

ISSN: 2348-6848 Vol-3, Special Issue-3

### International Conference on Research and Recent Trends in Engineering and Technology. (ICRRTET)



Held on 27<sup>th</sup> January 2016 organized by **Sai Polytechnic College**, Kinhi Jawade, Yavatmal, Maharastra, India.

### A Study Project on Air Pollution Control

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#### **ABSTRACT**

Environmental engineering is mainly divided into four parts which is :- 1.water engineering ,2.Waste water engineering ,3.Solid waste ,4.Air & noise pollution.

In our study we are concentrated on 'Air pollution'. It because Air is main component thing in environment .Air get polluted due to the emissions of smoke from factories, coke ovens, furnaces, steam engines ,etc. exhaust fumes from automobiles , power plants etc. So it is very important to control air pollution at domestic level, municipal level , International level. So it is very important to prevent air pollution by some simple ways such as avoid combustion of plastic, polythene, coal, wood etc. Avoid excessive use vehicles industries should be design in proper manning.

### INTRODUCTION:-Environmental

engineering is simply divided into four parts such as water engineering, waste water engineering, solid waste, air pollution.

In our study we are studied on air pollution because air is very important in our life & also for animals and plant and all living organisms. air also important for supporting water cycl. Air helps in pollination of crops, Air is a conducting medium for sound

### LITRETURE SURVEY:-

The air pollution on earth originated when men started using firewood for cooking &heating purpose. Hippocrates, a well-known ancient physician, who practiced medicine on the greek Island cos, at about 400 BC and is considered to be father of

medicine for his 80 written medical works had written about air pollution prevailing even in those ancient times.

With the discovery at increasing used of coals air pollution has gone on more and more pronounced, especially in urban area.

### **#.AIR POLLUTION SURVEY:-**

An air pollution survey is critical study of particular geographical area like Bangalore for the purpose of determining the sources , nature, extend and effects of air pollution that exist within the area concerned .Air pollution survey may helps in several respects. Among them are urban and land and use planning, highly localized problems (for example: diseases like Asthma and other health

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problems) and development or improvement of a community's air pollution control programmed and research.

An air pollution survey in a town or city must provided answer to the following questions .

- 1. Where do the pollutants come from?
- 2. What are pollution levels with respects to time and place?
- 3. Why do these levels vary?
- 4. Which adverse environmental effects are produced?
- 5. How to overcome the problem?

## #.AIR POLLUTION SURVEY PROGRAMME FOR A CITY :-

When a general air pollution survey is to be undertaken in a city, the following factors should be taken into consideration:

### 1. Duration of survey programmed:-

In order to get useful data from which proper conclusions can be drawn the duration of survey should be spread over minimum period of two year,

### #. NATINOL AIR QUALLITY MONITORING:-

The air quality monitoring programme has been initiated by NEERI on a regular basis since 1978. Gives summery of the air quality with respect to certain common air pollutants in nine cities in INDIA.

CITY	SPM	SO2	SR (Sulphation rate)mg SO3/100cm3/day	DF (Dust fall)
			505/100 <b>c</b> m5/ <b>a</b> ay	MT/km2/months
Ahmedabad	217*	31*	0.10**	91**
Bombay	184	38	0.45	11
Calcutta	522	90a	0.45*	34
Delhi	433	31*	0.20*	31*
Hyderabad	143**	30**	-	-
Jaipur	308	6	0.18	19

preferably three year. Generally air pollution will be maximum during the winter (NOV-MARCH).

### 2.SELECTION OF AIR SAMPALING STATION:

To begin with ,it is better to limit the survey for collection of samples from six sampling station. While selecting the station , various factors like population density , concentration of industries including specific industries any , and intensity of traffic should be taken into account .

### 3. SELECTION OF AIR POLLUTION PARAMETERS:-

The generally in urban areas, the pollutants which are of major importants are sulphur dioxide, nitrogen dioxide, hydrogen sulphide, oxidants and dust. Depending on type of industries in operation in the specific areas, other pollutants like hydrocarbons, mercaptans, mercury, lead, chlorine, etc., may be included.



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Kanpur	432	13	0.19	34
Madras	155	8	0.33	-
Nagpur	199	12	0.22	34

<sup>\*6-7</sup> months average

\*\* 4-5 months average

a: scanty data

We can not stop air pollution comptetly, so we prevent air pollution at domestic level, municipal level, international level. These are simple ways to prevent air pollution in environment.

- 1. When purchasing a new car, consider one that is the most efficient, lowest-polluting vehicle or even a zero-emission electric car.
- 2. Walk or ride a bike when possible.
- 3. Take public transportation.
- 4. Organize and condense errands into one trip.
- 5. When driving, accelerate gradually and obey the speed limit.
- 6. Drive less, particularly on days with unhealthful air quality.
- 7. Maintain your vehicle and keep the tires properly inflated.
- 8. Contact the Ventura County Transportation Commission at goventura.org for ridesharing services.
- 9. Travel lightly and remove any unnecessary items that may weigh down your vehicle.
- 10. Limit idling.
- 11. Turn off the lights when you leave a room.
- 12. Replace energy-hungry incandescent lights with compact florescent light bulbs.
- 13. Opt for a fan instead of air conditioning.
- 14. Use a programmable thermostat and set it to 780 F in the summer and 680F in the winter.
- 15. Asks your energy supplier for a home audit and inquire about alternative energy solutions like solar or wind.
- 16. Install low-flow shower heads.
- 17. Recycle paper, plastic, metals and organic materials.
- 18. Use a surge protector for multiple appliances and turn it off when products are not in use.
- 19. Avoide combustion of wood, polythene, plastic etc.
- 20. Avoide sprinkling pesticide, chemicals.

CONCLUSION:-Still we are studying about this topic in our project and give some beneficial, economical idea, suggestion & techniques to control air pollution.

1.Tree plantation



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- 2. No vehicles day
- 3. Avoid vehicles when it possible
- 4. Switch of lights, mobile charger when it used.
- 5. Do not combust coal, wood etc.

#### Acknowledgement

We have this opportunity to express our deep sense of gratitude and whole hearted thanks to our project guide and in charge **MR.ANMOL W. DONGRE** for

Invaluable guidance.

We would also special thanks to our Head of Department **MR.A.W.DONGARE** giving time to time instruction and encouragement our thanks are due to staff member of Civil Engineering department for their co-operation.

We express our deep and sincere thanks to our Principal **Dr. C.B. KOTHARE** for his encouragement. We are also thankful to our friends to helped us during our project and thankful to our parents who inspired us during the project.