CONTRIBUTIONS LOOKING THE EVALUATION OF POLLUTANTS WITH POSSIBILITY OF DEPOLLUTION FOR THE ABOVE-GROUND WATERS

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ABSTRACT: The saving of watery funds must action in next directions: the intensive use of the water as part of the uses, in the aim of boiled down to at least necessary watery handling watery funds, in the sense creation possibility of satisfied how much the many maul uses in the conditions of variation at the regime of flow funds.

For correct the watery consumption, must follow the subsequent: modification and the accommodation procedures technological of utilize the water; replacing the water as the staple and technological factor; recycle interns of the water; systematization nets of casting of the water; reducing the watery loss and enter defended against measure the flows.

KEYWORDS: pollutants, depollution, capitalizarion.

1. INTRODUCTION

In the present water is an indispensable condition in the appearance and the development life on earth. The water is the fundamental element in the support which areas underlie the economic launch and social of countries, represented by: the agriculture, transports, touring and industry.

The analyses concerning the distribution of watery existing forms on Earth is rendered in the table no.1:

Table no. 1

Forms of water on Globe

No.	Form	Volum x 1000 mc x 10^3	Percent (%)
1.	Glaciers, oceanic snow	24064	68.7
2.	Above-ground and underground water	10530	30.06
3.	Underground ice	300	0.86
4.	The humidity of the soil	16.5	0.05
5.	Lakes	91	0.26
6.	Marshes	11.47	0.03
7.	Water in channels	2.12	0.006
8.	Water in atmosphere	12.9	0.04
9.	Total	35.028	100

The watery bulk volume to the current hour is of approximate 1386 millions x 10^3 mc. Most big part from the watery funds of Earth being 96.5 % is intent in Planetary Ocean, salt which water can be used as the drinking-water.

The fresh water, assures necessary alive social and economic, represents just 2,53% from the bulk volume and he totalizes 35 the millions x 10^3 mc.

The streams represent a little part from total hydrosphere, being the some primary employable sources. The Planetary Ocean receives yearly an average volume of 47000 x 10^3 mc of water, by the fluvial organisms. The repartition of fresh water to the level of the continents is contained in the table no.2:

Table no. 2

The continent watery

No.	Continent	Volume flowed (mc x 10^3/year)	Percent of water flowed (%)	Population (mil.habitants.)	Available of fresh water on inhabitant (mc/an)
1.	Asia	13190	31.8	2750	4796
2.	America de Sud	10380	25	234	44358
3.	America de Nord	6500	15.7	369	17615
4.	Africa	4225	10.3	456	9265
5.	Europa	3110	7.6	740	4202
6.	Australia şi Oceania	1965	4.7	22	89318
7.	Antartica	2050	4.9		
8.	Total	41420	100	4571	9061

From the date presented is noticed the order of the continents after available of fresh water on inhabitant, carry differs from one felled across the watery calculating bulk volume for each continent.

Is remarked that the available of fresh water for the Australia, the South America, the Europe at that rate be with an available of fresh water witch represents a tenth from necessary of America South.

The saving of watery funds must action in next directions: the intensive use of the water as part of the uses, in the aim of boiled down to at least necessary watery handling watery funds, in the sense creation possibility of satisfied how much the many maul uses in the conditions of variation at the regime of flow funds.

For correct the watery consumption, must follow the subsequent:

- modification and the accommodation procedures technological of utilize the water.
- replacing the water as the staple and technological factor.
- recycle interns of the water.
- systematization nets of casting of the water
- reducing the watery loss and enter defended against measure the flows.

In row procedures of rationalization, the repartition and the administration of watery funds in the sight of their intensive use, can take:

- the external rework the water in of watery source.
- the protection of the waters quality.
- the correlation between the regime of use water and the regime of flow the watery sources.
- establishment the weight of economic criterion in the repartition and the capitalization of watery funds

1.1. Prevention and struggle

The worn-out industrial waters, am output from conjunct, manufactories, the factories was used-up in technological aims and in aims of his sanitation cooling.

The worn-out waters contain below form dissolve, in colloidal dispersion and in suspension a big variety of organic substances and minerals, produced natural and synthesis results in the activity of social production and microorganisms from the prime used-up matters in the food industry and light. Matters lusted able to colloidal dispersion and in suspension are frequently form by clay, dust and the fine, trained in sewerage rainwater, the purification streets results to of prime matters.
The organic substances the by-paths represented three main categories: sugars, proteins and lipids, as well as of them products of metabolism and biochemical decompose. Among sugars, the polysaccharides in the shape of cellulose, starch or simple compounds maul as the: hexose's, pentose are dominant in the worn-out waters, arising from the industrial activities feature through big watery worn-out volumes: the industry of the cellulose and the paper, the industrialization of the wood, the textile industry, the food industry. They lusted in big amounts and in the sewages, due to on which he deals it vegetable products in alimentation.

Can mentioned that the worn-out waters from combine of paper and cellulose is characterized through big volumes, of 1000 - 3000L/s. Due to this facts, as well as their shipment with organic difficult biodegradable these substances waters produce an intensive impurities of the waters of the receivers, having as main effects the consumption of oxygen from the waters rivers and through, he endangers the conditions of life from average aquatic.

2. MATERIALS AND METHODS

2.1. Physical-chemical process
The modifications of physical-chemical features of the waters of the emissaries, in the zones of evacuation assignment the physical property: the color, the transparency, the smell, the temperature and amounts of matters in these suspensions modifications are and first signals of the presence pollutants afloat of a river.

With the growth of the temperature process of decomposition and degrade the present organisms in the worn-out waters, what facts causes a considerable contained of oxygen, are rendered in the table no.3:

Table no.3.

The value of oxygen afloat rivers in accordance with temperature

Temperature (˚C)	Dissolve oxygen(mg/L)
0	14.65
5	12.79
10	11.27
15	10.05
20	9.02
25	8.18
30	7.44

The organic pollution just as he presented, influences the content of oxygen dissolved of of a streams. The value of oxygen afloat rivers is the criterion appreciatory the degree of pollution. Limit the minimum thereto an water is consideration degradation is 4mg/L to the temperature of 20^0C.

2.2. Biologic process

The modifications of physical-chemical features of waters determinate of pollution, involves the modification of equilibrium existing biocenotic in his frame.

The biologic system the format from elements ale the organic components ale of the biosphere, attach and adjusted to the biotope represents the biocenotic or the community of life.

The permanent shift of matter and energy among the inorganic elements and one biologic ale of the ecosystem reunites them in a all unitary.

The circuit of the matter and of the energy, in ecosystem, registers some distinct stages, and the organisms after the role on which have hand-running their are can grouped in three big functional categories: producers, consumers and decompounds.

The circuit of the matter is esoteric of the organisms the producers, represented of green plants with pigments chlorophylls. These permit them the fixation and the utilization of solar energy for his synthesis the production of organic matter, departing from dioxide of carbon, water, simple minerals, which take over from the environment. The measure of carbon amount assimilated, from the organic matter, or of emitted oxygen, permits the evaluation of primary respective production biomass new formats.

2.3. The organic shipment

From viewpoint of determination of the regime of consumption of oxygen, the illustrative indicator is the biochemical consumption of oxygen. The of a must procedures the quick maul of drove to the application of another indicatory to the chemical consumption of oxygen(CCO) without the possibility to integrated, just statistical to concrete situations, seriatim what causes the regime of oxygen.

Biologic analyses permit the conclusions concerning drinking the water and the characteristic of modifications challenged of the present organisms in water: polisatest organisms, α -mezosatest, organisms, β -mezosatest organisms and oligosaprobe organisms. The table no.4 presents information's abaft the analyses of organisms and the type of theme.

Table no. 4

Type of watery depending on the present organisms

Organisms	Degrees of pollution	Physical-chemical characteristics of the water	General situation
The zone polisatest	Hard impure	Processes of decrease and decompose, Erect CBO, O_2 dissolved - absence, H_2S - present	1000000 bacteria/cmc
The subfield α mezosatest	Strong impure	Processes of redox of organic substances, CBO erect, O_2 dissolved in dribbled	100000 bacteriiacmc
The subfield β mezosatest	Modern pollution	Present ammoniakali products, Minimum amounts of O_2 dissolved,. Value of natural pH	1000 bacteriacmc
The zone oligosatest	Water without pollution	CBO reduced. O_2 dissolved close upon saturation. pH natural	100 bacteria/cmc

2.4. Bacteriological indicator

Represents which analysis is accomplished in the aim identification of pathogentic specific germs. This analysis contains: methods of current analysis and methods of complementary analysis, analyses of the current is adverted to the determination number of which germs is developed to 37^0C and the determination of germs number. The complementary analyses, is adverted to the determination number of which germs is developed to

22^0C, the determination number of germs through the method of the filtering membranes and the determination number and the germs.

3. RESULTS AND DISCUSSIONS

Consequences ale pollution of the waters
The studies showed that, a quarters from the watery above-ground sources impure by-path, what precludes of used without an expensive remaking. From the length total rivers, 14% (2794 km) is placed across the limits admitted. Yearly are plunge into watery sources 490000 t of material in suspension, 181000t of organic substances, 32000 t of dreg oils and fats, and 410 t of metals. These arrive in rivers by the void of interest or inadequate operation of the stations of defecation.

Between the worn-out waters and the waters in which are discharge is established a bilateral relation: the impurity contained afloat worn-out influences in negative ways the physical chemical features and biologic of the waters, and all these impurity conduces to the dispersal of pollutants from water.
The consequences pollution of the waters are felt in the zones waves are in overfills progress, but and on whole course of the waters. The impure waters seep in earthed the phreatic clothes and contaminates the watery drinkable sources. Watery worn-out industrial amounts discharge very big by-paths. The manufacture tons of paper results 100-200 mc worn-out of a waters tons of rubbers 150 mc worn-out waters, and the washing tons of fruits 10-20 mc worn-out waters.

4. CONCLUSIONS

The evolution of capitalization and manage of the water reflects an outstanding disproportion between the efforts of watery funds and the insufficient care in their utilization. The difference between the quality of natural watery funds and the quality of tripper water consumers cause seriously problems in the treatment technologies.

From the watery used volume, presenting the 27% from availed water from our country, is spill-overfed the 7.5% impure waters, which 10% are by-paths proper treaties, 60% fractionally and 10% are discharge without no these treatment. By date rules result for a good economic process and social development needs, the adhibition management corrects what contains all the appearances: appearances, economically, what financial the associate by-paths of the funds and their capitalization.

The water is the natural inexhaustible resource, carry the traces a closed loop, a contiguous process of replenish, be a regeneration resource. The quality of the water is established on the strength of indicators presented in the previous chapters in the aim area of activity, subsequently choose.

We in country, the global embitterment quality of watery funds is owed causes:

- the realization of industrial large objective and stock
- the of a promotion strong technologists abandoned pollutants in the countries developed economically: the sulphite method to obtain the cellulose, the manufacture of the soda through the method Solvay
- the quick growth diffuse pollution, produced through chemical of the agriculture with manures and pesticides
- noncorrelation between the growth of the capacity of production with the capacity of defecate the existing stations
- inadequate exploitation of the fittings of existing defecation
- the absence of the organized system of collection, storage and manage the residues and the mud's from the defecation of industrial worn-out waters

Scale up by across 15% the watery requirements, reflect, the development economical, maintain of a situations of unadvisable utilization and of waste of the water. These are generate of the of a perpetuation industrial big technologists consumer of water, of the use exorbitantly watery norms to the lettered irrigation, of watery loss in

the nets of casting, quotient and of the insufficiency endowment with systems of measure the watery amounts take off and evacuate.

Breed the watery disposal was accompany with the growth watery worn-out amounts were related with a building fittings of defecation to necessary capacities.

The current tendencies lead to the exaggerated solicitation of watery funds, disturbing these equilibrium natural funds.

The elaboration and the efficient of implementation national politics for the rational utilization of watery funds enforce the next priorities:

- reduce the rhythm of breed the watery consumption in all the branches of national economy
- the rationalization and the saving in utilization, in the aim boil down to at least necessary watery
- retraining and reused of the water
- the protection of the water against pollution
- systematization nets of casting of the water
- legislation and administration.

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