Sida spinosa* L.	Nagabala	Malvaceae	H-M	□	□	□
220	*Solanum melongena* L.	Mulla vankaya	Solanaceae	H	□	□	□
221	*Solanum nigrum* L.	Kaamanchi	Solanaceae	H	□	□	□
222	*Solanum surattense* Burm.f.	Nela vaakudu	Solanaceae	H-M	□	□	□

223	*Spermacoce hispida* L.	Madhanakattu	Rubiaceae	H	☐	☐	☐
224	*Sphaeranthus indicus* L.	Bodasaramu	Asteraceae	H	☐	☐	☐
225	*Stachytarpheta jamaicensis* (L.) Vahl.	Koraputia	Verbenaceae	H-M	☐	☐	☐
226	*Stemona tuberosa* Lour.	Kanupu tiga	Stemonaceae	H-M	☐	☐	☐
227	*Tephrosia purpurea* (L.) Pers.	Vempali	Fabaceae	H	☐	☐	☐
228	*Themeda triandra* Forssk.	Pedda yetra	Poaceae	H	☐	☐	☐
229	*Tragia involucrata* L.	Teega dulagondi	Euphorbiaceae	H	☐	☐	☐
230	*Trianthema portulacastrum* L.	Nadaraku	Aizoaceae	H-M	☐	☐	☐
231	*Tribulus terrestris* L.	Palleru	Zygophyllaceae	H-M	☐	☐	☐
232	*Trichuriella monsoniae* (L.f.) Bennet.	Era pindi	Amaranthaceae	H-M	☐	☐	☐
233	*Tridex procumbens* L.	Bella paku	Asteraceae	H-M	☐	☐	☐
234	*Triumfetta rhomboidea* Jacq.	Dhekki	Tilliaceae	H-M	☐	☐	☐
235	*Typha angustata* Bory & Chaub.	Jammu	Typhaceae	H-A	☐	☐	☐
236	*Urena lobata* L.	Anturasam	Malvaceae	H-M	☐	☐	☐
237	*Vernnonia cinerea* (L.) Less.	Sahadevi	Asteraceae	H	☐	☐	☐
238	*Vigna mungo* (L.) Hepp.	Mnumulu	Fabaceae	H	☐	X	☐
239	*Vigna radiata* (L.) Wilez.	Pesalu	Fabaceae	H	☐	X	☐
240	*Waltheria indica* L.	Nallabenda	Sterculiaceae	H-M	☐	☐	☐
241	*Xanthium indicum* Koen.	Marulamathangi	Asteraceae	H-M	☐	☐	☐
242	*Zea mays* L.	Mokka jonna	Poaceae	H	☐	☐	☐
243	*Zornia diphylla* (L.) Pers.	Uhunnali	Fabaceae	H	☐	☐	☐
244	*Abelmoschus esculentus* (L.) Moench.	Benda	Malvaceae	S	☐	☐	☐
245	*Acacia chundra* (Rottler) Willd.	Sundra	Mimosaceae	S	☐	☐	☐
246	*Acacia torta* (Roxb.) Craib.	Korinta teega	Mimosaceae	S	☐	☐	☐
247	*Adhatoda vasica* Nees.	Addasaram	Acanthaceae	S-M	☐	☐	☐
248	*Agave americana* L.	Kathai chettu	Agavaceae	S	☐	☐	☐
249	*Allamanda cathartica* L.	Manjal patti	Apocynaceae	S	☐	☐	☐
250	*Azima tetracantha* Lam.	Tella uppili	Salvadoraceae	S-M	☐	☐	☐
251	*Bougainvillea spectabilis* Willd.	Kaagitam poolu	Nyctaginaceae	S	☐	☐	☐
252	*Breynia vitis-idea* (Burm.f.) Fisch.	Nalla purugudu	Euphorbiaceae	S	☐	☐	☐
253	*Caesalpinia bonduc* (L.) Roxb.		Caesalpiniaceae	S	☐	☐	☐
254	*Cajanus cajan* (L.) Mill.	Kandhi	Fabaceae	S	☐	☐	☐
255	*Calotropis gigantea* (L.) R.Br.	Tella Jilledu	Asclepiadaceae	S-M	☐	☐	☐
256	*Calotropis procera* (Ait.) R. Br.	Erra Jilledu	Asclepiadaceae	S-M	☐	☐	☐
257	*Canthium parviflorum* Lam.	Balusu	Rubiaceae	S	☐	☐	☐
258	*Caparis zeylanica* L.	AaLady's finger	Capparaceae	S	☐	☐	☐
259	*Carissa carandas* L.	Pedda kalimi	Apocynaceae	S	☐	☐	☐
260	*Carissa spinarum* L.	Chinna kalimi	Apocynaceae	S	☐	☐	☐
261	*Cassia auriculata* L.	Thangedi	Caesalpiniaceae	S	☐	☐	☐
262	*Catunaregam spinoa* (Thunb.) Tirven.	Manga	Rubiaceae	S	☐	☐	☐
263	*Cipadessa baccifera* (Roth.) Miq.	Chedubira	Meliaceae	S-M	☐	☐	☐
264	*Cleistanthus collinus* Benth.ex Hook.f.	Wodisiaku	Euphorbiaceae	S-M	☐	☐	☐
265	*Cocos nucifera* L.	Kobbari	Arecaceae	S-M	☐	☐	☐
266	*Datura metel* L.	Nalls ummetta	Solanaceae	S-M	☐	☐	☐

267	*Datura stramonium* L.	Umetta	Solanaceae	S-M	□	□	□
268	*Dendropthoea falcata* (L.f.) Ett.	Urrinka	Loranthaceae	S	□	□	□
269	*Dodonea viscosa* (L.) Jacq.	Banderu	Sapindaceae	S	□	□	□
270	*Duranta repens* L.	Duranta	Verbenaceae	S	□	□	□
271	*Ehretia pubescens* Benth.in Royle		Boraginaceae	S	X	□	□
272	*Euphorbia tirucalli* L.	Kaada Jemudu	Euphorbiaceae	S-M	□	□	□
273	*Flacourtia indica* (Burm.f.) Merr.	Kaana Regu	Flacourtiaceae	S	□	□	□
274	*Glycosmis pentaphylla* (Retz.) DC.		Rutaceae	S	X	□	□
275	*Gmelina asiatica* L.	Adavigummadi	Verbenaceae	S-M	□	□	□
276	*Gossypium herbaceum L.*	Patti, Pishuvu	Malvaceae	S	□	□	□
277	*Grewia hirsuta* Vahl.	Nalla Kattelu	Tilliaceae	S	□	□	□
278	*Grewia villosa* Willd.		Tiliaceae	S	X	□	□
279	*Helictres isora* L.	Gooba thada	Sterculiaceae	S-M	□	□	□
280	*Hibiscus rosa sinensis* L.	Dhasari	Malvaceae	S-M	□	□	□
281	*Ipomoea carnea* Jack.	Pandiri thooti	Convolvulaceae	S-A	□	□	□
282	*Jasminum arborescens* Roxb.	Tivva malli	Oleaceae	S	□	□	□
283	*Jasminum sambac* (L.) Ait.	Malli	Oleaceae	S	□	□	□
284	*Jatropha curcas* L.	Nepaalam	Euphorbiaceae	S-M	□	□	□
285	*Jatropha gladulifera* Roxb.	Dundigamu	Euphorbiaceae	S-M	□	□	□
286	*Jatropha gossypifolia* L.	Adavi Aamudam	Euphorbiaceae	S	□	□	□
287	*Justicia adhatoda* L.	Addasaramu	Acanthaceae	S-M	□	□	□
288	*Lantana camara* L.	Seesa kammari	Verbenaceae	S-M	□	□	□
289	*Lawsonia inermis* L.	Gorinta	Lythraceae	S-M	□	□	□
290	*Leonitis nepetifolia* (L.) R. Br.	Ranabheri	Lamiaceae	S	□	□	□
291	*Lycopersicon esculantum* Mill.	Tamato	Solanaceae	S-M	□	□	□
292	*Manihot esculenta* Crantz.	Koyyaganusagadda	Euphorbiaceae	S	□	□	□
293	*Maytenus emarginata* (Willd.) Ding.	Danthi	Celastraceae	S-M	□	□	□
294	*Mimosa palyancistra* Benth.		Mimosaceae	S	□	□	□
295	*Murraya koenigii* (L.) Spr.	Karivepaku	Rutaceae	S-M	□	□	□
296	*Murraya paniculata* (L.) Jack.	Pulavelagu	Rutaceae	S-M	□	□	□
297	*Narigni crenulata* (Roxb.) Nicol.	Kukka velaga	Rutaceae	S-M	□	□	□
298	*Opuntia dillenii* (Ker.-Gawl.) Haw.	Nagamullu	Cactaceae	S	□	□	□
299	*Parkinsonia aculeata* L.	Simathumma	Caesalpiniaceae	S	□	□	□
300	*Phoenis sylvestris* (L.) Roxb.	Etha chettu	Arecaceae	S	□	□	□
301	*Phragmites karka* (Retz.) Trin ex Steud.var.Karka		Poaceae	S	X	□	□
302	*Phyllanthus reticulatus* Poir.	Purugudu	Euphorbiaceae	S-M	□	□	□
303	*Plumbago zeylanica* L.	Tellachitramulamu	Plumbaginaceae	S-M	□	□	□
304	*Rauwolfia tetraphylla* L.	Papataku	Apocynaceae	S-M	□	□	□
305	*Ricinus communis* L.	Amudamu	Euphorbiaceae	S-M	□	□	□
306	*Securinega virosa* (Roxb.ex Willd.) Baill	Tellapulicheri	Euphorbiaceae	S-M	□	□	□
307	*Sida acuta* Burm.f.	Katari kaanaaku	Malvaceae	S-M	□	□	□
308	*Tabaernemontana divaricata*L.	Nandivardhanam	Apocynaceae	S	□	□	□

309	*Tarena asiatica*(L.) Kuntz.ex schum	Kommi chettu	Rubiaceae	S	□	□	□
310	*Toddalia asiatica* (L.) lam.	Mirapa gandra	Rutaceae	S-M	□	□	□
311	*Vitex negundo* L.	Nalla vavilli	Verbenaceae	S-M	□	□	□
312	*Ziziphus numularia* (Burm.f.) Wt. & Arn.	Nelaregu	Rhamnaceae	S	□	□	□
313	*Acacia auriculiformis* A. Cunn. Ex Benth	Ari	Mimosaceae	T	□	□	□
314	*Acacia leucocephloea* (Roxb.) Willd.	Tella thumma	Mimosaceae	T	□	□	□
315	*Acacia nilotica* (L.) Willd.ex Del.	Nalla thumma	Mimosaceae	T-M	□	□	□
316	*Aegle marmelos* (L.) Corr.	Maredu, Bilvumu	Rutaceae	T-M	□	□	□
317	*Ailanthus excelsa* Roxb.	Pedda manu	Simaroubaceae	T	□	□	□
318	*Alangium salvifolium* (L.f.) Wang.	Nallaoodaga	Alangiaceae	T	□	□	□
319	*Albizia amara* (Roxb.) Boivin	Konda sigara	Mimosaceae	T	□	□	□
320	*Albizia lebbeck* (L.) Benth.	Bagichettu	Mimosaceae	T	□	□	□
321	*Alstonia scholaris* (L.) R. Br.	Yedakula paala	Apocynaceae	T-M	□	□	□
322	*Anacardium occidentale* L.	Jidi mamidi	Anacardiaceae	T	□	□	□
323	*Annona reticulata* L.	Ramaphalamu	Annonaceae	T-M	□	□	□
324	*Annona squmosa* L.	Seetaphalam	Annonaceae	T-M	□	□	□
325	*Anogeissus acuminata* Guill. & Perr.	Pasichettu	Combetaceae	T	□	□	□
326	*Anogeissus latifolia* Guill. & Perr.	Sirimanu	Combetaceae	T	□	□	□
327	*Anthocephalus chinensis* Rich.ex Walp	Kadambam	Rubiaceae	T-M	□	□	□
328	*Artocarpus heterophyllus* Lam.	Panasa	Moraceae	T	□	□	□
329	*Atalantia monophylla* (L.) Corr.	Adavonimma	Rutaceae	T	□	□	□
330	*Azadirachta indica* A. Juss.	Vepa chettu	Meliaceae	T-M	□	□	□
331	*Bambusa arundinacea* (Retz.) Roxb.	Veduru	Poaceae	T	□	□	□
332	*Barringtonia acutangula* (L.) Gaertn.	Kadimi chettu	Barringtoniaceae	T	□	□	□
333	*Bauhinia purpurea* L.	Bodhanta	Caesalpiniaceae	T	□	□	□
334	*Bauhinia racemosa* Lam.		Caesalpiniaceae	T	X	□	□
335	*Bauhinia variegata* L.	Madapaku	Caesalpiniaceae	T	□	□	□
336	*Bixa orellana* L.	Jabara kaya chettu	Bixaceae	T-M	□	□	□
337	*Bombax ceiba* L.	Buruga	Bombaceceae	T-M	□	□	□
338	*Borassus flabellifer* L.	Tati	Arecaceae	T	□	□	□
339	*Boswellia serrata* Roxb.	Andugu	Burseraceae	T	□	□	□
340	*Bridellia montana* (Roxb.) Willd.	Balli Patangi	Euphorbiaceae	T	□	□	□
341	*Buchanania lanzan* Spr.	Morli chettu	Anacardiaceae	T	□	□	□
342	*Butea monosperma* (Lam.) Taub.	Modhuga	Fabaceae	T-M	□	□	□
343	*Calophyllum inophyllum* L.	Ponna	Clusiaceae	T-M	□	□	□
344	*Canthium dicoccum* (Gaertn.) Teijsm.	Nalla balasa	Rubiaceae	T	□	□	□
345	*Careya arborea* Roxb.	Aima	Barringtoniaceae	T	□	□	□
346	*Carica papaya* L.	Boppaya	Caricaceae	T-M	□	□	□
347	*Casearia elliptica* Willd.	Girigudu	Flacourtiaceae	T	□	□	□
348	*Cassia fistula* L.	Rela chettu	Caesalpiniaceae	T-M	□	□	□
349	*Cassia siamea* L.	Seema thangedu	Caesalpiniaceae	T	□	□	□
350	*Casuarina littorea* L.	Chavuka chettu	Casuarinaceae	T	□	□	□

351	*Ceiba pentandra* (L.) Gaertn.	Tella buruga	Bombacaceae	T-M	□	□	□
352	*Cordia dichotoma* Forst.f	Iriki	Cordiaceae	T	□	□	□
353	*Dalbergia latifolia* Roxb.	Pachari	Fabaceae	T	□	□	□
354	*Dalbergia sisso* Roxb	Sissam	Fabaceae	T	□	□	□
355	*Delonix regia* (Boj.ex Hook.) Rafin	Agnipoolu	Caesalpiniaceae	T	□	□	□
356	*Dichrostachys cinerea* (L.) Wt. & Arn.	Yentur chettu	Mimosaceae	T	□	□	□
357	*Dillenia pentagyna* Roxb.	Chainna kalinga	Dilleniaceae	T-M	□	□	□
358	*Diospyros chloroxylon* Roxb.	Ullinda	Ebenaceae	T	□	□	□
359	*Diospyros melanoxylon* Roxb.	Beediakulu	Ebenaceae	T	□	□	□
360	*Diospyros sylvatica* Roxb.	Tella gatha	Ebenaceae	T	□	□	□
361	*Dolichandrone falcata* (DC.) Seem.	Voddi chettu	Bignoniaceae	T	□	□	□
362	*Erythrina variegata* L.	Badisha	Fabaceae	T	□	□	□
363	*Erythroxylum monogynum* Roxb.	Devadaru	Erythroxylaceae	T-M	□	□	□
364	*Eucalyptus globulus* Labill.	Neelagiri thylam	Myrtaceae	T-M	□	□	□
365	*Ficus benghalensis* L.	Marri	Moraceae	T-M	□	□	□
366	*Ficus hispida* L.f.	Bemmedu akulu	Moraceae	T	□	□	□
367	*Ficus racemosa* L.	Medi	Moraceae	T-M	□	□	□
368	*Ficus religiosa* L.	Ravi chettu	Moraceae	T-M	□	□	□
369	*Gardenia latifolia* Ait.	Pedda bikki	Rubiaceae	T	□	□	□
370	*Gliricidia sepium*	Seema kanuga	Fabaceae	T	□	□	□
371	*Gmelina arborea* Roxb.	Gummadi teku	Verbenaceae	T-M	□	□	□
372	*Grevillea robusta* A.cunn.ex R.Br.	Sima chiluku	Proteaceae	T	□	□	□
373	*Grewia subinequalis* DC.	Palsa chettu	Tilliaceae	T	□	□	□
374	*Guazuma ulmifolia* L.	Bhadraksha	Sterculiaceae	T	□	□	□
375	*Hibiscus tiliaceus* L.	Yetigogu	Malvaceae	T	□	□	□
376	*Ixora arborea* Roxb.ex Sm.	Korivi chettu	Rubiaceae	T	□	□	□
377	*Lagerstroemia parviflora* Roxb.	Chennangi	Lythraceae	T	□	□	□
378	*Lannea coromandelica* (Houtt.) Mann.	Gumpana chettu	Anacardiaceae	T-M	□	□	□
379	*Leucaena leucocephala*(Lam.) de Wit.	Subabulu	Mimosaceae	T-M	□	□	□
380	*Limonia acidissima* L.	Velaga	Rutaceae	T-M	□	□	□
381	*Madhuca latifolia* (Roxb.) Cheval	Ippa	Sapotaceae	T-M	□	□	□
382	*Mangifera indica* L.	Mamidi	Anacardiaceae	T-M	□	□	□
383	*Manilkara hexandra* (Roxb.) Dubard	Pala chettu	Sapotaceae	T-M	□	□	□
384	*Manilkara zapota* (L.) P Royen	Sapota	Sapotaceae	T-M	□	□	□
385	*Melia azedarach* L.	Turuaka vepa	Meliaceae	T-M	□	□	□
386	*Michelia champaka* L.	Sampangi chettu	Magnoliaceae	T-M	□	□	□
387	*Millingtonia hortensis* L.f.	Manumalli	Bignoniaceae	T	□	□	□
388	*Morinda pubescens* J. E. Smith	Togaru	Rubiaceae	T	□	□	□
389	*Moringa oleifera* Lam.	Munanga	Moringaceae	T-M	□	□	□
390	*Muntingia calabura* L.	China cherry	Elaeocarpaceae	T	□	□	□
391	*Musa paradisiaca* L.	Arati	Musaceae	T-M	□	□	□
392	*Neolamarckiana cadamba* (Roxb.) Boss.	Kadambamu	Rubiaceae	T	□	□	□
393	*Nyactanthes arbortristis* L.	Parijatham	Oleaceae	T-M	□	□	□
394	*Oroxylum indicum* (L.) Benth. ex Kurz.	Pampini chettu	Bignoniaceae	T-M	□	□	□

395	*Peltophorum pterocarpum* (DC.) Baker	Kondachintha	Caesalpiniaceae	T	□	□	□
396	*Phyllanthus emblica* L.	Usirikaya	Euphorbiaceae	T-M	□	□	□
397	*Pithecellobium dulce* (Roxb.) Benth.	Seemasinthaguddu	Mimosaceae	T-M	□	□	□
398	*Plumeria alba* L.	Tella devaganneru	Apocynaceae	T	□	□	□
399	*Plumeria rubra* L.	Erra devaganneru	Apocynaceae	T	□	□	□
400	*Polyalthia longifolia* (Sonner) Thw.	Naramadidi	Annonaceae	T-M	□	□	□
401	*Pongamia pinnata* (L.) Pier.	Kanuga	Fabaceae	T-M	□	□	□
402	*Prosopis chilensis* (Molina) Stuntz.	Karkar tumma	Mimosaceae	T	□	□	□
403	*Prosopis cineraria* (L.) Druce	Jammi	Mimosaceae	T	□	□	□
404	*Psidium guajava* L.	Jama	Myrtaceae	T-M	□	□	□
405	*Pterospermum xylocarpum* Sant. & Wagh.	Duddika	Sterculiaceae	T-M	□	□	□
406	*Punica granatum* L.	Daanimma	Punicaceae	T-M	□	□	□
407	*Salavdora persica* L.	Chekkara chettu	Salvadoraceae	T	□	□	□
408	*Samanea saman* (Jacq.) Druce.	Nidraganeru	Mimosaceae	T	□	□	□
409	*Santalum album* L.	Srigandhamu	Santalaceae	T-M	□	□	□
410	*Sapindus emarginatus* Vahl.	Knkudu	Sapindaceae	T-M	□	□	□
411	*Saraca asoca* (Roxb.) Wilde	Asoka chettu	Caesalpiniaceae	T-M	□	□	□
412	*Semecarpus anacardium* L.f.	Nalla jeedi	Anacardiaceae	T-M	□	□	□
413	*Shorea robusta* Gaertn.	Pedda jalari	Dipterocarpaceae	T-M	□	□	□
414	*Sterculia urens* Roxb.	Errapoliki	Sterculiaceae	T-M	□	□	□
415	*Strebulus asper* Lour	Barraniki	Moraceae	T-M	□	□	□
416	*Strychnos nux-vomica* L.	Mustichettu	Strychnaceae	T-M	□	□	□
417	*Strychnos potatorum* L.f.	Chillanginja chettu	Strychnaceae	T-M	□	□	□
418	*Syzigium cumini* (L.) Skeels.	Neredu chettu	Myrtaceae	T-M	□	□	□
419	*Tabebuia argentea* (Bur. & Schum.) Britt.	Idhakula ganneru	Bignoniaceae	T	□	□	□
420	*Tamarindus indica* L.	Chinta	Caesalpiniaceae	T-M	□	□	□
421	*Tecoma stans* (L.) Kunth.	Pasupu ganneru	Bignoniaceae	T	□	□	□
422	*Tectona grandis* L.	Teku	Verbenaceae	T	□	□	□
423	*Terminalia arjuna* (Roxb.) Wt. & Arn.	Tellamaddhi	Combetaceae	T-M	□	□	□
424	*Terminalia bellirica* (Gaertn.) Roxb.	Thandra	Combetaceae	T-M	□	□	□
425	*Terminalia catappa* L.	Badham chettu	Combetaceae	T-M	□	□	□
426	*Terminalia chebula* Retz.	Nallakaraka	Combetaceae	T-M	□	□	□
427	*Wrightia tinctoria* (Roxb.) R. Br.	Reppala	Apocynaceae	T	□	□	□
428	*Ziziphus xylopyrus* (Retz.) Willd.	Gotti	Rhamnaceae	T	□	□	□

Abbreviations: C-climber, H-Herbs, S-Shrubs, T-Trees, M-Medicinal, A-Aquatic, SS-Sumer Season, MS-Monsoon Season, WS-Winter Season, □ – present, X - absent

Photographs are presented at Annex. - I.

3.3 Impact of Air Pollution on Crops

The impact of air pollution on crops was studied by analyzing the Air Pollution Tolerance Index (APTI) of each and individual crop plants with in the vicinity of and up to 25 Km radius of Dr.NTTPS. The detail study area wise and season wise is as follows.

The results of air pollution tolerance index in the crop plants around Dr.NTTPS (5 to 25 Km) during the summer season are as follows.

3.3.1 Summer Season - APTI within 5 Km Radius of Dr.NTTPS

Cotton and paddy were found within 5 Km radius of Dr. NTTPS. The APTI values of crops are presented at Table-6.

Table-6 : APTI Within 5 Km Radius of Dr.NTTPS (Summer season)

S.No	Village Name	Crops	AA	TCh	pH	RWC	APTI
1	Paiderupadu	Capsicum	0.16	28.5	5.80	72.00	7.95
		Cotton	4.50	23.96	5.70	66.50	8.05
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.2 Summer Season - APTI Within 5 - 10 Km Radius of Dr.NTTPS

Capsicum, maize, cotton, psidium (guava), citrus, sapota, paddy, sugar cane, mango and eucalyptus were found within 5-10 Km radius of Dr.NTTPS. The detail of APTI values and index is presented at Table-7.

Table-7: APTI Within 5-10 Km Radius of Dr.NTTPS (Summer season)

S.No	Village Name	Crops	AA	TCh	pH	RWC	APTI
1	Kavuluru	Capsicum	0.24	25.05	6.05	73.50	8.05
		Maize	0.08	17.92	6.80	76.30	7.80
2	Tallur	Cotton	0.56	12.15	7.35	53.60	6.50
		Capsicum	0.08	13.85	6.15	57.30	5.89
		Psidium	2.20	15.21	5.95	75.15	21.15
3	Jupudi	Maize	0.08	18.85	6.84	77.80	7.80
4	Borumpadu	Capsicum	0.08	13.50	6.30	56.65	5.82
		Maize	0.08	17.75	6.56	76.35	7.77
		Citrus	2.30	12.10	7.30	88.75	24.66
		Sapota	2.40	13.20	6.30	89.00	26.00

5	Condapadu	Capsicum	0.08	13.85	6.15	55.15	5.58
		Cotton	0.56	12.90	7.25	56.40	6.57
		Mango	4.20	13.95	4.80	89.10	45.30
6	Nelapadu	Cotton	0.56	13.20	6.86	57.10	6.81
7	Velagapudi	Capsicum	0.08	14.05	6.25	55.20	5.65
		Cotton	0.56	13.10	6.88	59.85	7.07
		Coccnia	0.08	8.52	7.55	35.70	3.70
8	Gaddemungu	Capsicum	0.16	13.85	5.76	73.00	7.73
		Cotton	0.56	12.80	5.93	68.60	7.85
9	Kattubadipalem	Capsicum	0.36	24.30	5.70	75.00	8.50
10	Ketanakonda	Paddy	0.08	14.48	4.23	77.75	7.80
		Sugar cane	0.08	17.91	6.46	80.70	8.25
11	Rayapudi	Cotton	0.56	11.93	7.30	54.20	6.45
		Maize	0.08	18.85	6.33	75.65	7.75
		Psidium	2.40	15.59	6.00	77.20	23.7
12	Mulapadu	Maize	0.08	7.30	6.92	78.40	7.90
		Paddy	0.08	12.73	4.29	79.85	8.05
		Mango	4.00	13.08	4.60	90.00	43.00
		Eucalyptus	2.60	13.90	6.40	89.35	28.45
13	Kottur tadepalli	Mango	4.10	13.66	4.75	88.50	43.90
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.3 Summer Season- APTI within 10 – 15 Km Radius of Dr.NTTPS

Cotton, bottle guard, sesamum, lady's finger, cucumber, brinjal, maize, capsicum, sorghum, citrus and mango were found within 10-15 Km radius of Dr.NTTPS. The detail of APTI values and index is presented at Table-8.

Table-8: APTI Within 10-15 Km Radius of Dr.NTTPS (Summer season)

S.No	Village Name	Crops	AA	TCh	pH	RWC	APTI
1	Donabandi	Cotton	0.48	19.75	6.25	69.05	8.10
2	Krishnayapalam	Bottle gourd	0.16	28.96	7.35	66.50	7.19
		Sesame	0.08	21.70	6.38	63.15	6.50
		Ladys finger	0.08	21.70	7.46	56.70	5.85
		Cucumber	0.08	20.70	7.55	64.65	6.32
		Brinjal	0.08	19.78	6.71	58.00	6.37
3	G.konduru	Maize	0.12	16.00	6.80	74.50	7.50
		Capsicum	0.16	19.60	5.85	72.00	7.65
		Cotton	0.56	20.90	5.87	70.60	8.30
4	Payikaraya	Sorghum	0.12	16.29	6.04	71.80	7.40
5	Gandamangu	Mango	4.20	13.18	4.80	90.90	45.55
		Citrus	2.10	14.00	7.30	86.70	22.65
6	Gondapadu	Citrus	2.30	13.50	7.20	86.45	24.60
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.4. Summer Season- APTI Within 15 – 20 Km Radius of Dr.NTTPS

Sugar cane, sapota, psidium (guava), maize, banna, capsicum, bottle guard, cotton, sorghum, mango and moringa (drum stick) were found within 15-20 Km radius of Dr.NTTPS. The details of APTI values and index are presented at Table-9.

Table-9: APTI Within 15-20 Km Radius of Dr.NTTPS (Summer season)

S.No	Village Name	Crops	AA	TCh	pH	RWC	APTI
1	Nunna	Sugar cane	0.24	17.70	6.15	82.60	8.77
		Sapota	2.45	13.70	6.40	89.25	26.75
		Psidium	2.20	15.75	5.95	76.50	21.50
2	Mangalagiri	Maize	0.12	16.01	6.79	73.00	7.54
		Banana	1.95	18.01	6.76	87.35	22.35
		Sapota	2.40	13.52	6.30	89.05	26.05
3	Kuragallu	Bottle guard	0.12	27.50	7.15	66.75	7.00
4	Narkulapadu	Capsicum	0.16	19.85	5.70	73.00	7.70
		Cotton	0.52	20.65	6.35	69.40	8.25
5	Endrayi	Capsicum	0.12	14.20	6.90	62.55	6.45
		Cotton	0.52	20.90	6.35	70.75	8.40
6	Penaka	Sorghum	0.12	16.29	7.04	71.80	7.40
		Banana	1.95	18.16	6.75	87.15	21.8
7	Peddamaduru	Mango	4.10	13.58	4.75	89.95	44.16
		Moringa-1	2.76	19.40	6.45	73.80	27.40

AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content

3.3.5 Summer Season - APTI Within 20 - 25 Km Radius of Dr.NTTPS

Sugar cane, mangro, capsicum, cotton, tobacco and banana were found within 20-25 Km radius of Dr.NTTPS. The details of APTI values and index are presented at Table-10.

Table-10: APTI Within 20-25 Km Radius of Dr.NTTPS (Summer season)

S.No	Village Name	Crops	AA	TCh	pH	RWC	APTI
1	Surampalli	Sugar cane	0.24	17.85	6.35	80.65	8.60
		Mango	4.15	13.08	4.85	90.40	44.90
2	Tadikonda	Capsicum	0.12	13.35	6.90	58.55	6.85
		Cotton	0.39	12.95	6.85	60.75	6.80
3	Bodavadu	Tobacco	0.08	13.05	6.12	53.00	54.50

4	Pedralapudi	Sugar cane	0.16	20.90	6.45	79.70	8.35
		Banana	1.85	17.85	6.80	87.75	20.75
5	Gundimeda	Banana	1.90	18.30	6.80	88.20	21.50
6	Perakalapadu	Capsicum	0.16	15.66	5.78	73.50	7.65
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.6 Monsoon Season - APTI within 5 Km Radius of Dr.NTTPS

Cotton and Paddy were found within 5 Km radius of Dr. NTTPS. The details of APTI values and index are presented at Table-11.

Table-11: APTI Within 0-5 Km Radius of Dr.NTTPS (Monsoon season)

S.No	Village Name	Crops	AA	TCh	pH	RWC	APTI
1	Paiderupadu	Cotton	0.52	23.96	5.70	72.65	8.75
		Paddy	0.08	12.83	4.85	79.25	8.05
2	Guntupalli	Paddy	0.16	15.77	5.55	71.65	7.45
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.7 Monsoon Season - APTI within 5 - 10 Km Radius of Dr.NTTPS

Cotton, coccinia, sugar cane, banana, cauliflower, capsicum, maize, guava, lady's finger, paddy, sapota, citrus, turmeric, momordica and mango were found within 5-10 Km radius of Dr. NTTPS. The details of APTI values and index are presented at Table-12.

Table-12: APTI Within 5-10 Km Radius of Dr.NTTPS (Monsoon season)

S. No	Village Name	Crops	AA	TCh	pH	RWC	APTI
1	Mandadum	Cotton	0.48	18.95	6.25	69.05	8.10
		Coccinia	0.48	19.28	6.25	69.05	8.10
		Sugarcane	1.20	17.20	6.30	83.85	11.12
		Banana	2.40	17.00	6.60	77.25	13.30
		Cauliflower	0.08	25.60	7.35	66.50	6.89
2	Tullur	Capsicum	0.24	23.30	6.15	68.70	7.50
		Cotton	0.56	12.15	7.35	53.60	6.40
		Maize	0.08	16.25	6.80	77.75	7.90
		Psidium	2.20	15.22	5.95	80.15	12.65
3	Harischandrapuram	Cotton	0.56	13.06	7.20	60.55	7.15
		Ladysfinger	0.08	21.70	7.45	56.70	5.85
		Capsicum	0.16	13.15	6.30	67.55	7.05
		Cauliflower	0.08	22.30	7.40	65.00	6.70
4	Donabandi	Cotton	0.48	19.75	6.25	69.05	8.14
		Paddy	0.16	13.95	5.30	76.35	7.92

5	Rayapudi	Paddy	0.20	15.20	5.55	77.20	8.10
		Cauliflower	0.08	25.60	7.35	66.50	6.85
		Cotton	0.56	20.90	5.85	70.60	8.50
		Guajava	2.60	15.50	6.25	88.65	14.35
		Sapota	3.40	13.20	6.30	87.85	15.55
		Donda	0.16	27.70	7.35	66.50	7.15
		Turmeric	1.30	17.55	6.40	82.80	11.35
		Banana	2.05	16.70	6.60	84.55	13.15
		Citrus	2.30	13.25	7.30	88.70	13.60
6	Ketanakonda	Paddy	0.16	13.95	5.30	76.25	7.90
		Cotton	0.56	12.15	7.20	65.85	7.45
		Turmeric	1.60	16.00	6.30	74.30	11.00
7	Mulapadu	Maize	0.08	16.80	6.35	77.15	7.90
		Sugarcane	1.50	17.95	6.50	85.85	12.20
		Cotton	0.48	16.90	6.55	62.70	7.35
		Paddy	0.08	13.95	5.20	75.40	7.65
8	Kailasapuram	Paddy	0.12	13.11	5.00	79.65	8.10
9	Jupudi	Paddy	0.16	12.95	5.05	77.35	8.01
		Cotton	0.56	13.10	6.85	59.85	7.07
		Turmeric	1.80	15.45	6.55	80.0	11.90
		Sugarcane	1.50	18.30	6.45	87.05	12.40
10	Kottikalapudi	Paddy	0.08	12.73	5.35	74.20	7.35
		Ladys finger	0.08	21.70	7.45	56.70	5.85
		Sugarcane	1.04	17.20	6.30	75.10	10.35
		Cotton	0.56	12.68	7.35	53.60	6.45
		Capsicum	0.12	13.00	6.30	66.65	6.85
		Maize	0.12	16.01	6.78	74.50	7.80
11	Kavuluru	Cotton	0.56	12.15	7.35	64.30	7.45
		Paddy	0.16	15.01	5.1	77.2	8.00
		Turmeric	0.84	15.05	6.75	73.3	9.20
12	Kottur Tadepalli	Sugar cane	1.50	16.70	6.4	82.8	11.73
		Cotton	0.64	15.15	6.5	68.85	8.23
		Momordica	0.16	20.75	7.3	70.85	7.45
13	Gollapudi	Paddy	0.24	15.35	5.55	75.7	8.00
		Mango	4.10	13.66	4.75	88.5	16.35
14	Kottikalapudi	Paddy	0.08	12.73	5.35	74.2	7.50
		Ladys finger	0.08	21.70	7.45	56.7	5.85
		Sugarcane	1.12	17.20	6.3	75.1	10.35
		Cotton	0.56	12.686	7.35	53.6	6.45
		Capsicum	0.12	13.00	6.3	66.65	6.85
		Maize	0.12	16.01	6.78	74.5	7.80
15	Gaddemangu	Cotton	0.56	12.80	5.78	70.7	8.10
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.8 Monsoon Season - APTI within 10 – 15 Km Radius of Dr.NTTPS

Drum stick, paddy, mango, lady's finger, cotton, banana, cauliflower, onion, bottle guard, sapota, sugar cane, ash guard and capsicum were found within 10-15 Km radius of Dr. NTTPS. The details of APTI values and index are presented at Table-13.

Table-13: APTI Within 10-15 Km Radius of Dr.NTTPS (Monsoon season)

S. No	Village Name	Crops	AA	TCh	pH	RWC	APTI
1	Vaikuntapuram	Drumstick	2.76	19.40	6.45	73.80	14.45
		Paddy	0.08	14.79	5.20	75.30	7.60
2	G.konduru	Paddy	0.24	15.35	5.80	74.75	7.96
		Mango	4.15	18.15	6.65	89.95	19.25
		Ladys finger	0.12	21.90	7.45	62.00	6.50
		Cotton	0.56	20.90	5.40	69.15	8.35
3	Pennumoka	Paddy	0.20	14.85	5.40	75.35	7.90
		Banana	2.10	16.95	6.50	79.70	12.85
		Cauliflower	0.08	25.60	7.35	66.50	6.85
		Onion	0.20	18.95	6.30	65.95	6.15
		Bottle guard	0.16	28.96	7.35	66.50	7.15
4	Krishnayapalem	Sapota	2.40	13.20	6.40	89.00	13.60
		Bottle guard	0.16	28.96	7.35	66.50	7.15
		Cotton	0.56	20.90	5.85	72.10	8.70
		Sugarcane	1.16	16.80	6.20	79.60	10.60
		Cotton	0.56	21.90	5.85	69.50	8.40
		Coccinia	0.16	29.00	7.35	66.50	7.15
		Paddy	0.24	15.35	5.55	75.15	8.00
5	Venkatapuram	Banana	2.00	16.85	6.45	79.85	12.60
		Bottle guard	0.16	28.96	7.35	66.50	7.15
		Ashguard	0.08	20.75	7.45	64.65	6.65
		Cotton	0.56	20.90	5.86	70.05	8.65
6	Paritala	Paddy	0.16	14.02	5.30	77.35	8.00
		Maize	0.12	16.01	6.80	74.50	7.65
		Cotton	0.56	20.90	5.87	70.60	8.55
		Capsicum	0.16	18.95	5.77	72.00	7.55
7	Kanchikacharla	Paddy	0.16	14.02	5.30	77.35	8.00
		Capsicum	0.76	13.93	6.40	75.00	9.00

AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content

3.3.9 Monsoon Season - APTI within 15 – 20 Km Radius of Dr.NTTPS

Paddy, mango, cotton, lady's finger, brinjal, banana, cajanus, capsicum, mango and sapota were found within 15-20 Km radius of Dr. NTTPS. The details of APTI values and index are presented at Table-14.

Table-14: APTI Within 15-20 Km Radius of Dr.NTTPS (Monsoon Season)							
S. No	**Village Name**	**Crops**	**AA**	**TCh**	**pH**	**RWC**	**APTI**
1	Koduru	Paddy	0.24	15.35	5..57	74.20	7.90
2	Adavinekula	Mango	4.00	13.08	4.95	90.75	16.25
		Cotton	0.56	12.90	7.25	60.75	7.20
		Lady's finger	0.08	20.75	7.55	64.65	6.65
3	Nidamanuru	Brinjal	0.16	19.48	6.65	58.00	6.15
		Ladys finger	0.08	20.95	6.85	59.30	6.00
		Banana	2.00	17.65	6.35	74.30	12.15
		Cotton	0.39	12.95	6.85	65.70	7.30
4	Perakalapadu	Cotton	0.52	18.35	6.35	66.95	7.95
		Cajanus	0.24	14.15	6.50	67.50	7.20
5	Amaravati	Ladys finger	0.12	8.76	6.45	65.75	6.95
		Capsicum	0.16	14.35	5.75	72.75	7.55
6	Duggaralapadu	Cotton	0.56	14.00	6.95	66.95	7.85
		Mango	4.95	17.70	6.05	90.85	20.80
		Paddy	0.76	15.01	5.35	73.90	8.91
7	Nunna	Sapota	2.70	18.10	6.75	88.70	15.50
		Mango	5.60	16.60	6.90	91.50	22.25
		Psidium	2.25	17.35	6.05	85.70	13.80
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.10 Monsoon Season - APTI Within 20 - 25 Km Radius of Dr.NTTPS

Paddy, cotton, capsicum, cucumber, banana, maize and cajanus were found within 20-25 Km radius of Dr. NTTPS. The details of APTI values and index are presented at Table-15.

Table-15: APTI Within 20-25 Km Radius of Dr.NTTPS (Monsoon Season)							
S. No	**Village Name**	**Crops**	**AA**	**TCh**	**pH**	**RWC**	**APTI**
1	Tadikonda	Paddy	0.24	16.05	5.55	74.65	7.95
		Cotton	0.56	13.25	7.25	66.25	7.75
		Capsicum	0.16	14.20	6.90	66.85	6.95
2	Kantem	Cotton	0.40	15.80	7.15	65.35	7.40
		Dosakaya	0.12	27.50	7.20	66.65	7.04
		Capsicum	0.16	14.20	7.00	64.25	6.70
		Banana	1.95	17.20	6.85	76.90	12.25
3	Mustabad	Paddy	0.20	15.05	5.55	77.20	8.10
		Cotton 1	0.56	12.15	7.20	65.85	7.65
4	Surampalli	Cotton	0.56	12.15	7.20	66.70	7.70
		Paddy	0.16	13.90	5.30	77.20	8.00
		Maize	0.08	16.80	6.35	77.15	7.85
		Cajanus	0.20	17.25	7.00	67.25	7.20
5	Ganpavaram	Moringa	2.76	19.40	6.45	73.80	14.45
6	Peddapuram	Cotton	0.48	18.95	6.25	69.05	8.10

7	G.madhavaram	Cotton	0.56	20.90	5.85	69.50	8.40
		Capsicum	0.16	19.60	5.85	72.00	7.60
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.11 Winter Season - APTI Within 5 Km Radius of Dr.NTTPS

Cotton and paddy were found within 5 Km radius of Dr. NTTPS. The details of APTI values are presented at Table-16.

Table 16: APTI Within 5 Km Radius of Dr.NTTPS (Winter Season)

S. No	Village Name	Crops	AA	TCh	pH	RWC	APTI
1	Paiderupadu	Cotton	0.64	23.96	5.85	73.65	9.25
		Paddy	0.08	12.83	4.85	82.75	8.35
2	Guntupalli	Paddy	0.16	15.77	5.55	77.05	8.00
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.12 Winter Season - APTI within 5 - 10 Km Radius of Dr.NTTPS

Cotton, paddy, turmeric, sugar cane, momordica, coccinia, bottle guard, maize, drum stick, guava, Sapota, lemon, onion, capsicum, lady's finger and banana were found within 5-10 Km radius of Dr. NTTPS. The details of APTI values and index are presented at Table-17.

Table-17: APTI within 5-10 Km Radius of Dr.NTTPS (Winter Season)

S.No	Village Names	Crops	AA	TCh	pH	RWC	APTI
1	Kavuluru	Cotton	0.56	23.80	5.76	68.05	8.40
		Paddy	0.12	15.24	5.10	77.15	7.65
		Turmeric	1.90	17.85	6.75	82.70	12.90
2	Jupudi	Cotton	0.56	13.10	6.85	59.85	7.20
		Paddy	0.16	12.95	5.05	77.35	8.01
		Turmeric	1.60	16.70	6.60	71.85	11.33
		Sugar Cane	2.25	17.90	6.45	82.05	13.25
3	Kottur Tadepalli	Sugar Cane	1.95	18.75	6.75	88.65	12.85
		Cotton	0.64	15.15	6.50	68.85	7.75
		Momordica	0.16	20.75	7.30	73.70	13.75
4	Koduru	Paddy	0.24	16.05	5.75	75.95	8.50
5	Mandadum	Coccinia	0.16	19.95	6.45	64.75	6.95
		Bottle Guard	0.16	27.25	7.40	66.50	7.15
		Maize	0.12	16.00	6.80	75.50	7.75
		Sugarcane	1.40	18.00	6.20	79.85	11.30
		Capsicum	0.16	18.95	5.75	72.65	7.60
		Drumstick	2.70	19.40	6.45	73.30	14.20
6	Velagapudi	Maize	0.16	17.85	6.45	74.30	7.79

		Cotton	0.56	12.15	7.35	64.3	7.45
		Curcuma longa	0.12	20.75	7.45	64.65	6.65
5	Peddamadduru	Cotton	0.56	20.90	5.40	69.15	8.35
		Maize	0.12	16.01	6.77	74.50	7.80
		Drum Stick	2.75	19.40	6.45	73.80	14.45
		Capsicum	0.12	13.00	6.30	66.65	6.85
6	Kuntamukala	Sugar Cane	1.50	18.30	6.45	87.05	12.40
		Cotton	0.56	12.68	7.35	68.60	6.45
		Curcuma longa	0.16	28.95	7.35	66.65	7.15
		Capsicum	0.16	20.80	5.75	72.50	7.65
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.15 Winter Season- APTI within 20 – 25 Km Radius of Dr.NTTPS:

Paddy, cotton, capsicum, cucumber, banana, maize and cajanus were found within 10-15 Km radius of Dr. NTTPS. The details of APTI values and index are presented at Table-20.

Table-20: APTI Within 20-25 Km Radius of Dr.NTTPS (Winter Season)

S.No	Village Names	Crops	AA	TCh	pH	RWC	APTI
1	Tadikonda	Paddy	0.24	16.05	5.55	74.65	7.95
		Cotton	0.56	13.25	7.25	66.25	7.75
		Capsicum	0.16	14.20	6.80	65.30	6.95
2	Ramapuram	Cotton	0.40	15.80	7.15	65.35	7.40
		Dosakaya	0.12	27.50	7.20	66.65	7.04
		Capsicum	0.16	14.20	7.00	64.25	6.70
		Banana	1.95	17.20	6.85	76.90	12.25
3	Mustabad	Paddy	0.20	15.05	5.55	77.20	8.10
		Cotton	0.56	12.15	7.20	65.90	7.65
4	Surampalli	Cotton	0.56	12.15	7.20	66.70	7.70
		Paddy	0.16	13.90	5.30	77.20	8.00
		Maize	0.08	16.80	6.35	77.15	7.85
		Cajanus	0.20	17.25	7.00	67.25	7.20
7	Mogolluru	Cotton	0.56	90.90	5.85	69.70	8.40
		Capsicum	0.16	19.60	5.85	72.00	7.60
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.4 Soil Status

To explore the data on the quality of soil we approached various institutes/Agriculture University/ Farmer's Tainig Centre, Vijayawada, Agriculture Department, Ibrahimpatnam, Soil Testing Laboratory, Golapudi / published literatures and internet. The data on Soil type, pH, Electrical Conductivity, Organic Carbon, Available Nitrogen, Available Phosphate, Available Potassium, Nigrogen, Phosphorous, Potassium, Urea, Single Super Phosphate, Di-

ammonium phosphate, Muriate of Potash, Ammonium Sulphate of soil was available in **http://www.apagrisnet.gov.in/ mandalprintreport.jsp.** Soil data for the year 2010-11 and 2011-12 are at Annexure-II & III.

Paddy is the principal crop both in Krishna and Guntur Districts. Other than paddy, Cotton, Maize, Jowar, Capsicum, Onion, Turmeric, Sugarcane, Groundnut are also being cultivated.

Soil data from secondary source were collected for Ibrahimpatnam mandal and the analysis based on the standard soil classification of Agriculture Department (Table-23) revealed that pH of soil ranged between 7.5 and 8.83 with an average of 8.09 in the year 2010-11. Similarly pH ranged from 5.8 to 8.54 with an average of 7.63 in the year 2011-12. It indicated that the pH was moderately alkaline to slightly alkaline. Electrical Conductivity

(EC) is reported to be ranged between 0.15 and 3.35 in the year 2010-11 and the same ranged from 0.06 to 7.43 in the year 2011-12. It indicates that EC is in average condition and not harmful. The average Nitrogen levels were observed to fall under the category good in the year 2010-11 to better in the year 2011-12. In the case of Phosphorus the average level was also found to fall under the category of medium in both years whereas the average Potassium level fall under the category of medium in the year 1010-11 and less in the year 2011-12.

Table No-23: Standard Soil Classification

Sl. No	Soil Tests	Classification
1	pH	<4.5 extremely acidic 4.5-5.00 very strongly acidic 5.01-5.50 strongly acidic 5.51-6.00 moderately acidic 6.01-6.50 Slighly acidic 6.51-7.30 neutral 7.31-7.80 slightly alkaline 7.81-8.50 moderately alkaline 8.51-9.00 strongly alkaline >9.01 strongly alkaline
2	Salinity Electrical Conductivity (1 mhos/cm) (1 mho/cm = 640 ppm)	Upto 100 average 101-200 harmful to germination 201-300 harmful to crop
3	Organic Carbon	Upto 0.2: very less 0.21-0.4 : less 0.41-0.5 : medium 0.51-0.8 : on an average sufficient

		Guava	2.80	17.35	6.05	85.70	15.10
		Lemon	2.30	13.25	7.25	88.70	13.6
		Sapota	2.80	14.20	6.45	87.15	14.45
		Cotton	0.56	20.90	5.40	69.50	8.35
7	Donabandi	Onion	0.24	18.95	6.10	64.65	7.00
		Capsicum	0.16	20.80	5.75	72.50	7.65
		Maize	0.126	16.01	6.80	74.50	7.65
		Cotton	0.56	20.90	5.40	72.05	8.60
		Lemon	2.50	13.40	7.15	87.20	13.80
		Ladys Finger	0.08	22.00	7.25	58.55	5.95
8	Gollapudi	Maize	0.56	18.85	6.45	77.40	9.10
		Sapota	2.80	15.05	6.45	88.60	14.80
		Mango	4.30	13.67	5.05	88.90	17.25
9	Ketanakonda	Paddy	0.16	15.80	5.30	79.00	8.15
		Cotton	0.24	18.15	5.60	70.35	7.60
		Turmeric	1.90	16.10	6.45	80.00	12.25
10	Kaleswarapuram	Paddy	0.16	14.92	5.10	77.45	8.08
		Maize	0.12	16.01	6.80	74.50	7.65
11	Satyanarayana puram	Maize	0.16	19.85	6.35	74.50	7.86
		Cotton	0.56	20.90	5.45	69.90	8.50
12	Mulapadu	Maize	0.12	17.03	6.33	77.00	7.90
		Sugarcane	1.90	18.00	6.45	85.60	13.15
		Paddy	0.16	15.10	5.10	77.25	8.00
13	Kottikalapudi	Paddy	0.16	16.55	5.43	76.00	7.90
		Sugarcane	2.10	17.35	6.35	84.60	13.40
		Capsicum	0.16	18.95	5.77	74.50	7.85
14	Rayapudi	Paddy	0.12	15.10	5.35	78.20	8.03
		Cotton	0.44	20.20	5.85	70.25	8.15
		Guajava	2.30	23.45	6.25	82.20	15.00
		Sapota	3.25	22.85	6.95	79.20	19.00
		Banana	2.30	19.95	7.25	76.50	14.00
		Turmeric	1.80	15.45	6.75	70.83	11.90
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.13 Winter Season- APTI within 10 - 15 Km Radius of Dr.NTTPS:

Sorghum, onion, maize, drum stick, paddy, capsicum, cotton, sugar cane, turmeric, menthe, spinach, sorrel, bottle guard, sesamum, cucumber, brinjal and lady's finger were found within 10-15 Km radius of Dr. NTTPS. The details of APTI values and index are presented at Table-18.

Table-18: APTI within 10-15 Km Radius of Dr.NTTPS (Winter Season)

S.No	Village Names	Crops	AA	TCh	pH	RWC	APTI
1	Payikaraya	Sorghum	0.12	16.29	7.04	71.80	7.40
2	Ponumaka	Onion	0.56	18.95	6.30	59.45	7.30

		Maize	0.08	18.85	6.33	75.65	7.75
		Drum Stick	2.60	23.40	6.40	78.55	15.55
		Paddy	0.16	17.28	5.10	75.65	8.20
3	Tulluru	Capsicum	0.246	18.45	5.50	75.40	8.10
		Maize	0.56	23.75	6.75	77.80	9.45
		Cotton	0.56	21.10	5.25	69.55	8.35
4	Vikuntapurum	Cotton	0.56	19.40	5.45	70.90	8.40
		Maize	0.08	17.92	6.80	76.30	7.80
		Capsicum	0.16	18.95	5.75	73.50	7.70
		Drum Stick	2.50	19.15	6.80	80.30	14.45
5	Kottapet	Sugar Cane	1.70	17.80	6.30	80.70	12.13
		Drum Stick	1.90	23.35	6.45	77.35	13.35
6	Kunchanapelli	Turmaric	1.90	15.45	6.45	77.16	11.85
		Mentha	0.44	24.15	6.35	56.85	6.95
		Spinach	0.90	19.25	6.95	61.00	7.40
		Sorrel	1.60	15.35	2.83	50.25	7.65
7	Damuluru	Cotton	0.48	19.75	6.25	69.05	8.10
8	G.Konduru	Maize	0.12	16.01	6.80	74.50	8.00
		Capsicum	0.16	19.60	5.85	72.00	9.65
		Cotton	0.56	20.90	5.87	70.60	8.30
9	Krishnayapalam	Bottle Gourd	0.16	29.00	7.35	66.50	8.30
		Sesame	0.08	21.70	6.38	63.15	6.50
		Ladys Finger	0.08	21.70	7.46	56.70	5.85
		Cucumber	0.08	20.75	7.55	64.65	7.20
		Brinjal	0.08	19.78	6.71	58.00	6.37
AA-Ascrorbic Acid, TCh-Total Chlorophyll, RWC-Relative Water Content							

3.3.14 Winter Season- APTI within 15- 20 Km Radius of Dr.NTTPS:

Cotton, capsicum, cajanus, lady's finger, luffa, maize, capsicum, cucumber, drum stick, sugar cane and termeric were found within 15-20 Km radius of Dr. NTTPS. The details of APTI values and index are presented at Table-19.

Table-19: APTI within 15-20 Km Range of Dr.NTTPS (Winter Season)

S.No	Village Names	Crops	AA	TCh	pH	RWC	APTI
1	Kanchikacherla	Cotton	0.56	21.05	5.45	71.30	8.60
		Capsicum	0.24	18.70	5.75	77.10	8.65
2	Jagannathapuram	Capsicum	0.16	18.95	5.75	74.50	7.85
		Cotton	0.56	23.80	5.70	68.05	8.40
		Cajanus cajan	0.90	23.70	5.80	66.55	9.25
3	Nirukonda	Ladys Finger	0.12	22.00	7.05	58.55	6.15
		Lufa	0.32	26.10	7.25	67.15	7.75
		Maize	0.56	18.85	6.45	77.40	9.10
4	Kuragallu	Capsicum	0.16	18.95	5.75	72.00	7.60

		0.81-1.0 : sufficient > 1.0 : more than sufficient
4	Nitrogen (kg/ha)	Upto 50 very less 51-100 less 101-150 good 151-300 better Above 300 sufficient
5	Phosphorus (kg/ha)	Upto 15 very less 16-30 less 31-50 medium 51-65 on an average sufficient 66-80 sufficient Above 80 more than sufficient
6	Potash (kg/ha)	0-120 very less 120-180 less 181-240 medium 241-300 average 301-360 better Above 36o more than sufficient

Source: Agriculture Department

Although the nutrients content are reported to be less in case of Potassium and better in case Nitrogen, the soils are reported to be generally good for cultivation and agriculture use.

3.5 Air Quality and Wind Direction:

The industry uses coal boiler with sub-bituminous coal as fuel. The operating load of the boiler is at maximum during the monitoring period. SPM level is below the norm as prescribed by APPCB (115mg/Nm^3) at Unit -7 and marginal high at Unit -1 whereas the same of remaining plant like unit-2,3,4,5 and 6 were observed to be higher than the normal (Table-21).

Table-21: Stack Monitoring Data (2011)

Sl.No	Parameters	Standard	Unit-1	Unit-2	Unit-3	Unit-4	Unit-5	Unit-6	Unit-7
1	SPM	115 mg/Nm^3	117	294	238	125	140	210	64
2	SO_2		896	1238	880	1046	1123	864	959
3	NO_x		220	141	170	253	262	319	306

Source: EPTRI, 2011

The major air pollutants envisaged from the project are SPM, SO_2 and NO_x. The effect of particulate matter on vegetation is in the form of incrustation, plugging of stomata, loss of chlorophyll and reduction of photosynthesis process. Deposition of dust particle on foliar surfaces leads to reduction in plant growth and productivity. At high concentration of SO_2 inter-venial necrosis and skeletonized leaves are formed. The dead tissue turns black. The oxides of Nitrogen like N_2O, NO, and NO_2 are collectively referred as NO_x are formed due to high temperature reactions in presence of air. NO_x is absorbed by plants through stomata react with cell wall and forms HNO_2 and HNO_3 which is the cause of toxicity. The phytotoxic effect of NO_x is expressed as chlorotic and necrotic symptoms on the leaf lamina, accompanied with reduction in growth and production.

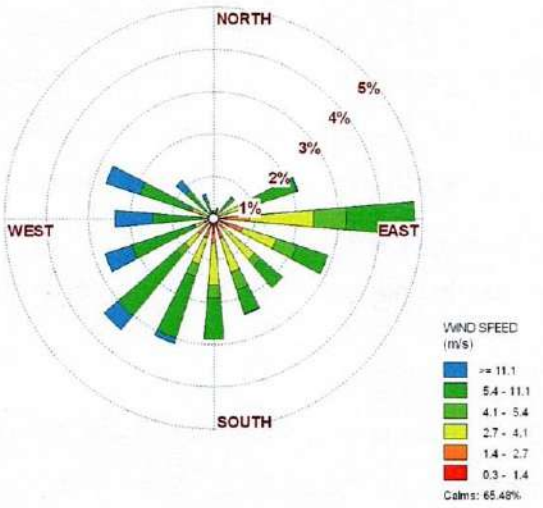
Table-22: Ambient Air Quality Data (range of values are in µg/m^3) on 24 hour basis

Sl.No	Parameters	PM_{10}	$PM_{2.5}$	SO_2	NO_x	Remarks
	Standard*	**100**	**60**	**80**	**80**	
1	Power house area	55.0 - 90.0	31.0 - 44.0	22.8 - 29.1	25.-5 – 40.5	Below Standard
2	Security colony	48.0 – 87.0	31.0 – 41.0	17.8 – 13.3	22.6 – 28.9	Below Standard
3	B-colony station	35.0 – 70.0	30.0 – 41.0	15.8 – 19.4	25.7 – 32.7	Below Standard
4	Rayanpadu village	46.0 – 88.0	33.0 – 45.0	15.0 – 20.4	26.8 – 32.4	Below Standard
5	Hill top Guest House	37.0 – 60.0	31.0 – 37.0	7.8 – 16.6	16.4 – 19.4	Below Standard
6	Ferry village	34.0 - 80.0	30.0 – 39.0	12.8 – 16.4	17.9 – 21.6	Below Standard

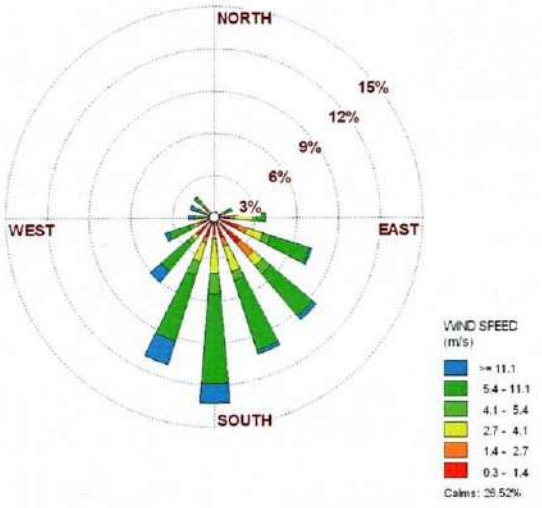
* NAAQ standards as prescribed for Industrial, Residential, Rural, and other areas, MoEF, 2009

Source: EPTRI, 2011

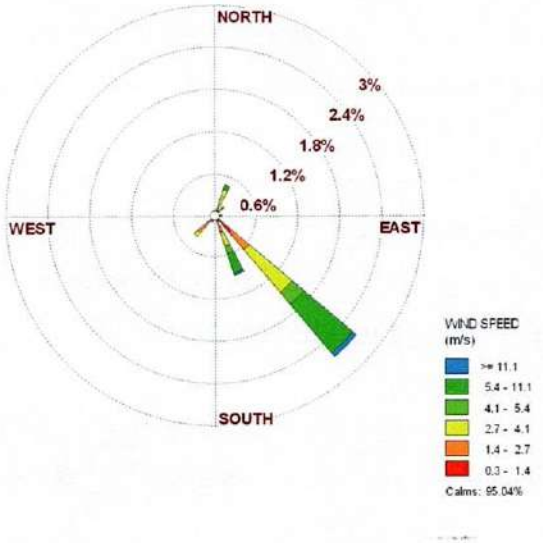
The injury threshold limit of SO_2 on vegetation is 785µg/m^3 when vegatgion is exposed for the duration of 8 hours. Similarly, the injury threshold limit of NO_x on vegation is 4700 µg/m^3 when vegetation is exposed for the duration of 4 hours. It is observed that the incremental concentrations of both SO_2 and NO_x are far less than the injury threshold limits. Hence the impact of air emissions from the power plant on vegetation is negligible (Table-22).



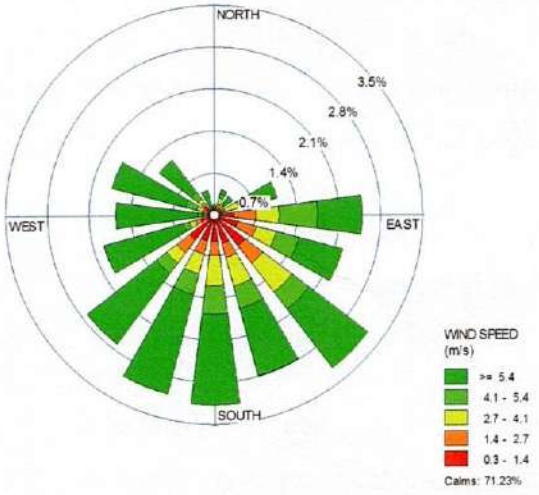
Windrose for March – June 2011



Windrose for July – October 2011



Windrose for November 2011-February 2012



Windrose for March 2011 – February 2012

Fig-1: Wind rose parttern of Summer, Monsoon and Winter seasons and complete year

4. Discussion

Due to urbanization and industrialization the cultivation in the villages around 5 Km range is reduced. In the close vicinity of the Dr.NTTPS (0-5 Km) in summer season from Paiderupadu village, capsicum and cotton were collected. The APTI values for these crops were in between 7.70 and 8.40. Cotton and paddy were collected from Paiderupadu and Guntupalli villages in monsoon season. The APTI values for these crops varied from 7.3 to 8.1. During winter season the APTI values for the same crops (paddy and cotton) were in between 7 and 10.

Villages with in 5-10 Km radius of Dr. NTTPS are Borumpadu, Condapadu, Gaddemangu, Gollapudi, Harichandrapuram, Jupudi, Kaleswarapuram, Kattubadipalem Kavuluru, Ketanakonda, Kondalapadu, Kottikalapudi, Kotturtadepalli, Mandadum, Mulapadu, Nelapadu, Rayapudi, Tallur, Velgapudi.

The crops samples collected during **summer season** were capsicum, maize, cotton, guava, citrus, sapota, paddy, sugar cane and mangro. The minimum and maximum values of APTI ranged between 3.50 and 46.80.

The crops during **monsoon season** were cotton, coccinia, sugar cane, banana, cauliflower, capsicum, maize, guava, lady's finger, paddy, sapota, citrus, turmeric, momordica and mango. The minimum and maximum values of APTI varied between 5.80 and 16.40.

The crops during **winter season** were capsicum, maize, cotton, sugar cane, turmeric, banana psidium, sapota, mango and paddy. The minimum and maximum values of APTI were recorded between 6 and 18.8.

Crops samples were collected from the following villages with in 10-15 Km radius of Dr. NTTPS are Damuluru, Donabandi, Gandamangu, G.konduru, Gondapadu, Kanchikacharla, Kottapet, Krishnayapalem, Payikiraya, Paritala, Pennumoka, Vaikuntapuram, Venkatapuram and Tulluru.

The crops during **summer season** were cotton, bottle guard, sesamum, lady's finger, cucumber, brinjal, maize, capsicum, sorghum, citrus and mango. The minimum and maximum values of APTI varied between 5.80 and 46.80.

The crops during **monsoon season** were drum stick, paddy, mango, lady's finger, cotton, banana, cauliflower, onion, bottle guard, sapota, sugar cane, ash guard and capsicum. The minimum and maximum values of APTI were between 5.80 and 20.00.

The crops during **winter season** were sorghum, onion, maize, drum stick, paddy, capsicum, cotton, sugar cane, turmeric, menthe, spinach, sorrel, bottle guard, sesamum, cucumber, brinjal and lady's finger. The minimum and maximum values of APTI showed between 7.1 and 16.2.

Crops samples collected from the villages with in 15-20 Km radius of Dr. NTTPS are Adavinekula, Amaravati, Duggaralapadu, Endrayi, Jagannathapuram, Kanchikacherla, Koduru, Kuntakula, Kuragalu, Mangalgiri, Narkulapadu, Nidamanuru, Nirukonda, Nunna, Peddamadduru, Penaka, Perakalapadu.

The crops during **summer season** were sugar cane, sapota, psidium (guava), maize, banna, capsicum, bottle guard, cotton, sorghum, mango and drum stick. The minimum and maximum values of APTI showed between 6.1 and 45.16.

The crops during **monsoon season** were paddy, mango, cotton, lady's finger, brinjal, banana, cajanus, capsicum, mango and Sapota. The minimum and maximum values of APTI ranged between 6.00 and 21.00.

The crops during **winter season** were cotton, capsicum, cajanus, lady's finger, luffa, maize, capsicum, cucumber, drum stick, sugar cane and turmeric. The minimum and maximum values of APTI varied between 6.1 and 14.60.

The villages with in 20-25 Km radius of Dr. NTTPS are Bodavadu, Ganpavaram, Cherumadhavaram, Kantem, Mogolluru, Mustabad, Peddapuram, Pedralapudi, Surampalli and Tadikonda.

The crops samples collected during **summer season** were sugar cane, mango, capsicum, cotton, tobacco and banana. The minimum and maximum values of APTI were showed between 5.4 and 45.40.

The crops samples collected during **monsoon season** were paddy, cotton, capsicum, cucumber, banana, maize and cajanus. The minimum and maximum values of APTI ranged between 6.6 and 14.6.

The crops samples collected during **winter season** were Paddy, cotton, capsicum, cucumber, banana, maize and cajanus. The minimum and maximum values of APTI were varied between 6.6 and 12.5.

Control site is selected from the villages located within 20-25 km radius of Dr.NTTPS in opposite to the wind direction i.e. from which side wind is blowing. As per the windrose pattern for the month of June (sampling period for summer season) the wind mainly blowing west to east side. Hence, Pedarlapudi and Bodavadu are the control sites for summer season. Similarly Ganpavaram and Surampalli are the Control sites for the monsoon season (Sampling month-September) as the main wind direction is from south east and east to west and west north side and Ramapuram is the Control site for the winter season (sampling month-January) as the main wind direction is from north west to south east side.

Summer season

Higher APTI value compare to the control site is an indicator of tolerance and no impact of air pollution on the respective species. Considering a place which is 20-25 km away from Dr.NTTPS where types of crops being cultivated may not resemble completely with other sites, hence crops of control site that are being cultivated in other sites are compared to draw a logical conclusion on impact of air pollution for all crops.

Sugarcane and capsicum among crops and mango from plantation were collected from Surampalli as control site as per the wind direction in summer season and compared with other areas to detect air pollution impact. The average ATPI value in 5 km radius for sugarcane was 8.6, capsicum 7.65 and mango 44.9. When compared to APTI in case of sugarcane in 5 km radius at Paiderupadu, there is a net increase of 3.92% which indicates no impact of air pollution on sugarcane ultimately no impact on crops.

The APTI value of mango within 5-10 km radius is higher than APTI of control site at Condapadu whereas it is slightly less (≈2%) at Mulapadu and Kotturtadepalli. This difference may be due to any physiological stress like dryness of the area etc. In case of sugarcane the APTI difference is only 0.35% which is neglible and hence no impact on sugarcane also. In the case of capsicum the APTI value is recorded higher at Kavuluru (8.05), Gadamangu (7.73), Kattubadipalem (7.85) whereas the same is lower at Tallur (5.89), Borampadu (5.82), Velagapudi (5.58) and Condapadu (5.65).

Within 10-15 km radius only one place G.Konduru capsicum (7.65) was cultivated and the value is equal value of control indicating no impact of air pollution on crops.

Sugarcane showed higher APTI value at Nunna (8.77), Narkulapadu (7.70) than the control site indicating no impact of air pollution on crop within 15-20 km radius.

In comparison to the APTI of control site, capsicum at Tadikonda exhibits slightly higher value within 25 km radius of Dr.NTTPS indicating no impact of air pollution on crops. Whereas ATPI of sugarcane at Pedralapudi showed slightly less (≈0.25) than the APTI value of control site, could be due to some climatic conditions in summer season.

Monsoon season

In this season the village Surampalli which is located in the eastern side of Dr.NTTPS is considered as control site in view of windrose pattern for the sampling month around Dr.NTTPS. The APTI recorded for the crops are cotton (7.70), rice (8.00), Maize (7.85) and cajanus (7.20). The APTI value for cotton (8.75) and rice (8.05) recorded at Paiderupadu within 5 km radius has showed higher than that of control site indicating no pollution impact on crops whereas ATPI of rice at Guntupally is slightly lower (0.55) may be due to some physiological stress. In case of cotton the APTI is higher at Mandadum (8.10), Donabandi (8.14), Rayapudi (8.50), Kottur Tadepalli (8.23) and Gaddamangu ((8.10) whereas APTI is lower at Tallur (6.40), Ketanakonda (7.45), Mulapadu (7.35) and Jupudi (7.07) and Kottikalapudi (6.45). This difference found in some villages may not be due to air pollution but due to some climatic or physiological stress. In case of maize showed higher APTI value at Tallur (7.90) and Mulapadu (7.90) indicating no impact of air pollution on maize. Rice showed higher APTI value than that of control site at Rayapudi (8.10), Kailasupram (8.01), Kavulur (8.00), Gollapudi (8.00) whereas lower at Donabandi (7.92), Ketanakonda (7.90),

Mulapadu (7.35), Kottikalapudi (7.50). The difference ranged between 0.10 and 0.65 is very low might be due to any physiological or climatic conditions.

Within 10-15 km radius cotton and rice have shown equal to higher APTI value in comparison to control site in all villages except one place Vaikunthapuram where the rice has shown slightly less APTI value (0.04 to 0.40) could be due to other physiological stress or soil status.

The APTI of cotton is higher or equal to the APTI of control site in almost all sites within 15-10 km radius except at Adavinekula (7.20) and Nidamanuru (7.30) may be due to physiological stress. In case of rice only at Koduru showed slightly lower value (0.10) whereas in the place within 15-20 km radius has shown either higher or equal to APTI value indicates no impact of air pollution on crops.

Within 20-25 km radius of DrNTTPS no crop has shown lower APTI value in comparison to control site except rice at Tadikond. The variation in very less i.e. 0.05 may be due to some internal stress.

Winter season

In winter season Ramapuram which is located towards northern side beween 20-25 km radius is considered as control site as per the wind direction during the sample period exhibited by windrose pattern. Four different crops were cultivated in the control site and APTI was estimated. The ATPI values for the crops are 7.40, 6.70 and 12.25 for cotton, capsicum and banana respectively.

The APTI for cotton (9.25) is higher than the APTI of control site within 5 km radius indicates no impact of air pollution on cotton and also on other crops.

APTI value of cotton, capsicum and banana crops within 5-10 km radius were compared with APTI of control site and found that all crops are showed higher value except in case of cotton at Jupudi (7.20). The difference is only 0.20 may not be due to air pollution but some climatic or physiological stress.

Within 10-15 km radius of Dr.NTTPS the APTI value of cotton as well as capsicum cultivated in 4 different villages has higher value of ATPI indicates clearly that there is no air pollution impact on crops.

Similarly APTI values of cotton and capsicum cultivated in 6 different villages within 15-20 km radius of DrNTTPS showed higher valued in comparison with APTI values of control sites except at Kuntamukala for cotton (6.45) and the difference is only 0.95. Also within 20-25 km radius all other 4 villages except the control site have shown higher APTI values than that of control site for cotton and capsicum is clearly indicating that there in no air pollution impact on crops.

The pH of soil in the year 2011 is higher than that of the year 2012 in major places. Although the recorded pH is ranged from slighly alkaline to moderatly alkaline except Ibrahimpatnam, Guntupali and Chilikuru village it is slighly acidic.

5. Conclusion

Major part of the study area (within 25 Km radius) are covered by single crop and then double crops and then agriculture plantation followed by scrub forest, as 27.06 % , 21.28%, 19.0% and 10.78% respectively as per land use and land cover classification througth RS and GIS. The least is poultry farm which occupied 0.01%.

The flora (number of plants species) with in 10 Km, 10-20 Km and 20-25 Km radius were 307, 375 and 428 respectively. Number of species found highest in monsoon season compared to other season due to increase in number of herbs.

The study area did not record the presence of any **critically threatened species**. The records of BSI and Forest department also did not indicate presence of any **endemic or endangered species** in this area.

By obeserving critically the physical condition of crops, it is noticed that there is no wethering of leaves / leaf blotch / blight/ scorch/ canker/ chlorosis/ necrosis/ damping-off/ abnormality in the plants etc.

The comparative study of APTI between control site and other sampling sites within 0-25 km radius of DrNTTPS revealed that there is no obvious impact of air pollution from Dr.NTTPS on the crops in the vicinity irrespective of season and crop types.

There has not been any kind of impact on the yield of crop as mentioned by Agriculture Officer, Ibrahimpatnam. From 0-25 km radius of Dr.NTTPS ephimeral crops and perenial crops irrespective of place (distance from Dr.NTTPS) showed the same trend of APTI value, hence there has no adverse affect on crops due to air pollution from Dr.NTTPS.

Although the nutrients content are found to be less in case of Potassium and better in case Nitrogen, the soils are reported to be generally good for cultivation and agriculture use.

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Annexure

Annex.-I

Photographs taken during field survey in and around Dr.NTTPS, Ibrahimpatnam



Director (Programmes) is Explaining procedure of the project to the CE of Dr.NTTPS



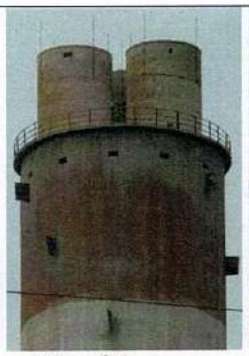
Statue of Dr. Narla Tata Rao Garu



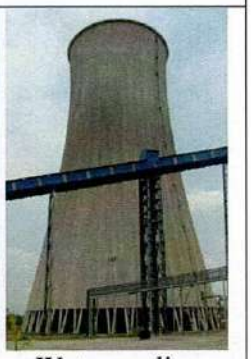
Chimney with cooling system



Two Chimneys composed of three units each of Dr.NTTPS, Ibrahimpatnam



Tip of the chimney (3 units)



Water cooling system



Mango Garden



Moringa oleifera



Musa paradisiaca



Manilkara zapota



Solanum melongena



Capsicum frutescens



Coccinia grandis



Gossypium herbacium



Curcuma longa



Lycopersicon esculantum



Oriza sativa



Zea mays



Vigna mungo



Vigna radiata



Sorghum vurgare



Saccarum officinarum



Cajanus cajan



Allium cepa



Abelmoschus esculentus



Brassica oleracea var. *botrytis*



View of Dry Deciduous Forest in 10 km radius of Dr. NTTPS, Ibrahimpatnam



Borassus flabellifer



Strychnos nux-vomica



Sansevieria roxburghiana



Cassytha filiformis



Helictres isora



Leucas aspera



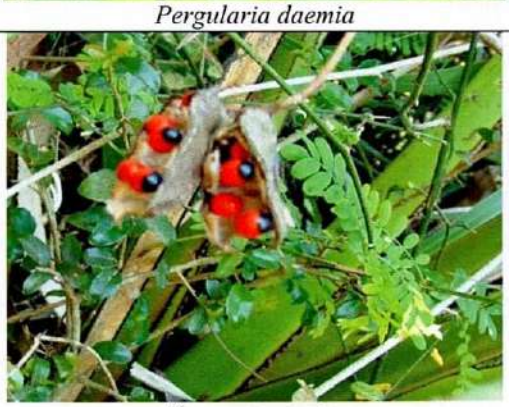
Ziziphus oenoplea



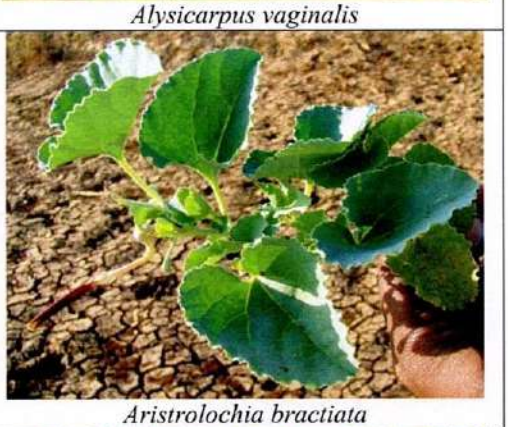
Pergularia daemia



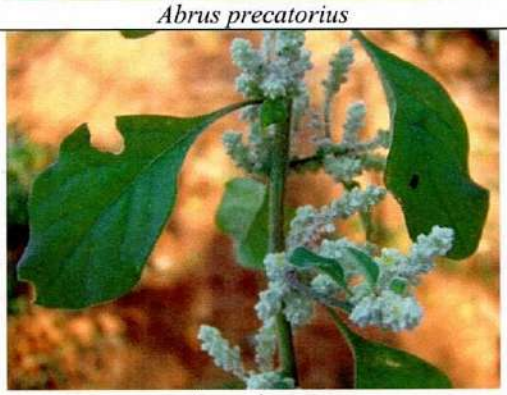
Alysicarpus vaginalis



Abrus precatorius



Aristrolochia bractiata



Aerva lanata



Tylophora indica



Tarrena asiatica



Catunaregam spinosa

Annex.-II

Soil data of Ibrahimpatanam Mandal from Soil Testing Laboratory 2010-11																		
Page	Village name	Date	Soil type	pH	EC	OC (%)	Kg/Acre											
							AN	AP	AK	Crop	N	P	K	URE	SSP	DAP	MOP	AS
1	Damuluru	6/8/2010	cl	8.01	1.09	L	100	66	269	Paddy	83	11	11	2.5	180	69	0	18
2	Damuluru	6/8/2010	cl	8.28	0.46	L	100	66	233	Paddy	83	11	11	2.5	180	69	0	18
3	Damuluru	6/8/2010	cl	8.24	0.47	L	100	66	202	Paddy	83	11	11	2.5	180	69	0	18
4	Damuluru	6/8/2010	cl	8.18	0.48	L	100	66	237	Paddy	83	11	11	2.5	180	69	0	18
5	Damuluru	6/8/2010	cl	8.16	0.26	L	100	66	96	Paddy	83	11	16	2.5	180	69	0	27
6	Damuluru	6/8/2010	cl	8.16	0.26	L	100	66	96	Paddy	83	11	16	2.5	180	69	0	27
7	Damuluru	6/8/2010	cl	8.06	0.30	L	100	66	81	Paddy	83	11	16	2.5	180	69	0	27
8	Elaprolu	6/8/2010	cl	8.07	0.23	L	100	66	72	Paddy	83	11	16	2.5	180	69	0	27
9	Elaprolu	6/8/2010	cl	7.91	0.40	L	100	66	72	Paddy	83	11	16	2.5	180	69	0	27
10	Elaprolu	6/8/2010	cl	7.91	0.40	L	100	66	72	Paddy	83	11	11	2.5	180	69	0	18
11	Elaprolu	6/8/2010	cl	8.00	0.26	L	100	66	81	Paddy	83	11	16	2.5	180	69	0	27
12	Elaprolu	6/8/2010	cl	8.38	0.21	L	100	66	121	Paddy	83	11	16	2.5	180	69	0	27
13	Elaprolu	6/8/2010	cl	8.20	0.27	L	100	66	105	Paddy	83	11	16	2.5	180	69	0	27
14	Elaprolu	6/8/2010	cl	8.13	0.39	L	100	66	94	Paddy	83	11	16	2.5	180	69	0	27
15	Elaprolu	6/8/2010	cl	7.85	0.43	L	100	66	78	Paddy	83	11	16	2.5	180	69	0	27
16	Elaprolu	6/8/2010	cl	8.20	0.23	L	100	66	103	Paddy	83	11	16	2.5	180	69	0	27
17	Elaprolu	6/8/2010	cl	8.17	0.26	L	100	66	94	Paddy	83	11	16	2.5	180	69	0	27
18	Elaprolu	6/8/2010	cl	8.23	0.24	L	100	66	81	Paddy	83	11	16	2.5	180	69	0	27
19	Elaprolu	6/8/2010	cl	8.23	0.28	L	100	66	94	Paddy	83	11	16	2.5	180	69	0	27
20	Elaprolu	6/8/2010	cl	8.20	0.36	L	100	66	121	Paddy	83	11	16	2.5	180	69	0	27
21	Elaprolu	6/8/2010	cl	8.23	0.27	L	100	66	242	Paddy	83	11	11	2.5	180	69	0	18
22	Elaprolu	6/8/2010	cl	8.21	0.27	L	100	66	188	Paddy	83	11	11	2.5	180	69	0	18
23	Elaprolu	6/8/2010	cl	8.21	0.36	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18

24	Elaprolu	6/8/2010	cl	8.07	0.39	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
25	Elaprolu	6/8/2010	cl	8.14	0.31	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
26	Elaprolu	6/8/2010	cl	7.92	0.45	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
27	Elaprolu	6/8/2010	cl	8.26	0.28	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
28	Elaprolu	6/8/2010	cl	8.26	0.30	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
29	Elaprolu	6/8/2010	cl	8.18	0.35	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
30	Elaprolu	6/8/2010	cl	8.19	0.30	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
31	Elaprolu	6/8/2010	cl	8.11	0.33	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
32	Elaprolu	6/8/2010	cl	8.07	0.29	L	100	66	228	Paddy	83	11	11	2.5	180	69	0	18
33	Elaprolu	6/8/2010	cl	8.33	0.29	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
34	Elaprolu	6/8/2010	cl	8.39	0.24	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
35	Elaprolu	6/8/2010	cl	8.40	0.25	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
36	Elaprolu	6/8/2010	cl	8.26	0.32	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
37	Elaprolu	6/8/2010	cl	8.20	0.27	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
38	Damuluru	6/8/2010	cl	8.28	0.30	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
39	Damuluru	6/8/2010	cl	8.30	0.29	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
40	Damuluru	6/8/2010	cl	8.25	0.28	L	100	66	179	Paddy	83	11	11	2.5	180	69	0	18
41	Damuluru	6/8/2010	cl	8.36	0.25	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
42	Damuluru	6/8/2010	cl	8.24	0.27	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
43	Damuluru	6/8/2010	cl	8.31	0.21	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
44	Damuluru	6/8/2010	cl	7.90	0.32	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
45	Damuluru	6/8/2010	cl	8.13	0.27	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
46	Damuluru	6/8/2010	cl	8.01	0.24	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
47	Damuluru	6/8/2010	cl	8.12	0.29	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
48	Damuluru	6/8/2010	cl	8.03	0.28	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
49	Damuluru	6/8/2010	cl	8.01	0.32	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
50	Jupudi	6/8/2010	cl	8.04	0.30	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
51	Jupudi	6/8/2010	cl	7.99	0.45	L	100	42	267	Paddy	83	11	11	2.5	180	69	0	18

52	Jupudi	6/8/2010	cl	7.91	0.28	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
53	Jupudi	6/8/2010	cl	7.94	0.41	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
54	Jupudi	6/8/2010	cl	7.89	0.40	L	100	56	267	Paddy	83	11	11	2.5	180	69	0	18
55	Jupudi	6/8/2010	cl	7.77	0.49	L	100	66	267	Paddy	83	11	11	2.5	180	69	0	18
56	Damuluru	6/8/2010	cl	8.21	0.18	L	100	56	148	Paddy	83	11	11	2.5	180	69	0	18
57	Damuluru	6/8/2010	cl	7.99	0.16	L	100	52	172	Paddy	83	11	11	2.5	180	69	0	18
58	Damuluru	6/8/2010	cl	8.27	0.16	L	100	46	195	Paddy	83	11	11	2.5	180	69	0	18
59	Damuluru	6/8/2010	cl	8.34	0.15	L	100	50	190	Paddy	83	11	11	2.5	180	69	0	18
60	Damuluru	6/8/2010	cl	8.24	0.20	L	100	48	190	Paddy	83	11	11	2.5	180	69	0	18
61	Damuluru	6/8/2010	cl	8.37	0.29	L	100	47	217	Paddy	83	11	11	2.5	180	69	0	18
62	Ibrahimpatnam	5/7/2010	cl	7.50	0.46	M	200	30	170	Paddy	64	11	11	2	139	69	0	18
63	Ibrahimpatnam	5/7/2010	cl	8.10	0.27	M	200	21	103	Paddy	64	16	16	2	139	100	0	27
64	Ibrahimpatnam	5/7/2010	cl	7.59	0.49	M	200	53	148	Paddy	64	11	11	2	139	69	0	18
65	Ibrahimpatnam	5/7/2010	cl	8.18	0.30	M	200	35	130	Paddy	64	11	16	2	139	69	0	27
66	Ibrahimpatnam	5/7/2010	cl	7.73	0.38	L	100	22	152	Paddy	83	16	11	2.5	180	100	0	18
67	Damuluru	5/7/2010	cl	8.44	0.23	M	200	44	269	Paddy	64	11	11	2	139	69	0	18
68	Ibrahimpatnam	5/7/2010	cl	8.60	0.23	M	200	49	134	Paddy	64	11	16	2	139	69	0	27
69	Ibrahimpatnam	5/7/2010	cl	8.83	0.36	M	200	29	269	Paddy	64	11	11	2	139	69	0	18
70	Ibrahimpatnam	5/7/2010	cl	8.47	0.30	M	200	42	269	Paddy	64	11	11	2	1398	69	0	18
71	Ibrahimpatnam	5/7/2010	cl	8.36	0.43	M	200	36	224	Paddy	64	11	11	2	139	69	0	18
72	Ibrahimpatnam	5/7/2010	cl	8.71	0.35	H	300	34	269	Paddy	45	11	11	1.5	98	69	0	18
73	Ibrahimpatnam	5/7/2010	cl	7.87	0.76	L	100	53	269	Paddy	83	11	11	2.5	180	69	0	18
74	Damuluru	5/7/2010	cl	8.75	0.25	M	200	53	211	Cotton	48	17	17	4	104	106	0	28
75	Damuluru	5/7/2010	cl	8.49	0.61	M	200	50	242	Cotton	48	17	17	4	104	106	0	28
76	Damuluru	5/7/2010	cl	8.56	0.26	L	100	28	269	Cotton	62	17	17	4	135	106	0	28
77	Damuluru	5/7/2010	cl	8.39	0.33	L	100	41	139	Cotton	62	17	17	4	135	106	0	28
78	Damuluru	5/7/2010	cl	8.60	0.56	M	200	66	269	Cotton	48	17	17	4	104	106	0	28
79	Damuluru	5/7/2010	cl	7.73	2.70	L	100	24	202	Cotton	62	24	17	4	135	150	0	28

80	Damuluru	5/7/2010	cl	8.50	0.29	M	200	60	269	Cotton	48	17	17	4	104	106	0	28
81	Damuluru	5/7/2010	cl	7.91	1.10	M	200	45	269	Cotton	48	17	17	4	104	106	0	28
82	Damuluru	5/7/2010	cl	8.05	0.34	L	100	55	269	Cotton	62	17	17	4	135	106	0	28
83	Damuluru	5/7/2010	cl	8.37	0.22	L	100	29	220	Cotton	62	17	17	4	135	106	0	28
84	Damuluru	5/7/2010	cl	8.47	0.21	L	100	38	237	Cotton	62	17	17	4	135	106	0	28
85	Damuluru	5/7/2010	cl	8.34	0.26	L	100	34	269	Cotton	62	17	17	4	135	106	0	28
86	Damuluru	5/7/2010	cl	8.60	0.17	L	100	37	175	Cotton	62	17	17	4	135	106	0	28
87	Damuluru	5/7/2010	cl	8.16	0.28	L	100	66	161	Cotton	62	17	17	4	135	106	0	28
88	Damuluru	5/7/2010	cl	8.30	0.28	M	200	18	143	Cotton	48	24	17	4	104	150	0	28
89	Damuluru	5/7/2010	cl	8.17	0.41	M	200	34	148	Cotton	48	17	17	4	104	106	0	28
90	Damuluru	5/7/2010	cl	8.50	0.19	L	100	46	269	Cotton	62	17	17	4	135	106	0	28
91	Damuluru	5/7/2010	cl	8.30	0.16	L	100	46	242	Cotton	62	17	17	4	135	106	0	28
92	Kotikalapudi	5/7/2010	cl	8.45	0.19	L	100	25	224	Maize	52	14	11	4	113	88	0	18
93	Kotikalapudi	5/7/2010	cl	8.53	0.17	L	100	23	206	Maize	52	20	11	4	113	125	0	18
94	Kotikalapudi	5/7/2010	cl	8.37	0.19	L	100	46	224	Maize	52	14	11	4	113	88	0	18
95	Kotikalapudi	5/7/2010	cl	7.98	0.23	L	100	19	228	Maize	52	20	11	4	113	125	0	18
96	Kotikalapudi	5/7/2010	cl	8.06	0.25	L	100	66	228	Maize	52	14	11	4	113	88	0	18
97	Kotikalapudi	5/7/2010	cl	8.26	0.30	L	100	36	267	Maize	52	14	11	4	113	88	0	18
98	Kotikalapudi	5/7/2010	cl	8.32	0.33	L	100	52	267	Maize	52	14	11	4	113	88	0	18
99	Kotikalapudi	5/7/2010	cl	8.32	0.24	L	100	27	267	Maize	52	14	11	4	113	88	0	18
100	Kotikalapudi	5/7/2010	cl	8.27	0.27	L	100	30	267	Maize	52	14	11	4	113	88	0	18
101	Kotikalapudi	5/7/2010	cl	8.36	0.33	L	100	22	267	Maize	52	20	11	4	113	125	0	18
102	Kotikalapudi	5/7/2010	cl	8.18	0.23	L	100	42	267	Maize	52	14	11	4	113	88	0	18
103	Kotikalapudi	5/7/2010	cl	8.10	0.37	L	100	33	267	Maize	52	14	11	4	113	88	0	18
104	Kotikalapudi	5/7/2010	cl	8.30	0.21	L	100	38	267	Maize	52	14	11	4	113	88	0	18
105	Kotikalapudi	5/7/2010	cl	7.88	0.34	M	200	36	267	Maize	40	14	11	4	87	88	0	18
106	Kotikalapudi	5/7/2010	cl	8.25	0.36	L	100	40	267	Maize	52	14	11	4	113	88	0	18
107	Kotikalapudi	5/7/2010	cl	8.09	0.36	L	100	36	267	Maize	52	14	11	4	113	88	0	18

108	Kotikalapudi	5/7/2010	cl	8.40	0.28	L	100	23	267	Paddy	52	20	11	4	113	125	0	18
109	Kotikalapudi	5/7/2010	cl	8.23	0.33	L	100	29	267	Maize	52	14	11	4	113	88	0	18
110	Kotikalapudi	5/7/2010	cl	8.37	0.26	L	100	50	267	Maize	52	14	11	4	113	88	0	18
111	Kotikalapudi	5/7/2010	cl	8.10	0.25	L	100	52	267	Maize	52	14	11	4	113	88	0	18
112	Kotikalapudi	5/7/2010	cl	8.38	0.23	L	100	50	269	Maize	52	14	11	4	113	88	0	18
113	Kotikalapudi	5/7/2010	cl	8.30	0.20	L	100	45	269	Maize	52	14	11	4	113	88	0	18
114	Kotikalapudi	5/7/2010	cl	8.49	0.22	L	100	43	269	Maize	52	14	11	4	113	88	0	18
115	Kotikalapudi	5/7/2010	cl	8.45	0.25	L	100	30	269	Maize	52	14	11	4	113	88	0	18
116	Kotikalapudi	5/7/2010	cl	8.51	0.32	L	100	32	269	Maize	52	14	11	4	113	88	0	18
117	Kotikalapudi	5/7/2010	cl	8.68	0.22	L	100	34	269	Paddy	52	14	11	4	113	88	0	18
118	Kotikalapudi	5/7/2010	cl	8.36	0.28	L	100	33	269	Maize	52	14	11	4	113	88	0	18
119	Kotikalapudi	5/7/2010	cl	8.48	0.35	L	100	29	269	Maize	52	14	11	4	113	88	0	18
120	Kotikalapudi	5/7/2010	cl	8.45	0.26	L	100	30	269	Paddy	52	14	11	4	113	88	0	18
121	Kotikalapudi	5/7/2010	cl	8.24	0.30	L	100	50	269	Maize	52	14	11	4	113	88	0	18
122	Jupudi	5/7/2010	cl	7.97	1.08	L	100	32	181	Paddy	83	11	11	2.5	180	69	0	18
123	Jupudi	5/7/2010	cl	7.77	1.44	M	200	48	269	Paddy	64	11	11	2	139	69	0	18
124	Jupudi	5/7/2010	cl	7.84	2.08	L	100	55	269	Paddy	83	11	11	2.5	180	69	0	18
125	Jupudi	5/7/2010	cl	7.66	3.35	M	200	61	269	Paddy	64	11	11	2	139	69	0	18
126	Jupudi	5/7/2010	cl	7.91	1.38	M	200	49	269	Paddy	64	11	11	2	139	69	0	18
127	Jupudi	5/7/2010	cl	8.05	1.44	M	200	36	269	Paddy	64	11	11	2	139	69	0	18
128	Jupudi	5/7/2010	cl	8.82	1.15	M	200	23	269	Paddy	64	16	11	2	139	100	0	18
129	Jupudi	5/7/2010	cl	7.83	1.55	M	200	66	269	Paddy	64	11	11	2	139	69	0	18
130	Jupudi	5/7/2010	cl	8.00	0.86	L	100	42	269	Paddy	83	11	11	2.5	180	69	0	18
131	Jupudi	5/7/2010	cl	8.29	0.79	L	100	43	269	Paddy	83	11	11	2.5	180	69	0	18
132	Jupudi	5/7/2010	cl	8.37	0.98	L	100	55	269	Paddy	83	11	11	2.5	180	69	0	18
133	Jupudi	5/7/2010	cl	7.72	1.32	L	100	38	269	Paddy	83	11	11	2.5	180	69	0	18
134	Jupudi	5/7/2010	cl	8.05	1.30	M	200	66	269	Paddy	64	11	11	2	139	69	0	18
135	Jupudi	5/7/2010	cl	8.39	0.52	L	100	17	87	Paddy	83	16	16	2.5	180	100	0	27

136	Jupudi	5/7/2010	cl	8.45	0.59	L	100	15	119	Paddy	83	16	16	2.5	180	100	0	27
137	Jupudi	5/7/2010	cl	8.37	1.68	L	100	27	269	Paddy	83	11	11	2.5	180	69	0	18
138	Jupudi	5/7/2010	cl	7.81	1.05	L	100	53	269	Paddy	83	11	11	2.5	180	69	0	18
139	Jupudi	5/7/2010	cl	8.31	0.68	L	100	13	148	Paddy	83	16	11	2.5	180	100	0	18
140	Jupudi	5/7/2010	cl	8.28	0.62	L	100	20	134	Paddy	83	16	16	2.5	180	100	0	27
141	Jupudi	5/7/2010	cl	8.28	0.62	L	100	20	134	Paddy	83	16	16	2.5	180	100	0	27
141	Jupudi	5/7/2010	cl	8.05	2.26	M	200	44	195	Paddy	64	11	11	2	139	69	0	18
142	Jupudi	5/7/2010	cl	8.06	1.45	L	100	66	269	Paddy	83	11	11	2.5	180	69	0	18
143	Jupudi	5/7/2010	cl	8.32	1.70	L	100	45	224	Paddy	83	11	11	2.5	180	69	0	18
144	Jupudi	5/7/2010	cl	7.77	1.50	L	100	42	220	Paddy	83	11	11	2.5	180	69	0	18
145	Jupudi	5/7/2010	cl	8.59	1.02	M	200	26	193	Paddy	64	11	11	2	139	69	0	18
146	Jupudi	5/7/2010	cl	8.14	1.48	L	100	66	269	Paddy	83	11	11	2.5	180	69	0	18
147	Jupudi	5/7/2010	cl	8.25	0.71	L	100	20	148	Paddy	83	16	11	2.5	180	100	0	18
148	Jupudi	5/7/2010	cl	8.12	2.20	L	100	28	260	Paddy	83	11	11	2.5	180	69	0	18
149	Jupudi	5/7/2010	cl	7.95	1.07	L	100	60	242	Paddy	83	11	11	2.5	180	69	0	18
150	Jupudi	5/7/2010	cl	8.36	0.30	L	100	16	87	Paddy	83	16	16	2.5	180	100	0	27
151	Jupudi	5/7/2010	cl	7.90	1.49	H	300	66	215	Paddy	45	11	11	1.5	98	69	0	18
152	Jupudi	5/7/2010	cl	8.00	1.14	H	300	22	141	Paddy	45	16	11	1.5	98	100	0	18
153	Jupudi	5/7/2010	cl	8.22	2.02	M	200	39	267	Paddy	64	11	11	2	139	69	0	18
154	Jupudi	5/7/2010	cl	7.98	1.18	L	100	49	267	Paddy	83	11	11	2.5	180	69	0	18
155	Jupudi	5/7/2010	cl	7.92	1.50	L	100	66	250	Paddy	83	11	11	2.5	180	69	0	18
156	Kachavaram	5/7/2010	cl	7.98	0.73	L	100	26	250	Paddy	83	11	11	2.5	180	69	0	18
157	Kachavaram	5/7/2010	cl	8.04	0.75	L	100	26	244	Paddy	83	11	11	2.5	180	69	0	18
158	Kachavaram	5/7/2010	cl	7.96	0.77	M	200	66	74	Paddy	64	11	16	2	139	69	0	27
159	Kachavaram	5/7/2010	cl	8.45	0.44	L	100	48	161	Paddy	83	11	11	2.5	180	69	0	18
160	Kachavaram	5/7/2010	cl	7.78	0.98	M	200	48	148	Paddy	64	11	11	2	139	69	0	18
161	Kachavaram	5/7/2010	cl	8.12	0.67	L	100	44	228	Paddy	83	11	11	2.5	180	69	0	18
162	Kachavaram	5/7/2010	cl	8.45	0.55	L	100	8	119	Paddy	83	21	16	2.5	180	131	0	27

163	Kachavaram	5/7/2010	cl	7.85	1.19	M	200	40	193	Paddy	64	11	11	2	139	69	0	18
164	Kachavaram	5/7/2010	cl	8.24	0.59	M	200	48	188	Paddy	64	11	11	2	139	69	0	18
165	Kachavaram	5/7/2010	cl	7.91	0.72	M	200	55	250	Paddy	64	11	11	2	139	69	0	18
166	Kachavaram	5/7/2010	cl	7.87	1.11	M	200	34	228	Paddy	64	11	11	2	139	69	0	18
167	Kachavaram	5/7/2010	cl	7.81	1.18	M	200	36	233	Paddy	64	11	11	2	139	69	0	18
168	Kachavaram	5/7/2010	cl	7.68	1.71	L	100	38	108	Paddy	83	11	16	2.5	180	69	0	27
169	Kachavaram	5/7/2010	cl	7.77	0.81	L	100	43	172	Paddy	83	11	11	2.5	180	69	0	18
170	Kachavaram	5/7/2010	cl	7.87	0.79	L	100	54	237	Paddy	83	11	11	2.5	180	69	0	18
171	Kachavaram	5/7/2010	cl	7.73	0.92	M	200	48	172	Paddy	64	11	11	2	139	69	0	18
172	Kachavaram	5/7/2010	cl	7.72	1.01	M	200	53	188	Paddy	64	11	11	2	139	69	0	18
173	Kachavaram	5/7/2010	cl	7.76	0.91	M	200	66	233	Paddy	64	11	11	2	139	69	0	18
174	Kachavaram	5/7/2010	cl	7.70	1.13	M	200	65	260	Paddy	64	11	11	2	139	69	0	18
175	Kachavaram	5/7/2010	cl	7.76	1.43	M	200	31	166	Paddy	64	11	11	2	139	69	0	18
176	Kethanakonda	5/7/2010	cl	7.67	2.63	M	200	30	110	Paddy	64	11	16	2	139	69	0	27
177	Kethanakonda	5/7/2010	cl	7.81	0.89	M	200	59	233	Paddy	64	11	11	2	139	69	0	18
178	Kethanakonda	5/7/2010	cl	7.80	0.75	L	100	46	224	Paddy	83	11	11	2.5	180	69	0	18
179	Kethanakonda	5/7/2010	cl	7.85	1.50	L	100	32	237	Paddy	83	11	11	2.5	180	69	0	18
180	Kethanakonda	5/7/2010	cl	7.87	1.45	L	100	44	228	Paddy	83	11	11	2.5	180	69	0	18
181	Kethanakonda	5/7/2010	cl	7.97	1.70	L	100	54	267	Paddy	83	11	11	2.5	180	69	0	18
182	Kethanakonda	5/7/2010	cl	7.92	1.43	L	100	32	213	Paddy	83	11	11	2.5	180	69	0	18
183	Kethanakonda	5/7/2010	cl	7.94	1.47	L	100	66	246	Paddy	83	11	11	2.5	180	69	0	18
184	Kethanakonda	5/7/2010	cl	7.61	1.51	L	100	36	267	Paddy	83	11	11	2.5	180	69	0	18
185	Kethanakonda	5/7/2010	cl	7.94	1.14	L	100	19	170	Paddy	83	16	11	2.5	180	100	0	18
186	Kethanakonda	5/7/2010	cl	7.90	1.25	L	100	32	246	Paddy	83	11	11	2.5	180	69	0	18
187	Kethanakonda	5/7/2010	cl	7.79	1.46	L	100	24	267	Paddy	83	16	11	2.5	180	100	0	18
188	Kethanakonda	5/7/2010	cl	7.97	1.12	L	100	20	220	Paddy	83	16	11	2.5	180	100	0	18
189	Kethanakonda	5/7/2010	cl	7.95	1.10	L	100	17	172	Paddy	83	16	11	2.5	180	100	0	18
190	Kethanakonda	5/7/2010	cl	7.82	1.10	L	100	26	260	Paddy	83	11	11	2.5	180	69	0	18

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191	Kethanakonda	5/7/2010	cl	7.82	1.09	M	200	34	267	Paddy	64	11	11	2	139	69	0	18
192	Kethanakonda	5/7/2010	cl	7.96	1.05	L	100	24	244	Paddy	83	11	11	2.5	180	100	0	18
193	Kethanakonda	5/7/2010	cl	7.90	1.09	L	100	26	250	Paddy	83	11	11	2.5	180	69	0	18
194	Kethanakonda	5/7/2010	cl	7.95	1.10	L	100	38	224	Paddy	83	11	11	2.5	180	69	0	18
195	Kethanakonda	5/7/2010	cl	7.94	1.08	L	100	32	250	Paddy	83	11	11	2.5	180	69	0	18
196	Kethanakonda	5/7/2010	cl	7.96	1.07	L	100	34	224	Paddy	83	11	11	2.5	180	69	0	18
197	Kethanakonda	5/7/2010	cl	7.84	1.18	L	100	35	260	Paddy	83	11	11	2.5	180	69	0	18
198	Kethanakonda	5/7/2010	cl	7.81	1.12	L	100	40	267	Paddy	83	11	11	2.5	180	69	0	18
199	Kethanakonda	5/7/2010	cl	7.81	1.32	L	100	40	224	Paddy	83	11	11	2.5	180	69	0	18
200	Kethanakonda	5/7/2010	cl	7.77	1.19	L	100	29	267	Paddy	83	11	11	2.5	180	69	0	18
201	Kethanakonda	5/7/2010	cl	7.90	1.07	L	100	22	193	Paddy	83	16	11	2.5	180	100	0	18
202	Kethanakonda	5/7/2010	cl	8.07	1.14	L	100	17	161	Paddy	83	16	11	2.5	180	100	0	18
203	Kethanakonda	5/7/2010	cl	7.91	0.94	L	100	24	228	Paddy	83	16	11	2.5	180	100	0	18
204	Kethanakonda	5/7/2010	cl	7.79	1.25	L	100	17	267	Paddy	83	16	11	2.5	180	100	0	18
205	Kethanakonda	5/7/2010	cl	8.18	1.28	L	100	14	112	Paddy	83	16	16	2.5	180	100	0	27
206	Kethanakonda	5/7/2010	cl	8.14	1.24	L	100	18	148	Paddy	83	16	11	2.5	180	100	0	18
207	Kethanakonda	5/7/2010	cl	7.86	1.07	M	200	35	213	Paddy	64	11	11	2	139	69	0	18
208	Navepothavar	5/7/2010	cl	7.89	1.21	L	100	27	250	Paddy	83	11	11	2.5	180	69	0	18
209	Navepothavar	5/7/2010	cl	8.16	1.04	L	100	18	211	Paddy	83	16	11	2.5	180	100	0	18
210	Navepothavar	5/7/2010	cl	7.85	0.95	L	100	30	242	Paddy	83	11	11	2.5	180	69	0	18
211	Navepothavar	5/7/2010	cl	7.97	0.98	L	100	29	267	Paddy	83	11	11	2.5	180	69	0	18
212	Navepothavar	5/7/2010	cl	7.95	1.17	L	100	63	267	Paddy	83	11	11	2.5	180	69	0	18
213	Navepothavar	5/7/2010	cl	7.95	0.98	L	100	20	224	Paddy	83	16	11	2.5	180	100	0	18
214	Navepothavar	5/7/2010	cl	7.92	1.10	L	100	21	267	Paddy	83	16	11	2.5	180	100	0	18
215	Navepothavar	5/7/2010	cl	7.96	1.32	L	100	32	213	Paddy	83	11	11	2.5	180	69	0	18
216	Navepothavar	5/7/2010	cl	7.85	1.95	L	100	22	121	Paddy	83	16	16	2.5	180	100	0	27
217	Navepothavar	5/7/2010	cl	7.74	1.35	L	100	57	267	Paddy	83	11	11	2.5	180	69	0	18
218	Navepothavar	5/7/2010	cl	7.89	1.40	L	100	42	224	Paddy	83	11	11	2.5	180	69	0	18

219	Navepothavar	5/7/2010	cl	7.93	0.79	M	200	26	267	Paddy	64	11	11	2	139	69	0	18
220	Navepothavar	5/7/2010	cl	7.99	0.99	L	100	27	206	Paddy	83	11	11	2.5	180	69	0	18
221	Navepothavar	5/7/2010	cl	7.81	1.07	L	100	24	220	Paddy	83	16	11	2.5	180	100	0	18
222	Navepothavar	5/7/2010	cl	7.98	1.12	L	100	36	246	Paddy	83	11	11	2.5	180	69	0	18
223	Navepothavar	5/7/2010	cl	7.64	0.92	L	100	24	170	Paddy	83	16	11	2.5	180	100	100	18
224	Navepothavar	5/7/2010	cl	8.02	0.86	L	100	17	141	Paddy	83	16	11	2.5	180	100	0	18
225	Kethanakonda	5/7/2010	cl	7.74	1.10	L	100	24	215	Paddy	83	16	11	2.5	180	100	0	18
226	Kethanakonda	5/7/2010	cl	7.88	0.88	L	100	18	228	Paddy	83	16	11	2.5	180	100	0	18
227	Kethanakonda	5/7/2010	cl	7.89	0.77	L	100	26	267	Paddy	83	11	11	2.5	180	69	0	18
228	Navepothavar	5/7/2010	cl	7.89	0.96	L	100	18	175	Paddy	83	16	11	2.5	180	100	0	18
229	Kethanakonda	5/7/2010	cl	7.91	0.79	L	100	12	175	Paddy	83	16	11	2.5	180	100	0	18
230	Kethanakonda	5/7/2010	cl	7.85	0.95	L	100	38	246	Paddy	83	11	11	2.5	180	69	0	18
231	Kethanakonda	5/7/2010	cl	7.86	0.90	L	100	18	148	Paddy	83	16	11	2.5	180	100	0	18
232	Kethanakonda	5/7/2010	cl	7.55	1.11	L	100	40	228	Paddy	83	11	11	2.5	180	69	0	18
233	Kethanakonda	5/7/2010	cl	7.84	0.92	L	100	40	206	Paddy	83	11	11	2.5	180	69	0	18

Note:- EC - Electrical Conductivity, OC - Organic Carbon, AN – Available Nitrogen, AP – Available Phosphate, AK – Available Phosphorous, N - Nigrogen, P – Phosphorous, K – Potassium, UREA, SSP – Single Super Phosphate, DAP – Di-ammonium phosphate, MOP – Muriate of Potash, AS – Ammonium Sulphate (*Source - http://www.apagrisnet.gov.in/mandalprintreport.jsp*)

Annex.-III

Soil data of Ibrahimpatanam Mandal from Soil Testing Laboratory for the year 2011-12																		
Sl.No.	Village name	Date	Soil Type	pH	EC (ds/m)	OC (%)	Kg/Acre											
							AN	AP	AK	Crop	N	P	K	UREA	SSP	DAP	MOP	AS
1	chilikuru	6/6/2011	CL	7.92	1.55	L	100	3	269	cotton	78	31	17	4	169	194	0	28
2	chilikuru	6/6/2011	CL	7.56	0.54	L	100	10	269	cotton	78	31	17	4	169	194	0	28
3	chilikuru	6/6/2011	CL	7.36	0.77	H	300	3	269	cotton	42	31	17	4	91	194	0	28
4	chilikuru	6/6/2011	CL	7.83	1.95	H	300	2	269	cotton	42	31	17	4	91	194	0	28
5	chilikuru	6/6/2011	CL	7.47	4.53	H	300	6	269	cotton	42	31	17	4	91	194	0	28
6	chilikuru	6/6/2011	CL	7.3	0.39	L	100	1	269	cotton	78	31	17	4	169	194	0	28
7	chilikuru	6/6/2011	CL	6.98	0.5	L	100	4	269	cotton	78	31	17	4	169	194	0	28
8	chilikuru	6/6/2011	CL	6.92	0.48	L	100	3	269	cotton	78	31	17	4	169	194	0	28
9	chilikuru	6/6/2011	CL	6.9	0.54	L	100	3	269	cotton	78	31	17	4	169	194	0	28
10	chilikuru	6/6/2011	CL	7.06	0.84	L	100	4	269	cotton	78	31	17	4	169	194	0	28
11	chilikuru	6/6/2011	CL	7.12	1.52	L	100	7	269	cotton	78	31	17	4	169	194	0	28
12	chilikuru	6/6/2011	CL	7.6	1.9	L	100	2	260	cotton	78	31	17	4	169	194	0	28
13	chilikuru	6/6/2011	CL	7.69	4.43	H	300	3	269	cotton	42	31	17	4	91	194	0	28
14	chilikuru	6/6/2011	CL	7.67	3.95	H	300	5	269	cotton	42	31	17	4	91	194	0	28
15	chilikuru	6/6/2011	CL	7.57	0.46	H	300	32	105	cotton	42	31	17	4	91	194	0	28
16	kethanakonda	6/6/2011	CL	7.63	0.41	M	200	19	130	Paddy	48	16	16	2	104	100	0	27
17	kethanakonda	6/6/2011	CL	7.66	0.42	M	200	21	125	Paddy	48	16	16	2	104	100	0	27
18	kethanakonda	6/6/2011	CL	7.54	0.46	M	200	22	147	Paddy	48	16	11	2	104	100	0	18
19	kethanakonda	6/6/2011	CL	7.85	0.39	L	100	24	143	Paddy	62	16	11	2.5	135	100	0	18
20	kethanakonda	6/6/2011	CL	7.85	0.39	L	100	24	143	Paddy	62	16	11	2.5	135	100	0	18
21	kethanakonda	6/6/2011	CL	7.7	0.38	L	100	28	157	Paddy	62	11	11	2.5	135	69	0	18
22	kethanakonda	6/6/2011	CL	7.63	0.44	L	100	69	141	Paddy	62	11	11	2.5	135	69	0	18

23	kethanakonda	6/6/2011	CL	7.45	0.39	L	100	69	128	Paddy	62	11	16	2.5	135	69	0	27
24	kethanakonda	6/6/2011	CL	7.6	0.37	L	100	69	141	Paddy	62	11	11	2.5	135	69	0	18
25	kethanakonda	6/6/2011	CL	7.65	0.36	L	100	41	139	Paddy	62	11	11	2.5	135	69	0	18
26	kethanakonda	6/6/2011	CL	7.62	0.36	L	100	21	146	Paddy	62	16	11	2.5	135	100	0	18
27	kethanakonda	6/6/2011	CL	7.83	0.34	H	300	27	161	Paddy	34	11	11	1.5	74	69	0	18
28	kethanakonda	6/6/2011	CL	7.72	0.36	L	100	18	166	Paddy	62	16	11	2.5	135	100	0	18
29	kethanakonda	6/6/2011	CL	7.99	0.32	L	100	17	139	Paddy	62	16	11	2.5	135	100	0	18
30	kethanakonda	6/6/2011	CL	7.8	0.38	L	100	14	159	Paddy	62	16	11	2.5	135	100	0	18
31	Kachavaram	27/5/2011	CL	8.54	0.57	L	100	12	146	Paddy	62	16	11	2.5	135	100	0	18
32	Kachavaram	27/5/2011	CL	8.22	0.88	L	100	19	105	Paddy	62	16	16	2.5	135	100	0	27
33	Kachavaram	27/5/2011	CL	8.01	0.98	H	300	10	105	Paddy	34	21	16	1.5	74	131	0	27
34	Kachavaram	27/5/2011	CL	8.28	0.64	L	100	8	114	Paddy	62	21	16	2.5	135	131	0	27
35	Kachavaram	27/5/2011	CL	8.1	0.87	L	100	7	96	Paddy	62	21	16	2.5	135	131	0	27
35	Kachavaram	27/5/2011	CL	8.53	0.64	L	100	12	96	Paddy	62	16	16	2.5	135	100	0	27
37	Kachavaram	27/5/2011	CL	8.3	0.74	L	100	14	92	Paddy	62	16	16	2.5	135	100	0	27
38	Kachavaram	27/5/2011	CL	7.76	1.21	H	300	3	105	Paddy	34	21	16	1.5	74	131	0	27
39	Kachavaram	27/5/2011	CL	7.85	1.27	L	100	9	132	Paddy	62	21	16	2.5	135	131	0	27
40	Kachavaram	27/5/2011	CL	7.78	1.3	L	100	3	125	Paddy	62	21	16	2.5	135	131	0	27
41	Kachavaram	27/5/2011	CL	7.88	0.77	L	100	21	150	Paddy	62	16	11	2.5	135	100	0	18
42	Kachavaram	27/5/2011	CL	8.07	1.16	H	300	19	72	Paddy	34	16	16	1.5	74	100	0	27
43	Kachavaram	27/5/2011	CL	8.12	1.21	H	300	9	81	Paddy	34	21	16	1.5	74	100	0	27
44	Kachavaram	27/5/2011	CL	7.97	1.3	L	100	20	172	Paddy	62	16	11	2.5	135	100	0	18
45	Kachavaram	27/5/2011	CL	7.81	2.75	L	100	5	269	Paddy	62	21	11	2.5	135	131	0	18
46	Guntupalli	27/5/2011	CL	7.45	0.67	H	300	1	269	Paddy	34	21	11	1.5	74	131	0	18
47	Guntupalli	27/5/2011	CL	7.65	0.56	H	300	10	242	Paddy	34	21	11	1.5	74	131	0	18
48	Guntupalli	27/5/2011	CL	7.26	0.73	L	100	9	269	Paddy	62	21	11	2.5	135	131	0	18
49	Guntupalli	27/5/2011	CL	7.03	0.7	M	200	8	262	Paddy	48	21	11	2	104	131	0	18
50	Guntupalli	27/5/2011	CL	7.19	0.56	H	300	10	228	Paddy	34	21	11	1.5	74	131	0	18

51	Guntupalli	27/5/2011	CL	7.43	7.43	L	100	11	269	Paddy	62	16	11	2.5	135	100	0	18
52	Guntupalli	27/5/2011	CL	7.3	0.48	L	100	10	178	Paddy	62	21	11	2.5	135	131	0	18
53	Guntupalli	27/5/2011	CL	6.8	0.56	H	300	11	211	Paddy	34	21	11	1.5	74	100	0	18
54	Guntupalli	27/5/2011	CL	5.8	0.62	H	300	6	242	Paddy	34	21	11	1.5	74	131	0	18
55	Guntupalli	27/5/2011	CL	7.3	0.95	H	300	4	215	Paddy	34	21	11	1.5	74	131	0	18
56	Guntupalli	27/5/2011	CL	7.44	1.37	L	100	1	224	Paddy	62	21	11	2.5	135	131	0	18
57	Guntupalli	27/5/2011	CL	6.7	0.32	L	100	3	204	Paddy	62	21	11	2.5	135	131	0	18
58	Guntupalli	27/5/2011	CL	7.55	0.38	H	300	6	222	Paddy	34	21	11	1.5	74	131	0	18
59	Guntupalli	27/5/2011	CL	7.32	0.39	H	300	3	269	Paddy	34	21	11	1.5	74	131	0	18
60	Guntupalli	27/5/2011	CL	7.79	0.37	L	100	5	141	Paddy	62	21	11	2.5	135	131	0	18
61	Z.H.Pothavaram	26/5/2011	CL	7.62	0.52	H	300	47	269	Cotton	42	17	17	4	91	106	0	28
62	Z.H.Pothavaram	26/5/2011	CL	7.72	0.48	M	200	54	197	Cotton	42	17	17	4	91	106	0	28
63	Z.H.Pothavaram	26/5/2011	CL	7.64	0.61	L	100	44	228	Cotton	78	17	17	4	169	106	0	28
64	Z.H.Pothavaram	26/5/2011	CL	7.59	0.64	H	300	48	255	Cotton	42	17	17	4	91	106	0	28
65	Z.H.Pothavaram	26/5/2011	CL	7.57	0.66	H	300	24	269	Cotton	42	24	17	4	91	40	0	28
66	Z.H.Pothavaram	26/5/2011	CL	7.65	0.59	L	100	121	251	Cotton	78	17	17	4	169	106	0	28
67	Z.H.Pothavaram	26/5/2011	CL	7.68	0.58	H	300	23	269	Cotton	42	24	17	4	91	150	0	28
68	Z.H.Pothavaram	26/5/2011	CL	7.66	0.61	L	100	28	269	Cotton	78	17	17	4	169	106	0	28
69	Z.H.Pothavaram	26/5/2011	CL	7.6	0.61	L	100	66	251	Cotton	78	17	17	4	169	106	0	28
70	Z.H.Pothavaram	26/5/2011	CL	7.7	0.52	H	300	62	269	Cotton	42	17	17	4	91	106	0	28
71	Z.H.Pothavaram	26/5/2011	CL	7.66	0.58	L	100	19	269	Cotton	78	24	17	4	169	150	0	28
72	Z.H.Pothavaram	26/5/2011	CL	7.52	0.64	L	100	30	269	Cotton	78	17	17	4	169	106	0	28
73	Z.H.Pothavaram	26/5/2011	CL	7.66	0.56	H	300	24	269	Cotton	42	17	17	4	91	150	0	28
74	Z.H.Pothavaram	26/5/2011	CL	7.57	0.66	H	300	28	269	Cotton	42	17	17	4	91	106	0	28
75	Z.H.Pothavaram	26/5/2011	CL	7.62	0.51	L	100	69	233	Cotton	78	17	17	4	169	106	0	28
76	Damuluru	26/5/2011	CL	7.13	0.5	H	300	69	233	Cotton	42	17	17	4	91	106	0	28
77	Damuluru	26/5/2011	CL	7.6	0.42	H	300	69	220	Cotton	42	17	17	4	91	106	0	28
78	Damuluru	26/5/2011	CL	7.62	0.45	L	100	69	217	Cotton	78	17	17	4	169	106	0	28

79	Damuluru	26/5/2011	CL	7.63	0.41	H	300	69	269	Cotton	42	17	17	4	91	106	0	28
80	Damuluru	26/5/2011	CL	7.79	0.34	H	300	69	242	Cotton	42	17	17	4	91	106	0	28
81	Damuluru	26/5/2011	CL	7.75	0.38	L	100	69	235	Cotton	78	17	17	4	169	106	0	28
82	Damuluru	26/5/2011	CL	7.68	0.45	M	200	69	222	Cotton	60	17	17	4	130	106	0	28
83	Damuluru	26/5/2011	CL	7.69	0.44	H	300	69	220	Cotton	42	17	17	4	91	106	0	28
84	Damuluru	26/5/2011	CL	7.65	0.46	H	300	69	253	Cotton	42	17	17	4	91	106	0	28
85	Damuluru	26/5/2011	CL	7.75	0.44	L	100	69	260	Maize	42	17	17	4	169	106	0	28
86	Damuluru	26/5/2011	CL	7.62	0.53	H	300	69	228	Cotton	42	17	17	4	91	106	0	28
87	Damuluru	26/5/2011	CL	7.54	0.38	L	100	69	269	Cotton	78	17	17	4	169	106	0	28
88	Damuluru	26/5/2011	CL	7.69	0.33	H	300	69	251	Cotton	42	17	17	4	91	106	0	28
89	Damuluru	26/5/2011	CL	7.6	0.36	L	100	69	206	Maize	78	17	17	4	169	106	0	28
90	Damuluru	26/5/2011	CL	7.73	0.35	M	200	33	153	Cotton	60	17	17	4	130	106	0	28
91	Mulapadu	21/5/2011	SL	7.92	0.33	L	100	17	34	Paddy	62	16	21	2.5	135	100	0	35
92	Mulapadu	21/5/2011	SL	8.02	0.34	L	100	14	31	Paddy	62	16	21	2.5	135	100	0	35
93	Mulapadu	21/5/2011	CL	7.26	0.44	L	100	69	161	Paddy	62	11	11	2.5	135	69	0	18
94	Mulapadu	21/5/2011	SL	8.06	0.26	L	100	12	40	Paddy	62	16	21	2.5	135	100	0	35
95	Mulapadu	21/5/2011	SL	8.03	0.31	L	100	30	34	Paddy	62	11	21	2.5	135	100	0	35
96	Mulapadu	21/5/2011	SL	8.09	0.39	L	100	10	36	Paddy	62	21	21	2.5	135	131	0	35
97	Mulapadu	21/5/2011	CL	7.69	0.48	M	200	57	164	Paddy	48	11	11	2	104	69	0	18
98	Mulapadu	21/5/2011	SL	8.04	0.23	L	100	9	34	Paddy	62	21	21	2.5	135	131	0	35
99	Mulapadu	21/5/2011	SL	8.15	0.27	L	100	12	27	Paddy	62	16	21	2.5	135	100	0	35
100	Mulapadu	21/5/2011	SL	8.25	0.41	L	100	40	21	Paddy	62	11	21	2.5	135	69	0	35
101	Mulapadu	21/5/2011	SL	7.95	0.63	L	100	21	20	Paddy	62	16	21	2.5	135	100	0	35
102	Mulapadu	21/5/2011	SL	8.02	0.34	L	100	17	27	Paddy	62	16	21	2.5	135	100	0	35
103	Mulapadu	21/5/2011	SL	8.08	0.25	L	100	18	34	Paddy	62	16	21	2.5	135	100	0	35
104	Mulapadu	21/5/2011	SL	7.94	0.39	L	100	12	27	Paddy	62	16	21	2.5	135	100	0	35
105	Mulapadu	21/5/2011	CL	7.16	0.96	H	300	59	197	Paddy	34	11	11	1.5	74	69	0	18
106	Mulapadu	21/5/2011	CL	7.65	0.83	L	100	12	125	Paddy	62	16	16	2.5	135	100	0	27

107	Mulapadu	21/5/2011	CL	7.8	0.93	L	100	6	112	Paddy	62	21	16	2.5	135	131	0	27
108	Mulapadu	21/5/2011	CL	7.68	0.81	L	100	14	103	Paddy	62	16	16	2.5	135	100	0	27
109	Mulapadu	21/5/2011	CL	7.57	0.89	L	100	9	116	Paddy	62	21	16	2.5	135	131	0	27
110	Mulapadu	21/5/2011	CL	7.74	0.8	L	100	3	112	Paddy	62	21	16	2.5	135	131	0	27
111	Mulapadu	21/5/2011	CL	7.67	0.81	L	100	7	101	Paddy	62	21	16	2.5	135	131	0	27
112	Mulapadu	21/5/2011	CL	7.75	0.75	L	100	3	119	Paddy	62	21	16	2.5	135	131	0	27
113	Mulapadu	21/5/2011	CL	7.69	0.98	L	100	19	114	Paddy	62	21	16	2.5	135	131	0	27
114	Mulapadu	21/5/2011	CL	7.66	0.8	L	100	8	116	Paddy	62	21	16	2.5	135	131	0	27
115	Mulapadu	21/5/2011	CL	7.74	0.81	L	100	10	103	Paddy	62	21	16	2.5	135	131	0	27
116	Mulapadu	21/5/2011	CL	7.6	0.85	L	100	7	115	Paddy	62	21	16	2.5	135	131	0	27
117	Mulapadu	21/5/2011	CL	7.59	0.76	L	100	4	128	Paddy	62	21	16	2.5	135	131	0	27
118	Mulapadu	21/5/2011	CL	7.63	0.85	L	100	3	130	Paddy	62	21	16	2.5	135	131	0	27
119	Mulapadu	21/5/2011	CL	7.68	0.91	L	100	2	125	Paddy	62	21	16	2.5	135	131	0	27
120	Mulapadu	21/5/2011	CL	7.63	0.95	L	100	3	132	Paddy	62	21	16	2.5	135	131	0	27
121	Elaprolu	21/5/2011	CL	7.7	1.02	L	100	4	242	Paddy	62	21	11	2.5	135	131	0	18
122	Elaprolu	21/5/2011	CL	7.53	1.85	L	100	3	269	Paddy	62	21	11	2.5	135	131	0	18
123	Elaprolu	21/5/2011	CL	7.65	0.58	L	100	6	224	Paddy	62	21	11	2.5	135	131	0	18
124	Elaprolu	21/5/2011	CL	7.57	0.69	L	100	2	202	Paddy	62	21	11	2.5	135	131	0	18
125	Elaprolu	21/5/2011	CL	7.56	0.63	L	100	1	164	Paddy	62	21	11	2.5	135	131	0	18
126	Elaprolu	21/5/2011	CL	7.56	0.63	L	100	2	179	Paddy	62	21	11	2.5	135	131	0	18
127	Elaprolu	21/5/2011	CL	7.6	0.53	H	300	3	161	Paddy	34	21	11	1.5	74	131	0	18
128	Elaprolu	21/5/2011	CL	7.56	0.6	H	300	0	134	Paddy	34	21	16	1.5	74	131	0	27
129	Elaprolu	21/5/2011	CL	7.52	0.64	M	200	0	141	Paddy	48	21	11	2	104	131	0	18
130	Elaprolu	21/5/2011	CL	7.66	0.67	M	200	0	170	Paddy	48	21	11	2	104	131	0	18
131	Elaprolu	21/5/2011	CL	7.58	0.65	H	300	0	184	Paddy	34	21	11	1.5	74	131	0	18
132	Elaprolu	21/5/2011	CL	7.54	0.62	L	100	2	170	Paddy	62	21	11	2.5	135	131	0	18
133	Elaprolu	21/5/2011	CL	7.63	0.46	H	300	0	172	Paddy	34	21	11	1.5	74	131	0	18
134	Elaprolu	21/5/2011	CL	7.59	0.5	L	100	2	188	Paddy	62	21	11	2.5	135	131	0	18

135	Elaprolu	21/5/2011	CL	7.49	0.47	L	100	6	46	Paddy	62	21	21	2.5	135	131	0	35
136	Kotikalapudi	19/5/2011	CL	7.76	0.62	H	300	69	224	Turmertic	49	22	42	10	106	136		70
137	Kotikalapudi	19/5/2011	CL	7.73	0.72	H	300	69	190	Other Crops	0	0	0	-	-	-	-	-
138	Kotikalapudi	19/5/2011	CL	7.76	0.5	L	100	31	194	Greengram	10	14	8	2	22	88	0	13
139	Kotikalapudi	19/5/2011	CL	7.86	0.64	M	200	27	228	Other Crops	0	0	0	-	-	-	-	-
140	Kotikalapudi	19/5/2011	CL	7.78	0.62	M	200	69	157	Other Crops	0	0	0	-	-	-	-	-
141	Kotikalapudi	19/5/2011	CL	7.86	0.61	M	200	69	204	Turmertic	70	22	42	10	151	138	-	70
142	Kotikalapudi	19/5/2011	CL	7.85	0.66	M	200	69	224	Other Crops	0	0	0	-	-	-	-	-
143	Kotikalapudi	19/5/2011	CL	7.86	0.59	M	200	69	222	Other Crops	0	0	0	-	-	-	-	-
144	Kotikalapudi	19/5/2011	CL	7.85	0.55	L	100	69	159	Other Crops	0	0	0	-	-	-	-	-
145	Kotikalapudi	19/5/2011	CL	7.75	0.37	L	100	28	116	Other Crops	0	0	0	-	-	-	-	-
146	Kotikalapudi	19/5/2011	CL	7.82	0.48	L	100	24	86	Other Crops	0	0	0	-	-	-	-	-
147	Kotikalapudi	19/5/2011	CL	7.79	0.53	L	100	69	112	Bhendi	0	0	0	-	-	-	-	-
148	Kotikalapudi	19/5/2011	CL	7.84	0.5	L	100	59	211	Blackgram	10	14	6	2	22	88	0	10
149	Kotikalapudi	19/5/2011	CL	7.82	0.59	L	100	55	104	Blackgram	10	14	8	2	22	88	0	13
150	Kotikalapudi	19/5/2011	CL	7.93	0.52	L	100	36	164	Blackgram	10	14	6	2	22	88	0	10
151	Jupudi	19/5/2011	CL	7.8	0.35	H	300	7	45	Paddy	34	21	21	1.5	74	131	0	35
152	Jupudi	19/5/2011	CL	7.66	0.24	L	100	20	87	Paddy	62	16	16	2.5	135	100	0	27
153	Jupudi	19/5/2011	CL	7.77	0.36	L	100	17	45	Paddy	62	16	21	2.5	135	100	0	35
154	Jupudi	19/5/2011	CL	7.58	0.23	H	300	21	38	Paddy	34	16	21	1.5	74	100	0	35
155	Jupudi	19/5/2011	CL	7.83	0.26	H	300	23	65	Paddy	34	16	16	1.5	74	100	0	27
156	Jupudi	19/5/2011	CL	7.75	0.31	L	100	17	16	Paddy	62	16	21	2.5	135	100	0	35
157	Jupudi	19/5/2011	CL	7.95	0.36	M	200	69	105	Paddy	48	11	16	2	104	69	0	27
158	Jupudi	19/5/2011	CL	7.58	0.45	H	300	69	159	Paddy	34	11	11	1.5	74	69	0	18
159	Jupudi	19/5/2011	CL	7.94	0.68	H	300	69	269	Paddy	34	11	11	1.5	74	69	0	18
160	Jupudi	19/5/2011	CL	7.75	0.73	H	300	69	269	Paddy	34	11	11	1.5	74	69	0	18
161	Jupudi	19/5/2011	CL	7.79	0.8	H	300	69	220	Paddy	34	11	11	1.5	74	69	0	18
162	Jupudi	19/5/2011	CL	8.02	1.05	H	300	38	269	Paddy	34	11	11	1.5	74	69	0	18

163	Jupudi	19/5/2011	CL	7.55	0.6	H	300	69	269	Paddy	34	11	11	1.5	74	69	0	18
164	Jupudi	19/5/2011	CL	7.74	0.61	H	300	33	269	Paddy	34	11	11	1.5	74	69	0	18
165	Jupudi	19/5/2011	CL	7.28	0.76	H	300	48	269	Paddy	34	11	11	1.5	74	69	0	18
166	Tummalapalem	19/5/2011	CL	7.46	0.27	L	100	69	172	Paddy	62	11	11	2.5	135	69	0	18
167	Tummalapalem	19/5/2011	CL	7.54	0.31	L	100	69	150	Paddy	62	11	11	2.5	135	69	0	18
168	Tummalapalem	19/5/2011	CL	7.8	0.36	L	100	69	181	Paddy	62	11	11	2.5	135	69	0	18
169	Tummalapalem	19/5/2011	CL	7.52	0.46	H	300	69	175	Paddy	34	11	11	1.5	74	69	0	18
170	Tummalapalem	19/5/2011	CL	7.51	0.33	L	100	69	161	Paddy	62	11	11	2.5	135	69	0	18
171	Tummalapalem	19/5/2011	CL	7.91	0.29	L	100	69	128	Paddy	62	11	16	2.5	135	69	0	27
172	Tummalapalem	19/5/2011	CL	7.86	0.28	L	100	69	116	Paddy	62	11	16	2.5	135	69	0	27
173	Tummalapalem	19/5/2011	CL	7.86	0.27	L	100	69	141	Paddy	62	11	11	2.5	135	69	0	18
174	Tummalapalem	19/5/2011	CL	7.75	0.29	L	100	30	170	Paddy	62	11	11	2.5	135	69	0	18
175	Tummalapalem	19/5/2011	CL	7.41	0.39	L	100	69	211	Paddy	62	11	11	2.5	135	69	0	18
176	Tummalapalem	19/5/2011	CL	7.64	0.32	L	100	28	157	Paddy	62	11	11	2.5	135	69	0	18
177	Tummalapalem	19/5/2011	CL	7.47	0.55	L	100	28	159	Paddy	62	11	11	2.5	135	69	0	18
178	Tummalapalem	19/5/2011	CL	7.62	0.3	H	300	69	195	Paddy	34	11	11	1.5	74	69	0	18
179	Tummalapalem	19/5/2011	CL	7.93	0.34	L	100	35	108	Paddy	62	11	16	2.5	135	69	0	27
180	Tummalapalem	19/5/2011	CL	7.92	0.44	L	100	37	152	Paddy	62	11	11	2.5	135	69	0	18
181	Ibrahimpatnam	19/5/2011	CL	7.65	0.6	L	100	69	195	Paddy	62	11	11	2.5	135	69	0	18
182	Ibrahimpatnam	19/5/2011	CL		0.79	H	300	69	195	Paddy	34	11	11	1.5	74	69	0	18
183	Ibrahimpatnam	19/5/2011	CL	7.7	0.75	L	100	69	269	Paddy	62	11	11	2.5	135	69	0	18
184	Ibrahimpatnam	19/5/2011	CL	7.63	0.81	L	100	69	197	Paddy	62	11	11	2.5	135	69	0	18
185	Ibrahimpatnam	19/5/2011	CL	7.81	0.91	L	100	69	269	Paddy	62	11	11	2.5	135	69	0	18
186	Ibrahimpatnam	19/5/2011	CL	7.95	1.25	L	100	32	119	Paddy	62	11	16	2.5	135	69	0	27
187	Ibrahimpatnam	19/5/2011	CL	7.87	1.16	L	100	35	101	Paddy	62	11	16	2.5	135	69	0	27
188	Ibrahimpatnam	19/5/2011	CL	7.96	1.1	L	100	39	112	Paddy	62	11	16	2.5	135	69	0	27
189	Ibrahimpatnam	19/5/2011	CL	7.8	0.72	H	300	34	138	Paddy	34	11	11	1.5	74	69	0	18
190	Ibrahimpatnam	19/5/2011	CL	7.74	0.43	H	300	69	166	Paddy	34	11	11	1.5	74	69	0	18

191	Ibrahimpatnam	19/5/2011	CL	7	0.4	L	100	69	169	Paddy	62	11	11	2.5	135	69	0	18
192	Ibrahimpatnam	19/5/2011	CL	7.47	0.54	L	100	51	184	Paddy	62	11	11	2.5	135	69	0	18
193	Ibrahimpatnam	19/5/2011	CL	7.46	0.06	H	300	69	269	Paddy	34	11	11	1.5	74	69	0	18
194	Ibrahimpatnam	19/5/2011	CL	6.95	0.42	L	100	69	211	Paddy	62	11	11	2.5	135	69	0	18
195	Ibrahimpatnam	19/5/2011	CL	7.35	0.37	L	100	69	211	Paddy	62	11	11	2.5	135	69	0	18

Note:- EC - Electrical Conductivity, OC - Organic Carbon, AN – Available Nitrogen, AP – Available Phosphate, AK – Available Phosphorous, N - Nigrogen, P – Phosphorous, K – Potassium, UREA, SSP – Single Super Phosphate, DAP – Di-ammonium phosphate, MOP – Muriate of Potash, AS – Ammonium Sulphate (*Source - http://www.apagrisnet.gov.in/mandalprintreport.jsp*)

Studies on Air Pollution status and Human Health conditions in Influence zone and Non-influence zone of Dr.NTTPS

Report submitted to A.P.Pollution Control Board

By

Andhra Pradesh Power Generation Corporation Limited

April, 2018

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CHAPTER 1

Objective of the study

Andhra Pradesh Power Generation Corporation Limited (APGENCO) is a State Public Sector undertaking engaged in power generation including operation and maintenance of the power plants. APGENCO is operating 1760 MW capacity (6x210 MW and 1x500 MW) coal based Thermal Power Plant in the name of Dr. Narla Tata Rao Thermal Power Station (Dr. NTTPS). One uint of 800 MW supercritical unit is under construction. NTTPS lies in between Ibrahimpatnam and Kondapalli Villages in the Krishna District, Andhra Pradesh.

Different sources such as Industries, Road traffic, Agriculture activities, Commercial and Domestic activities contribute accumulation of pollutant concentrations in the air. **The present study is aimed at identification of the pollution sources, analyse the Air Quality scenario, collection of data on Human health status from Public Health Centers in the influence zone and Non-influence zone of Dr.NTTPS, Investigations by conducting Medical camps to corroborate the health statistics and conclusions on Human Health status in the study area.**

CHAPTER 2

Pollution sources in the study area

Study Area: **The study area is Influence zone of Dr.NTTPS (upto 10 km from Dr.NTTPS) and Non-influence zone of Dr.NTTPS (above 10 km) to understand the influence of Dr.NTTPS on Human health.** Major pollution sources in the Influence zone **(upto 10 km from Dr.NTTPS)** that contribute impact on the human health are noted below.

1) Major, Medium industries & Stone crushing units

2) Vehicular Traffic

3) *Other sources such as* Agriculture activities, Domestic activities etc.

Details of the above sources are given below.

1) Major, Medium industries & Stone crushing units:

S.No	Name of the Industry	Address	Product
1.	Sri Pavan Granite metal works	Jupidi(V), Ibrahimpatnam (M), Krishna(D)	Stone Crusher
2.	Sri Srinivasa Stone Crusher	Ibrahimpatnam Krishna(D)	Stone Crusher
3.	Sri Swathi Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
4.	Venkata ramana Stone Crusher co.,	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
5.	Sri Venkateshwara Stone crusher	Panipaka(V),G.Konduru(M),Krishna(D)	Stone Crusher
6.	T.Venkateshwara Stone Crusher	Paritala(V),Krishna(D)	Stone Crusher
7.	Sri Sai Ramana Stone Crusher co.,	Mulapadu(V), Krishna(D)	Stone Crusher
8.	Vijaya Sudha Crusher	Mulapadu(V), Krishna(D)	Stone Crusher
9.	Anjaneya Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
10.	Sri Mahalakshmi Stone Crusher	Jupudi(V),Ibrahimpatnam Krishna(D)	Stone Crusher
11.	Venkata Ramana Granite Metal Works	Jupudi(V),Ibrahimpatnam Krishna(D)	Stone Crusher
12.	Jagadamba Stone Crusher	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
13.	Vengamamba Engineering co.,	Jupudi(V),Ibrahimpatnam (M)Krishna(D)	Stone Crusher
14.	Srinivasa Stone Crusher	Killeswarapuram(V), Ibrahimpatnam Krishna(D)	Stone Crusher
15.	Granite Product Company	Kattubadipalem(V), G.Konduru(M), Krishna(D)	Stone Crusher

S.No	Name of the Industry	Address	Product
16.	Lakshmi Devi Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
17.	Sri Padmavathi Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
18.	Sree Seetharamajaneya Stone Crusher	Ibrahimpatnam(V&M) Krishna(D)	Stone Crusher
19.	N.V.Subbarao&co.	Jupudi(V),Ibrahimpatnam (M)Krishna(D)	Stone Crusher
20.	Pushyami Stone Crusher	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	Stone Crusher
21.	Madhavi Metal Crushers	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
22.	Chakravarthi Stone Crusher	Donabanda(V), Ibrahimpatnam(M),Krishna(D)	Stone Crusher
23.	Jyothi Stone Crusher	Kanchavaram(V) Ibrahimpatnam(M),Krishna(D)	Stone Crusher
24.	Sri Sai Srinivasa Stone Crusher	Kanchavaram(V) Ibrahimpatnam(M),Krishna(D)	Stone Crusher
25.	Sri Sarada Stone Crusher	Paritala(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
26.	Sri Veeranjaneya Stone Crusher	Kethanakonda(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
27.	BMC Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
28.	Maruthi Stone Crusher	Kanchavaram(V) Ibrahimpatnam(M),Krishna(D)	Stone Crusher
29.	Vijaya Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
30.	Nandini Stone Crusher	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
31.	Adilakshmi Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
32.	Sai Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
33.	Seshachala Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
34.	Sri Balaji Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
35.	Sri Sai Malleshwari Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
36.	Sri Venkateshwara Engineering co.,	Ibrahimpatnam(V&M),Krishna(D)	Stone Crusher
38.	Sri Kanaka Durga Metal works	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
39.	Sri sarath Stone Crusher	Kanchavaram(V) Ibrahimpatnam(M),Krishna(D)	Stone Crusher
40.	Sri Srinivasa Stone Crusher	Kethanakonda(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
41.	Sai Maruthi Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
42.	Vengamamba Stone Crusher	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	Stone Crusher
43.	Sree Vigneswara Stone Crusher	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
44.	Vijayalakshmi Stone Crushers	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
45.	Sree Lakshmi Metal Crushers	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
46.	Tirumala Venkateshwara Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
47.	Y.K.reddy Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
48.	Kondapally Stone Crusher	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	Stone Crusher
49.	Vijaya Maruthi	Kondapalli(V), Ibrahimpatnam	Stone Crusher

S.No	Name of the Industry	Address	Product
	Constructions	(M)Krishna(D)	
50.	Standard Granite Crusher	Kattubadipalem(V) G.Konduru(M), Krishna(D)	Stone Crusher
51.	Siddhartha Stone Crusher	Kanchavaram(V) Ibrahimpatnam(M),Krishna(D)	Stone Crusher
52.	Siva Sakthi Stone Crusher	Jupudi(V),Ibrahimpatnam (M)Krishna(D)	Stone Crusher
53.	Sri Swamy ayyappa Stone Crusher	Kethanakonda(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
54.	Ganesh Stone Crusher	Ibrahimpatnam(M), Krishna(D).	Stone Crusher
55.	Sri Shiridi Sai Stone Crusher	Paritala(V),Ibrahimpatnam(M), Krishna(D).	Stone Crusher
56.	Sri Shiridi Stone Crusher	Mulapadu(V),Ibrahimpatnam(M), Krishna(D).	Stone Crusher
57.	M/s. K&K Stone Crusher	Navvepothavaram(V) ,Ibrahimpatnam(M), Krishna(D).	Stone Crusher
58.	M/s. Prabhu Stone Crusher	Mylavaram road, G.Konduru(M), Krishna(D)	Stone Crusher
59.	Baji babu Stone Crusher	Kondapalli(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
60.	Sri Balaji Stone Crusher	Kachavaram(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
61.	Dhanalakshmi Stone Crusher	Kattubadipalem(V) G.Konduru(M), Krishna(D)	Stone Crusher
62.	Venkateshwara Stone Crusher	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	Stone Crusher
63.	Sri sai ram Stone Crusher	Kondapally	Stone Crusher
64.	N. Brahmeswara Rao & co.,	Kachavaram(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
65.	Quality Stone Crusher	Jupudi(V),Ibrahimpatnam (M)Krishna(D)	Stone Crusher
66.	Kesava Stone Crusher	Jupudi(V),Ibrahimpatnam (M)Krishna(D)	Stone Crusher
67.	Spriha Enterprises	Ida, Kondapally, Ibrahimpatnam (M)Krishna(D)	Stone Crusher
68.	Venkata vijaya durga Stone Crusher	Mulapadu(V),Ibrahimpatnam(M), Krishna(D).	Stone Crusher
69.	Manorama Crushers	Paritala(V),Ibrahimpatnam(M), Krishna(D).	Stone Crusher
70.	Lakshmi Ganesh Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
71.	Vijaya jyothi Stone Crusher	Kondapalli (V),Krishna(D)	Stone Crusher
72.	MSR Hitech Formulation Pvt. Ltd.	Kondapalli(V),Ibrahimpatnam(M),Krishna(D)	Pesticides/Insecticides/ Fungicides/Herbicides/ Agrochemical Formulations
73.	SHV Energy South East (P) Ltd.,	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	LPG Bottling
74.	P. Subba Raj & Co.,	Bone mill, Konndapally,Krishna(D)	Glue & Gelatine
75.	Solar Form Chemicals	Kondapally, Krishna(D)	Pesticides(Techinical)(Excluding Formulation)
76.	Lanco Kondapally Power Pvt Ltd.,	IDA Kondapally, Ibrahimpatnam(M), Krishna(D).	Power Plant
77.	Bharat Petroleum Corporation Ltd.,	Pinapaka(V),G.Konduru(M), Krishna(D)	Petroleum Products invoving storage, transfer or processing
78.	IBP Corporation ltd	Kadimipothavaram(V)G.Konduru(M) Krishna(D)	Petroleum Products invoving storage, transfer or processing
79.	Indian Oil Corporation Ltd	Kadimipothavaram(V)G.Konduru(M) Krishna(D)	Petroleum Products invoving storage, transfer

S.No	Name of the Industry	Address	Product
			or processing
80.	Hindustan Petroleum Corporation Ltd.,	Kattubadipalem(V), G.Konduru(M) Krishna(D)	Petroleum Products invoving storage, transfer or processing
81.	Shine Ceramics Pvt Ltd.,	Kuntamukkala,(V)Ibrahimpatnam(M), Krishna(D).	Allo Bricks Glazad Well Tiles
82.	Lakshmi Organics Pvt Ltd.,	Kondapally (V),Ibrahimpatnam(M), Krishna(D)	Bulk Drugs & Pharmaceuticals
83.	Panax Pharma Chemicals	I.D.A Kondapally (V),Ibrahimpatnam(M), Krishna(D)	Bulk Drugs & Pharmaceuticals
84.	S.V. Chemicals	I.D.A Kondapally (V),Ibrahimpatnam(M), Krishna(D)	Bulk Drugs & Pharmaceuticals
85.	S.D.V Steels Ltd	Kadimipothavaram(V),G.Konduru(M)Krishna(D)	Steel Bars
86.	Reshma Chemical (P) Ltd	Sarojini Road Kethanakonda(V) , Ibrahimpatnam(M), Krishna(D)	Fine Chemicals
87.	Railway Wagon Workshop	Guntupalli(V) Ibrahimpatnam(M), Krishna(D)	Servicing of Railway Wagons & other article pertaining to railway
88.	Ramco Industries Ltd	Ibrahimpatnam(M), Krishna(D)	Asbestos & asbestos Products
89.	Sri Kanakadurga Chromates Pvt Ltd	Gadmanugu(V), G.Konduru(M), Krishna(D)	Sodium Dichromate, Basic Chromium Sulphate, Sodium Chromate

Source of data APPCB website

2) Road Traffic

National Highway 65 and National Highway 30 are passing nearer to Dr.NTTPS.

The automobile source is one among major sources of air pollutant emissions that contribute significantly to poor air quality. A detailed traffic survey was conducted in the study area at 2 major traffic intersections in order to arrive at the traffic density in the study area. Gaseous emissions like Sulphur dioxide, Nitrous oxide, CO, HC etc might be released from the vehicular movement, which has a direct impact on the environment. The details of traffic monitoring locations are given in table.

Details of Traffic Monitoring Locations

S.No	Code	Location	W.R.T the Site Epicenter	
			Direction	Distance in Km
1	TF1	Vijayawada to Kodada (NH-65)	SW	2.1
2	TF2	Ibrahimpatnam to kondapalli Road(NH-30)	NW	1.5

Traffic density on Vijayawada to Kodada (NH-65)

Hours	2- Wheelers Motor cycle or scooter		3 & 4 Wheelers		Medium Vehicles		Heavy Vehicles		Total	
	No.s	@0.75 PCU	No.s	@1.0 PCU	No.s	@2.0 PCU	No.s	@3.7 PCU	No.s	PCU's / Hr
10:00-11:00	462	346.5	590	590	647	1294	32	118.4	1731	2348.9
11:00-12:00	289	216.8	558	558	540	1080	15	55.5	1402	1910.3
12:00-13:00	370	277.5	729	729	521	1042	46	170.2	1666	2218.7
13:00-14:00	325	243.8	556	556	427	854	28	103.6	1336	1757.4
14:00-15:00	249	186.8	655	655	458	916	36	133.2	1398	1891.0
15:00-16:00	352	264.0	569	569	437	874	45	166.5	1403	1873.5
16:00-17:00	421	315.8	606	606	544	1088	40	148	1611	2157.8
17:00-18:00	485	363.8	650	650	594	1188	52	192.4	1781	2394.2
18:00-19:00	421	315.8	540	540	562	1124	35	129.5	1558	2109.3
19:00-20:00	424	318.0	694	694	555	1110	47	173.9	1720	2295.9
20:00-21:00	281	210.8	610	610	625	1250	52	192.4	1568	2263.2
21:00-22:00	158	118.5	588	588	700	1400	35	129.5	1481	2236.0
05:00-06:00	90	67.5	417	417	586	1172	32	118.4	1125	1774.9
06:00-07:00	270	202.5	550	550	491	982	30	111	1341	1845.5
07:00-08:00	340	255.0	616	616	544	1088	41	151.7	1541	2110.7
08:00-09:00	425	318.8	666	666	488	976	29	107.3	1608	2068.1
09:00-10:00	387	290.3	683	683	441	882	27	99.9	1538	1955.2
Total	**5749**	**4311.8**	**10277**	**10277**	**9160**	**18320**	**622**	**2301.4**	**25808**	**35210.2**

Traffic Density on Ibrahimpatnam to kondapalli Road (NH-30)

Hours	2- Wheelers Motor cycle or scooter		3 & 4 Wheelers		Medium Vehicles		Heavy Vehicles		Total	
	No.s	@0.75 PCU	No.s	@1.0 PCU	No.s	@2.0 PCU	No.s	@3.7 PCU	No.s	PCU's / Hr
10:00-11:00	377	282.8	263	263	34	68	1	3.7	675	617.5
11:00-12:00	345	258.8	278	278	40	80	0	0	663	616.8
12:00-13:00	276	207.0	190	190	45	90	2	7.4	513	494.4
13:00-14:00	308	231.0	229	229	61	122	3	11.1	601	593.1
14:00-15:00	359	269.3	251	251	39	78	0	0	649	598.3
15:00-16:00	239	179.3	202	202	56	112	1	3.7	498	497.0
16:00-17:00	366	274.5	274	274	47	94	4	14.8	691	657.3
17:00-18:00	320	240.0	293	293	52	104	2	7.4	667	644.4
18:00-19:00	384	288.0	313	313	38	76	2	7.4	737	684.4
19:00-20:00	256	192.0	234	234	17	34	0	0	507	460.0
20:00-21:00	241	180.8	185	185	48	96	3	11.1	477	472.9
21:00-22:00	158	118.5	164	164	30	60	2	7.4	354	349.9

05:00-06:00	53	39.8	40	40	19	38	2	7.4	114	125.2
06:00-07:00	185	138.8	173	173	15	30	3	11.1	376	352.9
07:00-08:00	332	249.0	260	260	22	44	1	3.7	615	556.7
08:00-09:00	310	232.5	288	288	29	58	0	0	627	578.5
09:00-10:00	355	266.3	328	328	25	50	2	7.4	710	651.7
Total	**4864**	**3648.0**	**3965**	**3965**	**617**	**1234**	**28**	**103.6**	**9474**	**8950.6**

Volume count: The volume count surveys have been conducted for two National Highways. The traffic volume counts were conducted for 17 hours (from 5: 00 AM to 22:00 PM on the day) in three shifts. Manual count method was adopted for vehicular counts. At every one hour interval, the number and category of vehicles passing through each arm of the intersection were recorded in the survey form.

From the above table, it can be understood that the road corridors in the study area has a medium to heavy traffic flow.
Source of data: EIA report of Dr.NTTPS Stage.V unit 1x800MW.

Other sources of pollution: **Agriculture activities, Domestic activities etc**

CHAPTER 3

Air Quality in the study area

Ambient Air Quality

Ambient air quality is being monitored regularly for PM_{10}, $PM_{2.5}$, SO_2 and NO_x at Ibrahimpatnam, Kondapalli, Rayanapadu and Hilltop Guest House by Dr.NTTPS. The AAQ data for year 2017-18 (upto February) along with Air Quality Index (AQI) are given below for 4 locations.

To present status of the air quality and its effects on human health, CPCB classified the air quality scenario based on the AQI as follows:

IND-AQI Category and Range

AQI Range	AQI Category
0-50	GOOD
51-100	Satisfactory
101-200	Moderately polluted
201-300	Poor
301-400	Very Poor
401-500	Severe

The Air Quality levels around Dr. NTTPS are in the satisfactory range.

Location: Kondapalli **Units : µg/m^3**

		PM $_{10}$	PM $_{2.5}$	SO_2	NOx	AQI	AQI category
	CPCB/APPCB Limits	100	60	80	80		
Month	Date						
APR-17	03.04.17	101	37	28	35	101	Moderate
	06.04.17	125	58	32	40	117	Moderate
	10.04.17	83	37	21	28	83	Satisfactory
	13.04.17	104	50	26	33	103	Moderate
	20.04.17	114	42	29	34	109	Moderate
	21.04.17	108	50	29	36	105	Moderate
	25.04.17	87	37	23	28	87	Satisfactory
	28.04.17	94	42	26	35	94	Satisfactory
MAY - 17	02.05.17	81	33	27	34	81	Satisfactory
	05.05.17	85	33	24	30	85	Satisfactory
	10.05.17	92	37	30	37	92	Satisfactory
	11.05.17	102	25	27	40	101	Moderate
	22.05.17	114	29	30	37	109	Moderate
	23.05.17	123	42	27	36	115	Moderate
	29.05.17	94	46	33	41	94	Satisfactory
	31.05.17	107	37	27	35	105	Moderate
JUN - 17	06.06.17	118	37	29	37	112	Moderate
	07.06.17	89	33	23	33	89	Satisfactory
	14.06.17	112	42	26	32	108	Moderate

	17.06.17	62	21	26	34	62	Satisfactory
	19.06.17	69	25	20	28	69	Satisfactory
	22.06.17	102	42	23	33	101	Moderate
	28.06.17	84	29	26	35	84	Satisfactory
JUL - 17	04.07.17	48	17	19	27	48	Satisfactory
	10.07.17	74	29	25	34	74	Satisfactory
	18.07.17	94	37	25	34	94	Satisfactory
	21.07.17	71	33	22	32	71	Satisfactory
	22.07.17	55	17	17	26	55	Satisfactory
	26.07.17	106	42	28	37	104	Moderate
AUG - 17	03.08.17	70	37	20	31	70	Satisfactory
	07.08.17	75	33	24	31	75	Satisfactory
	16.08.17	89	37	24	33	89	Satisfactory
	23.08.17	81	33	21	29	81	Satisfactory
	30.08.17	81	29	26	34	81	Satisfactory
	31.08.17	74	21	23	32	74	Satisfactory
SEP - 17	05.09.17	96	46	29	36	96	Satisfactory
	07.09.17	84	42	26	34	84	Satisfactory
	11.09.17	86	33	23	28	86	Satisfactory
	13.09.17	62	29	21	29	62	Satisfactory
	22.09.17	80	33	24	34	80	Satisfactory
	26.09.17	79	33	21	29	79	Satisfactory
OCT - 17	06.10.17	96	33	27	36	96	Satisfactory
	10.10.17	116	42	32	42	111	Moderate
	12.10.17	94	33	27	36	94	Satisfactory
	16.10.17	87	37	24	33	87	Satisfactory
	25.10.17	77	29	21	29	77	Satisfactory
	30.10.17	89	33	27	35	89	Satisfactory
NOV - 17	04.11.17	85	33	24	33	85	Satisfactory
	07.11.17	79	37	24	35	79	Satisfactory
	13.11.17	94	42	30	38	94	Satisfactory
	15.11.17	93	37	27	35	93	Satisfactory
	22.11.17	78	25	21	31	78	Satisfactory
	27.11.17	87	33	27	36	87	Satisfactory
DEC - 17	04.12.17	89	54	24	34	89	Satisfactory
	08.12.17	93	46	27	37	93	Satisfactory
	12.12.17	86	42	27	36	86	Satisfactory
	19.12.17	101	75	30	39	101	Moderate
	26.12.17	75	33	27	38	75	Satisfactory
	29.12.17	81	42	24	33	81	Satisfactory
JAN - 18	04.01.18	94	42	27	36	94	Satisfactory
	08.01.18	95	37	30	38	95	Satisfactory
	09.01.18	109	58	36	45	106	Moderate
	17.01.18	107	58	35	42	105	Moderate
	24.01.18	98	42	30	39	98	Satisfactory
	29.01.18	104	37	30	38	103	Moderate
FEB - 18	03.02.18	96	42	30	39	96	Satisfactory
	06.02.18	108	50	36	45	105	Moderate
	09.02.18	91	42	27	36	91	Satisfactory

	12.02.18	94	42	27	37	94	Satisfactory
	23.02.18	109	50	36	44	106	Moderate
	28.02.18	81	33	24	33	81	Satisfactory
Max		**125**	**75**	**36**	**45**	**117**	
Min		**48**	**17**	**17**	**26**	**48**	

Location: Ibrahimpatnam **Units : µg/m^3**

		PM_{10}	$PM_{2.5}$	SO_2	NOx	AQI	AQI category
	CPCB/APPCB Limits	**100**	**60**	**80**	**80**		
Month	**Date**						
APR-17	03.04.17	39	25	15	21	39	Good
	06.04.17	52	21	20	26	52	Satisfactory
	10.04.17	64	29	17	24	64	Satisfactory
	13.04.17	51	21	14	19	51	Satisfactory
	20.04.17	82	37	28	34	82	Satisfactory
	21.04.17	57	33	20	26	57	Satisfactory
	25.04.17	40	21	17	24	40	Satisfactory
	28.04.17	49	33	17	25	49	Satisfactory
MAY - 17	02.05.17	62	21	17	24	62	Satisfactory
	05.05.17	72	21	20	27	72	Satisfactory
	10.05.17	61	21	17	25	61	Satisfactory
	11.05.17	77	33	15	22	77	Satisfactory
	22.05.17	55	21	20	28	55	Satisfactory
	23.05.17	70	29	15	21	70	Satisfactory
	29.05.17	81	29	17	22	81	Satisfactory
	31.05.17	68	25	14	21	68	Satisfactory
JUN - 17	06.06.17	54	33	17	25	54	Satisfactory
	07.06.17	46	17	14	23	46	Satisfactory
	14.06.17	62	25	14	21	62	Satisfactory
	17.06.17	43	25	12	22	43	Satisfactory
	19.06.17	49	17	14	20	49	Satisfactory
	22.06.17	66	29	17	23	66	Satisfactory
	28.06.17	56	21	18	24	56	Satisfactory
JUL - 17	04.07.17	47	21	15	19	47	Satisfactory
	10.07.17	56	17	15	23	56	Satisfactory
	18.07.17	66	21	18	26	66	Satisfactory
	21.07.17	59	25	18	25	59	Satisfactory
	22.07.17	69	21	15	23	69	Satisfactory
	26.07.17	45	17	15	25	45	Satisfactory
AUG - 17	03.08.17	60	17	15	24	60	Satisfactory
	07.08.17	64	21	17	25	64	Satisfactory
	16.08.17	57	25	14	21	57	Satisfactory
	23.08.17	61	21	20	27	61	Satisfactory
	30.08.17	60	17	17	23	60	Satisfactory
	31.08.17	62	21	17	25	62	Satisfactory
SEP - 17	05.09.17	62	21	14	21	62	Satisfactory
	07.09.17	66	21	17	24	66	Satisfactory

	11.09.17	68	25	20	27	68	Satisfactory
	13.09.17	63	21	17	25	63	Satisfactory
	22.09.17	51	17	14	21	51	Satisfactory
	26.09.17	50	21	17	24	50	Satisfactory
OCT - 17	06.10.17	-	29	-	-	-	-
	10.10.17	-	33	-	-	-	-
	12.10.17	-	29	-	-	-	-
	16.10.17	-	25	-	-	-	-
	25.10.17	-	33	-	-	-	-
	30.10.17	-	29	-	-	-	-
NOV - 17	04.11.17	-	33	-	-	-	-
	07.11.17	-	29	-	-	-	-
	13.11.17	-	46	-	-	-	-
	15.11.17	-	29	-	-	-	-
	22.11.17	-	37	-	-	-	-
	27.11.17	-	33	-	-	-	-
DEC - 17	04.12.17	-	37	-	-	-	-
	08.12.17	-	42	-	-	-	-
	12.12.17	-	54	-	-	-	-
	19.12.17	-	75	-	-	-	-
	26.12.17	-	42	-	-	-	-
	29.12.17	-	37	-	-	-	-
JAN - 18	04.01.18	-	37	-	-	-	-
	08.01.18	72	25	20	28	72	Satisfactory
	09.01.18	93	46	26	34	93	Satisfactory
	17.01.18	90	33	23	32	90	Satisfactory
	24.01.18	70	29	20	30	70	Satisfactory
	29.01.18	67	25	17	25	67	Satisfactory
FEB - 18	03.02.18	85	42	23	30	85	Satisfactory
	06.02.18	92	37	20	27	92	Satisfactory
	09.02.18	83	33	17	25	83	Satisfactory
	12.02.18	74	33	20	26	74	Satisfactory
	23.02.18	86	37	23	29	86	Satisfactory
	28.02.18	73	29	20	27	73	Satisfactory
Max		**93**	**75**	**28**	**34**	**93**	
Min		**39**	**17**	**12**	**13**	**39**	

Location: Rayanapadu **Units : µg/m^3**

Month	**CPCB/APPCB Limits**	**PM $_{10}$** **100**	**PM $_{2.5}$** **60**	**SO_2** **80**	**NOx** **80**	**AQI**	**AQI category**
APR-17	03.04.17	65	29	21	29	65	Satisfactory
	06.04.17	43	25	17	24	43	Good
	10.04.17	75	29	17	26	75	Satisfactory
	13.04.17	85	33	23	32	85	Satisfactory
	20.04.17	114	46	34	41	109	Moderate
	21.04.17	79	29	28	36	79	Satisfactory
	25.04.17	79	37	31	39	79	Satisfactory
	28.04.17	66	33	26	33	66	Satisfactory

MAY - 17	02.05.17	63	25	20	26	63	Satisfactory
	05.05.17	67	25	23	28	67	Satisfactory
	10.05.17	57	21	20	26	57	Satisfactory
	11.05.17	69	21	17	24	69	Satisfactory
	22.05.17	68	25	20	25	68	Satisfactory
	23.05.17	109	37	23	31	106	Moderate
	29.05.17	116	50	29	36	111	Moderate
	31.05.17	80	29	23	32	80	Satisfactory
JUN - 17	06.06.17	67	25	20	28	67	Satisfactory
	07.06.17	56	21	20	26	56	Satisfactory
	14.06.17	94	37	25	32	94	Satisfactory
	17.06.17	56	21	22	28	56	Satisfactory
	19.06.17	75	33	25	34	75	Satisfactory
	22.06.17	107	46	31	39	105	Moderate
	28.06.17	87	25	25	33	87	Satisfactory
JUL - 17	04.07.17	93	46	26	36	93	Satisfactory
	10.07.17	85	37	29	36	85	Satisfactory
	18.07.17	69	29	23	30	69	Satisfactory
	21.07.17	54	21	20	32	54	Satisfactory
	22.07.17	103	58	26	34	102	Moderate
	26.07.17	60	25	21	28	60	Satisfactory
AUG - 17	03.08.17	104	58	32	44	103	Moderate
	07.08.17	102	37	28	36	105	Moderate
	16.08.17	87	37	23	31	87	Satisfactory
	23.08.17	95	42	25	34	95	Satisfactory
	30.08.17	93	29	29	37	93	Satisfactory
	31.08.17	87	29	26	35	87	Satisfactory
SEP - 17	05.09.17	78	25	21	29	78	Satisfactory
	07.09.17	71	29	18	26	71	Satisfactory
	11.09.17	104	46	29	36	103	Moderate
	13.09.17	71	37	30	38	71	Satisfactory
	22.09.17	97	42	32	39	97	Satisfactory
	26.09.17	86	37	27	36	86	Satisfactory
OCT - 17	06.10.17	86	29	24	33	86	Satisfactory
	10.10.17	74	25	24	32	74	Moderate
	12.10.17	65	21	15	22	65	Satisfactory
	16.10.17	72	25	18	26	72	Satisfactory
	25.10.17	89	37	27	36	89	Satisfactory
	30.10.17	78	33	21	29	78	Satisfactory
NOV - 17	04.11.17	103	46	30	37	102	Moderate
	07.11.17	109	42	27	35	106	Moderate
	13.11.17	99	37	24	33	99	Satisfactory
	15.11.17	87	33	24	31	87	Satisfactory
	22.11.17	108	42	30	38	105	Moderate
	27.11.17	95	37	27	34	95	Satisfactory
DEC - 17	04.12.17	102	46	30	39	101	Moderate
	08.12.17	90	46	33	41	90	Satisfactory
	12.12.17	92	50	27	38	92	Satisfactory
	19.12.17	113	54	36	43	109	Moderate

	26.12.17	87	37	30	39	87	Satisfactory
	29.12.17	87	42	27	36	87	Satisfactory
JAN - 18	04.01.18	74	33	21	30	74	Satisfactory
	08.01.18	87	33	21	32	87	Satisfactory
	09.01.18	106	42	24	35	104	Moderate
	17.01.18	108	37	30	37	105	Moderate
	24.01.18	90	33	27	36	90	Satisfactory
	29.01.18	78	25	24	34	78	Satisfactory
FEB - 18	03.02.18	114	50	33	41	109	Moderate
	06.02.18	104	46	30	38	103	Moderate
	09.02.18	78	33	21	30	78	Satisfactory
	12.02.18	76	33	24	32	76	Satisfactory
	23.02.18	94	42	30	38	94	Satisfactory
	28.02.18	75	29	21	31	75	Satisfactory
Max		**116**	**58**	**36**	**44**	**111**	
Min		**43**	**21**	**15**	**22**	**43**	

Location: *Hill* top guest house **Units : µg/m^3**

Month	CPCB/APPCB Limits	PM_{10} 100	$PM_{2.5}$ 60	SO_2 80	NOx 80	AQI	AQI category
APR-17	03.04.17	50	17	11	18	50	Good
	06.04.17	66	33	26	32	66	Satisfactory
	10.04.17	63	25	15	23	63	Satisfactory
	13.04.17	64	25	18	24	64	Satisfactory
	20.04.17	53	25	26	32	53	Satisfactory
	21.04.17	56	17	23	30	56	Satisfactory
	25.04.17	45	25	20	26	45	Good
	28.04.17	48	21	18	26	48	Good
MAY - 17	02.05.17	53	21	25	31	53	Satisfactory
	05.05.17	40	17	19	24	40	Good
	10.05.17	49	17	16	22	49	Good
	11.05.17	43	25	13	20	43	Good
	22.05.17	57	17	16	24	57	Satisfactory
	23.05.17	94	46	31	39	94	Satisfactory
	29.05.17	79	33	22	30	79	Satisfactory
	31.05.17	59	21	19	26	59	Satisfactory
JUN - 17	06.06.17	72	33	21	28	72	Satisfactory
	07.06.17	48	12	18	25	48	Good
	14.06.17	55	17	15	22	55	Satisfactory
	17.06.17	29	12	15	20	29	Good
	19.06.17	43	21	18	25	43	Good
	22.06.17	60	21	21	28	60	Satisfactory
	28.06.17	44	17	15	22	44	Good
JUL - 17	04.07.17	35	12	15	22	35	Good
	10.07.17	39	17	12	19	39	Good
	18.07.17	50	17	12	20	50	Good
	21.07.17	60	21	15	21	60	Satisfactory

	22.07.17	43	12	12	21	43	Good
	26.07.17	44	21	15	23	44	Good
AUG - 17	03.08.17	58	12	15	21	58	Satisfactory
	07.08.17	67	21	14	23	67	Satisfactory
	16.08.17	52	21	17	26	52	Satisfactory
	23.08.17	44	17	17	24	44	Good
	30.08.17	53	17	15	23	53	Satisfactory
	31.08.17	51	17	15	22	51	Satisfactory
SEP - 17	05.09.17	51	17	14	22	51	Satisfactory
	07.09.17	49	17	12	19	49	Good
	11.09.17	45	12	12	20	45	Good
	13.09.17	43	17	15	24	43	Good
	22.09.17	41	12	15	21	41	Good
	26.09.17	41	17	15	22	41	Good
OCT - 17	06.10.17	45	17	12	19	45	Good
	10.10.17	68	25	20	26	68	Satisfactory
	12.10.17	50	17	12	20	50	Good
	16.10.17	40	12	15	21	40	Good
	25.10.17	50	21	18	24	50	Good
	30.10.17	61	25	20	26	61	Satisfactory
NOV - 17	04.11.17	58	21	17	24	58	Satisfactory
	07.11.17	45	17	15	22	45	Good
	13.11.17	64	25	18	24	64	Satisfactory
	15.11.17	46	21	15	22	46	Good
	22.11.17	54	21	18	23	54	Satisfactory
	27.11.17	66	25	15	23	66	Satisfactory
DEC - 17	04.12.17	58	33	17	24	58	Satisfactory
	08.12.17	48	29	15	23	48	Good
	12.12.17	49	25	17	24	49	Good
	19.12.17	77	29	21	28	77	Satisfactory
	26.12.17	58	21	15	24	58	Satisfactory
	29.12.17	54	29	18	26	54	Satisfactory
JAN - 18	04.01.18	58	25	15	23	58	Satisfactory
	08.01.18	45	21	18	25	45	Good
	09.01.18	61	29	15	23	61	Satisfactory
	17.01.18	59	25	20	27	59	Satisfactory
	24.01.18	45	21	15	24	45	Good
	29.01.18	41	21	12	21	41	Good
FEB - 18	03.02.18	58	25	17	25	58	Satisfactory
	06.02.18	51	21	15	22	51	Satisfactory
	09.02.18	55	21	15	23	55	Satisfactory
	12.02.18	43	17	15	21	43	Good
	23.02.18	66	29	21	26	66	Satisfactory
	28.02.18	49	17	18	25	49	Good
Max		**94**	**46**	**31**	**39**	**94**	
Min		**29**	**12**	**11**	**18**	**29**	

As per the CPCB classification, **air quality around Dr. NTTPS is good to moderate.** CPCB has given breakpoint concentrations of individual pollutants for different AQI categories as follows.

AQI Category	Break point concentrations				
	NOx ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	
Good	40	40	50	30	
Satisfactory	80	80	100	60	
Moderately polluted	180	380	250	90	
Poor	280	800	350	150	
Very Poor	400	1600	430	250	
Severe	400+	1600+	430+	250+	

SO2 and NOx levels are in the good to satisfactory range. Most of the time, pollution levels around Dr. NTTPS fall in the good to satisfactory range. Pollution levels fall in the moderate range due to higher PM10 which are far away from the breakpoint concentrartions of moderately polluted range.

Air quality Index in other locations of Vijayawada

The CPCB is recording the AQI from different cities in India. AQI data recorded by CPCB for 3 locations in Vijayawada (Benz circle, Auto Nagar and Police control room) is as follows.

AQI – January 2018

Monitoring Station	City	Date	AQI	Status	Prominent Parameter
Benz Circle, Vijayawada	Vijaywada	2/1/2018	104	Moderate	PM10
		5/1/2018	102	Moderate	PM10
		8/1/2018	101	Moderate	PM10
		10/1/2018	103	Moderate	PM10
		12/1/2018	99	Satisfactory	PM10
		20-01-2018	103	Moderate	PM10
		22-01-2018	103	Moderate	PM10
		25-01-2018	99	Satisfactory	PM10
		28-01-2018	103	Moderate	PM10
Autonagar, Vijayawada	Vijaywada	2/1/2018	104	Moderate	PM10
		5/1/2018	103	Moderate	PM10
		8/1/2018	101	Moderate	PM10
		10/1/2018	104	Moderate	PM10
		12/1/2018	102	Moderate	PM10
		20-01-2018	103	Moderate	PM10
		22-01-2018	104	Moderate	PM10
		25-01-2018	103	Moderate	PM10
		28-01-2018	102	Moderate	PM10
Police Control	Vijaywada	2/1/2018	101	Moderate	PM10

Room, Krishna District Vijaywada		5/1/2018	96	Satisfactory	PM10
		8/1/2018	103	Moderate	PM10
		10/1/2018	105	Moderate	PM10
		12/1/2018	100	Satisfactory	PM10
		20-01-2018	101	Moderate	PM10
		22-01-2018	98	Satisfactory	PM10
		25-01-2018	102	Moderate	PM10
		28-01-2018	103	Moderate	PM10

AQI in Auto nagar is Moderate in all days while AQI of Benz circle and Police control room is Satisfactory to Moderate.

Observations: The Air Quality in the study area is varying from good to Moderate which is comparable to AQI of Benz circle and Police control room

CHAPTER 4

Health survey and Collection of data from Primary Health Centers

Preliminary survey on Health Status

Preliminary survey was conducted to ascertain the health conditions in the villages and health care facilities. Total 277 sample house holds in 18 villages were surveyed.The households were surveyed about the prevalence of common or regular ailments, relatively long-term and chronic conditions. Out of 18 villages, 8 villages are covered under influence zone of Dr.NTTPS. 10 villages are covered in non-influence zone.

Village wise total number of samples collected

Name of the village	Number of House Holds		Number of population	
Influence zone	No.		No.	
Ibrhimpatnam	20		84	
Kondapalli	20		103	
Mulapadu	16		64	
Jupudi	12		51	
Guntupalli	16		81	
Thummalapalem	15		83	
Rayanpadu	12		68	
Elaprolu	15		65	
Total	126		599	
Non-influence zone				
Trilochanapuram	19		82	
Kethanakonda	15		60	
Kotikalapudi	16		77	
Kileshpuram	19		86	
Kattubadipalem	16		63	
Kavaluru	15		64	
Velagaleru	16		64	
Kothur	10		54	
Surayyapalem	11		38	
Paidurupadu	14		50	
Total	151		638	
Total influence zone and non-influence zone	277		1237	

Disease pattern among different villages are reported as follows.

1. Cold / Cough /Throat infection/Eye irritation/Other allergies
2. Asthma/Lung related problems
3. Skin diseases
4. Hypertension
5. Head ache
6. Neurological problems
7. Gastric problems
8. Heart diseases
9. Diabetes

Prevalence of village wise disease pattern

Name of the village	Total population surveyed	Non-chronic incidences		Chronic diseases	
Influence zone		No. of persons	%	No. of persons	%
Ibrhimpatnam	84	25	29.8	15	17.9
Kondapalli	103	24	23.3	9	8.7
Mulapadu	64	26	40.6	13	20.3
Jupudi	51	13	25.5	8	15.7
Guntupalli	81	22	27.2	15	18.5
Thummalapalem	83	22	26.5	10	12.0
Rayanpadu	68	18	26.5	7	10.3
Elaprolu	65	16	24.6	15	23.1
Total	**599**	**166**	**27.7**	**92**	**15.4**
Non-influence zone					
Trilochanapuram	82	19	23.2	19	23.2
Kethanakonda	60	8	13.3	8	13.3
Kotikalapudi	77	13	16.9	10	13.0
Kileshpuram	86	18	20.9	15	17.4
Kattubadipalem	63	15	23.8	5	7.9
Kavaluru	64	12	18.8	6	9.4
Velagaleru	64	15	23.4	10	15.6
Kothur	54	15	27.8	10	18.5
Surayyapalem	38	10	26.3	9	23.7
Paidurupadu	50	11	22.0	8	16.0
Total	**638**	**136**	**21.3**	**100**	**15.7**

Observations: Occurrence of common diceases are 6.4% more in the influence zone when compared with non-influence zone. However, there is no major difference in the occurrence of chronic diseases in the influence and non-influence zone.

Source of data: EIA report of Dr.NTTPS stage.V unit 1x800MW survey was conducted during 2014 for EIA study for construction of 1x800MW unit.

Data collection from PHCs

Health status data was collected from 3 Nos Primary Health Centers (PHCs) in the influence zone and 4 PHCs in the Non-influence zone for the period of last 3 years i.e 2015, 2016 and 2017. The survey data is given below.

Prevalence of Acute Respiratory Infection (ARI)/ Influenza like Illness (ILI) among the patients in 3 years from 2015 to 2017

S.No	Name of the village	Population	**Acute Respiratory Infection (ARI)/ Influenza like Illness (ILI)**	Total OPD Attendance	% of Acute Respiratory Infection (ARI)/ Influenza like Illness (ILI)	**Acute Respiratory Infection (ARI)/ Influenza like Illness (ILI)**	Total OPD Attendance	% of Acute Respiratory Infection (ARI)/ Influenza like Illness (ILI)	**Acute Respiratory Infection (ARI)/ Influenza like Illness (ILI)**	Total OPD Attendance	% of Acute Respiratory Infection (ARI)/ Influenza like Illness (ILI)
			2015 (from Jan-15 to Dec-15)			**2016 (from Jan-16 to Dec-16)**			**2017 (from Jan-17 to Dec-17)**		
INFLUENCE ZONE (with in 10Km range)											
1	Ibrahimpatnam PHC	68572	1781	9701	18.36	4396	26009	16.90	5182	21922	23.63
2	Kondapalli PHC	85114	1482	6655	22.27	4452	18903	23.55	2793	14200	19.67
3	G.Konduru PHC	53299	999	6815	14.66	687	24606	2.79	11	21019	0.05
Sub-Total		206985	4262	23171	18.39	9535	69518	13.72	7986	57141	13.98
NON-INFLUENCE ZONE (above 10Km range)											
4	Velagaleru PHC	81000	2044	7903	25.86	4181	22924	18.24	2904	14926	19.46
5	Reddygudem PHC	49500	1252	5331	23.49	3356	19808	16.94	3119	14838	21.02
6	Kanchikacharla	97000	1473	7177	20.52	3867	19336	20.00	2309	16153	14.29
7	Chandrala PHC	68686	207	24355	0.85	(from Jan-15 to Dec-16)			95	16393	0.58
Sub-Total		296186	4976	44766	11.12	11404	62068	18.37	8427	62310	13.52
Total		503171	9238	67937	13.60	20939	131586	15.91	16413	119451	13.74

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Prevalence of Asthma among the patients in 3 years from 2015 to 2017

S.No	Name of the village	Population	**Asthma**	Total OPD Attendance	% of Asthma	**Asthma**	Total OPD Attendance	% of Asthma	**Asthma**	Total OPD Attendance	% of Asthma
			2015 (from Jan-15 to Dec-15)			**2016 (from Jan-16 to Dec-16)**			**2017 (from Jan-17 to Dec-17)**		
INFLUENCE ZONE (with in 10Km range)											
1	Ibrahimpatnam PHC	68572	199	9701	2.05	450	26009	1.73	447	21922	2.04
2	Kondapalli PHC	85114	163	6655	2.44	384	18903	2.03	219	14200	1.54
3	G.Konduru PHC	53299	40	6815	0.58	185	24606	0.75	104	21019	0.48
Sub-Total		206985	402	23171	1.73	1019	69518	1.46	770	57141	1.34
NON-INFLUENCE ZONE (above 10Km range)											
4	Velagaleru PHC	81000	201	7903	2.54	699	22924	3.04	364	14926	2.43
5	Reddygudem PHC	49500	97	5331	1.82	183	19808	0.92	41	14838	0.27
6	Kanchikacharla	97000	274	7177	3.82	419	19336	2.17	66	16153	0.41
7	Chandrala PHC	68686	845	24355	3.46	(from Jan-15 to Dec-16)			536	16393	3.26
Sub-Total		296186	1417	44766	3.16	1301	62068	2.09	1007	62310	1.61
Total		503171	1819	67937	2.67	2320	131586	1.76	1777	119451	1.48

Prevalence of Allergic rhinitis among the patients in 3 years from 2015 to 2017

S.No	Name of the village	Population	**Allergic rhinitis**	Total OPD Attendance	% of Allergic rhinitis	**Allergic rhinitis**	Total OPD Attendance	% of Allergic rhinitis	**Allergic rhinitis**	Total OPD Attendance	% of Allergic rhinitis
			2015 (from Jan-15 to Dec-15)			**2016 (from Jan-16 to Dec-16)**			**2017 (from Jan-17 to Dec-17)**		
INFLUENCE ZONE (with in 10Km range)											
1	Ibrahimpatnam PHC	68572	69	9701	0.71	180	26009	0.69	512	21922	2.33
2	Kondapalli PHC	85114	251	6655	3.77	821	18903	4.34	882	14200	6.21
3	G.Konduru PHC	53299	785	6815	11.52	4310	24606	17.52	4498	21019	21.39
Sub-Total		206985	1105	23171	4.76	5311	69518	7.64	5892	57141	10.31
NON-INFLUENCE ZONE (above 10Km range)											
4	Velagaleru PHC	81000	161	7903	2.03	1164	22924	5.07	260	14926	1.74
5	Reddygudem PHC	49500	99	5331	1.85	259	19808	1.31	114	14838	0.76
6	Kanchikacharla	97000	12	7177	0.16	742	19336	3.83	2553	16153	15.80
7	Chandrala PHC	68686	3719	24355	15.26	(from Jan-15 to Dec-16)			3593	16393	21.91
Sub-Total		296186	3991	44766	8.91	2165	62068	3.48	6520	62310	10.46
Total		503171	5096	67937	7.50	7476	131586	5.68	12412	119451	10.39

Prevalence of Chronic Bronchitis among the patients in 3 years from 2015 to 2017

S.No	Name of the village	Population	**Chronic Bronchitis**	Total OPD Attendance	% of Chronic Bronchitis	**Chronic Bronchitis**	Total OPD Attendance	% of Chronic Bronchitis	**Chronic Bronchitis**	Total OPD Attendance	% of Chronic Bronchitis
			2015 (from Jan-15 to Dec-15)			**2016 (from Jan-16 to Dec-16)**			**2017 (from Jan-17 to Dec-17)**		
INFLUENCE ZONE (with in 10Km range)											
1	Ibrahimpatnam PHC	68572	9	9701	0.09	2	26009	0.007	1	21922	0.004
2	Kondapalli PHC	85114	1	6655	0.015	0	18903	0	0	14200	0
3	G.Konduru PHC	53299	0	6815	0	0	24606	0	0	21019	0
Sub-Total		206985	10	23171	0.04	2	69518	0.0028	1	57141	0.0017
NON-INFLUENCE ZONE (above 10Km range)											
4	Velagaleru PHC	81000	2	7903	0.02	2	22924	0.0087	0	14926	0
5	Reddygudem PHC	49500	0	5331	0	0	19808	0	1	14838	0.0067
6	Kanchikacharla	97000	0	7177	0	2	19336	0.010	0	16153	0
7	Chandrala PHC	68686	11	24355	0.045	(from Jan-15 to Dec-16)			19	16393	0.115
Sub-Total		296186	13	44766	0.03	4	62068	0.006	20	62310	0.032
Total		503171	23	67937	0.034	6	131586	0.004	21	119451	0.017

Prevalence of Pulmonary Tuberculosis among the patients in 3 years, from 2015 to 2017

S.No	Name of the village	Population	**Pulmonary Tuberculosis**	Total OPD Attendance	% of Pulmonary Tuberculosis	**Pulmonary Tuberculosis**	Total OPD Attendance	% of Pulmonary Tuberculosis	**Pulmonary Tuberculosis**	Total OPD Attendance	% of Pulmonary Tuberculosis
			2015 (from Jan-15 to Dec-15)			**2016 (from Jan-16 to Dec-16)**			**2017 (from Jan-17 to Dec-17)**		
INFLUENCE ZONE (with in 10Km range)											
1	Ibrahimpatnam PHC	68572	3	9701	0.03	11	26009	0.04	0	21922	0
2	Kondapalli PHC	85114	0	6655	0	14	18903	0.07	6	14200	0.04
3	G.Konduru PHC	53299	11	6815	0.161	23	24606	0.08	7	21019	0.03
Sub-Total		206985	14	23171	0.06	48	69518	0.06	13	57141	0.07
NON-INFLUENCE ZONE (above 10Km range)											
4	Velagaleru PHC	81000	0	7903	0	12	22924	0.05	6	14926	0.04
5	Reddygudem PHC	49500	0	5331	0	4	19808	0.02	1	14838	0.006
6	Kanchikacharla	97000	6	7177	0.083	15	19336	0.07	6	16153	0.03
7	Chandrala PHC	68686	0	24355	0	(from Jan-15 to Dec-16)			0	16393	0
Sub-Total		296186	6	44766	0.013	32	62068	0.05	13	62310	0.20
Total		503171	20	67937	0.029	80	131586	0.06	26	119451	0.22

Prevalence of Skin infection among the patients in 3 years from 2015 to 2017

S.No	Name of the village	Population	**Skin infection**	Total OPD Attendance	% of Skin infection	**Skin infection**	Total OPD Attendance	% of Skin infection	**Skin infection**	Total OPD Attendance	% of Skin infection
			2015 (from Jan-15 to Dec-15)			**2016 (from Jan-16 to Dec-16)**			**2017 (from Jan-17 to Dec-17)**		
INFLUENCE ZONE (with in 10Km range)											
1	Ibrahimpatnam PHC	68572	333	9701	3.43	1269	26009	4.87	366	21922	1.67
2	Kondapalli PHC	85114	100	6655	1.50	307	18903	1.62	170	14200	1.19
3	G.Konduru PHC	53299	47	6815	0.68	705	24606	2.86	854	21019	4.06
Sub-Total		206985	480	23171	2.07	2281	69518	3.28	1390	57141	2.43
NON-INFLUENCE ZONE (above 10Km range)											
4	Velagaleru PHC	81000	119	7903	1.50	740	22924	3.22	665	14926	4.45
5	Reddygudem PHC	49500	0	5331	0	1	19808	0.005	0	14838	0
6	Kanchikacharla	97000	199	7177	2.77	622	19336	3.22	282	16153	1.74
7	Chandrala PHC	68686	599	24355	2.46	(from Jan-15 to Dec-16)			635	16393	3.87
Sub-Total		296186	917	44766	2.04	1363	62068	2.19	1582	62310	2.54
Total		503171	1397	67937	2.06	3638	131586	2.76	2972	119451	2.48

Analysis of the data collected for 3 years

In the Influence zone (within 10 km), 3 Nos PHCs are covered with total population of 2,06,985. Under Non-influence zone, 4 Nos PHCs with total population of 2,96,186 are covered for study. Comparision of prevalence of various dieseas is given below.

Comparision of Prevalence of ARI/ILI in the Influence zone and Non Influence zone

Year 2015

Details	Category			
	Influence zone	**Non influence zone**	Change in ARI/ILI	Remarks
Total Population covered	206985	296186		% incidences of ARI/ILI increased in the Influence zone over the Non-influence zone.
Total OPD attendence	23171	44766		
ARI/ILI observed	4262	4976		
ARI/ILIcases	18.39%	11.12%	(+) 7.27 %	

Year 2016

Details	Category			
	Influence zone	**Non influence zone**	Change in ARI/ILI	Remarks
Total Population covered	206985	296186		% incidences of ARI/ILI decreased in the Influence zone compared to Non-influence zone.
Total OPD attendence	69518	62068		
ARI/ILI observed	9535	11404		
ARI/ILIcases	13.72%	18.37%	(-) 4.65%	

Year 2017

Details	Category			
	Influence zone	**Non influence zone**	Change in ARI/ILI	Remarks
Total Population covered	206985	296186		% incidences of ARI/ILI increased slightly in the Influence zone over the Non-influence zone.
Total OPD attendence	57141	62310		
ARI/ILI observed	7986	8427		
ARI/ILIcases	13.98%	13.52%	(+) 0.46 %	

Comparision of Prevalence of Asthma in the Influence zone and Non Influence zone

Year 2015

Details	Category		Change in Asthma	Remarks
	Influence zone	**Non influence zone**		
Total Population covered	206985	296186		% incidences of Asthma decreased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	23171	44766		
Asthma observed	402	1417		
Asthma cases	1.73%	3.16%	(-) 1.43 %	

Year 2016

Details	Category		Change in Asthma	Remarks
	Influence zone	**Non influence zone**		
Total Population covered	206985	296186		% incidences of Asthma decreased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	69518	62068		
Asthma observed	1019	1301		
Asthma cases	1.46%	2.10%	(-) 0.64%	

Year 2017

Details	Category		Change in Asthma	Remarks
	Influence zone	**Non influence zone**		
Total Population covered	206985	296186		% incidences of Asthma decreased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	57141	62310		
Asthma observed	770	1007		
Asthma cases	1.34%	1.62%	(-) 0.28 %	

Comparision of Prevalence of Allergic rhinitis observed in the Influence zone and Non Influence zone

Year 2015

Details	Category			
	Influence zone	**Non influence zone**	Change in Allergic rhinitis	Remarks
Total Population covered	206985	296186		% incidences of Allergic rhinitis decreased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	23171	44766		
Allergic rhinitis observed	1105	3991		
Allergic rhinitis cases	4.76%	8.92%	(-) 4.16 %	

Year 2016

Details	Category			
	Influence zone	**Non influence zone**	Change in Allergic rhinitis	Remarks
Total Population covered	206985	296186		% incidences of Allergic rhinitis increased in the Influence zone over the Non-influence zone.
Total OPD attendence	69518	62068		
Allergic rhinitis observed	5311	2165		
Allergic rhinitis cases	7.64%	3.48%	(+) 4.16%	

Year 2017

Details	Category			
	Influence zone	**Non influence zone**	Change in Allergic rhinitis	Remarks
Total Population covered	206985	296186		% incidences of Allergic rhinitis decreased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	57141	62310		
Allergic rhinitis observed	5892	6520		
Allergic rhinitis cases	10.31%	10.46%	(-) 0.15 %	

Comparision of Prevalence of Chronic Bronchitis observed in the Influence zone and Non Influence zone

Year 2015

Details	Category			
	Influence zone	**Non influence zone**	Change in Chronic Bronchitis	Remarks
Total Population covered	206985	296186		% incidences of Chronic Bronchitis decreased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	23171	44766		
Chronic Bronchitis observed	10	23		
Chronic Bronchitis cases	0.043%	0.051%	(-) 0.008 %	

Year 2016

Details	Category			
	Influence zone	**Non influence zone**	Change in Chronic Bronchitis	Remarks
Total Population covered	206985	296186		% incidences of Chronic Bronchitis decreased in the Influence zone I when compared to Non-influence zone.
Total OPD attendence	69518	62068		
Chronic Bronchitis observed	2	4		
Chronic Bronchitis cases	0.003%	0.006%	(-) 0.003%	

Year 2017

Details	Category			
	Influence zone	**Non influence zone**	Change in Chronic Bronchitis	Remarks
Total Population covered	206985	296186		% incidences of Chronic Bronchitis decreased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	57141	62310		
Chronic Bronchitis observed	1	20		
Chronic Bronchitis cases	0.002%	0.032%	(-) 0.03 %	

Comparision of Prevalence of Skin infection observed in the Influence zone and Non Influence zone

Year 2015

Details	Category			
	Influence zone	**Non influence zone**	Change in Skin infection	Remarks
Total Population covered	206985	296186		% incidences of Skin infection increased in the Influence zone over the Non-influence zone.
Total OPD attendence	23171	44766		
Skin infection observed	480	917		
Skin infection cases	2.07%	2.05%	(+) 0.02 %	

Year 2016

Details	Category			
	Influence zone	**Non influence zone**	Change in Skin infection	Remarks
Total Population covered	206985	296186		% incidences of Skin infection increased in the Influence zone over the Non-influence zone.
Total OPD attendence	69518	62068		
Skin infection observed	2275	1363		
Skin infection cases	3.27%	2.19%	(+) 1.08%	

Year 2017

Details	Category			
	Influence zone	**Non influence zone**	Change in Skin infection	Remarks
Total Population covered	206985	296186		% incidences of Skin infection decreased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	57141	62310		
Skin infection observed	1382	1582		
Skin infection cases	2.41%	2.53%	(-) 0.12 %	

Comparision of Prevalence of Pulmonary Tuberculosis observed in the Influence zone zone and Non Influence zone

Year 2015

Details	Category			
	Influence zone	**Non influence zone**	Change in Pulmonary Tuberculosis	Remarks
Total Population covered	206985	296186		% incidences of Pulmonary Tuberculosis increased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	23171	44766		
Pulmonary Tuberculosis observed	14	6		
Pulmonary Tuberculosis cases	0.06%	0.013%	(+) 0.047 %	

Year 2016

Details	Category			
	Influence zone	**Non influence zone**	Change in Pulmonary Tuberculosis	Remarks
Total Population covered	206985	296186		% incidences of Pulmonary Tuberculosis increased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	69518	62068		
Pulmonary Tuberculosis observed	48	32		
Pulmonary Tuberculosis cases	0.069%	0.052%	(+) 0.017%	

Year 2017

Details	Category			
	Influence zone	**Non influence zone**	Change in Pulmonary Tuberculosis	Remarks
Total Population covered	206985	296186		% incidences of Pulmonary Tuberculosis decreased in the Influence zone when compared to Non-influence zone.
Total OPD attendence	57141	62310		
Pulmonary Tuberculosis observed	13	13		
Pulmonary Tuberculosis cases	0.022%	0.021%	(+) 0.001 %	

Analysis of medical investigations conducted in medical camps

Observations

Preliminary survey indicates **Occurrence of common diceases are 6.4% more in the influence zone when compared with non-influence zone. However, there is no major difference in the occurrence of chronic diseases in the influence and non-influence zone.**

There is no definite trend (increase or decrease) on prevalence of occurrence of Acute Respiratory Infection (ARI)/ Influenza Like Illness (ILI), Allergitic Rhinitis, Skin infections, Pulmonary Tuberculosis reported in the influence zone and Non-influence zones. But Prevalence of Ashtma and Chronic Bronchitis are more in the non-influence zone compared to influence zone. This may be due to local ground level pollution sources.

Remarks of Medical officers of PHCs on the "Questionnaire for survey at PHC to ascertain prevalence of diseases and pollution aspects" is enclosed. The medical officers statements do not indicate any advrse pollution related medical cases in the influence and Non-influence zones.

Chapter 5

Investigation on Human health (Field data collection by conducting Medical camps)

Field data collection by conducting medical camps

APGENCO in co-ordination with Andhra Hospitals conducted medical camps at 10 locations covering 6 locations in Influence zone and 4 locations in Non-influence zone. Total No of people attended in the medical camps is 1451. Pulmonary Function Test (PFT), Ultrasonography (USG), ECG and general health checkup was done by the team headed by Senior level Doctors and paramedical staff using medical equipment. Medicines were also distributed. Photos taken and the data recorded during medical camps were enclosed. News paper clippings regarding conducting medical camps are also enclosed.

MEDICAL CAMPS DATA

S. No	Date	Village	No. of persons attended	ECG (Heart)			PET (Lungs)			USG (Kidneys and lever)		
				Normal	Abnormal	% of abnormal	Normal	Abnormal	% of abnormal	Normal	Abnormal	% of abnormal
INFLUENCE ZONE												
1	05 -12 - 17	West Ibrahimpatnam	230	205	25	10.87	226	4	1.74	223	7	3.04
2	14 -12 - 17	Mulapadu	106	86	20	18.87	74	32	30.19	99	7	6.60
3	21 -12 - 17	Kondapalli	172	158	14	8.14	145	27	15.70	172	0	0.00
4	28 -12 - 17	Kattubadipalem	163	146	17	10.43	152	11	6.75	160	3	1.84
5	27 -02 - 18	Surayapalem	121	95	26	21.49	95	26	21.49	115	6	4.96
6	07 -03 - 18	Jupudi	146	130	16	10.96	126	20	13.70	124	22	15.07
Total			938	820	118	12.58	818	120	12.79	894	44	4.69
Non- INFLUENCE ZONE												
1	23 -01 - 18	Kotikalapudi	159	150	9	5.66	153	6	3.77	159	0	0.00
2	20 -02 - 18	Chilikuru	117	112	5	4.27	100	17	14.53	117	0	0.00
3	22 -02 - 18	Athkuru	100	88	12	12.00	79	21	21.00	98	2	2.00
4	03 -03 - 18	Kavuluru	137	116	21	15.33	115	22	16.06	134	3	2.19
Total			513	466	47	9.16	447	66	13.84	508	5	0.97

Analysis of medical investigations

		Zone		
		Inflence zone	**Non influence zone**	Change
Name of the test	**Test results**			
PFT(lungs)	Normal	818	447	
	Abnormal	120	66	
	% of abnormal	12.79	12.86	-0.07%
USG(kidneys and lever)	Normal	893	508	
	Abnormal	45	5	
	% of abnormal	4.80	0.97	+3.83%
ECG (Heart)	Normal	820	466	
	Abnormal	118	47	
	% of abnormal	12.58	9.16	+3.42%

Observations: Medical investigations like PFT indicate, there is no adverse pollution related issues in the influence zone compared to Non-influence zone. The % of abnormality increasing by 3.42% in the influence zone over non-influence zone in ECG tests conducted. The % of abnormality increases by 3.83% in the influence zone over no n-influence zone in USG tests conducted. The % abnormality decreases by 0.07% in the influence zone over non-influence zone in PFT tests conducted.

Chapter 6

Analysis and Findings

Main pollution sources in the influence zone (upto 10 km from Dr.NTTPS) are Dr.NTTPS, another 17 major& medium industries, 71 stone crushing units, NH 65, NH 30 and domestic activities. All these sources contribute to increase of pollution levels in the Atmospheric air. Air quality in the influence zone is Good to Moderate which is comparable with the other locations in Vijayawada.

Preliminary survey indicates occurrence of common diceases are 6.4% more in the influence zone when compared with non-influence zone. However, there is no major difference in the occurrence of chronic diseases in the influence and non-influence zone.

The Health statistics from PHCs on Acute Respiratory Infection (ARI)/ Influenza like Illness (ILI), Allergitic rhinitis, Ashtma, Chronic bronchitis, Pulmonary tuberculosis, Skin infections do not indicate any more occurrence in the influence zone compared to non-influence zone. The observations of the Medical officers of PHCs in the influence and non-influence zones do not indicate any adverse pollution related medical cases. Investigations during medical camps did not indicate adverse disease occurrence phenomenon in the influence zone when compared to non-influence zone.

Overall conclusion

Preliminary survey, Health statistics from PHCs, observations of the Medical officers of PHCs, Investigations during medical camps did not indicate adverse pollution related medical cases in the influence zone evidencing the serious impact on human health due to Dr.NTTPS.

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సాక్షి : 21'12'2017

ఉచిత వైద్య శిబిరాలను సద్వినియోగం చేసుకోండి

ఇఛాపురం, న్యూస్‌టుడే: స్వచ్ఛంద సంస్థలు ఏర్పాటు చేస్తున్న ఉచిత వైద్య శిబిరాలను సద్వినియోగం చేసుకోవాలని ఎన్టీటీపీఎస్ వాటర్ మేనేజర్ లక్ష్మీనారాయణ అన్నారు. ఎన్టీటీపీఎస్ సంక్షేమ శాఖ, వెంకటేశ్వర చారిటబుల్ ట్రస్ట్, ఆంధ్రా ఆసుపత్రి సంయుక్తంగా ఉచిత వైద్య శిబిరాన్ని పశ్చిమ ఇఛాపురం పట్నం ఎంపీయూపీ పాఠశాలలో బుధవారం నిర్వహించాయి.

వైద్య శిబిరానికి స్పందన



ఈసీజీ పరీక్షలు నిర్వహిస్తున్న వైద్య సిబ్బంది

మూలపొర ఇఛాపురం (గ్రామీణం), న్యూస్‌టుడే: మూలపొర గ్రామపంచాయతీ కార్యాలయంలో శ్రీ వెంకటేశ్వర చారిటబుల్‌ట్రస్ట్, ఎన్టీటీపీఎస్ సంయుక్తంగా గురువారం నిర్వహించిన వైద్య శిబిరంలో 176 మందికి పైగా గ్రామస్థులు వైద్య పరీక్షలు చేయించుకున్నారు. వైద్య శిబిరాన్ని సర్పంచి పి. శ్రీనివాసరావు ప్రారంభించారు. ఎన్టీటీపీఎస్ పర్యావరణ విభాగం పర్యవేక్షక ఇంజినీరు వెంకటరెడ్డి, మానవవనరులు, సంక్షేమ విభాగం జనరల్ మేనేజరు లక్ష్మీనారాయణలు మాట్లాడుతూ సప్త విద్యుత్తు ఉత్పత్తితోపాటు పర్యావరణ పరిరక్షణ, పరిసర గ్రామస్థుల సంక్షేమానికి ప్రాధాన్యమిస్తున్నట్లు తెలిపారు. ఆవరణలో జరిగిన వైద్య శిబిరానికి హాజరైన రోగులకు వైద్య పరీక్షలు చేసిన వైద్యులు తగిన సూచనలు చేశారు. అవసరమైన వారికి మందులు ఉచితంగా అందించారు. గ్రామ కార్యదర్శి శ్రీనివాసరావు, ఆంధ్రా ఆసుపత్రికి చెందిన వైద్యులు రవీంద్రనాథ్, కమలాకాశీ, శ్రీదేవి, శ్రీనివాస్, అమృత రాజు, ట్రైనీ పాల్గొన్నారు. శిబిర నిర్వహణలో ఎన్టీటీపీఎస్ ఇంజినీర్లు, సిబ్బంది, వెలుగు గ్రామ కమిటీ సభ్యులు పాల్గొన్నారు.

తెలుగు పద్యాలు నేర్పించాలి

కురవ (రెడ్డిగూడెం), న్యూస్‌టుడే: విద్యార్థులకు తెలుగు పద్యాలు రాగయుక్తంగా వేర్పించాలని రెడ్డిగూడెం ఎంపీపీ తోటకూర నాగయ్యదేవి అన్నారు. ఆకర్షణీయ గ్రామాల కార్యక్రమంలో భాగంగా కురవ పంచాయతీలోని ప్రాథమికోన్నత పాఠశాల, తండా ప్రాథమిక పాఠశాల, అంగన్‌వాడీ కేంద్రాలను గురువారం తనిఖీ చేశారు. పాఠశాలల్లో విద్యార్థుల ప్రతిభను పరీక్షించారు. ఈ కార్యక్రమంలో ఈవోపీఆర్డీ డి.వాసవెంకటేశ్వరరావు, పంచాయతీ కార్యదర్శి ఎం.శివకుమారి పాల్గొన్నారు.

మైలవరం

నేడు వైద్య-శిబిరం

కొండపల్లి(ఇబ్రహీంపట్నం): కొండపల్లి ఆర్సీఎం ప్రాథమికోన్నత పాఠశాలలో ఎన్టీటీపీఎస్ ఆధ్వర్యంలో గురువారం వైద్యశిబిరం నిర్వహిస్తున్నట్లు ఆ సంస్థ జనరల్ మేనేజర్ డి.లక్ష్మీనారాయణ బుధవారం తెలిపారు. గుండె, ఊపిరితిత్తుల సంబంధిత వ్యాధులకు వైద్యపరీక్షలు నిర్వహిస్తారన్నారు. ప్రజలు ఈ అవకాశాన్ని సద్వినియోగం చేసుకోవాలన్నారు.

ఈనాడు: 21:12:2017

★ ఎన్టీటీపీఎస్ సంక్షేమ శాఖ, వెంకటేశ్వర చారిటబుల్ ట్రస్ట్, ఆంధ్రా ఆసుపత్రి సంయుక్తంగా కొండపల్లి తరీసీఎం కాలనీలో గురువారం ఉచిత వైద్య శిబిరాన్ని నిర్వహించనున్నట్లు ఎన్టీటీపీఎస్ వాటర్ మేనేజర్ లక్ష్మీనారాయణ తెలిపారు. ఉచితంగా మందులు అందజేస్తామని తెలిపారు.

ఆంధ్రభూమి 21-02-2018

ఉచిత వైద్య శిబిరం

ఇబ్రహింపట్నం, ఫిబ్రవరి 20: గ్రామీణ ప్రాంతాలలో అమాయక లేక ఎముకలు, కీళ్ళ వ్యాధులు వస్తున్నాయని వాటి నివారణకు వైద్యుల సలహాలు పాటించాలని పర్యవేక్షక ఇంజనీరు ఎంశేఖర్ తెలిపారు. ధర్మల్ విద్యుత్ కేంద్రం, హైదరాబాద్ మణిపాల్ హాస్పిటల్ వైద్య బృందం మండలంలోని రిబుకూట గ్రామంలో వైద్య పరీక్షలు నిర్వహించగా వాటర్ మేనేజర్ లక్ష్మీనారాయణ ఆధ్వర్యంలో జరిగిన ఈ ఎముకలు, కీళ్ళ వైద్య నిపుణుల బృందానికి మాట్లాడుతూ గ్రామీణ ప్రాంతాలలో పొలం పనులు చేయడం వలన 40 సంవత్సరాల నుండే ఎముకలు, కీళ్ళు అరిగి వ్యాధులు వస్తున్నాయని, వాటి నివారణకు వైద్యుల సూచనలు సలహాలు పాటించాలన్నారు. ఈ శిబిరంలో మొత్తం 117 మందికి పరీక్షలు నిర్వహించి మందులు పంపిణీ చేశారు.

ఈనాడు

ఉచిత వైద్య శిబిరానికి స్పందన



ఈసీజీ పరీక్ష చేస్తున్న వైద్యులు

కొండూరు). న్యూస్‌టుడే: వాటర్ మేనేజర్ లక్ష్మీనారాయణ ప్రారంభించారు. విద్యుత్ కేంద్రం వాటర్ మేనేజర్ లక్ష్మీనారాయణ ఆధ్వర్యంలో గురువారం ఉచిత వైద్య శిబిరాన్ని గ్రామ సర్పంచ్ బద్దెర వెంకటేశ్వరరావు. విద్యుత్ కేంద్రం వాటర్ మేనేజర్ లక్ష్మీనారాయణ ప్రారంభించారు గ్రామస్థులు సేవలను సద్వినియోగం చేసుకున్నారు. ఈసీజీ, శ్వాసకోశ, కాలేయం, మూత్ర పిండాలు, మధుమేహం తదితర పరీక్షలు చేసి వంద మందికిపైగా రోగులకు ఉచితంగా మందులు అందజేశారు. నిర్వాహకులు మాట్లాడుతూ వైద్య సేవల కోసం ప్రత్యేక బడ్జెట్‌ను సమకూర్చుకొని జి.కొండూరు, ఇబ్రహీంపట్నం మండల గ్రామాల్లో తరచూ శిబిరాలు నిర్వహించి సేవలు అందిస్తున్నట్లు తెలిపారు. కార్యక్రమంలో ఎస్‌ఈ, ఎం.శేఖర్, ఈఈ వెంకటరెడ్డి, ఏడీఈ రాంబాబు పాల్గొనగా డాక్టర్ అమృత బాబు, శ్రీనివాస్, రవీంద్రకుమార్ వైద్య సేవలందించారు.

Chief Engineer
SM / Dr. N.T.T.P.S.
Himabindam – 521 456

ఈనాడు: 21:02:2018

సరైన జీవన విధానాలతో శారీరక బాధలు దూరం



ఈనాడు

2018

ఆత్మూరులో....

గ్రామీణ ప్రాంతాల్లో వ్యాధుల బారినపడుతున్న వారికి ఆధునిక వైద్యం అందించేందుకు చేస్తున్న సేవలు విస్తరింపజేయాలని జనరల్ మేనేజర్

125

ఎన్టీటీపీఎస్ ఆవరణలో సూరాయపాలెంలోని పాఠశాలలో నిర్వహించిన మెగా వైద్యశిబిరంలో 167 మంది రోగులకు పరీక్షలు నిర్వహించి ఉచితంగా మందులు అందచేశారు. ఈ శిబిరాన్ని జనరల్ మేనేజరు లక్ష్మీనారాయణ ప్రారంభించారు. ఆరోగ్యపరిరక్షణకు తీసుకోవాల్సిన జాగ్రత్తలు వివరించారు. ఈ శిబిరంలో శ్వాసనాళ వ్యాధుల నిపుణులు డా.రవీంద్రనాథ్, మూత్రపిండ వ్యాధుల నిపుణులు డా.శ్రీనివాసరావు, గుండె వ్యాధుల నిపుణులు డా.ఆచ్యుతరావులు మాట్లాడుతూ ఆయా వ్యాధులు రాకుండా తీసుకోవాల్సిన చర్యలు, నివారణా చర్యలు గురించి వివరించారు. ఈ కార్యక్రమంలో యాజమాన్య ప్రతినిధులు ఎం.శేఖర్, ఇ.ఇ వెంకటరెడ్డి, రాంబాబు, ఉపాధ్యాయులు మహాలక్ష్మి, సీతామహాలక్ష్మి, లీల తదితరులు పాల్గొన్నారు.

వార్త Tue, 27 February 2018
epaper.vaartha.com//c/26639046

వంశీకృష్ణ
మేనేజర్ ఆపరేషన్ & మెయింటెనెన్స్
డాక్టర్ నాగ్ల తాతారావు
ఈ విద్యుత్ ఉత్పాదన కేంద్రము
కృష్ణపట్నము-521 455.

వంశీకృష్ణ

నేడు కవులూరులో ఉచిత వైద్య శిబిరం

ఉ.కొండూరు, మార్చి 2: మండలంలోని కవులూరు పంచాయతీ కార్యాలయం ఆవరణలో శనివారం ఉదయం 9.30 నుంచి సాయంత్రం 5 గంటల వరకు ఉచిత మెగా వైద్యశిబిరం నిర్వహించనున్నట్లు ఎన్టీటీపీఎస్ జీఎం లక్ష్మీనారాయణ శుక్రవారం ఒక ప్రకటనలో తెలిపారు. వైద్యశిబిరంలో రోగులకు ఉచితంగా మందులు పంపిణీ చేసి, అవసరమైన గుండె, మూత్ర పిండాల, ఉపిరితిత్తులకు సంబంధించిన పరీక్షలు అవసరాన్ని బట్టి యంత్రాల సాయంతో చేయిస్తామన్నట్లు తెలిపారు. ఈ అవకాశాన్ని ప్రజలు సద్వినియోగం చేసుకోవాలని కోరారు.

మైలవరం
శనివారం 3 మార్చి 2018

నేడు కవులూరులో ఉచిత మెగా వైద్య శిబిరం

ఉ.కొండూరు: ఎన్టీటీపీఎస్ ఆధ్వర్యంలో శనివారం 9 గంటల నుంచి కవులూరులో ఉచిత మెగా వైద్య శిబిరం నిర్వహిస్తున్నట్లు జనరల్ మేనేజర్ లక్ష్మీనారాయణ తెలిపారు. వృద్ధాప్య సంబంధిత వ్యాధులు, మధుమేహ, రక్తపోటు, దంత, నేత్ర పరీక్షలు చేయడంతోపాటు మందులు అందిస్తారని తెలిపారు. అవసరాన్ని బట్టి యంత్రాంగంతో పాటు కోరారు.

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నేడు వైద్య శిబిరం

ఉయ్యూరు(ఉ.కొండూరు): ఎన్టీటీపీఎస్ ఆధ్వర్యంలో కవులూరు పంచాయతీ కార్యాలయం వద్ద శనివారం వైద్య శిబిరాన్ని నిర్వహిస్తున్నట్లు ఎన్టీటీపీఎస్ జనరల్ మేనేజర్ లక్ష్మీనారాయణ శుక్రవారం తెలిపారు. శిబిరంలో వైద్య పరీక్షలు జరిపి మందులు అందజేయనున్నట్లు ఆయన పేర్కొన్నారు. ఈ అవకాశాన్ని ప్రతి ఒక్కరూ వినియోగించుకోవాలని ఆయన కోరారు.

సాక్షి: 08-03-2018

గుండె జబ్బులపై అప్రమత్తత అవసరం



వైద్య పరీక్షలు చేయించుకుంటున్న గ్రామస్థులు

జూపూడి(ఇబ్రహీంపట్నం): మారుతున్న జీవన విధానంలో వస్తున్న గుండె జబ్బులపై అప్రమత్తంగా ఉండాలని డాక్టర్ అమృతబాబు అన్నారు. ఎన్టీటీపీఎస్ ఆధ్వర్యంలో జూపూడిలో వైద్య శిబిరం బుధవారం నిర్వహించారు. సర్పంచ్ నల్లమోతు దుర్గారావు వైద్య శిబిరం ప్రారంభించారు. మంచి ఆహారపు అలవాట్లు, వ్యాయామం, ధ్యానం ద్వారా గుండెజబ్బులు నివారించవచ్చన్నారు. డాక్టర్ శ్రీనివాస్ మూర్తిందాబు, కాలేయ వ్యాధులు, వాటి నివారణోపాయాలపై అవగాహన కల్పించారు. వ్యాధిగ్రస్తులకు బ్లీడింగ్ స్టిటమ్స్ పరీక్షలు నిర్వహించారు. టీపీ, మరుమేహం, పారారం వ్యాధులకు సంబంధించి 145 మందికి పరీక్షలు జరిపి మందులు అందించారు. జనరల్ మేనేజర్ డి.లక్ష్మీనారాయణ, ఎండీఓ పీహెచ్ పుష్పలత, గ్రామస్థులు పాల్గొన్నారు.

వంశీకృష్ణ
చీఫ్ మేనేజర్
ఆపరేషన్ & మెయింటెనెన్స్
డాక్టర్ నాగ్ల తాతారావు
విద్యుత్ ఉత్పాదన కేంద్రము
కృష్ణపట్నము-521 456.

ఆంధ్రజ్యోతి: 08.03.2018

మైలవరం
నియోజకవర్గం

గుండె జబ్బులతో అప్రమత్తంగా ఉండాలి



జూపూడి(ఇబ్రహీంపట్నం), మార్చి 7: గుండె జబ్బులపై ప్రజలు అప్రమత్తంగా ఉండాలని డాక్టర్ అమృతబాబు చెప్పారు. ఎన్టీటీపీఎస్ ఆధ్వర్యంలో మంగళవారం జూపూడిలో ఉచిత వైద్యశిబిరం నిర్వహించారు. శిబిరంలో దాదాపు 145 మంది రోగులకు పరీక్షలు నిర్వహించి, ఉచితంగా మందులు అందజేశారు. కార్యక్రమంలో సర్పంచ్ దుర్గారావు, ఎంపీటీసీ సభ్యులు, సివిల్ ఇంజనీర్ వెంకటరెడ్డి, లక్ష్మీనారాయణ పాల్గొన్నారు.

రోగులను పరీక్షిస్తున్న వైద్యులు

Questionnaire for survey at PHCs to ascertain prevalence of diseases and pollution aspects

1.	PHC location	Ibrahimpatnam.
2.	No. of people served/total population in the jurisdiction of the PHC	68,572
3.	No. of Doctors and paramedical staff in the PHC	12 (2+10)
4	No. of in-patient beds/emergency ward	6
5	Equipment available for investigation/Lab facilities	yes

6	Availability of medicines	(1) Paracetmol. (2) cifpertaxim (3) Diclofenac. (4) Atem. (5) metformin (6) Azithromicin (7) Doxcylen. (8) Amycoxilin 500+250
7	No. of out patients in a month/quarter. Data for three years may be provided	6000 Patients to quarter
8	No. of emergency cases and nature of emergency in a month/quarter	70 nos for month
9	Name of the major symptoms reported by patients and nature of diseases diagnosed by Doctors in different seasons in a year	F/W systeams and NON communicable Diseas and Diabetes Hypertation.
10	Causes of the diseases (Biological factors / Behavioral Factors/ Environmental factors/ Immunologic factors/ Nutritional factors/ Genetic factors/ Occupational/ Social factors and prevalence of the diseases, Disease patterns.	all are ~~feel~~. present
11	Morbidity and Mortality	—

12	Any kind of complaints made by public on the air pollution. water pollution etc.	Nil.
13	Special camps conducted by PHC	Depending on seasonal Diseases.
14	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the PHC	Shortcoming for Respiratory Co ll E. Covers Irritation of Bronchus of Dust Pollution in the air.

మెడికల్ ఆఫీసరు
ప్రాథమిక ఆరోగ్యకేంద్రం
ఇబ్రాంపట్నం-521456

Report Date and Time : 01/12/2017 03:40:45

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Ibrahimpatnam Phc**
Disease : **All**
Fdate : **01-Jan-2015**
Tdate : **31-Dec-2015**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Acute Repiratory Infectio	537	640	259	242	103
Fever of unknown origin	527	635	249	244	174
Body Pains	431	848	10	11	131
Diabetes Mellitus	256	475	0	0	111
Hypertension	183	326	0	0	105
Skin Infections	129	149	24	25	6
Asthama	128	52	1	0	18
Gasric ulcer	127	211	1	0	7
Accidental Injuries	103	36	18	9	0
Not Selected by DDC	61	119	13	14	0
Osteoarthritis	59	71	0	1	0
Scabies	54	60	29	21	13
Dog Bites	48	38	11	5	20
Headache	28	109	0	1	6
Abscess	25	28	9	3	2
Allergic rhinitis	22	40	4	2	1
Diarrhoea and gasroenteritis	22	39	9	11	6
Pain in throat and chest	20	26	2	0	5
Epilepsy	19	1	0	0	3
Pain Abdomen Non Specifi	17	122	7	11	8
Burns	17	9	1	1	1
Candidiasis	14	13	2	2	0
Iron deficiency anemia	13	77	0	2	0
Hensons disease (Leprosy)	13	0	0	0	1
dental caries	11	23	2	2	0
Vitamin A deficiency	9	9	2	1	0
Acute Urinary Tract Infec	7	41	7	3	0
Vitamin B12 deficiency anemia	6	2	1	1	0
Chronic bronchitis	6	3	0	0	0
Vitamin D deficiency	6	6	3	0	0
Nausea and vomitting	6	12	4	0	1
Pulmonary Tuberculosis	3	0	0	0	0
Other Std Cases	3	18	0	0	0
Visual disturbances	3	0	0	0	0
Atheroscerosis	3	6	0	0	7
Oedema	3	3	0	0	0
Acute renal failure	2	1	1	0	0
Animal Bite	2	3	0	0	0
Hypotension	2	8	0	0	5
Other anxiety disorder	1	0	0	0	0
Other Neurological Disord	1	0	0	0	0
Haemorrhage in early pregnancy	1	0	0	0	0
Fall from tree	1	4	0	0	0
Parkinsons disease	1	0	0	0	0

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Rubella	1	0	0	0	0
Osteoporosis	1	0	0	0	0
Uretic Colic	1	0	0	0	0
Acute tonsillitis	1	3	0	1	0
Urticaria	1	1	0	0	0
Foreign body on external eye	1	0	0	0	0
Iodine deficiency hypothyroidism	1	2	0	0	0
Femoral hernia	1	0	0	1	0
Unspecified sexually Trasmitted Infections	1	0	0	0	1
Pulmonary Oedema	1	0	0	0	0
Hemiplegia	1	0	0	0	0
Pregnancy And Antenatal C	0	426	0	0	0
Abnormalities of heart beat	0	3	0	0	0
Filariasis	0	1	0	0	0
Amoebiasis	0	0	0	0	1
Other hearing loss	0	0	0	1	0
Typhoid And Paratyphoid fevers	0	1	0	0	0
Acute Diarrhoeal (Includi	0	2	1	1	0
Otitis externa	0	1	0	1	0
Acute pericarditis	0	0	0	1	0
Snake Bite	0	1	0	0	0
Excessive vomitting in pregnancy	0	1	0	0	0
Postpartum haemorrage	0	2	0	0	0
Early syphillis	0	0	0	0	1
Road Traffic Accident	0	1	0	0	0
Adult Respiratory Distress Syndrome	0	2	0	0	0
Alzheimer's disease	0	0	0	0	1
Obesity	0	1	0	0	0
Dyspepsia	0	1	0	0	0
Bacterial meningitis	0	2	0	0	0
Tubectomy	0	1	0	0	0
Gangrene	0	1	0	0	0
Ascarisis (Roundworm Infestation	0	0	0	1	0
Orchitis and epididymitis	0	1	0	0	0
Acute appendicitis	0	0	0	0	1
Osteomyelitis	0	3	0	0	0
Maliganant neoplasm of base of tongue	0	0	0	0	2
Parasitilogically cofirmed Malaria	0	1	0	0	1
Dengue Fever	0	1	0	0	0
Otosclerosis	0	1	0	0	0
Viral Conjunctivitis	0	1	0	0	0
Single spontaneus delivery	0	1	0	0	0
Infantile cerebral palsy	0	1	0	0	0
Taeniasis	0	1	0	0	1
Non diabetic hypoglycemic coma	0	1	0	0	0
	2941	**4728**	**670**	**619**	**743**
	Two Thousand Nine Hundred Fourty One Only	Four Thousand Seven Hundred Twenty Eight Only	Six Hundred Seventy Only	Six Hundred Nineteen Only	Seven Hundred Fourty Three Only

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Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Ibrahimpatnam Phc**
Disease : **All**
Fdate : **01-Jan-2016**
Tdate : **31-Dec-2016**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Acute Repiratory Infectio	1138	1711	747	800	0
Body Pains	993	2114	36	29	0
Diabetes Mellitus	828	1606	2	1	0
Fever of unknown origin	735	998	511	486	0
Hypertension	551	853	0	1	0
Gasric ulcer	523	750	16	16	0
Accidental Injuries	434	219	106	48	0
Skin Infections	403	563	166	137	0
Dog Bites	334	261	184	95	0
Routine general health chech up	325	780	112	115	0
Asthama	295	148	3	4	0
Osteoarthritis	188	302	0	1	0
Scabies	111	92	70	40	0
Acute Urinary Tract Infec	89	154	23	28	0
Headache	79	313	11	25	0
Diarrhoea and gasroenteritis	65	113	42	54	0
Allergic rhinitis	64	74	21	21	0
Pain Abdomen Non Specifi	63	295	35	66	0
Abscess	58	58	22	13	0
dental caries	37	66	5	6	0
Road Traffic Accident	31	11	2	0	0
Hensons disease (Leprosy)	24	6	0	0	0
Conjunctivitis	22	33	7	9	0
Acute pharyngitis	21	42	5	8	0
Animal Bite	20	37	4	4	0
Nausea and vomitting	18	72	22	16	0
Burns	18	15	10	2	0
Whooping Cough	14	9	0	2	0
Candidiasis	14	18	7	1	0
Epilepsy	10	4	1	0	0
Pulmonary Tuberculosis	8	3	0	0	0
Iron deficiency anemia	6	52	2	3	0
Chronic Obstructive Pulmo	6	2	0	0	0
Acute tonsillitis	5	11	7	5	0
Haemorrhoids	5	4	0	0	0
Early syphillis	4	4	3	3	0
Vitamin B12 deficiency anemia	4	15	0	2	0
Oedema	3	1	0	0	0
Unspecified sexually Trasmitted Infections	3	4	1	0	0
Pain in throat and chest	3	5	1	0	0
Helminthiasis	3	4	0	4	0
Other Std Cases	2	150	0	0	0
Dyspepsia	2	2	0	0	0

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Hypotension	2	3	0	0	0
Otitis externa	2	1	0	0	0
Bacterial meningitis	1	3	1	0	0
Aquired haemolytic anemia	1	1	0	0	0
Acute Diarrhoeal (Includi	1	3	0	2	0
Scorpion Bite	1	0	0	0	0
Emphysema	1	0	0	0	0
Juvenile arthritis	1	1	0	0	0
Pulmonary Tuberculosis cofirmed	1	0	0	0	0
Adult Respiratory Distress Syndrome	1	0	0	0	0
Obesity	1	0	0	0	0
Migraine	1	0	0	0	0
Stroke (CVA)	1	0	0	0	0
Hydatidiform mole	1	0	0	0	0
Enteric Fever	1	0	0	0	0
Chicken pox (Varicella)	1	0	0	0	0
Chronic bronchitis	1	1	0	0	0
Orchitis and epidodymitis	1	0	0	0	0
Acute appendicitis	1	2	0	0	0
Osteomyelitis	1	0	0	0	0
Acute renal failure	1	3	2	1	0
Acute pericarditis	1	2	0	0	0
Birth injury to skeleton	0	1	0	0	0
Vitiligo	0	3	0	0	0
Iodine deficiency hypothyroidism	0	1	0	0	0
Toxic effect of alcohol	0	1	0	0	0
Renal calculus	0	1	0	0	0
Dyspepsia	0	2	0	0	0
Acute Poliomyelitis	0	1	0	0	0
Nonsuppurative otitis media	0	1	0	0	0
Influenza	0	1	0	0	0
Turner's syndrome	0	1	0	0	0
Urticaria	0	1	0	0	0
Acute myocardial infarction	0	1	0	0	0
Maliganant neoplasm of base of tongue	0	1	0	0	0
Fracture at wrist and hand level	0	2	0	0	0
Other aplastic anemias	0	1	0	0	0
Pulmonary Oedema	0	1	0	0	0
Syphilis	0	1	0	0	0
Osteoporosis	0	1	0	0	0
Fall from tree	0	4	3	2	0
Pregnancy And Antenatal C	0	1877	0	1	0
Viral Conjunctivitis	0	3	0	0	0
Snake Bite	0	2	0	0	0
Mumps	0	1	3	2	0
Granuloma inguinalae	0	0	1	0	0
Vitamin A deficiency	0	3	2	0	0
Tubectomy	0	247	0	0	0
Disordres of tooth eruption	0	1	0	0	0
Femoral hernia	0	0	1	0	0
Taeniasis	0	2	1	0	0
Amoeblasis	0	1	0	0	0
Gangrene	0	1	0	0	0
Preterm delivery	0	5	0	0	0
Convulsions	0	1	0	0	0
Haemorrhage in early pregnancy	0	1	0	0	0
	7583	**14175**	**2198**	**2053**	**0.0**
	Seven Thousand Five Hundred Eighty Three Only	Fourteen Thousand One Hundred Seventy Five Only	Two Thousand One Hundred Ninety Eight Only	Two Thousand Fifty Three Only	Zero Only

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Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Ibrahimpatnam Phc**
Disease : **All**
Fdate : **01-Jan-2017**
Tdate : **30-Nov-2017**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Acute Repiratory Infecti (cold & cough)	1496	2122	813	751	0
Body Pains	997	1890	39	46	0
Fever of unknown origin	770	1019	427	351	0
Diabetes Mellitus	648	1138	2	3	0
Hypertension	461	685	3	1	0
Routine general health chech up	331	700	109	114	0
Accidental Injuries	294	161	84	42	0
Gasric ulcer	288	485	12	3	0
Asthama	253	189	1	4	0
Dog Bites	213	218	113	75	0
Allergic rhinitis	161	268	45	38	0
Skin Infections	150	159	36	21	0
Pain Abdomen Non Specifi	104	241	45	37	0
Headache	89	189	4	7	0
Acute Urinary Tract Infec	75	114	20	27	0
Scabies	74	66	51	43	0
Abscess	47	27	14	11	0
Osteoarthritis	35	77	0	0	0
Diarrhoea and gasroenteritis	27	55	2	7	0
Nausea and vomitting	20	28	5	6	0
Road Traffic Accident	17	13	2	2	0
Conjunctivitis	13	9	1	0	0
Burns	11	14	2	1	0
dental caries	11	32	3	2	0
Acute Diarrhoeal (Includi	8	10	5	3	1
Animal Bite	5	8	3	2	0
Hypotension	5	12	0	0	0
Early syphillis	4	4	1	3	0
Adult Respiratory Distress Syndrome	3	5	1	1	0
Acute tonsillitis	3	3	0	1	0
Alzheimer's disease	2	0	0	0	0
Infantile cerebral palsy	2	0	0	0	0
Epilepsy	2	0	0	0	0
Obesity	2	2	0	0	0
Cystitis	1	0	0	0	0
Hensons disease (Leprosy)	1	10	0	0	0
Chronic bronchitis	1	0	0	0	0
Viral Conjunctivitis	1	1	0	0	0
Abnormalities of heart beat	1	0	0	0	0
Acute Poliomyelitis	1	1	0	0	0
Tubectomy	1	186	0	0	0
Chronic Obstructive Pulmo	1	0	0	0	0
Convulsions	1	0	0	0	0

Pain in throat and chest	1	1	0	0	0
Other Std Cases	1	23	0	0	0
Snake Bite	1	0	0	0	0
Other anxiety disorder	1	0	0	0	0
Whooping Cough	0	1	0	0	0
Hypertensive heart and renal disease	0	2	0	0	0
Syphilis	0	5	0	0	0
Juvenile arthritis	0	1	0	0	0
Postpartum haemorrage	0	1	0	0	0
Down's syndrome	0	0	1	0	0
Pulmonary Oedema	0	1	0	0	0
Amoebiasis	0	0	1	0	0
Duodenal ulcer	0	1	0	0	0
Pregnancy And Antenatal C	0	1631	0	0	0
Iron deficiency anemia	0	3	0	0	0
Haemorrhage in early pregnancy	0	1	0	0	0
Candidiasis	0	5	0	2	0
Femoral hernia	0	2	0	0	0
Filariasis	0	1	1	0	0
Helminthiasis	0	1	0	0	0
Disordres of tooth eruption	0	1	0	0	0
Trachoma	0	1	0	0	0
Vitamin D deficiency	0	0	1	0	0
Preterm delivery	0	2	0	0	0
Chicken pox (Varicella)	0	0	0	2	0
Acute pharyngitis	0	2	0	0	0
HIV disease	0	1	0	0	0
Rabies	0	1	0	0	0
Acute appendicitis	0	1	0	0	0
Taeniasis	0	1	0	2	0
	6634	**11832**	**1847**	**1608**	**1**
	Six Thousand Six Hundred Thirty Four Only	Eleven Thousand Eight Hundred Thirty Two Only	One Thousand Eight Hundred Fourty Seven Only	One Thousand Six Hundred Eight Only	One Only

Questionnaire for survey at PHCs to ascertain prevalence of diseases and pollution aspects

1.	PHC location	Kondapalli
2.	No. of people served/total population in the jurisdiction of the PHC	85,114
3.	No. of Doctors and paramedical staff in the PHC	1 and 19
4	No. of in-patient beds/emergency ward	4
5	Equipment available for investigation/Lab facilities	Yes

6	Availability of medicines	Yes, Antibiotics, Anti Allergics, Diabetic, Hypertention, pains
7	No. of out patients in a month/quarter. Data for three years may be provided	~~2200/-~~ 2200
8	No. of emergency cases and nature of emergency in a month/quarter	—
9	Name of the major symptoms reported by patients and nature of diseases diagnosed by Doctors in different seasons in a year	ARI, TB, HIV, Upper respiratory infection Cold, cough. Allergic cases
10	Causes of the diseases (Biological factors / Behavioral Factors/ Environmental factors/ Immunologic factors/ Nutritional factors/ Genetic factors/ Occupational/ Social factors and prevalence of the diseases, Disease patterns.	Seasonal diseases
11	Morbidity and Mortality	—

12	Any kind of complaints made by public on the air pollution, water pollution etc.	—
13	Special camps conducted by PHC	—
14	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the PHC	—

20-12-17

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Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Kondapalli Phc**
Disease : **All**
Fdate : **01-Jan-2015**
Tdate : **31-Dec-2015**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Acute Repiratory Infectio	419	549	253	245	16
Body Pains	397	624	15	16	0
Fever of unknown origin	336	367	137	128	2
Hypertension	184	290	3	0	149
Diabetes Mellitus	155	294	2	1	135
Asthama	103	52	1	5	2
Dog Bites	96	73	27	16	17
Allergic rhinitis	88	107	27	29	0
Accidental Injuries	74	31	13	4	5
Dyspepsia	44	68	2	2	0
Skin Infections	42	43	8	7	0
Pain Abdomen Non Specifi	37	51	11	8	0
Pain in throat and chest	28	33	1	4	0
Dyspepsia	25	29	1	0	0
Acute Diarrhoeal (Includi	22	16	4	7	2
Iron deficiency anemia	22	151	4	5	0
Gasric ulcer	21	33	2	0	0
Not Selected by DDC	14	20	3	1	0
Scabies	12	14	8	9	6
Diarrhoea and gasroenteritis	6	10	2	1	4
Helminthiasis	6	4	8	0	0
Burns	6	7	1	1	1
dental caries	5	17	1	2	0
Headache	5	20	0	0	0
Amoebiasis	4	12	2	6	0
Animal Bite	3	1	0	0	0
Hypotension	3	7	0	0	11
Atheroscerosis	2	0	0	0	0
Abscess	2	1	1	0	0
Adult Respiratory Distress Syndrome	1	1	0	0	0
Diaphragmatic hernia	1	0	0	0	0
Other Std Cases	1	0	0	0	0
Iodine deficiency hypothyroidism	1	0	0	0	0
Renal calculus	1	0	0	0	0
Acute Urinary Tract Infec	1	8	0	0	0
Osteoarthritis	1	0	0	0	0
Disordres of tooth eruption	0	1	0	0	0
Enteric Fever	0	0	0	1	0
Vitamin B12 deficiency anemia	0	0	0	1	0
Preterm delivery	0	1	0	0	0
Scorpion Bite	0	1	0	0	0
Taeniasis	0	1	2	0	0
Hypertensive heart disease	0	1	0	0	0
Diper Dermatitis	0	1	0	0	0
Fall on same level	0	0	0	0	2
Typhoid And Paratyphoid fevers	0	1	0	0	2
Chronic bronchitis	0	1	0	0	0
Ankylosing spondylitis	0	0	1	0	0
Pregnancy And Antenatal C	0	137	0	0	0
Unspecified sexually Trasmitted Infections	0	1	0	0	0
Foreign body in ear	0	1	0	0	0
Iridocyclitis	0	1	0	0	0
Acute renal failure	0	1	0	0	0
Hookworm Infestation	0	0	0	0	1
Herpes zoster	0	1	1	0	0
Whooping Cough	0	3	5	0	1

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2168	**3086**	**546**	**499**	**356**
Two Thousand One Hundred Sixty Eight Only	Three Thousand Eighty Six Only	Five Hundred Fourty Six Only	Four Hundred Ninety Nine Only	Three Hundred Fifty Six Only

20-12-17

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Report Date and Time : 29/11/2017 10:50:45

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Kondapalli Phc**
Disease : **All**
Fdate : **01-Jan-2016**
Tdate : **31-Dec-2016**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Acute Repiratory Infectio	1528	1892	535	497	0
Body Pains	893	1613	1	10	0
Diabetes Mellitus	539	1176	0	3	0
Dog Bites	533	417	67	60	0
Accidental Injuries	505	244	23	14	0
Hypertension	456	794	0	2	0
Allergic rhinitis	304	403	50	64	0
Pain Abdomen Non Specifi	255	530	5	16	0
Fever of unknown origin	243	250	43	57	0
Asthama	222	157	3	2	0
Dyspepsia	155	211	0	3	0
Abscess	150	108	8	3	0
Skin Infections	127	161	16	3	0
Hypotension	105	319	2	3	0
Acute Diarrhoeal (Includi	102	141	58	46	0
Taeniasis	57	47	7	2	0
Scabies	54	45	10	6	0
Headache	45	90	0	0	0
Pain in throat and chest	40	54	1	2	0
Iron deficiency anemia	35	274	1	1	0
Nausea and vomitting	34	44	5	10	0
Minor Surgery	27	6	0	1	0
Acute Urinary Tract Infec	26	37	6	3	0
dental caries	25	42	0	1	0
Osteoarthritis	21	40	0	1	0
Otitis externa	20	37	7	3	0
Burns	17	31	5	1	0
Hookworm Infestation	12	36	5	5	0
Animal Bite	11	29	2	2	0
Dyspepsia	10	22	1	0	0
Pulmonary Tuberculosis	9	4	0	0	0
Diarrhoea and gasroenteritis	6	7	2	3	0
Helminthiasis	6	9	4	8	0
Renal calculus	5	3	0	0	0
Fall on same level	4	4	1	0	0
Typhoid And Paratyphoid fevers	2	11	0	0	0
Haemorrhoids	2	2	0	0	0
Herpes zoster	2	1	1	0	0
Electric shock	2	0	0	0	0
Acute renal failure	2	5	0	0	0
Convulsions	1	0	0	0	0
Inguinal Hernia	1	0	0	0	0
Atopic Dermatitis	1	0	0	0	0
Acute tonsillitis	1	2	1	0	0
Scorpion Bite	1	1	0	0	0
Amoebiasis	1	13	3	1	0
Hyperplasia of prostate	1	0	0	0	0
Hypertensive heart and renal disease	1	0	0	0	0
Tubectomy	1	56	0	0	0
Otosclerosis	1	0	0	0	0
Conjunctivitis	1	0	0	1	0
Diaphragmatic hernia	1	1	0	0	0
Syphilis	1	0	0	0	0
Gasric ulcer	1	1	0	0	0
Urticaria	1	1	0	0	0
Pulmonary Tuberculosis cofirmed	1	0	0	0	0
Filariasis	0	1	0	0	0

Pregnancy And Antenatal C	0	1187	0	0	0
Oedema	0	2	0	0	0
Glaucoma	0	1	0	0	0
Iridocyclitis	0	1	0	0	0
Adult Respiratory Distress Syndrome	0	1	2	0	0
Snake Bite	0	1	0	0	0
Hypoparathyroidism	0	2	0	0	0
Vitamin B12 deficiency anemia	0	2	0	0	0
Uretic Colic	0	2	0	0	0
Hyperparathyroidism	0	1	0	0	0
Femoral hernia	0	0	1	0	0
Aquired haemolytic anemia	0	1	0	0	0
Vitamin D deficiency	0	1	0	0	0
Preterm delivery	0	4	0	0	0
Chicken pox (Varicella)	0	1	0	0	0
Birth injury to skeleton	0	1	0	0	0
Routine general health chech up	0	2	0	0	0
Iodine deficiency hypothyroidism	0	3	0	0	0
Candidiasis	0	1	0	0	0
	6607	**10586**	**876**	**834**	**0.0**
	Six Thousand Six Hundred Seven Only	Ten Thousand Five Hundred Eighty Six Only	Eight Hundred Seventy Six Only	Eight Hundred Thirty Four Only	Zero Only

29-12-17

Report Date and Time : 29/11/2017 10:55:35

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Kondapalli Phc**
Disease : **All**
Fdate : **28-Jan-2017**
Tdate : **28-Nov-2017**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Acute Repiratory Infectio	889	1205	346	353	0
Diabetes Mellitus	655	1183	2	5	0
Body Pains	572	1022	10	18	0
Hypertension	321	610	0	1	0
Dog Bites	309	186	48	33	0
Allergic rhinitis	227	487	72	96	0
Accidental Injuries	191	127	19	10	0
Pain Abdomen Non Specifi	174	346	17	21	0
Asthama	142	75	1	1	0
Abscess	140	133	11	9	0
Fever of unknown origin	120	164	12	12	0
Dyspepsia	91	148	0	0	0
Hypotension	76	235	3	3	0
Osteoarthritis	66	104	0	0	0
Acute Urinary Tract Infec	63	96	12	24	0
Skin Infections	56	92	8	14	0
Acute Diarrhoeal (Includi	48	75	16	34	0
Headache	37	94	2	3	0
Scabies	35	21	2	5	0
Iron deficiency anemia	35	328	1	5	0
Taeniasis	30	41	0	3	0
Pain in throat and chest	15	29	1	3	0
Nausea and vomitting	12	25	10	7	0
Otitis externa	12	31	5	6	0
dental caries	11	21	1	4	0
Burns	11	9	0	1	0
Animal Bite	8	15	1	2	0
Fall on same level	7	6	0	0	0
Hookworm Infestation	6	10	2	4	0
Dyspepsia	6	13	0	0	0
Helminthiasis	5	11	2	3	0
Haemorrhoids	4	0	0	0	0
Typhoid And Paratyphoid fevers	3	1	0	1	0
Herpes zoster	3	3	0	0	0
Acute renal failure	3	6	1	1	0
Conjunctivitis	3	0	0	1	0
Pulmonary Tuberculosis	2	3	0	0	0
Uretic Colic	2	3	0	0	0
Down's syndrome	1	0	0	0	0
Oedema	1	2	0	0	0
Diarrhoea and gasroenteritis	1	7	2	1	0
Snake Bite	1	0	0	0	0
Hydrocephalus	1	0	0	0	0
Diaphragmatic hernia	1	0	0	0	0
Fall from tree	1	0	0	0	0
Diseases of salivary gland	1	0	0	0	0
Acute appendicitis	1	0	0	0	0
Gasric ulcer	1	0	0	0	0
Pulmonary Tuberculosis not cofirmed	1	0	0	0	0
Blindness and low vision	1	1	0	0	0
Vitamin A deficiency	0	1	0	0	0
Pregnancy And Antenatal C	0	1475	0	0	0
Ischaemic Heart Diseases	0	1	0	0	0
Hypoparathyroidism	0	2	0	0	0
Hodgkin's disease	0	1	0	0	0
Tubectomy	0	31	0	0	0
Vitamin D deficiency	0	1	0	0	0

Preterm delivery	0	1	0	0	0
Epilepsy	0	1	0	0	0
Osteoporosis	0	1	0	0	0
Iodine deficiency hypothyroidism	0	3	0	0	0
Adult Respiratory Distress Syndrome	0	2	1	0	0
Alzheimer's disease	0	1	0	1	0
Inguinal Hernia	0	0	1	0	0
Minor Surgery	0	6	0	0	0
Anencephaly and similar malformations	0	1	0	0	0
Postpartum haemorrage	0	2	0	0	0
Renal calculus	0	1	0	0	0
Acute tonsillitis	0	1	0	0	0
Amoebiasis	0	2	0	0	0
Parasitilogically cofirmed Malaria	0	1	0	0	0
Lichen planus	0	1	0	0	0
	4402	**8504**	**609**	**685**	**0.0**
	Four Thousand Four Hundred Two Only	Eight Thousand Five Hundred Four Only	Six Hundred Nine Only	Six Hundred Eighty Five Only	Zero Only

20-12-17

Questionnaire for survey at PHC

S. No.	Description		Remarks
1.	PHC location	G. kadiam	
2.	No. of people served/Total population in the jurisdiction of the PHC	53,299	
3.	No. of Doctors and paramedical staff in the PHC	Doctors: 1 CHO - 1 Paramedic - 3.	other staff: 25
4.	No. of in patient beds/emergency ward	5	
5.	Equipment available for investigation/Lab facilities	Typhoid. Malaria, Pregnancy test & Dengue. Blood test.	Enclosed.
6.	Availability of medicines	Anti bacterial Painkiller. Anti allergic. HT, DM, other.	
7	No. of out patients in a month/quarter. Data for three years may be provided along with profiles of the patients (age, sex etc)	1500 to 2000 per month.	
8.	No. Of emergency cases and nature of emergency in a month/quarter	— NO —	
9.	Name of the major symptoms reported by patients and nature of diseases diagnosed by Doctors in different seasons in a year	—	—
10.	Causes of the diseases (Biological factors / Behavioral Factors/Environmental factors/ Immunologic factors/Nutritional factors/Genetic factors/ Occupational/ Social factors and prevalence of the diseases, Disease patterns.	Seasonal	diarrhoea.

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11.	Morbidity and Mortality rates	within limit.
12.	Any kind of complaints made by public on the air pollution, water pollution etc.	Not noticed
13.	Special camps conducted by PHC	70 Camps.
14.	Overall impression on the prevalence of diseases caused by Air pollution and water pollution by the Doctor in-charge of the PHC.	Not noticed.

23-11-17

MEDICAL OFFICER
PRIMARY HEALTH CENTRE
G. KONDURU, Krishna Dt.

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Report Date and Time : 22/11/2017 11:48:46

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **G.Konduru Phc**
Disease : **All**
Fdate : **01-Jan-2015**
Tdate : **31-Dec-2015**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Fever of unknown origin	371	384	125	87	3
Body Pains	365	614	2	1	0
Acute Repiratory Infectio	330	345	157	164	3
Diabetes Mellitus	328	388	0	0	6
Allergic rhinitis (Common Cold)	233	251	171	130	0
Hypertension	164	290	0	0	2
Abscess	128	117	38	18	0
Gasric ulcer	74	120	1	1	0
Dog Bites	57	35	24	15	1
Scabies	55	41	13	0	0
Iron deficiency anemia	27	141	4	3	0
Asthama	26	13	0	0	1
Accidental Injuries	24	6	2	1	0
Conjunctivitis	22	41	0	4	0
Skin Infections	18	24	2	3	0
Acute Urinary Tract Infec	16	99	4	3	0
Headache	13	68	0	0	2
Pain in throat and chest	12	18	3	0	1
dental caries	11	20	0	1	1
Pain Abdomen Non Specifi	11	31	1	2	0
Pulmonary Tuberculosis	9	1	0	0	0
Otitis externa	9	16	2	4	0
Amoebiasis	7	9	9	11	0
Animal Bite	6	9	2	3	1
Acute tonsillitis	6	8	0	1	0
Scorpion Bite	5	4	0	0	1
Typhoid And Paratyphoid fevers	5	1	0	0	0
Burns	5	5	1	0	0
Hypertensive heart and renal disease	4	0	0	0	0
Acute Diarrhoeal (Includi	4	7	8	15	0
Helminthiasis	3	2	5	1	0
Urticaria	3	5	0	1	0
Nausea and vomitting	3	3	4	0	0
Adult Respiratory Distress Syndrome	3	0	2	2	0
Ascarisis (Roundworm Infestation	3	2	0	1	0
Acute renal failure	2	1	0	0	0
Haemorrhoids	2	5	0	0	0
Vitamin B12 deficiency anemia	2	1	0	0	0
Osteoarthritis	2	1	0	0	0
Acute pharyngitis	2	0	1	0	0
Fall on same level	2	0	0	1	0
Iridocyclitis	1	0	0	0	0
Cystitis	1	0	0	0	0
Femoral hernia	1	0	0	0	0
Hypotension	1	4	0	0	0

Snake Bite	1	2	0	0	0
Hensons disease (Leprosy)	1	0	0	0	0
Not Selected by DDC	1	0	0	0	0
Diarrhoea and gasroenteritis	1	2	0	0	0
Fall from tree	1	0	0	0	0
Mumps	1	0	0	0	0
D.I.C. (Disseminated Intavascular Coagulation)	1	0	0	0	0
Pulmonary embolism	1	0	0	0	0
Fracture at wrist and hand level	1	0	0	0	0
Epilepsy	1	0	0	0	0
Exposure to uncontrolled fire	1	1	0	0	0
Poisoning Cases	0	1	0	0	0
Vitamin A deficiency	0	1	0	0	0
Osteomyelitis	0	0	0	0	0
Birth injury to skeleton	0	1	0	0	1
Acute naso pharyngitis	0	0	1	0	0
Influenza	0	1	0	0	0
Lactose intolerence	0	0	1	0	0
Oedema	0	1	0	0	0
Pregnancy And Antenatal C	0	172	0	0	0
Contaceptive management	0	22	0	0	0
Tubectomy	0	9	0	0	0
Iodine deficiency hypothyroidism	0	1	0	0	0
Pulmonary Tuberculosis cofirmed	0	1	0	0	0
Hydatidiform mole	0	1	1	0	0
Enteric Fever	0	0	0	0	0
Vitamin D deficiency	0	1	0	0	0
Preterm delivery	0	1	0	0	0
	2387	**3348**	**584**	**473**	**23**
	Two Thousand Three Hundred Eighty Seven Only	Three Thousand Three Hundred Fourty Eight Only	Five Hundred Eighty Four Only	Four Hundred Seventy Three Only	Twenty Three Only

23-11-17

MEDICAL OFFICER
PRIMARY HEALTH CENTRE
G. KONDURU, Krishna Dt.

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Report Date and Time : 22/11/2017 11:50:14

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **G.Konduru Phc**
Disease : **All**
Fdate : **01-Jan-2016**
Tdate : **31-Dec-2016**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Body Pains	1444	2919	21	9	0
Diabetes Mellitus	1416	1717	1	4	0
Allergic rhinitis (Coryza Cold)	1128	1427	933	821	1
Fever of unknown origin	942	943	393	342	0
Hypertension	645	1026	0	2	0
Accidental Injuries	404	157	59	14	1
Abscess	303	367	98	68	0
Gasric ulcer	295	558	1	3	0
Acute Repiratory Infectio	247	261	81	98	0
Skin Infections	237	340	65	63	0
Dog Bites	220	139	74	37	0
Asthama	121	60	3	1	0
Headache	118	303	5	3	0
Iron deficiency anemia	103	417	11	8	0
Conjunctivitis	94	169	32	24	0
Pain Abdomen Non Specifi	91	226	20	25	0
Acute Diarrhoeal (Includi	59	46	26	27	0
Pain in throat and chest	56	93	9	10	0
Acute Urinary Tract Infec	51	372	3	4	0
Scabies	34	15	7	11	0
dental caries	28	54	6	3	0
Diarrhoea and gasroenteritis	26	32	13	13	0
Amoebiasis	25	27	21	21	0
Nausea and vomitting	22	24	9	15	0
Otitis externa	19	34	3	8	0
Animal Bite	17	27	5	7	0
Pulmonary Tuberculosis	15	7	0	0	0
Osteoarthritis	11	17	9	4	0
Haemorrhoids	10	9	0	0	0
Burns	9	12	3	8	0
Snake Bite	7	1	0	0	0
Scorpion Bite	7	5	0	0	0
Acute tonsillitis	7	9	1	3	0
Vitamin B12 deficiency anemia	5	6	1	0	0
Helminthiasis	4	4	6	3	0
Hypertensive heart and renal disease	4	4	0	0	0
Hypotension	4	0	0	0	0
Ascarisis (Roundworm Infestation	4	3	0	0	0
Obesity	3	3	0	0	0
Fall on same level	2	2	0	0	0
Tubectomy	2	157	0	0	0
Fall from tree	2	1	0	0	0
Dyspepsia	1	0	0	0	0
Diper Dermatitis	1	0	0	0	0
Road Traffic Accident	1	0	0	0	0
Stroke (CVA)	1	0	0	0	0

Dengue Fever	1	0	0	0	0
Enteric Fever	1	0	0	0	0
Vitamin D deficiency	1	0	0	0	0
Convulsions	1	0	0	0	0
Acute pharyngitis	1	0	0	0	0
Hyperparathyroidism	1	0	0	0	0
Hydrocephalus	1	2	0	0	0
Abnormalities of heart beat	0	1	0	0	0
single delivery by caeserian section	0	1	0	0	0
Pulmonary Tuberculosis not cofirmed	0	1	0	0	0
Pulmonary Tuberculosis cofirmed	0	1	0	0	0
Benign neoplasm of ovary	0	1	0	0	0
Oedema	0	1	0	0	0
Early syphillis	0	1	0	0	0
Lungs Diseases	0	1	0	0	0
Typhoid And Paratyphoid fevers	0	1	0	0	0
Femoral hernia	0	1	0	0	0
Single spontaneus delivery	0	5	0	0	0
Poisoning Cases	0	1	0	0	0
Hensons disease (Leprosy)	0	1	0	0	0
Gangrene	0	0	0	2	0
Birth asphyxia	0	1	0	0	0
Contaceptive management	0	4	0	0	0
Pregnancy And Antenatal C	0	752	0	0	0
Acute renal failure	0	0	0	1	0
Schistosomiasis	0	1	0	0	0
	8252	**12771**	**1919**	**1662**	**2**
	Eight Thousand Two Hundred Fifty Two Only	Twelve Thousand Seven Hundred Seventy One Only	One Thousand Nine Hundred Nineteen Only	One Thousand Six Hundred Sixty Two Only	Two Only

23-11-17

MEDICAL OFFICER
PRIMARY HEALTH CENTRE
G. KONDURU, Krishna Dt.

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Report Date and Time : 22/11/2017 11:51:39

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **G.Konduru Phc**
Disease : **All**
Fdate : **01-Jan-2017**
Tdate : **31-Dec-2017**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Diabetes Mellitus	1394	1631	2	1	0
Allergic rhinitis (Common Cold)	1184	1568	876	870	0
Body Pains	1081	2024	28	25	0
Fever of unknown origin	861	967	398	420	0
Hypertension	463	856	0	3	0
Accidental Injuries	403	167	54	21	0
Skin Infections	317	386	81	70	0
Abscess	230	272	71	53	0
Gasric ulcer	229	466	10	5	0
Dog Bites	167	125	70	40	0
Iron deficiency anemia	94	329	12	12	0
Conjunctivitis	91	121	23	20	0
Headache	81	244	12	12	0
Asthama	61	39	4	0	0
Pain Abdomen Non Specifi	56	128	17	13	0
Acute Diarrhoeal (Includi	34	45	30	16	0
Acute Urinary Tract Infec	32	241	1	4	0
Pain in throat and chest	31	44	3	1	0
Scabies	28	17	19	17	0
Animal Bite	22	28	9	7	0
Burns	22	9	6	5	0
dental caries	21	45	2	5	0
Otitis externa	12	25	4	2	0
Diarrhoea and gasroenteritis	11	22	20	10	0
Scorpion Bite	10	6	0	0	0
Nausea and vomitting	8	18	10	10	0
Haemorrhoids	7	8	0	0	0
Pulmonary Tuberculosis	6	1	0	0	0
Hypertensive heart and renal disease	5	4	0	0	0
Hyperplasia of prostate	4	4	0	0	0
Amoebiasis	4	10	5	6	0
Osteoarthritis	3	1	1	2	0
Abnormalities of heart beat	3	4	1	0	0
Hypotension	3	3	0	0	0
Snake Bite	2	0	0	0	0
Viral Conjunctivitis	2	0	0	0	0
Vitamin B12 deficiency anemia	2	4	1	0	0
Helminthiasis	2	4	0	2	0
Acute tonsillitis	1	7	1	1	0
Hyperparathyroidism	1	3	0	0	0
Acute Repiratory Infectio	1	9	1	0	0
Vitamin A deficiency	1	0	0	0	0
Haemorrhage in early pregnancy	1	2	0	0	0
Femoral hernia	1	2	0	1	0
Ascarisis (Roundworm Infestation	1	1	1	0	0
Poisoning Cases	0	1	0	0	0

Tubectomy	0	1	0	0	0
Fall from tree	0	1	0	0	0
Hensons disease (Leprosy)	0	1	0	0	0
Vitamin D deficiency	0	1	0	0	0
Pregnancy And Antenatal C	0	570	0	0	0
Contaceptive management	0	4	0	0	0
Hydrocephalus	0	1	0	0	0
Acute renal failure	0	1	0	0	0
Filariasis	0	0	0	0	0
Iridocyclitis	0	0	1	0	0
Pneumonial	0	1	0	1	0
Alzheimer's disease	0	0	0	0	0
Glaucoma	0	1	0	1	0
Obesity	0	0	0	0	0
Urticaria	0	2	0	1	0
Single spontaneus delivery	0	1	0	0	0
Bacterial meningitis	0	1	0	0	0
	6993	**10595**	**1774**	**1657**	**0.0**
	Six Thousand Nine Hundred Ninety Three Only	Ten Thousand Five Hundred Ninety Five Only	One Thousand Seven Hundred Seventy Four Only	One Thousand Six Hundred Fifty Seven Only	Zero Only

23-11-17

MEDICAL OFFICER
PRIMARY HEALTH CENTRE
G. KONDURU, Krishna Dt.

Questionnaire for survey at PHC

S. No.	Description		Remarks
1.	PHC location	VELAGALERU	
2.	No. of people served/Total population in the jurisdiction of the PHC	81,000	
3.	No. of Doctors and paramedical staff in the PHC	10	
4.	No. of in patient beds/emergency ward	6	
5.	Equipment available for investigation/Lab facilities	Yes.	
6.	Availability of medicines	yes antibiotics, anti allergic cl, anti hyperkeatine OHA, pain killers.	
7	No. of out patients in a month/quarter. Data for three years may be provided along with profiles of the patients (age, sex etc)	1400/month	
8.	No. Of emergency cases and nature of emergency in a month/quarter	-	
9.	Name of the major symptoms reported by patients and nature of diseases diagnosed by Doctors in different seasons in a year	upper respiratory infection cold, cough	
10.	Causes of the diseases (Biological factors / Behavioral Factors/Environmental factors/ Immunologic factors/Nutritional factors/Genetic factors/ Occupational/ Social factors and prevalence of the diseases, Disease patterns.	Uncontrolled, Diabetes, Hypertension	

11.	Morbidity and Mortality rates		
12.	Any kind of complaints made by public on the air pollution, water pollution etc.		
13.	Special camps conducted by PHC	—	
14.	Overall impression on the prevalence of diseases caused by Air pollution and water pollution by the Doctor in-charge of the PHC.	NO such cases are reported with water and Air pollution	

N. KUMAR VARMA
MEDICAL OFFICER
PRIMARY HEALTH CENTRE
VELAGALERU

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Report Date and Time : 22/11/2017 12:28:41

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Velagaleru Phc**
Disease : **All**
Fdate : **01-Jan-2015**
Tdate : **31-Dec-2015**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Acute Repiratory Infectio	479	644	323	316	282
Body Pains (Seasonal)	433	719	4	5	180
Hypertension	288	371	0	0	168
Accidental Injuries	230	114	22	17	117
Diabetes Mellitus	170	171	0	0	54
Fever of unknown origin	152	173	47	50	53
Headache	105	159	4	10	58
Asthama	103	70	1	3	24
Dog Bites	46	31	22	13	38
Not Selected by DDC	42	61	14	10	48
Skin Infections	41	54	13	11	0
Allergic rhinitis	34	66	18	10	33
Gasric ulcer	31	41	1	1	31
Acute Diarrhoeal (Includi	24	37	19	12	16
Routine general health chech up	16	22	0	0	2
Dyspepsia	14	22	0	1	23
Dyspepsia	14	19	0	0	17
Pain Abdomen Non Specifi	14	21	1	2	0
Hypotension	14	27	0	0	12
Nausea and vomitting	12	20	8	7	5
Diarrhoea and gasroenteritis	11	16	3	4	11
Helminthiasis	10	22	12	3	2
dental caries	10	20	0	0	7
Pain in throat and chest	10	23	1	1	11
Taeniasis	7	6	1	0	3
Acute Urinary Tract Infec	7	26	1	0	1
Acute tonsillitis	5	2	2	3	1
Foreign body in ear	5	0	1	0	0
Scabies	4	6	10	3	18
Iron deficiency anemia	4	23	2	0	10
Burns	4	4	1	0	3
Atopic Dermatitis	3	1	0	0	0
Adult Respiratory Distress Syndrome	3	2	0	1	3
Osteoarthritis	3	0	0	0	0
Otitis externa	2	1	0	1	2
Chronic bronchitis	2	0	0	0	0
Foreign body on external eye	2	8	1	0	0
Herpes zoster	2	0	0	0	0
Animal Bite	2	11	3	0	3

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Amoebiasis	2	0	0	0	3
Snake Bite	2	0	0	0	0
Depressive Episode	2	2	0	0	0
Abscess	1	0	0	0	0
Visual disturbances	1	3	0	2	3
Mumps	1	0	1	0	1
Blindness and low vision	1	3	0	0	0
fissure and fistula of anal and rectal region	1	0	0	0	0
Acute appendicitis	1	0	0	0	0
Acute renal failure	1	1	2	3	0
Road Traffic Accident	0	2	0	0	0
Cholera	0	0	0	0	1
Convulsions	0	0	1	0	0
Gonococcal infection	0	1	0	0	2
Postpartum haemorrage	0	1	0	0	0
Femoral hernia	0	0	1	0	0
Syncope and collapse	0	0	0	0	1
Urticaria	0	0	0	0	1
Vitamin B12 deficiency anemia	0	0	0	0	1
Tubectomy	0	1	0	0	0
Hydatidiform mole	0	1	0	0	0
Scorpion Bite	0	1	0	1	0
Gangrene	0	0	0	0	2
Preterm delivery	0	2	0	0	2
Acute pharyngitis	0	2	0	0	0
Aquired haemolytic anemia	0	0	0	0	1
Iodine deficiency hypothyroidism	0	1	0	0	0
Single spontaneus delivery	0	3	0	0	0
Haemorrhage in early pregnancy	0	0	1	0	0
Filariasis	0	1	0	1	0
Orchitis and epidodymitis	0	0	0	0	1
Pregnancy And Antenatal C	0	194	0	0	0
Moderate mental retardation	0	0	1	0	0
Pulmonary Tuberculosis	0	0	0	0	1
Conjunctivitis	0	1	1	0	3
Angina pectoris	0	1	0	0	0
Anencephaly and similar malformations	0	0	1	0	0
Otosclerosis	0	1	0	0	0
Folate deficiency anemia	0	0	0	0	2
Acute naso pharyngitis	0	1	0	0	0
	2371	**3236**	**544**	**491**	**1261**
	Two Thousand Three Hundred Seventy One Only	Three Thousand Two Hundred Thirty Six Only	Five Hundred Fourty Four Only	Four Hundred Ninety One Only	One Thousand Two Hundred Sixty One Only

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Report Date and Time : 22/11/2017 12:30:11

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Velagaleru Phc**
Disease : **All**
Fdate : **01-Jan-2016**
Tdate : **31-Dec-2016**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Body Pains	1584	2651	4	5	0
Acute Repiratory Infectio	1258	1704	596	623	0
Accidental Injuries	831	453	56	28	0
Hypertension	805	1237	0	2	0
Diabetes Mellitus	755	867	0	0	0
Asthama	361	332	1	5	0
Headache	338	932	33	29	0
Allergic rhinitis	332	450	205	177	0
Skin Infections	260	360	64	56	0
Gasric ulcer	194	360	0	1	0
Fever of unknown origin	192	240	80	47	0
Pain Abdomen Non Specifi	175	393	23	28	0
Dog Bites	157	109	33	20	0
Acute Diarrhoeal (Includi	103	160	44	28	0
Routine general health chech up	97	221	10	6	0
Nausea and vomitting	86	142	23	24	0
Helminthiasis	39	82	20	24	0
dental caries	38	49	1	2	0
Pain in throat and chest	38	61	3	0	0
Acute Urinary Tract Infec	37	198	0	1	0
Dyspepsia	30	43	0	0	0
Animal Bite	28	35	9	4	0
Dyspepsia	26	49	0	0	0
Acute pharyngitis	25	24	0	1	0
Scabies	23	18	13	7	0
Foreign body on external eye	22	31	2	2	0
Abscess	20	19	1	3	0
Hypotension	16	28	0	0	0
Acute tonsillitis	15	16	1	1	0
Foreign body in ear	14	21	3	2	0
Iron deficiency anemia	13	133	1	4	0
Burns	12	15	3	1	0
Diarrhoea and gasroenteritis	11	23	1	2	0
Scorpion Bite	9	6	0	0	0
Haemorrhoids	9	7	0	0	0
Osteoarthritis	8	11	1	0	0
Mumps	7	5	4	2	0
Visual disturbances	6	9	0	1	0
Otitis externa	5	5	1	1	0
Pulmonary Tuberculosis	5	3	0	0	0

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cofirmed						
Road Traffic Accident	4	0	0	0	0	
Pulmonary Tuberculosis	4	0	0	0	0	
Oedema	4	5	0	0	0	
Conjunctivitis	4	6	0	1	0	
Vitamin B12 deficiency anemia	3	1	0	0	0	
Taeniasis	3	13	0	2	0	
Snake Bite	3	0	0	0	0	
Gangrene	2	1	0	0	0	
Disordres of tooth eruption	2	0	0	0	0	
Blindness and low vision	2	10	0	0	0	
Fall from tree	2	0	0	0	0	
Vitamin A deficiency	1	2	0	1	0	
Viral Conjunctivitis	1	0	0	0	0	
Fall on same level	1	0	0	0	0	
Migraine	1	2	0	0	0	
Hypertensive heart and renal disease	1	0	0	0	0	
Poisoning Cases	1	1	0	0	0	
Hypoparathyroidism	1	2	0	0	0	
Vitamin D deficiency	1	0	0	0	0	
Psoriasis	1	1	0	0	0	
Pulmonary embolism	1	0	0	0	0	
Chronic bronchitis	1	1	0	0	0	
Dengue Fever	1	0	0	0	0	
Typhoid And Paratyphoid fevers	1	0	0	0	0	
Hyperplasia of prostate	1	1	0	0	0	
Aquired haemolytic anemia	1	0	0	0	0	
Acute Poliomyelitis	1	0	0	0	0	
Fracture at wrist and hand level	1	0	0	1	0	
Herpes zoster	1	4	0	0	0	
Enteric Fever	1	0	0	0	0	
Pulmonary Tuberculosis not cofirmed	1	0	0	0	0	
Amoebiasis	1	5	0	0	0	
Acute renal failure	1	9	0	1	0	
Cholelithiasis	0	1	0	0	0	
Adult Respiratory Distress Syndrome	0	1	0	0	0	
Benign neoplasm of ovary	0	1	0	0	0	
Viral Hepatitis - A	0	1	0	0	0	
Syphilis	0	2	0	0	0	
Exposure to uncontrolled fire	0	1	0	0	0	
Vitiligo	0	2	0	0	0	
Bacterial meningitis	0	1	0	0	0	
Tubectomy	0	75	0	0	0	
Depressive Episode	0	6	0	0	0	
Preterm delivery	0	1	0	0	0	
Umbilical hernia	0	0	0	1	0	
Pyogenic arthritis	0	1	0	0	0	
Iodine deficiency hypothyroidism	0	2	0	0	0	
Contaceptive management	0	1	0	0	0	
Orchitis and epidodymitis	0	1	0	0	0	
Acute appendicitis	0	1	0	0	0	
Acute myocardial infarction	0	0	0	2	0	
Electric shock	0	1	0	0	0	
Epilepsy	0	1	0	0	0	
Otosclerosis	0	2	0	0	0	
Pregnancy And Antenatal C	0	788	0	0	0	
Assault by blunt object	0	1	0	0	0	
Single spontaneus delivery	0	35	1	1	0	
Heriditary factor viii deficiency	0	0	0	1	0	
Infantile cerebral palsy	0	1	0	0	0	

Dynamic Report

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Filariasis	0	1	0	0	0
HIV disease	0	1	0	0	0
Atopic Dermatitis	0	2	1	0	0
Postpartum haemorrage	0	2	0	0	0
	8039	**12499**	**1238**	**1148**	**0.0**
	Eight Thousand Thirty Nine Only	Twelve Thousand Four Hundred Ninety Nine Only	One Thousand Two Hundred Thirty Eight Only	One Thousand One Hundred Fourty Eight Only	Zero Only

MEDICAL OFFICER
PRIMARY HEALTH CENTRE
VELAGALERU

76

Report Date and Time : 22/11/2017 12:32:07

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Velagaleru Phc**
Disease : **All**
Fdate : **01-Jan-2017**
Tdate : **22-Nov-2017**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Body Pains	995	1630	1	1	0
Acute Repiratory Infectio	933	1083	456	431	1
Accidental Injuries	675	309	60	29	0
Hypertension	666	1106	1	1	0
Diabetes Mellitus	637	667	0	0	0
Skin Infections	287	298	45	35	0
Asthama	191	169	0	4	0
Headache	168	409	27	17	0
Gasric ulcer	137	196	1	0	0
Routine general health chech up	125	258	19	16	0
Pain Abdomen Non Specifi	122	238	21	22	0
Abscess	102	67	11	2	0
Dog Bites	92	52	27	15	0
Allergic rhinitis	88	128	27	17	0
Nausea and vomitting	58	124	26	20	0
Fever of unknown origin	49	44	26	22	1
Acute pharyngitis	45	82	3	7	0
Acute Diarrhoeal (Includi	33	38	10	10	0
dental caries	28	36	1	0	0
Pain in throat and chest	21	23	7	0	0
Animal Bite	16	11	2	1	0
Helminthiasis	14	17	15	9	0
Acute Urinary Tract Infec	14	100	1	0	0
Scabies	10	9	7	4	0
Acute tonsillitis	9	10	3	1	0
Osteoarthritis	7	5	0	0	0
Burns	7	9	2	2	0
Taeniasis	6	6	0	0	0
Haemorrhoids	6	10	0	0	0
Foreign body in ear	5	9	2	3	0
Conjunctivitis	5	15	0	1	3
Foreign body on external eye	4	8	1	1	0
Pulmonary Tuberculosis	4	0	0	0	0
Hypotension	3	6	0	0	0
Acute renal failure	3	4	0	2	0
Otitis externa	3	2	0	0	0
Iron deficiency anemia	3	75	0	2	0
Scorpion Bite	3	2	0	0	0
Assault by blunt object	2	0	0	0	0
Oedema	2	8	0	0	0

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Snake Bite	2	0	0	0	0
Acute naso pharyngitis	2	0	0	0	0
Acute appendicitis	1	1	0	0	0
dietary zinc deficiency	1	0	0	0	0
Osteoporosis	1	0	0	0	0
Glaucoma	1	0	0	0	0
Road Traffic Accident	1	0	0	0	0
Blindness and low vision	1	2	0	0	0
Hypertensive heart and renal disease	1	1	0	0	0
Pulmonary Tuberculosis cofirmed	1	1	0	0	0
Chronic Obstructive Pulmo	1	0	0	0	0
Ano -genital herpes virus infection	1	0	0	0	0
Chronic ischemic heart disease	1	0	0	0	0
Poisoning Cases	1	0	0	0	0
Amoebiasis	1	1	1	0	0
Candidiasis	1	0	0	0	0
Gangrene	1	0	0	0	0
Depressive Episode	1	3	0	0	0
Chicken pox (Varicella)	1	2	0	2	0
Hyperplasia of prostate	1	1	0	0	0
Acute myocarditis	1	0	0	0	0
Diarrhoea and gasroenteritis	1	2	2	1	0
Filariasis	0	1	0	0	0
Iodine deficiency hypothyroidism	0	1	0	0	0
Single spontaneus delivery	0	24	0	0	0
Vitamin B12 deficiency anemia	0	2	0	0	0
Pregnancy And Antenatal C	0	465	0	0	0
Diaphragmatic hernia	0	2	0	0	0
Acute Poliomyelitis	0	1	0	0	0
Orchitis and epidodymitis	0	0	1	0	0
Adult Respiratory Distress Syndrome	0	1	0	0	0
Rhumatic mitral valve disease	0	0	0	1	0
Acute myocardial infarction	0	1	0	0	0
Tubectomy	0	44	0	0	0
Osteomyelitis	0	5	0	0	0
Excessive vomitting in pregnancy	0	2	0	0	0
Acute nephrotic syndrome	0	1	0	1	0
Migraine	0	2	0	0	0
Mumps	0	1	2	1	0
	5602	**7830**	**808**	**681**	**5**
	Five Thousand Six Hundred Two Only	Seven Thousand Eight Hundred Thirty Only	Eight Hundred Eight Only	Six Hundred Eighty One Only	Five Only

Questionnaire for survey at PHCs to ascertain prevalence of diseases and pollution aspects

1.	PHC location	Reddigudem
2.	No. of people served/total population in the jurisdiction of the PHC	49,500.
3.	No. of Doctors and paramedical staff in the PHC	1+ PHN - 1 HV - 1 S/N - 2 ANMS - 10 MPHA (M) - 4. APMO - 1
4	No. of in-patient beds/emergency ward	5
5	Equipment available for investigation/Lab facilities	Microscopy Hb%, Bl.gp, Rapid kits, Medal,

6	Availability of medicines	Antibiotics, Analgesics, Antidiabetics, Antihypertn.
7	No. of out patients in a month/quarter. Data for three years may be provided	2000/month.
8	No. of emergency cases and nature of emergency in a month/quarter	15-20 cases/Month.
9	Name of the major symptoms reported by patients and nature of diseases diagnosed by Doctors in different seasons in a year	Fever, cough, JT pains -
10	Causes of the diseases (Biological factors / Behavioral Factors/ Environmental factors/ Immunologic factors/ Nutritional factors/ Genetic factors/ Occupational/ Social factors and prevalence of the diseases, Disease patterns.	Behavioural, Environmental, Occupational, Genetic We are overloaded with Monkey & Dog bites
11	Morbidity and Mortality	

12	Any kind of complaints made by public on the air pollution, water pollution etc.	water pollution.
13	Special camps conducted by PHC	—
14	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the PHC	Air pollution is not seen in the General OP. Water pollution is seen as there is epidemic Typhoid, and Mosquito bites. We have ↑ in the No. of Non communicable diseases.

Medical Officer
MPHC Reddigudem
Krishna Dist

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Report Date and Time : 28/11/2017 02:56:50

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Reddigudem Phc**
Disease : **All**
Fdate : **01-Jan-2015**
Tdate : **31-Dec-2015**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Body Pains	738	914	11	7	6
Acute Repiratory Infectio	443	502	131	170	6
Fever of unknown origin	210	213	54	44	2
Diabetes Mellitus	193	172	0	2	5
Accidental Injuries	186	161	7	2	49
Dog Bites	80	47	14	7	6
Gasric ulcer	70	59	1	0	7
Asthama	47	48	0	0	2
Headache	46	68	5	1	1
Allergic rhinitis	43	51	2	3	0
Hypertension	43	49	0	0	1
Amoebiasis	19	16	2	1	2
Scabies	16	26	5	4	0
Foreign body on external eye	15	11	1	4	0
Acute Urinary Tract Infec	12	12	0	1	0
Abscess	10	10	1	0	0
Acute Diarrhoeal (Includi	7	13	2	1	4
Foreign body in ear	7	6	1	2	0
Blindness and low vision	5	8	0	0	0
Enteric Fever	3	4	0	0	0
Adult Respiratory Distress Syndrome	3	6	0	1	30
Acute renal failure	2	1	1	0	0
Conjunctivitis	2	0	0	0	0
Yaws	1	0	0	0	0
Whooping Cough	1	0	0	0	0
Cysticercosis	1	0	0	0	0
Haemorrhage in early pregnancy	1	0	0	0	0
Toxic effect of pesticide	1	0	0	0	0
Acute tonsillitis	1	6	0	0	0
Pain in throat and chest	1	0	0	0	1
Scorpion Bite	1	0	0	0	0
Snake Bite	1	0	0	0	1
Oedema	1	0	0	0	0

Hypotension	1	0	0	0	0
Acute naso pharyngitis	1	0	0	0	0
Cystitis	1	0	0	0	0
Birth injury to scalp	1	0	0	0	0
Folate deficiency anemia	1	1	0	0	0
Convulsions	1	0	0	0	0
Femoral hernia	1	2	1	0	0
Disordres of tooth eruption	1	0	0	0	0
Orchitis and epididymitis	1	0	0	0	10
Ano -genital herpes virus infection	0	1	0	0	0
Not Selected by DDC	0	0	0	0	1
Renal calculus	0	1	0	0	0
Nausea and vomitting	0	1	0	0	0
Burns	0	2	0	0	2
Rhumatic aortic valve disease	0	0	0	0	1
Pain Abdomen Non Specifi	0	2	0	1	0
Vitamin B12 deficiency anemia	0	1	0	0	0
Pregnancy And Antenatal C	0	39	0	0	0
Osteomyelitis	0	0	0	0	1
Tubectomy	0	5	0	0	0
Acute myocardial infarction	0	1	0	0	0
Diarrhoea and gasroenteritis	0	6	1	4	0
Depressive Episode	0	1	0	0	0
Vitamin D deficiency	0	2	0	0	0
Preterm delivery	0	2	0	0	0
Osteoporosis	0	0	0	0	1
Atheroscerosis	0	1	0	0	0
dental caries	0	2	0	0	0
Osteoarthritis	0	1	0	0	0
Dengue Haemorragic Fever	0	0	0	1	0
Animal Bite	0	2	1	0	0
	2219	**2476**	**241**	**256**	**139**
	Two Thousand Two Hundred Nineteen Only	Two Thousand Four Hundred Seventy Six Only	Two Hundred Fourty One Only	Two Hundred Fifty Six Only	One Hundred Thirty Nine Only

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28/11/17

Medical Officer
PHC
Krishna Dist

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Report Date and Time : 28/11/2017 02:54:40

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Reddigudem Phc**
Disease : **All**
Fdate : **01-Jan-2016**
Tdate : **31-Dec-2016**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Body Pains	3316	3918	25	20	0
Acute Repiratory Infectio	1191	1243	440	482	0
Diabetes Mellitus	844	981	1	3	0
Fever of unknown origin	548	658	165	178	0
Accidental Injuries	467	353	28	26	0
Dog Bites	369	200	88	46	0
Scabies	346	382	94	60	0
Gasric ulcer	314	442	1	7	0
Hypertension	298	342	0	4	0
Headache	187	400	3	9	0
Allergic rhinitis	120	121	6	12	0
Asthama	90	91	2	0	0
Acute Diarrhoeal (Includi	33	52	12	15	0
Diarrhoea and gasroenteritis	27	32	1	2	0
Amoebiasis	21	23	5	0	0
Foreign body on external eye	20	14	6	3	0
Blindness and low vision	11	4	0	0	0
Acute tonsillitis	9	2	1	0	0
Abscess	7	11	1	0	0
Acute Urinary Tract Infec	6	3	0	0	0
Foreign body in ear	6	9	1	4	0
Ascarisis (Roundworm Infestation	5	2	2	1	0
Acute renal failure	4	3	0	2	0
Pulmonary Tuberculosis	4	0	0	0	0
Acute myocardial infarction	3	2	0	0	0
Snake Bite	2	0	0	0	0
Burns	2	2	0	0	0
Alzheimer's disease	2	2	0	1	0
Pain Abdomen Non Specifi	2	4	0	0	0
Scorpion Bite	2	3	0	0	0
Hypotension	2	2	0	0	0
Vitamin B12 deficiency	2	6	0	0	0

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anemia					
Chicken pox (Varicella)	1	0	0	0	0
Osteoporosis	1	0	0	0	0
Foreign body in respiratory tract	1	0	0	0	0
Obesity	1	0	0	0	0
Animal Bite	1	1	0	0	0
Nausea and vomitting	1	0	0	0	0
Lungs Diseases	1	0	0	0	0
Assault by blunt object	1	0	0	0	0
Femoral hernia	1	2	0	0	0
Tubectomy	1	76	0	0	0
Gangrene	1	0	0	0	0
Acute nephrotic syndrome	1	0	0	0	0
Birth injury to skeleton	1	2	0	0	0
Hyperplasia of prostate	1	1	0	0	0
Rabies	1	1	0	0	0
Whooping Cough	1	0	0	0	0
Conjunctivitis	1	1	0	1	0
Skin Infections	0	0	1	0	0
Enteric Fever	0	1	1	0	0
Depressive Episode	0	2	0	1	0
Other anxiety disorder	0	1	0	0	0
Adult Respiratory Distress Syndrome	0	4	2	0	0
Cerebro Vascular Accident	0	1	0	0	0
Candidiasis	0	1	0	0	0
Preterm delivery	0	21	0	0	0
Poisoning Cases	0	3	0	0	0
dental caries	0	1	0	0	0
Duodenal ulcer	0	1	0	0	0
Migraine	0	1	0	0	0
Dyspepsia	0	1	0	0	0
Fall on same level	0	0	1	0	0
Pregnancy And Antenatal C	0	336	0	0	0
Haemorrhage in early pregnancy	0	1	0	0	0
Haemorrhoids	0	1	0	0	0
	8277	**9767**	**887**	**877**	**0.0**
	Eight Thousand Two Hundred Seventy Seven Only	Nine Thousand Seven Hundred Sixty Seven Only	Eight Hundred Eighty Seven Only	Eight Hundred Seventy Seven Only	Zero Only

MPHO 24/4/17 Krishna Dist.

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Report Date and Time : 28/11/2017 02:58:46

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Reddigudem Phc**
Disease : **All**
Fdate : **01-Jan-2017**
Tdate : **28-Nov-2017**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Body Pains	3095	3524	28	46	0
Acute Repiratory Infectio	972	1089	525	533	0
Diabetes Mellitus	644	720	0	4	0
Scabies	279	294	66	54	0
Dog Bites	272	182	64	43	0
Accidental Injuries	224	124	12	12	0
Hypertension	153	171	0	1	0
Gasric ulcer	149	185	3	3	0
Fever of unknown origin	143	226	53	52	0
Headache	111	192	2	5	0
Allergic rhinitis	42	54	10	8	0
Acute Diarrhoeal (Includi	32	41	7	7	0
Asthama	19	21	0	1	0
Scorpion Bite	7	1	0	0	0
Acute renal failure	4	1	0	3	0
Abscess	3	3	0	0	0
Pulmonary Tuberculosis	2	0	0	0	0
Tubectomy	2	59	0	0	0
Foreign body on external eye	2	3	0	0	0
Vitamin B12 deficiency anemia	2	0	1	0	0
Burns	2	1	0	0	0
Amoebiasis	1	0	0	0	0
Foreign body in ear	1	3	1	0	0
Acute tonsillitis	1	3	1	0	0
Congenital hydrocephalus	1	0	0	0	0
Pulmonary Tuberculosis cofirmed	1	0	0	0	0
Alzheimer's disease	1	0	0	0	0
Birth asphyxia	1	0	0	0	0
Diarrhoea and gasroenteritis	1	2	0	0	0
Nausea and vomitting	1	1	0	0	0
Diaphragmatic hernia	1	0	0	0	0
Animal Bite	0	2	0	0	0

Pregnancy And Antenatal C	0	197	0	0	0
Gangrene	0	1	0	0	0
Preterm delivery	0	11	0	0	0
Acute nephrotic syndrome	0	1	0	0	0
Chronic bronchitis	0	1	0	0	0
Acute Urinary Tract Infec	0	1	0	0	0
Acute appendicitis	0	1	0	0	0
Acute myocardial infarction	0	4	0	0	0
Hypotension	0	2	0	0	0
Adult Respiratory Distress Syndrome	0	2	0	1	0
	6169	**7123**	**773**	**773**	**0.0**
	Six Thousand One Hundred Sixty Nine Only	Seven Thousand One Hundred Twenty Three Only	Seven Hundred Seventy Three Only	Seven Hundred Seventy Three Only	Zero Only

Medical Officer
MPHC Reddigud
Krishna Dist.

Questionnaire for survey at PHCs to ascertain prevalence of diseases and pollution aspects

1.	PHC location	Kanchikacherla
2.	No. of people served/total population in the jurisdiction of the PHC	47000
3.	No. of Doctors and paramedical staff in the PHC	2+13
4	No. of in-patient beds/emergency ward	6
5	Equipment available for investigation/Lab facilities	Yes

6	Availability of medicines	Yes Antibiotics antidiabetes antihypertensives Pain Killer Other
7	No. of out patients in a month/quarter. Data for three years may be provided	1700/mth
8	No. of emergency cases and nature of emergency in a month/quarter	Dog bite Cases 20/mth
9	Name of the major symptoms reported by patients and nature of diseases diagnosed by Doctors in different seasons in a year	ARTE Cough Cold
10	Causes of the diseases (Biological factors / Behavioral Factors/ Environmental factors/ Immunologic factors/ Nutritional factors/ Genetic factors/ Occupational/ Social factors and prevalence of the diseases, Disease patterns.	Vector borne diseases (Mosquito related) Diabetes Hypertension
11	Morbidity and Mortality	—

12	Any kind of complaints made by public on the air pollution, water pollution etc.	No
13	Special camps conducted by PHC	No
14	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the PHC	No such Cases reported due to Air and water pollution

MEDICAL OFFICER
PRIMARY HEALTH CENTRE
KANCHIKACHERLA - 521 180
KRISHNA DIST.

90

Report Date and Time : 25/11/2017 10:45:28

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Kanchikacherla Phc**
Disease : **All**
Fdate : **01-Jan-2015**
Tdate : **31-Dec-2015**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Acute Repiratory Infectio	474	382	209	204	204
Body Pains	288	492	8	3	227
Hypertension	273	256	0	0	170
Diabetes Mellitus	240	259	0	1	130
Not Selected by DDC	134	141	14	16	380
Abscess	132	72	11	7	0
Gasric ulcer	114	154	0	0	97
Asthama	114	115	5	0	40
Dog Bites	99	30	39	13	43
Accidental Injuries	96	45	11	3	58
Skin Infections	88	84	11	16	0
Fever of unknown origin	66	61	28	25	19
Osteoarthritis	46	36	0	0	0
Headache	27	91	1	5	38
Nausea and vomitting	11	16	0	3	15
Taeniasis	9	6	0	0	1
Acute Diarrhoeal (Includi	8	14	3	3	4
Scabies	8	6	9	4	11
Acute tonsillitis	7	11	2	1	0
Pain Abdomen Non Specifi	7	35	1	6	1
Urticaria	5	4	0	1	0
Keratitis	5	7	0	1	0
Animal Bite	5	5	5	3	0
Pulmonary Tuberculosis	3	1	0	0	2
Acute Urinary Tract Infec	3	6	0	0	0
Typhoid And Paratyphoid fevers	3	1	1	0	3
Vitamin B12 deficiency anemia	3	13	0	2	0
Burns	2	9	0	0	1
Acute renal failure	2	3	2	1	1
Hypotension	2	0	0	0	3
Haemorrhoids	2	1	0	0	0
Iron deficiency anemia	2	12	0	0	0
Vitamin A deficiency	1	3	0	0	0
Other Std Cases	1	33	0	0	1

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Mumps	1	2	1	0	0
Oedema	1	0	0	0	0
Road Traffic Accident	1	0	0	0	0
Maliganant neoplasm of vulva	1	0	0	0	0
Fall from tree	1	0	0	0	0
Suppurative otitis media	1	8	1	2	0
Migraine	1	1	0	0	0
Convulsions	1	1	0	0	1
Hemiplegia	1	0	0	0	1
Kwashiorior	1	0	0	0	0
Staphylococcal Scalded Skin Syndrome	1	0	0	0	0
Ascarisis (Roundworm Infestation	1	0	1	1	0
Otitis externa	1	5	5	4	2
dental caries	1	3	1	1	1
Hyperplasia of prostate	1	0	0	0	1
Abnormalities of heart beat	1	0	0	0	0
Osteomyelitis	1	0	0	0	0
Electric shock	1	0	0	0	1
Diarrhoea and gasroenteritis	1	0	0	0	9
Assault by blunt object	1	0	0	0	0
Allergic rhinitis	0	8	0	1	3
Ischaemic Heart Diseases	0	1	0	0	0
Amoebiasis	0	1	0	1	1
Tubectomy	0	17	0	0	0
Helminthiasis	0	0	1	0	0
Pregnancy And Antenatal C	0	198	0	0	0
Dyspepsia	0	0	0	0	2
Vitamin D deficiency	0	0	0	1	0
Umbilical hernia	0	0	1	0	0
Preterm delivery	0	1	0	0	0
Excessive vomitting in pregnancy	0	0	1	0	0
Acute pharyngitis	0	1	0	0	0
Duodenal ulcer	0	0	0	0	4
Single spontaneus delivery	0	28	0	0	0
Foreign body on external eye	0	1	0	0	1
Chronic Obstructive Pulmo	0	0	0	0	1
Obesity	0	0	0	0	1
Routine general health chech up	0	3	0	0	0
Dyspepsia	0	1	0	0	2
Other nontoxic goitre	0	0	0	0	1
Conjunctivitis	0	1	0	0	0
Foreign body in ear	0	0	1	0	0
Granuloma inguinalae	0	1	0	0	0
Herpes zoster	0	1	0	0	0
Epilepsy	0	3	0	0	2
Scorpion Bite	0	1	0	0	0
Visual disturbances	0	1	0	0	0
	2300	**2692**	**373**	**329**	**1483**
	Two Thousand Three Hundred Only	Two Thousand Six Hundred Ninety Two Only	Three Hundred Seventy Three Only	Three Hundred Twenty Nine Only	One Thousand Four Hundred Eighty Three Only

MEDICAL OFFICER
PRIMARY HEALTH CENTRE
KANCHIKACHERLA - 521 180

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Report Date and Time : 25/11/2017 10:47:46

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Kanchikacherla Phc**
Disease : **All**
Fdate : **01-Jan-2016**
Tdate : **31-Dec-2016**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Acute Repiratory Infectio	1171	1351	650	695	0
Body Pains	1055	1609	14	17	0
Hypertension	713	817	1	4	0
Diabetes Mellitus	577	752	0	5	0
Gasric ulcer	527	709	4	3	0
Accidental Injuries	397	154	39	31	0
Abscess	350	158	36	29	0
Headache	350	596	25	29	0
Dog Bites	330	186	151	72	0
Skin Infections	273	260	49	40	0
Allergic rhinitis	271	322	83	66	0
Asthama	225	187	2	5	0
Vitamin B12 deficiency anemia	200	448	23	23	0
Fever of unknown origin	179	215	103	99	0
Osteoarthritis	103	98	0	0	0
Pain Abdomen Non Specifi	75	169	17	28	0
Nausea and vomitting	40	62	21	25	0
Acute Diarrhoeal (Includi	37	26	20	10	0
Foreign body on external eye	35	40	3	1	0
Acute Urinary Tract Infec	30	92	1	2	0
Iron deficiency anemia	23	112	1	3	0
Scabies	22	7	21	10	0
Diarrhoea and gasroenteritis	17	23	11	3	0
Acute renal failure	14	15	14	12	0
Foreign body in ear	13	26	6	1	0
Burns	12	1	3	2	0
dental caries	11	21	1	0	0
Animal Bite	11	12	7	2	0
Pulmonary Tuberculosis	10	1	0	0	0
Acute pharyngitis	9	30	0	2	0
Routine general health chech up	9	20	0	1	0
Vitamin A deficiency	7	22	4	1	0
Adult Respiratory Distress Syndrome	6	12	0	0	0

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Conjunctivitis	6	13	3	0	0
Keratitis	4	5	1	0	0
Otitis externa	4	14	6	9	0
Pulmonary Tuberculosis cofirmed	4	0	0	0	0
Hyperparathyroidism	3	4	0	0	0
Acute tonsillitis	3	29	0	6	0
Taeniasis	3	1	0	0	0
Mumps	3	0	0	0	0
Suppurative otitis media	3	1	0	0	0
Hypotension	3	5	0	0	0
Diper Dermatitis	2	0	1	0	0
Oedema	2	9	0	0	0
Osteomyelitis	2	0	0	0	0
Epilepsy	2	0	1	0	0
Dyspepsia	2	4	0	0	0
Chronic bronchitis	2	0	0	0	0
Cerebrovascular Accidents	1	0	0	0	0
Whooping Cough	1	0	0	0	0
Diphtheria	1	0	0	0	0
Candidiasis	1	2	0	0	0
Hemiplegia	1	0	0	0	0
Haemorrhoids	1	3	1	0	0
Scorpion Bite	1	2	1	0	0
Other Std Cases	1	19	0	0	0
Road Traffic Accident	1	0	0	0	0
Cleft palate	1	0	0	0	0
Pneumonial	1	3	0	0	0
Dyspepsia	1	0	0	0	0
Migraine	1	8	0	0	0
Bacterial meningitis	1	1	0	0	0
Gangrene	1	0	0	0	0
Acute nephrotic syndrome	1	0	0	0	0
Ascarisis (Roundworm Infestation	1	0	0	0	0
Peritonotis	1	0	0	0	0
Tetanus Other Than Neonat	1	0	0	0	0
Vitamin D deficiency	0	3	0	0	0
Urticaria	0	5	0	1	0
Tubectomy	0	45	0	0	0
Acute Poliomyelitis	0	1	0	1	0
Rabies	0	1	0	0	0
Ischaemic Heart Diseases	0	0	0	1	0
Purperal sepsis	0	1	0	0	0
Fracture at wrist and hand level	0	1	0	0	0
Miliary Tuberculosis	0	1	0	0	0
Blindness and low vision	0	1	0	0	0
Dengue Fever	0	0	0	1	0
Acute naso pharyngitis	0	2	0	0	0
Gonococcal infection	0	1	0	0	0
Pregnancy And Antenatal C	0	802	0	0	0
Rhumatic tricuspid valve disease	0	1	0	0	0
Viral Conjunctivitis	0	2	0	0	0
Single spontaneus delivery	0	44	0	0	0
Influenza	0	0	1	0	0
Typhoid And Paratyphoid fevers	0	1	0	0	0
Amoebiasis	0	2	2	1	0

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Report Date and Time : 25/11/2017 10:50:13

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Kanchikacherla Phc**
Disease : **All**
Fdate : **01-Jan-2017**
Tdate : **24-Nov-2017**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Allergic rhinitis	778	1154	323	298	0
Hypertension	777	809	0	1	0
Acute Repiratory Infectio	768	960	323	258	0
Body Pains	766	1043	27	4	0
Diabetes Mellitus	631	661	0	1	0
Accidental Injuries	418	118	45	13	0
Vitamin B12 deficiency anemia	247	557	6	4	0
Gasric ulcer	207	256	3	1	0
Dog Bites	191	90	84	37	0
Fever of unknown origin	166	213	125	107	0
Skin Infections	144	114	13	11	0
Headache	141	324	6	12	0
Abscess	139	71	21	10	0
Osteoarthritis	137	158	3	0	0
Dyspepsia	97	147	1	0	0
Urticaria	71	58	12	1	0
Routine general health chech up	69	202	3	0	0
Pain Abdomen Non Specifi	48	110	12	13	0
Acute Diarrhoeal (Includi	38	38	17	15	0
Asthama	35	31	0	0	0
Scabies	25	6	27	1	0
Taeniasis	24	14	2	0	0
Nausea and vomitting	23	32	15	10	0
Acute Urinary Tract Infec	23	41	1	0	0
Animal Bite	21	21	3	1	0
Otitis externa	19	14	4	1	0
dental caries	16	29	1	0	0
Burns	15	5	1	0	0
Pain in throat and chest	14	12	1	0	0
Foreign body on external eye	14	17	5	1	0
Acute pharyngitis	14	29	0	0	0
Conjunctivitis	13	5	2	0	0
Foreign body in ear	9	14	9	4	0
Haemorrhoids	9	6	0	0	0

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Fall on same level	6	4	0	1	0
Hypotension	5	4	0	0	0
Pulmonary Tuberculosis	4	1	0	0	0
Diarrhoea and gasroenteritis	4	0	0	1	0
Acute tonsillitis	3	2	0	0	0
Scorpion Bite	2	3	0	0	0
Oedema	2	5	0	0	0
Adult Respiratory Distress Syndrome	2	1	0	0	0
Hemiplegia	2	0	0	0	0
Hensons disease (Leprosy)	2	2	0	0	0
Hyperparathyroidism	1	0	0	0	0
Epilepsy	1	2	0	0	0
Helminthiasis	1	3	2	2	0
Congenital hydrocephalus	1	0	0	0	0
Inguinal Hernia	1	0	0	0	0
Bacterial meningitis	1	0	0	0	0
Herpes zoster	1	0	0	0	0
Pulmonary Tuberculosis cofirmed	1	0	0	0	0
Candidiasis	0	2	0	0	0
Tubectomy	0	13	0	0	0
Preterm delivery	0	2	0	0	0
Dengue Fever	0	1	0	0	0
Abnormalities of heart beat	0	3	0	0	0
Fall from tree	0	1	0	0	0
Acute naso pharyngitis	0	2	0	0	0
Endometriosis	0	15	1	0	0
Aquired haemolytic anemia	0	1	0	0	0
leiomyoma of uterus	0	1	0	0	0
Single spontaneus delivery	0	5	0	0	0
Hookworm Infestation	0	0	1	0	0
Alzheimer's disease	0	0	0	1	0
Iron deficiency anemia	0	15	0	0	0
Migraine	0	2	0	0	0
Convulsions	0	2	0	0	0
Pregnancy And Antenatal C	0	645	0	0	0
Acute renal failure	0	1	0	1	0
	6147	**8097**	**1099**	**810**	**0.0**
	Six Thousand One Hundred Fourty Seven Only	Eight Thousand Ninety Seven Only	One Thousand Ninety Nine Only	Eight Hundred Ten Only	Zero Only

MEDICAL OFFICER
PRIMARY HEALTH CENTRE
KANCHIKACHERLA - 521 180
KRISHNA DIST.

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Questionnaire for survey at PHCs to ascertain prevalence of diseases and pollution aspects

1.	PHC location	Chandrala
2.	No. of people served/total population in the jurisdiction of the PHC	68,686
3.	No. of Doctors and paramedical staff in the PHC	1 + 11 members
4	No. of in-patient beds/emergency ward	4
5	Equipment available for investigation/Lab facilities	Microscope, Rapid kits.

6	Availability of medicines	Antibiotics, Analgesic, Antidiabetic. Antihypertensive.
7	No. of out patients in a month/quarter. Data for three years may be provided	1500/month
8	No. of emergency cases and nature of emergency in a month/quarter	10/month Injuries, bite by Animals.
9	Name of the major symptoms reported by patients and nature of diseases diagnosed by Doctors in different seasons in a year	Fever, Cough, joint pain.
10	Causes of the diseases (Biological factors / Behavioral Factors/ Environmental factors/ Immunologic factors/ Nutritional factors/ Genetic factors/ Occupational/ Social factors and prevalence of the diseases, Disease patterns.	Behavioral, Environmental, Occupational, Genetic.
11	Morbidity and Mortality	

12	Any kind of complaints made by public on the air pollution, water pollution etc.	Water pollution.
13	Special camps conducted by PHC	—
14	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the PHC	Water pollution diseases like Typhoid are reported. Which could avoided by cleaning water tanks and Chlorination of piped water.

MEDICAL OFFICER
Primary Health Centre
Chandrala

Report Date and Time : 05/12/2017 01:03:43

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Chandrala Phc**
Disease : **All**
Fdate : **01-Jan-2015**
Tdate : **31-Dec-2016**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Allergic rhinitis	1465	1471	416	330	37
Body Pains	1393	1484	14	19	21
Diabetes Mellitus	1259	1416	0	6	12
Gasric ulcer	1031	1185	3	25	13
Fever of unknown origin	983	1207	313	223	17
Headache	798	968	32	48	0
Hypertension	540	806	0	0	19
Asthama	440	403	0	2	5
Routine general health chech up	437	786	28	19	0
Accidental Injuries	396	186	50	34	13
Osteoarthritis	301	440	3	2	0
Skin Infections	244	237	55	63	0
Enteric Fever	108	132	39	39	1
Pain Abdomen Non Specifi	93	157	34	27	0
Acute Repiratory Infectio	82	115	4	6	0
Conjunctivitis	59	101	8	8	0
Dog Bites	56	37	34	18	2
Acute Diarrhoeal (Includi	53	72	23	12	0
dental caries	33	64	2	3	0
Acute Urinary Tract Infec	31	43	0	2	0
Vitamin A deficiency	29	10	0	8	0
Foreign body in ear	22	45	4	0	0
Hypotension	14	23	0	0	2
Nausea and vomitting	14	46	17	20	0
Iron deficiency anemia	13	55	2	22	0

(Cold)

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Primary Health Cent
Chandrala

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Whooping Cough	11	14	4	3	0
Juvenile arthritis	9	11	0	1	0
Scabies	8	5	17	7	1
Scorpion Bite	7	4	0	0	0
Diarrhoea and gasroenteritis	7	17	3	4	3
Inguinal Hernia	4	0	0	0	0
Chronic bronchitis	4	3	3	1	0
Acute tonsillitis	3	4	1	1	0
Burns	3	14	1	2	2
Abscess	2	0	0	0	0
Orchitis and epidodymitis	2	1	0	0	0
Vitamin B12 deficiency anemia	2	0	0	1	1
Adult Respiratory Distress Syndrome	2	3	0	0	0
Dyspepsia	2	3	0	0	0
Osteomyelitis	2	0	0	0	0
Other hearing loss	1	1	0	0	0
Fall from tree	1	1	0	0	0
Other Tetanus	1	0	0	0	0
Diphtheria	1	0	0	0	0
Hyperparathyroidism	1	0	0	0	0
Hypertensive heart disease	1	1	0	0	0
Complication following trasfusion ,Injection ,Infusion	1	0	0	0	0
Oedema	1	0	0	0	0
Birth injury to scalp	1	0	0	0	0
Measles	1	0	0	0	0
Umbilical hernia	1	0	0	0	0
Acute pharyngitis	1	1	0	0	0
Uretic Colic	1	0	0	0	0
Rhumatic tricuspid valve disease	1	0	0	0	0
Infantile cerebral palsy	1	0	0	0	0
Minor Surgery	1	0	0	0	0
Cystitis	0	1	0	0	0
Road Traffic Accident	0	3	0	0	0
Tubectomy	0	21	0	0	0
Helminthiasis	0	1	0	0	0
Thyritoxicosis (Hyperthyroidism)	0	2	0	0	0
Vitamin D deficiency	0	5	5	6	0
Depressive Episode	0	1	0	0	0
Gangrene	0	2	0	0	0
Pregnancy And Antenatal C	0	522	0	0	0
Filariasis	0	1	0	0	0
Early syphillis	0	2	0	0	0
Glaucoma	0	0	0	1	2
Iodine deficiency hypothyroidism	0	1	0	0	0
Hypoparathyroidism	0	1	0	0	0
Taeniasis	0	0	0	0	1
Pain in throat and chest	0	1	0	0	0
Superficial injuries involving multiple body region	0	1	0	0	0
Birth asphyxia	0	1	0	0	0

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Primary Health Cen
Chandrala

Candidiasis	0	0	1	0	0
Acute renal failure	0	0	0	0	1
Anencephaly and similar malformations	0	1	0	0	0
Purperal sepsis	0	1	0	0	0
Renal calculus	0	1	0	0	0
Folate deficiency anemia	0	0	0	1	0
Bacterial meningitis	0	0	0	0	1
Lungs Diseases	0	1	0	0	0
Superficial injury over head	0	1	0	0	0
	9978	**12143**	**1116**	**964**	**154**
	Nine Thousand Nine Hundred Seventy Eight Only	Twelve Thousand One Hundred Fourty Three Only	One Thousand One Hundred Sixteen Only	Nine Hundred Sixty Four Only	One Hundred Fifty Four Only

MEDICAL OFFICER
Primary Health Centre
Chandrala

Report Date and Time : 05/12/2017 01:02:39

Govt. of Andhra Pradesh
AP Medical Services & Infrastructure
4th Floor, DM & HS Campus, Koti, Opposite Womens College, Sultan Bazar Hyderabad - 500095
Phone-040-24658702, tele-fax: 040-24619120

Disease Vs Gender

Storeid : **Chandrala Phc**
Disease : **All**
Fdate : **01-Jan-2017**
Tdate : **05-Dec-2017**

DiseaseName	Male	Female	Malechild	Femalechild	Others
Allergic rhinitis	1497	1669	223	204	0
Body Pains	1059	1525	2	8	0
Diabetes Mellitus	872	710	1	4	0
Routine general health chech up	677	1020	20	20	0
Gasric ulcer	463	571	4	0	0
Fever of unknown origin	446	547	169	211	0
Asthama	366	161	5	4	0
Hypertension	359	495	0	4	0
Accidental Injuries	308	149	32	24	0
Skin Infections	269	263	59	44	0
Osteoarthritis	161	236	1	2	0
Headache	94	181	3	5	0
Dog Bites	59	34	21	12	0
Acute Repiratory Infectio	41	42	9	3	0
Pain Abdomen Non Specifi	26	119	11	8	0
Acute Diarrhoeal (Includi	25	43	17	15	0
Hypotension	24	30	0	0	0
Conjunctivitis	24	39	10	6	0
Juvenile arthritis	22	24	0	1	0
Scorpion Bite	20	4	0	0	0
Foreign body in ear	19	49	8	8	0
Acute Urinary Tract Infec	18	24	0	0	0
Diarrhoea and gasroenteritis	13	13	0	1	0
dental caries	10	17	0	3	0
Whooping Cough	10	7	7	3	0

MEDICAL OFFICER
Primary Health Centre
Chandrala

Road Traffic Accident	8	2	0	0	0
Burns	7	5	0	1	0
Chronic bronchitis	7	7	2	3	0
Iron deficiency anemia	4	1	0	0	0
Acute tonsillitis	3	10	3	0	0
Orchitis and epidodymitis	3	0	0	0	0
Scabies	3	1	0	3	0
Abscess	3	3	0	0	0
Adult Respiratory Distress Syndrome	3	2	0	1	0
Inguinal Hernia	2	1	0	0	0
Early syphillis	2	3	0	0	0
Contaceptive management	2	0	0	0	0
Abnormalities of heart beat	1	0	0	0	0
Fall from tree	1	0	0	0	0
Alzheimer's disease	1	0	0	0	0
Gangrene	1	1	0	0	0
Cancer	0	216	0	0	0
Candidiasis	0	1	0	0	0
Pregnancy And Antenatal C	0	1	0	0	0
fissure and fistula of anal and rectal region	0	1	0	0	0
Obesity	0	1	0	0	0
Chancroid	0	9	2	0	0
Nausea and vomitting	0	1	0	3	0
Osteoporosis	0	1	0	0	0
Snake Bite	0	0	0	1	0
Convulsions	0	2	0	0	0
Atheroscerosis	0	2	0	0	0
Vitamin B12 deficiency anemia	0	1	1	0	0
Dengue Fever	0	1	0	0	0
Birth asphyxia	0	0	0	0	0
Acute appendicitis	0	1	0	1	0
Blindness and low vision	0	1	0	0	0
Dyspepsia	0	1	0	0	0
	6933	**8247**	**610**	**603**	**0.0**
	Six Thousand Nine Hundred Thirty Three Only	Eight Thousand Two Hundred Fourty Seven Only	Six Hundred Ten Only	Six Hundred Three Only	Zero Only

MEDICAL OFFICER
Primary Health Ce...
Chandrala

Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
1	M. Durga	"	65	F	140/80	101	AN	N	AN	
2	Ramana		38	F	130/70	85	AN	N	N	
3	D. Vijayalakshmi		29	F	110/90	80	AN	N	N	
4	P. John Vesthy		12	M	—	—	N	AN	AN	
5	P. Narasimha Swamy	"	57	M	120/60	327	N	N	N	
6	R. Krishna Rao		73	M	180/70	172	N	N	N	
7	N. Yuva Raju		7	M	—	—	N	N	AN	
8	N. Brahmeswara Rao		26	M	120/90	116	AN	N	AN	
9	M. Rambabu.		61	M	130/80	153	N	N	N	
10	K. Jhansi Rani		38	F	120/60	128	N	N	N	
11	P. Kanaka Durga		49	F	120/90	117	N	N	AN	
12	S. Subba Rao		85	M	237/87	145	N	N	N	
13	B. Sri Devi	"	40	F	131/90	127	N	AN	N	
14	SK. Khajavali		56	M	120/70	85	N	—	—	
15	G. Babu Rao		57	M	160/80	147	N	—	—	
16	K. Gopala krishna		55	M	152/84	137	N	—	—	
17	V. Krishna kumari	"	36	F	100/60	—	N	N	AN	
18	P. Prabhu		52	M	—	355	N	N	AN	
19	P. Venkata Ramana.		50	F	130/80	—	—			
							4	—	1	

Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
20	K. Ramulu.		63	M	100/60	150	—	N	N	
21	M. Nuna		60	M	—	96	—	N	AN	
22	B. Naresh Babu		40	M	130/80	110	—	N	N	
23	S. Yellaiah		70	M	—	—	N	N	N	
24	M. Vijayalakshmi		53	F	126/80	110	—	—	—	
25	Sk. Gaabi		36	F	100/60	85	—	N	N	
26	Sk. Fathi Munnisa		60	F	112/67	138	—	AN	N	
27	K. Lakshmi		55	F	160/80	—	—	—	—	
28	G. Srinivasa Rao		80	M	140/80	292	N	N	AN	
29	N. Jyothi		30	F	100/70	120	N	N	AN	
30	B. Venkateshwara Rao		63	M	180/90	276	N	N	N	
31	B. Balaji		50	M	97/64	137	N	N	N	
32	V. Venkateshwarlu		52	M	135/79	155	N	AN	N	
33	K. Appa Rao		80	M	—	120	N	N	N	
34	G. Lakshmi		28	F	120/70	120	N	—	—	
35	B. Venkaiah		62	M	151/85	117	N	—	—	
36	D. Yellavardhan.		64	M	159/58	225	N	—	—	
37	P. Lakshmi		26	F	104/69 ~~100/60~~	—	—	—	AN	
38	P. Venkata Ramana.		50	F	150/100	—	—	—	—	

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Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
39	G. Navyasri		14	F	—	102	—	—	—	
40	B. Neelaveni		10	F	90/40	98	—	N	DN	
41	K. Sakuntala		75	F	160/100	130	—	AN	DN	
42	Y. Babu Rao		57	M	160/80	147	—	N	N	
43	Ch. Rambabu.		52	M	104/71	109	—	N	N	
44	Y. Prasad		64	M	135/79	193	N	—	—	
45	K. Sahadevudu		65	M	146/79	127	—	N	—	
46	V. Venkata Lakshmi		38	F	141/86	104	—	—	—	
47	V. Krishna Kumari		36	F	100/60	—	—	AN	N	
48	B. Krishna		55	M	180/112	113	N	—	—	
49	B. Sakku.		60	F	—	347	—	—	—	
50	K. Karthick		8	M	—	—	—	—	N	
51	P. Kumari		40	F	151/77	—	—	N	N	
52	P. Sambasiva Rao		65	M	115/73	138	N	—	—	
53	SK. Moulabi		53	M	145/86	123	—	—	—	
54	V. Subba Rao		78	M	160/80	—	—	—	—	
55	M. Suryavathi		55	F	—	—	N	—	—	
56	P. Archana.		9	F	—	—	—	N	N	
57	D. Chinnari		9	F	—	—	—	—	—	

Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
58	D. Swamy		8	M	—	—	N	N	AN	
59	D. Ramu.		9	M	—	—	—	N	AN	
60	D. Lakshmi		23	F	—	—	—	N	N	
61	A. Hemalatha		13	F	—	—	—	N	N	
62	A. Renuka		32	F	100/70	163	N	—	—	
63	A. Madhulatha		28	F	110/60	—	N	AN	N	
64	R. Ganesh		14	M	—	—	—	N	AN	
65	N. Gowthami		27	F	—	—	—	—	—	
66	T. Anjaneyulu		30	M	—	—	—	—	—	
67	Ch. Jujitha		10	F	—	—	—	AN	—	
68	Ch. Gowri		26	F	—	—	—	—	—	
69	S. Babu Rao.		56	M	148/102	—	—	—	—	
70	K. Chittimma		50	F	120/60	130	—	—	—	
71	SK. Moulali		75	M	156/81	132	—	N	N	
72	B. Maroni		70	F	160/90	90	—	N	—	
73	K. Mary		30	F	88/58	88	—	AN	—	
74	SK. Shakeela		33	F	131/75	110	N	N	AN	
75	M. Lakshmi		55	F	134/81	83	—	—	—	
76	B. Vijaya		45	F	121/80	207	—	—	—	

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Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
77	B. Harsha		7	M	—	—	—	—	—	
78	B. Kamman.		6	M	—	—	—	—	—	
79	Ch. Gopalaswamy		63	M	170/80	140	—	N	—	
80	B. Krishna veni		6	F	—	—	—	—	—	
81	S. Rukmini		38	F	140/80	—	—	—	—	
82	B. Sali		51	F	140/89	131	—	—	—	
83	A. Jayalamma		60	F	129/67	341	—	—	AN	
84	SK. Mymuni		70	F	140/90	390	—	—	—	
85	M. Bosi		50	F	114/73	110	—	—	—	
86	B. Mangamma.		40	F	130/83	89	—	N	AN.	

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Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
87	B. Mahidhar		5	M	—	—	—	N	—	
88	K. Renuka		49	F	144/83	116	—	—	—	
89	K. Venkateswara Rao		64	M	157/90	249	—	N	N	
90	P. Pinnaja		40	F	138/70	104	—	N	—	
91	K. Sakri		55	F	141/88	106	—	N	N	
92	M. Nagendramma		30	F	100/70	94	—	N	AN	
93	K. Nanchi		60	F	163/98	109	N	N	—	
94	B. Pramila		55	F	157/104	187	—	—	—	
95	Sk. Yakubnabi		14	M	—	—	N	—	—	
96	B. Gogulamma		43	F	146/78	112	—	N	—	
97	G. Ramya		14	F	98/65	—	—	N	—	
98	G. Jayasudha		22	F	122/80	250	—	—	—	
99	M. Bhagyalakshmi		28	F	120/70	104	—	—	—	
100	M. Tulasamma		60	F	114/75	120	—	—	—	
101	M. Nageswara Rao		32	M	170/110	—	N	N	—	
102	A. L. Srinivasa Rao Naik		55	M	120/60	80	N	—	—	
103	J. Nagendramma		48	F	136/85	—	—	—	—	
104	S. Venkataranayana.		47	M	120/90	130	—	N	—	
105	M. Nagamani		28	F	113/67	—	—	—	—	

Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
106	M. Gali		37	F	110/80	90	—	—	—	
107	Sk. Kalibi		19	F	90/60	—	—	—	—	
108	B. Sana		55	F	100/60	—	N	N	—	
109	V. Siromani		45	F	120/70	75	—	—	—	
110	P. Devi		35	F	140/90	97	—	—	—	
111	M. Santhoshamma		20	F	103/67	269	—	—	—	
112	M. Adam		11	M	—	90	—	—	—	
113	Sk. Apsara		46	F	150/90	—	—	N	AN	
114	N. KrishnaKumari		45	F	121/71	—	—	N	AN	
115	N. Prisha		10	F	—	74	—	—	—	
116	K. YuvaRani		10~~5~~	~~M~~ F	140/80	109	—	—	—	
117	K. Sri Rama Murthy		54	~~F~~ M	140/80	—	—	—	—	
118	G. Narasamma		45	F	140/90	—	—	N	—	
119	V. Kameshwaramma		56	F	130/80	159	—	—	—	
120	S. Lakshmi		36	F	130/90	—	—	N	—	
121	K. Nagendramma		65	F	171/82	—	—	—	—	
122	Sk. Mohammad		18	M	90/60	—	—	—	—	
123	Sk. Shakeesha		18	M	150/60	—	—	N	N	
124	Sk. Fayum.		19	M	113/70	—	—	—	—	

Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
125	Sk. Azam		18	M	114/60	—	—	N	A N	
126	A. Sali		40	F	111/62	—	—	—	—	
127	B. Vyshali		10	F	—	—	—	N	—	
128	K. Suvartha		45	F	143/99	—	—	N	—	
129	K. Sowmya		10	F	—	—	—	—	—	
130	M. Manimma		55	F	—	—	—	N	—	
131	V. Venkateswara Rao		53	M	90/60	—	—	—	—	
132	V. Malleswari		36	F	140/90	—	—	—	—	
133	G. Suseela		45	F	—	—	—	—	—	
134	B. Vijayalakshmi		51	F	120/80	—	N	—	—	
135	D. Eshwari		25	F	110/60	—	—	—	—	
136	Ch. Swarajyam		55	F	160/80	—	—	—	—	
137	Sk. Hafeenabee		80	F	150/80	—	—	—	—	
138	M. Suryanarayana		80	M	—	—	—	—	—	
139	S. Koteswara Rao		45	M	90/50	—	—	N	A N	
140	Ch. Anuradha		30	F	120/60	—	—	N	N	
141	P. Tirupathamma		50	F	110/80	—	— N	N	N	
142	G. Suseela		45	F	120/70	—	—	N	A N	
143	M. Manimma.		55	F	110/70	—	—	—	—	

Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
144	Kumari		40	F	100/60	—	—	—	—	
145	M. Bhadri		41	M	90/60	—	—	—	—	
146	B. Chilakamma		42	F	130/80	—	—	—	—	
147	P. Chiranjeevi		8	M	-	—	—	—	—	
148	P. Srivalli		11	F	-	—	—	—	—	
149	A. Nagamani		26	F	90/50	—	—	—	—	
150	K. Nagatirumala		13	F	-	—	—	—	—	
151	Cp. Pavan		10	F	-	—	—	—	—	
152	B. Saumya		9	F	-	—	—	—	—	
153	M. Durga Bhavani		9	F	-	—	—	—	—	
154	Sk. Saleem		11	M		—	—	—	—	
155	Sk. Labbi		55	F	150/90	—	—	—	—	
156	Sk. Apsa		3	F		—	—	—	—	
157	K. Prasad		12	M		—	—	N	—	
158	P. Ganesh		12	M		—	—	N	AN	
159	T. Mounika		21	F	110/70	—	—	—	—	
160	T. Venkateswara Rao		49	M	140/90	—	—	—	—	
161	Cp. Mose		40	M	140/100	309	—	N	—	
162	V. Tarun Teja.		12	M			—	N	—	

Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
163	V. Vicharam				—	—	—	—	—	
164	K. Harichandra Prasad		11	M	—	—	—	—	—	
165	B. Gopi		14	M	—	—	—	N	—	
166	Cp. Nagaiah		20	M	135/84	—	—	—	—	
167	Sk. M.D. Galib		42	M	135/84	—	—	—	—	
168	M. Sarala		49	M	—	—	—	—	—	
169	P. Varalakshmi		40	F	—	—	—	—	—	
170	R. Sarada		50	F	—	—	—	—	—	
171	R. Rathna		60	F	—	—	—	—	—	
172	Y. Varalakshmi		30	F	—	—	—	—	—	
173	Sk. Karim		55	F	—	—	—	—	—	
174	K. Bramaramba		45	F	—	—	—	—	—	

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Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
175	K. Soramma		30	F	160/80	116	—	N	—	
176	V. Vani		42	F	128/70	98	—	—	—	
177	S. Durga Bhavani		6	F	140/90	132	—	N	—	
178	V. Malleswari		36	F	140/90	118	—	N	—	
179	G. Suseela		45	F	120/80	—	—	N	—	
180	B. Vijayalakshmi		31	F	120/80	122	—	N	—	
181	D. Bhudri		25	F	110/60	138	—	N	—	
182	Ch. Swarajyam		55	F	160/80	140	—	N	—	
183	Sk. Habeeb bee		80	F	150/80	117	—	N	—	
184	V. Suryanarayana		80	M	130/90	158	—	N	—	
185	S.K Eshwara Rao		45	M	180/50	198	—	N	—	
186	Ch. Anuradha		30	F	120/60	112	—	N	—	
187	P. Tirupatamma		50	F	110/80	—	—	N	—	
188	M. Manimma		55	F	120/70	—	—	N	—	
189	Kumari		40	F	100/60	—	—	N	—	
190	M. Badri		41	M	90/60	—	—	N	—	
191	B. Chilakamma		42	F	130/80	—	—	N	—	
192	P. Chiranjeevi		8	M	—	—	—	N	—	
193	P. Sainath		11	F	—	—	—	N	—	

Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
194	A. NagaMani		26	F	90/50	—	—	N	—	
195	K. Nagatirumala		13	F	—	—	—	N	—	
196	G. Pavani		10	F	—	—	—	N	—	
197	B. Sowmya		9	F	—	—	—	N	—	
198	M. Durga Bhavani		9	F	—	—	—	N	—	
199	SK. Saleem		11	M	—	—	—	N	—	
200	SK. Lakki		55	F	150/90	—	—	N	—	
201	SK. Asha		3	F	—	—	—	N	—	
202	K. Prasad		12	M	—	—	—	N	—	
203	P. Ganesh		12	M	—	—	—	N	—	
204	T. Mounika		21	F	—	—	—	N	—	
205	T. Venkateswara Rao		49	M	140/90	—	—	N	—	
206	G. Mosey		40	M	140/100	—	—	N	—	
207	V. Tarun Teja		12	M	—	—	—	N	—	
208	V. V. Charan		11	M	—	—	—	N	—	
209	K. HariChandra Prasad		14	M	—	—	—	N	—	
210	B. Gopi		20	M	—	—	—	N	—	
211	G. Nagesh		42	M	135/84	—	—	N	—	
212	SK. Mohammad Gaffar		49	M	140/90	—	—	N	—	
213	M. Sarada		40	F	110/90	—	—	N	—	
214	P. Varalakshmi		50	F	120/80	—	—	N	—	

Details of patients attended the Medical Health camp conducted
at West Ibrahimpatnam village on 05-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
215	R. Sarala	..."	60	F	110/90	152	—	N	—	
216	R. Reshma		30	F	120/80	118	—	N	—	
217	Y. Varalakshmi		55	F	128/90	125	—	N	—	
218	Sk. Karim		45	M	120/80	114	—	N	—	
219	K. Bramaramba	..."	37	F	120/80	136	—	N	—	
220	K. Saramma		30	F	110/70	116	—	N	—	
221	V. Rani		42	F	120/90	131	—	N	—	
222	S. Durgabhavani		6	F	—	—	—	N	—	
223	Y. Yehrah		36	M	130/90	142	—	N	—	
224	K. Gowtham		40	M	130/95	128	—	N	—	
225	M. Narendra		26	M	120/80	118	—	N	—	
226	P. Nageswara Rao		30	M	130/90	109	—	N	—	
227	M. Venkata Ratnam		39	M	110/80	135	—	N	—	
228	Y. Venkateswarlu	..."	44	M	110/90	140	—	N	—	
229	K. Anjaneyulu		50	M	130/90	110	—	N		
230	S. Durga		40	F	—	—	—	N.		

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Details of patients attended the Medical Health camp conducted
at Mulapadu village on 14-12-2017

S.No.	Name	Weight/kg	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
1	G. Srinivasa Rao	105	48	M	100/70	131	N	N	N	
2	J. Venkata Ramaiah	80	82	M	140/80	211	AN	N	N	
3	G. Padma	84	46	F	130/90	142	N	N	N	
4	A. Pitcheswara Rao	85	62	M	130/80	132	N	N	AN	
5	N. Sankra Kumari	66	45	F	110/70	147	AN	N	N	
6	P. Rama Rao	71	54	M	110/70	79	AN	AN	N	
7	K. Mariyamma	68	45	F	110/70	104	N	N	—	
8	N. Ramamohan Rao	57	62	M	170/90	129	AN	N	N	
9	B. Jyothi	54	29	F	130/70	153	N	N	N	
10	K. Yesupadam	60	65	M	120/60	106	N	N	N	
11	P. Sirani	67	38	F	120/80	123	N	N	N	
12	M. Mallikarjuna Rao	80	50	M	150/90	91	N	N	AN	
13	M. Koti Ratnam	47	67	F	140/70	92	AN	N	—	
14	K. Sita Ramaiah	74	68	M	200/120	132	AN	AN	AN	
15	K. Venka Ramamma	51	40	F	110/80	113	N	N	N	
16	K. Seshagiri Rao	68	80	M	140/60	128	N	N	AN	
17	N. Thirupathamma	35	75	F	140/70	152	AN	—	—	
18	K. Nageswara Rao	61	58	M	130/80	127	AN	AN	N	
19	K. Satyavathi	44	50	F	120/70	178	N	N	N	
20	N. Jallaiah	53	65	M	130/70	120	N	N	—	
21	NV Suneel Kumar	54	17	M	—	—	N	—	—	
22	T. Narasimha Swamy	74	40	M	110/70	87	N	—	—	
23	Y. Venkateswara Rao	86	65	M	140/60	221	AN	N	N	
24	N. Sankara Rao	65	45	M	80/50	113	AN	AN	N	
25	N. Ravi Kumar	77	32	M	120/80	272	N	N	N	
26	B. Rama Rao	70	85	M	130/70	120	AN	N	AN	
27	K. Meeramma	73	50	F	140/90	130	N	N	N	
28	Ch. Hari Krishna Prasad	83	24	M	—	—	N	N	—	
29	A. Venkata Rao	66	67	M	100/70	172	AN	N	—	
30	K. Vajramma	54	65	F	140/80	174	AN	N	—	
31	B. Aasirvadam	56	70	M	120/50	95	AN	N	—	

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Details of patients attended the Medical Health camp conducted
at Mulapadu village on 14-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
32	N. Venkateswara Rao	—	43	M	—	—	N	—	—	
33	M. China Rao	54	65	M	130/80	93	AN	N	—	
34	B. Kalyan Rao	87	37	M	180/100	104	N	N	AN	
35	K. Kotteswara Rao	85	62	M	160/80	156	AN	N	—	
36	D. Ragavamma	76	60	F	130/70	88	AN	—	—	
37	G. Velukaiah	52	66	M	150/80	169	AN	—	—	
38	N. Vara Lakshmi	62	55	F	170/80	86	AN	N	AN	
39	B. Selva Raju	76	32	M	120/80	115	AN	N	AN	
40	G. Venkateswara Rao	53	78	M	—	178	AN	N	N	
41	B. Srinivasa Rao	65	45	M	150/90	155	AN	N	N	
42	K. Vubamma	45	50	F	—	139	AN	N	AN	
43	D. Suraiah	43	100	M	130/70	116	N	N	N	
44	V. Narasimha Rao	78	70	M	150/100	170	N	N	AN	
45	K. Anantamma	49	58	F	130/60	139	—	N	N	
46	K. B. Rajendra Prasad	51	87	M	130/60	119	—	N	N	
47	N. Sambasiva Rao	59	74	M	130/80	165	AN	N	N	
48	K. China Venkateswara Rao	43	70	M	170/80	150	N	N	N	
49	A. Naga Lakshmi	41	45	F	110/60	172	AN	N	N	
50	G. Subadevi	49	50	F	120/80	156	N	N	—	
51	K. Marijamma	40	54	F	140/80	128	N	N	N	
52	N. Sanjeeva Rao	40	70	M	100/60	95	AN	—	—	
53	V. Madhava Rao	52	79	M	120/70	137	AN	N	—	
54	B. Edukondalu	47	83	M	120/70	116	AN	N	—	
55	M. Ramulu	70	45	M	180/90	130	AN	N	N	
56	Ch. Purnachandra Rao	63	62	M	150/100	110	AN	N	N	
57	J. Punnamma	60	47	F	140/70	131	—	N	N	
58	B. Vijayalakshmi	55	68	F	170/100	116	N	N	AN	
59	M. Sarojini	68	94	F	180/70	146	N	N	—	
60	D. Samrajyam	60	53	F	150/70	161	AN	N	AN	
61	P. Ranganayakamma	65	59	F	170/90	116	AN	N	N	
62	V. Krishnam Raju	65	34	M	110/70	101	N	N	—	

Details of patients attended the Medical Health camp conducted
at Mulapadu village on 14-12-2017

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
63	N. Venkata Subbamma	60	50	F	120/80	—	N	—	—	
64	M. Veeranjaneyulu.	32	33	M	140/90	130	—	N	N	
65	V. Kishore	69	33	M	130/90	105	N	N	N	
66	LMV Prasad	70	51	M	130/80	97	N	N	N	
67	P. Sita Mahalakshmi	45	65	F	130/80	82	N	N	—	
68	B. Chinnamma.	58	25	F	110/76	140	N	—	N	
69	M. Syamala	84	60	F	150/69	167	—	N	N	
70	K. Madhavi	67	48	F	150/80	209	—	N	N	
71	N. Savitha.	54	22	F	130/80	110	N	—	N	
72	B. Rama Rao	73	78	M	110/70	121	—	N	AN	
73	G. Suguna	61	55	F	140/90	163	—	N	—	
74	P. Lakshmi	60	55	F	120/80	142	N	—	AN	
75	N. Vijaya	77	38	F	110/72	144	—	N	AN	
76	Appamma	48	40	F	109/69	120	—	—	N	
77	P. Kamala	47	28	F	120/70	104	—	—	AN	
78	K. Adilakshmi	60	45	F	163/105	100	N	—	AN	
79	M. Baby.	50	35	F	120/80	176	—	N	AN	
80	N. Siva Parvathi	65	54	F	130/100	153	N	—	N	
81	K. Babu Rao.	66	42	M	120/80	142	N	N	N.	
82	M. Anusha	60	28	F	128/77	116	—	N	AN	
83	K. Satyanarayana	77	50	M	131/88	134	N	N	N	
84	G. Uma Devi	48	45	F	95/67	144	—	N	—	
85	K. Venkata Ramana.	56	45	F	141/85	109	N	N	—	
86	A. Ramaswamy.	57	63	M	112/83	152	N	N		

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S No	Name	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
87	M.MAHESWARI	22	F	47	104/60	—	—	N	N	—	
88	N.TIRUPATHAMMA	60	F	49	123/86	—	—	N	AN	—	
89	B.ROSAMMA	45	F	43.	103/66	—	—	N	—	—	
90	P.NAGADURGA	37	F	78	130/80	—	—	N	AN	—	
91	NAGA MANI	51	F	62	137/86	—	—	N	N	—	
92	N.UMAMAHESWARRAO	58	M	77	140/90	—	—	BP↑	—	—	
93	Veeramma.	30	F	62	130/72	—	—	[illegible] N	—	—	
94	T.Venkateswarlu	52	M	63	105/60	—	—	N	N	AN	
95	T.Krishna Kumari	30	F	65	104/72	—	—	N	N	N	
96	T.Venkateswarlu	35	M.	46.	107/78	—	—	N	N	N	
97	J.Venkatapaiah	71	M.	73	157/123	—	—	N	N	N	
98	G.RAMARAO	74	M.	74	120/80	—	—	N	N	N	
99	T.NAGESWARRAO	60	M	50	128/86	—	—	N	N	N	
100	M.Mutha Rao	55	M	73.	150/90	—	—	N	—	N	
101	M.KRISHNAKUMARI	23	F	37.	—	—	—	N	—	N	
102	M.ANURADHA	27	F.	54	130/90.	—	—	N	AN	—	
103	P.KONDAIAH.	80	M.	65.	140/80	—	—	—	N	N	
104	J.koteswarao.	63	M	71.	—	—	—	—	N	—	
105	J.Kalavathi	55	F.	55	151/80	—	—	N	N	—	
106	R.PARVATHI	50	F	50	121/78	—	—	N	—	N	
107											
108											

RCM School Kondapalli

Details of patients attended the Medical Health camp conducted
at ~~Mulapadu~~ Kondapalli village on ~~14-12-2017~~ 21.12.2017

S.No.	Name	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
1	R. DURGA	37	F	60	110/70	156	N	N	—		
2	K. RAMULU	65	M	65	160/90	316	AN	N	N		
3	K. CHINNA	55	M	61	130/70	102	AN	N	AN		
4	K. Sambaiah	45	F	62	160/90	114.	AN	N	AN		
5	P Ramulu	60	M	64.	140/90	90	AN	N	N		
6	N Ashok Kumar	30.	M	76	130/90	149	N	N	N		
7	K. Beebamma	65	F.	49	160/90	120	AN	N	N		
8	K. Samrajyam	45	F	56	120/90	120.	AN	N	N		
9	anji	58	F.				—	N	AN		
10	K Sikhamahalakshmi	26	F				N	N	N		
11	N. Samrajyam	45	F	42	130/90	92	AN	N	N		
12	K. Samrajyam	29	F	44	110/90		AN	N	N		
13	G. chinna srinu	48	M	61	140/80	81.	AN	N	N		
14	G. Chilakamma	44	F	72	130/80	99	N	N	AN		
15	B. chinnagangaiah	75	M	54	170/90.	86	AN	N	N		
16	B. krishna	50	M	62	120/90	203.	AN	N	N		
17	D Satyavathi	45	F	60	130/80	370	N	N	N		
18	R. Ramu	23	M	64	120/90		N	N	N		
19	V. Mary	35	F	72	100/60.	150	N	N	—		
20	M. Ramulu	72	M	44	150/90	167	AN	N	N		

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S.No.	Name	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
21	K. Lakshmi	45	F				AN	N	AN		
22	G. Srinivasarao	51	M	95	150/90	210	AN	N	N		
23	S Ramarao	52	M	83	120/70	354.	N	N	N		
24	K. Lakshminarayana	30	M	69	110/70	188	N	N	AN		
25	T. Ratnarao	38	M	84	120/90.	105	N	N	N		
26	G. Kumari	50	F	86	110/90		—	N	AN		
27	V. Bobbili	45	M	50	140/80.	94.	N	—	—		
28	V. Surya Lakshmi	39	F	52	100/60	108	N	N	—		
29	V. Ramana	34.	F	70	110/80	113	AN	—	—		
30	S Suresh	22	M	50	110/70		N	—	—		
31	B. Seetha Ramaiah	20	M	52	130/90	327.	N	—	—		
32	SK. Ramjan	38	M	82	120/90.	106.	AN	—	—		
33	SK. Malik	30	F	66	130/80	107	N	—	—		
34	M. Vijay Kumar	44	F	90	160/90	157	N	N	AN		
35	K. Padma	65	F	61	170/100	137	—	—	—		
36	M. Srinivasarao	40	M	69	130/90	105	N	N	N		
37	K. Dhanalakshmi	37	F	66	110/90	426	N	N	N		
38	K. Venkata Ramana	33	F	71	110/80	211	N	N	—		
39	K. Sirisha						AN	N	N		
40	V. Rambabu	40	M	40	100/60.	86.	—	N	—		
41	T. Appalanarasamma	45	F	62	110/90.	102	N	—	—		
42	V. Yedukondalu	40	M	56	110/90	266	N	—	—		

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S.No.	Name	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
43	T. Nukaraju	60	M	54	130/90	87	N	N	N		
44	T. Durga	55	F	62	130/90	91	N	N	—		
45	T. Sivamma	38	F	61	110/90	102	N	N	N		
46	r. Naga mani	54	F	72	120/80	128	N	N	—		
47	Y. Nukaratnam	27	F	54	110/90.	156	N	N	—		
48	B. Nagamani	32	F	72	110/90.	88.	N	N	N		
49	K. Ramana	38	M	42	110/80.	89,	N	N	—		
50	ch. Narasimharao	38.	M	64	120/70	108	N	N	—		
51	M. Ramana	40	F	62	140/90	107	AN	N	—		
52	E. Revathi	29	F	44	110/80	99	N	N	N		
53	R. Suguanamma	65	F	65	140/80	166.	N	N	—		
54	ch. Ramana	38	F	75	110/90.	153	—	—	N		
55	s. Phanalakshmi	36	F	65	130/80	117	N	—	N		
56	R. Neelamma	60	F	64	170/90.	94,	—	N	N		
57	k. Anandamma	60	F	68	150/90	76	—	N.	—		
58	D. Vishnu	9	M	17	—	—	N	—	—		
59	D. Sandhya	25	F	51	100/60	88	N	—	N		
60	I. Veeraveekamma	70	F	38	100/60.	126	N	—	N		
61	A. Rayamma	60	F	74	130/80	115	—	—	N		
62	dr. Murali	43	M	64	110/90	110.	—	N	—		
63	M. Ramanma	60	F	39	130/90.	117	—	—	N		
64	ch. Reby	40	F	55	120/90.	132	—	N	—		

S.No.	Name	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
65	O. Mutamma	28	F	61 ~~40~~	110/90	82	N	N	N		
66	K. Jaswi	9	M	17	—	—	—	—	N		
67	N. Jamalamma	35	F	72	130/80	79.	N	N	N		
68	Ch. Atchamma	65	F	58	140/90.	163	N	—	N		
69	M. Annapurna	52	F	89	110/80	167	AN	N	AN		
70	V. Nagendrakumar	32	M	81	170/100	108.	N	N	N		
71	K. Gnanasundaram	63	M	64	90/60		AN	N	AN		
72	P. Lakshmi	63	F	51	150/90		N	—	N		
73	R. Subbamma	60	F	81	110/80.		N	—	N		
74	B. Salomiya	60	F				AN	—	N		
75	N. Durga	56	F				AN	—	N		
76	R. Ramana	49	F	75	130/80		—	N	N		
77	K. Prabhudas	40	M	56	120/90.		AN	—	AN		
78	J. Nagamma	70	F				AN	N	AN		
79	S Kotamma	70	F	40	100/60	139.	AN	N	AN		
80	K. Gangavamma	25	F				N	—	N		
81	T. Anjamma	70	F	45	140/80		—	N	—		
82	O. Anjamma	35	F	46	110/80		N	—	—		
83	K. Lordhimary	44	F	89	110/80		—	—	N		
84	M. Pushpavathi	38	F	56	100/60.		N	—	N		
85	P. Mahesh	64	M	86	130/90	224	—	N	—		
86	I. Kandamma	45	F	64	170/90		—	N	N		

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S.No.	Name	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
87	M. Dhanalakshmi	43	F	51	110/90	276	N	—	N		
88	M. Nirmala	45	F	66	130/80		—	—	N		
89	M. Moshabhagyamma	55	F	50	150/90		—	N	—		
90	K Subhashini	30	F	86	130/90	123	N	—	—		
91	K. Samrajyam	40	F	66	110/90	84	N	—	N		
92	D Venkateswarlu	53	M	100	120/90	135	—	—	N		
93	P. Renuka	45	F				N	N	—		
94	M. Sambasivarao	55	M	75	130/80	198	AN	—	—		
95	V. Rajeswararao	42	M	73	130/90	220	N	—	N		
96	Ch. Venkateswarlu	55	M	82	160/100	92	—	—	N		
97	V. Srinivasarao	43	M	107	140/80	108	—	—	N		
98	P. Yelia	36	F	54	130/80		AN	—	N		
99	B. Ramadevi	36	F	54	130/80	121	—	—	N		
100	P. Lakshmaiah	68	M				—	AN	—		
101	B. Koteswararao	41	M	68	150/90	164	N	—	N		
102	V. Murali Krishna	46	M	85	110/90	92	—	N	N		
103	V. Anish Babu	28	M	75	110/70		N	N	—		
104	P. Swarajyarao	29	M	.	110/80	84	N	—	N		
105	M. Anjamma	50	F	62	160/90	185	N	—	N		
106	P. Ramatulasi	50	F	44	110/70	88	—	N	N		
107	Ch. Ademma						N	N	—		
108	M. Mangamma	50	F	53	150/100	174	—	—	N		

S.No.	Name	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
109	M. Kamakadurga	47	F	74	160/90.	152.	N	—	N		
110	P. Pooja	25	F..				—	—	N		
111	R. Santhi	30	F	74	100/60	127	—	N	—		
112	M. Uma Rani	28	F				N	—	N		
113	M. Uma	23	F				—	N	—		
114	K. Kumar	46	M				N	N	—		
115	R. Ramu	33	M				—	—	N		
116	J. Ramana	41	F	42	140/90		—	N	—		
117	P. Bharani	22	F	50	100/60.		N	N	—		
118	Ch. Srinu	40	M.	79	130/90	194.	—	N	N		
119	T. durga	40	F	78.	140/80.	271	N	—	N		
120	K Kameswaram	60	F	62	130/90	143	—	—	N		
121	Ch. Venkateswaram	63	F..	62	130/80.	105	—	—	N		
122	K. Ramana	48	F	50	110/80		—	N	N		
123	P. Jyothi	23	F..	40	100/60.	118.	—	N	N		
124	S. Raghavamma	37	F	62	110/80	119.	—	N	—		
125	M. Sujatha	37	F.	64.	110/80		N	—	N		
126	M. Gangamma	360	F	38	170/60.		N	N	—		
127	M. Venkat Rao	33	M.	56	120/90	297	N	N	N		
128	M. Bebi						N	—	N		
129	P. Yellamma	50	F.	74	190/60	258	N	—	N		
130	J. Venkateswarlu	52	M	60	110/90.	123	—	—	N.		

S.No.	Name	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
131	E. Lakshmi	31	F	65	130/90	94.	N	N	N		
132	V. Sudhakar	44	M.	74	140/80	187	—	N	—		
133	B. Vijay Kumar	41	M.	80	130/90.	88.	—	—	N		
134	K. Aruna	30	F	64	120/80.		—	N	N		
135	J. Nageswara Rao	44	M	64	130/90	132	—	—	N		
136	D Aruna	45	F	74	150/90.		N	—	N		
137	M. Sammaiyam	50	F	50	130/90.	158.	—	—	N		
138	R. Venkatamma	55	F	44	90/60.		—	N	N		
139	M. Ramadevi	40	F.	62	110/90.		N	—	AN		
140	M. Chinna Ramulu	70	M				N	—	N		
141	R. Mariyadas	54	M	82	110/90.	136.	—	N	—		
142	T. Baburao	70	M.	64	120/90	127	—	N	—		
143	C. Kodeswaramma	45	F.	65	100/60.		—	—	N		
144	M. Josh Babu	25	F	80	120/90.	129	—	N	N		
145	B Andamma	60	F	62	130/90.	200	—	N	N		
146	K. Satyavathi	40	F	46	120/70.		—	N	—		
147	B. Kanakadurga	60	F	66	130/80	139.	N	—	N		
148	K. Chinna	55	F	56	110/80.		—	N	—		
149	K. Selvi	40	F	54	120/80.		N	—	N		
150	B. Sandeep Kumar	22	M	64	130/70		N	N	—		
151	O. Terezamma	60	F	80	110/80.		—	—	N		
152	N. Pullamma	58	F	62	130/80		—	N	N		

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S.No.	Name	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
153	V. Lakshmi	50	F.	49	110/80	147	N	N	—		
154	Ch. Ramadevi	30	F.	62	130/80.		N	—	N		
155	B. Trivedi						N	N	—		
156	G. Sukeela	55	F	65	110/70	142.	N	—	N		
157	P. Anjali devi						N	—	N		
158	K. Ritchamma	45	F	50	100/60		N	—	N		
159	Ch. Jamalamma	50	F	46	110/80.		N	N	—		
160	T. Tirapathamma	23	F	58	100/60		N	—	AN		
161	A. Gnanamma	30	F.	59	100/70		N	—	N		
162	A. Sailaja	24	F				—	N	N		
163	Y. Venkateswara Rao	45	M				N	—	—		
164	M. Lalavathi	33	F				—	—	N		
165	P. Venkateswaram	45	F	52	120/90	108	N	—	N		
166	P. Mariyarani	52	F				—	—	N		
167	Ch. Kotesw Rao	49	M	69	130/80.	112.	N	—	N		
168	D. Hari Babu	40	M.	68	120/90		—	—	N		
169	T. Prasad	42	M.	94	120/90.	94.	N	—	N		
170	K. Syamala	37	F	55	100/60		—	N	N		
171	T. Sanyasiyam	58	F	122	100/60.		N	N	—		
172	K. Venkateswarlu	49	M.	84	120/80	238	N	—	N		
173											
174											

Details of patients attended the Medical Health camp conducted
at Kattubadi village on 28-12-2017

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
1	B.KOTESWAR RAO	66	M	86	151/90	179.	N	N	N		
2	G. PULLAIAH	50	M	62	150/77	229.	N	N	AN		
3	G. SIVA M. LAKSHMI	45	F	55	153/89	371	N	—	AN		
4	K. VENKAIAH	75	M	55	137/88		—	—	N		
5	Ch. KOTESWARAMMA	75	F	66	140/72	121	ABN	N	N		
6	G. KRISHNA	48	M	94	131/81	178.	—	N	N		
7	M. JAMALAIAH.	85	M	68	186/86		ABN	—	AN		
8	M. L. NARASAMMA	55	F	66.	151/97.	171	—	N	N		
9	M. SAMBAIAH	30	M	63	114/75		N	—	N		
10	J. VENKAIAH	50	M	55	120/76	134.	N	—	N		
11	B. VENKATA RAO	51	M	86	182/101	146	—	—	N		
12	B. BIKSHALU	56	M	90	151/87	301	N	—	N		
13	G. BHULAKSHMI	40	F	75	120/73	154.	—	—	N		
14	J. RAMANA	60	F	61	152/94	97	N.	AN	—		
15	Ch. Venkateswara Rao	72	M	61	171/83		N	—	N.		
16	K. VENKATESWARAO	75	M	66	140/90		N	—	N		
17	B. JAMKU	90	F	35	150/80		N	—	N		
18	Y. KOTESWAR RAO	50	M.	74	115/74.	196	N	—	N.		
19	G. SRINIVASA RAO	52	M	79	141/84	163	N	—	N		
20	D NAGARAJU	27	M	63	151/91		—	—	AN		

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S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
21	P. TIRUPATHAMMA	50	F	47	185/95	236	N	—	N		
22	CH. JAMALAIAH	55	M	50	~~189/95~~ 175/85	189.	—	—	N		
23	K. KOTESWARAMMA	50	F	80	146/93	121	—	—	N		
24	J. MALLESWARI	50	F	84	141/83	130	ABN	N	—		
25	J. KRISHNA.	53	M	73	161/70	160.	—	—	N		
26	G. ATCHAMMA	55	F	34	90/67		—	N	N		
27	K. SAMRAJYAM	66	F	49	121/75		—	N	—		
28	CH. LAKSHMI	50	F	63	105/76.	149.	—	N	N		
29	J. SATYANARAYANA	59	M	54	162/85	109.	—	N	—		
30	K. SURESH	39	M.	44	132/102	96	—	—	N		
31	B. VENKAYAMMA	75	F	55	148/70	145	—	—	N		
32	B. BHADDILI	60	F	54	116/69.	296	—	—	N		
33	P. VENKATESWARRAO	56	M	66	116/78		N	—	—		
34	B. KOTESWARRAO	70	M	63	135/85	103.	—	—	N		
35	CH. VENKATAJAMMA	49	F	73	129/88	101	—	—	N		
36	G. SRINIVASARAO	57	M	77	160/95	133.	N	—	—		
37	R. PEDA BALA	50	M	69	125/88	98	—	—	N		
38	J. DURGA RAO	53	M	54	91/65	108.	—	—	AN	1	
39	CH. PAPAMMA	60	F	70	156/76.	123.	N	—	N		
40	B. NAGAMMA	70	F	55	140/82	154.	ABN	—	N		
41	P. VENKATESWARRAO	50	M	64	110/68.	95	—	—	N		
42	G. SWATHI	20	F	73	115/75		N.	—	—		

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
43	G.S.RAJU.	25	M	76	131/85		N	—	N		
44	P.MURALI	45	M	56	146/82		ABN	—	N		
45	CH.VENKATASAMBAIAH	56	M	74	151/88.		—	N	N		
46	P.NAGAMANI	80	F	46.	198/79		—	—	N		
47	P.KOTESWARRAO	60	M	69	138/85	132	ABN	—	—		
48	R.SAMPIDI	75	F	47	136/83		N	—	N		
49	R. RATNAM	75	F	52	180/97.		—	—	N		
50	G.BHUVAKSHMI	55	F	64	147/77		N	AN	—		
51	R.KESAVANAYAK	47	M	82	158/82	269	—	N	AN		
52	J.SUBBAMMA	65	F	46	115/81		ABN	—	N		
53	K.KOTESWARRAO	72	M	76	152/117		—	—	N		
54	CH.NAGAMANI	30	F	55	130/81		—	N	—		
55	P.VENKAYAMMA	65	F	61	131/81	148	—	—	N		
56	K.PRASANNA	28	F	35	108/71		—	N	N		
57	V.BODI	53	F	61	116/74.		—	—	N		
58	K.RAJESWARI	22	F	41	102/70		N	—	N		
59	B.BADDU	46	M	62	138/105		N	—	N		
60	V. Vavaprasad	56	M	66	140/110		—	—	N		
61	Ch. Koteswara Rao	72	M	70	110/70		—	—	N		
62	M. Thirupathi Rao	44	M	64	120/90		—	—	N		
63	G.NAGAMALESWARI	45	F	53	137/83		ABN	—	—		
64	Y. BRAHAMMAM.	59	M	65	127/73.		N	—	N		

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S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
65	S.NAGESWARRAO	55	M	72	145/90		N	—	—		
66	J.KOTESWARRAO	66	M	65	120/80		N	—	N		
67	N. Vinayakamma	50	F	69	130/80		—	—	N		
68	D.VenkateswaRRAO	43	M	50	100/80		—	—	N		
69	B.RATHAMMA	58	F	75	160/70	128	—	N	N		
70	G.SIVADURGA	28	F	44	120/90		ABN	—	—		
71	G.KANTHAMMA	60	F	45	150/90		N	—	N		
72	G. JayaRaju	72	M	68	140/110		—	—	AN.		
73	B.V.NARSAMMA	48	F	44	130/80		N	—	N		
74	J.Venkateswa-Ra	68	M	39	110/70		ABN	—	N		
75	J.BRAHMMAIAH	65	M	59	120/80	127	N	—	N		
76	R.HAMU	80	M	45	140/80		—	—	N		
77	LAKSHMI NAYAK	25	F	45	110/60		N	—	N		
78	G.VenkatRATHAH	55	M	44	110/70		—	—	AN		
79	A.LAKSHMAIAH	65	M	97	160/100	173	—	—	AN		
80	A.LeelaVathi	56	F	67	110/70	116	—	—	AN		
81	G.SIVA	42	M	82	130/80		N	—	N		
82	K.RAJESWARI	32	F	80	120/80	110	—	—	N		
83	B.CHINAVENKATES	55	M	69	150/100	184	—	N	N		
84	D.LAKSHMI	39	F	64	130/90	114	—	—	N		
85	G.VENKAT	28	M	76	110/70	A	ABN	—	N		
86	B.KUMARI	40	F	55	140/80	R	N	—	N		

3 4

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
87	Y. Lakshmi	45	F	45	130/70		—	N	N		
88	R. LAKSHMI	80	F	47	214/112		—	N	—		
89	R. JAMARAM.	55	M	67	141/92	160	N	N	N		
90	B. BIMAJAH	55	M	72	122/74	120	—	N	N		
91	CH. SAVITHRI	65	F	54	132/80	117	—	N	—		
92	S. LAKSHMANRAO	29	M	50	110/78.		—	N	AN		
93	K. ARJUN RAO	46	M	75	120/80		—	—	N		
94	K. KOTAIAH	60	M	85	160/90.	79	—	N	AN		
95	B. VENKATRRAO	60	M	49	166/111	98	—	N	N		
96	CH. V. KRISHNARAO	62	M	65	110/60	108	N	—	N		
97	A. PAKERAIAH	50	M	59	120/80.		N	—	N		
98	G. BRAMMIAH	65	M	50	150/90.		—	—	N		
99	CH. MADHUSUDHAN RAO	65	M	54	160/90	123	—	—	N		
100	B. SAMBA SIVA RAO	53	M	59	150/90.	154	—	N	N		
101	P. KOTAIAH	65	M	49	160/110	95	—	N	N		
102	B. RAM BABU.	42	M	67	130/80.	132	N	—	N		
103	PANJAIAH	60	M	52	130/70	117	—	—	N		
104	S. DURGA	30	F	36	120/60		—	—	N		
105	T. VENKTESWARRAO	48	M	65	110/70	120	—	N	N		
106	S. SAROJINI	38	F	52	110/80		N	—	N		
107	S. MOHAN RAO	39	M	85	140/90		N	N	—		
108	CH. SAMRAJYAM	50	F	44	130/80	116	—	—			

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
109	CH·KANKANNA (AMR)	25	F	65	140/80	115	N	N	N		
110	G·VENKATESWARAO	68	M	59	130/80	110	—	N	N		
111	R·KOTESWARRAO	30	M	52	140/100	130	—	N	N		
112	B·MANGAMMA	50	F	57	130/80		—	N	N		
113	CH·VENKAYAMMA	64	F	55	160/90		—	N	—		
114	J·KAMAIAH	50	M	54	120/70		N	—	N		
115	CH·SAMRAJYAM	48	F	59	130/90	242	N	N	—		
116	J·LAKSHMAMMA	60	F	54	150/90		N	—	N		
117	G·DAMAYANTHI	70	F	65	110/70		—	—	N		
118							—	N	N		
119	CH·ROHINI	25	F	55	110/80		—	N	N		
120	D·KRISHNA	45	F		118/83		—	—	—		
121	B·NARASIMHARAO	55	M.	82	173/114		N	N	—		
122	P·PUNYAVATHI	50	F	75	150/90		—	N	N		
123	B·DURGA	60	F	59	130/82		—	—	—		
124	G·SRINU	43	M	62	130/90		—	N	N		
125	G·PULAMMA	50	F	63	186/107		—	N	AN		
126	B·LAKSHMI	52	F	65	130/90		—	—	N		
127	D·LAKSHMI	56	F	57	140/100		—	—	N		
128	K·NARAYANA	47	F	50	140/80		—	N	AN		
129	P·JEEVANKUMAR	30	M	67	140/100		—	N	—		
130	J·VENKAYAMMA	40	F	63	130/90		—	N	—		

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
131	V·KUMARI	48	F	67	120/80		—	—	AN		
132	CH·ANKANAGAMMA	28	F	60	114/79		—	N	N		
133	J·NARASIMHARAO	35	F	94	150/100		—	—	N		
134	K·SEETARAMAIAH	65	M	45	110/70		—	—	AN		
135	M·VENKATESWARAO	68	M	59	120/90		—	—	N		
136	P·AJAY KUMARI	42	F	71	110/80		—	—	N		
137	CH·CHARAIAH	68	M	67			—	—	N		
138	B·SAMRAJYAM	45	F	52	160/100		N	N	N		
139	J·ANJALI	35	F	84	110/100		N	—	N		
140	B·CHENNI	58	F	49	198/96		N	N	N		
141	CH·KOTESWARAMA	58	F	65	130/90		N	N	—		
142	B·NARASIMHA RAO	65	M	60	140/80		N	—	N		
143	K·SRINIVASA RAO	45	M	78	120/80		—	N	N		
144	B·CHINNAKHDAR	50	M	61	155/90		—	N	N		
145	RAMAKOTAIAH	70	M	57	140/80		—	N	—		
146	J·VENKARAMANA	40	F	70	160/100		N	N	—		
147	G·NARASIMHARAO	65	M	78	210/114		—	N	N		
148	B·VENKATA RATNAM	80	F	40	102/68		—	N	N		
149	B·RAM BABU	48	M	87	150/100		—	N	—		
150	G·YEDUKONDALU	48	M	64	140/100		N	—	N		
151	Y·ANKAMMA	40	F	50	120/80		—	—	N		
152	CH·SAMRAJYAM	68	F	60	148/84		AN	AN	N		

1 2

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
153	A.USHA RANI	28	F	61.	120/80.		N	—	N.		
154	D.NAGA MANI	37	F	83.	150/110		N	—	N		
155	D. Subba Raju	48	M	76	140/98	136	N	N	AN.		
156	D.MOUNTKA	22	F	53	110/70.		—	—	N		
157	CH.SEETHALAKSHMI	50	F	54			—	—	N		
158	M.CH.K.KUMARI	40	F	77	130/90		—	—	N		
159	CH.JYOTHI	28	F	52			N	—	N		
160	M.KOTESWARRAO	45	M	75	140/90		N	N	N		
161											
162	D.SAILU.	28	F	60.	150/120.		N	—	N		
163	P.VEENA	21	F	63	130/90		N	—	N		
164									1		
165											
166											
167											
168											
169											
170											
171											
172											
173											
174											

Details of patients attended the Medical Health camp conducted
at Kotikalapudi village on 23-01-2018

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
1	P.CHENNAKESAVARAO	84	M	57	120/82	87	AN	N.	N		
2	P.PINNAIAH	49	M	65	150/110	110	N	—	N		
3	CH.KOTAIAH	49	M	55	120/70	111	N	N	N		
4	R.RAM BABU	43	M	92	130/90	172	AN	N.	—		
5	R.APPARAO	60	M	58	150/90	149.	N	N	—		
6	SAROJINI	60	F	50	152/105	147	N	N	—		
7	M.MARIYAMMA	60	F	68	166/98.	275	N	N	—		
8	N.VENKATESWARAO	49	M	76	160/100	111	N	N	—		
9	SOWAMMA	60	F	47	144/73.	307	N	N	—		
10	NAGESWARAMMA	50	F	61	120/80	99.	AN	N	N		
11	GOVINDA RAO	75	M	72	129/65	139.	N.	N	—		
12	R.CHITTEMMA	75	F	86	115/67.		AN	N	—		
13	G.SAMBASIVARAO	60	M	76	123/80	315	N	N	N		
14	ADEMMA	65	F	62	161/82	203.	N	N			
15	M.ROSAIAH	84	M	83	142/85	104.	AN	N	N		
16	PRASADA RAO	90	M	70.	139/72.	124.	N	—	N		
17	SESHTAGIRAMMA	75	F	65	158/76	143	N	—	N		
18	SESHAIH	65	M	68.	120/80	141	N	—	—		
19	BHAIAH	75	M	62	158/92	141	N	—	N		
20	R.KOTESWARRAO	55	M	70	137/98	227	N	—	—		
21	R.BOSUBABU	65	M	73.	147/90	153	N	—	N		
22	VENKATESWARRAO	70	M	61	184/106	99.	N	—	N		
23	R.MARIYAMA	60	F	52.	140/90	335.	N	—	N		
24	G.LAKSHMAIAH	50	M	57	113/81	123.	N	—	—		

5 0/12 0/2

0/12 0/2

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
25	R·RAMA KOTAIAH	70	M	65	150/90.	151					
26	R·RAJA RAO	52	M	75	110/70	418.			"		44.
27	B.NAGESWARRAO -	50	M	53.	142/90	88.					
28	P. Prasada Rao -	68	M	63	150/78	91					
29	S·BALA RAJU.	46	M	86.	141/87	106.					9502648183
30	CH·VENKATESWAR RAO	46	M	70	132/94.	91					8886809163.
31	G·KRISHNA RAO	62	M	68	140/80	164					9848334375 - 34.
32	R·Subba Rao.	67	M	61	101/69.	124					9985115207
33	G·Suramma -	70	F								
34	G·RAMAKOTI	65	M	48.	190/120	176.			"		
35	S·RENUKA	68	F	47	160/100	416					204
36	A·KOTAMMA	70	F	53	150/80	187					
37	K·SUNDARA RAO	55	M	53	110/80	133					
38	N·MARIYAMMA	70	F	46	190/80.	114.					
39	B·MANIKYAM	55	F	50.	150/90	158.					
40	B·GENNAMMA	75	F	51	160/90	95		N	N		
41	R·CHENAKESAVULU	70	M	54	160/70	164.			"		.
42	N·RANGAMMA	50	F	46	130/90	404.		N	A		54.
43	D·BAYAMMA	70	F	37	130/90	134.					54
44	V·VENKAMMA.	70	F	61	180/110	94					
45	S·SWARAJYAM -	65	F	75	150/100	191		N	N		
46	A·TIRUPATHAMMA	60	F	48.	120/70	127					
47	P·POTHURAJU	66	M	43.	110/70	104.		.			
48	ROSAMMA	50	F	64	120/80.	107		N.	N		
49	A·VENKATESWARLU	66	M	58.	100/70	146		N	N.	"	
50	J·KUSUMAVATHI	65	F	68.	140/90	156		N	N		

0/18 1/7

0/18 1/7

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
51	~~A ROSR~~ Venkateswarlu	45	M	71	130/100	125	—	N	A.		
52	K. TIRUPATHI RAO	36	M	73	130/90	103	—	N	N		8309329456
53	P. BHAGIYA	63	M	61		102	—	N	N		
54	A. ROSAIAH	43	M	73	130/90	120	—	N	N		7893888743
55	S. KOTESWARA RAO	70	M	52	140/100	87	—	—	N		
56	N. KOTI RATNAM	60	F	55	110/70	160	—	—	N		34.
57	B. VENKAYAMMA	80	F	38	110/70	107	AN	—	—		
58	P. CHINA LAKSHMI	70	F	44	190/90	98	N	—	N		
59	CH. VIDYA SAGAR	27	M	63	120/70	119	—	—	N		
60	B. AGGAIAH	49	M	63	130/80	161	—	N	A.		24.
61	V. SAVITRAMMA	61	F	60	120/80	131	—	—	N		114.
62	S. SESHAGIRI	58	M	65	140/90	136	—	—	N		
63	N. ~~K~~ANNAIAH	47	M	90	130/90	150	—	N	—		84. 7382905803
64	R. DURGA RAO	55	M	66		70	—	—	N		
65							—	—	N		
66	B. SAROJINI	55	F	42	130/70	~~130~~ 119/70	—	—	N		
67	R. NAGESWARA RAO	45	M	80	170/90	345	381 —	—	N		34-9703151371
68	M. BALARAJU	38	~~M~~	78	130/85	77	—	N	N		
69	R. ITHAMMA	45	F	63	120/60	103	—	N	N		
70	B. LAKSHMI TIRUPATHI	60	F	42	110/80	113	—	—	N		
71	K. RAMBABU	28	M	48	120/80	~~88~~ 124	—	N	N		
72	R. PULLAMMA	46	F	53	130/90	89	—	N	A		
73	A. KOTAIAH.	49	M	71	140/100	105	—	N	—		
74	CH. BALAJI	28	M	60	120/80	86.	—	—	N		
75	R. MALLIKARJUNA RAO	26	M	52	120/80	86	—	—	—		
76	N. ERU	75	F	62	150/80	107	—	—	—		

1 0/14 4/10 3

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
77	G.Veraiah	45	M	82.	170/108.	318	—	N.	N.		44-9963526284.
78	R.KOTESWARAMMA	40	F	61	150/100	136	—	—	—		
79	P.PRAKASA RAO	60	M	60	140/90	120	—	—	—		
80	N.VENKATESWARRAO	45	M	60	140/80	127	—	—	—		
81							—	—	—		
82	M.PADMAVATHI.	50	F	91	140/90	162.	—	—	—		44
83	K.veelankamma	30	F	65	120/80	110	—	—	—		
84	P.MARTHAMMA	50	F	70	130/100	92	—	—	—		
85							—	—	—		
86							—	N	N.		
87	P.EDUKONDALU	50	M	63	160/100	124.	—	—	—		
88	K.YESAMMA.	45	F	70	140/90	213	—	—	—		
89	CH.NAGESWARRAO	60	M	81	190/102	74	—	—	—		
90	B.KOTESWARRAO	60	M	62	160/100.	337	—	—	—		
91							—	—	—		
92	S.VeeravasanthaRAO	55	M	93	130/90	141	—	—	—		
93	K.KOTESWARA RAO	60	M	72	130/90	106	—	—	—		
94	P.PITCHAMMA	55	F	48.	150/70	206	—	—	—		44
95	CH.ROJA	23	F	58.	110/70		—	—	—		
96	R.BHANU PRASAD	32	M	73	130/70	113	—	—	—		
97	R.SAMBAIAH	69	M	75	160/100	346	—	N.	N		
98	NAGA BHUSHANAM	55	M	76	130/80	238	—	N.	N		44-
99	D.SESHAIAH	29	M	66	120/80		—	N.	A		
100	K.SRINIVASA RAO	43	M	76	120/80	110	—	N	—		
101	S.MARIYAMMA	48	F	55	140/80	262	—	N	N		34-
102	A.NAGULU	75	M	63		181	—	N	A		

0/22 6/13

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
103	K·VENKATARAVAMMA	65	F	60	150/100	121	—	—	—		
104	A·LAVANYA	15	F	48.			—	—	—		
105	A·JYOTHI	30	F	87	130/90	107	—	N	N		
106	A·VANI	38	F	78	140/100	129	—	—	—		
107	K·BABU	30	M	65	140/80	106	—	—	—		
108	K·VIJAYAMMA	39	F	54.	140/90	106	—	N	—		
109	B·CHENAKESAVA RAO	65	M	56	100/60	107	—	—	—		
110	R·SUNITHA	40	F	95	120/70	128	—	N	N.		
111	K·NAGULAMMA	65	F	51	120/80.	243	—	N	N.		34.
112	R·SeetaraVamma.	65	F	45	120/80	155	—	N	N.		10.
113	R·VEERULU	50	F	77	160/110	129.	—	N	N.		
114	K·SUBBARAO.	49	M	70	160/110	211	—	N	N.		34-8142699508
115	B·SRINU	37	M	80	120/80	112	—	N	N.		
116	S·VenKATESWARRAO	58	M	70	120/80	136	—	N.	N.		
117	K·JANARDHANARAO	40	M	75	130/90.	215	—	N.	N		37-9553554868
118	N·KUMARI	55	F	80	110/80.	122	—	N.	N.		
✓ 119	R·DHANA LAKSHMI	36	F	60	120/70	264	—	N.	N.		44-7095149787
120	B·POTHURAJU	65	M	73	120/80	110	—	N.	N		34-9912930774.
121	R·ANNAMMA	25	F	50			—	N.	N		
✓ 122	M CHINNA RAO	70	M	70	130/90	203.	—	N.	N.		14-9676686857
123	K·SANKARA RAO	38	M	70.	140/100	152	—	N.	N.		
124	K·SUBHASHINI	50	F	-		234.	—	N.	A		
125	R·RAMA LAKSHMI	32	F	70	120/80	137	—	N.	N		81212185 44
✓ 126	K·VENKATESWARAMA	50	F	67	180/90	327	—	N.	N		64
127	R·DEVAMATHA	35	F	70	120/80	115	—	N.	N		
128	B·MARIYAMMA	50	F	53	120/80	99	—	N.	N		

0/43 7/49

0/43 7/49

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
129	K.VENKATA RAVAMMA	35	F	67	150/103	194	—	—	—		
130	S.BUJJI	35	F	45	150/90	93.	—	N	N		
131	A.NAGENDRAMMA	45	F	72	130/90.	115	—	N	N		
132	A.DEVARAJO	35	F	52	150/80	201	—	N	A.		154.
133	P.ROSAIAH	38	M	71	140/101		—	—	—		
134	B.LAKSHMAIAH	55	M	46.	130/80		—	—	—		
135	J.KOTESWARAMMA	65	F	45	180/90	131	—	N	A.		
136	P.BHADRAIAH	36	M	93	130/80	105	—	—	—		
137	J.KOTI NAGULU	60	F	71	108/70	117	—	N	N		
138	P.RAVI KUMAR	37	M	85	130/90	186	—	—	—		
139											
140											
141											
142	K.MERYHELAN	45	F	87		268.	—	—	—		9581651443
143	P.VIJAYA	33	F	70.	130/90	166	—	—	—		6m-9603382321
144	.						—	—	—		
145	R.AGATHAMMA	48	F	75	180/100	223	—	—	—		
146	K.MEERAMMA	58	F	70	130/90	142	—	—	—		
147	P.SUNDARAMMA	60	F	80	120/80	140	—	—	—		
148							—	—	—		
149	R.CHINA PUNNAIAH	76	M	80.	130/80	485	—	—	—		
150	G.RATHAIAH	57	M	45	130/85	99.	—	—	—		
151							—	—	—		
152	D.KISHORE	30	M	66.			—	—	—		
153							—	—	—		
154	K.DWARANESH	48	M	75	120/80	169..	—	—	—		8121502458.

0/48 9/52

0/48 9/52

S.No.	Name of the person	Age	Gender	Weight	BP	Blood sugar	PFT	USG	ECG	Eye	Remarks/previous medical history
155	B. NAGAVENI	30	F	67	120/80		—	—	—		
156	B. KOTESWARAMMA	50	F	80	170/100	157	—	—	—		
157	D. DEVA DAS	63	M	72		271	—	—	—		Sr - 9848033584.
158	SUDARSHAN	55	M.			198.	—	—	-		
159	K. NAGESH	67	M			232.					9441122577
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Details of patients attended the Medical Health camp conducted at Chilukuru on 20-02-2018

S.No.	Name	Age	Gender	BP	Blood sugar	PFT	USG	ECG
1	K. PEDANAGULU	70	F	168/96	277	AB.	—	—
2	D. MAHALAKSHMI	65	F	120/70	99	N	—	—
3	P. KOTESWARARAO	66	M	200/100	124	N	N	N
4	B. CHENNAMMA	42	F	120/80	89	N	—	—
5	N. VENKATESWARA RAO	63	M/84	115/80	123	AB	—	—
6	K. PEDARAMAKRISHNAIAH	68	M/65	145/80	105	N	N	N
7	D. VENGALA RAO	55	M/50	130/80	102	N	—	—
8	M. VENKATA RAO	63	M/75	150/80	87	N	—	—
9								
10	G. JAMES	55	M/55	140/80	265	AB	—	—
11	D. KAVITHA	35	F/60	130/90	99	N	N	A
12	Y. NARASIMHARAO	75	M/55	130/70	100	N	—	—
13	D. NAGESWARA RAO	31	M/70		155	N	—	—
14	B. VIJAYA	30	F/65	110/70	103	N	—	—
15	B. SEETHAMMA	30	F/75	100/75	150	N	N	N
16	B. DAMAYANTHI	30	F/42	100/70	94	N	—	—
17	G. RANI	50	F/50	100/70	392	N	—	—
18	K. SAMRAJYAM.	52	F/55	.	383.	N	—	—
19	B. RAKESH	22	M/67	130/70		N	—	—
20	V. RANI	63/F	F/78	130/90	94	AB	N	N
21	K. TIRUPATHI RAO	31	M/55	120/60		N	—	—
22	K. JAGGURTHAMMA	65	F/74	150/80	172	N	—	—
23	K. LAKSHMI	31	F/60	120/80		N	—	—
24	D. ANJAMMA	36	F/62	100/70	128	N	—	—
25	D. ATCHAMMA	60	F/60	150/90	88	AB	—	—
						5/14	0/5	1/4

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		AGE	GEN/W	BP	SUGAR	S/I	O/I	H/K
26	K·LAKSHMANA RAO	29	M/75	115/80.		N	—	N
27	P.VIJAYA RANI	33	F/60	120/80	96	—	—	N
28	B·SURAMMA	72	F/36	150/80	126.	AB	N	N
29	D·KONDALA RAO	49	M/54	120/80	104	N	—	—
30	D·KAMALA	39	F/65	160/90	253.	N	N.	N
31								
32	D·RANI	27	F/62	120/80.	103	—	—	—
33	D·LAKSHMI	28	F/49	110/70		N	N	N
34	G·MERI	45	F/[illegible]	110/70.	157	AB	N	N
35	G· KELARAMMA	20	F/35			—	—	—
36	D· SIVA PARVATHI	22	F/40.	115/90.		—	—	—
37								
38								
39	D·RAMA RAJU	45	M/55	130/80.	105	—	—	—
40	K·SEVIRI	56	M/65	130/80.	134	AB	N	N
41	N·NANCHARAMMA	50.	F/66	120/80	211	—	—	—
42								
43	B·PUROSHOTHAM	60	F/35	80/50	131	—	—	—
44	D·RANI	50	F/56	110/80	106.	—	—	—
45	D· CHITEMMA	78	F/54	140/80	118	—	—	—
46	D·TIRUPATHAMMA	65	F/60	150/80	116	AB	N	A
47	D· DEVAMANI	60	60/W	130/80	89	—	—	—
48	J·VENKATESWARLU	70	M/60	170/80	140.	AB.	N	N
50						—	—	—
51	D·NAGESWARA RAO	80	M/40	150/70	92	AB.	N	N
52	B·JOJIRANI	30	F/60	115/70	~~94~~ 93	N	N	N
53	M·NAGESWARAMMA	66	75/F	120/80.	127	N	N	A
54	M·RATHAMMA	60	F/75	130/70	140.	AB	N	N
55	SK·ROSHANBEE	48	F/60	170/100	135	—	—	—
56	T·VENKATA RAMANA	19	F/39.			N.	—	—
49	K·NAGENDRAMMA	60	F/76	130/80	105	12/25	0/16	3/13

							12/25	0/16	8/13
57	P.SESHAGIRAMMA	60	F/52	150/90	147		N		
58	K.NAGESWARA RAO	75	70/M	100/60	159		AB	N	A
59	D.KOTAMMA	60	F/40	140/70	89		N	—	—
60	K.JEROJAMMA	60	F/45	120/80	103		N	N	N
61	P.LAKSHMI	40	F/69	110/70	103		N	—	—
62	G.NAKSHTRAMMA	30	F/52	110/70	99		N	—	—
63	D.APPA RAO	50	M/59	100/60	93			N	N
64	B.AMRATHAMMA	50	F/59	120/90	82		N	—	—
65	D.SAVITRI	45	F/60	130/80	115		—	—	—
66	D.DURGA	35	F/60	110/80	94		—	—	—
67	D.LAKSHMI	34	F/55	100/70	112		—	—	—
68	B.JYOTHI	32	F/50	140/110	99		—	—	—
69	K.MARIYAMMA	80	F/45	170/50	169		AB	N	N
70	K.MARIYAMMA	82	F/55	160/80	133		AB	N	N
71	K.APARNA	17	F/54				—	—	—
72	K.SREEDEVI	33	F/65	110/80	92		—	—	—
73	M.HUSEENAMMA	65	F/44	120/70	99		N	—	—
74	B.ANNAMMA	38	F/60	140/80	144			—	—
75	D.NAGAMMA	60	F/55	210/110	101		N	—	—
76	B.BALA SIVUDU	66	M/57	120/70	93		N	N	N
77	K.RAMAIAH	46	M/72	190/70	155		—	—	—
78	G.LAKSHMI DURGA	25	F/50	110/60	120		N	—	—
79	G.THABI	30	M/87	120/70	81		—	N	N
80	G.PRAVEEN	28	M/75	130/70			—	—	—
81	K.RAM BABU	42	M/45	140/100	157		N	—	—
82	D.PUNNAIAH	74	M/60	150/80	121		—	—	—
83							—	N	N
84	S.SANDHYA	29	F/55	90/60			—	—	—
85	K.RANI	41	F/68	120/70	121		—	—	—
86	D.ROTAIAH	50	M/59	150/90	135		—	N	N
							15/36	9/25	4/21

						15/36	0/25	4/21
87	B.MADHAVA RAO	40	M/95	140/90	161	—	N	N.
88						—	N	N.
89	V.SUSEELA	55	F/85	140/90.	107	—	—	—
90	K.KUMARI	33	F/62	120/90	123	—	—	—
91	B.JULI	40	F/67	120/80	103	—	—	—
92	T.DEVIMATHA	30	F/53	100/70	91	—	—	—
93	J.MANIKYAMMA	50	F/45	170/90	120	—	—	—
94	T.BASKAR RAO	65	M/63	160/90	93		N	N.
95	G.ADISESHULU	60	F/65	120/70	101	N	—	—
96	Y.BHARATHI	55	F/96	130/80	104	—	—	—
97	J.KIRAN	35	M/85	140/90	155	—	N	N.
98	SK.SAIDA	60	M/65	190/120	93	N	N	N.
99	G.CHINNAKESAVULU	38	M/59	130/90	108.	—	—	—
100	B.VENKAYYAMA	55	F/75	150/80	94	—	—	—
101								
102	K.VASANTHI	53	F/66	130/90	266	—	—	—
103	K.KALAVATHI	30	F/56	110/70	86	—	—	—
104	T.YESUBABU	33	M/76	120/70	106	—	—	—
105	M.PULAIAH	76	M/80	140/80	202	—	N	N.
106	G.CHEVIRI RANI	30	F/60	100/70	108.	—	—	—
107	J.MARIYAMMA	55	F/56	120/80	102	—	—	—
108	D.NAVANEETHAMA	56	F/65	130/80	122	—	—	—
109	K.SUBBARAO	80	M/62	180/90	190	AB	N	N.
110	M.BULLEMMA	40	F/70	100/60	102	—	—	—
111	K.MARIYAMMA	45	F/45	100/80.	126	—	—	—
112	J.PAPA RAO	70	M/54	120/70	145	—	N	A
113	A.RAMA MOHANRAO	67	M/69.	130/80.	99	—	N	N.
114	D.SWAMI	30	M/75	120/80		—	—	—
115	Y.NAGENDRAMMA	55	F/64	130/80	196	—	—	—
116	Y.YESU KUMARI	50	F/65	140/80	202.	—	—	—
						16/38	0/34	5/29

117	Y. VENKATANARASAMMA	60	F/66	130/80	116	AB	16/38	0/34	5/29
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Details of patients attended the Medical Health camp conducted
at Athukuru on 22-02-2018

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
1	K.KOTESWARAMMA	~~55~~ 48	48	F	130/80	98		N	N	
2	P.LAKSHMAN RAO	65	65	M	110/80	115		N	N	
3	CH.VENKATA RAO	75	57	M	160/90	101	N	N	N	
4	P.AKKAIAH	90	65	M	140/70	129	N	N	N	57
5	K.VENKATESWARARAO	50	70	M	115/70	128	N	N	N	
6	A.MADHAVARAO	65	80	M	120/70	95	N	N	N	
7	K.VENKATESWARRAO	65	50	M	140/90	106	AN	N	N	
8	K.PAPA RAO	80	58	M	159/90	113	AN			
9	B.YOHAN	50	65	M	110/60	120	N	N	A	
10	P.KASTURI BAI	55	60	F	180/80	124	AN			
11	P.SESHA RAO	39	65	M	160/80	99	AN	N	A	
12	CH.VENKATESWARRAO	63	50	M	150/80	184	AN	N	N	
13	CH.DHANALAKSHMI	85	49	F	100/70	181	AN		N	
14	K.BHANUMATHI	75	65	F	150/70	291	AN	N	N	
15	S.VENKAYAMMA	65	60	F	170/100	207	N	A	A	
16	B.VENKATESWARARAO					122	N			
17	S.AKKAIAH	67	70	M	115/70	267	AN	N	N	
18	U.MANGAMMA	60	60	F	150/80	225	N			
19	M.APPA RAO	82	55	M	140/90	99	N	N	N	
20	B.APPA RAO	60	75	M	130/80	111	AN	N	N	
21	M.SRI RAMAYYA	45	70	M	130/80	92	N			
22	P.BUJJI	36	38	F	90/70		N			
23	K.SUBBA RAO	64	73	M	140/90	103	AN	N	N	
24	B.CHINNA RAMA RAO	85	50	M	100/70		N			
25	K.NAGESWARA RAO	85	65	M	140/80	106	N			
26	M.PADMAJA	~~30~~ 65	34	F	100/70	90	N	N	N	
27	M.JAYAMMA	65	45	F	150/80	81	N			
28	P.PULLAIAH	70	70	M	150/80	120	N	N	N	
29	P.SIVANAGA MANI	60	58	F	160/92	141	AN			51
30	D.RAMA TULASI	~~60~~ 52	59	F	120/80	116	N	N	N	
31	M.KOTAIAH	45	60	M	170/90	147	AN	N	N	

12/17 1/20~~18~~ 17/4

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Details of patients attended the Medical Health camp conducted
at Athukuru on 22-02-2018

12/17 1/20 4/13

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
32	K. SATYAVATHI	65	60	F	120/70	91	N.	N	A	Follow up - ST
33	K. BHUPATHIRAO	72	62	M	140/80	101	N.	—	—	
34	M. MANIKYAM	65	45	F	150/100	196	N.	N	N	
35	M. AMMAJI	55	45	F	170/110	231	N.	—	—	
36	T. KRISHNA KUMARI	50	58	F	150/80	88	N.	—	—	10y
37							—	—	—	
38	CH. LENIN BABU	95	40	M	120/80	113	N.		N	
39	B. SRINU	100	45	M	140/90	107	N.	N	N	
40	P. VENKATESWARA RAO	70	40	M	140/90	106	N.	N	N	
41	G. SRINIVASA RAO	47	55	M	130/80	125	N.	N	N	
42	G. VEYAMMA	72	50	F	180/110	89	N.	N	N	
43	P. RENUKA	65	45	F	110/70	98	N.	N	A	
44	K. SAROJINI	55	55	F	130/80	190	N.	N	N	2y
45	M. NAGESWARAMMA	45	60	F	150/70	118	AN.	N	N	
46							—	—	—	
47	B. RAVI	75	50	M	140/100	223	N.	N.	N	
48	M. SRINIVASA RAO	83	43	M	120/80	92	N.	A.	N	
50	B. PADMA	76	50	F	120/80	118	N.	N	N	
51	Ch. RANIHURAMSAGAR	65	29	M	130/100	86	N.	N.	A	
52	M. SAMBAIAH	86	59	M	130/80	262	AN.	N.	A	4y
53	P. SEKHAR	52	35	M	100/60	96	N	N	N	
54	M. LAKSHMI NARAYANA	77	62	M	150/10	242	N	N	N	ST
55	B. VENKATESWARRAO	65	55	M			—	—	—	
56	B. PADMA	88	50	F	140/80	92	AN	N	A	
57	M. SAMUEL	70	65	M	130/60	172	N	—	—	
58	K. NAGARATNA PRASAD	76	37	M	132/85	130	N.	N		
59	B. PRABHAKARA RAO	90	50	M		141	AN	—	N	
60	G. VENKATA RAO	86	54	M	176/115	172	N.	N.	N	NA
61	B. BOSE	60	65	M	129/81	85	AN.	N.	N	
62	U. NAGAMALLESWARI	51	30	F	130/80		N.	N	N.	
63	K. MANASA	95	29	F	114/87		N.	N	N.	
64.	G. VIJAYALAKSHMI	60	40	F	100/60	113	N	N	NA	

17/32 2/23 10/35

Details of patients attended the Medical Health camp conducted
at Athukuru on 22-02-2018

17/32 2/23 10/35.

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
64	M.SAVITHRI	65	50	F	122/79	96	N	N	N	
65	M.RATNAM	70	65	M.	110/70		—	N	N	
66	N.NARASAIAH	67	75	M	160/91	137	AP	N	N	
67	D.VISHNUVARDHANRAO	70	50	M.	130/80	124	N	N	N	
68							—	—	—	
69	P.LALITHA	57	30	F.	100/77		—	—	—	
70	P.NARASIMHARAO	52	45	M.	110/80	98	N	N	N	
71	G.PRAMEELADEVI	60	45	F.	131/83	192	N	N	A	
72	A.VENKATACHARYULU	80	60	M	120/80	141	N	N	N	
73							—	—	—	
74	U.PRABHAVATHI	60	21	F	110/64	117	—	N	N	
75	T.HARSHINI	65	19	F.	110/60	249	N	N	N	
76	P.KOTAMMA		60	F	150/90	180	—	—	—	
77	P.SUBBARAO	36	80	F	143/85		—	N	N	
78	M.VENKATA RAO	75	42	M	140/80	144	N	N	N	
79	P.SESHAMMA	75	50	F	130/90		+	N	N	
80	B.SATYAVATHI	50	53	F	150/70	127	N	—	—	
81	P.SIVA PARVATHI	70	35	F	129/88			N	N	
82	P.TIRAPATAMMA	68	60	F	140/90		—	—	—	
83	B.SATYAVATHI	80	79	F.	150/80	141	N	N	A	
84	K.ARUNA KUMARI	55	50	F	130/80	261	N	—	—	
85	D.leelavathi	96	60	F	150/90	121	N	N	N	
86	B.KAMESWARAMMA	75	50	F	120/80		—	—	—	
87	B.RAMA RAO	80	60	M.	160/110	369	AP	N	A	9390492466
88	M.SARAVAIAH	53	60	M	110/80	86	N	N	N	
89	E SRINIVASA RAO	57	45	M.	140/100	98	N	N	N	
90	P.EDUKONDALU	60	66	M	110/70	106	N	N	N	
91	E.SAMBAIAH	80	55	M	180/100	375	AP	N	N	
92	K.SWAGESWARA RAO	65	60	M	130/80	229	N	—	—	
93	P.KRISHANA RAO		55	M	130/80	119	AP	N	N	
94	K.MARIYAMMA	57	40	F	140/90	318	N	N	N	

21/48 24/45 12/54

Details of patients attended the Medical Health camp conducted at Athukuru on 22-02-2018

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT 21/48	USG 2/45	ECG 12/54	Remarks
95	M. KUMARI	67	40	F	140/100	130	2	2	2	
96	M. KUMARI	73	45	F	180/90	121	2	2	2	
97	B. NAGABHUSHNAMMA	54	70	F	170/70	—	—	—	—	
98	N. DURGARANI	64	56	F	150/90	101	2	2	2	
99	G. SATYAVATHI	83	63	F	130/80	142	2	2	2	
100	P NARASAMMA	66	40	F	140/90	162	2	2	2	
101										
102								2/50	12/58	
103							21/53			
104										
105										
106										
107										
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Details of patients attended the Medical Health camp conducted
at Surayapalem on 27-02-2018

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
1	K. SRI DEVI	68	38	F	130/80	235	AB	—	—	6m. 7799333945
2	A. NAGAMANI	83	50	F	130/80.	222	AB	N	N	N.D
3	A. BHADRAMMA	59	63	F	160/130	157	—	—	—	7799333945
4	G. SITA	63	39	F	110/60	134.	N	N	N	9963656208
5	A. RAMAYAMMA	68	70	F	170/90.	157	N	N	N.	8.7842789105
6	M. MADHAVI	48	27	F	90/80.		—	—	—	9640573351
7	M. VENKATESWAR RAO	90	50	M.	110/80.	159	N	A	N	7842789105
8	Y. VENKATAPPAH	65	84	M	130/60	132	N	N	N	7842789105
9	A. VENKATESWAR RAO	65	65	M	130/90	117		A	N	7799333945
10	N. BAIU	80	30	M	120/70.	141	N	—	—	9494991792
11	A. SIVA Leela	59	30	F	110/80	129	N	A	N	9703737424
12	T. SATYANARAYANA	58	57	M	120/80	113	N	N	N	9866241558
13	G. KOTESWARI	78	30	F	120/70	113	N	N	N.	7032510705
14	N. SITA MAHA LAKSHMI	58	66	F	150/80.	180	N.	N	A	184-8985134476
15	N. NAGA LAKSHMI		48.	F	150/80	57	N	N	A	8985134476
16	R. VENKATA RATNAM.	70	60	M	180/110	102.	N	A.	N	9010400737
17	G. SATYANARAYANA	79	67	M	120/80	141	N	N	N	2531366
18	I. SOMAMMA	35	55	F	120/80.	98.	N	N	—	9640913023
19	N. DHANA RAJU	60	58	M	180/110	109.	N	N	—	8008652885
20	N. TIRUPATHI VENKATAH	78	60	M	130/90	93	AB	N	A	7337085153
21	M. MADHAVA RAO	61	75	M	160/90	91	N	N	A	9505738546
22	G. VARALAKSHMI	95	60	F.	129/80	132	N	N	A	.9000603335
23							—			
24	K. NIRMALA	65	49	F	110/50		—	—	—	9908669091
25							—	—	—	9246329211
26	K. SRINIVASA RAO	70	50	M	130/80.	240	AB	N	N	14.9553738615
27	K. LAKSHMI	70	43	F	120/70	115	N	N	N	9553738615
28	S. NAGA SUDHAI	67	35	F	120/80	160	N	N	N	8985670170
29	P. RISHIKA	14	3.	F.			—	N	N	
30	K. SAI DEVI		23	F	110/70	94.	N.	N	N	9948842911
31	A. POSAMMA	90	31	F	120/80.	353	AB.	N	N	999-N.R

5/20 4/21 5/18

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Details of patients attended the Medical Health camp conducted
at Surayapalem on 27-02-2018

5/20 4/21 5/18

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
32	T. KRISHNAMURTHY.	76	60	M	170/90	117	N	N	A	9951141776
33	S. JAGANNADHA RAO	79	70	M	120/80.	103	N	N	N	
34	G. VARALAKSHMI	35	50	F	100/70	132	N	N	N	9885289102.
35	K. DANAIAH	65	60	M	170/140	88	N	N	N	9704016472
36	V. LAKSHMMI KUMARI	72	64	F	120/70	129.	N	N	N.	9441471761
37	N. SITAMAHALAKSHMI	93	54	F	140/80	121	N	N	A	9441471761
38	T. VANI SREYA	42	16	F			—	—	A	7386509046
39	G. VARA LAKSHMI	93	62	F	140/90.	96	N	N	A	9949093396
40	A. RAMA RAO	83	55	M	90/80.	104	N.	N	A	9885639636
41	M. VED. AKAMMA	43	75	F	180/80	104.	N	N	A	9908639232
42	B. ADI LAKSHMI	61	50	F	140/70	152.	N	N	N.	9908639232
43	B. MANIKYAM	83	55	F	120/60	200	AB.	N	A.	N.D. 9951808283
44	T. VIJAYA LAKSHMI	72	29	F	130/80.	128	N	N	N	N 9951808283
45	A. MALLESWARI	63	45	F	80/60	122	AB.	N	N	8121717537
46	M. SATYAVANI	60	45	F	160/80	198	AB.	N	N	34-9866396535
47	M. NANAJYOTHI	71	24	F	110/70		—	N	A	9866396535
48	A. RAJESWARI	58	60	F	160/90	137	N	N	N	
50	T. SATYASIVAKUMARI	55	38	F	110/70	120	N	N	N	7386509046
51	B. RAMALAKSHMI	48	76	F	130/80	329	AB.	N	N	54.
52	A. SUPRATIKA	28	15	F	140/80	93	N	N	A	9703737424
53	K. SITA MAHALAKSHMI	62	34	F	90/70	95.	N	N	N	9676516005
54										
55	G. MARIYADAS	90	49	M	160/110.	313	AB.	N	N	64-9542325717
56	ADI LAKSHMI	66	80	F	130/80.	428	AB.	N	N	64.
57	N. VENKATESWARA RAO	47	70	M		232	N	N	A	
58	B. SULOCHANA	78	49	F	110/70	130.	AB.	N	N	9491725366
59	T. MANEMMA	80	75	F	110/70	154.	N	N	N	9742966770
60	B. ISWARYA	27	8	F			—	N	A	
61	P. SITARAVAMMA	45	80	F	155/80	91	N	N	N	
62	N. VENKATA RATNAM.	71	70	F	150/80	142	N	N.	N	
63	D. ANJALI	75	35	F	110/70	102.	N	N	N.	
49.	M. VENKATA RAMANA.	85	39	F	130/80	98	N.	4/50	15/37	7732006951

12/41

237

Details of patients attended the Medical Health camp conducted
at Surayapalem on 27-02-2018

12/41 4/50 15/37

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
64	G. SAMRAJYAM	60	43	F	140/80	197.	AB	N		8498975706
65	G. VENKATA SATYANARAYANA	70	52	M	140/80.	139	N	N	AB	8498975706
66	A. KUTUMBA RAO	41	80.	M	180/90	132	N	N	N	
67	G. SUBBA RAO	83	44	M	140/90.	104.	N	N	N	9963656208
68	A. VENKATANARAYANAMMA	80	54	F.	120/70	100	N	N	N.	
69	G. PITCHAMMA	61	58	F.	160/90	76.	—	—	—	9603715959
70	G. KUSUMA KUMARI	85	53	F.	130/80	227.	AB	A	N	34
71	K. SUJATHA	45	35	F.	106/56	119.	N	N	N	8886921500
72	G. UMAMAHESWARI	75	52	F.	160/80	167.	AB	N	N	44
73	S. ANJANEYULU	55	62	M.	120/75	135	N	N	N	7702240215
74	K. ANNAPURNA	74	48	F	140/80	142.	N	N	N	
75	A. SRINIVASA RAO	93	43	M.			—	—	—	8008691396
76	N. SARASWATI	58	50	F.	136/82	135.	N	N	N	9010853192
77	N. SIVA. PARVATHI	70	46	F	106/72	213	AB	N	A	9908502236
78	T. SESHA KUMARI	78	51	F	120/70	109	N	N	A.	
79	T. NAGINI	48	24	F	100/69.		—	—	—	
80	T. AMALA KUMARI	50	47	F	130/90	119.	N	N	N	7995724254
81	R. DRAUPATHI	50	78	F.	107/60	99.	N	N	N	
82	CH. BHAVANI	55	20	F.	116/63		—	—	—	7893594885
83	K. LAKSHMI	55	22	F.	126/80.		—	—	—	
84	G. VENKATESWARAMMA	54	50	F.	107/79.		—	—	—	
85	K. DHANALAKSHMI	90	54	F.	114/78	119	N	N	N	9885639636
86	N. DURGA	49	29	F.	114/60.		—	—	—	9010853192
87							—	—	—	9010853192
88	P. PARVATHI	63	65	F.	189/89	136.	N	A	N	
89	A. CHANDRAKALA	39	44.	F.	120/70	199.	AB	N	A	Bm-7382902144
90	S. NAGABABU	60	32	M.	105/71		—	—	—	
91							—	—	—	
92	S. VENKATA LAKSHMI	57	26	F.	134/94.	258	AB.	N.	A	7702240215
93	S. SRIDEVI	44	26.	F	93/61			N.	N.	
94	K. DHANASESHA KUMARI	84	54	F.	120/80.	117.	N	N	N	

18/55 6/69 20/52

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Details of patients attended the Medical Health camp conducted
at Surayapalem on 27-02-2018

18/55 6/69 20/52

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
95	S.LAKSHMI	60	53	F.	120/80.	1	—	N	A	
96	A.ANASUYA	67	66	F	129/89	136	N	N		
97	A.VENKAIAH	75	72	M	180/60	128	N	N	A	
98	N.RANI	70	58	F	120/70	178	AB	—	—	
99	S.DEVI	65	50	F	117/76	139	N	—	—	
100	PRATSAVATHI	52	70	F	140/77.	181	N	N		
101	K.KANAKA DURGA	58	60	F	120/75	.	—	—	—	
102							—	—	—	
103	A. SESHAIAH	72	65	M.	133/74	130	AB	N	A	
104	M.SANJEEVA RAO	53	52	M.	106/70	181	N	N	N	
105							—	—	—	
106	R. ANNAPURNA	58	66	F	140/88	134.	N	N	N	
107	P. RANGARAO		69	M	117/54.	252	AB	N	N	
108	S.SATYAVATHI	75	50	F.	178/91	120	N	N	N	
109	G.NARASIMHA RAO	74	73.	M	170/100	103	AB	N	N	
110	G.DASU	87	58	M.	150/100.	184.	AB	N	A	34-7702623857
111	B.SIVAIAH.	65	64	M	130/80	180	AB	N	A	
112	T.SUBBARAO	90	55	M.	140/90.	162	AB	N	N	
113	B PADMAVATHI	75	55	F	120/80.	142	N	N	N	
114	N.RADHA	72	48	F.	115/78.	145.	N	N	N	
115	T.SATYAVATHI	50	48	F.	120/80	120	N	N	N	
116	BABY SAROJINI	55	70	F	130/70	257.	N	N	N	
117	Padmasri	70	55	F	120/80		—	—	—	
118	NAGAMANI.N	80	46	F	110/70		AB	N	N	
119	J.RAMADEVI	90	55	F	160/80		—	—	—	
120	RAJA RAMANA RAO	60	56.	F	120/70		AB	N	N	
121	P.SIVA.	504	50	F	110/60		N	N	N	
122										
123										
124										
125										

26/68 6/89 26/68

Details of patients attended the Medical Health camp conducted
at Kavuluru on 03-03-2018

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
1	R. RAMANUJA SURI	85	42	M	135/90	89	N	N	N	
2	B. V. R. CHOUDARY	89	80	M	150/90	99	AB	N	N	
3	P. Mahaboob Khan	90	41	M	150/100	150	N	N	N	M
4	K. VENKATESWARA RAO	87	53	M	130/80	249	N	N	N	M
5	K. CHANDRA RAO	68	48	M	120/80	113	N	N	—	
6	SK SABIRUNISA	70	47	F	130/80	130	AB	—	—	
7	V. TIRAPATHI RAO	65	72	M	160/100	158	N	—	N	BP
8	P. SRINIVAS RAO	53	40	M	130/80	83	N	—	N	
9	K. RAMULU	57	65	M	130/80	107	N	—	N	
10	MD. KHASIM PURA	65	75	M	140/120	238	AB	—	—	M.D
11	B. Veera Rajalaiah	77	54	M	140/90	209	AB	—	—	DY
12	K. KANYA KUMARI	76	64	F	120/80	289	AB	N	N	BP
13	D. Suseela	65	60	F	160/80	93	N	N	N	
14	K. SUBBA RAO	67	56	M	140/100	360	AB	N	N	DY
15	G. BABU RAO	81	67	M	130/80	227	AB	N	—	NA
16	K. NAGESWAR RAO	96	63	M	130/90	106	N	N	—	
17	K. LAKSHMAIAH	65	62	M	120/90	90	N	N	AN	
18	P. Ramaiah	69	50	M	170/100	180	N	N	—	BP
19	K. VENKTESWARA RAO	63	55	M	120/80	291	AB	N	—	BP
20	R. SATYANARAYANA	70	66	M	180/90	179	N	N	—	BP
21	U. SRINIVASA RAO	57	55	M	140/90	166	N	N	N	
22	V. Davalamma	30	80	F	140/60	87	N	N	AN	
23	P. NAGESWARA RAO	65	46	M	130/80	215	AB	N	—	DY
24	P. MANIKYAM	37	70	F	126/80		—	N	AN	
25	U. PULLAMMA	54	60	F	120/80		—	N	—	
26	SK. MASTAN	62	66	M	120/80	137	N	N	—	
27	K. NAGARE	67	59	M	180/90	272	AB	N	—	DM
28	K. ANASUYAMMA	52	55	F	120/80	83	N	N	—	
29	CH. Sarojwathi	63	60	F	150/90	455	AB	N	—	BP
30	G. ROSAMMA	45	50	F	120/90	114	N	N	—	
31	P. DURGA PRASAD	69	60	M	130/90	94	N	N	—	

11/18

Details of patients attended the Medical Health camp conducted .
at Kavuluru on 02-03-2018

11/18

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
32	K. JYOTHI	55	28	F.	114/80	272	AB	—	—	HTD
33	P. CHITTEMMA	32	65	F.	130/70.		—	N	N	
34	M. SAMBASIVA RAO	84	67	M.	105/77	350.	AB	N	AN	10%
35										
36	A. PRATSAKARRAO	85	64	M.	120/80	107	N.	N	N	3%
37	SK. ASHABEG.	55	31	M.	91/60.	93	N.	N	N	
38	M. BHAVANI	81	43	F.		107	N.	N	N	
39	G. VENKATA RAMANA		45	F	160/100	98	N.	N	AN	
40	G. D. KOTESWARA RAO	72	73	M.	120/70	114.	N.	N	N	
41	CH. ESWARI	67	35	F.	120/80	113	N.	N	AN	
42	K. VENKATA RATNAM	67	65	F	160/90	235	AB	N	N	20%
43	B. Peda GALIB	43	70.	M	150/90.	159	N.	—	—	
44	P. PARVATHI	56	40	F	120/80	160	—	N	N	
45	G. LALITHA	48	48	F.	160/90.	150	N.	N	N	
46	CH. KATLAMMA	53	70	F.	180/90	151	N.	—	—	
47										
48										
49										
50	G. NAGENDRAMMA	54	68	F.	143/90					
51	CH. MANI	58	60	F.	130/100	137	N	N	AN	
52	P. SHAHIDA BEGUM	52	38.	F.	140/90	87	N	N	N	
53	P. RAZIYA BEGUM.	57	28	F.	117/67		—	N	N	
54	B. NARASIMHA RAO	77	74.	M.	120/80	89	N	N	N	
55	MD. ADZAL	84	63	M.	130/80.	126	N.	—	—	
56	K. NANDAIAH	47	52	M.	120/80	104.	N.	—	—	
57								—	—	
58	T. JHANSI	72	40	F	100/76	161	N	N	N	
59	N. SUVARTHA	50	24	F.	110/74.			N	N	
60	SK. NAZIMUNISA	53	60	F	150/70		N	N	N	
61	G. ACHYUTA RAMAIAH	70	65	M.	120/80	109	N	N	N	
62	P. ATCHAMMA	65	38	F.	140/100	193	N	—	—	

14/18

Details of patients attended the Medical Health camp conducted
at Kavuluru on 03-03-2018

14/36

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
63	A·SATYANARAYANA	67	76	M.	120/70	139	N.	—	—	
64	K·VENKAYAMMA	64	60	F.	140/90.	96	N	—	—	
65	G·JANARDHANA RAO	65	74	M.	111/74.	90.	N	—	—	
66	K·NAGANDRAMMA	74.	50	F	130/80.	274	N	—	—	Dy
67	CH·RANGA RAO	77	88	M.	140/70	188	N	N	—	Dy
68	K·VENKATESWAR RAO	68	60	M.	145/86		—	N	—	
69										
70										
71	CH·BHUPENDRA RAO	76	74.	M.	160/100	104	N	N	—	
72	SK·KHAZABEE	59.	60	F.	130/80.	152	N	N	—	
73	P·CHITTEMMA	52	65	F.	126/76		—	N	—	
74	P·KHADAR KHAN	73	50	M.	120/70.		—	N	—	
75	K·NAGESWARMMMA	64	35	F.	106/70	97.	N	N	—	
76	S·N·MURTHY	95	48	M.	130/90	147	N	—	—	
77	G·PADMA··	105	60	F	150/100	133.	N	—	—	
78	D·TIRUPATHAMMA	83	48	F	117/72	167.	AB	—	—	
79										
80										
81	CH·KOTAMMA	35	110·	F		152	N.	—	—	Dy
82	G·VENKATESWAR RAO	81	55	M.	140/90		—	—	N	
83	G·NAGESWAK RAO	42	78	M.			—	N	AN	
84	ABDUL KABEER	42	78	M.	145/104	171	N	N	N	Dy
85	R·SUBBA RAO	74	70	M	136/90	165	N	N	AN	
86	N·VENKATAH	52	70.	M.			—	N	AN	
87								N	—	
88	CH·VARA KUMARI	101	57	F.	130/70	122	N	N	—	
89	A·VENKATA RAMANA	72	55	F	130/70	111	N	N	—	Dy
90							—	N	—	
91	G·MEREMMA	51	50	F.	150/90		—	N	N	
92	B·DAMANANTHI	51	65	F			—	N	N	
93	V·NAGENDRAMMA	53	80	F	140/80	188.	AB	N	—	

16/57

242

Details of patients attended the Medical Health camp conducted at Kavuluru on 03-03-2018

160

16/51

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
94	V.KOTESWARA RAO	62	62	M	150/90	138	N	N		
95	G.VENKATA RAO	52	39	M.	125/90	96	N	N		
96	P.VENKATESWARARAO	52	39	M	128/83	108	N	N	AN	
97	B.DURGA RAO	55	42	M	120/80	108	N	N	.	
98	G.SITA. RAMAIAH	73	62	M.	120/80.		—	N	.	
99	M.SUSEELA	42	65	F	120/80.		—	N	AN	
100	V.RANGAMMA	51	50	F.	230/117	221	AD	N	AN	
101	T.LAKSHMI	62	53.	F.	140/80.	142	N	N	N	
102	CH.NAGESWARRAO	54	70	M.	150/90	118	N	N	AN	
103	CH.SUSEELA	55	68	F.	150/90.		—	N	AN	
104	CH.VIJAYA LAKSHMI	62	47	F.	160/100	111	N	N	N	
105	D.RANI	67	35	F.	120/80		—	N	N	
106	M.POSHPA	52	37	F.	112/72.		—	N	AN	
107	G.SAMBASIVA RAO	91	69	M.	130/80.	139.	N	N	N	
108	SK.MOTI BEGUM	49	70	F	140/70	180	N	N	AN	
109	D.BAYYAMMA	49	70	F.	130/80		—	N	—	
110	D.SRINIVASA RAO	74	51	M	140/90.	156.	N	N	—	H
111	M.ABADDAIAH	65	68	M.	120/80	122	N	N	—	
112	K.BALA SWAMY	58	59	M.	93/55		—	N	—	
113	A.LAKSHMI	66	39	F	135/90.		—	N	—	
114	CH. NIRMALA	92	65	F	140/90	149	N	N	AN	
115							—	N	—	
116	J. APPA RAO	72	76	F	140/80		—	N	AN	
117	CH.BAPAMMA	60	60	F.	160/80.		—	N	AN	
118	CH.DEVADAS	65	63	M.	144/99.		198	N	—	
119	G. JOSEPH	52	56	M	110/80	512	AB	N	N	
120	N.VENKATESWARRAO	73	69	M	150/60	194	N	N	—	
121	ABDUL AZEEM	54	80	M	150/90	115	N	N	—	
122	G.RAMANA	57	45	M.	120/80		—	N	—	
123	J. TULASI	55	40	F	200/100	169	N	N	—	
124	A.SAMBASIVAM	42	60	F	140/60	121	N	N	—	

16/67

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Details of patients attended the Medical Health camp conducted
at Kavuluru on 03-03-2018

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18/67

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
125	G. JAYANTHI	51	32	F.	105/68		N	—	N	
126	K. ANASUYA	50	30	F.	120/80		N	N	—	
127	G. VIJAYA LAKSHMI	76	63	F	150/80		N	N	—	
128	G. SIVA RAMA KRISHNA	58	68	M.	130/90		N	N	—	
129	T. DURGA	85	27	F	120/80		N	—	N	
130	G. VIJAYA LAKSHMI	63	75	F.	120/74		N	AN	AN	
131	~~G. T~~ B. NAGU.	72	55	F	160/90		AB	N	AN	
132	G. PEDANAGESWARRAO	63	60	M.	160/80		AB	N	—	
133	G. GANGA RAO	58	85	M.	175/129		AB	N	—	
134	K. RATNA KUMARI	83	38	F	120/70		N	N	N	
135	P. LAKSHMI NARAYANA	75	45	M	130/80		N	N	—	
136	N. VENKATARAMANA	63	40	F	160/100		AB	AN	—	
137	MD. ARAFATH	55	24	F.	118/63		N	N	—	
138										
139							22/26			
140										
141										
142										
143										
144										
145										
146										
147										
148										
149										
150										
151										
152										
153										
154										
155										

244

Details of patients attended the Medical Health camp conducted at Jupudi on 07-03-2018

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
1	J. Varalakshmi	66	55	F	120/80	205	N	N	N	
2	Ch. Pushpalatha.	64	46	F	130/80	125	N	N	N	
3	M. Sarala.	53	41	F	110/90	156	N	N	N	
4	G. Durga.	56	27	F	110/60	120	AB	A	A	
5	R. Rayyam	68	42	F	120/70	140	N	N	N	
6	B. Saraswathi	65	65	F	130/80	129	N	N	N	
7	K. Dhana lakshmi	49	40	F	135/70	105	N	N	N	
8	P. SAMRAJYAM	80	60	F	120/70	123.	N	A	N	
9	P. KUMARI	61	93	F	160/90.	403	AB.	N	N	
10										
11	M. GONTHAMMA	60	60	F	135/70		N	N	N	
12	P. NARAYAMMA	48	63	F	140/90	214.	N	N	N	
13	P. RAMALAKSHMI	63	50	F	140/80	190	ABS	A	A	
14	P. JHANSI	70	40	F	110/70	203	N	N	N	GY.
15	P. ANNAPURNAMMA	58	55	F	130/80.	148.	N	A	N	
16	SK. KHADAR VALI	67	49	M.	130/80	299	ABS	N	N	
17	SK. MASTANBEE	45	63	F	120/80	172	ABS	N	N	
18	S. DAMAYANTHI	60	68	F	160/100	105	ABS	N.	N	
19	N. EDUKONDALU	62	65	M.	120/70.	126	N	A	N	
20	J. SUSEELA	44	70	F	157/93	129	N	N	N	
21	P. UMADEVI	42	50	F	185/72		N	N	N	
22	B. ANNAMMA	64	65	F	180/90	156	N	N	N	BY
23									N	
24									N	
25	P. DURGA RANI	72	39	F	110/80.	88	N	N	N	BY
26	K. ANJANEYULU	48	81	F	150/70	161	N	N	N	
27	K. KISHORE BABU	53	33	M.	180/120	190	N	A	A	SY.
28	N. CHINNA RAMULU	55	80	M.	170/100		N	N	N	
29	B. VENKAMMA	55	70	F	130/80.	120	N	N	N	
30	G. VENKATESWARRAO	32	73	M.	170/100		N	N	N	
31	L. CHINAVENKATESWARRAO	60	54	M	203/126	184	N	A	A	

60/8 6/21

245

Details of patients attended the Medical Health camp conducted
at Jupudi on 07-03-2018

6/12 6/24

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
32	M.SAIDA BEE	75	55	F	130/70	183	N	N	N	
33	A.ADI LAKSHMI	41	26	F	120/90		AD	AB	A	
34	K.GANGA BHAVANI	48	39	F	119/76		N	N	N	
35							N	N	N	
36										
37	K.PITCHAIAH	65	69	M	120/80	158	N	N	A	34
38	D.MARY	76	47	F	140/90	310	AB	N	N	84
39	A.SARASWATHI	43	56	F	140/90	95	N	A	N	
40	S.VANI	51	35	F	150/90	93	N	N	N	
41	R.PUNAMMA	76	45	F	199/100	238	AB	N	N	
42	N.KRISHNA KUMARI	49	55	F	130/80	113	N	N	N	
43	N.RAMA RAO									
44	B.SUSEELA	53	55	F	136/95	~~160~~300	AB	A	A	
45										
46	P.KALAVATHI	75	38	F	109/67	119	N	N	N	
47	R.RAMBAYAMMA	63	50	F	120/80	132	N	N	N	
48	P.PADMA	38	25	F	120/70					
49	S.SANTHI	~~38~~	30	F	115/73					
50	K.ROSE MARY	45	42	F	140/80	123	N	N	N	
51	B.VARADAIAH	41	57	M	113/65	66	AB	N	N	
52	S.PADMASRI	62	46	F	88/57	152	N	N	N	
53	D.NAGAMANI	80	28	F	104/70				N	
54	CH.VIJYA LAKSHMI	59	28	F	106/70					
55	O.DEVI	58	41	F	140/70	136	N	A	N	
56	P.SRI PRIYA	55	28	F	88/70		A	N	N	
57	R.NAGA MANI	63	59	F	147/81	121	N	N	N	
58	B.ROOPLI	48	40	F	112/73	124	N	N	N	
59	N.VENKATESWARAMMA	48	60	F	98/60	398	AB	N	N	124
60	N.SAKKU BAI	78	55	F	115/65	111	N	A	N	
61	BODI MARY	69	34	F	108/74	112	N	N	N	
62	N.POTHURAJU	57	75	M	140/70	133	N	N	N	

12/40 11/40

Details of patients attended the Medical Health camp conducted
at Jupudi on 07-03-2018

12/40 11/40

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
63										
64	N.NAGA RANGAMMA	66	27	F	116/8[illegible]		N	N	N	
65	S.SUNDARAMMA	~~49~~	70	F.	170/90	119.	AR	A	A	
66	J.BABU RAO	79	54	M.	170/90	86	N	N	N	
67	N.ADI RENUKAMMA	43	56	F.	120/80	89	N	N	N	
68	K.SUMATHI	75	32	F.	120/90	122	N	N	N	
69	K.DEVARAMMA	76	65	F.	140/80	137	N	N	N	
70	P.RANGANAYAKAMMA	34	40	F	120/80.		N	N	N	
71	SK.FADABEE	37	60	F.	170/100		N	N	N	
72									N	
73	N.DROWPATHI	63	53	F	140/90.	92	N	N	N	
74	K.RATNAMARY	80	40	F	135/107	228.	AN	A	A	
75										
76	CH.MOUNIKA	54	29	F	112/75		N	N	N	
77										
78	V.RAMADEVI	67	32	F	140/80.	123	N	N	N	
79										
80	P.DEVA SAHAYAM	69	50	M.	143/80	169.	N	N	N	24
81										
82	B.HEBSI BAI	52	34	F	112/73	147.	N	N	N	
83	P.VENKATESWARRAO	35 ~~60~~	40	M.	126/70.	200	N	N	N	4
84										
85	N.LAKSHMI	64	35	F.	114/60	99	N	N	N	
86	K.KUMARI	63	35	F.	108/67	1	N	N	N	
87	CH.VENKATESWARA RAO	66	50	M.	164/83	223	N	N	N	NAD
88										
89	N.MALLESWARAMMA	86	65	F.	150/80	169.	ATS	A	A	
90	K.CHINNAMMA	45	~~59~~ 52.	F.	165/90		N	N	N	
91										
92	K.VENKATESWARA RAO	45	55.	M.	130/80	175	N	N	N	
93	K.SESHA KUMARI	46	49	F.	160/90	133	N	N	N.	

14/60 14/59

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Details of patients attended the Medical Health camp conducted
at Jupudi on 07-03-2018

14/60 14/59

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
94	S. ANANTHA LAKSHMI	78	28	F	130/80		N	N	N	
95	M. SRINIVASA RAO	44	40	M.	100/64	140	N	N	N	
96	M. MANGAMMA	65	35	F	103/70	126	N	N	N	
97	S. PRIYADARSINI	76	32	F	113/80	136	N	N	N	
98	K. SUNITHA	60	25	F	114/74	116	N	N	N	
99										
100										
101	N. SOWJANYA	60	24	F	107/75	120	N	N	N	
102	N. RAMADEVI	58	27	F	120/70	116	N	N	N	
103										
104	N. RAJESWARI	48	33	F	117/80	117	N	N	N	
105	K. MAMATHA	59	35	F	105/63	127	N	A	N	
106										
107										
108										
109	K. LAKSHMI	72	50	F	102/73	223	AB	A	N	
110	V. KANKAMAHALAKSHMI	67	31	F	92/59	130	N	N	N	
111	K. TIRAPATAMMA	47	44	F	140/80	193	AB	N	N	
112										
113	J. CHINNAMMAI	60	55	F	120/80	125	N	N	N	
114	N. SUNEETHA	83	30	F	120/90	126	N	N	N	
115	N. VENKATA RAMA RAJU	87	50	M.	130/80	273	AB	A	A	
116	R. SUBBA RAO	58	74	M.	130/60	146	N	N	N	
117	P. VANAJAKSHI	53	60	F	190/90	216	AB	N	N	
118	G. ROJA MANI	55	40	F	119/86	266	N	N	N	
119										
120										
121	K. SURESH BABU	78	37	M.	130/80	127	N	N	N	
122	J. CHENCHA RAO	68	34	M.	111/80	179	N	A	A	
123	K. PRAMEELA	73	36	F	117/81	86	N	N	N	
124	D. KALAVATHI	53	56	F	109/80	246	AB	N	N	

18/78 19/76

Details of patients attended the Medical Health camp conducted at Jupudi on 07-03-2018

18/77 19/76

S.No.	Name	Weight	Age	Gender	BP	Blood sugar	PFT	USG	ECG	Remarks
125	P.VENKAT & SWARAMMA	54	45	F	104/70	127	N	N	N	
126	P:SARASWATHI	85	39	F	163/80	116	N	N	N	
127										
128	N.LAKSHMI MANOHARA	70	56	F	84/63	120	N	A	A	
129										
130	P.AMALA	43	27	F	107/74	119	N	N	N	
131										
132										
133	N.R.K.MURTHY	52	70	M.	90/90	132	N	N	N	
134	S.MALATHI	60	45	F						
135	B.ROSAMMA	77	45	F	118/80	114	N	N	N	
136	B:KOTESWARI	49	40	F	160/80	113	N	N	N	
137	K.KUMARI	50	45	F	86/60	96	N	N	N	
138	CH.RAMANJANEYULU	65	68	F	120/70	112	AB	A	A	
139										
140										
141	A. CHITTEMMA	61	68	F	130/85	116	N	N	N	
142										
143										
144	P.NIRMALA	60	43	F	107/75	116	N	A	N	
145	P.VENKATA RAVAMMA	66	56	F	120/80	116	N	N	N	
146	K.PADMA	64	46	F	110/70	113	N	N	N	
147										
148							19/84	21/86		
149										
150										
151										
152										
153										
154										
155										

ISO-9001:2008 UNIT

Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
IBRAHIMPATNAM, KRISHNA (Dt.), (Andhra Pradesh)
Phone No. : 0866 - 2882203 Fax: 0866 - 2882365
e-Mail: vjwcevtps@yahoo.com, vjwcevtps@hotmail.com, vtps.ce@apgenco.com

From
The Chief Engineer,
Operation &Maintenance,
Dr.NTTPS,Ibrahimpatnam
Krishna District -521 456.

To
The Member Secretary,
A.P.Pollution Control Board,
D.No.33-26-14, D/2, Near Sunrise Hospital,
Pushpa Hotel Centre,
Chalamalavari Street,
Kasturibaipet, Vijayawada - 520010.

Lr.No.CEE/O&M/SE/EE/C/Envt/Dr.NTTPS/F.03/D.No. 331/18, Dt. 19 /10/ 2018.

Sir,

Sub: APGENCo – Dr.NTTPS – Conducting health statastics to the animals in influence zone and non-influence zone villages of Dr.NTTPS – Study report – Furnishing – Reg.

Ref: 1)Order No.31/APPCB/UH-II/TF/VSP/2016- Date04.04.2016.
2) Order No.31/APPCB/UH-II/TF/VSP/2016- Date:23-07-2016.
3) Order No.31/APPCB/UH-II/TF/VSP/2016- Dt.22.11.2016.
4) CEE/O&M/SE/C/EE/C/Envt/Dr.NTTPS/F-3/D.No.112/18, dt.12.03.2018.

&&&

It is to inform that, , the study report on health statastics to the people in influence and Non-influence zone villages of Dr.NTTPS was furnished in the ref. letter 4th cited as per the directions of APPCB issued in ref.1st to 3rd cited.

Further, the study report obtained from Deputy Director, Animal Husbandry, Nandigama regarding Health studies to the animals in influence and non influence zones of Dr.NTTPS is herewith furnished.

In this regard, it is to further inform that health statastics from veterinary Hospitals in influence and Non-influence zones and observations of Deputy Director, Animal Husbandry, Nandigama, Krishna District didnot indicate any severe and adverse cases of diseases due to Water and Air pollution of Dr.NTTPS.

Encl: Study report.

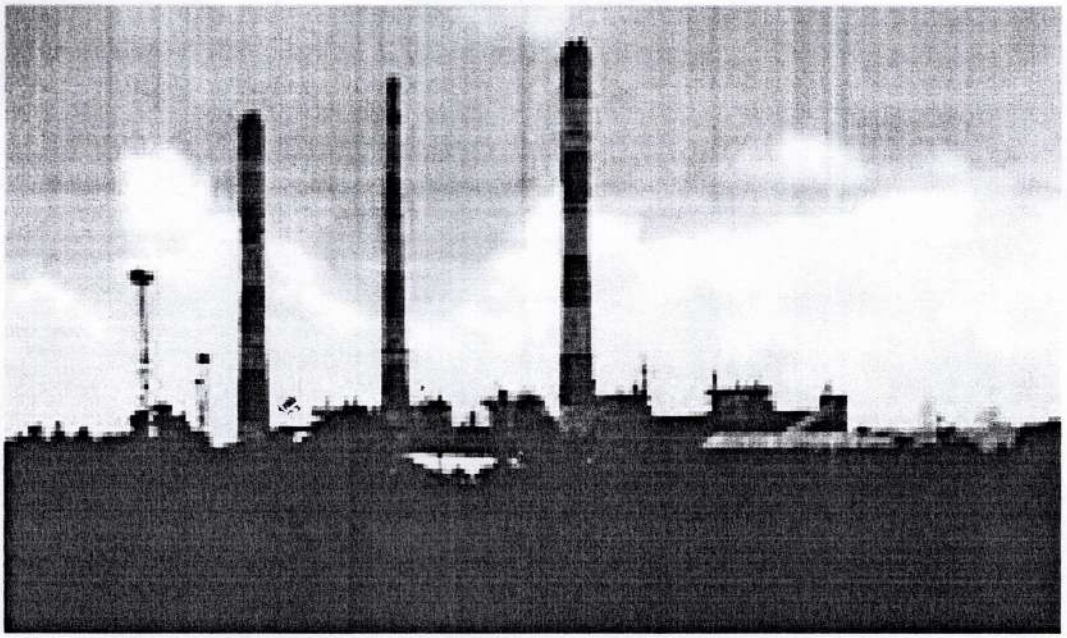
Yours faithfully,

CHIEF ENGINEER/O&M
Dr.NTTPS/IBRAHIMPATNAM

Copy communicated the Environmental Engineer/APPCB/RO/ for favour of information.
Copy communicated to the Chief Engineer, Civil, General Services, Hydel, C&I, APGENCO for favour of information.
Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.

APGENCO

Studies on water and Air Pollution Impact on Animal Health conditions in Influence zone and Non-influence zone of Dr.NTTPS



Submitted To
A.P.Pollution Control Board
By
A.P. Power Generation Corporation Limited
October, 2018

Conclusion:

Health statastics from veterinary Hospitals in influence and Non-influence zones and observations of Deputy Director, Animal Husbandry, Nandigama, Krishna District indicate that no severe and adverse cases of diseases were reported due to Water and Air pollution of Dr.NTTPS.

Whom So ever it may Concern

This is to Certify that V.T.P.S GENCO was situated at Ibrahimpatnam village Ibrahimpatnam Mandal Krishna (D.T) is producing the Thermal Power regularly since 1980's

In the Process of Producing Electricity (Thermal) in and around the areas of Ibrahimpatnam Mandal and G. Kandera Mandal areas, Like Stock Population moderate effect of pollution was there. due to that Some Animals are showing allergy and Pregnance problems during 2014-2015 to till date. No Some and adverse cases were reported due to air pollution and water pollution.

DEPUTY DIRECTOR
ANIMAL HUSBANDRY
NANDIGAMA -521 185.
KRISHNA Dt.

OFFICE OF THE DEPUTY DIRECTOR
29 SEP 2016
ANDRY, NANDIGAMA

4

Government of Andhra Pradesh
Animal Husbandry Department

Office of the Joint Director (AH), VBRI, Labbipet, Vijayawada-10.

Lr.Roc.No.1/Path/VBRI/2017

Date: 21.11.2017

Sub: Communication of results - Regarding

Ref: Health camp conducted at **Guntupalli camp** by Assistant Director (AH), AVH, Ibrahimpatnam
15.11.17

Species: Bullock

Specimen: Blood

VBRI. No	Sample No.	Results					
		Hb	RBC	WBC	PCV	MCV	MCHC
897 - 903	05	9.1	7.18	**15.3**	33.8	47.2	26.9
904 - 910	07	5.6	4.42	6.6	20.4	46.3	27.4

Reference range of haematological values in Bullock

Hb	RBC	WBC	PCV	MCV	MCHC
g/dl	milli/ul	Thou/ul	%	fl.	g/dl.
8-14	5-8	5.6-9.25	26-42	40-60	26-34

Note: Leucocytosis noticed in sample no. 5
Severe Anaemic changes noticed in sample no. 7

Corrective measures adopted while correlating with clinical symptoms.

21.11.17
for Joint Director (AH)
VBRI, Vijayawada.

18/4/18

ASSISTANT DIRECTOR
ANIMAL HUSBANDRY
VETERINARY HOSPITAL
IBRAHIMPATNAM
KRISHNA - 521 456

To

The Assistant Director (AH) AVH, Ibrahimpatnam, Krishna Dt

The ISA, Guntupalli

5

GOVERNMENT OF ANDHRA PRADESH
ANIMAL HUSBANDRY DEPARTMENT

Office of the Joint Director (AH), VBRI, Labbipet, Vijayawada - 520010.

Lr.Roc.No.1/Path/VBRI/2017-18

Dated: 21.11.2017

Sub: Communication of Results - Regarding.

Ref: Health camp conducted at **Guntupalli camp** by Assistant Director (AH), AVH, Ibrahimpatnam

VBRI SP. No	Case No	Animal	Kind Of Specimen	Calcium	Phosphorus
1451 – 1452	2	Buffalo	Serum	9.82	11.92
1453 – 1454	3	Buffalo	Serum	10.36	15.52
1455 – 1456	4	Buffalo	Serum	9.50	10.91
1457 – 1458	5	Buffalo	Serum	8.09	15.16
1459 - 1460	6	Buffalo	Serum	9.83	**2.25**
1461 – 1462	7	Buffalo	Serum	**5.98**	**2.43**
1463 – 1464	8	Buffalo	Serum	9.63	**1.87**
1465 – 1466	9	Buffalo	Serum	**2.62**	**1.68**
1467 – 1468	14	Buffalo	Serum	**7.43**	**1.43**
1469 – 1470	16	Buffalo	Serum	**6.82**	**4.22**
1471 – 1472	19	Buffalo	Serum	9.90	12.93
1473 – 1474	26	Buffalo	Serum	**7.77**	17.63
1475 - 1476	27	Buffalo	Serum	8.55	11.47

Reference Range of Biochemical Values in Buffalo:

Ca	Phosp
mg/dl	mg/dl
8.0-11.4	5.6-8.0

Note: low calcium levels noticed in sample no. 7,9,14,16,26
Low phosphorus levels noticed in sample no. 6,7,8,9,14,16
High phosphorus levels noticed in sample no. 2,3,4,5,19,26,27
Corrective measures may be adopted while correlating with clinical symptoms.

for Joint Director (AH)
VBRI, Vijayawada.

ASSISTANT DIRECTOR
ANIMAL HUSBANDRY
VETERINARY HOSPITAL
IBRAHIMPATNAM
KRISHNA - 521 456

To
The Assistant Director (AH), Ibrahimpatnam, Krishna Dt

Government of Andhra Pradesh
Department of Animal Husbandry

Office of the joint Director (AH), Veterinary Biological Research Institute (VBRI), Vijayawada

Lr. Roc. No. 946 / PARAS/ VBRI/2017 dated 17/11/2017

Sub: **Communication of results of Samples screened from Guntupalli village of Ibrahim patnam mandal- Krishna District-Regarding.**

****

S. No	Tag No/ Identification	Species	Kind of the Specimen	Result	Kind of the Specimen	Result
1	26(Ge)	Cow	Dung sample	NPOD	Blood smear	No blood parasites detected
2	27(Ge)	Cow	Dung sample	NPOD	Blood smear	
3	07(Ge)	Buffalo	Dung sample	Amphistome +ve	Blood smear	
4	06(Ge)	Buffalo	Dung sample	NPOD	Blood smear	
5	02(Ge)	Buffalo	Dung sample	NPOD	Blood smear	
6	08(Ge)	Buffalo	Dung sample	NPOD	Blood smear	
7	03(Ge)	Buffalo	Dung sample	NPOD	Blood smear	
8	11(Ge)	Buffalo	Dung sample	NPOD	Blood smear	
9	05(Ge)	Buffalo	Dung sample	Amphistome +ve	Blood smear	
10	04-Gy	Buffalo	Dung sample	NPOD	Blood smear	
11	05-Gy	Buffalo	Dung sample	NPOD	Blood smear	
12	15-Gy	Buffalo	Dung sample	NPOD	Blood smear	
13	08-Gy	Buffalo	Dung sample	NPOD	Blood smear	
14	16-Gy	Buffalo	Dung sample	NPOD	Blood smear	
15	14-Gy	Buffalo	Dung sample	NPOD	Blood smear	
16	12-Gy	Buffalo	Dung sample	Amphistome +ve	Blood smear	
17	14-Ge	Buffalo	Dung sample	NPOD	Blood smear	
18	9-Gy	Buffalo	Dung sample	NPOD	Blood smear	
19	31-Gy	Buffalo	Dung sample	Amphistome +ve	Blood smear	
20	19-Gy	Buffalo	Dung sample	NPOD	Blood smear	

21	27-Gy	Buffalo	Dung sample	NPOD	Blood smear	No ble parasit dete
22	34-Gy	Buffalo	Dung sample	NPOD	Blood smear	
23	43-Gy	Buffalo	Dung sample	Amphistome +ve	Blood smear	
24	45	Buffalo	Dung sample	NPOD	Blood smear	
25	47	Buffalo	Dung sample	NPOD	Blood smear	
26	53	Buffalo	Dung sample	NPOD	Blood smear	
27	28	Buffalo	Dung sample	NPOD	Blood smear	
28	33	Buffalo	Dung sample	NPOD	Blood smear	
29	48	Buffalo	Dung sample	NPOD	Blood smear	
30	42	Buffalo	Dung sample	B. Coli	Blood smear	
31	20-Ge	Buffalo	Dung sample	NPOD	Blood smear	
32	55-Gy	Buffalo	Dung sample	NPOD	Blood smear	
33	56-Gy	Buffalo	Dung sample	B. Coli	Blood smear	
34	23-Ge	Buffalo	Dung sample	Amphistome +ve	Blood smear	
35	57-Gy	Buffalo	Dung sample	NPOD	Blood smear	
36	59-Gy	Buffalo	Dung sample	Amphistome +ve	Blood smear	
37	60-Gy	Buffalo	Dung sample	NPOD	Blood smear	
38	54-Gy	Buffalo	Dung sample	NPOD	Blood smear	
39	51-Gy	Buffalo	Dung sample	NPOD	Blood smear	
40	52-Gy	Buffalo	Dung sample	NPOD	Blood smear	

Submitted to the Assistant Director (AH) Pathology section AP VBRI, Vijayawada.

17.11.17

Y. Assistant Director (AH)
Parasitology section
AP VBRI, Vijayawada

17/11/17

11/11/17

ASSISTANT DIRECTOR
ANIMAL HUSBANDRY
VETERINARY HOSPITAL
IBRAHIMPATNAM
KRISHNA - 521 456

GOVERNMENT OF ANDHRA PRADESH
ANIMAL HUSBANDRY DEPARTMENT

Office of the Joint Director (AH), Veterinary Biological and Research Institute, Labbipet, Vijayawada-520 010

Lr.Roc. No. 1 /SE/VBRI/2017 Dated : 23-11-2017

Sub: Communication of results- Regarding

Ref: Mass camp at Guntupalli village of Ibrahimpatnam Mandal ; sent by AD (AH), Pathology, VBRI-AP, Vijayawada on 14-11-2017.

S.No	VBRI SP. No.	SampleNo	Species	Kind of Specimen	Result
1	757	05	Buffalo	Serum	The sera sample was found **Negative** for Brucella antibodies.
2	758	07			The sera sample was found **positive** for IBR antibodies.

Joint Director (AH) 23/11/17
VBRI, Vijayawada-10

To
The Assistant Director (AH), Pathology, VBRI-AP, Vijayawada for information and necessary action.

ASSISTANT DIRECTOR
ANIMAL HUSBANDRY
VETERINARY HOSPITAL
IBRAHIMPATNAM
KRISHNA - 521 456

8

GOVERNMENT OF ANDHRA PRADESH
ANIMAL HUSBANDRY DEPARTMENT

Office of the Joint Director (AH), VBRI, Labbipet, Vijayawada 520010

Lr.Roc.No.1/Path/VBRI/2017-18 Dated: 23.10.2017

Sub: Communication of Results - Regarding.

Ref: Samples collected at Kavuluru village, during Animal Health Camp, Dated 17.10.2017

VBRI SP. No	Sample. No	Animal	Kind Of Specimen	Cal	Phosp	Mg
1074 – 1076	01	Buffallo	Serum	**7.2**	6.2	**7.24**
1077 – 1079	02	Buffallo	Serum	**7.8**	**5.4**	**6.62**
1080 – 1082	03	Buffallo	Serum	8.2	4.9	**7.26**

Reference Range of Biochemical Values in ~~[illegible]~~ BUFFALO

Cal	Phosp	Mg
mg/dL	mg/dL	mg/dl
8.0 – 11.4	5.6 – 8.0	2.0 – 2.8

Note: Decreased levels of **Cal** observed in the sample no. **01 and 02**, Decreased levels of **Phosp** observed in the sample no. **02**, Increased levels of **Mg** observed in the sample no. **01, 02, and 03.**
Corrective measures adopted while correlating with clinical symptoms.

Joint Director (AH) 23/10
VBRI, Vijayawada

To
VAS, VD. G Konduru, Nandigama division, Krishna dist.

DEPUTY DIRECTOR 23/10/17
ANIMAL HUSBANDRY
NANDIGAMA-521 185.
KRISHNA Dt.

Scanned by CamScanner

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location	Ibrahimpatnam.
2	Details of Medical Staff (1) (2) (3) (4)	(1) Assist. Director (2) Vety. Asst. surgeon (3) Vety. Asst. (4) Office subordinate
2.	Details of cattle population in the jurisdiction of the AVH	Cattle - 49 Buffaloes - 1435 Sheep - 428 Goat - 651 Poultry - 2695 Others - -
3.	Equipment available for investigation/Lab facilities	No any specific equipment and staff are available.
4.	Availability of medicines	Sufficient.
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2016-17: 5840 2015-16: 5226 2014-15: 5607
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different seasons in a year	Repeat Breeding Anoestrous Amphistomiasis Trypanosomiasis

7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	(1) Nutritional factors. (2) Biological factors.
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	NO any
9	Special camps conducted by AVH	(1) Sukhalam Camps (2) NSP Camps (3) VTPS Camps. (4) Rapalamitha Camps.
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	— NO any —

ASSISTANT DIRECTOR
ANIMAL HUSBANDRY
VETERINARY HOSPITAL
IBRAHIMPATNAM
KRISHNA - 521 456

7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	1. Nutritional factors - Lack of sufficient mineral supplen 2. Biological factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	No complaints recieved.
9	Special camps conducted by AVH	1. Suphalam Camps 2. NSP Camps 3. Gopalmitra Camps
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	No cases reported due to air pollution & water pollutio

M.D. Bharath 20/3

Veterinary Assistant Surgeo
VETERINARY DISPENSAR
MULAPADU-521 456

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location	Veterinary Dispensary, MULAPAD
2	Details of Medical Staff	1. Dr. M.D. Bharath, Veterinary Asst Surg 2. V.V. Padma Rao, Office Subordina
2.	Details of cattle population in the jurisdiction of the AVH	Cattle - 208 Buffalo - 4878 Sheep - 4086 Goat - 1565 Poultry - 4634 others -
3.	Equipment available for investigation/Lab facilities	No any specific equipment & staff available.
4.	Availability of medicines	Sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2016-17: 8621 2014-15: 7432 2015-16: 7681
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different seasons in a year	Repeat Breeding, Endometritis. Amphistomiasis, Trypanosomiasis

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location	Kanchikacharla. Mandal
2	Details of ~~Medical~~ Veterinary Staff	1. Assistant Director – Vacant 2. Veterinary Asst. Surgeon (3 days) 3. Office Subordinate – (1)
2.	Details of cattle population in the jurisdiction of the AVH	White – 50 Black – 1290 Sheep – 750 Goat – 56
3.	Equipment available for investigation/Lab facilities	No Specific equipment (or) staff are available.
4.	Availability of medicines	Sufficient
5.	No. of ~~complaints~~ Cases in a ~~month/quarter~~ year. Data for three years may be provided along with profiles	2016-17: 6369 2015-16: 6734 2014-15: 6260

6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different seasons in a year	1. Repeat Breeding 2. Endometritis 3. Amphistomiasis.
7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	Nutritional and Biological factors.
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	— NIL —
9	Special camps conducted by AVH	1. Suphalam camps 2. Nsp camps 3. Gopalamitra Camps.
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	— NIL —

23/03/18

Veterinary Assistant Surgeon
Veterinary Dispensary
Mugulavu
Kanchikacherla -521190

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location	G. Kondury.
2	Details of Medical Staff	Dr. M. Rameela Rani Veterinary Assistant Surgeon Veterinary Dispensary G. Kondury
2.	Details of cattle population in the jurisdiction of the AVH	2452 — Cattle (Buffaloes) 1329 — Sheep 1232 — Goat 5016 — Poultry
3.	Equipment available for investigation/Lab facilities	only microscope available
4.	Availability of medicines	Sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	~~2015-16~~ ~~2016-17~~ 2017-2018 12026 13014 14003 Surgical cases
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different	Repeat breeding, Mastitis, Enteritis,

	seasons in a year	
7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	Biological & Nutritional factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	-No-
9	Special camps conducted by AVH	Syphalam camps NSP camps APLDA - Opthalmitis camps
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	we are not enough equiped to give impression. 23/3/18 Veterinary Assistant Surgeon VETERINARY DISPENSARY G. Kondur

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location VD location	Velagaleru ; Gokavaram Mandal
2	Details of ~~Medical~~ Staff Veterinary	Dr. Ch. Saibabu Madhuri - Vety Assistant Surgeon - 1 veterinary Assistant - 1 Office subordinate - 1
2.	Details of cattle population in the jurisdiction of the AVH	White: 62 Poultry: 1728 Black: 2556 Others: 86 Sheep: 988 Goat: 1528
3.	Equipment available for investigation/Lab facilities	No any
4.	Availability of medicines	Suffivient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2016-17/yr 2015-16/yr 2014-15/yr. 8642 8872 8464
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different	Mastitis, Endometritis, Anoestrum cases ; Repeat breeding in cattle

	seasons in a year	
7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	Biological & Nutritional factors.
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	— No —
9	Special camps conducted by AVH	→ Suphalam Camps → 'Nagarjuna Sagar Project' camps → APLDA Gopal mitra camps → AH Day camps.
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	We are not enough equipped to give impression. 23/03/18 Veterinary Assistant Surgeon VETERINARY DISPENSARY VELAGALERU. Krishna Dist 23/03/18

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location VD Location	Gangeneripalem, G. Konduru Ma
2	Details of ~~Medical~~ Staff Veterinary Dispensary	Veterinary Asst Surgeon - Vacc OS - Vaccant Smt. G. Jyothi LSA on dut deputation.
2.	Details of cattle population in the jurisdiction of the AVH	White - 101 Poultry - 2022 Black - 1135 others - 82 Sheep - 1845 Goat - 1101
3.	Equipment available for investigation/Lab facilities	No any.
4.	Availability of medicines	Sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2016-17/Y 2015-16/Y 2014-15/Y. 14020. 13001 12028.
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different	Mastitis, Endometrities, Anoestru cows, Repeat breeding in buffalo

	seasons in a year	—
7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	Biological & Nutritional factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	— NIO —
9	Special camps conducted by AVH	→ Suphalam Camps → Nagarjuna Sagar Project Ca → APLDA Gopalmithra Camps → AH day Camps.
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	We are not enough equipped to give impression 23/8/18 Veterinary Assistant Surgeon VETERINARY DISPENSARY Gangireddipalem

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location	R.L.V Kanthanmukkala
2	Details of Medical Staff	Dr. Rama Swamy L.S.A R.L.V Kanthanmukkala U. Kandeeru (D.D) Thiruvananthapuram
2.	Details of cattle population in the jurisdiction of the AVH	2530 - Cattle & Buffaloes 1930 - Sheep 170 - Goat 2560 - poultry
3.	Equipment available for investigation/Lab facilities	— Nil —
4.	Availability of medicines	Sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2015-16 2016-17 2017-18 11900 , 12900 13192 per year Cases
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different	Repeat breeding, Anestrus Retained placenta, Milk Fever

	seasons in a year	
7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	Biological & Nutritional Factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	— NO —
9	Special camps conducted by AVH	Scaphalum camp N.S.P camp
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	we are not enough equped to give impressions. 23/3/18 Veterinary Assistant Surgeon VETERINARY DISPENSARY G.Kondur

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location	RLU- Vellaturu.
2	Details of Medical Staff	1) DEVADASU. NAGESWARA RAO LIVESTOCK ASSISTANT RURAL LIVESTOCK UNIT, VELLATURU.
2.	Details of cattle population in the jurisdiction of the AVH	White :- 60 Black 2600. S/G :- 4000 P :- 1360 O :- 25
3.	Equipment available for investigation/Lab facilities	— NO —
4.	Availability of medicines	— Sufficient —
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2014-15/yr. 11465 / 2015-16/yr. 12365 / 2016-17/yr. 12747
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different	Repeat Breeders, Endometritis & O Cases. } Mastitis Cases, Enteritis Cases

	seasons in a year	
7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	Biological & Nutritional factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	— No —
9	Special camps conducted by AVH	NSP Camps Suphalam Camps. Fertility Camps.
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	We are not enough equipped to give ~~sufficient~~ impression

22/03

Veterinary Assistant Surgeon
VETERINARY DISPENSARY
VELAGALERU. Krishna Dist

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location	Mylavaram
2	Details of Medical Staff	Assistant Director – 1 Veterinary Assistant – 1 Office Subordinate - 1
2.	Details of cattle population in the jurisdiction of the AVH	White – 86 Black - 1214 Sheep – 1272 Goat – 412 Poultry – 8112 Others – 72
3.	Equipment available for investigation/Lab facilities	— No —
4.	Availability of medicines	Sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2016-17/yr 2015-16/yr 2014-15/yr 9232 8878 9268
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different	Mastitis, Endometritis, Anoestrum c Repeat Breedings,

	seasons in a year	
7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	Biological & Nutritional factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	— NO —
9	Special camps conducted by AVH	Suphalam camps NSP camps APDA – Gopalmitra camps.
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	We are not enough equipped to give impression. 23/3/12 ASSISTANT DIRECTOR (A.H.) VETERINARY HOSPITAL MYLAVARAM 521 230 KRISHNA (Dist)

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location	
2	Details of Medical Staff	VAS – (1) ~~deputation~~ VAS, VA, Attendant ~~Holding~~ Incharge JVO – (1) working on deputation
2.	Details of cattle population in the jurisdiction of the AVH	Buffl – 1200 cattle – 3400 sheep & Goat – 9,000/-
3.	Equipment available for investigation/Lab facilities	— NIL —
4.	Availability of medicines	Sufficient.
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2014–15: 12,346 15–16: 12,437 16–17: 13,861.
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different	Repeat breeding, Reduced conceptions, Anoestrus

	seasons in a year	
7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	Biological & nutritional factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	— no —
9	Special camps conducted by AVH	NSP camps Suphalam camps.
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	we are not enough equipped to give impression 13/3/18. Veterinary Assistant Surgeon Veterinary Dispensary CHANDRALA-521 230. Mylavaram (Md.)

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location R.L.U. Location	Gramapuram : Vijayawada
2	Details of ~~Medical~~ Staff Veterinary	A. Dhana Lakshmi Junior Veterinary officer
2.	Details of cattle population in the jurisdiction of the AVH	Black cattle - 739 Sheep & Goat = 3260 White cattle = 43 Poultry = 2238
3.	Equipment available for investigation/Lab facilities	— NO. —
4.	Availability of medicines	Sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2016-17 2015-16 2014- 14238. 13875. 12319
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different	Ano. Endometritis cases Repeat breeding cases in catt

	seasons in a year	
7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	Biological & Nutritional Factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	—No—
9	Special camps conducted by AVH	→ Sadhalam Camps → N.S.P. Camps
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	We are not enough equipped to give any impression —No— 23/3/18. Veterinary Assistant Surgeon Veterinary Dispensary CHANDRALA-521 230. Mylavaram (Md.)

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location	
2	Details of Medical Staff	VAS – (1) contract hospital attender 4
2.	Details of cattle population in the jurisdiction of the AVH	Black – 4600 white – 1200 5800 Sheep & Goat – 13,000
3.	Equipment available for investigation/Lab facilities	– No –
4.	Availability of medicines	Sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2014-15: 11,261 2015-16: 12,086 2016-17: 13,686
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different	Anoestrus, Repeat breeding, Reduced conception rate

	seasons in a year	
7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	Biological & nutritional factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	— NO —
9	Special camps conducted by AVH	NSP camps explosions camp
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	we are not enough equipped to give impressi 23/8 Veterinary Assistant Surgeon Veterinary Dispensary CHANDRALA-521 230. Mylavaram (Md.)

Veerullapadu

Questionnaire for survey at Area Veterinary Hospital (AVH)

1.	AVH location VD location	veerullapadu (vi (or) MD)
2	Details of Medical Staff	1. Vety. Asst
2.	Details of cattle population in the jurisdiction of the AVH	White - 275 Buffaloes - 4120 Sheep - 2300 Goat - 1000 Poultry - 4000 others - 70
3.	Equipment available for investigation/Lab facilities	no any specific equipment and staff are available
4.	Availability of medicines	sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2016-2017 912 · 2015-2016 1012 · 2014-2015 1090
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different seasons in a year	1. Anorexia 2. pyrexia 3. Indigestion 4. Repeat breeding 5. skin Allergy 6=pox

7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	1. Biological factors 2. nutritional factors 3. Environmental factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	— NO —
9	Special camps conducted by AVH	1. Suphelam camps 2. NSP- camps 3. Gopala mitra camps
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	— NO —

21/3/15
Veterinary Assistant Surgeon
Veterinary Dispensary
Veerulapadu
Veerulapadu -521170

VD 286 Allavu

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location VD - Location	Allavu (vi) veerallapaduCm
2	Details of Medical Staff	1. Livestock Asst
2.	Details of cattle population in the jurisdiction of the AVH	white - 85 Buffaloes - 970 Sheep - 3200 Goat - 500 Poultry - 10000 others - 100
3.	Equipment available for investigation/Lab facilities	no any specific equipment and staff are available
4.	Availability of medicines	sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2016-2017 2015-2016 2014-201 1000 9900 9890
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different seasons in a year	1. weekness 4. Repeat breed 2. pyrexia 5. skin Allergy 3. Indigestion

7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	1. Biological factors 2- nutritional factors 3. Environmental factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	— NO —
9	Special camps conducted by AVH	1. Suphalam camps 2. NSP camps 3. Gopalla mitra camps
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	— NO —

24/3/18

Veterinary Assistant Surgeon
Veterinary Dispensary
Veerulapadu
Veerulapadu -521170

RLV Jujjuru

288

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location RLV - Location	Jujjuru (vi) Veerullapadu (r
2	Details of Medical Staff	1) Vety Asst
2.	Details of cattle population in the jurisdiction of the AVH	white: 160 Buffaloes - 2600 Sheep - 3520 Goat - 516 Poultry - 8671 Others - 74
3.	Equipment available for investigation/Lab facilities	no any specific equipment and staff are available
4.	Availability of medicines	sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2016-2017 2015-2016 2014-201 3720 4020 4800
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different seasons in a year	1. weekness (5) Repeat Breedi 2. pyrexia (6) Skin Allergy 3. Indigection (7) Parasitic inf 4. mastitis.

7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	1. Biological factors 2. nutritional factors 3. Environmental factors
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	-NO-
9	Special camps conducted by AVH	1. suphelam camps 2. N.S.P camps 3. Gm camps Gopalamitra camps
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	—NO—

21.3.18

Veterinary Assistant Surgeon
Veterinary Dispensary
Veerulapadu
Veerulapadu -521170

VD ~~Veelinaki~~ Vellanki

Questionnaire for survey at Area veterinary Hospital (AVH)

1.	AVH location VD location	vellanki(vi) veerullapadu(m
2	Details of Medical Staff	1. Vety. Asst. Surgeon 2. office subordinate
2.	Details of cattle population in the jurisdiction of the AVH	White: 160 Buffaloes - 1212 Sheep - 1800 Goat - 700 Poultry - 3500 others - 70
3.	Equipment available for investigation/Lab facilities	no any specific equipment and staff are available
4.	Availability of medicines	sufficient
5.	No. of complaints in a month/quarter. Data for three years may be provided along with profiles	2016-2017 2015-2016 2014-2015 7721 7921 8029
6	Name of the major symptoms reported by people and nature of diseases diagnosed by Doctors in different seasons in a year	1. Anoestric. 4) worm burden 2) Indigestion. 5) External parasite 3) Bacterial & viral diseases 6) Repeat breeders infestation.

7	Causes of the diseases (Biological factors / Environmental factors/ Immunologic factors/ Nutritional factors and prevalence of the diseases, Disease patterns.	①. Improper management practices ②. Environmental.
8	Any kind of complaints made by public on water pollution due to which cattle is affected.	- No -
9	Special camps conducted by AVH	- Syphelam
10	Overall impression on the prevalence of diseases caused by air pollution and water pollution by the Doctor in-charge of the AVH	- No - 21/3/18 Veterinary Assistant Surgeon Veterinary Dispensary Veerulapadu Veerulapadu -521170

सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
तापीय परियोजना नवीनीकरण एवं आधुनिकीकरण प्रभाग
Thermal Project Renovation & Modernization Division

No.: CEA-TH-14-24/5/2022-TRM Division/235-335 Dated 20.01.2023

विषय: Renovation and Modernisation (R&M) of aged coal-fired Thermal Power Stations (TPS) - reg.

The Govt. of India is striving to provide affordable electricity on 24x7 basis to common citizen. However, the country is witnessing huge energy demand post pandemic which is projected to surge at all-time high in coming summer of 2023 and beyond. Therefore, the role of thermal fleets including old thermal units becomes crucial in order to support renewable integration.

Hon'ble minister in the meeting held on 06.12.2022 (**copy enclosed**) advised not to retire any thermal units and urged for carrying out R&M for life extension and improve the flexibility and reliability of thermal units considering the expected demand scenario and availability of capacity in future. It may be noted that about 15-16 GW of new thermal capacity is expected by December 2023. Accordingly, R&M for life extension is to be considered after December 2023. However, RLA and other pre-R&M/LE related preparatory works may be taken up in the meantime.

Therefore, it is advised to all power utilities not to retire any thermal units till 2030 and ensure the availability of units after carrying out R&M activities, if required.

बि मल्लिक 20/01/2022

(B C Mallick) / (बी सी मलिक)
CE (TPRM) / सीई (टीपीआरएम)

To:

As per the list.

Copy for information:

1. Secretary (Power), MoP
2. Chairperson, CEA
3. Member (Thermal), CEA

To:

1. CMD, NTPC Limited, NTPC Bhawan, SCOPE Complex, Institutional Area, Lodhi Road, New Delhi – 110003, (FAX NO.: 011 24361018), Email: cmd@ntpc.co.in
2. Chairman, DVC Headquarter, DVC Towers, 9th Floor, VIP Road, Kolkata-700054, Email: chairman@dvc.gov.in
3. The Chairman & Managing Director, PSPCL, The Mall, Patiala-147001 (FAX – 0175-2213199, Email: cmd.pspcl@gmail.com
4. Managing Director, UPRVUNL, UP Rajya Vidyut Utpadan Nigam, Shakti Bhawan, Ashok Marg, Lucknow. (Fax No. 0522-2237922), Email: md@uprvunl.org
5. MD, Haryana Power Generation Corporation Ltd., Room No.411,3rd Floor, Urja Bhawan, C-7, Sector-6, Panchkula, Haryana-134109 (Fax No. 0172-5022432) Email: seplg.pkl@hpgcl.org.in
6. CMD, West Bengal Power Development Corporation Ltd., Bidyut Unnayan Bhaban, Plot No.3/C, Block LA, Sector-III, Bidhannagar, Kolkatta-700098 Fax: 033-23350523/23350516, Email: cmd@wbpdcl.co.in
7. MD, Gujrat State Electricity Corpon. Ltd. (GSECL), Vidyut Bhavan, Race Course, Vadodara-390007 (Fax No. 0265-2337918/2338164), Email: md.gsecl@gebmail.com
8. CMD, MP Power Generating Co. Ltd, Shakti Bhawan, Vidyut Nagar, Rampur, Jabalpur-482009 (Fax: 0761-2665661), Email: mppgcl@mp.nic.in
9. MD, Andhra Pradesh Generation Corporation (APGENCO), Vidyut Soudha, Gunadala, Vijaywada, Andhra Pradesh, India-520004, Email: apg.md@apgenco.gov.in
10. CMD, Karnataka Power Corporation Ltd. (KPCL), Shakti Bhawan, Race Course Road, Banglore-560001, Email: kpclcetd@gmail.com
11. CMD, TSGENCO, Vidyut Saudha, Khaitrabad, Hyderabad-500082 (Fax-040-23499361), Email: cmd@tsgenco.co.in
12. CMD, TANGEDCO, NPKRR Maaligai, 144, Anna Salai, Chennai-60002 (Fax: 044-28521300), Email: chairman@tnebnet.org
13. CMD, HPGCL, Urja Bhawan, C-7, Sector-6, Panchkula, Haryana-134109 (Fax No. 0172-5022432)
14. CMD, Rajasthan Rajya Vidyut Utpadan Nigam Limited, Vidyut Bhawan , Jyoti Nagar, Janpath , Jaipur -302005 (Fax No. 0141 - 2740633), Email: **cmd@rrvun.com**
15. Managing Director, Orissa Power Generating Corp. Ltd., Zone A,7111 Floor,Fortune T.owers, Chandrashekharpur, Bhubaneshwar- 751 023 Fax.No. 0674-2303 755, Email : opgc2.leadership@opgc.co.in
16. CMD, Chhattisgarh State Power Generation Co. Ltd Shed No. 3, Dangania, Raipur (C.G .) 492013, Chhattisgarh(Fax: 077 1 -2574089),
17. CMD, Jharkhand State Electricty Board, HEC Building, Duranda, Ranchi- 834004, Jharkhand , (Fax No. 0651 -24037999/2400816), Email: contactus@jbvnl.co.in
18. Managing Director, MSPGCL, Prakashgad , Plot No-G-9 ,Bandra(east), Mumbai-400051 Fax:02226581400, Email: md@***mahagenco***.in
19. Managing Director, Tenughat Vidyut Nigam Ltd .Hinoo, Doranda, Ranchi - 834002, Jharkhand, Fax 0651 -2507460, Email: info@tvnl.in
20. MD/CMD, JSW Centre, Bandra Kurla Complex, Near MMRDA Grounds, Bandra East,Mumbai 400 051 Fax: +91 22 4286 3000, Email: contact@**jsw**.in
21. CMD, Bajaj Bhawan , Jamnalal Bajaj Marg, B-10, Sector-3, Noida-201 301, Uttar Pradesh Tel. 0120-4045100, Email: jkbajajtrust@***gmail***.com
22. The Durgapur Projects Limited , Dr B C Roy Avenue, Durgapur- 713201, West Bengal , India, Email: admin@dpl.net.in
23. CMD, TRN Energy Pvt. Ltd. / ACB India LTD., 7th Floor, Corporate Tower, Ambience Mall, NH.-8, Gurgaon -122002 , Ph . 0124-2719000, Fax: 0124-2719185, Email:

legal.secretarial@acbindia.com

24. CMD, DB Power Ltd, 3rd Floor, Naman Corporate Link, Opposite Dena Bank, C-31 , Block G,Bandra Kurla Complex, Bandra (E), Mumbai- 400 051 ,Tel No +91-22-7156 6000, Fax No +91 -22-26590264, Email: sandeep.gurav@**dbpower**.in
25. CMD, Bharat Aluminium Company Limited , Aluminium Sadan, Core - 6, Scope Office Complex, Lodi Road , New Del hi – 110003, Email: north.aluminium@vedanta.co.in
26. CMD, Tata Power, Bombay House, 24, Homi Mody Street, Mumbai 400 001 , Tel: (91 22) 66658282, Fax: (91 22) 6665 8801, Email: tatapower@tatapower.com
27. CMD/ MD, Essar, Essar House, Opposite Gujarat College, Ellisbridge, Ahmedabad 380 006, Gujarat , India, Tel.: +91 -79-66086666 , Fax: +91-79-66086608, Email: powersec@essarpower.co.in
28. CMD, CESC Limited , CESC House, Chowringhee Square, Kolkata - 70000 I, Phone: 2225604049, Email: cesclimited@rp-sg.in
29. CMD, Larsen & Toubro Limited, L&T House, Ballard Estate P. 0. Box: 278, Mumbai 400001. Email: Infodesk@larsentoubro.com
30. MD, Haldia Energy Limited, 8, Chittaranjan Avenue, Barick Bhawan, 6th Floor, Kolkata 700072. Email: ranajit.haldiaenergy@rp-sg.in
31. CMD, Lalitpur Power Generation Company Limited, 106-107, Bajaj Bhawan , 10th Floor, Jamnalal Bajaj Marg, 226 Nariman Point, Mumbai -400021 ,Tel. +91-22-22049056 /58, Fax: +91 -22-22048681, Email: cs@lpgcl.com
32. Chairman, Reliance Centre, Santacruz, Near Prabhat Colony, Off. Western Express Highway, Santa Cruz (East), Mumbai 400 055 Tel: +91 22 3303 1000 Fax: +91 22 3303 3662, Email: reliancepower.investors@relianceada.com
33. CMD, Lanco Anpara Power Limited , Plot No. 397, Phase-III ,, Udyog Vihar, Gurgaon-122016, New Delhi Region - India, Phone +91 -124 - 4741 000,Fax +91 -124 - 4741 024, Email: info.power@lancogroup.com
34. MD, Talwandi Sabo Power Limited, Site Cum Regd. Office:,Village Banawala , Mansa - Talwandi Sabo Road, Distt. Mansa, Punjab - 15 1302 INDIA, Tel: +91 -1659-248000 Telefax: 01659-248083, Email: tspl.commercial@vedanta.co.in
35. CMD, GVK Power, Paigah House, 156-159, SP Road, Secunderabad 500003,Telangana, India.,Telephone +91 -40-27902663/4, Email: pvrs@**gvk**.com
36. CMD, Prayagraj Power Generation Co. Ltd, Khan Semra, Uttar Pradesh 212106, Email: ppgcl@ppgcl.co.in
37. Chairman, CSPDCL, Energy Info Tech Centre, Block No. 8, CS Power Companies Campus ,Daganiya, Raipur (CG), Pin – 492013, Email:
38. Sterlite power Transmission Limited , Director, F-1 Mira Corporate Suits, 1 &2 floor, Mathura Road , Ishwar Nagar New Delhi, Delhi, New Delhi, Delhi 110065 Email: amitabh.prasad@sterlite.com
39. Director, Adani Power Limited, Achalraj, Opp Mayor Bungalow, Law Garden, Ahmedabad-380006 ,Gujarat, lndia.,Tel:+91 79 2555 7555,Fax:+91 79 25557177 Email: deepak.pandya@adani.com
40. Director, Jaiprakash Power Ventures Limited, Complex of Jaypee Nigrie Super Thermal Power Plant, Tehsil Sarai, Nigrie, Singrauli , Madhya Pradesh - 486669 , India, Phone No: (7801) 286021 - 39, Fax: (780 I) 286020, Email: mm.sibbal@jalindia.co.in
41. CMD, NLC India Ltd., First Floor, No.8, Mayor Sathyamurthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai-60003 I ,Tamil Nadu, India. Ph No. 044-28364613,614,615,616,617 Fax. 044-28364619 Email: cmd@nlcindia.com
42. CMD, The Singareni Collieries Company Ltd., Kothagudem Collieries, Bhadradri Kothagudem Dist , Telangana State PIN: 507101. Ph No 08744-242301 /02/03/04 Fax: 08744-242305, Email: dp@scclmines.com

43. CMD, Hinduja National Power Corporation Limited , Hinduja House, 171 , Dr. Annie Besant Road,, Worli , Mumbai - 40001 8, India, Phone : +91 -22-24960707, Fax : +91 -22-24960747 Email: sunil.hnp@hindujagroup.com
44. CMD, R.K.M Powergen Private Limited , 14/45 Dr.Giriappa Road , T.Nagar,, Chennai - 600017, Tamil Nadu, India, Telephone : +91 -44-66291000, Email: m.malathi@rkmpowergen.in
45. Chairman, jhabua Power, Avantha Power & Infrastructure Limited, 6th floor, Vatika City Point, M.G. Road -Gurgaon - 122002, India, Tel: + (91 124) 439 2000, Fax: + (91 124) 437 6496, Email: communications@***avanthapower***.com
46. Chairman , KSK Energy Ventures Limited, 8-2-293/82/A/43 I/A, Road No:22 , Jubilee Hills, Hyderabad, Telangana 500033, India , Tel: 04023559922 /23/24/25 Fax: 04023559930, Email: info@ksk.co.in
47. Dy. General Manager, Mahatma Gandhi TPS, Jhajjar Power Ltd . (CLP India Co.), Tehsil Matenhail , Distt Jhajjar-124142, Email: rajiv.mishra @clpindia.in
48. Chairman, Adhunik Industries Ltd., Lansdowne Towers, 2/1 A, Sarat Bose Road Kolkata 700020, West Bengal , INDIA Tel: 033 3051 7100 Fax 033 22890285 Email: bharatagarwal@adhunikgroup.co.in
49. Chairman , Rattanlndia Power Limited, 5th Floor, Tower-8, World mark I , Aerocity,, New Delhi - 110037 Email: powersectt@rattanindia.com
50. CMD/MD, Taqa Neyveli Power Company Pvt Ltd, Uthangal, Tamil Nadu 607804, Email: raghu.nathan@taqaglobal.com
51. CMD/MD, Coastal Energy Pvt. Ltd , 5th Floor, Buhari Towers,4, Moores Road, Chennai - 600 006, INDIA Tel: +91 44 4397 4397. Fax: +91 44 2826 8316. Email: nadeem.ma@coastalenergen.com
52. MD/CMD, CLP India Private Limited, 7th Floor, FULCRUM , Sahar Road, Andheri (East), Mumbai - 400 099, Tel : +91 -22-6758 8888, Fax: +91 -22-6758 881 1/8833
53. MD/CMD, Dhariwal Infrastructure Limited., C-6, Tadali Growth Centre, MIDC Tadali, District: Chandrapur, Maharashtra – 442406, India., Phone:07172 645911/645912/645913, FAX : 07172 237992,Email : dhariwalinfrastructure@rp-sg.in
54. MD/CMD,Adhunik Group,14, N. S. Road, 2nd Floor, Kolkata 700001, West Bengal, INDIA
55. MD/CMD, Essar, Essar House, 11, Keshavrao Khadye Marg, Mahalaxmi, Mumbai 400034, Maharashtra, India Tel.: +91-22- 66601100Fax: +91-22-66601809
56. MD/CMD, Jindal Power Limited, Jindal Centre, 12, Bhikaiji Cama Place, New Delhi 110 066, India, Email: info@jindalpower.com
57. MD/CMD , Gujarat Mineral Development Corporation Limited , 132 feet - Ring Road, Vastrapur, Ahmedabad – 380052 Phone : 079-27913501, 27913200 Fax : 079-27913038 Email : contact@gmdcltd.com
58. MD/CMD, Gujarat Industries Power Company Ltd. , P.O. Petrochemical – 391346 Dist.: Vadodara, Gujarat – India Phone: +91-265-2232768 Fax: +91-265-2230029 Email: genbaroda@gipcl.com
59. MD/CMD Torrent Power Generation Ltd, Sola Road, Naranpura,Ahmedabad - 380 013 Ph +91 79 22551912 / 66551912 Email: connect.ahd@torrentpower.com
60. MD/CMD TAQA Neyveli Power Company Pvt. Ltd, 79 Kasturi Avenue, MRC Nagar, R A Puram, Chennai Pin:600028 India Tel: +91 44 4209 7811 Fax: +91 44 4209 7812
61. MD/CMD, M/S SKS ISPAT AND POWER LTD., B-501, Elegant Business Park, Andheri Kurla Road, J.B.Nagar, Andheri - (E), Mumbai - 400 059 Telephone: +91-22-3080 7000 Fax: +91-22-3080 7070 / 7080 E-Mail: corporateoffice@sksispat.com
62. MD/CMD , Sembcorp Energy India Limited, 5th floor, Tower C, Building No. 8, DLF Cybercity, Gurgaon 122002 Haryana, India Ph: (91) 12 4389 6700
    Email: cs.**india@sembcorp.com**

63. MD/CMD, Hindustan Power projects Private Ltd., 239, Okhla Industrial Estate, Phase-III New Delhi-110020 Tel: +91-11-47624100, Fax: +91-11-47624229 Email: info.hpppl@hpppl.in
64. MD/CMD, JINDAL INDIA THERMAL POWER LIMITED , Plot No 12, Sector B-1, Local Shopping Complex , Vasant Kunj NEW DELHI 110 070 Tel: 011-26139256-65 Fax: 011-26125739, E-Mail: jitpl@jindalgroup.com
65. MD/CMD, Ind-Barath Power Infra Limited, Hyderabad, Plot No. 30-A, Road No. 1, Film Nagar, Jubilee Hills, Hyderabad - 500 096 , Andhra Pradesh, INDIA. Phone: +91-40-23553459 Fax: +91 40 23607522 Email: hyderabad@ibpil.com
66. MD/CMD, GMR Enterprises Private Limited, Third Floor, Old No.248/New No.114, Royapettah High Road, Royapettah, Chennai - 600 014 Email: Yogindu.Khajuria@gmrgroup.in
67. CMD, India Power Corporation Ltd., Plot No.X, 1, 2 & 3, Block – EP, Sector-V, Salt Lake City, Kolkata – 700091, Email: pr@indiapower.com, Fax: +91 33 2357 2452
68. Chairman/CMD, MAHAGENCO, Maharashtra State Power Generation Co. Ltd., Prakashgad, Plot No. G-9, Bandra (East) Mumbai-400 051
69. CMD/MD, East Coast Energy Pvt. Ltd., H. No. 7-1-50, Flat No. 203, Myneni Apartments, Dharam Karam Road, Ameerpet, Hyderabad TG 500016 Email: **irp.eastcoast@bdo.in**
70. MD/CMD, Lanco Amarkantak Pvt. Ltd., 397, Phase II, Udyog Vihar, Sector 20, Gurugram, Haryana 122008
71. MD/CMD, Vandana Vidyut Ltd., Vandana Bhawan M.G.Road, Raipur, Chhattisgarh 492001 Email: codinthree@rediffmail.com
72. MD/CMD, Visa Power Ltd., 8/10 Alipore Road, Kolkata, West Bengal 700027, Email ID: secretarial@visa-group.com
73. MD/CMD, Corporate Power Ltd., FE-83, SECTOR-III Salt Lake City, Ground Floor, Kolkata, West Bengal- 700106, Email : mcainfo@abhijeet.in
74. MD/CMD, Jinbhuvish Power Generation Pvt. Ltd., 101, E High Ct Rd, New Ramdaspeth, Ramdaspeth, Nagpur, Maharashtra 440010, Email: companylaw.info@gmail.com
75. MD/CMD, Shirpur Power Pvt. Ltd., 903, Shilp Building, Opposite Navrangpura Telephone Exchange, Ahmedabad, Gujarat- 380009, India,
    Email ID: nikunj.shah@shirpurpower.in
76. MD/CMD, D.B. Power (MP) Ltd., Office Block 1A,5th Floor, Corporate Block, DB City-Park, DB City, Arera Hills Opposite MP Nagar, Zone -I Bhopal, Madhya Pradesh- 462016, Email : sandeep.gurav@dbpower.in
77. MD/CMD, Ind Barath TPP Odisha, Ind Barath Energy Utkal Ltd., H NO. 8-5-210/43, Plot No 44, Shiva Enclave old Bowenpally, Secunderabad, Rangareddi Telangana 500011, Email : brs@ibpil.com
78. MD/CMD, KVK Nilanchal, Plot No. 484/A, Road No. 36, Jubilee Hills, Hyderabad-500033, Email: srinivasaraoa@kvkenergy.com
79. MD/CMD, LBP Ltd., Lanco Babandh Thermal Power Plant, Plot # 4, Software Units Layout, HITEC City, Madhapur Hyderabad, Telangana 500081,
    Email: dheeraj.kumarmishra@lancogroup.com
80. MD/CMD, Monnet Power Company Ltd. (MPCL), Malibrahmani TPP, Monnet House, 11, Masjid Moth, Greater Kailash Part-II, New Delhi- 110048
81. MD/CMD, IBPIL- Tuticorin TPP (Ind- Barath), Plot No. 30-A, Road No. 1, Film Nagar, Jubilee Hills, Hyderabad - 500 096, Email: hyderabad@ibpil.com , chennai@ibpil.com
82. MD/CMD, SEPC Power Company Ltd., Tuticorin TPP Stage-IV, MEIL House, First Floor No 395 (Old No 280-A) Anna Salai, Teynampet, Chennai, Tamil Nadu 600018, Email ID: sepc.ppl@meilteam.in
83. MD/CMD, India Power Corporation (Haldia) Limited, Plot No. X1- 2 & 3, Block-EP,

Sector - V, Salt Lake City, Kolkata - 700 091.

84. MD/CMD, Lanco Vidharbha Power Pvt. Ltd., 11th Milestone, Belgaon-Mandwa Road, PO Mandwa, Dist Wardha, Maharashtra -422001 Phone +91-715-2283715
85. MD/CMD, BLA Power Pvt. Ltd., 84 Maker Chambers III, Nariman Point, Mumbai, Maharashtra- 400021 Email: compsec@bla.co.in
86. MD/CMD, BRBCL (Bharatiya Rail Bijlee Company Ltd.), Bihar State Power Generation Company Ltd., 5th Floor, Vidyut Bhawan, Bailey Road, Patna-800001, Email ID : gmhrbspgcl@gmail.com
87. MD/CMD, Corporate Power Ltd., FE-83, Sector-III Salt Lake City, Ground Floor, Kolkata, West Bengal- 700106, Email ID : mcainfo@abhijeet.in
88. MD/CMD, Dishergarh Power Supply Company Ltd. (DPSCL), Plot No.- X-1, 2 & 3 Block EP Sector-V, Salt Lake, Kolkata 700091 Email: rpower.mcafiling@relianceada.com
89. MD/CMD, Essar Power Ltd., LGF, A-20, Kailash Colony, Hotel Conclave Complex, Block A, Kailash Colony, Greater Kailash, New Delhi, Delhi 110048 Email: Shailendra.saha@essarpower.co.in
90. CMD/MD, NTPC SAIL Power Company Ltd. (NSPCL), NBCC Tower, 15, 4th Floor, Bhikaji Cama Place, New Delhi
91. MD/CMD, Shirpur Power Pvt. Ltd., 903, Shilp Building, Opposite Navrangpura Telephone Exchange, Ahmedabad, Gujarat- 380009, India,
    Email ID: nikunj.shah@shirpurpower.in
92. Chairman, DVC, DVC Head Quarters, DVC Towers, VIP Rod, Kolkata-700054 Email id : chairman@dvc.gov.in
93. CMD/MD, Global Energy Pvt. Ltd. (GEPL), 2, Panchsheel Community Centre, New Delhi-110017 Email: gyansheel@globalenergy.net.in
94. Bishagarh, Email address: cmd.**tsecl**@rediffmail.com
95. NTEC , NTPC Tamil Nadu Energy Company Ltd. NTPC Tamil Nadu Energy Company Limited , Vallur Thermal Power Project,
    Vellivoyal chavadi, Ponneri Taluk, Thiruvallur, Tamil Nadu - 600 103
96. Vidarbha Industries Ltd. Subsidiary of reliance Power, Email : rpower.mcafiling@relianceada.com
97. Korba West power Company Ltd., Avantha Power, Email: communications@**avanthapower**.com
98. MD/CMD, ITPCL, IL&FS Tamil Nadu Power Company Limited 4th Floor, KPR Tower, Old No. 21, New No. 2, 1st Street, Subba Rao Avenue,College Road, Chennai - 600 006, Email: info@itpclindia.com

सत्यमेव जयते

No. 11/3/2022-Th-I
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,
New Delhi, dated 23th December, 2022

OFFICE MEMORANDUM

Sub: Minutes of the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 06.12.2022 at 03:30 PM to discuss Life Extension (LE) and Renovation and Modernization (R&M) of Coal Based Thermal Power Plants - Reg.

The undersigned is directed to forward herewith a copy of Minutes of the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on **06.12.2022 at 03:30** PM at 2nd Floor, Shram Shakti Bhawan, Rafi Marg, New Delhi to discuss Life Extension (LE) and Renovation and Modernization (R&M) of Coal Based Thermal Power Plants.

Encl: As above

(Sunil Kumar Sah)
Under Secretary to the Government of India
Telefax: 23719710

To:

1. Chairman, CEA
2. CMD, NTPC Ltd.

Copy for information to:

PS to Hon'ble Miniser of Power & NRE /PS to Hon'ble MoS (Power & HI)/Sr. PPS to Secretary (P)/PPS to JS (Th)/ PS to Dir (Th), Ministry of Power

(Sunil Kumar Sah)
Under Secretary to the Government of India

Minutes of the meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 06.12.2022 to discuss Life Extension (LE) and Renovation and Modernization (R&M) of Coal Based Thermal Power Plants

List of Participants is given at **Annexure**.

2. At the outset, Secretary (Power) welcomed all the participants and apprised the agenda of the meeting. It was informed that Renovation & Modernization (R&M) is an important but neglected area. Various states are going for retirement and subsequent repurposing of their plants instead of opting for R&M in more efficient manner.

3. CMD, NTPC briefed about the R&M experience of GSECL's Wanakbori Thermal Power Station and NTPC's Ramagundam TPS.

4. Considering the expected demand scenario and availability of the capacity, Hon'ble Minister instructed not to retire any thermal Unit and urged to carry out R&M for life extension and improve the flexibility and reliability of the Units.

5. CEA made a presentation explaining objectives and guiding principles of R&M emphasizing that priority should be given to R&M and LE. It was agreed that CEA will take up with States and other Utilities for revisiting their plans for retirement/ re-purposing of thermal Units, if any.

6. Secretary (Power) asked CEA to prepare a scheme for LE and R&M and a phasing plan for the R&M of Units.

7. It was discussed that 15-16 GW of new thermal capacity is expected by December 2023. Accordingly, R&M for life extension is to be considered after December 2023. However, RLA and other pre-R&M / LE-related preparatory works are to be taken up.

8. Hon'ble Minister asked CEA to review the off-bar capacity Utility wise and take measures for bringing them on-bar.

The meeting ended with a vote of thanks to all the participants.

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Annexure

List of Participants in the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 06.12.2022 to discuss Life Extension (LE) and Renovation and Modernization (R&M) of Coal Based Thermal Power Plants.

S. No	Name	Designation
Ministry of Power		
1	Shri Alok Kumar	Secretary
2	Shri Piyush Singh	Joint Secretary (Thermal)
3	Shri Satish Kumar	Director (Thermal)
4	Shri Sunil Kumar Sah	Under Secretary (Thermal)
CEA		
5	Shri Praveen Gupta	Member (Thermal)
6	Shri B C Mallick	Chief Engineer, TPR&M
7	Shri Pravir Kumar	Director, TPR&M
8	Shri Surender Kumar	Dy. Director, TPR&M
NTPC Ltd		
9	Shri Gurdeep Singh	CMD
10	Shri U K Bhattacharya	Director (Projects)
11	Shri Ramesh Babu	Director (Operations)
12	Shri M K Shrivastava	Executive Director (Engineering)
13	Shri A P Samal	General Manager
14	Shri Soumyajit Mukherjee	Addl General Manager
15	Shri Santosh Kumar V	Deputy General Manager

ANDHRA PRADESH POLLUTION CONTROL BOARD
D.No.33-26-14D/2, Near Sunrise Hospital, Pushpa Hotel Centre,
Chalamalavari Street, Kasturibaipet, Vijayawada – 520 010
Phone. No.0866-2463200, Website : https://pcb.ap.gov.in/

RED CATEGORY
RENEWAL OF CONSENT AND HAZARDOUS WASTE AUTHORIZATION ORDER

Consent Order No: APPCB/VJA/VJA/24/CFO/HO/2016 24/04/2023

CONSENT is hereby granted to operate under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21/22 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation under Rule 6 of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 & Amendments thereof and the rules and orders made there under (hereinafter referred to as 'the Acts', `the Rules') to:

M/s Dr. Narla Tatarao Thermal Power Station,
Sy.No.25 to 61, Ibrahimpatnam Mandal,
Krishna District
E-mail: vtps.ce@apgenco.gov.in

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

i). Outlets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge in KLD	Point of Disposal
Old Plant (6x210 MW)			
1-6	Condenser Cooling Waters	42,00,000	Shall discharge to Budameru Di Channel which joins River Krishr
7	Floor washings, blow down and domestic effluent from plant	39,600	The industry shall commission a er recycling system and recycle 80% of effluent and discharge b 20% treated effluents (8245 KL Budameru diversion channel wh s River Krishna.
8.	Ash pond effluent from decant system	61,200	River Krishna
9.	Ash pond effluent from toe drain	1500	River Krishna

10.	DM Plant effluent	300	After neutralization, temporarily ed for discharge into Budameru on channel (BDC) joining River K . After commissioning of the recy ystem, the effluent to be diverted P.
11.	Domestic Effluents fro m A, C and Security co lonies	3000	After treatment in STP, the maxi eated effluents shall be utilized f ening / toilets / flushing only. Excess treated effl o be discharged into Budameru on channel which in turn joins riv hna..
12.	Domestic Effluents fro m B colony	2000	After treatment in the STP, the m m treated effluents shall be utiliz gardening / toilets / flushing only. Excess treated effl o be discharged into Budameru on channel which in turn joins riv hna
New Plant (1 x 500 MW)			
13.	Boiler blow down - 720 KLD + Plant washings - 168 KLD	888	After treatment, shall either recy effluent for ash disposal system e for irrigation / gardening duly c ng discharge standards
14.	Domestic	72	After treatment in STP, shall be for irrigation / gardening purpose

ii). Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissi at peak flow
Old Plant (6x210 MW)		
1.	Attached to 700 TPH Coal fired Boiler of Unit - I Attached to 700 TPH Coal fired Boiler of Unit - II Attached to 690 TPH Coal fired Boiler of Unit – III	--
2.	Attached to 690 TPH Coal fired Boilers of Unit -IV Attached to 690 TPH Coal fired Boilers of Unit - V Attached to 690 TPH Coal fired Boilers of Unit-VI	--
New plant 1 x 500 MW		
3.	Attached to 1625 TPH coal fired boiler of Unit - VII	--

iii). Hazardous Waste Authorization (Form – II) [see Rule 6]:

M/s. Dr. Narla Tatarao Thermal Power Station (formerly Vijayawada Thermal Power Station), Krishna District, is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

S. No.	Name of the Hazardous Waste	Stream Number as per HWM Rules	Quantity of Hazardous waste	Disposal Option
1.	Used oil / used Transformer oil	5.1 of schedule–I	202 KLPA	Shall be routed through M/s. APEMC to Authorized reprocessors / Recyclers
2.	Used Grease	5.1 of schedule–I	20 TPA	
3.	Containers and container liners of Hazardous waste and Hazardous chemicals	33.3 of Schedule-I	400 nos./annum	After complete detoxification to be disposed to outside agencies.
4.	Copper Scrap	--	3.0 MTPA	Shall be routed through M/s. APEMC to authorized Recyclers
5.	Copper Cable Scrap	--	2.0 MTPA	Shall be routed through M/s. APEMC to authorized Recyclers

Non hazardous / other waste details:

S. No.	Name of the waste	Source of generation	Quantity of waste	Disposal Option
1.	Used Batteries	--	230 Nos / annum	Return back to the dealers.
2.	Fly Ash	Boilers	11390 TPD	To be supplied to fly ash brick manufacturers / Govt. Contractors / Asbestos units and cement industries.
3.	Bottom ash	Boilers	2280 TPD	Disposed to fill low lying areas.

This consent order is valid for the following products along with quantities indicated only:

Sl. No.	Product	Quantity
1.	Electric power	1760 MW (6 x 210 MW + 1x 500 MW)

This order is subject to the provisions of 'the Acts' and 'the Rules' and orders made

thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of Consent & Hazardous Waste Authorization shall be valid for a period ending with the **31.12.2027.**

B SREEDHAR IAS, MS(BS), O/o MEMBER SECRETARY-APPCB

To
M/s Dr. Narla Tatarao Thermal Power Station,
Sy.No.25 to 61, Ibrahimpatnam Mandal,
Krishna District.

Copy to:

1. The Joint Chief Environmental Engineer, Zonal Office, **Vijayawada** for information.
2. The Environmental Engineer, Regional Office, **Vijayawada** for information and necessary action.

SCHEDULE-A

1. Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
2. The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
3. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
4. Notwithstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
5. The industry shall ensure that there shall not be any change in the process technology, source & composition of raw materials and scope of working without prior approval from the Board.
6. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
7. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board.
8. The industry should immediately submit the revised application for consent to

this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.

9. 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 Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.
10. The conditions stipulated are without prejudice to the rights and contentions of this Board in any Hon'ble court of law.
11. The industry shall be liable to pay Environmental Compensation / Other Environmental Taxes, if any environmental damage caused to the surroundings, as fixed by the Collector & District Magistrate or any other competent authority as per the Rules in vogue.
12. The industry may explore the possibility of tapping the solar energy for their energy requirements.
13. The industry should educate the workers and nearby public of possible accidents and remedial measures.

SCHEDULE-B

The industry shall comply with the following:

1. The industry shall comply with all the standards issued by MoEF&CC and CPCB to the Thermal Power Plants.
2. The industry shall develop balance greenbelt to meet the 33% of total area within One year.
3. The industry shall provide & maintain flow meters with totalisers for water and effluent quantity measurements for different streams of effluents and different categories of water usage stipulated in this order within one month.
4. The industry shall obtain Fire NOC and shall submit the copy at RO.
5. The industry shall provide Cooling tower for stage – I to III as per the MoEF Notification dt.07.12.2015 and Amendments thereof.
6. The industry shall provide Flue gas De-sulphurization (FGD) system for control of SO2 emissions as per MoEF Notification.
7. The industry shall provide hydro bins for stage – I to III for bottom ash (wet ash) disposal.
8. The industry shall provide online surveillance system to the ash conveying pipeline such as SCADA system to monitor continuous ash conveyance to control and to plug any leakages to mitigate unusual damage on to the surrounding environment.
9. The industry shall provide flow meters for water consumption utilized at ash disposal points and colony potable water.

Water:

10. The industry shall comply the following effluent standards based on the disposal points permitted :

Outlet	Parameter	Concentration (mg/l except for pH and Temp.)
1 to 6	PH	6.50-8.50
	Temperature	Not more than 10 deg C higher than the intake water temperature.
	Free available chlorine	0.5
7.	pH	6.50 – 8.50
	BOD [3 days at 27°C]	30
	Suspended Solids	100
	Oil and grease	20
	Free available Chlorine	0.5
	Zinc	1.0
	Chromium (Total)	0.2
	Phosphate as PO_4	5.0
8-9	pH	6.5 – 8.5
	Suspended Solids	100
	Oil and grease	20
10	pH	5.5 – 9.0
	Suspended Solids	100
	TDS	2100
11-12	PH	5.50 – 9.0
	Suspended Solids	100
	Oil and grease	20
	BOD [3 days at 27°C]	30
	COD	250
13-14	PH	5.50 – 9.0
	Suspended Solids	200
	Oil and grease	10
	BOD [3 days at 27°C]	100

11. The source of water being River Krishna. The following is the permitted water consumption.

S.No	Purpose	Quantity (Old Plant - 6X 210 MW)	Quantity (New Plant 1x500 MW)
1.	Cooling make up	42,00,000 KLD*	36000 KLD
2.	Boiler feed make up	2,222 KLD	1728 KLD
3.	Ash slurry	83,588 KLD**	--
4.	D.M. Plant	339 KLD	--
5.	Washings	--	360 KLD
7.	Ash handling	--	1200 KLD
6.	FGD plant	--	1440 KLD
8.	Domestic	5242 KLD	120 KLD

	TOTAL	**42,91,391 KLD**	**40,848 KLD**

*The industry shall submit the action plan with time schedule for compliance regarding the installation of cooling tower.

**The industry shall commission the ash water recycling system.

12. The Industry shall also comply with water consumption limits and time lines notified by the MoEF CC, GOI in the G.S.R. 3305 (E), dated 07.12.2015 as applicable.

Industry	Parameter	Standards
Thermal Power Plant (Water consumption limit)	Water consumption	I. All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption upto maximum of 3.5 m3/MWh within a period of two years from the date of publication of this notification. II. All existing CT-based plants reduce specific water consumption upto maximum of 3.5 m3/MWh within a period of two years from the date of publication of this notification.

13. The industry shall make arrangements for not to exceed the norms of 10 degree centigrade temperature difference for cooling water.
14. The industry shall install water flow meter at the hot water pumps (cooling water recirculation water).
15. The Industry shall also comply with standards notified by the MoEFCC, GOI in the G.S.R. 3305 (E), dated.07.12.2015 and G.S.R. 682 (E), dated 07.03.2016 as applicable.

	Parameter	Standards
	TPPs (units) installed before 31st December, 2003*	
Chimney 1 & 2	Particulate Matter	100 mg/Nm^3
	Sulphur Dioxide (SO_2)	600 mg/Nm^3 (units smaller than 500 MW capacity unit) s 200 mg/Nm^3 (for units having capacity of 500 MW and above)
	Oxides of Nitrogen (NOx)	600 mg/Nm^3
	Mercury (Hg)	0.03 mg/Nm3 (for units having capacity of 500 MW and above)

Chimney 3	**TPPs (units) installed after 1st January, 2004, upto 31st December, 2016***

	Particulate Matter	50 mg/Nm^3
	Sulphur Dioxide (SO_2)	200 mg/Nm^3 (for units having capacity of 500 MW and above)
	Oxides of Nitrogen (NO_x)	450 mg/Nm^3
	Mercury (Hg)	0.03 mg/Nm^3

16. The industry shall comply with ambient air quality standards of PM_{10} (Particulate Matter size less than 10 mircon) – 100 mircogram/ m^3; $PM_{2.5}$ (Particulate Matter size less than 2.5 micron) – 60 mircogram / m^3; SO_2 – 80 mircogram / m^3 ; NOx – 80 mircogram / m^3 ; outside the factory premises at the periphery of the industry.

Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.

Noise Levels: Day time (6AM to 10PM) -75 dB (A)
Night time (10PM to 6AM) – 70dB (A)

17. The industry shall provide a sampling port with removable dummy of not less than 15 cm diameter in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform
18. The industry shall maintain CAAQM stations at B-Colony near Kondapalli and at East side compound wall near Rayanapadu (V). Continuous Ambient Air Quality Monitoring Stations with online link up with the APPCB web site shall be maintained.
19. The industry shall improve the performance of ESPs attached to the unit – I to VI and also to take measures to achieve Board's Emission Standards consistently.
20. The industry shall install and maintain online effluent and emission monitoring systems and connect monitoring systems to APPCB/CPCB websites as per CPCB directions dated 05.02.2014 & 02.03.2015 and guidelines issued regarding online monitoring systems from time to time.

GENERAL:

21. The industry shall treat the domestic effluents from A, B, C & security Colonies before discharging into Budameru diversion channel.
22. The industry should not join the effluents into agricultural channels located towards East side of the new plant.
23. The drums containing chemicals / solvents shall be stored under a roof on elevated platform with a provision to collect leakages / spillages in the collection pit.
24. The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board:

a. Daily production details (ER-1 Central Excise Returns).
b. Quantity of Effluents generated, treated, recycled/reused and disposed.
c. Log Books for pollution control systems.
d. Characteristics of ambient air, effluents and emissions.
e. Hazardous/non hazardous solid waste generated and disposed.
f. Inspection book.
g. Manifest copies of hazardous waste.

25. The industry shall carry out the Health studies for Human beings and Animals in influence Zone and Non influence zone in coordination with DM&HO and Animal Husbandry Departments within three months.
26. The industry shall achieve 100% utilisation of fly ash for current generation as per Fly Ash Notification dated 03.11.2009 and amendments thereof.
27. The industry shall transport the flyash through vehicles by covering with tarpaulin to avoid the dust nuisance during transportation.
28. As per the new fly ash notification dated.31.12.2020, the legacy ash existing in the ash pond spread in the area of 1000 Hectares has to be cleared. The industry has informed that, they have provided piezo metric wells for bund - I & II of existing ash pond.
29. The industry shall maintain permanent water sprinklers around the fly ash loading vehicle at fly ash loading point to wash the vehicles after its loading to avoid fugitive emissions during transportation.
30. The industry shall maintain one additional collection tank / sump for washing effluents at fly loading point with spare high speed motor pump for pumping of the sludge to Hydrobin.
31. The industry shall maintain full-fledged environmental cell for this plant (Stage – IV) and conduct review meeting with stakeholders regularly.
32. The industry shall maintain proper coal dust collection system (vacuum collection) at coal transfer points to avoid fugitive emissions.
33. The industry shall maintain records for quantity of effluents generated, treated, recycled/reused and disposed, Log Books for pollution control systems, Characteristics of ambient air, effluents and emissions, Hazardous/non hazardous solid waste generated and disposed.
34. The industry shall explore the possibility for reusing the treated effluent to the extent possible.
35. The industry shall use Beneficiated Coal, i.e. coal containing ash content not more than 34% as per MoE&F, notification no. GSR 560(E), dt. 19-09-1997.
36. The industry shall obtain certificate from APSDR&FS department for applicability of fire NOC.
37. The industry shall submit the documents pertaining to training records on prevention of accidents and necessary antidotes.
38. The industry shall comply with the conditions stipulated in the CFE amendment order dt. 07.03.2020.
39. The industry shall complete the construction of ash pond seepage structures in Stage – V as per the TF direction dated 27.12.2018.
40. The industry shall take up ash water recycling system as committed by the management (i.e. along with commissioning of 800 MW project) by March, 2019 as per the TF direction dated 27.12.2018.

41. The industry shall provide Flue Gas De-Sulphurization (FGD) System for control of SO2 emissions as per the notification No.3305, dt. 07.12.2015 of MoEF & CC as per the TF direction dated 27.12.2018.
42. The industry shall maintain proper lift and ensure proper working conditions for conducting stack monitoring.
43. The industry shall comply all the directions issued by the Board vide order dated 04.04.2016, 23.07.2016, 22.11.2016, 27.12.2018 & 06.01.2023.
44. The online stack monitoring systems with recording facility to all the six units shall be maintained properly and shall keep in good working condition. Monthly consolidated report shall be submitted to the E.E., APPCB, Vijayawada.
45. The industry shall maintain valid PLI policy which includes Environmental Relief Fund (ERF) and submit copy to RO, Vijayawada on yearly basis.
46. The industry shall comply with standards and directions issued by CPCB / MoEF & CC as and when notifications are issued.
47. The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the industry and second half yearly compliance reports shall be the audited through MoEF&CC recognized and National Accreditation Board for Laboratory Testing (NABL) accredited third party.
48. The industry shall prepare a safety report and carry out an independent safety audit report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC Rules, 1989 and get it approved by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit report and safety certificate at concerned Regional Office, APPCB.
49. The industry shall carryout calibration of safety equipment and leak detection systems at regular intervals and shall certify the same with the Factories Department. That certified copy shall be submitted to the APPCB, Regional Office.
50. The industry install fluorescent Wind Vane at the highest point in the industry premises.
51. The industry shall submit Risk analysis and risk assessment covering worst scenario clearly describing impact within the industry premises and outside the industry premises and emergency response system
52. The industry shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.

SCHEDULE – C

[See rule 6(2)]

[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.

2. The authorisation shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
8. An application for the renewal of an authorisation shall be made as laid down under these Rules.
9. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

Specific Conditions:

10. The industry shall comply with the provisions of HWM Rules, 2016 in terms of interstate transport of Hazardous Waste and manifest document prescribed Under Rule 18 and 19 of the HWM Rules, 2016.
11. The industry shall not store hazardous waste for more than 90 days as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
12. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.
13. The industry shall maintain proper records for Hazardous and Other Wastes stated in Authorisation in Form-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form-4 as per Rule 20 (2) of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B SREEDHAR IAS, MS(BS), O/o MEMBER SECRETARY-APPCB

To
M/s Dr. Narla Tatarao Thermal Power Station,
Sy.No.25 to 61, Ibrahimpatnam Mandal,
Krishna District

igned by B Sreedhar Ias
ate: 24-04-2023 18:13:25
eason: Approved

ANDHRA PRADESH POLLUTION CONTROL BOARD
D.No.33-26-14D/2, Near Sunrise Hospital, Pushpa Hotel Centre,
Chalamalavari Street, Kasturibaipet, Vijayawada – 520 010
Phone. No.0866-2463200, Website : https://pcb.ap.gov.in/

RED CATEGORY
RENEWAL OF CONSENT AND HAZARDOUS WASTE AUTHORIZATION ORDER

Consent Order No: APPCB-11022/66/2022-TEC-CFO-APPCB 28/04/2023

CONSENT is hereby granted to operate under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21/22 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation under Rule 6 of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 & Amendments thereof and the rules and orders made there under (hereinafter referred to as 'the Acts', `the Rules') to:

M/s Dr. Narla Tatarao Thermal Power Station,
Stage – V (1x800 MW), Ibrahimpatnam (V & M),
NTR District
E-mail: vtps.ce@apgenco.gov.in

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

i). Outlets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge in KLD	Point of Disposal
1.	Cooling tower bleed off – 7200 KLD & Process – 3216 KLD	10416	Treated waste water shall be reused for ash quenching / greenbelt development within the premises. Excess effluents shall be discharged into Budameru Diversion Canal.
2.	Domestic	240.0	After treatment in the STP it is being discharged into Budameru diversion channel.

ii). Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissions at peak flow
1.	Attached to 1 x 2600 TPH coal fired boiler	--

iii). Hazardous Waste Authorization (Form – II) [see Rule 6]:
M/s. Dr. Narla Tatarao Thermal Power Station (formerly Vijayawada Thermal Power Station), NTR District, is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

Non hazardous / other waste details:

S. No.	Name of the Hazardous Waste	Quantity of Hazardous waste	Disposal Option
1.	Ash generation	3492 TPD	Supplied to fly ash brick manufacturers / Road

2.	Fly ash (80%)	698 TPD	construction / building construction / Embankment / Govt. Contractors / Asbestos units and cement industries through M/s. APEMC.
3.	Bottom Ash (20%)	2794 TPD	Disposed by landfilling in low lying areas.

This consent order is valid for the following products along with quantities indicated only:

Sl. No.	Product	Quantity
1.	Electric power	800 MW

This order is subject to the provisions of 'the Acts' and 'the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of Consent & Hazardous Waste Authorization shall be valid for a period ending with the **30.04.2026.**

B SREEDHAR IAS, MS(BS), O/o MEMBER SECRETARY-APPCB

To
M/s Dr. Narla Tatarao Thermal Power Station,
Stage – V (1x800 MW), Ibrahimpatnam (V & M),
NTR District.

Copy to:

1. The Joint Chief Environmental Engineer, Zonal Office, **Vijayawada** for information.
2. The Environmental Engineer, Regional Office, **Vijayawada** for information and necessary action.

SCHEDULE-A

1. Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
2. The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
3. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
4. Notwithstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
5. The industry shall ensure that there shall not be any change in the process technology, source & composition of raw materials and scope of working without prior approval from the Board.
6. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
7. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board.
8. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the

Board. The person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.

9. 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 Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.
10. The conditions stipulated are without prejudice to the rights and contentions of this Board in any Hon'ble court of law.
11. The industry shall be liable to pay Environmental Compensation / Other Environmental Taxes, if any environmental damage caused to the surroundings, as fixed by the Collector & District Magistrate or any other competent authority as per the Rules in vogue.
12. The industry may explore the possibility of tapping the solar energy for their energy requirements.
13. The industry should educate the workers and nearby public of possible accidents and remedial measures.

SCHEDULE-B

The industry shall comply with the following within six months:

1. The industry shall provide and maintain online digital flow meters for STPs & ETPs and same connected to APPCB website;
2. The industry shall provide the water flow meters for water consumption.
3. The industry shall commission the 2 MLD STP;
4. The industry shall provide sampling port with removable dummy for stack monitoring facility for the boiler of 2600 TPH;
5. The industry shall provide and maintain online emission monitoring systems for stacks and continuous data shall be transmitted to APPCB website;
6. The industry shall provide and maintain online effluent monitoring system to STP and continuous data shall be transmitted to APPCB website;
7. The industry shall obtain Fire NOC;
8. The industry shall obtain CTE amendment to acquire 70 acres of land for ash pond;
9. The industry shall construct the cyclone dust collector for the coal crusher;
10. The industry shall provide permanent water sprinklers around the fly ash silos and loading areas.
11. The industry shall complete the construction of coal storage / handling yard with belt conveyor system for transportation of coal.
12. The industry shall construct remaining 1 silo for storage of fly ash.
13. The industry shall construct the hydro bins.

Water:

14. The industry shall comply the following effluent standards based on the disposal points permitted:

Outlet	Parameter	Concentration (mg/l except for pH and Temp.)
1	PH	6.50-8.50
	Temperature	Not more than 10 deg C higher than the intake water temperature.
	Free available chlorine	0.5
2	PH	5.50 – 9.0
	Suspended Solids	200
	Oil and grease	10
	BOD [3 days at 27°C]	100

15.The source of water being River Krishna. The following is the permitted water consumption.

S.No	Purpose	Quantity (in KLD)
1.	Cooling make up	42,744
2.	Domestic	360
3.	Process	4,896
	TOTAL (fresh + Recycled)	**48,000**

*The industry shall submit the action plan with time schedule for compliance regarding the installation of cooling tower.

**The industry shall commission the ash water recycling system.

16.The Industry shall also comply with water consumption limits and time lines notified by the MoEF CC, GOI in the G.S.R. 3305 (E), dated 07.12.2015 as applicable.

Industry	Parameter	Standards
Thermal Power Plant (Water consumption limit)	Water consumption	I. All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption upto maximum of 3.5 m3/MWh within a period of two years from the date of publication of this notification. II. All existing CT-based plants reduce specific water consumption upto maximum of 3.5 m3/MWh within a period of two years from the date of publication of this notification.

17.The industry shall make arrangements for not to exceed the norms of 10 degree centigrade temperature difference for cooling water.

18.The industry shall install water flow meter at the hot water pumps (cooling water recirculation water).

19.The Industry shall also comply with standards notified by the MoEFCC, GOI in the G.S.R. 3305 (E), dated.07.12.2015 and G.S.R. 682 (E), dated 07.03.2016 as applicable.

Chimney 1	Parameter	Standards
	TPPs (units) installed from 1st January, 2017	
	Particulate Matter	30 mg/Nm^3
	Sulphur Dioxide (SO_2)	100 mg/Nm^3
	Oxides of Nitrogen (NOx)	100 mg/Nm^3
	Mercury (Hg)	0.03 mg/Nm3

20.The industry shall comply with ambient air quality standards of PM_{10} (Particulate Matter size less than 10 mircon) – 100 mircogram/ m^3; $PM_{2.5}$ (Particulate Matter size less than 2.5

micron) – 60 mircogram / m^3; SO_2 – 80 mircogram / m^3 ; NOx – 80 mircogram / m^3 ; outside the factory premises at the periphery of the industry.

Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.

Noise Levels: Day time (6AM to 10PM) -75 dB (A)
Night time (10PM to 6AM) – 70dB (A)

21. The industry shall provide a sampling port with removable dummy of not less than 15 cm diameter in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform
22. The industry shall maintain CAAQM stations at B-Colony near Kondapalli and at East side compound wall near Rayanapadu (V). Continuous Ambient Air Quality Monitoring Stations with online link up with the APPCB web site shall be maintained.
23. The industry shall improve the performance of ESPs attached to the unit – I to VI and also to take measures to achieve Board's Emission Standards consistently.
24. The industry shall install and maintain online effluent and emission monitoring systems and connect monitoring systems to APPCB/CPCB websites as per CPCB directions dated 05.02.2014 & 02.03.2015 and guidelines issued regarding online monitoring systems from time to time.

GENERAL:

25. The industry shall treat the domestic effluents from A, B, C & security Colonies before discharging into Budameru diversion channel.
26. The industry should not join the effluents into agricultural channels located towards East side of the new plant.
27. The drums containing chemicals / solvents shall be stored under a roof on elevated platform with a provision to collect leakages / spillages in the collection pit.
28. The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board:
    a. Daily production details (ER-1 Central Excise Returns).
    b. Quantity of Effluents generated, treated, recycled/reused and disposed.
    c. Log Books for pollution control systems.
    d. Characteristics of ambient air, effluents and emissions.
    e. Hazardous/non hazardous solid waste generated and disposed.
    f. Inspection book.
    g. Manifest copies of hazardous waste.

29. The industry shall carry out the Health studies for Human beings and Animals in influence Zone and Non influence zone in coordination with DM&HO and Animal Husbandry Departments within three months.
30. The industry shall achieve 100% utilisation of fly ash for current generation as per Fly Ash Notification dated 03.11.2009 and amendments thereof.
31. The industry shall transport the flyash through vehicles by covering with tarpaulin to avoid the dust nuisance during transportation.
32. As per the new fly ash notification dated.31.12.2020, the legacy ash existing in the ash pond spread in the area of 1000 Hectares has to be cleared. The industry has informed that, they have provided piezo metric wells for bund - I & II of existing ash pond.
33. The industry shall maintain permanent water sprinklers around the fly ash loading vehicle at fly ash loading point to wash the vehicles after its loading to avoid fugitive emissions during transportation.
34. The industry shall maintain one additional collection tank / sump for washing effluents at fly loading point with spare high speed motor pump for pumping of the sludge to Hydrobin.
35. The industry shall maintain full-fledged environmental cell for this plant (Stage – IV) and

conduct review meeting with stakeholders regularly.

36. The industry shall maintain proper coal dust collection system (vacuum collection) at coal transfer points to avoid fugitive emissions.
37. The industry shall maintain records for quantity of effluents generated, treated, recycled/reused and disposed, Log Books for pollution control systems, Characteristics of ambient air, effluents and emissions, Hazardous/non hazardous solid waste generated and disposed.
38. The industry shall explore the possibility for reusing the treated effluent to the extent possible.
39. The industry shall submit the documents pertaining to training records on prevention of accidents and necessary antidotes.
40. The industry shall maintain proper lift and ensure proper working conditions for conducting stack monitoring.
41. The industry shall comply all the directions issued by the Board vide order dated 04.04.2016, 23.07.2016, 22.11.2016, 27.12.2018 & 06.01.2023.
42. The online stack monitoring systems with recording facility to all the six units shall be maintained properly and shall keep in good working condition. Monthly consolidated report shall be submitted to the E.E., APPCB, Vijayawada.
43. The industry shall maintain valid PLI policy which includes Environmental Relief Fund (ERF) and submit copy to RO, Vijayawada on yearly basis.
44. The industry shall comply with standards and directions issued by CPCB / MoEF & CC as and when notifications are issued.
45. The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the industry and second half yearly compliance reports shall be the audited through MoEF&CC recognized and National Accreditation Board for Laboratory Testing (NABL) accredited third party.
46. The industry shall prepare a safety report and carry out an independent safety audit report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC Rules, 1989 and get it approved by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit report and safety certificate at concerned Regional Office, APPCB.
47. The industry shall carryout calibration of safety equipment and leak detection systems at regular intervals and shall certify the same with the Factories Department. That certified copy shall be submitted to the APPCB, Regional Office.
48. The industry install fluorescent Wind Vane at the highest point in the industry premises.
49. The industry shall submit Risk analysis and risk assessment covering worst scenario clearly describing impact within the industry premises and outside the industry premises and emergency response system
50. The industry shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.

SCHEDULE – C

[See rule 6(2)]

[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorisation shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.

3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
8. An application for the renewal of an authorisation shall be made as laid down under these Rules.
9. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

Specific Conditions:

10. The industry shall comply with the provisions of HWM Rules, 2016 in terms of interstate transport of Hazardous Waste and manifest document prescribed Under Rule 18 and 19 of the HWM Rules, 2016.
11. The industry shall not store hazardous waste for more than 90 days as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
12. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.
13. The industry shall maintain proper records for Hazardous and Other Wastes stated in Authorisation in Form-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form-4 as per Rule 20 (2) of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B SREEDHAR IAS, MS(BS), O/o MEMBER SECRETARY-APPCB

To
M/s Dr. Narla Tatarao Thermal Power Station,
Stage – V (1x800 MW), Ibrahimpatnam (V & M),
NTR District.

ned by B Sreedhar Ias
e: 28-04-2023 17:01:30
ason: Approved

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
(A Govt. Of A P Undertaking)
VidyutSoudha, Vijayawada – 520 004
Ph No: 0866-2526111, 6112

From
Chief Engineer/Generation
APGENCO, 4th Floor,
Vidyut Soudha
Vijayawada – 520 004

To
The General Manager (Quality),
M/s. Singareni Collieries Company Ltd,
Kothagudem, Bhadradri,
Kothagudem Dist.

Lr No. CEG/SE(C&FO)/EE(Coal)/F.SCCL/D.No.260/2023, Dt.05.09.2023.

Sir,

Sub: APGENCO – Fuel supply agreement with SCCL for supply of 3.00 MMTPA of coal to Dr. NTTPS – Request to supply good quality of coal – Regarding.

Ref: 1.FSA dt 31.03.2022 with SCCL for supply of 3.0 MMTPA of coal to Dr. NTTPS

***

APGENCO has entered Fuel supply Agreement dt 31.03.2022 with SCCL for supply of 3.0 MMTPA of coal to Dr. NTTPS, duly swapping part FSA quantity from MCL to SCCL.

In this regard, it is inform that SCCL is supplying coal @ 41% from Yellandu, @ 28% from JVRB and @ 20% from Manuguru upto August 2023 of FY 2023-24. The details number of coal rakes received at Dr.NTTPS, of G-14 and below grade, are as follows:

S. No	Mine	G14	G15	G16	G 17	Un grade
1	Yellandu	22	56	48	39	7
2	JVRB	20	41	30	11	1
3	Manuguru	12	30	8	6	0
% of supply		**13**	**28**	**19**	**12**	**2**

From the above, SCCL is supplying 61% of coal of G15 and less than G15 grade of coal.

It is pertinent to mention that the Units of Dr. NTTPS are designed for usage of coal with GCV of 3686-4500 Kcal/kg. Due to feeding of inferior coal to the Boilers, sometimes it becomes necessary to take oil support to avoid flame failures and for stabilization of unit. Further, due to usage of inferior quality of coal the units are unable to operate at full load, variable cost increased and also units could not able to meet the availability norms fixed by APREC

Further, it is also to bring to your kind notice that, the demand for supply of Power is increasing and could not able meet the requirement.

Under the above circumstances, it is requested to cause necessary instructions to the concerned to minimize supply of G15 grade & below coal rakes to Dr. NTTPS & RTPP and enhance supply G13 grade & above coal rakes to the maximum extent possible, to enable APGENCO to operate the units at rated capacity to meet the Grid demand.

Yours faithfully,

5/9/23

Chief Engineer (Generation)

Copy to:
The General Manager (Marketing), M/s. SCCL, Singareni Bhavan, P.B. No. 18, Hyderabad-500004
The General Manager (Quality), Kothagudem Region, M/s. SCCL, Kothagudem
Dy.EE (Tech) to Managing Director APGENCO, VS, Gunadala, Vijayawada
Dy.EE (Tech) to Director (Coal & Logistics), APGENCO, VS, Gunadala, Vijayawada
Dy.EE (Tech) to Director (Thermal), APGENCO, VS, Gunadala, Vijayawada.

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

****

From
The Chief Engineer,
Operation & Maintenance,
Dr.NTTPS, Ibrahimpatnam,

To
The Dr. G.Srijana,I.A.S
Collector & District Magistrate
NTR District,Vijayawada.

Lr.No.CE/O&MDr.NTTPS/SE/C/O&M/Dr.NTTPS/F.No.dkt /D.No.374/24, Dt.13-09-24

Sir,

Sub:APGENCO- Dr.NTTPS-Civil/O&M-Stagel to IV -Corporate Social Responsibility -Details of CSR contribution for the last 5 years-Information-submitted-reg

Ref: 1. Environmental clearance J-13012/26/2012 –IA.II(T) GOI of MoEF & CC
2.Rc.No.e-11390/CSR Grant/DYSO-2/CPO/2022,Dt:23-08-2024.

*****

With reference to the letter 2nd cited, it is to inform that as per the Enviornmental Clearance for Stage-V (1x800MW), Dr.NTTPS vide ref 1st cited, an amount of Rs. 15.00 Crores @ 3.00 Cr per year shall be spent on welfare measures in the next five years for the existing units i.e., Stage I to Stage IV and a minimum amount of Rs 21.15 Cr shall be earmarked as capital cost for CSR activities during the construction phase of the Project and Rs.4.23 Cr per annum or the amount as per the CSR policy of GOI whichever is higher shall be earmarked as recurring cost per annum till the operation of the plant in respect of Stage -V (1x800MW) unit.

In this connection, I here with furnish details of CSR funds released in respect of Dr.NTTPS Stage-I to IV and Stage-V for favour of taking further necessary action.

I) **For StageI to IV:**Amount to be spent on welfare measures in five years for the existing units :(Stage I to IV @ Rs 5.00 Cr per year for 3years): Rs15.00 Cr

S.no	Description	CSR fund released in Cr.
	A) Funds already released	3.00
1	Dr.NTTPS-EnvironmentalClearance-Assurance given in the public hearing during.(As per G.O.O.No.297/CE/C/Hydel/GS/C&I/ 2015,Dt:17-11-2015	
2	Dr.NTTPS-Stage-I to IV-Certain works proposed for krishna Pushakaram under CSR works (Construction of PSC bridge across the CW canal at Gollapudi etc.,) vide Proc.No.431 /Dr.NTTPS/FCSR Funds/D.No.130/16,Dt:09-15-2016	2.7925

OFFICE OF THE CE/CIVIL/O&M DR.NTTPS, IBRAHIMPATNAM. 1049 13-09-24

3	Supply of Nutrition food to the pregnant and lactating women in the district for the year 2017-2018 vide Proc.No.CCL 431/Dr.NTTPS /F.CSR/ D.No.53/18 ,Dt:23-03-2018	0.005
4	Providing fingerlings in Krishna River VideLr.No.CE/O&M/SE/C/Envt/Dr.NTTPS /Dr.NTTPS /Fdkt /D.No.809 /18, Dt:03-10-2018	0.05
5	Dr.NTTPS-Stage I to IV CSR Activpities in the surrounding villages of Dr.NTTPS(funds towards regularization of VTPS land to an extent of AC 17.46 Ct to the encroachers in the Shramika Nagar, Kondapalli) as per GOO .No.433/CE/C/Thermal /2018,Dt:02-01-2019	5.22
		11.0675 Cr
1.	**B) . Funds to be released.** Dr.NTTPS-Assurance given by Management of Dr.NTTPS to the demand /issue raised during meeting with the members of Dr.NTTPS Kalushya Niyantransa Praja Porata Samithi (Proc.No.CE/C/Hydel-I,C&I/SE/Hydel-I,C&I/EE/EnvnDn/Dr.NTTPS/D.No.109/24,Dt: 12-04-2024).	4.00
	Total	**15.0675 Cr**

II) A minimum of Rs 21.15 Cr shall be earmarked as Capital cost for CSR activities during construction phase of the project and 4.13 Cr/annum or the amount as per the CSR policy of GOI which ever is higher .

S.no	Description	CSR fund released in Cr.
1	**A) Funds already released** Dr.NTTPS- Stage-V-Certain works proposed for krishna Pushakaram under CSR works (Widening of road from PH main gate to the IBM)	2.65
2	Contribution of funds by AP Power Utilities in to SECM	0.50
3	Funding towards up-gradation of Indian Red Cross Society (IRCS)	0.30715
	Sub Total	**3.4572 Cr**
1.	**B) Funds to be reased** Construction of outfall drain from culvert near MPDO office to existing outlet at Budameru drain(along Kajimanyam area)	3.00
	Total	**6.457 Cr**

In addition to the above, Medical camps, Veterinary camps and other social activities are being taken up regularly by Dr.NTTPS as a part of Corporate Social Responsibility.

The CSR fund amounts deposited with the District Collector, Krishna District and the particulars of expenditure incurred for the respective years as received from the District Economics & Statistics officer,Machilipatnam, Krishna District is here with enclosed for information.

Encl :Expenditure details.

Yours faithfully,

CHIEF ENGINEER,O&M
Dr.NTTPS,IBRAHIMPATNAM

Copy to the Chief Engineer/Civil/Thermal/APGENCO/Vidyut Soudha/Gunadala / Vijayawada for information.
Copy to the Chief Engineer/Civil/Hydel/APGENCO/Vidyut Soudha/Gunadala / Vijayawada for information.
Copy to the Chief Engineer/Generation/APGENCO/Vidyut Soudha/Gunadala / Vijayawada for information
Copy to the Superintending Engineer /Civil/O&M/Dr.NTTPS for information.
Copy to the Superintending Engineer /Civil/Stage-V/Dr.NTTPS for information.
Copy to the Superintending Engineer /Civil/Environment/Dr.NTTPS for information

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
The Chief Engineer,
Operation and Maintenance,
Dr. NTTPS, Ibrahimpatnam,
Gunadala, Vijayawada -520 004.

To
The Collector & District Magistrate,
NTR District,
Vijayawada.

Lr. No. CE/O&M /SE/C/O&M/ Dr. NTTPS / F.No.36 /D.No.501/2024, Dt. 29.10.2024.

Sir,

Sub:-APGENCO - Dr. NTTPS –Civil, O&M- Stage I to IV – Corporate Responsibility- Cheque towards CSR activities in the surrounding villages of Dr. NTTPS - Furnished -Reg.

Ref: 1) MOF&F, GOI Letter No. J-13012/26/2012-IA, II (T), dt. 26.09.2012.
2) Proceeding No. 694/ APGENCO/Dr. NTTPS/CSR/2014, dt.16.08.2014 of the Dist. Collector, Krishna Dist. (Now NTR Dist.).

*****

With reference to the above, I herewith furnish a Cheque bearing No. 179546, Dt. 25.10.2024 for an amount of Rs. 4.00 Cr towards CSR activities in the surrounding villages of Dr. NTTPS.

In this connection, it is requested to take up the works under CSR activities in the surrounding affected villages of Dr. NTTPS like Kondapalli, Eelaprolu, Ibrhimpatnam, Guntupalli, Tummalapalem, Jupudi, Mulapadu and Kilesapauram etc. Many people and people's representatives in the surrounding villages of Dr. NTTPS are requesting for certain works like roads, drains, levelling and compound wall to burial grounds etc.

Encl: Cheque No. 179546, Dt. 25.10.24.

Yours faithfully,

29/10

29/10/24
Selected

CHIEF ENGINEER, O&M,
Dr. NTTPS, IBRAHIMPATNAM.

Copy to the Dy.EE/Tech to Director/Thermal, Vidyut Soudha, Vijayawada for information.
Copy to the Chief Engineer, Civil, Thermal, APGENCO, VS, Vijayawada for information.
Copy to the Chief Engineer, Civil, Hydel, C&I, GS/VS Vijayawada for information.
Copy to the Superintending Engineer, Civil, O&M, Dr. NTTPS for information and necessary action.
Copy to the General Manager/Finance, Dr. NTTPS for information.

Andhra Pradesh
Power Generation Corporation Ltd.
(Govt. of A. P. Undertaking)
CIN : U40109AP1998SGC109187

K.V.N. Chakradhar Babu, IAS
Managing Director

Lr No. MD/DIR (C&L) /CEG/F.SCCL/D.No.24/24, Dt.11.01.2024.

To
The Chairman & Managing Director,
M/s. Sigareni Collieries Company Ltd,
Singareni Bhavan, Red Hills,
Hyderabad-500 004

Sir,

Sub: APGENCO – Dr.NTTPS & Dr.M.V.R RTPP– Fuel supply agreement for Supply of 3.00 MMTPA coal to Dr.NTTPS after Swapping part FSA quantity from MCL to SCCL – Supply of high grade coal and reduction of coal prices –Requested - Regarding.

Ref:
1. SCCL Lr. No. CMD/PS/H/67, dt 03.07.2020
2. SCCL Lr. No. CMD/PS/H/112, dt 11.09.2020
3. SCCL Lr. No. HYD/MKT/A/005/193, dt 10.04.2021
4. Fuel Supply Agreement dt.31.03.2022 between M/s SCCL & APGENCO
5. Lr No. MD/DIR (C&L)/CEG/F.SCCL/D.No.177/23, Dt. 05.07.2023.
6. Lr No.CEG/SE(C&FO)/EE(Coal)/F.SCCL/D.No.260/2023, Dt.05.09.2023
7. Lr No. MD/DIR (C&L) /CEG/F.SCCL/D.No.311/23, Dt.11.10.2023.
8. Lr. No. CEG/SE(C&FO)/EE/F.SCCL Quality/23-24/D.No.170/2023, Dt.02.01.2024
9. Lr. No. CEG/SE(C&FO)/EE/F.SCCL/2023-24/D.No.120/23, dt.03.01.2024

***

Please refer to the correspondence cited above wherein APGENCO has requested to reduce the coal prices to the extent possible to match with MCL prices for the coal supplies from all loading points of SCCL and supply G13 and above grade coal i.e. G12, G11 etc., to APGENCO plants and still awaiting for favourable orders from SCCL.

Further, it is to inform that the weighted average GCV of coal received at Dr.NTTPS and Dr.M.V.R RTPP during the month of December from **JVRB siding is G16** and **RCHP siding is Ungraded,** which was communicated to the concerned vide ref (8) cited above. The quality of coal from SPSG, RUSG and JVRB is low grade continuously and is mostly being supplied to APGENCO only.

It is once again to mention that based on the assurance of SCCL that the landed cost of coal supplied from SCCL to Dr. NTTPS would be lesser, accordingly, APGENCO has entered Fuel Supply Agreement dt.31.03.2022 with M/s SCCL for supply of 3.0 MMTPA to Dr. NTTPS duly reducing the FSA quantity with MCL by 3.0 MMTPA.

Contd..2

However, consequent to ~22 price revisions, issued by M/s SCCL, the coal prices have been increased abnormally by almost Rs.1000/- to 1800/- per MT, when compared with MCL prices.

Due to most inferior quality of coal being received from M/s SCCL, the equipment is getting damaged, the specific coal consumption of the units increases which in turn leads to increase in the coal consumption while denting into PLF and adversely impacting other commercial and statutory parameters. Further, the cost of generation is also increased resulting in huge loss to APGENCO.

Hence, the intention of swapping of coal linkage pertaining to Dr. NTTPS from MCL to SCCL is not fulfilled.

Further, it is to inform that 14.25 Lakh MT of coal was received from SCCL to Dr.M.V.R RTPP during FY'2023-24 which is only 50.2% of the linkage quantity of 28.40 Lakh (upto December'2023).

In view of the above, it is once again requested to supply G12 and above grade coal i.e. G11, G10 etc., to APGENCO plants, withdraw the additional facility charges and reduce the coal prices to the extent possible to match with MCL prices, for the coal supplies from all loading points of SCCL.

It is also requested to supply minimum 2 rakes of G8/G9 grade coal to Dr.NTTPS and Dr.M.V.R RTPP so as to run the units uninterruptedly at their rated capacity.

I solicit an early positive response in this regard.

Yours faithfully,

MANAGING DIRECTOR 11/1/24

Copy Submitted to

The Secretary, Ministry of Coal, GoI, Shastri Bhawan, New Delhi for favour of kind information.

The Additional Secretary (Coal), Ministry of Coal, GOI, Shastri Bhawan, New Delhifor favour of kind information.

The Special Chief Secretary, Energy, GoAP, Velagapudi, Amaravathi for favour of kind information.

ISO-9001:2008 UNIT Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
IBRAHIMPATNAM, KRISHNA (Dt.), (Andhra Pradesh)
Phone No. : 0866 - 2882203 Fax: 0866 - 2882365
e-Mail: vjwcevtps@yahoo.com, vjwcevtps@hotmail.com, vtps.ce@apgenco.com

From
The Chief Engineer,
Operation and Maintenance,
Dr.NTTPS.,Ibrahimpatnam-521 456.

To
The District Medical and Health officer,
Vijayawada, NTR district.

Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.04/24, dt. 2 -04-2024.

Sir,

Sub: APGENCO - Dr.NTTPS –Carrying out health studies on human beings in the Influence zone and buffer zone as per the directions of APPCB to evaluate the impacts of pollution– Requested - Reg.

Ref: 1.Consent Order No.APPCB/VJA/VJA/24/CFO/HO/2016- Date:24.04.2023.
2. Order No. 31/APPCB/HO/ECS/VJA/2024-981, 02.02.2024.

&&&

It is to inform that, The Andhra Pradesh Power Generation Corporation Limited (APGENCO) is a State Public Sector undertaking and has been incorporated under the provisions of the Indian Companies Act, 1956 and engaged in power generation including operation and maintenance of the power plants to meet the electrical power demand in Andhra Pradesh. APGENCO has been operating Dr. Narla Tata Rao Thermal Power Station (Dr. NTTPS) with a generation capacity of 2560 MW with 6 units of 210 MW (Commissioned between 1979 -1995) under Stages I, II & III, one unit of 500 MW (Commissioned during 2009) under stage – IV and one unit of 800MW (Commissioned during 2023) under Stage-V.

Further, Andhra Pradesh pollution control Board(APPCB) had issued Consent to Operation (CTO) vide ref 1st cited to operate Dr. NTTPS in which it was directed that "The industry shall carry out the Health studies for Human beings and Animals in influence Zone and Non influence zone in coordination with DM&HO and Animal Husbandry Departments within three months."

It is also to inform that directions were issued by APPCB vide ref. 2nd cited as follows:

"The industry shall undertake scientific study in consultation with expert organizations/ institutions to evaluate the possible impacts of pollutants emanating from the power plant activities in the influence zone and buffer zone to cover the impacts on the surrounding environment and incremental increase of heavy metals concentration exclusively in the influence zone. The study shall broadly cover the cumulative impacts

on human health, animal, soil, agriculture/horticulture activities, water bodies, aquatic life, flora & fauna etc). The details of the study shall be updated to the periodically."

In view of the above, it is required to carryout health studies on human beings in the influence zone and Non influence zone as per the above directions of APPCB.

Hence, it is requested to furnish your willingness and inform the necessary charges to be borne by Dr. NTTPS to carryout the above health studies in Influence zone and Non Influence zones as per the above directions of APPCB.

Yours faithfully,

CHIEF ENGINEER
OPERATION AND MAINTENANCE
Dr.NTTPS / IBRAHIMPATNAM

Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.
Copy communicated to Environment Engineer/RO, Vijayawada for information.

ISO-9001:2008 UNIT Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
IBRAHIMPATNAM, KRISHNA (Dt.), (Andhra Pradesh)
Phone No. : 0866 - 2882203 Fax: 0866 - 2882365
e-Mail: vjwcevtps@yahoo.com, vjwcevtps@hotmail.com, vtps.ce@apgenco.com

From
The Chief Engineer,
Operation and Maintenance,
Dr.NTTPS.,Ibrahimpatnam-521 456.

To
The Registrar
Acharya Nagarjuna university
NH16, Nagarjuna Nagar,
Guntur, Andhra Pradesh 522510.

Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.03/24, dt. 2 -04-2024.

Sir,

Sub: APGENCO - Dr.NTTPS –Carrying out health studies on human beings in the Influence zone and buffer zone as per the directions of APPCB to evaluate the impacts of pollution– Requested - Reg.

Ref: 1.Consent Order No.APPCB/VJA/VJA/24/CFO/HO/2016- Date:24.04.2023.
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on human health, animal, soil, agriculture/horticulture activities, water bodies, aquatic life, flora & fauna etc). The details of the study shall be updated to the periodically."

In view of the above, it is required to carryout health studies on human beings in the influence zone and Non influence zone as per the above directions of APPCB.

Hence, it is requested to furnish your willingness and inform the necessary charges to be borne by Dr. NTTPS to carryout the above health studies in Influence zone and Non Influence zones as per the above directions of APPCB.

Yours faithfully,

CHIEF ENGINEER
OPERATION AND MAINTENANCE
Dr.NTTPS / IBRAHIMPATNAM

Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.
Copy communicated to Environment Engineer/RO, Vijayawada for information.

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ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
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Phone No. : 0866 - 2882203 Fax: 0866 - 2882365
e-Mail: vjwcevtps@yahoo.com, vjwcevtps@hotmail.com, vtps.ce@apgenco.com

From
The Chief Engineer,
Operation and Maintenance,
Dr.NTTPS.,Ibrahimpatnam-521 456.

To
The Vice-chancellor,
DR. Y.S.R University of Health Sciences
ring Near Siddhartha Medical College,
Beside New Government General Hospital,
near Ramavarappadu, Vijayawada,
Andhra Pradesh 520008.

Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.02/24, dt. 2 -04-2024.

Sir,

Sub: APGENCO - Dr.NTTPS –Carrying out health studies on human beings in the Influence zone and buffer zone as per the directions of APPCB to evaluate the impacts of pollution– Requested - Reg.

Ref: 1.Consent Order No.APPCB/VJA/VJA/24/CFO/HO/2016- Date:24.04.2023.
2. Order No. 31/APPCB/HO/ECS/VJA/2024-981, 02.02.2024.

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exclusively in the influence zone. The study shall broadly cover the cumulative impacts on human health, animal, soil, agriculture/horticulture activities, water bodies, aquatic life, flora & fauna etc). The details of the study shall be updated to the periodically."

In view of the above, it is required to carryout health studies on human beings in the influence zone and Non influence zone as per the above directions of APPCB.

Hence, it is requested to furnish your willingness and inform the necessary charges to be borne by Dr. NTTPS to carryout the above health studies in Influence zone and Non Influence zones as per the above directions of APPCB.

Yours faithfully,

CHIEF ENGINEER
OPERATION AND MAINTENANCE
Dr.NTTPS / IBRAHIMPATNAM

Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.
Copy communicated to Environment Engineer/RO, Vijayawada for information.

ISO-9001:2008 UNIT Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
IBRAHIMPATNAM, KRISHNA (Dt.), (Andhra Pradesh)
Phone No. : 0866 - 2882203 Fax: 0866 - 2882365
e-Mail: vjwcevtps@yahoo.com, vjwcevtps@hotmail.com, vtps.ce@apgenco.com

From
The Chief Engineer,
Operation and Maintenance,
Dr.NTTPS.,Ibrahimpatnam-521 456.

To
The Director,
AIIMS,
Mangalagiri, Guntur District
Andhra Pradesh – 522503.

Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.01/24, dt. 9-04-2024.

Sir,

Sub: APGENCO - Dr.NTTPS –Carrying out health studies on human beings in the Influence zone and buffer zone as per the directions of APPCB to evaluate the impacts of pollution– Requested - Reg.

Ref: 1.Consent Order No.APPCB/VJA/VJA/24/CFO/HO/2016- Date:24.04.2023.
2. Order No. 31/APPCB/HO/ECS/VJA/2024-981, 02.02.2024.

&&&

It is to inform that, The Andhra Pradesh Power Generation Corporation Limited (APGENCO) is a State Public Sector undertaking and has been incorporated under the provisions of the Indian Companies Act, 1956 and engaged in power generation including operation and maintenance of the power plants to meet the electrical power demand in Andhra Pradesh. APGENCO has been operating Dr. Narla Tata Rao Thermal Power Station (Dr. NTTPS) with a generation capacity of 2560 MW with 6 units of 210 MW (Commissioned between 1979 -1995) under Stages I, II & III, one unit of 500 MW (Commissioned during 2009) under stage – IV and one unit of 800MW (Commissioned during 2023) under Stage-V.

Further, Andhra Pradesh pollution control Board(APPCB) had issued Consent to Operation (CTO) vide ref 1st cited to operate Dr. NTTPS in which it was directed that "The industry shall carry out the Health studies for Human beings and Animals in influence Zone and Non influence zone in coordination with DM&HO and Animal Husbandry Departments within three months."

It is also to inform that directions were issued by APPCB vide ref. 2nd cited as follows:

"The industry shall undertake scientific study in consultation with expert organizations/ institutions to evaluate the possible impacts of pollutants emanating from the power plant activities in the influence zone and buffer zone to cover the impacts on the surrounding environment and incremental increase of heavy metals concentration exclusively in the influence zone. The study shall broadly cover the cumulative impacts

on human health, animal, soil, agriculture/horticulture activities, water bodies, aquatic life, flora & fauna etc). The details of the study shall be updated to the periodically."

In view of the above, it is required to carryout health studies on human beings in the influence zone and Non influence zone as per the above directions of APPCB.

Hence, it is requested to furnish your willingness and inform the necessary charges to be borne by Dr. NTTPS to carryout the above health studies in Influence zone and Non Influence zones as per the above directions of APPCB.

Yours faithfully,

CHIEF ENGINEER
OPERATION AND MAINTENANCE
Dr.NTTPS / IBRAHIMPATNAM

Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.
Copy communicated to Environment Engineer/RO, Vijayawada for information.

APPCB-11023/133/2022-TEC-TF-APPCB

I/3883009/2025

ANNEXURE - II

(6)

ANDHRA PRADESH POLLUTION CONTROL BOARD
Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007
Phone. No.0866-2463200, Website : https://pcb.ap.gov.in/

Lr. No.31/APPCB/HO/ECS//VJA/2019- **Date:10-01-2025.**

DIRECTIONS

Sub.: APPCB - HO - ECS - M/s. Dr. Narla Tatarao - Thermal Power Station, Ibrahimpatnam (V&M), NTR District - Non- compliance to Consent conditions and standards - Public complaints on Air & water pollution from the TPP - Monitoring (TF) Committee Meeting held on 25.11.2024 – Minutes of the Monitoring Committee - Communicated – Reg.

Ref.: 1. CTO order no: APPCB/VJA/VJA/24/CFO/HO/2016, Dt.24.04.2023.
2. CTO no: APPCB-11022/66/2022-TEC-CFO-APPCB, Dt.28.04.2023.
3. Order No.31/APPCB/HO/ECS/VJA/2024 Dt.02.02.2024.
4. Lr.No.MD/CE/C/Hydel,GS,C&I/SE/Hy- 1/ EE/ Env. Dn/ D.No.92 /2024, Dt.20.02.2024
5.Lr. No. CE/ O&M /SE /C /Envt /EE /C/ Env /Dr.NTTPS /F6 /D.No.236/ 23, Dt.16.03.2024
6. Notice No.K-24/PCB/RO-VJA/2024-256, date.01.07.2024
7. Inspection of your industry by the Board officials on 13.06.2024, 04.07.2024 and 05.11.2024.
8. Monitoring (Task Force) Committee meeting held on 25.11.2024.

***

WHEREAS you are operating Coal based Thermal power plant in the name of Dr. Narla Tatarao Thermal Power Station (NTTPS), (Formerly M/s. Vijayawada Thermal Power Station) located at Ibrahimpatnam, Vijayawada, Krishna District and engaged in generation of electricity.

WHEREAS the Board vide ref. 1st cited issued renewal of CTO& HWA to the industry on 24.04.2023 for Electric power generation of -1760 MW (6 x 210 MW (Stage-I, II & III) + 1 x 500 MW (Stage-IV)), valid upto 31.12.2027.

WHEREAS the Board vide ref. 2nd cited issued renewal of CTO&HWA to the industry (Stage – V) on 28.04.2023 for Electric power generation of - 800 MW, valid up to 30.04.2026.

WHEREAS earlier, the Board received complaints pollution problems caused from the industry and adverse news items appeared in various newspapers. The issue was reviewed in the Monitoring (Task Force) committee meeting held on 25.01.2024 and the Board issued specific directions to the industry on 02.02.2024 vide ref. 3rd cited.

WHEREAS a complaints received from Sri EAS Sarma, Former Energy Secretary to GoI, Sri Ch. Venugopal Rao and from the Member of NTTPS, Kalushya Niyantrana Praja Porata Samithi against the air and water pollution being caused from M/s. Dr. Narla Tatarao Thermal Power Station and to take necessary action. Complaints were also

(7)

received on pollution caused by the industry from Sri Md. Masud Ali, Advocate through A.P. Legal Services Authority and EFS&T Department.

WHEREAS further, the Board also received the complaints from the Guntupalli Villagers and The Krishna Co-Op. Irrigation & Agricultural Improvement Society on air pollution being caused by your industry and discharge of the ash bearing waste water into the agricultural canals and accumulation of the ash in the agricultural fields.

WHEREAS the Regional Office, Vijayawada received a complaint filed by Sri Chinta Ramesh Babu, D.No.7-98, Guntupalli(V), Ibrahimpatnam (M), NTR District through Public Grievance Redressal System (PGRS) on 01.07.2024 regarding discharges of ash bearing waste water into the agricultural canals, not developing greenbelt in an extent of 65 Acres and crop damage due to accumulation of the ash in the agricultural fields. The Board officials inspected your industry and surroundings on 13.06.2024 & 04.07.2024 and reported the following observations -

1. Damages were observed to ESPs of the unit 5 & 6 and thick smoke emissions were observed from the stacks.
2. The fly ash is disposing from the bottom hoppers of the ESPs of the unit-5 & 6.
3. Leakage of the fly ash was observed from the ESP of unit-7 (500 MW). The ash is being stored openly at ESP bottom collection area and the same is lifting into trucks by JCB. Fugitive emissions were observed at fly ash handling at Unit-7.
4. The above fly ash is loading into trucks through JCBs instead of using pneumatic system.
5. There is no fly ash and bottom ash conveying system to the Unit-8 (800 MW) and the ash storing openly at the bottom of the ESP. Huge fugitive emissions were observed at ash handling area.
6. The industry has not improved the performance of the ESPs attached to the Unit-I to Unit-VI and thick smoke emissions are observed.
7. The online stack monitoring system provided to boiler-1,2,3 & 6 are not showing the SPM values.
8. The industry is disposing the Once Through Cooling water to Budameru channel and not operating the cooling towers of Unit-1-6.
9. The public drains near the ash pond area and along with the National highway are deposited /filled with boiler ash of the industry.
10. The ash sludge from the ash pond was observed on the road leading to ash pond to National Highway due to spillages from the ash carrying trucks and thereby causing fugitive emissions to the surrounding area.
11. Open storage of crushed coal was observed without providing any fugitive dust containing measures such as covering the surface of coal stockpiles with tarpaulin sheets.
12. The industry provided sedimentation tanks to the Unit-1 to 6 and the over flow is

joining into Budameru channel. Ash accumulation was observed in the Budameru drain at the discharge point.

13. The industry provided sedimentation tanks to the Unit-7 and the over flow water discharging outside the industry premises.
14. The industry not provided sedimentation tanks to the Unit-8 and the floor washings mixed with ash is discharging into agricultural canals.
15. Coal dust emissions observed at coal stocking yard and transit points and at nearby residential area around the coal stockyard.
16. The industry is discharging ash contaminated water from the Southern side of the industry to the agricultural canals and the water joining in to agricultural fields.
17. Ash accumulation was observed in the agricultural canal and in some of the agricultural lands.
18. Ash dust spillages were observed along the National Highway from Jupudi area to Guntupalli and are causing fugitive emissions to the road travelers.
19. Ambient Air Quality Monitoring (AAQM) and Stack monitoring to the boilers were conducted on 22.02.2024 and the monitored values are exceeding the Board stipulated standards as follows –

Stack Monitoring:

Sl. No.	Sampling point	Parameter	Result (mg/Nm^3)	Standard (mg/Nm^3)
1.	Stack attached to 690 TPH Coal Fired Boiler - Stage – II (210 MW) of Unit – IV	SPM	4012.0	100.0
2.	Stack attached to 690 TPH Coal Fired Boiler - Stage – III (210 MW) of Unit – V	SPM	5614.0	100.0
3	Stack attached to 690 TPH Coal Fired Boiler - Stage – III (210 MW) of Unit – VI	SPM	3420.0	100.0

AAQM Monitoring:

S.No.	Sampling point	Parameter	Result ($\mu g/m^3$)	Standard ($\mu g/m^3$)
1	Accounts of the NTTPS, Ibrahimpatanam	PM_{10}	261	100.0
2	Railway Hospital Rayanapadu	PM_{10}	173	100.0
3	Hilltop Guesthouse of Dr. NTTPS	PM_{10}	90.3	100.0
4	Beside YSR Health Care Center, Kondapalli	PM_{10}	113	100.0

20. The online Particulate Matter parameter is not working for the Boiler - 1,2 & 3. The online particulate matter of Boiler - 4,5 & 6 are continuously exceeding the stipulated standards of 100 mg/Nm^3.
21. The online SO_2 values of Boiler-I, III, IV, V & VI are in between 900 mg/Nm^3 to 1350 mg/Nm^3, as against the standard of 600 mg/Nm^3.
22. The online Particulate Matter values of the stack attached to the 500 MW Stage-IV (Unit-VII) is in between 90 to 110 mg/Nm^3 thereby exceeding prescribed **standard of PM-50 mg/Nm^3. The SO_2 parameter recorded as 900 mg/Nm^3 to 1180 mg/Nm^3 as against the standard of 200 mg/Nm^3.**
23. The industry has not connected the Stage-V boiler online stack monitoring data to the APPCB server.
24. The Two CAAQM stations provided at B-Colony and towards railway wagon workshops are not in operation and not updating any data.
25. The plant submitted exceedance report of the online stack monitoring data from February, 2024 to till date.
26. The latest compliance status to the directions issued by the Board vide order dated.02.02.2024 is reported as follows:

a. The industry informed that an amount of Rs.28 Crores sanctioned to rectify and improvement of the pollution control systems and issued Purchase orders for the related equipment and systems. Further, informed that the prescribed emissions standards will be achieved soon. The industry requested the Coal supplier i.e., M/s Singareni Collieries Company Ltd to supply of high-grade coal. Proposed replacement of the ESP damaged internals and improvement of the ash handling systems.
b. The works pertaining to ETP of stage-I-III not yet completed. The existing sedimentation tanks not adequate for treatment of the floor washings and the overflow of the settling tanks discharging into Budameru Channel.
c. The industry carried feasibility report for hydrobin systems through third party. As per the report, it is not possible to provide Hydro bin system to Stage-II.
d. The ash pond effluents proposed to recycle and reuse in the Stage V. The ash water recycling system is proposed to complete shortly.
e. Proposed to provide CC cameras for continuous monitoring of the ash pipelines and leakage control. The works pertaining to CC cameras not yet started.
f. Open stacking of ash in the plant premises was observed at the bottoms of the ESPs at Unit 5, 6, 7 & 8.
g. The representative of the industry informed that an amount of Rs.28 Crores sanctioned for rectification of the pollution control systems and they will replace of

ESP damaged internals.

h. The industry conducted feasibility study conversion of the OTC system to closed cycle system. As per the report, it is not technically feasible to provide cooling towers for stage–I,II&III units.

i. The PO issued to provide wet limestone based Flue Gas De-Sulphurization (FGD) System for control of SO_2 emissions vide PO order dated.14.07.2022 to the Unit 7 (Stage IV). Works not yet started.

j. Patrolling system provided to monitor the leakage of ash during conveyance and transportation of boiler ash.

k. Full-fledged MDSS system not provided and Coal dust emissions were observed around the coal stock yard.

l. At present, no ash stock yards observed along the National Highway.

m. The online stack monitoring systems and AAQM not working to measure all the prescribed pollution parameters.

n. The Plant has not done the periodical calibration.

o. The industry is using the coal which contain ash content more than 50 % which more than the designated capacity of the air pollution control systems.

p. The industry requested the AIIMS, DM & HO, YSR University of Health Sciences and the Registrar, Acharya Nagarjuna University to furnish willingness for carry out health studies on human beings in the influence zone and non-influence zone vide letter dated.02.04.2024.

q. The industry requested the JD, Animal Husbandry, Vijayawada to furnish willingness for carry out health studies on the animals in the influence zone and non-influence zone vide letter dated.02.04.2024.

WHEREAS the RO, Vijayawada issued notices to the industry on 01.07.2024 for non-compliance of the Board directions.

WHEREAS vide ref. 5th cited, the EE, RO, Vijayawada vide letter dt: 05.11.2024 informed that agitation conducted by the Pollution Porata Samithi, Ibrahimpatnam, NTR District in front of the industry on 03.11.2024. Further informed that there is no progress at the industry to achieve compliance to the prescribed standards and to rectify the non-compliances to Board directions / CTO conditions.

WHEREAS a hearing was conducted before the Monitoring (Task Force) Committee Meeting of A.P. Pollution Control Board on 25.11.2024. The representatives of the industry and EE, RO, Vijayawada attended the meeting in person. The EE, RO, Vijayawada informed that earlier, the Board received complaints against the industry regarding pollution problems caused by the industry and adverse news items in various newspapers. The issue was reviewed in the Monitoring (Task Force) committee meeting held on 25.01.2024 and the Board issued certain directions to the industry on 02.02.2024. Complaints received from Sri EAS Sarma, Former Energy Secretary to GoI,

Sri Ch. Venugopal Rao and from the Member of NTTPS Kalushya Niyantrana Praja Porata Samithi against the air and water pollution caused by M/s. Dr. Narla Tatarao Thermal Power Station and to take necessary action. Complaints also received on pollution caused by the industry from Sri Md. Masud Ali, Advocate through A.P. Legal Services Authority and EFS&T Department. The Board also received the complaints from the Guntupalli villagers and The Krishna Co-Op. Irrigation & Agricultural Improvement Society on air pollution caused by the industry and discharge of the ash containing water into the agricultural canals and accumulation of the ash in the agricultural fields. A complaint filed by Sri Chinta Ramesh Babu, D.No.7-98, Guntupalli (V), Ibrahimpatnam (M), NTR District through Public Grievance Redressal System (PGRS) on 01.07.2024 regarding discharging of the ash containing water into the agricultural canals, not developing greenbelt in an extent of 65 Acres and crop damage due to accumulation of the ash in the agricultural fields.

Further informed that the industry is operating the thermal power plant without operating ESPs. Stack, Ambient air quality monitoring reports revealed that the industry is continuously exceeding the prescribed standards. The industry not implemented adequate measures for suppression of the boiler ash at ash pond and during transportation. Regional Office, Vijayawada issued notices on 21.02.2024, 07.03.2024 & 01.07.2024 for non-compliance of the Board directions to the TPP for violating the Consent Conditions and directions. The industry is not complying with the Board directions to prevent ash slurry discharges to outside the premises. The representatives of the industry informed that they will implement adequate measures shortly to control pollution problems in the surroundings.

During the review, the committee noted that the Board officials inspected the TPP and its surroundings on 13.06.2024 & 04.07.2024 and reported the following observations:

1. Damages were observed to ESPs of the unit 5 & 6 and thick smoke emissions were observed from their stacks. Stack monitoring conducted from the boilers operating at stage IV, V and VI and the monitored value for the particulate matter is in the range of 3420 to 5614 mg/Nm^3 against the standard of 100 mg/Nm^3.
2. Ambient air quality monitoring conducted different locations at the industry and the monitored value for the SPM is 90 to 261 µg/m^3 (against the standard of 100 µg/m^3).
3. The fly ash is disposing from the bottom hoppers of the ESPs of the unit- 5 & 6.
4. Leakage of the fly ash was observed from the ESP of unit-7 (500 MW). The ash is storing openly at ESP bottom area and the same is lifting into trucks by JCB. Fugitive emissions were observed at fly ash handling at Unit-7.
5. The above fly ash is loading into trucks through JCBs instead of using pneumatic system.
6. There is no fly ash and bottom ash conveying system to the Unit-8 (800 MW) and the ash storing openly at the bottom of the ESP. Fugitive emissions were observed large scale at ash handling area.
7. The industry has not improved the performance of the ESPs attached to the Unit-I to Unit-VI and thick smoke emissions are observed.
8. The online stack monitoring system provided to boiler-1,2,3 & 6 are not showing the SPM values.
9. The public drains near the ash pond area and along with the National highway are

deposited /filled with boiler ash of the industry.

10. The ash sludge from the ash pond was observed on the road leading to ash pond to National Highway due to spillages from the ash carrying trucks and thereby causing fugitive emissions to the surrounding area.
11. Open storage of crushed coal was observed without providing any fugitive dust containing measures such as covering the surface of coal stockpiles with tarpaulin sheets.
12. The industry is discharging the floor washing effluents of Stage-I to III into Budameru channel without treatment except settling tanks. The settling tanks are filled up with ash sludge. Sludge formation also observed in the Budameru channel.
13. The industry has not provided hydro bins for Stage-I, II & III for bottom ash disposal and not provided cooling tower for Stage-I to III as per consent conditions of CTO order dated.24.04.2023. The artificial cooling provided are utilizing during summer season.
14. The industry has not provided hydro bins for Stage-V for bottom ash disposal as per the condition of CTO order dated.24.04.2023 and also not provided ash water recycling system.
15. The industry provided sedimentation tanks to the Unit-7 and the over flow water discharging outside the industry premises.
16. The industry not provided sedimentation tanks to the Unit-8 and the floor washings mixed with ash is discharging into agricultural canals.
17. Coal dust emissions observed at coal stocking yard and transit points and at nearby residential area around the coal stockyard.
18. The industry is discharging ash contaminated water from the Southern side of the industry to the agricultural canals and the water joining in to agricultural fields.
19. Ash accumulation was observed in the agricultural canal and in some of the agricultural lands.
20. Ash dust spillages were observed along the National Highway from Jupudi area to Guntupalli and are causing fugitive emissions to the road travelers.

WHEREAS the EFS&T Dept, vide letter dt. 05.08.2024 instructed the Board to furnish action taken report on the complaint No. 343/1/3912024 filed by Sri Cherukuri Venu Gopal before the Hon'ble NHRC on pollution caused by the M/s. Dr. Narla Tatarao Thermal Power Station (Dr. NTTPS), Ibrahimpatnam (V) & (M), NTR District. Further, the Board official again inspected the TPP in connection with agitation conducted by the Pollution Porata Samithi, Ibrahimpatnam, NTR District in front of the industry on 03.11.2024 and informed vide letter dt. 05.11.2024 that there is no progress at the TPP to rectify the non-compliances to Board directions / CTO conditions. Further reported the following status -

21. The online Particulate Matter parameter is not working for the Boiler-1,2 & 3. The online particulate matter of Boiler 4,5 & 6 are continuously exceeding the stipulated standards of 100 mg/Nm3.
22. The online SO2 values of Boiler-I, III, IV, V & VI are in between 900 mg/Nm3 to 1350 mg/Nm3, as against the standard of 600 mg/Nm3.
23. The online Particulate Matter values of the stack attached to the 500 MW Stage-IV (Unit-VII) is in between 90 to 110 mg/Nm3 thereby exceeding prescribed standard

(13)

of PM-50 mg/Nm3. The SO2 parameter recorded as 900 mg/Nm3 to 1180 mg/Nm3 as against the standard of 200 mg/Nm3.

24. The industry has not connected the Stage-V boiler online stack monitoring data to the APPCB server.
25. The Two CAAQM stations provided at B-Colony and towards railway wagon workshops are not in operation and not updating any data.

In view of the above recommendations, it is hereby directed to furnish detailed plan of action of Dr. Narla Tatarao Thermal Power Station (NTTPS), Ibrahimpatnam, Vijayawada, Krishna District within 2 weeks along with budgetary estimations to rectify the above violations within 3 months, to take further action in the matter.

S SRI SARAVANAN
MEMBER SECRETARY

To
The Occupier,
M/s. Dr. Narla Tatarao Thermal Power Station
(Dr. NTTPS) (formerly M/s.Vijayawa da Thermal Power Station),
Ibrahimpatnam (V) & (M), Krishna District.

Copy to:

1. The JCEE, ZO, Vijayawada for information and necessary action.
2. The EE, RO, Vijayawada for information and necessary action.

Digitally signed by
SHANMUGAM SRISARAVANAN
Date: 10-01-2025 00:33:36

ANNEXURE-III

(14)

1441
28/01/25

APGENCO
ISO-9001:2008 ISO 14001:2004 OHSAS 18001:2007
Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
IBRAHIMPATNAM, KRISHNA Dist., Andhra Pradesh
Phone No. : 0866 - 2882203 Fax: 0866 - 2882385
e-Mail: vjmcevtps@yahoo.com, vjmcevtps@hotmail.com, ctps.ce@apgenco.com

From
The Chief Engineer
Operation and Maintenance
Dr.NTTPS., Ibrahimpatnam

To
The Member Secretary,
A.P.Pollution Control Board,
APIIC colony,
opp Jamac apartment,
Autonagar,
Vijayawada - 520007.

Lr.No.CE/O&M/SE/C/ Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.346 /24, dt.27 -01-2025.

Sir,

Sub: Dr.NTTPS –APPCB Monitoring (TF) Committee meeting held on 25.11.2024-Directions issued on 10.01.2025–Action plan-submitted-Reg.

Ref: Order No.31/APPCB/HO/ECS//VJA/2019-Dt.10.01.2025.

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It is to submit that Monitoring (TF) committee meeting of APPCB was held on 25.11.2024 and certain directions were issued on 10.01.2025 vide reference cited. The detailed plan of action on the directions issued is herewith submitted in the annexure attached.

Encl: Annexure (6 sheets)

Yours faithfully,

27/1

CHIEF ENGINEER::O&M
Dr.NTTPS:IBRAHIMPATNAM

File
Inward

Copy to the

1. The Chief Engineer/Civil/Thermal/VidyuthSoudha/Vijayawada.
   Encl: Annexure (6 sheets)
2. The Chief Engineer/Civil/Hydel,G.Services,C&I/VidyuthSoudha/Vijayawada
   Encl: Annexure (6 sheets)
3. The Environment Engineer, APPCB/Regional Office, Vijayawada with reference to the directions of the Member Secretary/ APPCB dated 10.01.2025. Encl: As above
4. Superintending Engineer /Civil/Environment/Dr.NTTPS for information. Encl: As above

Statement showing the detailed plan of action of Dr.NTTPS,Ibrahimpatnam against the recommendations/directions communicated by the Member Secretary/APPCB/VJA dt.10.01.25

Sl.No	Observation	Action plan
1.	Damages were observed to ESPs of the unit 5 & 6 and thick smoke emissions were observed from their stacks. Stack monitoring conducted from the boilers operating at stage IV, V and VI and the monitored value for the particulate matter is in the range of 3420 to 5614 mg/Nm3 against the standard of 100 mg/Nm3.	• To control SPM, rectification of ESP fields, and replacement of damaged ESP internals is required including replacement of worn out spares of ash handling systems. APGENCO Management had sanctioned budget of Rs. 10 Crore. Additional budget of Rs.18.00 Crores to improve the performance of existing ESPs and fly ash evacuation systems and to strengthen the existing ash handling systems was also sanctioned by APGENCO management. On 16.12.2024 an amount of Rs.31.00 Crores was also sanctioned by APGENCO management. Work orders/Purchase Orders have been placed. Copies of sanction are enclosed for reference. 1.Two nos worn out vacuum pumps are refurbished and will be replaced for 2nos ESP paths to improve fly ash evacuation in next one week. The removed worn out 2 nos vacuum pumps will be refurbished and will be placed in service in next 3 months for another 2nos ESP parths.As vacuum is very critical for ash evacuation from ESP hoppers, the above replacement of 4 no's refurbished vacuum pumps will definitely improve the ash evacuation. 2. New CI pipe lines, gaskets were procured and will be replaced to the worn out ash conveying pipe line in phased manner in next 3 months to improve fly ash conveying system. 3. Purchase orders were placed for procurement of new cages & Bags for dry fly ash evacuation filtration system for required quantity i.e. 600 nos each. The materials will be received to site within one month.As soon as received, the filtration system will be refurbished immediately. 4. Purchase orders were placed for procurement of new fluidizing blowers for ESPs & Silos to improve evacuation rate of fly ash. The delivery of the blowers will be in the month of February 2025. As soon as received, the blowers will be kept in service to improve the fly ash evacuation system.

		5. Almost 80% of ESP hopper heaters are in working condition and remaining 20% of hopper heaters will be kept in running condition within 2 months for free flow of ash in the Hoppers to improve the ash evacuation system. 6. The damaged ESP internals due to ash pile up are being repaired/replaced frequently. The damaged collecting plates are rectified in many fields and keeping the fields in service. 7. Replaced the damaged filtration system with new cages & bags, 250 mtrs damaged pipe lines, 300 nos damaged coupling gaskets, 2 nos worn out conveying air blowers with overhauled blower etc. with a total purchase cost of Rs.4.75 crores. 8. In addition to the above, as a long term measures for improvement in Operation & maintenance of the ash handling system to cater the needs of worst coal filing condition, a detailed renovation proposal for complete replacement of wornout equipment & enhancing the equipment sizing, for an amount of Rs.51.70 crores prepared and fixing up of agency is under progress. The scheduled completion will be within one year after awarding the work. In addition to the above major works, there will be a round the clock operation & maintenance team working on ash handling system to plug in any leakages, proper operation of the system, thereby improving the fly ash evacuation system to minimize stack emissions for the unit-5 & 6 of Stage-III, Dr. NTTPS. The O&M team will ensure continuous improvements in the ash handling system in coming months/years to minimize air pollution. • APGENCO management had requested M/s Singareni Collieries company Ltd for supply of high grade coal. Copies of correspondence, attached here with.
2.	Ambient air quality monitoring conducted different locations at the industry and the monitored value for the SPM is 90 to 261 µg/m3 (against the	As the ESP's attached to Units I to VI are to be renovated the particulate matter in stack emissions is against the standard of 100mg/N m3 .Hence the Ambient Air Quality at different locations are against the standards. As Dr.NTTPS is taking the measures for improving the performance of

Statement showing the detailed plan of action of Dr.NTTPS,Ibrahimpatnam against the recommendations/directions communicated by the Member Secretary/APPCB/VJA dt.10.01.25

	standard of 100 µg/m3).	ESP's of all units for reduction of PM in stack emissions which in turn improves the quality of Ambient Air in the surrounding villages and will meet the standards.
3.	The fly ash is disposing from the bottom hoppers of the ESPs of the unit- 5 & 6.	After Annual Overhaul of unit-5 &6 in FY 2024-25,dumping of ash from the ESP hoppers is completely avoided.
4.	Leakage of the fly ash was observed from the ESP of unit-7 (500 MW). The ash is storing openly at ESP bottom area and the same is lifting into trucks by JCB. Fugitive emissions were observed at fly ash handling at Unit-7.	Annual overhaul was completed for the year 24-25 During Annual Overhaul of Unit-7 FY 2024-25,all leakages from ESP hoppers are arrested by replacing damaged spares of ESP evacuation system.Ash accumulated in ESP hoppers before AOH are totally cleared and lifted to open trucks by watering on fly ash heaps to avoid fugitive emissions during loading of trucks.
5.	The above fly ash is loading into trucks through JCBs instead of using pneumatic system.	After completion of AOH, there is no dumping & loading from ESP hopper area.
6.	There is no fly ash and bottom ash conveying system to the Unit-8 (800 MW) and the ash storing openly at the bottom of the ESP. Fugitive emissions were observed large scale at ash handling area.	Erection and commissioning of the dry fly ash system works were completed and fly ash conveying system is in service. Pertaining to Bottom Ash conveying system,presently bottom ash is disposing through existing Stage-I Ash disposal lines through interconnection.However,the civil and mechanical fabrication work for hydrobins is underway at a fast pace. The expected date of completion is 31st March 2025.
7.	The industry has not improved the performance of the ESPs attached to the Unit-I to Unit-VI and thick smoke emissions are observed.	• To control SPM, rectification of ESP fields, and replacement of damaged ESP internals requires including replacement of worn out spares of ash handling systems. APGENCO Management had sanctioned budget of Rs. 10 Crore. Additional budget of Rs.18.00 Crores to improve the performance of existing ESPs and fly ash evacuation systems and to strengthen the existing ash handling systems was also sanctioned by APGENCO management. On 16.12.2024 an amount of Rs.31.00 Crores was also sanctioned by APGENCO management .Work orders/Purchase Orders have been placed. Copies of sanction are enclosed for reference. Stage-I An estimate vide PR.No.1300054407 was already submitted for

(41)

		fixing of an agency to carry out the work Replacement of various CI/MS pipes and Bends at Bottom ashing system and Dry fly ash handling system of stage-I`towards strengthening of Ash Transport lines. Meanwhile the material required for the said work has been received. After fixing up of agency the work will be commenced. Further it has to submit that an agency had been already fixed towards replacement of badly eroded 400 NB CI/MS Pipes and bends with new 406 NB OD CI/MS ERW pipes and bends from location:500 to 570 for ADL_2 and from LOC No.1328 to 1336 (under khilla road culvert) on 3 Nos ash disposal lines of stage-I vide PO.No.6500002029, Dtd:23.07.2024. The work has commenced and will be completed by 15 th of Feb-2025. And also it is proposed to provide an interconnection in between ADL 1 & 2 and ADL 2 & 3 to get availability of ADL2 by 24X7. To the possible extent, doing our best to maintain system stability without effecting the generation. As a Long term plan,it is proposed to replace large quantity of collecting plates 200 Nos., pin,wheel(Big),Wheel(Small),Plain,bearing assembly,inner arms,outer arms,F/CERM,outer arms,F/EERM,shock PADs,collecting and emitting shafts,shock bars during annual overhaul of Unit for improvement of performance of ESP's. Further,Po No 6500002021, dt: 08.07.2024 was placed for supply of emitting electrodes and worm out emitting electrodes will be replaced during annual over haul of Unit-I& II to improve the performance of ESP's. At present all the ESP fields & rapping mechanism of unit-I& II ESP's are in healthycondition. Stage-II 1.New CI lines & bends will be procured to replace the present eroded ash conveying lines 2.The worn out spares will be replaced in the ESP hopper ash

		rectified in many fields and keeping the fields in service. 7. Replaced the damaged filtration system with new cages & bags, 250 mtrs damaged pipe lines, 300 nos damaged coupling gaskets, 2 nos worn out conveying air blowers with overhauled blower etc. with a total purchase cost of Rs.4.75 crores. 8. In addition to the above, as a long term measures for improvement in Operation & maintenance of the ash handling system to cater the needs of worst coal filing condition, a detailed renovation proposal for complete replacement of wornout equipment & enhancing the equipment sizing, for an amount of Rs.51.70 crores prepared and fixing up of agency is under progress. The scheduled completion will be within one year after awarding the work. In addition to the above major works, there will be a round the clock operation & maintenance team working on ash handling system to plug in any leakages, proper operation of the system, thereby improving the fly ash evacuation system to minimize stack emissions for the unit-5 & 6 of Stage-III, Dr. NTTPS. The O&M team will ensure continuous improvements in the ash handling system in coming months/years to minimize air pollution. In addition to the above major works, there will be a round the clock operation & maintenance team working on ash handling system to plug in any leakages, proper operation of the system, thereby improving the fly ash evacuation system to minimize stack emissions for the unit-1,2,3,4,5 & 6 of Stage-I,II,-III Dr. NTTPS. The O& M team will ensure continuous improvements in the ash handling system in coming months/years to minimize air pollution.
		• APGENCO management had requested M/s Singareni Collieries company Ltd for supply of high grade coal. Copies of correspondence, attached here with.
8.	The online stack monitoring system	• Online dust monitors of Units 1,2,3 are not working. For Unit-1

		evacuation system. 3.To enhance the conveying air quantity new compressors of suitable rating is being procured by February-2025.Also the existing compressors are being repaired to boost up air pressure in the air conveying system. <u>Stage-III</u> 1.Two nos worn out vacuum pumps are refurbished and will be replaced for 2nos ESP paths to improve fly ash evacuation in next one week. The removed worn out 2 nos vacuum pumps will be refurbished and will be placed in service in next 3 months for another 2nos ESP parths.As vacuum is very critical for ash evacuation from ESP hoppers, the above replacement of 4 no's refurbished vacuum pumps will definitely improve the ash evacuation. 2. New CI pipe lines, gaskets were procured and will be replaced to the worn out ash conveying pipe line in phased manner in next 3 months to improve fly ash conveying system. 3. Purchase orders were placed for procurement of new cages & Bags for dry fly ash evacuation filtration system for required quantity i.e. 600 nos each. The materials will be received to site within one month.As soon as received, the filtration system will be refurbished immediately. 4. Purchase orders were placed for procurement of new fluidizing blowers for ESPs & Silos to improve evacuation rate of fly ash. The delivery of the blowers will be in the month of February 2025. As soon as received, the blowers will be kept in service to improve the fly ash evacuation system. 5. Almost 80% of ESP hopper heaters are in working condition and remaining 20% of hopper heaters will be kept in running condition within 2 months for free flow of ash in the Hoppers to improve the ash evacuation system. 6. The damaged ESP internals due to ash pile up are being repaired/replaced frequently. The damaged collecting plates are

	provided to boiler-1, 2, 3 & 6 are not showing the SPM values.	material was procured. Though material is received for Unit-I. The dust monitor could not be installed due to lift under damage .Now the PO is placed for new lift. For Units 2 & 3 procurement is under progress. • Online dust monitors of remaining 4, 5, 6& 7 units are in working condition and the data is being uploaded continuously in the statutory websites.
9.	The public drains near the ash pond area and along with the National highway are deposited /filled with boiler ash of the industry.	Ash is being removed as and when deposited/filled in the public drains time to time near the ash pond area and all along with the National Highway.
10.	The ash sludge from the ash pond was observed on the road leading to ash pond to National Highway due to spillages from the ash carrying trucks and thereby causing fugitive emissions to the surrounding area.	Sprinkling of water is being carried out daily to suppress the spilled ash dust on the road leading from ash pond to National Highway and also sweeping the road daily along the National Highway.
11.	Open storage of crushed coal was observed without providing any fugitive dust containing measures such as covering the surface of coal stockpiles with tarpaulin sheets.	Fire quenching systems with fire monitors and sprinklers are provided and operating at crushed coal yard to suppress fire and dust. MDSS is available to control fugitive dust emissions emanating from coal crushers, wagon unloading and transfer points.
12.	The industry is discharging the floor washing effluents of Stage-I to III into Budameru channel without treatment except settling tanks. The settling tanks are filled up with ash sludge. Sludge formation also observed in the Budameru channel.	The industry provided Sedimentation tanks to the unit 1 to 6 are being cleaned regularly by fixing the agencies on first come first allocation basis in lottery system from expression of interest calling.Those agencies are transporting the ash at free of cost.The agencies are fixed upto March 2025 with an allotment quantity of 1500MT/month. An exclusive Effluent Treatment Plant (ETP) was proposed for re-treating the effluents of sedimentation tank and proposed for reusing the re-treated effluents in ash disposal and plantation. ETP proposed for treatment of effluents generated in Stage-I, II & III

		units with recycle arrangements was covered in the main contract work of construction of Stage-V (1x800MW) Unit. BOP civil construction works are being executed and part of the ETP works are completed. At present releases from sedimentation tank are proposed to be pumped to Ash pump house of Stage-III for pumping to ash pond without letting into Budameru Channel and this will be completed with in two months. The construction of clarifier for further treatment of power house effluent will be completed within three months. Construction of sumps for pumping arrangements for re-use and re-utilization of treated water for ash handling system and chemical house are in progress and will be completed within three months.
13.	The industry has not provided hydro bins for Stage-I, II & III for bottom ash disposal and not provided cooling tower for Stage-I to III as per consent conditions of CTO order dated.24.04.2023. The artificial cooling provided are utilizing during summer season.	• Draft report on feasibility study for providing hydrobins for Stage-I&III is received from M/s Indure Pvt. Ltd, New Delhi. After receipt of final DPR cost estimates will be prepared and tenders will be processed. • In existing once through cooling system of units 1 to 6, the water required for the plant is drawn through CW canal from river Krishna and the condenser hot water is discharged into Budameru Diversion Channel (BDC) of I & CAD department which joins river Krishna. Now the cooling towers are to be provided in place of once through cooling system. The cooling towers are provided for stage-IV and Stage V units during the construction itself for cooling of condenser hot water for recirculation without discharging into outside premises. • The feasibility and technical study for conversion from once through cooling system to closed cycle cooling system for 6x210MW (Stage-I,II&III) of Dr. NTTPS was carried out by external agency M/s TUV SUD South Asia Pvt Ltd., Mumbai-72 and report submitted during November 2019. The report

		concluded that "Converting open cycle cooling system to closed cycle cooling system is not technically feasible in the existing Dr.NTTPS project site". • The same was informed to the Central Electricity Authority (CEA) with detailed report, requesting for exemption. • On 31-05-2023, a team of CEA Engineers visited Dr.NTTPS in response to our request for exemption & necessary information was also furnished to CEA vide Lr. No. CE/O&M/Dr.NTTPS/SE/Civil/Envt./F.11A/D.No.222/23, Dt. 06.06.2023. Final orders from CEA are awaited and the same will be pursued.
14.	The industry has not provided hydro bins for Stage-V for bottom ash disposal as per the condition of CTO order dated.24.04.2023 and also not provided ash water recycling system.	The civil and mechanical fabrication work for hydrobins is underway at a fast pace. The expected date of completion is 31st March 2025.
15.	The industry provided sedimentation tanks to the Unit-7 and the over flow water discharging outside the industry premises.	Annual Overhaul of Unit-7 in FY 2024-25 was completed.Hence complete Over flow water from Hydrobin Recycle sump areas will be reused for bottom ash and other operations and will not be discharged outside the plant premises.
16.	The industry not provided sedimentation tanks to the Unit-8 and the floor washings mixed with ash is discharging into agricultural canals.	2 Nos temporary sedimentation tanks are provided.
17.	Coal dust emissions observed at coal stocking yard and transit points and at nearby residential area around the coal stockyard.	Fire quenching systems with fire monitors and sprinklers are provided and operating at crushed coal yard to suppress fire and dust. MDSS is available to control fugitive dust emissions emanating from coal crushers, wagon unloading and transfer points.
18.	The industry is discharging ash contaminated water from the Southern side of the industry to the agricultural	Ash water is being discharged to outside drains through temporary sedimentation tanks and clear water is allowed after settling of ash in the tanks.

Statement showing the detailed plan of action of Dr.NTTPS,Ibrahimpatnam against the recommendations/directions communicated by the Member Secretary/APPCB/VJA dt.10.01.25

	canals and the water joining in to agricultural fields.	
19.	Ash accumulation was observed in the agricultural canal and in some of the agricultural lands.	Accumulated ash is being removed from the canal and agricultural fields. Periodically it has been attending by the APGENCO for removal of accumulated ash till completion of the hydrobins.
20.	Ash dust spillages were observed along the National Highway from Jupudi area to Guntupalli and are causing fugitive emissions to the road travelers.	Continous supervision on the lorries at ash pond to cover the lorry body fully with tarpaulins and instructions were issued to the lorry drivers not to stop the lorries on the National High way.However necessary steps will be taken to prevent ash spillage.
21.	The online Particulate Matter parameter is not working for the Boiler-1,2 & 3. The online particulate matter of Boiler 4,5 & 6 are continuously exceeding the stipulated standards of 100 mg/Nm3.	The online dust monitor for measuring particulate matter for the boiler-1,2 &3 are not working due to non-availability of spares and they are obsolete. The procurement of online dust monitor for boiler-1 was done and material is at the stores of Dr.NTTPS since March'23.The installation and commissioning was not yet done due to non-availability of lift for chimney-2 P.O was placed on M/s Alikraft Engineer Pvt Ltd for supply erection and commissioning of lift for Chimney-I vide P.O.No.4500030919 commissioning of online dust monitor of boiler-I will be done as soon as the commissioning of lift for Chimney-I was completed.The purchase order was placed for another 2 nos online dust monitor of boiler-2&3 and the material yet to be received.
22.	The online SO2 values of Boiler-I, III, IV, V & VI are in between 900 mg/Nm3 to 1350 mg/Nm3, as against the standard of 600 mg/Nm3.	The MOEF&CC extended the base line data to comply the SO2 parameter for another three more years i.,e up to 31.12.2027
23.	The online Particulate Matter values of the stack attached to the 500 MW Stage-IV (Unit-VII) is in between 90 to 110 mg/Nm3 thereby exceeding prescribed standard of PM-50 mg/Nm3. The SO2 parameter recorded as 900 mg/Nm3 to 1180 mg/Nm3 as against the standard of 200 mg/Nm3.	After completion of Annual Over haul for the year 2024-25 stack emission norms are achieved by replacing all worn out spares of ESP's of Unit-7 and at present out of 72 Nos of ESP fields 68 Nos are in service. • Engineering consultancy services for installation of wet limestone based Flue Gas desulphurization (FGD) systems for Dr. NTTPS Stage-IV (1x500 MW) Unit-7 was awarded to M/s STEAG Energy Services India Pvt Limited vide PO No:4800000846CE(TPC&FGD)/SE/TPC3/SE/TPC3/

Statement showing the detailed plan of action of Dr.NTTPS,Ibrahimpatnam against the recommendations/directions communicated by the Member Secretary/APPCB/VJA dt.10.01.25

		EME1/C25/2022-23on Dt: 14.07.2022 by APGENCO, Head Quarters. The Job is under progress. • The timeline for taking measures for controlling SO2 emissions as per the revised time schedule given vide MOEF & CC, GOI Notification G.S.R. 787(E) dated 30.12.2024 is up to **31.12.2027.** • The installation of FGD system will be expedited and reported periodically.
24.	The industry has not connected the Stage-V boiler online stack monitoring data to the APPCB server.	The agency (alicraft) will come to site next week for erection of the stack elevator. Subsequently, the Total Flue Gas(FG) Monitoring equipment,including analyzers for SO2,Opacity,NOx,Mercury,CO,HF,CO2,O2, and FG flow,will be installed by M/s BHEL,these equipments are readily available in the site. The expected date of completion for erection of elevator is 31ST March 2025.
25.	The Two CAAQM stations provided at B-Colony and towards railway wagon workshops are not in operation and not updating any data.	The CAAQMS station provided at B-colony,kondapalli is working but not uploading to APPCB Website due to software problem and the one which is located towards railway wagon workshop is not working due to maintenance problems.The Agency was fixed for comprehensive Annual maintenance works and the work is under progress.The 3 nos CAAQMS station data will be uploaded with in a week.

Chief Engineer, (O&M)
Dr. N.T.T.P.S.
IBRAHIMPATNAM-521 456.

ISO-9001:2008 UNIT Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
IBRAHIMPATNAM, KRISHNA (Dt.), (Andhra Pradesh)
Phone No. : 0866 - 2882203 Fax: 0866 - 2882365
e-Mail: vjwcevtps@yahoo.com, vjwcevtps@hotmail.com, vtps.ce@apgenco.com

From
The Chief Engineer,
Operation and Maintenance,
Dr.NTTPS.,Ibrahimpatnam-521 456.

To
The Principal,
Siddhartha Medical College,
Vijayawada,
Andhra Pradesh – 520 001.

Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.39/24, dt. 05-02-2025.

Sir,

Sub: APGENCO - Dr.NTTPS-Envt. Dvn –Carrying out health studies on human beings in the Influence zone and buffer zone as per the directions of APPCB to evaluate the impacts of pollution– Requested - Reg.

Ref:1. Consent Order No.APPCB/VJA/VJA/24/CFO/HO/2016- Date:24.04.2023.
2. Order No. 31/APPCB/HO/ECS/VJA/2024-981, 02.02.2024.
3.Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.04/24, dt.02-04-2024.
4. Rc.No.1/DMHO/NTR/NCD/Epi.2024, dt. 24.04.2024.
5.Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.28/24, dt.02.05.2024.
6. Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.133/24, dt.28.08.2024

&&&

Your kind attention is invited to the letters in ref.(3rd,5th & 6th) cited, where in, it was requested to carryout health studies on human beings in the influence zone and Non-influence zones of Dr.Narla Tata Rao Thermal Power Station (Dr.NTTPS) of APGENCO located at Ibrahimpatnam as per the directions of APPCB issued in ref 1st and 2nd cited and as informed by DM & HO vide ref 4th cited stating that their department DM & HO comprises of only MBBS Doctors, concerned competent department authorized to conduct the study on industrial Public Health is the community health medicine from SPM Department of Siddhartha Government Medical College, Vijayawada.

In this connection, it is to bring to your kind notice that APPCB/kalushya Niyantrana porata samithi is insisting this office for conducting Health studies for human beings in the influence/Non-influence zones of this industry.

Hence, it is once requested to furnish your willingness, to carryout health studies for human beings as per the directions of APPCB and as informed by DM & HO, Krishna District in 'Influence' and 'Non Influence' zones, to comply the directions of APPCB and also to inform the necessary charges to be borne by Dr. NTTPS to carryout the above health studies.

Copies of this office letters 3rd, 5th & 6th cited are here with enclosed for ready reference.

Encl:As above

Yours faithfully,

CHIEF ENGINEER
OPERATION AND MAINTENANCE
Dr.NTTPS / IBRAHIMPATNAM

Copy communicated to The Chief Engineer/Civil/Th/VS-5th floor/Gunadala, Vijayawada for information please.
Copy communicated to The Chief Engineer/Civil/Hydel,GS and C&I/VS-4thfloor/Gunadala, Vijayawada for information please.
Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.
Copy communicated to Environment Engineer/RO, Vijayawada for information please.

ISO-9001:2008 UNIT Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
IBRAHIMPATNAM, KRISHNA (Dt.), (Andhra Pradesh)
Phone No. : 0866 - 2882203 Fax: 0866 - 2882365
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From
The Chief Engineer,
Operation and Maintenance,
Dr.NTTPS.,Ibrahimpatnam-521 456.

To
The Principal,
Siddhartha Medical College,
Vijayawada,
Andhra Pradesh – 520 001.
Mail Id:govsmcvja@gmail.com

Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.23/25, dt. 15-04-2025.

Sir,

Sub: APGENCO - Dr.NTTPS-Envt. Dvn –Carrying out health studies on human beings in the Influence zone and Non-influence zones as per the directions of APPCB to evaluate the impacts of pollution– Willingness- Requested - Reg.

Ref:1. Consent Order No.APPCB/VJA/VJA/24/CFO/HO/2016 Date:24.04.2023.
2. Order No. 31/APPCB/HO/ECS/VJA/2024-981, 02.02.2024.
3.Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.04/24, dt.02-04-2024.
4. Rc.No.1/DMHO/NTR/NCD/Epi.2024, dt. 24.04.2024.
5.Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.28/24, dt.02.05.2024.
6. Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.133/24, dt.28.08.2024.
7. Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.352/24, dt.05.02.2025.

&&&

Your kind attention is invited to the letters in ref.(3rd,5th ,6th & 7th) cited, where in, it was requested to carryout health studies on human beings in the influence zone (with in 10 Km radius) and Non-influence zones (beyond 10 Km radius) of Dr.Narla Tata Rao Thermal Power Station (Dr.NTTPS) of APGENCO located at Ibrahimpatnam as per the directions of APPCB issued in ref 1st and 2nd cited and as informed by DM & HO vide ref 4th cited stating that their department DM & HO comprises of only MBBS Doctors. concerned competent department authorized to conduct the study on industrial Public Health is the community health medicine from SPM Department of Siddhartha Government Medical College, Vijayawada.

In this connection, it is to bring to your kind notice that APPCB/Kalushya Niyantrana Porata Samithi is insisting this office for conducting Health studies for human beings in the influence/Non-influence zones of this industry.

Contd.....(2)

Hence, it is once requested to furnish your willingness, along with estimated value to carryout Health studies for human beings as per the directions of APPCB and as informed by DM & HO, Krishna District in 'Influence' and 'Non Influence' zones, to comply with the directions of APPCB and also to inform the necessary charges to be borne by Dr. NTTPS to carryout the above health studies.

Copies of this office letters 3rd, 5th, 6th & 7th cited are here with enclosed for ready reference.

Encl:As above

Yours faithfully,

CHIEF ENGINEER
OPERATION AND MAINTENANCE
Dr.NTTPS / IBRAHIMPATNAM

Copy communicated to The Chief Engineer/Generation/APGENCO/VS-4th floor/Gunadala, Vijayawada for information please.
Copy communicated to The Chief Engineer/Civil/Th/VS-5th floor/Gunadala, Vijayawada for information please.
Copy communicated to The Chief Engineer/Civil/Hydel,GS and C&I/VS-4thfloor/Gunadala, Vijayawada for information please.
Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.
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ISO-9001:2008 UNIT Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
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From
The Chief Engineer,
Operation and Maintenance,
Dr.NTTPS.,Ibrahimpatnam-521 456.

To
The District Medical and Health officer,
Vijayawada, NTR district.

Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.04/24, dt. 2 -04-2024.

Sir,

Sub: APGENCO - Dr.NTTPS –Carrying out health studies on human beings in the Influence zone and buffer zone as per the directions of APPCB to evaluate the impacts of pollution– Requested - Reg.

Ref: 1.Consent Order No.APPCB/VJA/VJA/24/CFO/HO/2016 Date:24.04.2023.
2. Order No. 31/APPCB/HO/ECS/VJA/2024-981, 02.02.2024.

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It is to inform that, The Andhra Pradesh Power Generation Corporation Limited (APGENCO) is a State Public Sector undertaking and has been incorporated under the provisions of the Indian Companies Act, 1956 and engaged in power generation including operation and maintenance of the power plants to meet the electrical power demand in Andhra Pradesh. APGENCO has been operating Dr. Narla Tata Rao Thermal Power Station (Dr. NTTPS) with a generation capacity of 2560 MW with 6 units of 210 MW (Commissioned between 1979 -1995) under Stages I, II & III, one unit of 500 MW (Commissioned during 2009) under stage – IV and one unit of 800MW (Commissioned during 2023) under Stage-V.

Further, Andhra Pradesh pollution control Board(APPCB) had issued Consent to Operation (CTO) vide ref 1st cited to operate Dr. NTTPS in which it was directed that "The industry shall carry out the Health studies for Human beings and Animals in influence Zone and Non influence zone in coordination with DM&HO and Animal Husbandry Departments within three months."

It is also to inform that directions were issued by APPCB vide ref. 2nd cited as follows:

"The industry shall undertake scientific study in consultation with expert organizations/ institutions to evaluate the possible impacts of pollutants emanating from the power plant activities in the influence zone and buffer zone to cover the impacts on the surrounding environment and incremental increase of heavy metals concentration exclusively in the influence zone. The study shall broadly cover the cumulative impacts

on human health, animal, soil, agriculture/horticulture activities, water bodies, aquatic life, flora & fauna etc). The details of the study shall be updated to the periodically."

In view of the above, it is required to carryout health studies on human beings in the influence zone and Non influence zone as per the above directions of APPCB.

Hence, it is requested to furnish your willingness and inform the necessary charges to be borne by Dr. NTTPS to carryout the above health studies in Influence zone and Non Influence zones as per the above directions of APPCB.

Yours faithfully,

CHIEF ENGINEER
OPERATION AND MAINTENANCE
Dr.NTTPS / IBRAHIMPATNAM

Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.
Copy communicated to Environment Engineer/RO, Vijayawada for information.

ISO-9001:2008 CNIT Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
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From
The Chief Engineer,
Operation and Maintenance,
Dr.NTTPS.,Ibrahimpatnam-521 456.

To
The Principal,
Siddhartha Medical College,
Vijayawada,
Andhra Pradesh – 520 001.

Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.369/24, dt. 05-02-2025.

Sir,

Sub: APGENCO - Dr.NTTPS-Envt. Dvn –Carrying out health studies on human beings in the Influence zone and buffer zone as per the directions of APPCB to evaluate the impacts of pollution– Requested - Reg.

Ref:1. Consent Order No.APPCB/VJA/VJA/24/CFO/HO/2016 Date:2[illegible].04.2023.
2. Order No. 31/APPCB/HO/ECS/VJA/2024-981, 02.02.2024.
3.Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.04/24, dt.02-04-2024.
4. Rc.No.1/DMHO/NTR/NCD/Epi.2024, dt. 24.04.2024
5.Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.28/24, dt.02.05.2024.
6. Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.133/24, dt.28.08.2024

&&&

Your kind attention is invited to the letters in ref.(3rd,5th & 6th) cited, where in, it was requested to carryout health studies on human beings in the influence zone and Non-influence zones of Dr.Narla Tata Rao Thermal Power Station (Dr.NTTPS) of APGENCO located at Ibrahimpatnam as per the directions of APPCB issued in ref 1st and 2nd cited and as informed by DM & HO vide ref 4th cited stating that their department DM & HO comprises of only MBBS Doctors, concerned competent department authorized to conduct the study on industrial Public Health is the community health medicine from SPM Department of Siddhartha Government Medical College, Vijayawada.

In this connection, it is to bring to your kind notice that APPCB/kalushya Niyantrana porata samithi is insisting this office for conducting Health studies for human beings in the influence/Non-influence zones of this industry.

Hence, it is once requested to furnish your willingness, to carryout health studies for human beings as per the directions of APPCB and as informed by DM & HO, Krishna District in 'Influence' and 'Non Influence' zones, to comply the directions of APPCB and also to inform the necessary charges to be borne by Dr. NTTPS to carryout the above health studies.

Copies of this office letters 3rd, 5th & 6th cited are here with enclosed for ready reference.

Encl:As above

Yours faithfully,

CHIEF ENGINEER
OPERATION AND MAINTENANCE
Dr.NTTPS / IBRAHIMPATNAM

Copy communicated to The Chief Engineer/Civil/Th/VS-5th floor/Gunadala, Vijayawada for information please.
Copy communicated to The Chief Engineer/Civil/Hydel,GS and C&I/VS-4thfloor/Gunadala, Vijayawada for information please.
Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.
Copy communicated to Environment Engineer/RO, Vijayawada for information please.

ISO-9001:2008 UNIT Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
IBRAHIMPATNAM, KRISHNA Dist. (Andhra Pradesh)
Phone No. : 0866 - 2882103 Fax: 0866 - 2882365
e-Mail: vjwcevtps@yahoo.co.in, vjwcetps@hotmail.com, vtps.ce@apgenco.gov.in

From
The Chief Engineer,
Operation and Maintenance,
Dr.NTTPS..Ibrahimpatnam-521 456.

To
The Principal,
Siddhartha Medical College,
Vijayawada,
Andhra Pradesh – 520 001.

Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.133/24, dt. 26-08-2024.

Sir,

Sub: APGENCO - Dr.NTTPS –Carrying out health studies on human beings in the Influence zone and buffer zone as per the directions of APPCB to evaluate the impacts of pollution– Requested - Reg.

Ref:
1.Consent Order No.APPCB/VJA/VJA/24/CFO/HO/2016- Date:24.04.2023.
2. Order No. 31/APPCB/HO/ECS/VJA/2024-981, 02.02.2024.
3.Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.04/24, dt.02-04-2024.
4. Rc.No.1/DMHO/NTF/NCD/Epi.2024, dt. 24.04.2024.
5. Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.28/24, dt.02.05.2024.

&&&

Your kind attention is invited to the letter in ref.(5th) cited, where in, it was requested to carry out health studies on human beings in the influence zone and Non influence zones of Dr.Narla Tata Rao Thermal Power Station (Dr.NTTPS) of APGENCO located at Ibrahimpatnam as per the directions of APPCB issued in ref 1st and 2nd cited and as informed by DM & HO vide ref 4th cited stating that their department DM & HO comprises of only MBBS Doctors, concerned competent department authorized to conduct the study on industrial Public Health is the community health medicine from SPM Department of Siddhartha Government Medical College, Vijayawada.

Hence, it is once requested to furnish your willingness, to carryout health studies for human beings as per the directions of APPCB and as informed by DM & HO, Krishna District in 'Influence' and 'Non Influence' zones, to comply the directions of APPCB and also to inform the necessary charges to be borne by Dr. NTTPS to carry out the above health studies.

A copy of this office letter 5th cited is here with enclosed for ready reference.

Encl: As above

Yours faithfully,

CHIEF ENGINEER
OPERATION AND MAINTENANCE
Dr.NTTPS / IBRAHIMPATNAM

Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.
Copy communicated to Environment Engineer/RO, Vijayawada for information.

ISO-9001:2008 CERT Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
(BRANCH OF APGENCO) NTTPS, Dt., Andhra Pradesh
Phone No: 0866 - 28 2201 Fax: 0866 - 2881365
e-Mail: jpsvtps@yahoo.com, cetnttps@gmail.com, stpsce@apgenco.gov.in

From
The Chief Engineer,
Operation and Maintenance,
Dr.NTTPS..Ibrahimpatnam-521 456.

To
The Principal,
Siddhartha Medical College,
Vijayawada,
Andhra Pradesh – 520 001.

Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.78/24, dt. 9 -05-2024.

Sir,

Sub: APGENCO - Dr.NTTPS –Carrying out health studies on human beings in the Influence zone and buffer zone as per the directions of APPCB to evaluate the impacts of pollution– Requested - Reg.

Ref: 1.Consent Order No.APPCB/VJA/VJA/24/CFO/HO/2016- Date: 24.04.2023.
2. Order No. 31/APPCB/HO/ECS/VJA/2024-981, 02.02.2024.
3.Lr.No.CE/O&M/SE/C/Envt/EE/C/Env/Dr.NTTPS/F.63/D.No.04/24, dt.02-04-2024.
4. Rc.No.1/DMHO/NTR/NCD/Epi.2024, dt. 24.04.2024.

&&&

It is to inform that, The Andhra Pradesh Power Generation Corporation Limited (APGENCO) is a State Public Sector undertaking and has been incorporated under the provisions of the Indian Companies Act, 1956 and engaged in power generation including operation and maintenance of the power plants to meet the electrical power demand in Andhra Pradesh. APGENCO has been operating Dr. Narla Tata Rao Thermal Power Station (Dr. NTTPS) with a generation capacity of 2560 MW with 6 units of 210 MW (Commissioned between 1979 -1985) under Stages I, II & III, one unit of 500 MW (Commissioned during 2009) under stage – IV and one unit of 800MW (Commissioned during 2023) under Stage-V.

Further, Andhra Pradesh pollution control Board(APPCB) had issued Consent to Operation (CTO) vide ref 1st cited to operate Dr. NTTPS in which it was directed that "The industry shall carry out the Health studies for Human beings and Animals in influence Zone and Non influence zone in coordination with DM&HO and Animal Husbandry Departments within three months."

It is also to inform that directions were issued by APPCB vide ref. 2nd cited as follows:

"The industry shall undertake scientific study in consultation with expert organizations/ institutions to evaluate the possible impacts of pollutants emanating from

the power plant activities in the influence zone and buffer zone to cover the impacts on the surrounding environment and incremental increase of heavy metals concentration exclusively in the influence zone. The study shall broadly cover the cumulative impacts on human health, animal, soil, agriculture/horticulture activities, water bodies, aquatic life, flora & fauna etc). The details of the study shall be updated to the periodically."

In view of the above, it is required to carryout health studies on human beings in the influence zone and Non influence zone as per the above directions of APPCB.

Further, vide ref 3rd cited DM & HO had been requested by this office to carryout health studies on human beings in the influence zone and Non influence zone as per the above directions of APPCB. DM & HO vide ref 4th cited informed that their department DM & HO comprises of only MBBS Doctors and concerned competent department authorized to conduct the study on industrial Public Health is the community health medicine from SPM Department of Siddhartha Government Medical College, Vijayawada.

Hence, it is requested to furnish your willingness and inform the necessary charges to be borne by Dr. NTTPS to carryout the above health studies in Influence zone and Non Influence zones as per the above directions of APPCB.

Yours faithfully,

CHIEF ENGINEER
OPERATION AND MAINTENANCE
Dr.NTTPS / IBRAHIMPATNAM

Copy to the Superintending Engineer, Civil, Environment, Dr.NTTPS for information.
Copy communicated to Environment Engineer/RO, Vijayawada for information.

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From,
The Chief Engineer,
Operation & Maintenance
Dr.NTTPS/Ibrahimpatnam
NTR District – 521456.

To,
Sri. Nazimuddin,
Director & Division Head
IPC-II Division
CPCB/New Delhi

Lr.No. CE/O&M/SE/C/Env/EE/C/Env/Dr.NTTPS/F.No. 35 /D.No. 260 /25, Dt: 07 .03.2025
Sir,

Sub: APGENCO - Dr.NTTPS – Compliance of new emission norms for SO2, PM, NOx and Hg parameters by category 'A' thermal power plants in compliance to MoEF&CC, GoI's notification dated 07.12.2015 and subsequent amendments – Information – Furnished - Reg.

Ref: 1) e-Mail dt: 31.12.2024 received from Director & Div.Head, CPCB, New Delhi
2) Lr No.CE/O&M/SE/C/Env/EE/C/Env/Dr.NTTPS/F.No.35/D.No./25,Dt:02.2025
3) e-Mail dt: 19.02.2025 received from CPCB

****

With reference to the mail dated on 31.12.2024 cited above, the status of compliance of SO2, PM, NOx and Hg emission limits notified by MoEF&CC, GoI's notification dated 07.12.2015 by Category 'A' power plants (compliance date 31.12.2022 for other than SO2 parameter and 31.12.2024 for SO2 parameter) of units 1-7 of Dr.NTTPS was submitted in the prescribed excel sheet format along with the latest stack emission monitoring reports from authorized laboratory recognized by Govt. of India-MoEF&CC, New Delhi and accredited by NABL & NABET as evidence of applicable emission limits vide ref (2) cited above. In continuation, another mail was received stating, to furnish the data of Stage-V (800 MW) vide ref (3) cited.

Stack emission monitoring of Stage-V (800 MW) was not yet done as the elevator was not available and the erection of the same is under progress. As soon as the commissioning of the elevator, stack emission monitoring will be done and the reports will be submitted.

Encl : prescribed format

Yours faithfully,

Chief Engineer
Operation & Maintenance
Dr.NTTPS/Ibrahimpatnam.

Status of compliance of SO2, PM, NOx and Hg emission limits notified by MoEF&CC, GoI's notification dated 07.12.2015 by Category-A Power Plants (Compliance date - 31.12.2022 for other than SO2 parameter and 31.12.2024 for SO2 parameter)

Name of Thermal Power Plant	State	Unit No.	Capacity (MW)	Date of Commissioning	Date of latest manual stack emission monitoring through EPA/ SPCB lab	Sulphur dioxide (SO2)								Particulate Matter (PM)				Oxides of Nitrogen (NOx)				Mercury (Hg)		
						Applicable SO2 emission limit (100/ 200/ 600 mg/Nm3)	Current level of SO2 emission (mg/Nm3)	Complying with applicable SO2 limit (Yes/ No)	SO2 control technology adopted (if complying)	SO2 control technology being adopted (if not yet complying)	Status of implementation of control measures (Refer Note 2 below)	Date of FGD Bid award (if awarded)	Tentative time of commissioning of control measure	Applicable PM emission limit (30/ 50/ 100 mg/Nm3)	PM control technology adopted	Current level of PM emission (mg/Nm3)	Complying with applicable PM limit (Yes/ No)	Applicable NOx emission limit (100/ 450/ 600 mg/Nm3)	NOx control technology adopted	Current level of NOx emission (mg/Nm3)	Complying with applicable NOx limit (Yes/ No)	Applicable Hg emission limit (NA/ 0.03 mg/Nm3)	Current level of Hg emission (mg/Nm3)	Complying with applicable Hg limit (Yes/ No)
Dr.Narla Tata Rao Thermal Power Station	A.P	1	210	01.11.1979	27.03.2023*	600	1139	No		No				100	Electro static precipitators	94	Yes	600	No	214	Yes	NA		
		2	210	10.10.1980	27.03.2023*	600	1078	No		No				100		95	Yes	600	No	253	Yes	NA		
		3	210	05.10.1989	27.03.2023*	600	1165	No		No				100		100	Yes	600	No	262	Yes	NA		
		4	210	23.08.1990	28.12.2024	600	1161	No		No				100		138	No	600	No	189	Yes	NA		
		5	210	31.03.1994	28.12.2024	600	1195	No		No				100		152	No	600	No	237	Yes	NA		
		6	210	24.02.1995	28.12.2024	600	1256	No		No				100		159	No	600	No	259	Yes	NA		
		7	500	10.08.2009	28.12.2024	200	1095	No		Yes	Bid awarded	14.07.2022		50		89	No	450	No	316	Yes	0.03	<0.005	Yes
		8	800	20.12.2023		100	Erection of elevator is under progress. After commissioning of the elevator, stack emission monitoring will be done and the reports will be submitted							30	Erection of elevator is under progress			100	Erection of elevator is under progress			0.03	Erection of elevator is under progress	

Note 1: Latest stack emission monitoring reports from EPA recognized lab/ SPCB shall be submitted as evidence of compliance of the applicable emisison limits.

Note 2: Select from these: Control measures installed/ Bid awarded/ Bids opened/ NIT issued/ Tender spec. made/ Feas. study completed/ Feas. study in process/ Feas. study to be started/ To be decommissioned (with time for retirement), Retired.

*** Due to Non-availability of lift, manual stack emission monitoring was not done from April 2023**

Chief Engineer/O&M
Dr.NTTPS/Ibrahimpatnam

SV ENVIRO LABS & CONSULTANTS

(ENVIRONMENTAL ENGINEERS & CONSULTANTS IN POLLUTION CONTROL)

Corporate Office & Laboratory : Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012.
Hyderabad: Flat No. 302, H.No. 7-1-396/B/12, Sai Ram Residency, Balkampet Road, S.R.Nagar, Hyderabad-500038.
✆ +91-9440338628, +91-7207664444 ✉ svenviro_labs@yahoo.co.in, info@svenvirolabs.com 🌐 www.svenvirolabs.com
Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by : NABL & NABET

Ref. No: SVELC/NTTPS/23-03/05 **Date: 11-04-2023**

ISSUED TO : **M/s. Dr. NARLA TATA RAO THERMAL POWER STATION O&M, IBRAHIMPATNAM, KRISHNA DIST. -521456, ANDHRA PRADESH.**

DESCRIPTION OF WORK : **STACK MONITORING**

PARAMETERS REQUIRED : **PM, SO2, NOx and Hg**

SAMPLE COLLECTED BY : **SV ENVIRO LABS & CONSULTANTS, Visakhapatnam**

TEST REPORT

Sr.No.	Parameters	EPA Limits	Results			Methods
	Details of the Source					
1.	Unit no	-	UNIT-1	UNIT-2	UNIT-3	-
2.	Unit Load (MW)	-	172	174	199	-
3.	Air flow (TPH)	-	550	590	342	-
4.	Stack Sampling point Height (m)	-	60	60	60	-
5.	Stack Diameter (m)	-	4.0	4.0	4.0	-
6.	Cross Sectional Area of Stack Sq.m (m)	-	12.5	12.5	12.5	-
	Flue Gas Characteristics					
7.	Date and Time of Monitoring	-	27-03-2023 10:00	27-03-2023 10:45	27-03-2023 11:30	-
8.	Temperature (Kelvin)	-	425	430	423	IS:11255(P-1)1985
9.	Velocity m/s	-	21.3	21.0	23.6	IS:11255(P-1)1985
10.	Volumetric Flow Rate Nm^3/Hr	-	667656	650598	743248	IS:11255(P-1)1985
11.	**Emission Rates**					
12.	Particulate Matter in mg/Nm^3 (corrected to 12% CO2)	115	93.8	95.1	99.6	IS:11255(P-1)1985
13.	Sulphur Dioxide in mg/Nm^3 (Corrected to 6% O2)	-	1139	1078	1165	IS:11255(P-2)1985
14.	Oxides of Nitrogen in mg/Nm^3 (Corrected to 6% O2)	-	214	253	262	IS:11255(P-7)2005
15.	Mercury as Hg in mg/Nm^3		-	-	-	USEPA Method 29

CHECKED BY

SV ENVIRO LABS & CONSULTANTS VISAKHAPATNAM

SV EVNIRO LABS & CONSULTANTS

SV ENVIRO LABS & CONSULTANTS

(ENVIRONMENTAL ENGINEERS & CONSULTANTS IN POLLUTION CONTROL)

Corporate Office & Laboratory : Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012.
Hyderabad: Flat No. 302, H.No. 7-1-396/B/12, Sai Ram Residency, Balkampet Road, S.R.Nagar, Hyderabad-500038.
✆ +91-9440338628, +91-7207664444 ✉ svenviro_labs@yahoo.co.in, info@svenvirolabs.com 🌐 www.svenvirolabs.com
Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by : NABL & NABET

Ref. No: SVELC/NTTPS/24-12/05 **Date: 04-01-2025**

ISSUED TO : **M/s. DR. NARLA TATA RAO THERMAL POWER STATION O&M, IBRAHIMPATNAM, KRISHNA DIST. -521456, ANDHRA PRADESH.**

DESCRIPTION OF WORK : **STACK MONITORING**

PARAMETERS REQUIRED : **PM, SO2, NOx and Hg**

SAMPLE COLLECTED BY : **SV ENVIRO LABS & CONSULTANTS, Visakhapatnam**

TEST REPORT

Sr.No.	Parameters	EPA Limits	Results			Methods
	Details of the Source					
1.	Unit no	-	UNIT-4	UNIT-5	UNIT-6	-
2.	Unit Load (MW)	-	165	178	143	-
3.	Air flow (TPH)	-	524	551	519	-
4.	Stack Sampling point Height (m)	-	60	60	60	-
5.	Stack Diameter (m)	-	4.0	4.0	4.0	-
6.	Cross Sectional Area of Stack Sq.m (m)	-	12.5	12.5	12.5	-
	Flue Gas Characteristics					
7.	Date and Time of Monitoring	-	28-12-2024 10:30	28-12-2024 11:45	28-12-2024 13:00	-
8.	Temperature (Kelvin)	-	418	422	421	IS:11255(P-1)1985
9.	Velocity m/s	-	19.8	21.1	21.8	IS:11255(P-1)1985
10.	Volumetric Flow Rate Nm^3/Hr	-	631031	666088	689821	IS:11255(P-1)1985
	Emission Rates					
11.	Particulate Matter in mg/Nm^3 (corrected to 12% CO2)	100	138	152	159	IS:11255(P-1)1985
12.	Sulphur Dioxide in mg/Nm^3 (Corrected to 6% O2)	-	1161	1195	1256	IS:11255(P-2)1985
13.	Oxides of Nitrogen in mg/Nm^3 (Corrected to 6% O2)	-	189	237	259	IS:11255(P-7)2005
14.	Mercury as Hg in mg/Nm^3	-	<0.005	<0.005	<0.005	USEPA Method 29

CHECKED BY

SV ENVIRO LABS & CONSULTANTS VISAKHAPATNAM

SV EVNIRO LABS & CONSULTANTS

SV ENVIRO LABS & CONSULTANTS

(ENVIRONMENTAL ENGINEERS & CONSULTANTS IN POLLUTION CONTROL)

Corporate Office & Laboratory : Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012.
Hyderabad: Flat No. 302, H.No. 7-1-396/B/12, Sai Ram Residency, Balkampet Road, S.R.Nagar, Hyderabad-500038.
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Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by : NABL & NABET

Ref. No: SVELC/NTTPS/24-12/06 **Date: 04-01-2025**

ISSUED TO : **M/s. DR. NARLA TATA RAO THERMAL POWER STATION O&M, IBRAHIMPATNAM, KRISHNA DIST. -521456, ANDHRA PRADESH.**

DESCRIPTION OF WORK : **STACK MONITORING**

PARAMETERS REQUIRED : **PM, SO2, NOx and Hg**

SAMPLE COLLECTED BY : **SV ENVIRO LABS & CONSULTANTS, Visakhapatnam**

TEST REPORT

S.No.	Parameters	As per CFO Limits	Results	Methods
	Details of the Source			
1.	Unit no	-	UNIT-7	-
2.	Unit Load (MW)	-	445	-
3.	Air flow (TPH)	-	1427	-
4.	Stack Sampling point Height (m)	-	75	-
	Flue Gas Characteristics			
5.	Date and Time of Monitoring	-	28-12-2024 14:45	-
6.	Temperature (Kelvin)	-	367	IS:11255(P-1)1985
7.	Velocity m/s	-	18.1	IS:11255(P-1)1985
	Emission Rates			
8.	Particulate Matter in mg/Nm^3 (corrected to 12% CO2)	50	89.1	IS:11255(P-1)1985
9.	Sulphur Dioxide in mg/Nm^3 (Corrected to 6% O2)	-	1095	IS:11255(P-2)1985
10.	Oxides of Nitrogen in mg/Nm^3 (Corrected to 6% O2)	-	316	IS:11255(P-7)2005
11.	Mercury as Hg in mg/Nm^3	-	<0.005	USEPA Method 29

CHECKED BY

SV ENVIRO LABS & CONSULTANTS VISAKHAPATNAM

SV EVNIRO LABS & CONSULTANTS

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/NTTPS/F.3/D.No: 57 /2024.Dt: 07 .06.2024

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Report on Pollution Control Measures for Thermal Units for the month of MAY - 2024 - Information - Furnished - Reg.

****

The Environmental Monitoring Report for the month of May - 2024 in respect of Dr. Narla Tata Rao Thermal Power Station is here with submitted in the prescribed proformas for favour of information.

Yours faithfully,

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008.

-- Executive Engineer / Env, O/o CE/Civil/Hydel&GS, Vidyut Soudha ,Gunadala.

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066.

-- Superintending Engineer/Civil/Envt/Dr.NTTPS.

-- Executive Engineer/Civil/Env /Dr. NTTPS.

PROFORMA FOR MAY-2024 ENVIRONMENTAL DATA

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value Max. values of the month)		102		31		40		54		108		32		41		54		92		26		35		46
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/NTTPS/F.T/D.No: 77 /2024,Dt: 05 .07.2024

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Report on Pollution Control Measures for Thermal Units for the month of JUNE - 2024 - Information - Furnished - Reg.

****

The Environmental Monitoring Report for the month of June - 2024 in respect of Dr. Narla Tata Rao Thermal Power Station is here with submitted in the prescribed proformas for favour of information.

Yours faithfully,

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008.

-- Executive Engineer / Env, O/o CE/Civil/Hydel&GS, Vidyut Soudha ,Gunadala.

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066.

-- Superintending Engineer/Civil/Envt/Dr.NTTPS.

-- Executive Engineer/Civil/Env /Dr. NTTPS.

PROFORMA FOR JUNE-2024 ENVIRONMENTAL DATA

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		108		30		39		50		104		31		41		50		81		20		28		39
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/NTTPS/F.3/D.No: 91 /2024,Dt: 05.08.2024

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Report on Pollution Control Measures for Thermal Units for the month of JULY - 2024 - Information - Furnished - Reg.

****

The Environmental Monitoring Report for the month of July - 2024 in respect of Dr. Narla Tata Rao Thermal Power Station is here with submitted in the prescribed proformas for favour of information.

Yours faithfully,

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008.

-- Executive Engineer / Env, O/o CE/Civil/Hydel&GS, Vidyut Soudha ,Gunadala.

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066.

-- Superintending Engineer/Civil/Envt/Dr.NTTPS.

-- Executive Engineer/Civil/Env /Dr. NTTPS.

PROFORMA FOR JULY-2024 ENVIRONMENTAL DATA

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		112		31		39		54		116		33		42		46		83		21		28		28
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/NTTPS/F.3/D.No: 108 /2024,Dt: 05 .09.2024

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Report on Pollution Control Measures for Thermal Units for the month of AUGUST - 2024 - Information - Furnished - Reg.

****

The Environmental Monitoring Report for the month of August - 2024 in respect of Dr. Narla Tata Rao Thermal Power Station is here with submitted in the prescribed proformas for favour of information.

Yours faithfully,

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008.

-- Executive Engineer / Env, O/o CE/Civil/Hydel&GS, Vidyut Soudha ,Gunadala.

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066.

-- Superintending Engineer/Civil/Envt/Dr.NTTPS.

-- Executive Engineer/Civil/Env /Dr. NTTPS.

PROFORMA FOR AUGUST-2024 ENVIRONMENTAL DATA

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		94		29		36		46		103		32		40		50		83		21		26		29
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/NTTPS/F.3/D.No: 133 /2024,Dt: 10 .10.2024

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Report on Pollution Control Measures for Thermal Units for the month of SEPTEMBER - 2024 - Information - Furnished - Reg.

****

The Environmental Monitoring Report for the month of September - 2024 in respect of Dr. Narla Tata Rao Thermal Power Station is here with submitted in the prescribed proformas for favour of information.

Yours faithfully,

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008.

-- Executive Engineer / Env, O/o CE/Civil/Hydel&GS, Vidyut Soudha ,Gunadala.

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066.

-- Superintending Engineer/Civil/Envt/Dr.NTTPS.

-- Executive Engineer/Civil/Env /Dr. NTTPS.

PROFORMA FOR SEPTEMBER-2024 ENVIRONMENTAL DATA

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		102		28		39		46		109		32		40		46		87		21		28		37
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravime	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/NTTPS/F.3/D.No: 148 /2024,Dt: 05.11.2024

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Report on Pollution Control Measures for Thermal Units for the month of OCTOBER - 2024 - Information - Furnished - Reg.

****

The Environmental Monitoring Report for the month of October - 2024 in respect of Dr. Narla Tata Rao Thermal Power Station is here with submitted in the prescribed proformas for information please.

Yours faithfully,

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- CE/Civil/Thermal/APGENCO/V.S-5th floor/Gunadala/VJA-520004

-- CE/Civil/Hydel, GS & CI/APGENCO/V.S-4th floor/Gunadala/VJA-520004

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008.

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066.

-- Superintending Engineer/Civil/Envt/Dr.NTTPS.

-- Executive Engineer/Civil/Env /Dr. NTTPS.

PROFORMA FOR OCTOBER-2024 ENVIRONMENTAL DATA

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		102		29		35		46		104		31		37		54		91		25		30		37
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/NTTPS/F.3/D.No: 171 /2024,Dt: 04 .12.2024

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Report on Pollution Control Measures for Thermal Units for the month of NOVEMBER - 2024 - Information - Furnished - Reg.

****

The Environmental Monitoring Test Reports for the month of November - 2024 in respect of Dr. Narla Tata Rao Thermal Power Station are here with submitted in the prescribed proformas for information please.

Yours faithfully,

Encl:Two sheets

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the

- CE/Civil/Thermal/APGENCO/V.S 5th floor/Gunadala/VJA-520004 Encl:As above
- CE/Civil/Hydel, GS & CI/APGENCO/V.S - 4th floor/Gunadala/VJA-520004 Encl: As above
- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008. Encl: As above
- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066. Encl: As above
- Superintending Engineer/Civil/Envt/Dr.NTTPS.

PROFORMA FOR NOVEMBER-2024 ENVIRONMENTAL DATA

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		103		28		37		42		102		29		38		37		92		21		35		
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/Dr.NTTPS/F.3/D.No: 197 /2025.Dt: 04 .01.2025

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Envt.Dvn- Report on Pollution Control Measures for Thermal Units for the month of DECEMBER - 2024 - Information - Furnished - Reg.

****

The Environmental Monitoring Test Reports for the month of December - 2024 in respect of Dr. Narla Tata Rao Thermal Power Station, Ibrahimpatnam, APGenco, are here with submitted in the prescribed proformas for information please.

Yours faithfully,

Encl:Two sheets

CHIEF ENGINEER/ O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- CE/Civil/Thermal/APGENCO/V.S 5th floor/Gunadala/VJA-520004 Encl:As above

--CE/Civil/Hydel, GS & CI/APGENCO/V.S - 4th floor/Gunadala/VJA-520004 Encl: As above

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008. Encl: As above

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066. Encl: As above

-- Superintending Engineer/Civil/Envt/Dr.NTTPS for information.

PROFORMA FOR DECEMBER-2024 ENVIRONMENTAL DATA

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		102		29		35		46		109		30		36		37		94		23		35		33
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/Dr.NTTPS/F.3/D.No: 231 /2025.Dt: 03 .02.2025

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Envt.Dvn- Report on Pollution Control Measures for Thermal Units for the month of JANUARY - 2025 - Information - Furnished - Reg.

****

The Environmental Monitoring Test Reports for the month of January - 2025 in respect of Dr. Narla Tata Rao Thermal Power Station, Ibrahimpatnam, APGenco, are here with submitted in the prescribed proformas for information please.

Yours faithfully,

Encl:Two sheets

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- CE/Civil/Thermal/APGENCO/V.S 5th floor/Gunadala/VJA-520004 Encl:As above

--CE/Civil/Hydel, GS & CI/APGENCO/V.S - 4th floor/Gunadala/VJA-520004 Encl: As above

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008. Encl: As above

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066. Encl: As above

-- Superintending Engineer/Civil/Envt/Dr.NTTPS for information.

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		109		31		42		48		102		31		38		50		95		24		29		35
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/Dr.NTTPS/F.3/D.No: 255 /2025,Dt: 04.03.2025

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Envt.Dvn- Report on Pollution Control Measures for Thermal Units for the month of FEBRUARY - 2025 - Information - Furnished - Reg.

****

The Environmental Monitoring Test Reports for the month of February - 2025 in respect of Dr. Narla Tata Rao Thermal Power Station, Ibrahimpatnam, APGenco, are here with submitted in the prescribed proformas for information please.

Yours faithfully,

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Encl:Two sheets

Copy to the :

-- CE/Civil/Thermal/APGENCO/V.S 5th floor/Gunadala/VJA-520004 Encl:As above

--CE/Civil/Hydel, GS & CI/APGENCO/V.S - 4th floor/Gunadala/VJA-520004 Encl: As above

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008. Encl: As above

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066. Encl: As above

-- Superintending Engineer/Civil/Envt/Dr.NTTPS for information.

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		118		34		41		46		106		28		34		42		94		25		31		37
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

*** (MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/Dr.NTTPS/F.3/D.No: 10 /2025,Dt: 03 .04.2025

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Envt.Dvn- Report on Pollution Control Measures for Thermal Units for the month of MARCH - 2025 - Information - Furnished - Reg.

****

The Environmental Monitoring Test Reports for the month of March - 2025 in respect of Dr. Narla Tata Rao Thermal Power Station, Ibrahimpatnam, APGenco, are here with submitted in the prescribed proformas for information please.

Encl:Two sheets

Yours faithfully,

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- CE/Civil/Thermal/APGENCO/V.S 5th floor/Gunadala/VJA-520004 Encl:As above

--CE/Civil/Hydel, GS & CI/APGENCO/V.S - 4th floor/Gunadala/VJA-520004 Encl: As above

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008. Encl: As above

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066. Encl: As above

-- Superintending Engineer/Civil/Envt/Dr.NTTPS for information.

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		112		31		36		48		104		32		39		46		94		22		33		37
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/Dr.NTTPS/F.3/D.No: 47 /2025.Dt: 03 .05.2025

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Envt.Dvn- Report on Pollution Control Measures for Thermal Units for the month of APRIL - 2025 - Information - Furnished - Reg.

****

The Environmental Monitoring Test Reports for the month of APRIL - 2025 in respect of Dr. Narla Tata Rao Thermal Power Station, Ibrahimpatnam, APGenco, are here with submitted in the prescribed proformas for information please.

Yours faithfully,

Encl:Two sheets

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- CE/Civil/Thermal/APGENCO/V.S 5th floor/Gunadala/VJA-520004 Encl:As above

-- CE/Generation/APGENCO/V.S 4th floor/Gunadala/VJA-520004 Encl:As above

--CE/Civil/Hydel, GS & CI/APGENCO/V.S - 4th floor/Gunadala/VJA-520004 Encl: As above

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008. Encl: As above

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066. Encl: As above

-- Superintending Engineer/Civil/Envt/Dr.NTTPS for information.

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSITIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT). NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_x ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -
Applicable Norm **	**60**	**100**	**50**	**80**	**40**	**80**	**40**	**60**	**60**	**100**	**50**	**80**	**40**	**80**	**40**	**60**	**60**	**100**	**50**	**80**	**40**	**80**	**40**	**60**
Actual Value (Max. values of the month)		116		34		40		54		102		33		39		50		91		25		30		35
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

*** (MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/NTTPS/F.3/D.No: 31 /2024,Dt: 02.05.2024

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Report on Pollution Control Measures for Thermal Units for the month of APRIL - 2024 - Information - Furnished - Reg.

****

The Environmental Monitoring Report for the month of April - 2024 in respect of Dr. Narla Tata Rao Thermal Power Station is here with submitted in the prescribed proformas for favour of information.

Yours faithfully,

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Copy to the :

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008.

-- Executive Engineer / Env, O/o CE/Civil/Hydel&GS, Vidyut Soudha ,Gunadala.

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066.

-- Superintending Engineer/Civil/Envt/Dr.NTTPS.

-- Executive Engineer/Civil/Env /Dr. NTTPS.

PROFORMA FOR APRIL-2024 ENVIRONMENTAL DATA

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs -	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		118		32		40		58		109		33		43		56		94		29		38		42
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

** *(MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

From
THE CHIEF ENGINEER / O&M
Dr. NTTPS(APGENCO),
IBRAHIMPATNAM--521 456,
NTR DISTRICT.
ANDHRA PRADESH

To
THE CHIEF ENGINEER/ CE&ET
CENTRAL ELECY. AUTHORITY
SEWA BHAVAN
R.K.PURAM
NEW DELHI--110 066.

Lr.No:CE/O&M/SE/C/ENVT/EE/C/Env/Dr.NTTPS/F.3/D.No: 76 /2025.Dt: 06 .06.2025

Sir,

SUB:- APGENCO - Dr. NTTPS - 6X210 MW Units & 1 x 500MW - Envt.Dvn- Report on Pollution Control Measures for Thermal Units for the month of MAY - 2025 - Information - Furnished - Reg.

****

The Environmental Monitoring Test Reports for the month of MAY - 2025 in respect of Dr. Narla Tata Rao Thermal Power Station, Ibrahimpatnam, APGenco, are here with submitted in the prescribed proformas for information please.

Yours faithfully,

5/6/25

CHIEF ENGINEER / O&M
Dr.NTTPS, IBRAHIMPATNAM.

Encl:Two sheets

Copy to the :

-- CE/Civil/Thermal/APGENCO/V.S 5th floor/Gunadala/VJA-520004 Encl:As above

-- CE/Generation/APGENCO/V.S 4th floor/Gunadala/VJA-520004 Encl:As above

--CE/Civil/Hydel, GS & CI/APGENCO/V.S - 4th floor/Gunadala/VJA-520004 Encl: As above

-- Environmental Engineer / A.P.Pollution Control Board / Plot No.41, Gurunanak road, Opp: State Bank of Hyderabad, Sri Kanakadurga Officers Colony, VIJAYAWADA--520 008. Encl: As above

-- The Asst. Director / CE & ET / C.E.A. / Sewa Bhavan / R.K.Puram New Delhi--110 066. Encl: As above

-- Superintending Engineer/Civil/Envt/Dr.NTTPS for information.

II. AMBIENT AIR QUALITY

WHETHER ECOLOGICALLY SENSTIVE AREA (NOTIFIED BY CENTRAL GOVERNMENT): NO

LOCATION	Location -I (POWER STATION)								Location -II (COLONY)								Location -III (OUTSIDE THE PLANT WITHIN 20 KM)							
PARAMETERS	PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)		PM10 ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)		NO_2 ($\mu g/m^3$)		PM2.5 ($\mu g/m^3$)	
	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-	Annual-	24 Hrs.-
Applicable Norm **	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60	60	100	50	80	40	80	40	60
Actual Value (Max. values of the month)		112		32		38		48		109		30		35		54		94		25		30		37
METHODS OF MEASUREMENTS	Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric		Gravimetric		Improved West and Gaeke method		Jacob-Hochheiser modified method		Gravimetric	

*** (MoEF&CC NOTIFICATION DATED 16th NOVEMBER, 2009)*

ISO-9001:2008 UNIT

Dr.Narla Tata Rao Thermal Power Station(Formerly V.T.P.S)
ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
IBRAHIMPATNAM, KRISHNA (Dt.), (Andhra Pradesh)
Phone No.: 0866 - 2882001 Fax: 0866 - 2882365
e-Mail : sjwcevtps.xaltor.com, sjwcevtps@hotmail.com, vtps.ce@apgenco.com

From
The Chief Engineer
Operation and Maintenance
Dr.NTTPS., Ibrahimpatnam

To
The Member Secretary,
A.P.Pollution Control Board,
APIIC colony,
opp Jamac apartment,
Autonagar,
Vijayawada - 520007.

Lr.No.CE/O&M/SE/C/ Envt/EE/C/Env/Dr.NTTPS/F.63/D.No. 71 /25, dt.09 -06-2025.

Sir,

Sub:APGENCO- Dr.NTTPS – Envt. Dvn-Latest Status on the implementation of the directions issued by APPCB on 10.01.2025–submitted-Reg.

Ref: Order No.31/APPCB/HO/ECS//VJA/2019-Dt.10.01.2025.

&&&

The Latest status on the implementation of the directions issued by APPCB on 10.01.2025 is herewith submitted in the annexure attached.

Encl: Annexure (5 sheets)

Yours faithfully,

9/6/25

CHIEF ENGINEER::O&M
Dr.NTTPS:IBRAHIMPATNAM

Copy to the

1. The Chief Engineer/Civil/Thermal/VidyuthSoudha/Vijayawada for information please. Encl: Annexure (5 sheets)
2. The Chief Engineer/Civil/Hydel,G.Services,C&M/VidyuthSoudha/Vijayawada for information please. Encl: Annexure (5 sheets)
3. The Chief Engineer/Generation/APGENCO/VidyutSoudha/Vijayawada-520 004 for information. Encl: As above
4. Superintending Engineer /Civil/Environment/Dr.NTTPS for information. Encl: As above
5. The Environment Engineer, APPCB/Regional Office, Vijayawada with reference to the directions of the Member Secretary/ APPCB dated 10.01.2025. Encl: As above

Latest status against the directions communicated by the Member Secretary/APPCB/VJA dt.10.01.25

Sl.No	Observation	Latest Status as on dt. 01.06.2025.
1.	Damages were observed to ESPs of the unit 5 & 6 and thick smoke emissions were observed from their stacks. Stack monitoring conducted from the boilers operating at stage IV, V and VI and the monitored value for the particulate matter is in the range of 3420 to 5614 mg/Nm3 against the standard of 100 mg/Nm3.	To improve the performance of existing ESPs and fly ash evacuation systems and to strengthen the existing ash handling systems and inorder to comply with the SPM (Suspended particulate matter) standards, APGENCO Management for all Units had sanctioned EP & FF budget as below: • Rs. 10 Crore on 06.12.2023. Work orders/Purchase Orders have been placed and all the works are completed. • Rs.18.00 Crores on 01.04.2024. Work orders/Purchase Orders have been placed and all the works are completed. • Rs. 31.00 Crores on 16.12.2024. Work orders/Purchase Orders have been placed and all the works are in progress. • Copies of sanction and Budget Utilization details are enclosed for reference. With the allotted budget, annual overhaul(for the FY 2024-25) and major modifications of ESP evacuation had been taken for Units 5 & 6. • Further, for Unit 5 & 6 R&M budget of Rs 60 Crores for renovation of ash handling system & enhancing coal handling plant in good condition. The work was placed on M/s Nagarjuna Engineering Projects in JV/Consortium with M/s G Power Engineering and services Pvt Ltd.,) on 03.02.2025. The works are commenced and in progress and all the works will be completed BY 31.03.2026.

Contd-(2)

		• APGENCO management had requested M/s Singareni Collieries company Ltd for supply of high grade coal. Copies of correspondence, attached here with.
2.	Ambient air quality monitoring conducted different locations at the industry and the monitored value for the SPM is 90 to 261 µg/m3 (against the standard of 100 µg/m3).	All measures have been taken for improving the performance of ESPs of all units for reduction of Suspended Particulate Matter in stack emissions, the quality of Ambient Air in the surrounding villages are meeting the permissible limits.
3.	The fly ash is disposing from the bottom hoppers of the ESPs of the unit- 5 & 6.	At present all the ESP hoppers of unit 5&6 are being evacuated through fly ash evacuation system only.
4.	Leakage of the fly ash was observed from the ESP of unit-7 (500 MW). The ash is storing openly at ESP bottom area and the same is lifting into trucks by JCB. Fugitive emissions were observed at fly ash handling at Unit-7.	During Annual Overhaul of Unit-7 for the FY 2024-25, all leakages from ESP hoppers are arrested by replacing damaged spares of ESP evacuation system. Ash accumulated in ESP hoppers before AOH are totally cleared and lifted to open trucks by watering on fly ash heaps to avoid fugitive emissions during loading of trucks.
5.	The above fly ash is loading into trucks through JCBs instead of using pneumatic system.	At present, Fly ash is evacuated through Pneumatic system.
6.	There is no fly ash and bottom ash conveying system to the Unit-8 (800 MW) and the ash storing openly at the bottom of the ESP. Fugitive emissions were observed large scale at ash handling area.	Fly ash collected in ESPs is being disposed of through TWO ash silos from January 2025. TWO 400 NB ash disposal pipelines have been erected up to the main ash pond (Stage-III) to convey bottom ash, and are presently in use.
7.	The industry has not improved the performance of the ESPs attached to the Unit-I to Unit-VI and thick smoke emissions are observed.	To improve the performance of existing ESPs and fly ash evacuation systems and to strengthen the existing ash handling systems in order to comply with the SPM standards, APGENCO sanctioned EP & FF budget and allocated as detailed below: • Rs. 10 Crore on 06.12.2023. Work orders/Purchase Orders have been placed and all the works are completed in full shape. • Rs.18.00 Crores on 01.04.2024. Work orders/Purchase Orders have been placed and all the works are completed in full shape.

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		• Rs. 31.00 Crores on 16.12.2024. Work orders/Purchase Orders have been placed and all the works are in in full swing. • Copies of sanction and Budget Utilization details are enclosed for reference. With the allotted budget, annual overhaul(for the FY 2024-25) and major modifications of ESP evacuation had been taken for Units 5 & 6. • APGENCO management requested M/s Singareni Collieries company Ltd for supply of high grade coal. Copies of correspondence, attached here with. **Stage I:** At present all the ESP fields & rapping mechanism of unit-I&II ESPs are in healthy condition. With the allotted budget, all the ESP hoppers are facilitated with sufficient spares. **Stage II:** ESP modification works are to be taken up in R&M works. Stage-III : • Annual overhaul and major modifications of ESP evacuation have been taken for the FY 2024-25 and of completed successfully. Further, for Unit-5 & 6 R &M budget of Rs 60 Crores was allocated for renovation of ash handling system & enhancing the sizing of equipment at coal handling plant. The work was placed on M/s Nagarjuna Engineering Projects in JV/Consortium with M/s G Power Engineering and services Pvt Ltd.,) on 03.02.2025. The works are commenced and in progress and all the works will be completed BY 31.03.2026.
8.	The online stack monitoring system provided to boiler-1, 2, 3 & 6 are not showing the SPM values.	• Latest upgraded Online Dust Monitors for Unit-I, 2 & 3 are received at stores. Due to non-availability of chimney lift these dust monitors are could not installed. A purchase

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		order was placed on M/s. Ali craft firm for supply and installation of chimney lift (in place of damaged chimney lift of Stack1) and the work is in process. Dust monitors will be installed for both Unit-I, II & III soon on erection of lift at chimney. • Online dust monitors of remaining Units- 4, 5, 6& 7 are in working condition and the data is being uploaded continuously in the statutory websites.
9.	The public drains near the ash pond area and along with the National highway are deposited /filled with boiler ash of the industry.	Annual estimate towards "Removal of ash/silt from the drains of Bund-I&II of Stage-III ash pond" is in operation for removing of ash as and when deposited/filled in the public drains time to time near the ash pond area and all along the National Highway. The work was awarded to the contractor and the work is commenced and is in progress.
10.	The ash sludge from the ash pond was observed on the road leading to ash pond to National Highway due to spillages from the ash carrying trucks and thereby causing fugitive emissions to the surrounding area.	Annual estimate for "Engaging of water tanker and JCB at Stage-III ash pond for the period of 12 months" is in operation for Sprinkling of water daily to suppress the spilled ash dust on the road leading from ash pond to National Highway and also sweeping the road daily along the National Highway. The work was awarded to the contractor and the work is commenced and is in progress.
11.	Open storage of crushed coal was observed without providing any fugitive dust containing measures such as covering the surface of coal stockpiles with tarpaulin sheets.	Fire quenching systems with fire monitors and sprinklers are provided and operating at crushed coal yard to suppress fire and dust. Mechanical Dust Suppression System is available to control fugitive dust emissions emanating from coal crushers, wagon unloading and transfer points.
12.	The industry is discharging the floor washing effluents of Stage-I to III into Budameru channel without treatment except settling tanks. The settling tanks are filled up with ash sludge. Sludge formation also observed in the Budameru channel.	The industry provided sedimentation tanks to the unit-1 to 6 are being cleaned regularly by fixing the agencies on first come first allocation basis and are transporting the ash at free of cost. Exclusively Effluent Treatment Plant was proposed for treatment of effluents generated in Stage-I,II & III units with recycle arrangements was covered in the main contract

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		work of construction of Stage-V (1x800 MW) unit, under BOP civil works and construction of clarifier for further treatment of power house along with construction of sumps for pumping arrangements for re-use and re-utilization of treated water are in progress and will be completed by the end of June-25. An agency M/s SVS Suppliers, Guntupalli is engaged for daily lifting of silt deposits from sedimentation tank of Stage-I to III.
13.	The industry has not provided hydro bins for Stage-I, II & III for bottom ash disposal and not provided cooling tower for Stage-I to III as per consent conditions of CTO order dated.24.04.2023. The artificial cooling provided are utilizing during summer season.	• Draft report on feasibility study for providing Hydrobins for Stage-I & III is received from M/s Indure Pvt. Ltd, New Delhi. • The feasibility study for construction of Hydrobins for units 5&6 was completed and preparation of DPR under active consideration. Hydro bins are not feasible for Stage-I as the Units-I & II are 45 years older units. Hydrobins are also not feasible for Stage-II as bottom ashing is done through scraper conveyor system and due to space constraint. • In existing once through cooling system of units 1 to 6, the water required for the plant is drawn through CW canal from river Krishna and the condenser hot water is discharged into Budameru Diversion Channel (BDC) of I & CAD department which joins river Krishna. Now the cooling towers are to be provided in place of once through cooling system. The cooling towers are provided for stage-IV and Stage V units during the construction itself for cooling of condenser hot water for recirculation without discharging into outside premises. • The feasibility and technical study for conversion from once through cooling system to closed cycle cooling system for 6x210MW (Stage-I,II&III) of Dr. NTTPS was carried out by external agency M/s TUV SUD South Asia Pvt Ltd.,

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		Mumbai-72 and report submitted during November 2019. The report concluded that "Converting open cycle cooling system to closed cycle cooling system is not technically feasible in the existing Dr.NTTPS project site". • The same was informed to the Central Electricity Authority (CEA) with detailed report, requesting for exemption. • On 31-05-2023, a team of CEA Engineers visited Dr.NTTPS in response to our request for exemption of closed cycle system & necessary information was also furnished to CEA vide Lr. No. CE/O&M/Dr.NTTPS/SE/Civil/Envt./F.11A/D.No.222/23, Dt. 06.06.2023. Final orders from CEA are awaited and the same will be pursued. • IDCT are available for Stage-I, II & III to makeup the CW sump levels for Stage-I-III. Whenever the river water level falls below the normal value mainly in summer season, the IDCT are being kept into service.
14.	The industry has not provided hydro bins for Stage-V for bottom ash disposal as per the condition of CTO order dated.24.04.2023 and also not provided ash water recycling system.	Erection of TWO hydro bins on mechanical side is in progress. Civil works are underway for the third hydro bin. Fabrication of mechanical beams and cones is completed for all three hydro bins. Erection of two pumps for pumping ash slurry from sump up to hydro bin is in progress. The work will be completed shortly.
15.	The industry provided sedimentation tanks to the Unit-7 and the over flow water discharging outside the industry premises.	During Annual Overhaul of Unit-7 in FY 2024-25. Over flow water from Hydrobin Recycle sump areas will be reused for bottom ash and other operations and hence there will not any discharges outside the plant premises. Ash settled at sedimentation tank is being cleaned regularly and clean water only being discharged.
16.	The industry not provided sedimentation tanks to the Unit-8 and the floor washings mixed with ash is	02 Nos temporary sedimentation tanks are provided.

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	discharging into agricultural canals.	
17.	Coal dust emissions observed at coal stocking yard and transit points and at nearby residential area around the coal stockyard.	Fire quenching systems with fire monitors and sprinklers are provided and operating at crushed coal yard to suppress fire and dust. MDSS is available to control fugitive dust emissions emanating from coal crushers, wagon unloading and transfer points.
18.	The industry is discharging ash contaminated water from the Southern side of the industry to the agricultural canals and the water joining in to agricultural fields.	Ash water is being discharged to outside drains through temporary sedimentation tanks and clear water is allowed after settling of ash in the tanks.
19.	Ash accumulation was observed in the agricultural canal and in some of the agricultural lands.	Accumulated ash is being removed from the canal and agricultural fields. Periodically it has been attending by the APGENCO for removal of accumulated ash till completion of the Hydrobin.
20.	Ash dust spillages were observed along the National Highway from Jupudi area to Guntupalli and are causing fugitive emissions to the road travelers.	Continuous supervision on the Trucks/Lorries at ash pond to cover the Truck body fully with tarpaulins and instructions were issued to the Truck drivers not to park their vehicles on the National High way. Necessary steps are being taken to prevent ash spillage.
21.	The online Particulate Matter parameter is not working for the Boiler-1,2 & 3. The online particulate matter of Boiler 4,5 & 6 are continuously exceeding the stipulated standards of 100 mg/Nm3.	• Online Dust Monitors for Unit-I, 2 & 3 are received at stores. Due to non-availability of chimney lift these dust monitors could not be installed. A purchase order was placed on M/s. Ali craft firm towards supply and installation of chimney lift (in place of damaged chimney lift of Stack1) and the work is in process. As soon as the chimney lift is available, dust monitors will be installed for Unit-I, II & III. • Online dust monitors of remaining 4, 5, 6& 7 units are in working condition and the data is being uploaded continuously in the statutory websites.
22.	The online SO2 values of Boiler-I, III, IV, V & VI are in between 900 mg/Nm3 to 1350 mg/Nm3, as against	The MOEF&CC extended the base line data to comply with the SO2 parameter for another three more years i..e up to

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	the standard of 600 mg/Nm3.	31.12.2027.
23.	The online Particulate Matter values of the stack attached to the 500 MW Stage-IV (Unit-VII) is in between 90 to 110 mg/Nm3 thereby exceeding prescribed standard of PM-50 mg/Nm3. The SO2 parameter recorded as 900 mg/Nm3 to 1180 mg/Nm3 as against the standard of 200 mg/Nm3.	Stack Test Results : Date of Testing :26.05.2025 SPM: 58 mg/Nm3 SO2 : 1185 mg/Nm3 NOx : 318 mg/Nm3 Total No.of fields :72 No.of fields in service : 70 • As seen from the above it could be noticed that the SPM values are in decrement stage every month. • Engineering consultancy services for installation of wet limestone based Flue Gas desulphurization (FGD) systems for Dr. NTTPS Stage-IV (1x500 MW) Unit-7 was awarded to M/s STEAG Energy Services India Pvt Limited (Copy enclosed) by APGENCO, Head Quarters and the work is in progress. • The timeline for taking measures for controlling SO2 emissions as per the revised time schedule given vide MOEF & CC, GOI Notification G.S.R. 787(E) dated 30.12.2024 is upto **31.12.2027 (Copy enclosed).** • The installation of FGD system will be expedited and reported periodically.
24.	The industry has not connected the Stage-V boiler online stack monitoring data to the APPCB server.	Erection of stack elevator up to 267 m is complete. The balance 5 m will be completed after receiving clearance from BGRESL, Civil (to remove winch pulley and other equipment causing obstruction to the elevator rack).

		Erection of online stack monitoring equipment is under the scope of M/s BHEL. Instruments are to be erected at 40 m and 121 m floors.
25.	The Two CAAQM stations provided at B-Colony and towards railway wagon workshops are not in operation and not updating any data.	The CAAQMS station provided at B-colony, Kondapalli is working and data is -being uploaded to APPCB Website. Due to power fluctuations temporarily railway wagon workshop CAAQMS is stopped and laying of power cable line work is in progress.

CHIEF ENGINEER::O&M
Dr.NTTPS:IBRAHIMPATNAM

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Environmental Impact Assessment

for

Proposed 1×800 MW Supercritical Coal Based Dr. Narla Tata Rao Thermal Power Station (Stage- V) at Ibrahimpatnam, Krishna (District), Andhra Pradesh

Draft Report

(for Public Hearing as per MoEF Notification S.O.1533 Dt. 14th Sept 2006)



Submitted By

Andhra Pradesh Power Generation Corporation Ltd

Room No. 125, 'A' Block, Vidyut Soudha,
Hyderabad-500 082,
Andhra Pradesh

Prepared By

Ramky Enviro Engineers Ltd

Hyderabad-500 082.

(QCI/NABET Approved - Certificate No. NABET/EIA/1013/016)

June 2013




3.14 IMPACT ASSESSMENT ON HUMAN HEALTH

In order to assess the impact on human health, household surveys have been carried out in 18 villages covering influence and non-influence areas from Dr. NTTPS. The study findings and recommendations are given below.

Following sources in the vicinity of Dr. NTTPS contribute impact on the human health.

1) Major, Medium industries & Stone crushing units:

S.No	Name of the Industry	Address	Product
1.	Sri Pavan Granite metal works	Jupidi(V), Ibrahimpatnam (M), Krishna(D)	Stone Crusher
2.	Sri Srinivasa Stone Crusher	Ibrahimpatnam Krishna(D)	Stone Crusher
3.	Sri Swathi Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
4.	Venkata ramana Stone Crusher co.,	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
5.	Sri Venkateshwara Stone crusher	Panipaka(V),G.Konduru(M),Krishna(D)	Stone Crusher
6.	T.Venkateshwara Stone Crusher	Paritala(V),Krishna(D)	Stone Crusher
7.	Sri Sai Ramana Stone Crusher co.,	Mulapadu(V), Krishna(D)	Stone Crusher
8.	Vijaya Sudha Crusher	Mulapadu(V), Krishna(D)	Stone Crusher
9.	Anjaneya Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
10.	Sri Mahalakshmi Stone Crusher	Jupudi(V),Ibrahimpatnam Krishna(D)	Stone Crusher
11.	Venkata Ramana Granite Metal Works	Jupudi(V),Ibrahimpatnam Krishna(D)	Stone Crusher
12.	Jagadamba Stone Crusher	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
13.	Vengamamba Engineering co.,	Jupudi(V),Ibrahimpatnam (M)Krishna(D)	Stone Crusher
14.	Srinivasa Stone Crusher	Killeswarapuram(V), Ibrahimpatnam Krishna(D)	Stone Crusher
15.	Granite Product Company	Kattubadipalem(V), G.Konduru(M), Krishna(D)	Stone Crusher
16.	Lakshmi Devi Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher

S.No	Name of the Industry	Address	Product
17.	Sri Padmavathi Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
18.	Sree Seetharamajaneya Stone Crusher	Ibrahimpatnam(V&M) Krishna(D)	Stone Crusher
19.	N.V.Subbarao&co.	Jupudi(V),Ibrahimpatnam (M)Krishna(D)	Stone Crusher
20.	Pushyami Stone Crusher	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	Stone Crusher
21.	Madhavi Metal Crushers	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
22.	Chakravarthi Stone Crusher	Donabanda(V), Ibrahimpatnam(M),Krishna(D)	Stone Crusher
23.	Jyothi Stone Crusher	Kanchavaram(V) Ibrahimpatnam(M),Krishna(D)	Stone Crusher
24.	Sri Sai Srinivasa Stone Crusher	Kanchavaram(V) Ibrahimpatnam(M),Krishna(D)	Stone Crusher
25.	Sri Sarada Stone Crusher	Paritala(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
26.	Sri Veeranjaneya Stone Crusher	Kethanakonda(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
27.	BMC Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
28.	Maruthi Stone Crusher	Kanchavaram(V) Ibrahimpatnam(M),Krishna(D)	Stone Crusher
29.	Vijaya Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
30.	Nandini Stone Crusher	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
31.	Adilakshmi Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
32.	Sai Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
33.	Seshachala Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
34.	Sri Balaji Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
35.	Sri Sai Malleshwari Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
36.	Sri Venkateshwara Engineering co.,	Ibrahimpatnam(V&M),Krishna(D)	Stone Crusher
38.	Sri Kanaka Durga Metal works	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
39.	Sri sarath Stone Crusher	Kanchavaram(V) Ibrahimpatnam(M),Krishna(D)	Stone Crusher
40.	Sri Srinivasa Stone Crusher	Kethanakonda(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
41.	Sai Maruthi Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
42.	Vengamamba Stone Crusher	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	Stone Crusher
43.	Sree Vigneswara Stone Crusher	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
44.	Vijayalakshmi Stone Crushers	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
45.	Sree Lakshmi Metal Crushers	Mulapadu(V),Ibrahimpatnam(M),Krishna(D)	Stone Crusher
46.	Tirumala Venkateshwara Stone Crusher	G.Konduru(V&M), Krishna(D)	Stone Crusher
47.	Y.K.reddy Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
48.	Kondapally Stone Crusher	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	Stone Crusher

S.No	Name of the Industry	Address	Product
49.	Vijaya Maruthi Constructions	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	Stone Crusher
50.	Standard Granite Crusher	Kattubadipalem(V) G.Konduru(M), Krishna(D)	Stone Crusher
51.	Siddhartha Stone Crusher	Kanchavaram(V) Ibrahimpatnam(M),Krishna(D)	Stone Crusher
52.	Siva Sakthi Stone Crusher	Jupudi(V),Ibrahimpatnam (M)Krishna(D)	Stone Crusher
53.	Sri Swamy ayyappa Stone Crusher	Kethanakonda(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
54.	Ganesh Stone Crusher	Ibrahimpatnam(M), Krishna(D).	Stone Crusher
55.	Sri Shiridi Sai Stone Crusher	Paritala(V),Ibrahimpatnam(M), Krishna(D).	Stone Crusher
56.	Sri Shiridi Stone Crusher	Mulapadu(V),Ibrahimpatnam(M), Krishna(D).	Stone Crusher
57.	M/s. K&K Stone Crusher	Navvepothavaram(V) ,Ibrahimpatnam(M), Krishna(D).	Stone Crusher
58.	M/s. Prabhu Stone Crusher	Mylavaram road, G.Konduru(M), Krishna(D)	Stone Crusher
59.	Baji babu Stone Crusher	Kondapalli(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
60.	Sri Balaji Stone Crusher	Kachavaram(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
61.	Dhanalakshmi Stone Crusher	Kattubadipalem(V) G.Konduru(M), Krishna(D)	Stone Crusher
62.	Venkateshwara Stone Crusher	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	Stone Crusher
63.	Sri sai ram Stone Crusher	Kondapally	Stone Crusher
64.	N. Brahmeswara Rao & co.,	Kachavaram(V), Ibrahimpatnam(M), Krishna(D).	Stone Crusher
65.	Quality Stone Crusher	Jupudi(V),Ibrahimpatnam (M)Krishna(D)	Stone Crusher
66.	Kesava Stone Crusher	Jupudi(V),Ibrahimpatnam (M)Krishna(D)	Stone Crusher
67.	Spriha Enterprises	Ida, Kondapally, Ibrahimpatnam (M)Krishna(D)	Stone Crusher
68.	Venkata vijaya durga Stone Crusher	Mulapadu(V),Ibrahimpatnam(M), Krishna(D).	Stone Crusher
69.	Manorama Crushers	Paritala(V),Ibrahimpatnam(M), Krishna(D).	Stone Crusher
70.	Lakshmi Ganesh Stone Crusher	Chevuturu(V), G.Konduru(M), Krishna(D)	Stone Crusher
71.	Vijaya jyothi Stone Crusher	Kondapalli (V),Krishna(D)	Stone Crusher
72.	MSR Hitech Formulation Pvt. Ltd.	Kondapalli(V),Ibrahimpatnam(M),Krishna(D)	Pesticides/Insecticides/ Fungicides/Herbicides/ Agrochemical Formulations
73.	SHV Energy South East (P) Ltd.,	Kondapalli(V), Ibrahimpatnam (M)Krishna(D)	LPG Bottling
74.	P. Subba Raj & Co.,	Bone mill, Konndapally,Krishna(D)	Glue & Gelatine
75.	Solar Form Chemicals	Kondapally, Krishna(D)	Pesticides(Techinical)(Excluding Formulation)
76.	Lanco Kondapally Power Pvt Ltd.,	IDA Kondapally, Ibrahimpatnam(M), Krishna(D).	Power Plant
77.	Bharat Petroleum Corporation Ltd.,	Pinapaka(V),G.Konduru(M), Krishna(D)	Petroleum Products invoving storage, transfer or processing

S.No	Name of the Industry	Address	Product
78.	IBP Corporation ltd	Kadimipothavaram(V)G.Konduru(M) Krishna(D)	Petroleum Products invoving storage, transfer or processing
79.	Indian Oil Corporation Ltd	Kadimipothavaram(V)G.Konduru(M) Krishna(D)	Petroleum Products invoving storage, transfer or processing
80.	Hindustan Petroleum Corporation Ltd.,	Kattubadipalem(V), G.Konduru(M) Krishna(D)	Petroleum Products invoving storage, transfer or processing
81.	Shine Ceramics Pvt Ltd.,	Kuntamukkala,(V)Ibrahimpatnam(M), Krishna(D).	Allo Bricks Glazad Well Tiles
82.	Lakshmi Organics Pvt Ltd.,	Kondapally (V),Ibrahimpatnam(M), Krishna(D)	Bulk Drugs & Pharmaceuticals
83.	Panax Pharma Chemicals	I.D.A Kondapally (V),Ibrahimpatnam(M), Krishna(D)	Bulk Drugs & Pharmaceuticals
84.	S.V. Chemicals	I.D.A Kondapally (V),Ibrahimpatnam(M), Krishna(D)	Bulk Drugs & Pharmaceuticals
85.	S.D.V Steels Ltd	Kadimipothavaram(V),G.Konduru(M)Krishna(D)	Steel Bars
86.	Reshma Chemical (P) Ltd	Sarojini Road Kethanakonda(V) , Ibrahimpatnam(M), Krishna(D)	Fine Chemicals
87.	Railway Wagon Workshop	Guntupalli(V) Ibrahimpatnam(M), Krishna(D)	Servicing of Railway Wagons & other article pertaining to railway
88.	Ramco Industries Ltd	Ibrahimpatnam(M), Krishna(D)	Asbestos & asbestos Products
89.	Sri Kanakadurga Chromates Pvt Ltd	Gadmanugu(V), G.Konduru(M), Krishna(D)	Sodium Dichromate, Basic Chromium Sulphate, Sodium Chromate

3.14.1 Road Traffic

Traffic volume was studied at 2 Locations i.e Ibrahimpatnam Circle(NH-9) & Road Ibrahimpatnam to Kondapalli passing close to Dr.NTTPS and details are given in table s 3.9.1, 3.9.2 (A) & (B). .

Main Air Pollutants from Thermal Power Station:

Suspended Particulate Matter (SPM), Sulphurdioxide (SO_2), Nitrogen oxides (NO_x) & Fugitive Dust Emissions from coal handling areas, ash pond, ash handling areas etc.

Air pollutants from Stone crushing units

Stone crushing units are operated at the ground level emitting stone dust which is main pollutatant

Air pollutants from Road traffic

Smoke, Carbon monoxide, Nitrous oxide, Hydro carbons, Lead etc.

It is observed that thermal power station is equipped with ESPs of efficiency in the order of 99.8% to 99.89% to control dust. The dust particles escaped through flue gas are dispersed in the wider area due to the tall chimneys of height as high as 275 m. But dust generated in the coal handling areas, ash handling areas and transportation of ash trucks generate ash particles at ground level. Presently there are no regulation in India to control SO2 and NOx for thermal power stations. Hence there are no control systems for reduction of SO2 and NOx in Dr.NTTPS units. But tall chimneys are constructed for dispersion in the wider area to prevent pollutant accumulation in the smaller areas. Every day about 28000 tons of coal is being burnt in the existing stations.

About 71 stone crushing units are being operated in the vicinity of Dr.NTTPS. Heavy dust generated from these units is dispersed in the smaller area.

NH-9 and Road from Ibrahimpatnam to Kondapalli have high traffic volumes. About 1520 vehicles pass through in an hour (on average) on NH-9. About 557 vehicles pass through in an hour (on average) on Ibrahimpatnam to Kondapalli road.

3.14.2 Health effects of Pollutants

There are several diseases, major and minor, known to be caused by air pollution, which may be broadly, categorized under two groups: 1) Respiratory and ii) Allergic diseases connected to eye, ear and skin.

Pollutant	Health effects
Particulates	a) Obscure vision b) Aggravate respiratory disorders c) Particles of size greater than10 µm retained in the nose. d) Particles of size 0.5 to 5 µm deposite on the respiratory bronchioles e) Particles < 0.5 µm size cause more damage to the respiratory organs
Sulphur Oxides	Suffocation, Irritation of throat, Watering of eyes, Respiratory diseases. Further, healthy individuals experience broncho-constriction when exposed to few minutes to levels of 1.6 ppm (4500 µg/m3)
Nitrogen Oxides (Out of seven oxides, NO, N2O and NO2 are important. Main toxic potential results from NO2)	Irritates eyes and nose, Bronchitis, Corrodes metals, Damages vegetation a) NO2 reach the lungs and convert into nitric acids and damage lung tissues. b) Exposure of NO_2 to 0.06-0.1 ppm (123 to 205 µg/m3) for 2-3 years cause acute respiratory disease

3.14.3 Household survey on disease pattern

Total 277 sample house holds in 18 villages are surveyed. Out of 18 villages, 8 villages are covered under influence zone of Dr.NTTPS, Stone crushers and Road traffic. 10 villages are covered in non-influence zone.

Table 3.14.3(A)

Village wise total number of samples collected

Name of the village	Number of samples		Number of population	
Influence zone	No.	%	No.	%
Ibrhimpatnam	20	7.22	84	6.79
Kondapalli	20	7.22	103	8.33
Mulapadu	16	5.78	64	5.17
Jupudi	12	4.33	51	4.12
Guntupalli	16	5.78	81	6.55
Thummalapalem	15	5.42	83	6.71
Rayanpadu	12	4.33	68	5.50
Elaprolu	15	5.42	65	5.25
Total	126	45.5	599	48.42
Non-influence zone				
Trilochanapuram	19	6.86	82	6.63

Amount Sanctioned (10 Cr) and Utilized vide Proceeding No. APGP/CE-CIV-TH/SE-TH/EENTTPS/EP&FF/D.No.82/23, dt.06.12.2023.

	Sanctioned		No.of PO's	Amount Utilised
Stage.I	Rs. 20,000,000.00	CAM-I	29	Rs. 18,531,329.00
		EM&MRT-I	3	Rs. 501,290.00
		I&C-I	6	Rs. 1,517,256.00
		BM-1	2	Rs. 3,003,681.26
		Services		Rs. 2,137,635.00
		Total:	**40**	**Rs. 25,691,191.26**
Stage.II	Rs. 20,000,000.00	CAM -II	27	Rs. 18,359,437.00
		EM&MRT-II	3	Rs. 967,518.00
		I&C-II	5	Rs. 1,679,114.00
		BM-II	2	Rs. 4,579,390.40
		Total:	37	Rs. 25,585,459.40
		CAM -III	**25**	**Rs. 11,952,226.00**
Stage.IV	Rs. 37,500,000.00	I&C-III	2	Rs. 404,384.00
		BM- III	1	Rs. 1,400,434.00
		EM&MRT-III	2	Rs. 209,877.00
		Services		Rs. 2,844,310.00
		H.Q		
		Total:	30	Rs. 16,811,231.00
		CAM-IV	**44**	**Rs. 23,283,099.27**
Civil	Rs. 2500000.0	EM&MRT-IV	6	Rs. 1,666,078.00
		I&C-IV	6	Rs. 2,780,961.00
		BM- IV	1	Rs. 185,637.00
		Services		Rs. 1,498,000.00
		H.Q		
		Total:	57	Rs. 29,413,775.27
		Civil		Rs. 2,500,000.00
			164	**Rs. 100,001,656.93**
Total	Rs. 100,000,000.00			
			Grand Total:	Rs. 100,001,656.93
			Balance	**Rs. 1,656.93**

11.04.25

EXECUTIVE ENGINEER/CIVIL
ENVIRONMENT & QC DIVISION
Dr.N.T.T.P.S.
IBRAHIMPATNAM-521 456.

Amount Sanctioned (14 Cr) and Utilized vide Proceeding No. APGP/CE-CIV-TH/SE-TH/EENTTPS/EP&FF/D.No.03/2024. dt.01.04.2024

	Sanctioned		No.of PO's	Amount Utilised
Stage.I	Rs. 20,000,000.00	CAM-I	24	Rs. 15,756,268.52
		EM&MRT-I	2	Rs. 3,266,260.00
		I&C-I	1	Rs. 1,285,030.00
		BM-1		Rs. 0.00
		Services	2	Rs. 1,143,783.00
		Total:	**29**	**Rs. 21,451,341.52**
Stage.II	Rs. 30,000,000.00	CAM -II	27	Rs. 13,804,383.73
		EM&MRT-II	3	Rs. 2,858,735.40
		I&C-II	3	Rs. 432,593.75
		BM-II	6	Rs. 4,368,637.32
		Services	1	Rs. 436,728.00
		Total:	**40**	**Rs. 21,901,078.20**
Stage.III	Rs. 35,000,000.00	CAM -III	29	Rs. 15,839,160.32
		I&C-III	3	Rs. 1,174,586.83
		BM- III	1	Rs. 1,455,388.00
		EM&MRT-III	14	Rs. 5,794,156.48
		Services	2	Rs. 3,468,324.00
		H.Q		
		Total:	**49**	**Rs. 27,731,615.63**
Stage.IV	Rs. 40,000,000.00	CAM-IV	52	Rs. 30,978,671.08
		EM&MRT-IV	8	Rs. 1,066,655.10
		I&C-IV	4	Rs. 1,725,016.46
		BM- IV	9	Rs. 7,578,409.16
		Services	2	Rs. 516,439.00
		General/- IV	2	Rs. 1,036,810.00
		H.Q	2	Rs. 12,230,700.00
		Total:	**79**	**Rs. 55,132,700.80**
Stage-V	Rs. 10,000,000.00	BM (CAM) - V	1	Rs. 1,641,692.50
		Services - V	1	Rs. 1,053,829.00
			2	**Rs. 2,695,521.50**
Civil	Rs.5,000,000.00	Civil		
		Civil Services	1	Rs. 1,067,153.00
H.Q		H.Q.		Rs. 10,000,000.00
Total	**Rs. 140,000,000.00**		**200**	**Rs. 139,979,410.65**

Grand Total:	**Rs. 139,979,410.65**
Balance	**Rs. 20,589.35**

1.04.25
EXECUTIVE ENGINEER/CIVIL
ENVIRONMENT & QC DIVISION

Amount Sanctioned (10 cr) for the year 2024-25 and utilized vide Proceeding NO. APG/CE-CIV-TH/SE-TH/EE NTTPS/ EP&FF Budget/D NO. 162/ 2024, Dt. 16.12.2024)

Material only

(3)

	Sanctioned		No.of PO's	Amount Utilised
Stage.I	Rs. 2,00,00,000.00	CAM-I	11	Rs. 78,17,179.57
		EM&MRT-I		
		I&C-I	1	Rs. 4,99,292.22
		BM-1	3	Rs. 8,60,132.00
		Services		
		Total:	15	**Rs. 91,76,603.79**
Stage.II	Rs. 1,50,00,000.00	CAM -II	13	Rs. 73,59,739.71
		EM&MRT-II		
		I&C-II	1	Rs. 3,34,258.68
		BM-II		
		Services		
		Total:	14	**Rs. 76,93,998.39**
Stage.III	Rs. 1,00,00,000.00	CAM -III	5	Rs. 40,20,975.29
		I&C-III	1	Rs. 5,59,684.00
		BM- III		
		EM&MRT-III	2	Rs. 1,18,252.00
		Services		
		H.Q		
		Total:	8	**Rs. 46,98,911.29**
Stage.IV	Rs. 2,50,00,000.00	CAM-IV	17	Rs. 77,39,819.12
		EM&MRT-IV	1	Rs. 12,30,160.00
		I&C-IV	1	Rs. 40,106.00
		BM- IV		
		Services		
		General/- IV		
		H.Q		
		Total:	19	**Rs. 90,10,085.12**
Stage-V	Rs. 2,00,00,000.00	BM (CAM) - V		
		Services - V		
		BM&AHP - V	2	Rs. 25,60,552.33
			2	**Rs. 25,60,552.33**
Civil		Civil	1	Rs. 7,08,010.00
		Civil Services		
H.Q		H.Q.		
Reserve	Rs.1,00,00,000.00			
Total	**Rs. 10,00,00,000.00**		**59**	**Rs. 3,38,48,160.92**
			Grand Total:	**Rs. 3,38,48,160.92**
			Balance	**Rs. 6,61,51,839.08**

11.04.25

EXECUTIVE ENGINEER/CIVIL
ENVIRONMENT & QC DIVISION

EP&FF - (11CTS DATA) services

		No.of PO's	Amount Utilised
Stage.I	CAM-I	8	Rs. 29,83,656.00
	EM&MRT-I	2	Rs. 4,85,791.50
	I&C-I		
	BM-1	2	Rs. 6,97,882.12
	Total:	**12**	**Rs. 41,67,329.62**
Stage.II	CAM -II	10	Rs. 20,48,055.77
	EM&MRT-II	3	Rs. 6,59,935.48
	I&C-II	2	Rs. 50,009.32
	BM-II	3	Rs. 12,66,612.00
	Total:	**18**	**Rs. 40,24,612.57**
Stage.III	CAM -III	12	Rs. 31,03,400.00
	I&C-III		
	BM- III	3	Rs. 17,90,177.64
	EM&MRT-III	4	Rs. 10,51,702.00
	H.Q		
	Total:	**19**	**Rs. 59,45,279.64**
Stage.IV	CAM-IV	26	Rs. 97,04,489.28
	EM&MRT-IV	8	Rs. 11,57,507.00
	I&C-IV		
	BM- IV	3	Rs. 7,50,176.74
	H.Q can.IV		Rs. 26,00,000.00
	Total:	**37**	**Rs. 1,42,12,173.02**
Stage-V	BM (CAM) - V	17	Rs. 94,66,727.08
	Services - V		
	EM&MRT-V	1	Rs. 1,33,340.00
	BM&AHP - V	31	Rs. 2,48,75,611.91
	Total:	**49**	**Rs. 3,44,75,678.99**
Civil	Civil	10	Rs. 54,17,231.72
	Civil HQ GST		**Rs. 52,00,000.00**
	Total:	**10**	**Rs. 1,06,17,231.72**
Civil/Envt	Envt	1	**Rs. 9,02,700.00**
	C&M-I	5	**Rs. 6,62,509.42**
	Total:	**6**	**Rs. 15,65,209.42**
Civil/O&M/Envt	**Total:**	**16**	**Rs. 1,21,82,441.14**
Total		**151**	**Rs. 7,50,07,514.98**

Grand Total:	**Rs. 7,50,07,514.98**

11.04.25

EXECUTIVE ENGINEER/CIVIL
ENVIRONMENT & QC DIVISION
Dr.N.T.T.P.S.
IBRAHIMPATNAM-521 456.

POs 2025-26
dt 17/3/25
dt 5/2/25
dt 18/12/24

8631,569
8,19,28,414
2785,561

Head office (56)

Amount sanctioned (20cr) for the year 2025-26 and utilized vide Proceeding NO. APG/CE-CIV-TH/SE-TH/EENTIPS/EP2FF Budget/ D NO. 162/2024, dt. 16.12.2024

06.01.2025

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	CAM - I	P 52	Rajesh Engineering Works, Telangana	Procurement of spares for Bottom Ash Handling System	6500002217	07.01.2025	**1231399.00**
2	CAM - I	P 52	The Indure Pvt Ltd, New Delhi	Procurement of Access Door For Bottom Ash Hoppers	6500002222	07.01.2025	**151933.46**
3	CAM - I	P 52	Melco India Private Limited, Faridabad	"Procurement Of Spares for D-85-D and D-135-8 Ash slurry Pumps at Ash Pump House"	6500002042	07.01.2025	**993635.02**
4	CAM - I	P 52	Ayems Engineers Private Limited, Navi Mumbai	Procurement of Spares for 300 NB Double Disc Valves and Clinker Grinder Roller for Unit-II Dry Fly Ash System	6500002080	10.01.2025	**715097.27**
5	CAM - I	P 52	Sri Rama Engineering Corporation, Vja	Procurement of Various Pullies For Dry Fly Ash System	6500002270	18.01.2025	**145244.00**
6	CAM - I	P 52	Sri Rama Engineering Corporation, Vja	Procurement Of Spares For D-85-D and D-135-8 Ash Slurry Pumps and Seal Water Pumps at Ash Pump House	6500002327	07.02.2025	**779075.88**
7	CAM - I	P 52	Rajesh Engineering Works, Telangana	Procurement of Spares For D-85-D and D-135-8 Ash Slurry Pumps and Seal Water Pumps at Ash Pump House"	6500002328	07.02.2025	**433388.00**
8	CAM - I	P 52	Sri Rama Engineering Corporation, Vja	Procurement of Spares for Bottom Ash Handling System	6500002329	07.02.2025	**263335.77**
9	CAM - I	P 52	Sri Engineering, Rajahmundry	Procurement of Spares for Bottom Ash Handling System"	6500002330	07.02.2025	**487723.00**
10	CAM - I	P 52	Atlas Copco India Private Limited, Pune	Procurement of Spares for GA-110 & GA-15 Atlas Copco Compressors for UNIT-1 Dry Fly Ash System"	6500002279	07.02.2025	**1338875.38**
11	CAM - I	P 52	Vinayaka Marketing, Bangalore	Procurement of Spares for FMI make HP/LP Pumps at CW Pump House"	6500002471	07.02.2025	**1277472.79**

78,17,179.57

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	I&C - I	P 42	Atlas Copco India Private Limited, Pune	Supply and installation of spare for GA110 Compressors for Dry Fly Ash Handling System	6500002309	16.01.2025	**499292.22**

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	BM - I	V05	NTNN QUEST ENGINEERING PVT LTD,	Supply of Spares for Rectification of ESP's Internals	6500002303	27.01.2025	**111874.00**
2	BM - I	V05	SHREE SHYAM INDUSTRIES	Supply of Spares for Rectification of ESP's Internals	6500002304	27.01.2025	**489828.00**
3	BM - I	V05	HARIHARAN POWER ENGINEERING	Supply of Spares for Rectification of ESP's Internals	6500002305	27.01.2025	**258430.00**

8,60,132.00

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	CAM - II	P 52	Indian Chain Private Limited, Kolkata	Procurement of Flashbutt Welded Round Link Chains for Scraper Conveyors	6500002340	06.01.2025	**970597.69**
2	CAM - II	P 52	Rajesh Engineering Works, Telangana	Procurement of Spares for Scraper Conveyors	6500002341	06.01.2025	**140135.00**
3	CAM - II	P 52	Ravi Rubber and PVC Products, Vja	Procurement of Spares For Scraper Conveyors of Unit-3 & 4"	6500002342	06.01.2025	**83200.00**
4	CAM - II	P 52	Macawber Beekay Pvt. Ltd, Keshwana	Procurement Of 100NB Dome Valve Complete Assembly For Dry Fly Ash Handling System	6500002218	07.01.2025	**848666.00**
5	CAM - II	P 52	Industrial Agency, Sec'bad	Procurement of Hydraulic Hoses for Air Systems of Dry Fly Ash System	6500002287	07.01.2025	**108344.50**
6	CAM - II	P 52	Macawber Beekay Pvt. Ltd, Keshwana	Procurement of Spares For 100NB Dome Valve Assemblies for Dry Fly Ash Handling System	6500002236	08.01.2025	**587798.00**

7	CAM - II	P 52	Sunray Specialities, VSKP	Procurement of MS Unions and GI Unions for ESP Duct and Economizer Hoppers and Ash Pump House	6500002239	16.01.2025	**739240.48**
8	CAM - II	P 52	New Allenberry Works, Kolkata	"Procurement of Optimax foot mounted Long travel gearbox for scraper conveyor	6500002374	18.01.2025	**389410.00**
9	CAM - II	P 52	Flowcon Engineer India Private Limited, Coimbatore	Procurement of Hydromix Water Pump for Dry Fly Ash Handling System	6500002219	21.01.2025	**912873.80**
10	CAM - II	P 52	Sanghvi Metals, Mumbai	Procurement of Cu Ni Tubes of IAC in air compressor house"	6500002376	25.01.2025	**545878.00**
11	CAM - II	P 52	Multivista Global Pvt Ltd, Chennai	Supply of Spares For KG Khosla Make Instrument Air Compressor Model No:2HA 2TERT and Service Air Compressor Model No 2HA4Q	6500002372	25.01.2025	**649308.98**
12	CAM - II	P 52	Multivista Global Pvt Ltd, Chennai	"Supply Of Bearings And Spring Plates For KG Khosla Make Instrument Air Compressor Model No:2HA 2TERT And Service Air Compressor Model No 2HA4Q "	6500002432	25.01.2025	**854276.26**
13	CAM - II	P 52	Yonik Air Solutions & Equipments, Vja	Procurement Of 37kw 50hp Compressor, 7 Bar Working Pressure,240CFM Screw Element For Dry Fly Ash Handling System	6500002421	29.01.2025	**530011.00**

73,59,739.71

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	I&C - II	P 42	Atpro Systems & Controls Pvt. Ltd., Bengaluru	Supply of GEFANUC make PLC modules for unit-3 dry fly ash system	6500002132	16.01.2025	**334258.68**

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	CAM - III	P 51	Gpower Engineering And Services Private Limited, Hyd	Procurement Of Complete Assembly Of 100NB & 200NB Longking Make Double Disc Valves For Dry Fly Ash System	6500002207	06.01.2025	**1703876.60**

2	CAM - III	P 51	Ayems Engineers Private Limited, Navi Mumbai	Procurement Of Spares For Hydro Ejectors Of BAH	6500002216	06.01.2025	**485108.69**
3	CAM - III	P 51	Melco India Private Limited, Faridabad	Procurement Of 300mm Knife edge gate valves for ash disposal lines	6500002306	06.01.2025	**1026610.00**
4	CAM - III	P 51	Sri Annapurna Filtration Systems, Hyd	Procurement Of Cages For Dry Fly Ash System	6500002338	10.01.2025	**371710.00**
5	CAM - III	P 51	Unik Pneumatic Engineering Company Private Limited, Hyd	Procurement Of Spares For Ingersoll Rand Make Instrument Air sor Model No. IR16 & 10 X 7IHE10NL, SL NO. 20725708	6500002332 ***	31.01.2025	**433670.00**

40,20,975.29

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	EM&MRT - III	P 41	Retco India, Jaipur	Supply of Certain LT Power Cable required for ESP Heaters and Rapping System	6500002468	10.02.2025	**79902.00**
2	EM&MRT - III	P 41	Sun Electricals, Sec'bad	Supply of Certain LT Power Cable required for ESP Heaters and Rapping System	6500002466	10.02.2025	**38350.00**

1,18,252.00

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	I&C - III	P 42	Transcon Impex Pvt Ltd, Sec'bad	Supply of Rotex make 5/2 solenoid valves and spares for dry fly ash system of AHP	6500002323	30.01.2025	**559684.00**

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	BM(CAM) - IV	P 51	Melco India Private Limited, Faridabad	Procurement Of ACI Bends For Wet Ash Handling System	6500002097	07.01.2025	**1883403.00**

2	BM (CAM) - IV	P 51	Tap Turbo Engineers Private Limited, Chennai	Procurement Of HP Water Pump, MODEL:ZM|| 440/00/	6500002153	07.01.2025	**809387.19**
3	BM (CAM) - IV	P 51	Tap Turbo Engineers Private Limited, Chennai	Procurement Of LP Water Pump Model No:6MD 80/205 And Refractory Cooling Water Pump, Type: WP 150/320 For Wet Ash Handling System	6500002187	07.01.2025	**427904.86**
4	BM(CAM) - IV	P 51	Tap Turbo Engineers Private Limited, Chennai	Procurement Of Seal Water Pump (PH Area) Model:7MD 80/205 For Ash Handling System	6500002243	07.01.2025	**650461.14**
5	BM(CAM) - IV	P 51	Unique Material Handling Systems Private Limited, Kolkata	Procurement Of 100NB Double Disc Valve Spares For Ash Handling System	6500002242	09.01.2025	**567236.00**
6	BM(CAM) - IV	P 51	Crown Rubber & Plastic Products, Chennai	Procurement Neoprene Rubber Gasket For Ash Conveying Line Couplings Of Ash Handling System	6500002261	09.01.2025	**72226.00**
7	BM(CAM) - IV	P 51	K B Rubber Industries, Kolkata	Procurement Neoprene Rubber Gasket For Ash Conveying Line Couplings Of Ash Handling System	6500002262	09.01.2025	**59482.00**
8	BM(CAM) - IV	P 51	Asian Rubber Products, VSKP	Procurement Neoprene Rubber Gasket For Ash Conveying Line Couplings Of Ash Handling System	6500002263	09.01.2025	**38714.00**
9	BM(CAM) - IV	P 51	Sri Chandra Industries, Hyd	Procurement Neoprene Rubber Gasket For Ash Conveying Line Couplings Of Ash Handling System	6500002265	09.01.2025	**20665.95**
10	BM(CAM) - IV	P 51	Multivista Global Pvt Ltd, Chennai	Procurement Of Spares for "Kirloskar" make Instrument Air Compressors Models:TBTD-MM of Stage-IV ash handling system	6500002293	09.01.2025	**969768.07**
11	BM(CAM) - IV	P 31	GHOSH ENGINEERING CONCERN	Supply "Best Quality" of MS BOLTS AND NUTS FOR WET ASH HANDLING SYSTEM	6500002369	20.01.2025	**229786.00**
12	BM(CAM) - IV	P 31	BADRI ENGINEERING CORPORATION	Supply of "MS BOLTS AND NUTS" FOR WET ASH HANDLING SYSTEM	6500002370	20.01.2025	**32578.00**
13	BM(CAM) - IV	P 51	SNB Associates, New Paloncha	Procurement Of Nipples For Wet Ash Handling System	6500002274	22.01.2025	**34702.00**
14	BM(CAM) - IV	P 51	Unik Pneumatic Engineering Company Private Limited, Hyd	Procurement Of Spares For Ash Intake Valves For Ash Handling System	6500002223	22.01.2025	**377337.00**

15	BM(CAM) - IV	P 51	MR Organisation Limited, Ahmedabad	Procurement Of Oil Separators For Transport Air Compressors Of Model GA-160w Of Ash Handling System	6500002339	22.01.2025	**476378.50**
16	BM(CAM) - IV	P 51	Global Technics, Nellore	Procurement Of Rotair Advanced Oil For GA-160 Model,Transport Air Compressors Of Dry Fly Ash Handling System	6500002469 ***	31.01.2025	**841056.50**
17	BM(CAM) - IV	P 51	Radhika Enterprises, Guntur	Procurement Of Spares For 14 Ton Escort Pick & Carry Hydra For Ash Handling System	6500002257	31.01.2025	**248732.91**

77,39,819.12

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	EM&MRT - IV	P41	KE Global Services, Chennai	Supply and Retrofitting of 800A, 415V/600V LT Air Circuit Breaker of Schneider Make	6500002225	17.01.2025	**1230160.00**

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	I&C - IV	P 42	IME Engineers, Vja	Supply of PLC push Button and selection switches	6500002231	01.02.2025	**40106.00**

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	BM&AHP - V	P 52	Tap Turbo Engineers Private Limited, Chennai	Procurement Of Spares For Coarse Ash Slurry Duty Pumps and Bottom Ash Overflow Pumps Of Ash Handling System	6500002260	07.01.2025	**1074372.73**
2	BM&AHP - V	P 52	Unique Material Handling Systems Private Limited, Kolkata	Procurement of Spares of Clinker Grinder for Bottom Ash Hoppers	6500002264	18.01.2025	**1486179.60**

25,60,552.33

S. No.	Division	Seat No.	Firm	Description	PO No	Date	GST
1	Civil (Env)	V10	Swan Environmental Pvt.Limited, Hyd	Supply, installation and Commissioning of Online Dust Monitors	6500002479	29.01.2025	**708010.00**

11.04.2025

EXECUTIVE ENGINEER/CIVIL
ENVIRONMENT & QC DIVISION
Dr.N.T.T.P.S.
IBRAHIMPATNAM-521 456.

State Energy Conservation Mission (SECM)

A Govt. of AP Society

(A State Designated Agency (SDA) of Bureau of Energy Efficiency (BEE), GoI under EC Act-2001)

STATE ENERGY CONSERVATION AWARD (SECA) 2022

In recognition to the achievements in Energy Conservation and Energy Efficiency in the Thermal Power Plants *Sector for the year 2022, APSECM, GoAP Society, SDA of Bureau of energy Efficiency (BEE), GoI is pleased to present the Silver category award to* M/s. Dr. Dr. Narla Tatarao Thermal Power Station, Ibrahimpatnam.

APSECM
Vijayawada, Dt.20.12.2022

On behalf of
AP State Energy Conservation Mission,
Govt. of Andhra Pradesh.

430

State Energy Conservation Mission (SECM)

A Govt. of AP Society

(A State Designated Agency (SDA) of Bureau of Energy Efficiency (BEE), GoI under EC Act-2001)

STATE ENERGY CONSERVATION AWARD (SECA) 2023

In recognition to the achievements in Energy Conservation and Energy Efficiency in the Thermal Power Plants *Sector for the year 2023, APSECM, GoAP Society, SDA of Bureau of energy Efficiency (BEE), GoI is pleased to present the Silver category award to* DR. NARLA TATA RAO THERMAL POWER STATION, IBRAHIMPATNAM.

APSECM
Vijayawada, Dt.20.12.2023

On behalf of
AP State Energy Conservation Mission,
Govt. of Andhra Pradesh.

431

14th Annual

GREENTECH
Environment
Award 2013



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NEW DELHI (INDIA)

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Certificate

This is to certify that

Dr. NARLA TATA RAO THERMAL POWER STATION
OF
ANDHRA PRADESH POWER GENERATION CORPORATION LTD.

has been declared Winner of

SILVER CATEGORY

in **POWER SECTOR**

for outstanding achievement

in Environment Management

KAMALESHWAR SHARAN
President

30 January 2014
Chandigarh (India)

15th Annual

GREENTECH
Environment
Award 2014

Certificate

This is to certify that

Dr. NARLA TATA RAO THERMAL POWER STATION
OF
ANDHRA PRADESH POWER GENERATION CORPORATION LTD.

has been declared Winner of

15th Annual Greentech Environment Award 2014

SILVER AWARD

in **THERMAL POWER SECTOR**

for outstanding achievement
in Environment Management

KNOWLEDGE PARTNER :

IICA Indian Institute of Corporate Affairs
Ministry of Corporate Affairs, Govt. of India

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28 January 2015
Kolkata (India)

KAMALESHWAR SHARAN
President
GREENTECH FOUNDATION

433

16th Annual

GREENTECH Environment Award 2015

Certificate

This is to certify that

Dr. NARLA TATA RAO THERMAL POWER STATION

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

has been declared Winner of

16th Annual Greentech Environment Award 2015

GOLD AWARD

in Thermal Power Sector

for outstanding achievement

in Environment Management

K. Sharan.

27 November 2015
Hyderabad (India)

KAMALESHWAR SHARAN
Chairman & CEO

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Government of Andhra Pradesh

Andhra Pradesh Greening and Beautification Corporation

AP Green Awards - 2017

This is to certify that Mr. / Ms. / M/s Narla Tatarao Thermal Power Station, APGENCO, Ibrahimpatnam, Krishna Dt.

has been Awarded Second in the category of Industries, Corporates, and Institutions (Industries, Public)....for contributing in the field of greenery development.

Managing Director
APG&BC

GREENTECH FOUNDATION®
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Certificate

This is to certify that

Andhra Pradesh Power
Generation Corporation Ltd.

Dr. Narla Tata Rao Thermal Power Station

has been declared

WINNER

in Thermal Power Sector

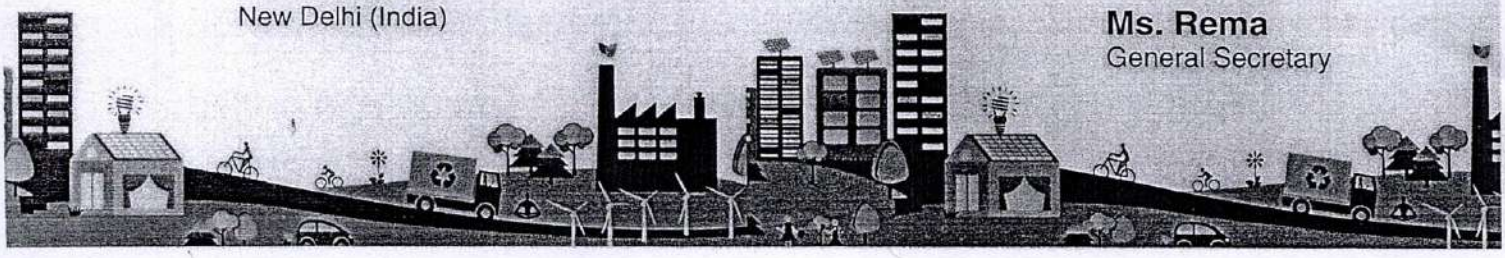
for outstanding achievements in

Environment Management.

11 - 12 July 2019
New Delhi (India)

Rema

Ms. Rema
General Secretary



BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, SOUTHERN ZONE BENCH AT CHENNAI

O.A. NO. 314 OF 2024 (SZ)

Tribunal on its own motion SUO MOTU based on the News Item in The Hindu dt: 04.11.2024 titled, "***Residents stage protest against pollution caused by Vijayawada Thermal Power Station***".

And

Andhra Pradesh Pollution Control Board and Ors.
…Respondents

ANNEXURES FILED ALONG WITH REPLY STATEMENT ON BEHALF OF RESPONDENT NO. 5

M/s. Janani Shankar [MS 3192/2014]
Tanushree Arvind [MS 4116/2018]
Simran Srinivasan [MS 673/2020]

COUNSEL FOR RESPONDENT NO. 5

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