Ethics and environmental case study assignment

Environment, Environmental Study

Leaders in developing countries have a strong desire to come more industrialized in order to compete with developed countries economically (Raven, et. Al, 2010). Beijing and Mexico City have growing populations and industrialization, causing an increase in air pollution (Raven, et. Al, 2010). As these countries strive to compete, air pollution laws are often ignored and outdated technologies are used (Raven et. Al, 2010). Leaders need to comply with the laws and regulations, which require newer technology, and environmental awareness to ensure protection of the environment, and safety of citizens.

Historical Development As Beijing has rapidly grown from a population of four million in 1949 to 1. 6 million in 2004 so has the air pollution (Ganged, Xii, Ding, & Bin 2005). The main cause for this rapid growth is economic investments and industrialization (Ganged, et. Al, 2005). As industrialization and arbitration continue to increase, so does the number of people in the area. In addition urban construction has also continued to rapidly grow (Ganged, 2005). This has increased from 2. 9 million mm to 70 million mm in less than forty years (Ganged, et. Al, 2005).

The increase in population, arbitration, and industrialization has stressed the natural environment. Beijing now has the worst air quality in the world (Raven, et. Al, 2010). As History has shown if Beijing does not take measures to reduce the rapid growth, industrialization and arbitration the air quality will only get worse. Mexico City is located in a basin surrounded by mountains (1994). Winds are light through the valley channels causing poor ventilation (1994). With the lower oxygen content CO emissions are increased and health effects are increased (1994).

As Mexico City’s population continues to increase at a rate of 1. 4 percent per year, the consumption of energy is also increasing (1994). The increasing population contributes to the 2. 5 million motor vehicles that contribute to 44 percent of energy consumption in the city (1994). Motor vehicles contribute to the pollution of Mexico City. In addition to the location, increased population and energy consumption Mexico City also has over 30, 000 industries are located in the valley of Mexico City (1994). Of these industries 4000 are generating atmospheric emissions that are damaging the environment (1994).

With the combination of these four factors Mexico City is ranked fourth of major metropolitan areas in the oral for air pollution (Raven, et. Al, 2010). Stakeholders The financial benefit of improving air quality and controlling the pollutant levels is reviewed and ultimately determines what actions take place for the cities. In Mexico City, efforts are taking place due to the statistics that workers are losing substantial income due to being ill; often illness related to poor air and environmental maintenance.

Air quality and exposure meddlers, epidemiologists and public health specialists, economists and statisticians assessed a wide range of health benefits and “ savings,” including people’s illnesses to pay for better health and a potentially longer life. (DIRE (ND), 201 1) Whether a resident suffers from a stuffy nose and watery eyes to more serious health issues, sickness prevents people from showing up to work sick and lacking productivity or it forces the employee to call off sick.

The benefit Of improving air quality not only increases the amount Of employees that attend work regularly, but it also lowers the costs to the employee; hospital visits, insurance co-pays, and medications aren’t needed as frequently. The priority to improve the air quality for both Mexico City and Beijing has escalated since 2002. Stakeholders are receiving realistic and accurate reports of the current living conditions versus the benefits of acting upon a plan of change to make Mexico City and Beijing livable cities.

Long Term Effects If the pollutant level is high enough, most people will experience some combination of sinus congestion, runny nose, tearing/burning eyes, or dry cough because these are reiterative phenomena, not allergic. (DIRE (ND), 2011) These symptoms are not only pesky to those who have allergies, but to healthy people who are typically living healthy lives. While the short term effects may be manageable in some annoying ways, the long term effects are quite daunting.

Children are some of the highest effected group of people related to environmental sickness, as their bodies aren’t capable of enduring the high levels of smog and pollutants. The children of Beijing and Mexico City face living as an asthmatic or other life-long respiratory problems due to lack of lung growth throughout childhood. The other groups of effected people that have the highest and most dangerous long term effects are those with a heart problem or coronary artery disease. The trigger of contaminated fumes regulating in the air strains the heart muscle and can result in the heart slowing, and even stopping.

A well person with no known symptoms can end up in the emergency room with chest or heart pains almost surprisingly. Air purifiers and filers would improve the quality of air in the homes of many people, but they may not be affordable to some. On days the air quality is at a high rate of risk, the emergency room is filled with more patients. The comparison of living in these effected cities is of a person living with a smoker; second hand smoke isn't any healthier than it is for the smoker myself, so an at-home air purifier would not completely solve the problem.

Another option would be to move outward from the downtown city areas, but often families find it too expensive to move their home or have a long commute to work or school. Scientific Perspectives Scientists play a major role in environmental issues, especially air pollution. If not for their efforts, the public would not understand why the pollution exists, the severity of their cities' air quality, or the effects of poor air quality. Topping their lists are carbon monoxide, nitrogen oxide, lead, particulates, and sulfur dioxide.

Beijing and Mexico City, along with most developed areas, keeps an Air Pollution Index (API), or measure the levels of these six major pollutants on a regular basis. The Weather Almanac (n. D.) states, " The best-known index of air pollution is the pollutant standard index (SSI). The SSI has five health-related categories: good (0-50); moderate (50-100); unhealthy (100-200); very unhealthy (200-300) hazardous (300-500)" (up. 259, 260). When pollution levels are too high, many scientists think the health of adults and newborns suffer.

According to the Weather Almanac: High concentrations of carbon monoxide in cities where automobiles operate at high density mean that the human heart has to work harder to make up for the oxygen displaced from the blood’s hemoglobin by carbon monoxide. In Mexico City, seven out of ten newborns have higher lead levels in their blood than the World Health Organization (WHO) considers acceptable. Lead, from automotive exhausts, is thought by many to be a factor in lowering the IIS of urban children (up. 256, 258). Although the results of their work can be depressing, scientists place important issues in the spotlight.

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Poor air quality causes sickness, and creates more hospital bills. The death toll is also staggering. Raven states, “(There were) an estimated 656, 000 premature deaths associated with air pollution in 2007 (in China),” (up. 468). Furthermore, the pollution has damaged many farms beyond repair. Local farmers and business owners share the setbacks from the pollution. Larson (2008) says, ‘ Volunteers from the (Center for Legal Assistance to Pollution Victims) have personally taken up more than 80 pollution cases.

In roughly one-third of the cases, judges ruled that factories must close or pay compensation to victims. ” Factory closures led to more job losses, and an increased strain on the economy. The evidence of air pollution- elated economic losses is mounting. According to Raven, “ Incentives to reduce air pollution are great: Air pollution caused an estimated $64 billion in economic damages in 2004,” (up. 468). The negative effect air pollution has on the economies of Beijing and Mexico City cannot be understated.

Societal Perspective Societal perspective can have negative implications. Experiencing huge population, and economic growth, societal demand for automobiles spiked at the expense of air quality. Raven (2010) states, “ In 2007, (Mexico City) had more than 5 million passenger vehicles (up from half that number in 2000), lulled at over 400 gasoline stations” (up. 469). Furthermore, society placed affordability over CEO-friendliness when choosing automobiles. Raven states, “(In Mexico City) the average automobile is 10 years Old and produces more pollutants than do newer cars” (up. 69). Aesthetic Perspective Aesthetic perspective compels Beijing and Mexico City to improve air quality. For example, bad smells resulting from poor air quality can disrupt quality of life. The Weather Almanac (n. D.) states, “ Poor air quality can manifest itself aesthetically (as a displeasing odor, for example)” (up. 257). Pride in the community is a driving force behind improvements as well. For example, Mexico City’s new public transit system is a major source of pride, winning numerous awards, and serving as a model for other communities emulate.

According to States News Service (201 0), “ Mexico City’s Bus Rapid Transit system, credited with reducing air pollution and greenhouse gas emissions in one of the world’s most polluted cities, was recently honored at Harvard University’s John F. Kennedy School of Government as a model for urban transit worldwide. ” Although improving the health of humans and the environment should come first, aesthetic perspective helps too. Environmental Theories and Ethical Positions Stakeholders in environmental cases like this one tend to have differing viewpoints, representing one, or more schools of environmental ethics.

A closer look at the different stakeholder motives reveals Anthropocentric, “ Humans come first,” Deep Ecologist, “ Environment comes first,” and Ethical Extension, “ Just do what is right,” viewpoints. For example, increased popularity of automobiles in Beijing came at the expense of bicyclists. Raven (2010) states, “ Beijing was once known as a town where bicycles ruled; now, icicles are banned from certain parts of the city to improve the flow of automobile traffic” (up. 468). Brushing CEO-friendly bicyclists aside in favor of automobiles has anthropocentric implications.

Furthermore, the pollution around the Beijing area is so bothersome; some communities resorted to extreme measures, even to the point of sacrificing economic feasibility. According to Raven, “ The Chinese cities of Hawaiian and Dahlia have taken aggressive measures to reduce air pollution. While these policies have been successful in terms of cleaner air, they have been expensive; making them fisticuff for other municipalities to replicate,” (up. 468). On further inspection, the extreme policies of Hawaiian and Dahlia may have Deep Ecologist implications.

As for the Teeth kcal Extension viewpoint, these efforts proved anthropocentric and deep ecologists could set aside their differences, and just do what is right to benefit their city. Ethical Responsibilities The ethical responsibilities are not just limited to the leaders of Beijing and Mexico City. The stakeholders in both countries have an ethical responsibility to help improve the increasingly harmful environmental issue that has had a reminders impact on each country, the communities, and all of the citizens.

All leaders will need to comply with the laws and regulations, which will require newer technology and environmental awareness to ensure the protection of their environment, the safety of their citizens, and to minimize the effects Of future pollution. The citizens and their communities will need to ascertain solutions collectively for the much needed air quality improvement. If the poor air quality is to be resolved or at the very least minimized, all stakeholders will need to be conscious of the effects and recognize the attention dangers air pollution can have on health, economy, communities, and ultimately on the environment.

According to (Tropical-Rainforest's- Animals. Com, 2009), a few of the possible effects and potential dangers caused by air pollution is listed below: ; Health – air pollution may cause cancer of the lungs, respiratory disease, pulmonary disease, vision loss, and death. ; Economy – air pollution creates losses for business, a decline In productivity and income, and an increase in repairing and cleaning costs. Community -?? air pollution affects the everyday living for citizens. Air pollution creates dangers for drinking water, clean breathing air, and all foods, and also has the potential to contaminate all in which are a necessity to live.

Environment -?? air pollution disrupts the whole photosynthetic process, thus creating the imbalance of nature. Air pollution assists in the generation of acid rain that affects, " Forests & other vegetation, Freshwater lakes & streams, destroying aquatic life, Soil, and Buildings & materials" (Tropical-Rainforest's-Animals. Com, 2009). Conclusion In conclusion, after discussing the historic development Of the air pollution n Beijing and Mexico City,

realizing the long-term effects on the environment, identifying all of the stakeholders and all reasons for their actions, provides a broader understanding of the crisis.

If these stakeholders do not find a compromise, or implement a much-needed solution, Beijing and Mexico City will not be the only cities at risk. As these countries continue to expand and develop, the air will become increasingly polluted; the long-term effects will become detrimental to the environment and will create unhealthy living for each country’s society. The leaders of these countries are faced with reminders responsibilities that urgently need a response. All of the stakeholders involved possess different views and concerns about the environmental issue.

After careful analysis of the situation, the stakeholders will need to negotiate all concerns and come to a satisfactory consensus. The implementation of a solution should be carefully assessed to avoid any further environmental disruption. Air pollution is not just limited to the area of origin, but all surrounding areas and possibly the whole world may also be at risk. According to Raven (201 0), “ Certain hazardous air pollutants are striated globally by atmospheric transport in a process known as the global distillation effect’ (up. 469).