Briefing Memo

[Name of the Writer]

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**Briefing Memo**

**Title**

Water Pollution and water-borne diseases; A growing concern for public, healthcare providers and policymakers.

**Context or Scope of the Problem:**

 It is a well-known fact that over two-third of the world is covered by water and less than a third is taken up by land. The population of the world is increasing very rapidly and this is putting very severe pressure on the available water resources. It will not be wrong to say that due to the human activities oceans and other inland water resources are squeezed and the problem is now being so severe that not only it is taking up less room but the water quality is also reducing. Poor water quality refers to water pollution, and due to water pollution not only the environment is suffering, due to deforestation and loss of wildlife but at the same time, human beings are at higher risks because of the various water-borne diseases. This situation is getting intense and it is no longer a problem of only one country and nation. Due to the increased industrialization and disposal of waste chemicals and garbage directly into the water problems are being created for water organisms and humans as well. The magnitude of water pollution globally is quite intense, it is estimated that currently around 1/3rd population of the world has no excess to clean water and therefore they are forced to use the contaminated water therefore many lives are lost and the situation can get worse if it is not addressed timely with effective measures (“Water Pollution - an overview | ScienceDirect Topics,” n.d.).

 Many countries around the world have adopted certain set of strategies in order to reduce water pollution but none of them have so far reduced this particular pollution and unfortunately the magnitude of this problem is increasing not only in one place but the magnitude of the issue is increasing globally and this can easily be assessed by looking at the growing problem of deforestation, due to the deadly chemicals that are present in water the soil is becoming infertile and animals are becoming extinct due to which there is an increasing demand to address this issue with practical and useful strategies so that the problem is solved before environment is damaged and lives are lost. By drinking contaminated water many diseases are now becoming common and most of the diseases include cholera, diarrhea, and typhus (Kjellstrom et al., 2006).

 The pathogens that are present in the water are causing many serious diseases in humans. Among these pathogens, some are present worldwide while some are specific to one particular area. Heavy rainfall and floods that are related wo extreme weather are creating diseases both for developed and developing countries. From the last few years, the mortality rate due to cancer is increasing in the rural areas of the world because they don't have the facility of treated water and they use the contaminated water due to which various neurological diseases, respiratory and cardiovascular diseases are becoming common among the masses. On ecosystem, the effect of water pollution is also quite intense because poor quality water is not only deadly for the crop production but at the same time, it is making the soil infertile. Water pollution is also endangering the marine organism by causing many diseases in the (Kjellstrom et al., 2006).

**Policy Alternatives**

 Currently, in the United States, there are various strategies in order to cope with the problem of water pollution. The government is introducing various acts to make sure that water pollution is minimized and to do that there is an act that was passed which is known as a Clean Water Act. This act was established for regulating the discharges of pollutants in the water and also regulating the standards of the surface water, under this law the EPA has finalized some wastewater standards for the industry. It has also developed national water quality criteria suggestions for the pollutants in surface water. Under the act, it is unlawful to discard any pollutant from any source into navigable waters unless it is permitted by the government (US EPA, 2013). Apart from these, there are certain other regulations that are specified for the common households and their water exposure into the water. Although these are some great initiatives but they are certainly not effective because water pollution is increasing at a rapid pace, the industries and factories that are built near the seashores are still exposing their wastes into the water and the households are doing the same therefore the problem is increasing rapidly and there is a need to introduce strategies which would address the problem effectively.

**Policy Recommendations**

 The issue of water pollution is getting serious day by day and the current strategies are not helping to reduce it, therefore, concrete steps must be taken in order to mitigation the issue and provide relief not only to the public but also to the ecosystem. The legal strategies include restricting the construction of factories or any industrial building near the shore. To save the public from the effects of water pollution it must be made sure to install household water filters to reduce the arsenic in the drinking water and also to save the environment it is important that the government restricts factories from exposing the contaminated water directly into sea or oceans and they must be warned to treat the water first and then expose it into the water. Secondly, the exposure of garbage into the environment must be regulated, the households should be given awareness about using plastic bags and its effects on the environment and on marine animals. These problems will be solved if both government and public collectively work together and in order to do that the government should take the public in confidence and then take steps.

**References**

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