

POSTGRADUATE [LL.M.] DISSERTATION

The Legal Regime on the Protection of Air Pollution under the Environmental Law



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LETTER OF APPROVAL

27TH November, 2019

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Subject: The Legal Regime on the Protection of Air Pollution under the Environmental Law

Dear Sir,

It's an incredible delight for me to present The Legal Regime on the Protection of Air Pollution under the Environmental Law. While setting up this examination Monograph Paper I have endeavored my measurement best to keep up the necessary Standard. I believe that this exploration monograph will fulfill your craving.

I therefore do seriously pronounce that the work displayed in exposition has been done by me and has not been recently submitted to some other foundation. The work I have displayed doesn't break any copyright.

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ACKNOWLEDGEMENT

At the earliest reference point of my paper I might want to express gratitude toward certain individuals for their liberal help and support during this task. As a matter of first importance, I might want to thank my manager Dr. Kudrat-E-Khuda for a wide range of help and collaboration all through the proposition and furthermore for helping me to keeping up the concentration and furthermore for his significant recommendations or more all saving his important time.

I might want to demonstrate my appreciation to my a few seniors and companions for helping me to accumulate and get to the data on detainee.

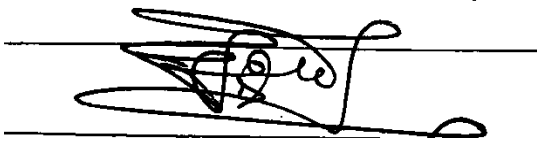
Finally, I might want to offer my heart fell thanks towards those people imparting their idea and insight during my examination on detainee. I earnestly express gratitude toward them all.

DEDICATION

I would like to dedicate this paper to my parents and my supervisor Dr. Kudrat-E-Khuda for all kinds of help to maintaining the focus and also for his valuable suggestions.

DICLARATION

This is certifying that the research monograph The Legal Regime on the Protection of Air Pollution under the Environmental Law has been done by Fahmida Akter (Id No 191-38-293) in partial fulfillment of the requirement for the degree of LLM program from Daffodil International University. This research monograph has been carried out successfully under my supervision.

A handwritten signature in black ink, appearing to read 'Dr. Kudrat-E-Khuda', is written over a horizontal line. The signature is somewhat stylized and cursive.

.....
Dr. Kudrat-E-Khuda

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ABSTRACT

The essential advantages of an in-house program are that general costs will be lower, the executives can increase quick access to information, and the board can completely control changes to the checking program. The essential benefit of an in-house program is, in any event for the occasion, DOE doesn't have adequate prepared staff to set up, work, and keep up the screens and create reports from what information there is. The essential advantages of a contracted program are it tends to be ready for action with no time for readiness, nobody should be prepared by DOE for activities (in spite of the fact that staff do should be prepared to do contractual worker oversight work), and the temporary worker will have the option to contract and prepare equipped staff without being obstructed by the present compensation issues inside the administration. The essential benefits are greater expenses and constrained capacity to change the program without persevering through an adjustment in the contract. Since the present checking staff isn't completely prepared to work and keep up the vaporous instruments being made arrangements for use soon, it is prescribed that a contractual worker be enlisted to guarantee persistent activity of the instruments for the close to term. This contractual worker, or an alternate temporary worker, ought to be procured to prepare the air observing staff on the best possible use and support of the instruments with an objective for the staff to be completely free when the administration contract lapses (roughly 27 months after start up of the up and coming age of instruments).It is emphatically prescribed that once the Cell has sufficient assets all constant checking information ought to be sent consequently or on a normal premise via landline or Internet association with the observing research facility.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Environmental condition of the nation is disintegrated because of various wellsprings of ecological contamination. Fast urbanization and industrialization lead the nation for major ecological issues. Air, water and soil contamination, transfer of strong waste and introduction to clamor are the key issues of condition in Bangladesh. In addition, Bangladesh is on high danger of environmental change and a dangerous atmospheric deviation. The current ecological circumstance of the nation couldn't be adjusted altogether since intense natural contamination are influencing general wellbeing, environment and development of economy. Natural issues happen in every single significant city of the nation. Also, discharges from engine vehicles, aero planes, trains, modern foundations, control age set up, block fields, revealed copying, burning, strong waste dumping region and particulate issues are causing to air contamination. Year to year, this nation has been suffering weakening procedure of condition that is a genuine matter of reasoning. Dirtied air causes respiratory issues, bronchitis, migraines and discombobulation, nasal blockage, and renal harm and a great deal of discharges additionally add to the nursery impact and hence instigating a dangerous atmospheric deviation and ocean level ascent. Air contamination is an extraordinary ecological worry for Bangladesh especially in enormous metropolitan urban areas like Dhaka and Chittagong.

As of late an investigation stated, Bangladesh has the most dirtied air on the planet and Dhaka is the second most contaminated capital city. In Dhaka city, air quality improvement was found in some degree due to CNG presentation and restricting 2-stirs 3 wheelers. Albeit a few activities have been taken to avert air contamination, such activities are not adequate for improving the air quality and more activities are required for controlling and checking air discharges from vehicles, businesses, block ovens and other potential wellsprings of air contamination.

1.2 Literature Review

For making the thesis paper till date I have read many documents. The list of these documents are given below---

- WTO and Climate Change.
- Constitution Of Bangladesh
- Bangladesh National Environmental Policy, 1992
- Bangladesh Environmental Conservation Act, 1995
- Bangladesh Environmental Court Act, 2010
- The Motor Vehicles Rules, 1940 (Extracts)
- Motor Vehicles Ordinance, 1983 (Extracts)
- Industrial Policy, 1991

1.3 Objectives of the study

- To create public awareness on air pollution and its effects.
- To help the community.
- To save people are from different complex diseases including tuberculosis, asthma, bronchitis and other skin diseases.
- To improve our own health.
- To identify the air pollution that of health importance human find their negative impact on human health.
- We need to save the forest and promote plantation inside the cities to maintain or restore the ecological balance.

1.4 Research Question

1. What is the reason for air pollution?
2. Is there any act which is properly used for protection of environment from air pollution?
3. What are the challenges and what obstacles are preventing assistance in improving air quality?

1.5 Methodology of the study

There is different methodology of research. But I will follow the qualitative research method for complete my dissertation paper. I will use both primary and secondary source of data for complete the research.

1.6 Significant of study

Air pollution is the most important one among those causes environmental pollution. Reducing pollutants in the air is important for human health and environment. Hence the study of air pollution is very important. Since the air pollution control is necessary for the better environment. All have to bother about the seriousness of the air pollution and fight against for the control. The study on the air pollution is invented to intent the pollution prevention.

CHAPTER 2

CAUSES OF AIR POLLUTION AND SIGNIFICANT

2.1 Introduction

Pollution is presently an ordinary term, that our ears are receptive to. We catch wind of the different types of contamination and read about it through the broad communications. Air contamination is one such structure that alludes to the sullyng of the air, independent of inside or outside. A physical, natural or concoction modification to the air in the climate can be named as contamination. It happens when any unsafe gases, dust, smoke goes into the environment and makes it hard for plants, creatures, and people to get by as the air gets filthy. Air contamination can additionally be ordered into two areas noticeable air contamination and imperceptible air contamination. Another perspective on contamination could be any substance that holds the possibility to block the climate or the prosperity of the living creatures making due in it. The sustainment of everything living is because of a mix of gases that all things considered structure the environment; the lopsidedness brought about by the expansion or decline in the level of these gases can be hurtful to endurance.

2.2 Types of Pollutants

In order to the reasons for Air contamination, a few divisions can be made. Primarily air poisons can be brought about by essential sources or optional sources. The toxins that are an immediate aftereffect of the procedure can be called essential contaminations. An exemplary case of an essential contamination would be the sulfur-dioxide produced from production lines. Optional contaminations are the ones that are brought about by the blending and responses of essential toxins. Exhaust cloud made by the connections of a few essential poisons is referred to be as an auxiliary toxin.

2.3 Various Causes of Air pollution

2.3.1. The burning of fossil fuels

Sulfur dioxide radiated from the ignition of non-renewable energy sources like coal, oil and other plant combustibles are one the significant reason for air contamination. Contamination producing from vehicles including trucks, jeeps, autos, trains, planes causes a gigantic measure of contamination. We depend on them to satisfy our day by day essential needs of transportation. Be that as it may, their abuse is executing our condition as risky gases are dirtying the earth. Carbon Monoxide brought about by ill-advised or deficient ignition and for the most part transmitted from vehicles is another significant toxin along - with Nitrogen Oxides, that is created from both common and man-made procedures.

2.3.2. Agricultural activities

Alkali is an extremely basic side-effect from agribusiness related exercises and is one of the most dangerous gases in the environment. Utilization of bug sprays, pesticides, and composts in farming exercises has developed a considerable amount. They produce hurtful synthetic substances into the air and can likewise cause water contamination.

2.3.3. Exhaust from factories and industries

Assembling enterprises discharge a lot of carbon monoxide, hydrocarbons, natural mixes, and synthetic concoctions into the air in this manner draining the nature of air. Assembling ventures can be found at each side of the earth and there is no region that has not been influenced by it. Oil treatment facilities additionally discharge hydrocarbons and different synthetics that contaminate the air and furthermore cause land contamination.

2.3.4. Mining operations

Mining is a procedure wherein minerals beneath the earth are extricated utilizing huge hardware. During the procedure residue and synthetic substances are discharged noticeable all around causing monstrous air contamination. This is one reason which is liable for the falling apart wellbeing states of laborers and close by occupants.

2.3.5. Indoor air pollution

Family unit cleaning items, painting supplies produce harmful synthetic compounds noticeable all around and cause air contamination. Have you at any point seen that once you paint the dividers of your home, it makes a type of smell which makes it actually unimaginable for you to relax? Suspended particulate issue well known by its abbreviation SPM, is another reason for contamination. Alluding to the particles above water noticeable all around, SPM is normally brought about by dust, burning, and so on.

2.4 New Source Review (NSR) and Prevention of Significant Deterioration (PSD).

These necessities require certain enormous mechanical offices to introduce cutting edge air contamination controls when they construct new offices or make changes to existing offices. Inability to introduce controls brings about outflow of toxins that can debase air quality and damage general wellbeing. Get familiar with New Source Review. Diminishing air contamination from the biggest wellspring of discharges is one of EPA's national requirement activities. EPA is making a move to take out or limit outflows from coal-terminated power, corrosive, glass and concrete plants and oil processing plants.

2.4.1 Illegal imports

Since 2008, there has been a steady flow of illegally imported uncertified motorcycles, equipment containing small gasoline-powered engines (e.g., generators, mowers, chainsaws,

etc.), and recreational vehicles. Uncertified vehicles and engines can emit harmful air pollutants at 30% or more above allowable standards. EPA is working with U.S. Customs to stop illegal vehicles and engines at the ports and requiring exportation. Learn more about importing vehicles and engines.

2.4.2 Defeat devices.

It is a violation of the CAA to manufacture, sell, or install a part for a motor vehicle that bypasses, defeats, or renders inoperative any emission control device. For example, computer software that alters diesel fuel injection timing is a defeat device. Defeat devices, which are often sold to enhance engine performance, work by disabling a vehicle's emission controls, causing air pollution. As a result of EPA enforcement, some of the largest manufacturers of defeat devices have agreed to pay penalties and stop the sale of defeat devices.

2.4.3 Tampering.

The CAA prohibits anyone from tampering with an emission control device on a motor vehicle by removing it or making it inoperable prior to or after the sale or delivery to the buyer. A vehicle's emission control system is designed to limit emissions of harmful pollutants from vehicles or engines. EPA works with manufacturers to ensure that they design their components with tamper-proofing, addresses trade groups to educate mechanics about the importance of maintaining the emission control systems, and prosecutes cases where significant or imminent harm is occurring.

2.4.4 Fuels. The CAA regulates fuel used in motor vehicles and non-road equipment. Clean fuels help reduce harmful emissions from a wide variety of motor vehicles, engines, and equipment.

CHAPTER 3

BANGLADESH APPROACH FOR AIR POLLUTION LAW

3.1 Introduction

While the record air contamination in neighboring India's Delhi this previous end of the week has caused cautions to go off, Bangladesh also has been reliable in its air contamination throughout the years. As a nation concentrated on development and industrialization with one of the most thick populaces, air contamination has been a reason for concern. As indicated by the AQI, a score between 0-50 is great, 51-100 is moderate, 101-150 is preventative, 151-200 is undesirable, and 201-300 is unfortunate, 300-500 is very unfortunate. The air quality in Savar is undesirable while Dhaka and Narayanganj has unfortunate air. The air quality crumbles in the winter, which is practically around the bend. On the off chance that air quality further decays, the circumstance may look like Delhi, which was covered by a substantial layer of brown haze. Dhaka has often bested the record of the world's urban communities with the most exceedingly terrible air quality.

3.2 Air Pollution as a Burning Issue

Air contamination is one of an assortment of synthetic ecological issue. Air contamination might be characterized as an air condition in which different substances are available at fixations sufficiently high over their ordinary surrounding levels to create a quantifiable impact on individuals, creatures, vegetation or materials.

'Substances' alludes to any normal or artificial concoction components or mixes fit for being airborne. These may exist in the air as gases, fluid drops, or strong particles. It incorporates any substance whether harmful or considerate; be that as it may, the term 'quantifiable impact' for the most part limits thoughtfulness regarding those substances that cause bothersome impacts. Air quality has decayed both because of human exercises, and normal wonder, for example, wind-blown residue particles and so on. There are two significant wellsprings of air contamination in Bangladesh, vehicular discharges and modern outflows. As of late, air contamination has gotten need among natural issues in Asia, just as in different pieces of the world. Dhaka is a significant social and assembling focus. The basic sorts of businesses in and around the outskirts of Dhaka are instant article of clothing fabricating, jute, tanneries, material, tea preparing, compost, concrete, paper and mash, synthetic concoctions and pesticides, nourishment and sugar, pharmaceuticals, oil processing plant, refinery, elastic, plastics, and block producing, collecting transports, trucks, and cruisers, gathering radios and TVs. Demeanor of Dhaka is being dirtied step by step gravely. The other urban zones for example Chittagong, Khulna, Bogra and Rajshahi have a lot lesser medical issue identified with urban air contamination.

3.3 Air particulate matters and gaseous pollutants

To fulfill the essential national requirement for checking air quality and to control air contamination in the significant urban areas of Bangladesh, Department of Environment (DOE) set up the first ever in the nation, the Continuous Air Quality Monitoring Station (CAMS) in 2002 in the open space of the most significant open foundation of Bangladesh, the Parliament Buildings, in the focal point of the Dhaka city. Twenty-four hour normal, month to month estimations of PM10 and PM2.5 particulate issues, gathered over the time of 22 months are delineated in Figure 2. The orderly pattern saw in these information is the topping of the fixations from October to April past which the convergence of both PM10 and PM2.5 are diminishing because of downpour out impact. The other time-arrangement information for PM2.5 have been gathered at two inspecting destinations: Farm Gate (Figure 3) which faces a crossing point of a few significant streets, and a semi-private site situated around 50 meters from a street with moderate traffic (Figure 4). These Figure 3 and 4 (WB 2004) show the regular example watched consistently; high particulate fixations in winter when it is dry and when low temperatures cause warm reversal whereby contaminations are caught close to ground level, and low focuses during the stormy season. There is an impressive fall in PM2.5 focuses at the Farm Gate somewhere in the range of 2002 and 2003. As talked about beneath, this could be to a limited extent because of the prohibition on all current two-stroke motor threewheelers that became effective on January 1, 2003 by advancing the vehicles that utilization packed gaseous petrol (CNG). The normal PM2.5 focuses for the long stretch of January in 2001 and 2002 were 87 and 136 $\mu\text{g}/\text{m}^3$ (before the phaseout), individually, contrasted with 55 and 54 $\mu\text{g}/\text{m}^3$ in 2003 and 2004, separately (after the phaseout). The month to month focuses were 125, 75 and 74 $\mu\text{g}/\text{m}^3$ in December for 2000, 2001 and 2002 (preceding the phaseout) and 44 $\mu\text{g}/\text{m}^3$ in 2003 (after the phaseout). To satisfy the basic national need for monitoring air quality and to control air pollution in the major cities of Bangladesh, Department of Environment (DOE) set up the first ever in the country, the Continuous Air Quality Monitoring Station (CAMS) in 2002 in the open space of the most important public institution of Bangladesh, the Parliament Buildings, in the center of the Dhaka city.

3.4 Environmental Policy and Legislation

4.4.1 National Environmental Policy, 1992

In 1992 the National Environmental Policy (NEP) was drawn up with the point of giving assurance and supportable administration of the earth. The goals of the Policy include:

- Maintaining the natural equalization and by and large advancement through security and improvement of the earth;
- Identifying and manage contaminating and earth debasing exercises;
- Ensuring naturally stable improvement;

- Ensuring manageable and ecologically solid utilization of every characteristic asset; and
- Actively remain related with all universal ecological activities (MoEF, 1994).

3.4.2 National Environmental Management Plan, 1995

The National Environmental Management Plan (NEMAP) was created as the structure of projects and mediations planned for actualizing NEP. Its exercises endeavor to prompt better administration of rare assets, decreasing the pace of ecological corruption, improving the common and synthetic condition, moderating living spaces and biodiversity, advancing feasible improvement and improving quality pointers of human life (MoEF, 1994). NEMAP proposed activities and mediations are for government organizations, NGOs and more extensive common society and incorporate exercises identifying with fisheries and horticulture (MoEF, 1994).

3.4.3 Environmental Conservation Act and Rules

The Bangladesh Environmental Conservation Act went in 1995, and the going with 1997 Rules, are apparently the most significant administrative reports for mechanical water contamination. The Act is committed to the protection, improvement of value guidelines, and control through relief of contamination of the earth (Environmental Conservation Act, 1995). The 1997 Environment Conservation Rules made as per the 1995 Act give extra direction to explicit parts of the Act. The Act is in principle authorized by the DoE, which has duty regarding:

- Coordinating with different specialists or offices that have importance to the targets of the Act.
- Adopting security quantifies and deciding reduction measures to avoid mishaps that may cause natural debasement.
- Advising people on ecologically stable use, stockpiling, transportation, import and fare of risky material or its segments.
- Conducting research and helping different specialists and organizations in preservation and improvement of the earth.
- Investigating areas, hardware, fabricate or different procedures, fixings, or materials, to guarantee improvement of the earth, and control and alleviation of contamination.
- Collecting, distributing and scattering data with respect to natural contamination.
- Advising the Government on assembling procedures and materials that may cause contamination.
- Ensuring consumable water quality.

So as to uphold the Act, the DoE has the option to enter, explore, test, look at and seize, modern plants, gear, records, registers, reports or other critical items, and to look through spots where it

is accepted an offense has happened in negation of this demonstration. Likewise, the DoE is engaged to gather water, air, soil or other material for examination within the sight of the tenant and under conditions set somewhere around the Act. Should any plant or process be seen as repudiating the principles of the 1995 Act, the DoE has the ability to uphold the Act through conclusion, denial or guideline of ventures, activities or procedures after due notice to the proprietor of the business or procedure. The DoE can likewise start formal proceedings if an application is put together by an individual or gathering of people who are being, or are probably going to be, influenced by contamination or corruption of the earth.

Since the gazetting of the 1995 Act, every modern unit or tasks must get Natural Clearance from the DoE. For the reasons for this every mechanical unit and activities have been partitioned into four classifications (Schedule 1 of the Rules) contingent upon ecological effect and area. So as to get Environmental Clearance, businesses inside these classifications must submit applications containing a few types of documentation (Table 1). When Environmental Clearance has been conceded it is substantial for a time of 3 years for Green Category ventures and 1 year for every single other Category. Applications for reestablishment must be made 30 days before expiry.

3.4.4 Environmental Quality Standards

Notwithstanding setting announcing criteria for exercises, procedures and the executives, the 1997 Environmental Conservation Rules likewise indicate squander release quality models for every single modern unit and activities and a determination of ordered enterprises. General industry release criteria are given for inland surface water, open sewers at optional treatment plants and inundated land. A solitary discharges standard is given for every one of the parameters for ordered businesses, which include: manure manufacturing plants; coordinated material plant and huge handling units mash and paper plants, concrete industrial facilities; mechanical boilers; nitric corrosive plants; refineries; sugar

3.4.5 Ecologically Critical Areas

Despite the fact that the Environmental Conservation Act (1995) manages procedures and exercises that outcome in contamination, parts of the Act likewise make arrangement for assurance of biological systems. Under the Act the administration can pronounce biologically basic regions in any zone liable to arrive at ecologically basic conditions, and can determine tasks and procedures that can't be started or proceeded in those territories. The Act likewise presents capacity to the DoE to arrange remedial measures to be taken by any individual accepted to be capable straightforwardly or in a roundabout way, for making harm the environment.

3.4.6 The Environmental Court Act 2000

The 2000 Environmental Court Act underpins the Environmental Conservation Act (1995) and the Environmental Conservation Rules (1997) by accommodating the foundation of ecological

courts for the preliminary of offenses identifying with natural contamination. It incorporates conventions for the foundation of the court, and characterizes the court's purview, fitting punishments, forces of search and section, and strategies for examination, preliminary and bid.

The Environmental Conservation Act, 1995 and the Environmental Court Act 2000 were revised in 2002 and the Environmental Conservation Rules, 1997 were stretched out to consolidate encompassing air quality and fumes fan vehicles.

3.5 Air quality index

On the basis of the observed data and the proposed air quality standards, some calculations have been performed to provide some air quality index (AQI) numbers so that the public understanding of the air pollution problems becomes clear. The index is calculated on the basis of Air Quality Rating for each of the pollutants which is defined as the ratio between the observed level of the pollutant in the air and the allowable limit for the same expressed in percentage. For a number of pollutants, AQI is obtained from the geometric mean of the Air Quality Ratings. Based on the Air Quality Index, the categorization of ambient air environment is presented in Table 3 (Alam et al, 1999). Hereafter, AQI's have been calculated using ambient concentration of CO, NO₂ and SO₂ measured at 49 important roadside intersections of Dhaka city (Alam et al, 1999) on the basis of the permissible level of the concentrations provided by both WHO and DOE, Bangladesh. The results are summarized in Table 4. It is observed that if AQI is calculated on the basis of WHO standards, in 70% of the areas the roadside environment is severely polluted and 30% of the areas is heavily polluted. For the standards set by the Government of Bangladesh, all the areas are very severely polluted. The most highly polluted areas are Mohakhali, Jatrabari and Panthopath where the AQI is above 200 (Based on WHO guideline). Even at roads besides residential areas like Dhanmondi and Jigatola the AQI is above 100. Again, according to US-EPA model, AQI has been calculated using single pollutant as parameter from the data of Sangsad Bhaban. The Figure 8 shows that the average AQI is 100 or more than 100 throughout the year. According to US-EPA model (www.epa.gov), the pollution represents Unhealthy for Sensitive Groups, which include national monuments, health resorts, hospitals, archeological spots and educational institutions.

CHAPTER 4

DRAFT CLEAN AIR ACT PRESENTED FOR IMMEDIATE APPROVAL

4.1 Introduction

As per the Department of Environment (DoE) and the World Bank, old and unfit vehicles are liable for the greater part of the contamination in the city. Employable block furnaces are likewise significant benefactors. In promotion of its responsibility to diminish air contamination levels to zero by 2020, the administration established the Brick Production and Brick Kiln Building (Control) Act of 2013. Another wellspring of air contamination is the tanneries. As indicated by ongoing Hugh Court orders, proprietors of tanneries are at risk to move their foundations to condition inviting areas and are committed to pay for the following natural costs dependent on the polluter's compensation standard. Because of the developing worries about the air quality,

4.2 Immediate approval in Bangladesh

Bangladesh Environment Lawyer's Association (BELA), Department of Environment (DoE) and Bangladesh University of Engineering and Technology (BUET) have mutually drafted a law for guaranteeing clean air the nation over. As indicated by the media report, the draft law is yet to be introduced before the bureau and parliament. In the draft law, an aggregate of 32 segments and some sub-areas has been joined. As indicated by the draft law, the Department of Environment is the checking cell which must be completely prepared so as to have the option to effectively execute the law. The law and the calendars remembered for the draft variant depend on the part rules on contamination which is difficult to change once passed. The draft of the law, whenever passed by the Parliament will be more activity arranged than authorize situated.

Segment 3 of draft incorporates the accompanying standards: practical improvement (right to take an interest, access to data, review), polluter pays guideline and prudent standards. Area 6 states about National Air Quality Management Plan where the Department of Environment will, inside one year from the happening of this law, set up a period bound National Air Quality Management Plan (NAQMP) that will look to offer impact to the guidelines and control measures to improve the air quality. Area 17(1) states that the administration will fortify (logical and mechanical) inquire about on air contamination counteractive action and control. It will likewise advance progressed and reasonable advances for the anticipation and control of air contamination. Segment 25 (1) expresses that an individual sentenced for an offense is obligated to a fine, or to detainment which, on account of a first offense, will be under two years. In any case, if the offense is submitted for the second or third time, it must be halted for all time. Clean air must be for all and there must be no deviation for the benefit of the administration

organizations to guarantee resident's entitlement to clean air. Ensure that the law is being actualized for a contamination free condition by the legislature.

Segment 6 recommends that the DoE readies a National Air Quality Management Plan inside one year of the law coming into effect. Section 7 says the legislature may proclaim a territory as basic if air quality crumbles there or on the off chance that it needs explicit consideration regarding dispose of the circumstance. Segment 11 of the draft proposes establishing a 29-part warning chamber with delegates from various services and divisions to regulate and make proposals to execute the plan. Section 25 recommends the arrangement of a greatest punishment 10 years detainment or fine or both as the disciplines for disregarding the law. Area 27 says if an offense is submitted by any administration office, its head will be viewed as liable of the damaging the law, and at risk to confront discipline as needs be.

4.3 Conclusion

The draft of clean air act-2019 recommends that the administration declare the names of basic regions with respect to the Air Quality Index (AQI), and the leader of any administration substance be considered liable for damaging the law. Segment 7 of the law says that the legislature may pronounce a region as a basic (non-fulfillment) or uncommon control one if air quality weakens in the specific territory or it needs explicit regard for dispose of the circumstance. As per segment 27 of the draft, if an offense is submitted by any administration organization, its head will be viewed as blameworthy of the abusing the law, and held at risk to confront discipline accordingly. Bangladesh Environmental Lawyers' Association (BELA) and Bangladesh University of Engineering and Technology (BUET) arranged the draft law and displayed it at a workshop at a Dhaka lodging on Thursday. The draft referenced that the Department of Environment (DoE) will set up a period bound National Air Quality Management Plan inside one year of the law coming into effect. It likewise proposes establishing a 29-part warning chamber with agents from various services and divisions, to direct and make proposals to actualize the plan. Discussing the law, BELA Executive Chairman Syeda Rizwana Hasan proposed the arrangement of a greatest punishment of 10 years prison time or fine or both as the disciplines for damaging the law. However, the draft seems, by all accounts, to be somewhat permissive for the individuals who will be seen as blameworthy in the primary offense, as it recommends a detainment of under two years for a first-time guilty party. Rizwana stated: The law is planned for improving air quality in the nation, particularly in Dhaka and its encompassing territories. It isn't discipline oriented She stated: There are grievances that lone the private division is to be accused and rebuffed for air contamination, not the administration agencies. But now, there are changes in the law, as has added the arrangement to rebuff the administration associations blamed for air contamination too. The Clean Air Bill sets a most extreme punishment of 10 years detainment or fine or both for damaging the law overseeing air contamination, and doesn't extra open area pioneers, making heads of government offices at risk for discipline if their association submits an offense.

CHAPTER 5

GENERAL CONCLUSION AND RECOMANDATION

5.1 Recommendations

5.1.1 Technical Services Unit

It is imagined that inside this Unit there would be a checking segment to work the observing stations, an information examination area to assess air quality information and perform quality affirmation and quality control tests (QA/QC) reporting in real time quality information, a meteorology segment for air quality guaging, and a source testing segment to perform emanation tests on mechanical smoke stacks.

5.1.2 Ambient Air Monitoring

The motivation behind an air quality checking program is to decide the degrees of poisons noticeable all around where individuals live and work. This is finished by directing constant checking of the encompassing air for criteria toxins in all urban communities where unhealthful air contamination may be available, and leading unique observing ventures varying to ponder confined concerns, for example, impacts from a clogged traffic point, or from a huge wellspring of modern emissions. The current essential focal point of the surrounding checking unit is introducing, working and keeping up consistent air checking stations crosswise over Bangladesh in zones recognized by the Air Quality Management Project (AQMP) as being imperative to the security of general wellbeing.

Bangladesh has chosen to pursue the U.S. EPA encompassing air quality principles and observing criteria. Along these lines, all stations ought to be worked in complete understanding with the U.S. EPA's criteria for encompassing observing stations as recorded in the Federal Register at 40 CFR 58. Such norms direct criteria for the physical area of a screen or screens, their adjustment cycles, required molding of the checking destinations, safeguard and restorative support gauges for quality affirmation and quality control, and review procedures. It is basic that a duplicate of the quality confirmation manual and station working manual be nearby and accessible to all staff liable for working and keeping up the station observing hardware. Right now, a delicate duplicate of the manual is on a PC in the AQMP lab office, yet a printed duplicate isn't accessible. Every individual taking a shot at hardware in the station ought to be prepared on this manual, and re-prepared varying to guarantee they are present in their insight into the gear. At the point when hardware is changed in a station, the manual must be refreshed and staff prepared on appropriate use and support of the new gear.

5.1.3 Special-Purpose Monitoring

Special checking undertakings would be examine situated in their temperament, directed to explore whether certain air poisons may exist in a populated territory. A case of unique reason observing may be setting up-twist and down-wind screens to examine the nearness of possibly destructive contaminations from a mechanical office. Another case of particular reason observing may be leading investigations of PM channels to decide the nearness, or absence of quality, of a compound of worry in a topographical territory. These mixes may be suspected from mechanical sources, versatile sources, or normal sources.

5.1.4 Data examination and quality confirmation

The Technical Services Unit would be answerable for leading quality affirmation and quality control (QA/QC) of all information detailed from all surrounding and specific reason screens. This gathering would create reports of the information for use via Air Quality Cell staff, by DOE, and by some other association inside the Government of Bangladesh. The information would be utilized to give day by day Air Quality Index declarations to the general population. The information ought to likewise be accessible to the general population upon request. The information is basic for knowing the status of air quality inside populated territories, and to decide long haul inclines in surrounding air quality at each station. The Unit ought to be liable for getting ready air quality patterns investigations for every toxin observed, by station. The patterns examinations ought to at least show month to month midpoints over a schedule year premise, and in a perfect world on an observing day premise when feasible. The activity of such stations, and the investigation of their information, are exceptionally specialized and in this way require talented specialized staff, including scientific experts.

5.1.5 Audits

An autonomous review of every analyzer ought to be directed at any rate once every year. These reviews can be performed by inspecting gases from a chamber that is numbered and constrained by an outside lab, however the vaporous qualities must not be known to the Air Quality Cell staff. It may be conceivable to contract with a neighborhood college to lead this review. Another choice is to procure a firm that has some expertise in encompassing checking and in this way could play out a free review of the instruments and the program insofar as it isn't a similar firm that is working the instruments for the AQC.

5.1.6 Emission testing of office stacks and smokestacks

Technical Services Unit ought to likewise be the home to a source testing program. Source testing is important to quantify discharges from mechanical smoke stacks. It requires uncommon hardware that is profoundly specialized in its plan, and should be utilized regularly for the gear administrators to keep up their capability with the hardware, and with the strategies used to

gauge stack gasses. Because of the specialized idea of the gear, and its requirement for steady alignment in a research center, this program would be all around put in the lab.

5.1.7 Air contamination anticipating

Air contamination determining is a troublesome assignment, yet one that is required if the general population is to be educated ahead of time of air quality list levels that are relied upon to be undesirable. The record doesn't have a lot of significant worth in the event that it is communicated sometime later. With appropriate preparing, a meteorologist can estimate air quality levels a lot of like the climate is conjecture by utilizing unique models to help dissect how explicit climate examples will influence air quality levels. A meteorologist can likewise give help to air quality demonstrating works out.

5.2 Conclusion

A profoundly specialized individual, for example, a senior physicist or researcher should lead the Unit. The staff working the observing gear must have a solid specialized foundation, and be very much prepared in the activity and upkeep of the hardware. The staff leading the information investigation and quality confirmation ought to be prepared and experienced in arithmetic, or a pertinent physical science. The staff playing out the source testing ought to have solid specialized aptitudes and preparing. Each source test group pioneer ought to be at the lesser specialist or junior scientific expert level. The AQC will require in any event one meteorologist to perform estimating for potential air quality levels, and to report ahead of time expected air quality record levels where information exists to do so. With legitimate instruction, preparing and experience, it is workable for one all around qualified instrument specialist to play out all protection upkeep, and constrained restorative support, on two stations, gave the stations are found a sensible good ways from one another, and from the workplace/lab area of the professional. What's more, a few pros will be required to perform QA/QC on the information on every one of the stations in Bangladesh, and a few additional authorities will be expected to keep up the database of this information to figure patterns and track air quality history at each station. The all out number of observing staff required to run the air checking system is straightforwardly identified with the quantity of stations, the number and sort of instruments in each station, and the area of the stations comparative with where the staff are stationed. Emission trying ought to be proceeded as regularly as one group can work to keep up capability with test strategies and the gear.

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