

4.4 Air

Section 3.4 Air described the air quality of the Study Area in detail. This section addresses potential direct, indirect, and cumulative effects on air quality associated with the implementation of the Proposed Action or any of the alternatives including the No Action Alternative (Alternative G) described in Section 2.0 Alternatives. Section 4.1 Introduction established the context for defining criteria to determine the potential for a significant effect within any resource category. Specific significance criteria for evaluating potential air quality effects are presented below. Section 2.0 Alternatives and Section 4.1 Introduction establish and define the range of possible taxation and jurisdictional scenarios that would apply to lands not conveyed into trust.

Significance Criteria

For the purposes of defining whether the Proposed Action or the alternatives (including the No Action Alternative – Alternative G) would have a potentially significant adverse effect on air quality, several criteria are considered. Potentially significant adverse effects may occur directly, indirectly or cumulatively if the action is likely to:

- Violate the NYSAAQS short-term and annual guideline concentrations or NAAQS or contribute to an existing or projected air quality violation;
- Conflict with the New York SIP;
- Result in a cumulative net increase in emissions of any criteria pollutant for which the project region is nonattainment under applicable New York State or Federal air quality standards;
- Expose sensitive receptors to unhealthy air pollutant concentrations; or
- Create objectionable odors affecting a large population.

The direct, indirect, and cumulative potentially significant adverse effects of the implementation of the Proposed Action or any of the alternatives are discussed below.

4.4.1 Direct Effects

The Proposed Action does not involve construction which could have short-term effects on air quality, the addition of new stationary sources or a significant expansion of existing facilities that would significantly increase the number of visitors. Implementation of the Proposed Action (Alternative A) or any of the alternatives described in Section 2.0 Alternatives would not result in the introduction or modification of any air emission sources on Nation lands, adjacent non-Nation lands or on any lands within the Study Area. As such, implementation of the Proposed Action or any of the trust alternatives would not result in any direct effects on air quality in the local area, towns, counties or surrounding region.

4.4.2 Indirect Effects

There are no ongoing or planned development projects or facility expansions that are contingent on the implementation of the Proposed Action or the trust alternatives. However, implementation of the Proposed Action or any of the trust alternatives would allow the continued operation of the Turning Stone Resort & Casino, thereby indirectly allowing projected growth associated with casino operations to occur over time. This growth is realized as an increase in casino visits and an associated increase in casino employment, which would result in the introduction of additional mobile source emissions within the Study Area. As such, implementation of the Proposed Action or the trust alternatives would result in an increase in mobile source emissions. Table 4.4-1 shows the projected incremental increase in mobile source emissions associated with casino growth (including both patrons and employees) between 2006 and 2011 for each of the criteria pollutants associated with mobile sources.

**Table 4.4-1
Projected Incremental Increase in Mobile Source Emissions
Between 2006 through 2011**

USEPA Criteria Pollutants	Increased Emissions (tons per year)	Percent Increase
CO	5,794	42
NOx	107	29
VOCs	116	29
PM ₁₀	6	35
PM _{2.5}	4.5	53

This increase in mobile source emissions is not expected to have an effect on regional air quality due to total volume of trips that occurs within the region.

Alternatives C, D, E, F, and G would exclude various parcels from conveyance into trust. The indirect effects associated with these alternatives vary according to the various taxation scenarios. Under the PTP scenario, current activities would presumably continue and emission sources or total emissions would change as described above. The Nation would submit to regulation of air emission sources under applicable New York State laws including 6 NYCRR Parts 201, 212, 231, and 257, and the permitting requirements for process and combustion sources. Under the PTNP—DC scenario, the collection of New York State and local taxes and the applicability of New York State and local regulations would remain in dispute. The requirements of the Federal Clean Air Act (40 C.F.R. Parts 71, 60, and 109) would continue to apply. Current activities and future growth would presumably continue as described above.

A range of indirect effects could occur under the PTNP—F scenario and they would vary according to the particular alternative. In general, it is assumed that current economic activities and uses of the properties not conveyed into trust would not continue if foreclosure were to occur. In most instances, this would result in the closure of stationary

emission sources and a reduction in vehicle trips (mobile source emissions) associated with these activities. The following discussion summarizes these potential effects.

Alternative C

Under Alternative C, Group 3 lands would not be conveyed into trust. As described in Subsection 3.4, there are very few emissions sources on these properties and no activities that generate significant mobile source emissions. Overall, air emissions associated with these activities are low and are consistent with current emissions from similar activities on non-Nation lands. Other emissions include odors, gases, and dust from production agriculture including livestock operations (poultry and pig shelters, open cattle feedlots), manure storage facilities, and land application of manure. These types of emissions are consistent with the surrounding agricultural land uses that occur on non-Nation lands as well as Nation lands. The reduction in emissions, while beneficial, would be limited given the small area on which these activities occur when compared to the total area of land in the Study Area that supports similar activities.

Alternative D

Under Alternative D, Group 2 and 3 lands would not be conveyed into trust. Activities on Group 2 lands that are potential sources of air emissions include the 12 SavOn gas stations and convenience stores and the sand and gravel quarry. Air emissions from the gas stations include hydrocarbon emissions or evaporative emissions that emanate from motor vehicle fuel tanks and fuel spillage during refueling operations. Operation of the sand and gravel quarry is a potential source of fugitive dust, similar to other sand and gravel quarries in the region. Other land uses in Group 2 lands do not represent significant air emissions sources. It is assumed that these activities would cease following foreclosure. Air emissions associated with the gas station operation would likely relocate to nearby non-Nation stations. Monitored ambient air quality levels have not exceeded the corresponding Federal and New York State standards over the past three-year monitoring period. Oneida and Madison Counties are currently in attainment for all NAAQS with the exception of ozone (New York and other northeastern states are part of the Northeast Ozone Transport Region, defined by the U.S. Congress as a nonattainment area for ozone precursors and as a result, the Central AQCR is also designated as nonattainment for ozone). Elimination of emission sources associated with Alternative D would result in a beneficial reduction in air emissions in the region. These effects would be in addition to the effects associated with Alternative C described above.

Alternative E

Under Alternative E, only the casino parcel would be conveyed into trust. The remaining Group 1 lands as well Group 2 and 3 lands, would not be conveyed into trust. The Group 1 lands not conveyed into trust would include the recently constructed cogeneration plant that has the following combustion sources:

- One natural gas-fired turbine generator with a heat recovery steam generator (59.86 MMBtu/hr);
- One natural gas-fired package boiler (33.48 MMBtu/hr);
- One natural gas/distillate oil fired package boiler (33.48 MMBtu/hr); and
- One emergency diesel generator (3.62 MMBtu/hr).

Combustion sources such as boilers, gas turbines, and generators emit criteria pollutants, VOCs, and air toxics. Other emission sources that would not be conveyed into trust include:

- Emissions associated with golf course operations and related resort, casino, and golf club maintenance, parking and warehouse facilities and
- Mobile source emissions associated with vehicular trips related to the Inn at Turning Stone, the Peaceful Pines campground, and the Nation's five golf courses.

Following foreclosure, the activities on these properties would likely cease and the air emissions associated with these activities would be eliminated. This would include the cogeneration plant. The Nation would obtain power for the Turning Stone Resort & Casino from the National Grid. Shutting down the cogeneration plant, a major emission source, would result in a net reduction in air emissions in the region. This reduction may be offset by an increase in the National Grid's power generation emissions; however, these emissions could occur over a wide area as the National Grid has the ability to import electricity from a variety of energy pools. The Nation's cogeneration plant has a NO_x emission potential of 60 tons/year. As described above, monitored ambient air quality levels have not exceeded the corresponding Federal and New York State standards over the past three-year monitoring period, and Oneida and Madison Counties are in attainment for all NAAQS with the exception of ozone. Regardless, this reduction in emissions would have a beneficial effect on local air quality.

Alternative F

Under Alternative F, Group 1 lands and most of the lands in Group 2 would be conveyed into trust, as well as Group 3 lands that are contiguous to Group 1 and 2 lands. Activities on lands not transferred into trust under Alternative F are similar to those included under Alternative C. These activities include agricultural land uses and the Nation's sand and gravel quarry. Assuming these activities would cease operations following foreclosure, the effects of this alternative would be similar to those of Alternative C.

Alternative G

Under Alternative G, Nation lands would not be conveyed into trust. Under the PTNP—F and CC-AEC scenarios, activities that are associated with air emissions would cease. In addition to the indirect effects identified above for Alternatives C, D, and E above would be the following:

- Reduction of mobile source emissions associated with vehicular traffic to the Turning Stone Resort & Casino (casino, spa and salon, the Lodge of Turning Stone, the Tower of Turning Stone, the hotel, and events and conference centers);
- Elimination of hydrocarbon emissions associated with all of the Nation’s SavOn gas stations and convenience stores; and
- Elimination of criteria pollutant emissions associated with two natural gas boilers (20.4 MMBtu/hr each) and six emergency diesel generators (about 2 MMBtu/hr to 15 MMBtu/hr).

Table 4.4-2 shows the stationary source emissions associated with the operation of the Turning Stone Resort & Casino. Closing of the casino would eliminate the associated emission sources and would have a beneficial effect to local and regional air quality.

**Table 4.4-2
Facility-wide Emissions in 2005**

USEPA Criteria Pollutants	Facility Emissions (tons per year)
CO	89
NO _x	154
VOCs	14.3
PM ₁₀	22.5
SO ₂	88

Similarly, elimination of visitor and employee vehicle trips to the casino would reduce the amount of associated mobile source emissions. Many of the trips that contribute to these emissions would not be wholly eliminated if the Turning Stone Resort & Casino were to close, as many of these trips may be multi-purpose and not solely related to the casino. Single destination trips to the casino would be eliminated. Some of these trips could be redirected to other casinos in the northeastern U.S. Mobile source emissions from redirected trips could have an effect on air quality in other parts of the northeastern U.S. The majority of mobile emissions currently generated as a result of operating the Nation’s casino, as listed in Table 3.4-11, would probably be distributed throughout New York State and elsewhere, depending on the ultimate destination of current casino patrons and employees. Although some employees may find regional employment, economic indications for the region predict that many would have to relocate to find suitable employment. Their relocation would shift employee produced air pollutants elsewhere.

4.4.3 Cumulative Effects

The Nation’s ongoing and reasonably foreseeable plans as described in Section 4.1.4 Ongoing and Planned Nation Development Projects and Activities include development projects that would result in a relatively small increase in air emissions. The proposed methane digester system commonly referred to as an anaerobic digester, will biologically process manure from the Nation’s open cattle feedlots. The system will promote the decomposition of organic matter in the manure in the absence of oxygen, producing simple organics and gaseous biogas products. Biogas is formed by the activity of

anaerobic bacteria which occur naturally in organic environments where oxygen is limited. Biogas normally consists of 50 to 70 percent methane and is water saturated. The balance of the biogas mixture is carbon dioxide with trace amounts of hydrogen sulfide, nitrogen gas, and volatile organic compounds.

There are several types of anaerobic digesters used in livestock operations. The Nation has not specified the type of digester design that will be used to convert the degradable organic materials in animal wastes from its livestock operations into biogas. A typical anaerobic digester is an enclosed tank that excludes oxygen. An impermeable cover on the digester traps the biogas. The biogas can either be burned off in a flare system or can be used to generate useful energy in the form of hot water, steam or electricity. Biogas can be used as fuel in lieu of natural gas in boilers, which can provide heat to maintain the digester temperature and for other farm uses. The biogas can also provide fuel for an internal combustion engine or turbine, which combined with a generator, can produce electricity.

Since anaerobic digestion operates in a closed system, anaerobic digesters are very effective at controlling odors, nearly eliminating them from associated manure storage structures. Odors will remain within the sealed digester during biodegradation. These systems normally have a pressure relief valve in the event of an emergency situation, such as gas pressure build-up within the tank. Assuming that the process vents are completely leak-free, no air emissions or odor nuisances will occur from the anaerobic digestion process since it will be fully enclosed. Potential sources of air emissions from anaerobic digesters are primarily from the combustion of the biogas via the flare, boiler or engine generator.

With the exception of Alternative E (Turning Stone Casino Gaming Floor Tax Lot) and Alternative G (No Action), there is only a nominal difference between the potential cumulative air quality effects of each of the alternatives. Alternatives E and G could result in the closure of the cogeneration plant and/or the entire Turning Stone Resort & Casino and all associated facilities resulting in a potential net reduction in both stationary and mobile source air emissions in the region. When taken cumulatively with ongoing and planned non-Nation projects, implementation of the Proposed Action or the alternatives would result in a modest overall increase in air emissions. Implementation of Alternatives E or G, along with the non-Nation projects, would have a lower total contribution of air emissions than implementation of the Proposed Action or Alternatives B, C, D, and F.