Part One: Health Impact Assessment

Preface

HIA is used to evaluate objectively the potential health effects of a project or policy before it is built or implemented. HIA can provide recommendations to increase positive health outcomes and minimize adverse health outcomes. The HIA framework is used to bring potential public health impacts and considerations to the decision-making process for plans, projects, and policies that fall outside of traditional public health arenas, such as transportation and land use. - Centers for Disease Control [1]

The health of an individual human being is determined by a complex interaction of social, economic, genetic, and environmental factors which he or she experiences throughout life. Income, access to clean drinking water, unpolluted air, social support from friends and family, healthy food, access to education, and a whole host of other factors combine to have a profound effect on the health of an individual.

Similarly, when social, economic, and environmental conditions are common to a group of people, those conditions can influence the health of the population as a whole. Public policies have the potential to impact population health. While there are public programs and policies designed to influence population health (e.g. food safety regulations), population health is not accounted for in all or even most of the policies that can impact health. To improve the accessibility and utility of existing scientific knowledge as it applies to program and policy development, public health researchers have developed the Health Impact Assessment (HIA) approach. While HIAs vary in their goals and methods, the general approach is consistent across HIAs: A group of public health experts works with community stakeholders to identify the potential health risks and potential benefits to public health of a proposed policy, program, or project. The HIA team then collects information to assess how likely public health will be impacted. Based on the potential impacts and the estimated likelihood of those impacts, the HIA team offers recommendations to maximize public health gains and minimize negative effects of the program, project or policy at hand.

While the goal of an HIA is to anticipate and provide recommendations that advance public health, it cannot be expected to prevent all negative health impacts of a given decision. A HIA is an approach to incorporating public health into decision-making processes. As opposed to costly retrofitting and remediation, HIAs are proactive and preventive public health tools that have the potential to save health care costs in the long-term. HIAs are open processes that necessarily include stakeholder participation, review, and input as an essential part of the methods. Through this open dialogue, the HIA seeks to generate realistic and broadly supported recommendations to protect public health.

A HIA differs from a scientific epidemiological study in that an epidemiological study typically evaluates the effects of exposures on populations after the exposures have occurred, whereas, a

HIA is conducted before a project or policy is started, with the ultimate goal of identifying potential exposures and determining if there are needs to mitigate their impact on health. Both kinds of investigations provide valuable information to those concerned with understanding and protecting public health.

Regarding Ozone and Human Health

The impact of ground level ozone and ozone precursors are not included in this HIA. The Antero project itself will contribute ozone precursors (volatile organic compounds (VOCs) and nitrogen oxides), however, it is the sum of the ozone precursors produced in the county that contributes to ozone levels county wide. Ozone can cause important negative health effects and should be the considered when discussing public health in Garfield County. However, the impact of Antero's contribution to ozone on the health of Battlement Mesa citizens is not discussed in this assessment.

Regarding Climate Change and Human Health

This Health Impact Assessment does not account for the potential health effects of climate change. There is reason to believe that fossil fuel combustion has changed the global climate[2]. There is also reason to believe that climate change will impact human health[2]. However, it is in the opinion of the HIA authors that while this specific natural gas development contributes to climate change, is not likely to influence the global climate enough to have a measurable impact on the health of Battlement Mesa residents.