Maintenance of Water Treatment Plant and activity scheduling for regular chacking Quality of Water

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Abstract-Water required for human in daily use this water can be used for drinking, bath, cooking, utensil washing purpose .water has huge requirement in our daily life this water must be clear ,bacteria free, odour free but water treatment plant faces many problem at the time of filtration process .it required regular maintainance but this not carried out daily bases .so it required to modified the process used in treatment plant because population demand increased hence water demand is also increased

Key word: Water Treatment plant, Maintenance

INTRODUCTION

Water available for daily use from various sources like River dam, Dam, Lake.Study of water treatment plant is carried out with all aspects and considerations including physical, chemical and bacteriological, to determine its efficiency and to produce water quality 1 This study will define design and operating problems and difficulties will allow for proper revision of these aspects to redefine and suggest recommendations for proper operations. The findings of work may be applicable for other WTP either under design or operation. Importance of continuous monitoring and analysis laboratory works to evaluate performance before and after each treatment unit has been illustrated

WATER TREATMENT PROCESS

Water treatment plants play a vital role in distributing safe drinking water. Without proper maintenance, these plants can become a breeding ground for harmful bacteria and viruses.

Various process involved in treatment process are
1)Screening   2)Aeration   3)Sedimentation
4)Coagulation   5)Flocculation   6)Filtration
7)Disinfection

In this all process regular cleaning and maintenance required if it not carried out regularly then treatment plant face many problem.

Typical maintenance schedule for any water treatment plant
Water treatment plants require regular maintenance to function properly. A typical maintenance schedule for a water treatment plant includes:

* Station check daily
* Clean it weekly
* Monthly station inspection
* Cleaning the station every three months

Check the station regularly
Inspect the station regularly, looking for any signs of damage or wear. This includes checking pipes, pumps, and other equipment for leaks or corrosion.

Clean filters
Filters in a water treatment plant must be cleaned regularly to prevent clogging. This will help ensure that the water is properly filtered before it is sent to homes and businesses.

Test the water quality
It is important to regularly test the water quality to ensure that it meets all safety standards. This includes testing for bacteria and other contaminants.
Water treatment plants require regular maintenance to function properly. A well-maintained water treatment plant can remove impurities from the water and make it potable.

Make repairs as needed
Water treatment plants are vital to the function of any city or town. They provide clean water for drinking, cooking and bathing. Without these stations, we would

be forced to drink dirty water that could make us sick. above step regularly taken in treatment plant, this paper added one more step required in maintenance process is to make activity chart so that in which each activity is scheduled in hourly basis, day basis, monthly basis so that there is less chances of missing activity .hence maintenance work carried out as per schedule.

There are four main tasks in the maintenance of a water treatment plant

- Cleaning.
- Inspection and repair.
- Replacement of spare parts.
- Tests

This activity with respect to time we scheduled and according to that bar chart indicate how many time required to complete. if any activity is not competed in time then we identify the treatment process not carried out as per schedule

CONCLUSION

By using Bar chart activity for water treatment are scheduled and completed in time. maintenance is required in WTP is done regularly.