Air Quality - Introduction

Good ambient air quality is fundamental to our well-being. On average, a person inhales about 500 cubic feet of air every day, and the presence of certain contaminants in this air can adversely affect people's health. People with pre-existing respiratory and heart conditions, diabetes, the young, and older people are particularly vulnerable. For this reason, the US Environmental Protection Agency established National Ambient Air Quality Standards (NAAQS) for six criteria pollutants to be regulated under the 1970 Clean Air Act (CAA), namely, carbon monoxide, lead, nitrogen dioxide, ozone, particle pollution (PM2.5 and PM10), and sulfur dioxide. The Metropolitan Washington region has achieved significant air quality improvements over the last twenty years thanks to more stringent state and federal air pollution control programs as well as efforts by local governments such as Alexandria. MWCOG (Metropolitan Washington Council of Governments) in collaboration with member jurisdictions~~has been instrumental in leading and coordinating~~ has been instrumental in leading and coordinating a majority of efforts in air quality improvements. A significant added benefit of improved air quality is the accompanying reduction in greenhouse gases (GHG) and improved environmental health in the region. Since transportation continues to be a major source of air pollution, as the City and the region make progress on transportation, it will result in cleaner air and reduced GHG emissions.

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Up to 2012, ~~tair quality improvement had been one of the highest environmental priorities for the City. T~~he City's focus was to reduce air emissions from the three major point sources, specifically, the antiquated Mirant coal-fired power plant, the Covanta waste-to-energy facility, and the Virginia Paving plant.

The Mirant power plant was the single largest air pollution source in Northern Virginia. Following a lengthy legal challenge, the City reached an agreement with Mirant to permanently shut down the coal-fired power plant in Old Town in 2012. The City (in partnership~~collaboration~~ with Arlington County) funded~~approved~~ the installation of state-of-the-art air pollution control equipment~~devices~~ at the Covanta facility in 2000. This has enabled the facility to comply with all regulatory emission limits. Furthermore, it currently has plans to further reduce its oxides of nitrogen emissions by 46 percent by the end of 2021. T~~The third point source for air pollution in the City, t~~he Virginia Paving plant was issued a Special Use Permit (SUP) in 2006 with conditions aimed at significantly reducing its air emissions. ~~this facility beyond its state operating permit~~

~~(SOP) limits.~~ Since then, this facility has operated in conformance with this SUP resulting~~permit conditions.~~ in cleaner and quieter operation and lower emissions.

Going forward, the focus will be on reduction of emissions from transportation ~~mobile sources (i.e., on-road vehicles)~~ and smaller ~~to a lesser extent,~~ area sources such as construction sites, ~~residential fire places,~~ and lawn equipment. Future air quality improvement will directly result from the City's multi-facet effort in tackling the climate change issue such as low-carbon transportation, energy efficiency improvement, increased use of renewable energy and green buildings. The City will continue collaborating with MWCOG on regional air quality issues and education and outreach. Strategies will be developed to reduce non-point and area sources of air pollution within the City. All these efforts will be prioritized based on the associated potential reduction of GHG emissions.