Free essay about controlling air pollution

Environment, Pollution



The environment is under different types of threats. Environmental pollution has been a key issue of concern in the last two centuries. The sustainability of human activities is something that the government has tried to look at in a detailed manner. Air pollution has been one of the most dangerous pollution in the environment. The human activities have contributed much to air pollution. The impacts of air pollution in the environment are massive and hazardous especially to the future generation the human activities especially industrial emission and automotive emission has been the main source of air pollution (Ackerman and William 1468). The recent years have seen the threat of global warming in the world environment that has called for control of air pollution to sustain the environment.

The Clean air Act can be identified as one of the first control that aimed at ensuring that there is clean air for all. The Clean air Act started with the primary focus of ensuring good air quality and ensuring good health to all as. Today this act has been modernized with the changes in the environment and modernized social activities. The average human being requires six pints of air per minute equivalent to over thirty pounds of air each day. The human being cannot be able to stand drinking sewage water but inhales much of filthy air each day. Therefore, air pollution present one of the key challenge to the environment in today modern age and it control is prerequisite for both toady and future generation. This paper is a report on air control and the environmental laws in place to meet it.

The clean air Act is a clear illustration of how the legal response to air pollution has changed from the traditional common law to a recent federal regulation where government enact laws that control the social activities

geared towards environmental protection.

In the pre-colonial period, North American had variety of natural resources and there was a deliberate use of large-scale fire by most natives. This means that the air had always some pollutant in it. In Europe, settlement, industrialization, and urban growth result to a higher rate of air pollution. At the beginning of 20th century thing deteriorated, the city of Pittsburgh, for example, had blots of soot in the air such that on required to use gaslights in the middle of the day. There was legal redress available but was not widely used. One way to handle the issue is early planning where there was a separation of the industries from commercial and residential areas to ensure that there is clean air at residential areas and commercial areas (Ackerman and William 1473).

As early as 1859, the courts had endorsed air pollution control where in the case of New Orleans vs. Lambert the court ruled against dense smoke. The example of Northwester Industry vs. Des Moines in 1916 showed that the smoke suit was a very significant nuisance in the environment but the health implication could not be certified and thus though air pollution control was significantly important it could not be undertaken at the exemption of industrial expansion. Therefore, there was no proper control against air pollution due to the economic benefits from industrial activities. The lack of another alternative to coal also contributed much to the reluctance to regulate the industrial emissions.

Although there was an adoption of "smoke ordinances" in different US cities aimed at limiting pollution from larger industrial sources and engineers have worked to improve the there is still contamination and pollution of air. Thing

remained the same Second World War II that there was significance of the health cost that come along with air pollution. This was seen in Pittsburgh where there was a dramatic improvement from its smoke program in year 1948. Just 29 km away the little society of Donora experiences an air pollution disaster that could not ascribe solely to smoke.

An annual metrological invasion resulted in a buildup of fog that lasted for days. Due to this invasion, 20 people lost their lives and more than 43% of the Pittsburgh population was affected by respiratory problems. The people were gasping for air, having chest pains, this story captured the headlines, and there was a need for action. The second transforming development was the event of eye-burning smog in 1943 in Los Angeles, which is one of the urban areas that virtually use coal. The so-called fog was not a normal fog, but air pollution that was harmful causing problems to the eyes.

The advice from Raymond backer who as an expert who was requested to look at the problem and give viable solution was banning of PM and SO2 emission such as incinerators and fires at waste dumps, monitoring industrial emission and penalizing diesel truck drivers with smoky emissions. The year 1947 saw the first California legislation authorizing county air pollution for anything else other than smoke. The county then formed an Air pollution control District. When these measures were carried out the level of dust reduced greatly but the control failed to address the main source of the problem.

The events of the US and Europe showed clearly the economic and cost of air pollution. This revolutionized the monitoring of air pollution and research was carried out on the effects of air pollution. The federal government came to a

proposal for the first time to take the matter as a national threat and funded the research projects (Trisko 974). Regulatory authority remained with the state and local government as the federal created funds for the works. California was the first one to create ambient air quality standards although it standards were less strict compared to those of other states. In the year, 1963 due to frustration of the air pollution that was continuing the congress directed the federal action. By the year 1966, there were inadequate air pollution standards that were set out by either the state or the federal. In the year 19967 the state were directed by the federal to form air quality standards and make plans in how to meet the standards (Melnick 23). By the year 1960, the environment movement was now in place and was addressing the challenges in the air pollution. The politicians were eager to address the issues raised and new federal regulation on air pollution was proposed. What was much clear is that the enacted of the law of 1967 was cumbersome and time consuming and thus there was need to combine the air quality standards with technology based emission limits. In the year 1970, the congress and politicians enacted the new Clean Air Act. Despite being amended twice in the year 1977 and the year 1999, the initial framework of the Clean Air Act remains relevant and intact until today. The act calls for national uniformity of air pollution standards, which are initialized by the states but back stopped by variety technology based controls on mobile and stationary sources. EPA, which was just a month old, was given the daunting task of issuing the air quality and emission limitation regulations called by the new law. The Clean Air Act outlines several control measure that help in reducing pollution.

The Ambient air quality standards are outlined in the Act. The primary concern of the Clean Air Act is achieving and establishing a clean air environment all over the country (Stander and Louis 38). To that end, section 108 gives a direction to EPA to identify suitable pollutant for issue of national standards. Section 109 requires EPA issues national ambient air quality standards (NAAQS) for the pollutants.

Quality standards by themselves cannot attain clean air, but they require to be implemented to achieve the goal of clean air. The quality standards need to be translated to specific source controls. Primarily the CAA relied on the states to carry out translation of the standards and carry out controls in their territory without causing harm elsewhere. The states failed to clean up their skies and the congress added sanctions to complete them to meet quality standards, which are the situation until today.

The CAA in the Clean Air Act introduced aggressive federal air control of air emission from mobile sources. CAA creates an important federal role in control and modification of quality standard in stationary sources modification. The primary goal of the 1970 CAA was to clean up the areas that were suffering from significant air pollution (Stander and Louis 47). This is when the PSD program was initiated (Prevention of significant deterioration).

In the part, 112 and EPA is called to identify health based emission standards such that there is no air pollution that might cause or contribute to adverse health effects. In the year 1990, CAA amendment enacted a system of tradable emission permission to address the problem of acid rain caused by emission of sulfur oxides. These permits were distributed to the different

sources that were interested in the extraction of tradable sulfur oxide. If the source requires increasing the emission, they have to request and be granted permit to increase the emission.

CAA focuses on air quality that is difficult to implement. While SIPs may allocate the available pollutant increment among the regions, it may difficult to regulate or keep track applicable requirements. More complication is the plethora of different technology based requirements that may apply any one source under the NSPS, PSD, NON-attainment and hazardous air pollutant programs.

The core foundation of the Clean Air Act is the federal definition of the ambient air quality standard and outline how the states implement it.

Defining an air quality standards is quite a difficult job and coming up with an acceptable level of air pollution is also difficult and maintaining the acceptable level of pollution proves to be the most difficult task.

The automobiles as pollutants are responsible for a very high percent of the emission that constitute half or more percentage of many urban areas emissions. The strategies of looking at automotive emission within the Clean Air Act are much different from that of stationary sources. Since automotive are consumer products, control has been focused on tailpipe emission at the time they roll off the assembly (Stander and Louis 68). Since the automobiles are marketed nationally, the federal government has undertaken the control of the emission.

Automobile emission remains a very significant problem since it contributes largely to non- attainment across the country. The automobile pollution is not a function just tailpipe emissions per mile travelled, but also the

aggregate number of miles travelled. While the emissions have aggressively been regulated, vehicle miles traveled have combined to rise with little federal or state response.

Since the 1970, tailpipe emission controls have become increasing stringent and more detailed. The general standard found out CAA that directs the administrator of EPA to prescribe emission limits for new motor vehicles for pollutant, which may reasonably be anticipated to endanger public health or welfare. Under the current statutory and regulatory scheme Clean Air Act; EPA also regulates emissions from a variety of other mobile sources including airplanes.

Congress has given the states only a few limited roles when it comes to controlling the mobile source control. The CAA establishes minimum vehicle emission effective throughout the country. It preempts the state regulation. Only California State has waiver since it was in business of regulating automobiles before the Federal State (Trisko 982). The other state that are not given waiver to impose their own regulations on motor vehicle and or non-road engine mission. Non-attained states, may, however, choose opt into California's standards. The regulations of locomotives or airplanes, that authority is reserved to the federal government.

In conclusion, the Clean Air Act is a revolution, which has been in place since the 1970 where the EPA continues to work with the local governments, states and the federal government. The Clean Air Act has undergone an amendment, but the initial framework of the Act has remained significance even in today modern age. According to the literature, the benefits of the Clean Air Act out ways the cost of the Clean Air Act, this includes the health

costs and the environmental cleaning costs. The significance of the Clean Air Act in the future cannot be undermined. The Clean Air Act will help in ensuring that there is more regulation to control air pollution and this will safeguard the air for the future generation. There need more control as more than 40 years of air pollution control has not achieved total control of the complex level soft pollution.

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