ASSESSING THE IMPACT OF INDUSTRIAL AND HAZARDOUS WASTE ON HUMAN POPULATIONS.

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Introduction

The world has in the last decade seen the proliferation of manufacturing industries a state that has earned this era the industrialization age. Globalization of business operations has been the core driver of the industrial operations as enterprises seek to position themselves strategically through value addition and profitability. Countries have also supported and focused their investments towards industries so as to position themselves competitively at the global scale. The result is the rising industrialization which comes with numerous benefits on the financial sphere but endless challenges on the environmental perspective. As Bergeson (2017) asserts, industrial operations produce various waste products; some being highly toxic and hazardous to human life. There are records of detrimental effects of some of the industrial and hazardous affecting human populations both directly and indirectly. In a bid to counter the adverse impacts of industrialization, states have enacted several laws and even appraised some of the existing laws to fully cover the emerging needs in industrial and hazardous waste management. This has significantly reduced the detrimental impacts on human populations but ultimate success in industrial waste disposal is still far from being achieved.

Impacts of Industrial and Hazardous Waste

Water pollution has been one of the most common impacts of the industrial wastes as most unregulated and unethical companies have recklessly failed to adopt the correct waste disposal procedures and instead channeled their waste products to water bodies. The impact of this is that hazardous waste pollutes water sources for the human populations and subjects them to consume toxic substances. There are rising cases of cancerous medical problems that have been attributed to consumption of water containing carcinogenic substances whose source can be traced back to industrial wastes in water bodies. (Apollonio and Bero, 2016). The industrial wastes also

adversely affect aquatic life directly causing death of sea weed that is the main source of nutrition to most water animals. There is a recorded decrease in fish population in water bodies that have suffered industrial waste disposal. The indirect impact is reduced source of food to human populations as well as their general welfare as some undertake fishing as a source of livelihood. The Clean Water Act (CWA) has been appraised severally to include clauses on water pollution control and the procedures thereof. Under the Environmental Protection Agency, industries are required to acquire a permit prior discharge of their waste into any surface waters. This follows thorough assessment meant to ensure that the discharge is free of any hazardous wastes on human populations.

Air pollution is yet another adverse impact of industrial and hazardous wastes globally. Most of the industries emit toxic gases from their operations and fail to undertake the recommended procedures for safe toxic gas disposal. As a result, the toxic gases have caused respiratory problems to the communities living around such companies with increased records of Pneumonia and Tuberculosis among other fatal lung diseases. According to Awuchi et al. (2020), the ozone layer has also been continuously depleted within the last decade; an occurrence attributed to the high industrialization leading to significant climate change globally. The melting glaciers in the Antarctic is at an alarming rate causing distress on the global sea levels. This would also affect the human populations as most coastal lands would be flooded requiring mass migration and resettlement. The Clean Air Act has been amended severally in order to make it more comprehensive and adaptive to the changes especially in the industrialization era. The Act is effected through the Environmental Protection Agency that undertakes the assessment and issuance of permits to industries in regard to fulfillment of the Air Pollution requirements. The

Act seeks to reduce the mortality rate associated with air pollution diseases and prevalence of fatal respiratory diseases among the populations.

Industrial and hazardous wastes have been one of the top-listed causes for mass migrations within countries in the last decade. As industries increase within the set industrial zones, the wastes pose several threats to the surrounding communities ranging from health risks to destruction of their immediate environment as waste is wrongly disposed causing bad odor, visual degradation among other impacts that change the natural environmental status. With no other option available, fear for their health and the need to pursue normal lives, most families have sort shelter in new locations, totally moving from their original locations. This comes with a lot of inconveniences and strains as the communities are not cushioned by the government or the companies responsible for the unethical waste disposal. Involuntary migration at this age of democracy in states across the globe would as well qualify to be classified under human rights infringement on the human populations. (Farzadkia, et al., 2020).

Conclusion

It is evident that the industrialization era has been characterized by high industrial and hazardous waste which has had adverse impacts on the human populations. It is also essential to note that the industrial and hazardous wastes affect the human populations both directly and indirectly; both ways causing harm and destabilizing the normal human life. As much as various laws have been enacted in the United States and across other countries globally, proper disposal of industrial and hazardous wastes has not been satisfactory. It is however evident that the continued appraisal of the laws is yielding reduced impact of the industrial and hazardous waste on human populations which is a positive milestone in this important pursuit towards curbing a global menace.

References

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