

A. INTRODUCTION

This section examines the potential for significant adverse air quality impacts from the Nation's properties. Air quality impacts can be either direct or indirect. Direct impacts stem from emissions generated by stationary sources at a projected or potential development site, such as emissions from fuel burned on site for heating, ventilation, and air conditioning (HVAC) systems. Indirect impacts are caused by potential emissions due to mobile sources/vehicles generated by the development.

B. AMBIENT AIR QUALITY

As required by the Clean Air Act, primary and secondary National Ambient Air Quality Standards (NAAQS)¹ have been established for six major air pollutants: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone, respirable particulate matter (PM), sulfur dioxide (SO₂), and lead. The primary standards protect public health and represent levels at which there are no known significant effects on human health.

The Air Quality Index (AQI)² is a uniform system developed by U.S. EPA to enable the public to determine whether air quality levels in a particular location are good, moderate, unhealthy, or worse.

The AQI measures five criteria air pollutants (particulate matter, sulfur dioxide, carbon monoxide, nitrogen dioxide, and ozone), and converts the measured pollutant concentrations in a community's air to a number on a scale of 0 to 500. The intervals on the AQI scale relate to the potential health effects of the daily concentrations of each of these five pollutants. The most important number on this scale is 100, since this number corresponds to the National Ambient Air Quality Standard established under the Clean Air Act. An AQI level in excess of 100 means that a pollutant is in the unhealthy range on a given day; an AQI level at or below 100 means that a pollutant reading is in the satisfactory range.

The Cayuga County and Seneca County air AQI reported at the air quality monitoring stations closest to the Nation's properties indicate readings of less than 50, meaning that the air quality is good, and that the general population would be expected to experience no general health effects as a result of air pollutants.³

¹ Clean Air Act available at <http://www.gpoaccess.gov> under 42 USC (Chapter 85); NAAQS are under 42 USC 7409.

² Available at <http://www.airnow.gov>.

³ New York State Department of Environmental Conservation, Division of Air Resources, January 2007.

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In addition to EPA standards, screening criteria described in the New York State Department of Transportation's (NYSDOT) Environmental Procedures Manual (EPM)¹ were employed at the Nation's LakeSide Enterprise properties in the Town of Seneca Falls and the Village of Union Springs to determine whether a detailed air quality analysis at the intersections in the study area is required. The properties in the Town of Montezuma and the Town of Springport are currently undeveloped.

The area roadway intersections were reviewed based on the EPM criteria for determining locations that may warrant a CO microscale air quality analysis. The screening analysis examined the existing levels of service (LOS) and determined that none of the fourteen project-affected intersections in either the Town of Seneca Falls or the Village of Union Springs have a LOS that would indicate the need for detailed microscale air quality analyses, and that no affected intersection results in adverse air quality impacts to the immediate area.

¹ Available at <https://www.nysdot.gov/divisions/engineering/environmental-analysis/manuals-and-guidance/epm>.