

## **JAY A. SNYDER**

### **EDUCATION**

B.S., Meteorology, The Pennsylvania State University, 1992

### **AREAS OF EXPERTISE**

Mr. Jay A. Snyder has project management and technical experience in the following general areas:

- New Source Review (Prevention of Significant Deterioration (PSD)) Modeling
- Class I Area Increment and Air Quality Related Values (AQRVs) Modeling
- Health Risk Assessments
- Toxic Air Pollutant Modeling
- Mobile Source Modeling (Roadway Assessments)
- Cooling Tower Analyses
- Boiler and Industrial Furnace (BIF) Modeling
- Air Quality Monitoring
- Source Testing

### **REPRESENTATIVE EXPERIENCE**

Mr. Snyder has over 13 years of experience and is responsible for the completion of air quality modeling projects and the development of air quality permit applications. He has also assisted on other air quality aspects of projects such as ambient monitoring and source testing

Mr. Snyder has conducted air quality analyses for numerous types of industries including: cogeneration facilities, fossil-fuel steam electric generating facilities, steam heating facilities, natural gas compressor stations, pharmaceutical facilities, refineries, military bases, pulp and paper mills, chemical facilities, furniture manufacturing facilities, and aircraft engine testing facilities. These industries were located in U.S. EPA regions II, III, IV, VI, and X and many different states (Arkansas, Colorado, Delaware, Florida, Georgia, Kentucky, Louisiana, Massachusetts, Maryland, Mississippi, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Virginia, and West Virginia). Some of these industries were located in major metropolitan areas and the air quality requirements of local agencies such as the New York City Department of Environmental Protection (NYCDEP), New York State Department of Transportation (NYSDOT), and the City of Philadelphia Department of Public Health Air Management Services (AMS) were addressed. Most analyses required discussions and negotiations with the governing agencies for the various cities, states, and U.S. EPA regions.

Mr. Snyder has worked with the U.S. EPA guideline models such as AERMOD, CALPUFF, the Industrial Source Complex Short-Term (ISCST3) model,

CAL3QHC roadway screening model, Offshore and Coastal Dispersion (OCD) model, COMPDEP, INPUFF, SCREEN3, and CTSCREEN, as well as, non-EPA guideline models MESOPUFF II, the Seasonal/Annual Cooling Tower Impacts (SACTI) model, and the Open Burning and Open Detonation model (OBODM). These models were used to perform point source, volume source, and area source modeling.

### **Prevention of Significant Deterioration Permitting**

#### **Caithness Long Island, LLC, Caithness Long Island Energy Center - Brookhaven, New York (Project Role: 2003-2006)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 346 MW combined cycle facility consisting of one Siemens Westinghouse 501F turbine with a duct burner and auxiliary boiler. The turbine and boiler had dual fuel capability, so various operating scenarios and stack heights were modeled to establish a stack height that would yield insignificant air quality impacts in the surrounding area. Other air quality analyses included toxic air pollutant modeling for comparison to the New York State Department of Environmental Conservation's (NYSDEC's) Air Guide 1 guidelines, fine particulates (PM<sub>2.5</sub>), acid deposition, accidental ammonia releases, local cumulative analyses, and global warming. All of these other analyses were addressed in the Environmental Impact Statement.

#### **Big River Power, L.L.C., Big River Project - Screven County, Georgia (Project Role: 2001-2002)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 855 MW combined cycle facility consisting of three General Electric (GE) Frame 7FA turbines with duct burners. Various stack heights and operating scenarios were modeled to determine the stack height that would result in insignificant impacts in the Class I and II areas and insignificant impacts on the regional haze in the Wolf Island National Wildlife Refuge (NWR) Class I area. The Federal Land Managers' Workgroup (FLAG) procedures were used to assess the Class I impacts due to the proposed project. Non-criteria pollutant emissions from the proposed facility were also modeled for comparison to the Georgia Department of Natural Resources (GADNR) acceptable ambient concentrations.

#### **Competitive Power Ventures, Terrapin Station - Savannah, Georgia (Project Role: 2001)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for an 800 MW combined cycle facility consisting of three GE Frame 7FA turbines with duct burners. Various stack heights and operating scenarios were modeled to determine the stack height that would result in insignificant impacts in the Class I and II areas and insignificant impacts on the regional haze in the Wolf Island NWR Class I area. The FLAG procedures were used to assess the Class I impacts due to the proposed project. Non-criteria pollutant emissions from the

proposed facility were also modeled for comparison to the GADNR acceptable ambient concentrations.

**Consolidated Edison Development, Inc., Ocean Peaking Power, LLP, - Lakewood, New Jersey (Project Role: 2000-2001)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 500 MW simple cycle facility consisting of three GE Frame 7FA combustion turbines. Multiple operating scenarios were modeled to determine the stack configuration and fuel type that would result in insignificant impacts and insignificant impacts on the regional haze in the nearby Edwin B. Forsythe NWR Class I area.

**Sithe Hunterstown LCC, Hunterstown Station – Hunterstown, Pennsylvania (Project Role: 1999-2000)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 1,600 MW combined cycle facility consisting of four Mitsubishi Heavy Industries (MHI) 501G turbines with duct burners. Natural gas only turbines were modeled for various operating loads to ensure insignificant impacts in the local area.

**Philadelphia Energy Center, L.P., Philadelphia Energy Center - Philadelphia, Pennsylvania (Project Role 2000-2001)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 550 MW combined cycle facility consisting of two GE Frame 7FA turbines with duct burners. Multiple operating scenarios were modeled to demonstrate that the project would result in insignificant impacts in the local area and minimize regional haze impacts in the Edwin B. Forsythe National Wildlife Refuge Class I area. The City of Philadelphia Department of Public Health AMS also required a SO<sub>2</sub> NAAQS compliance analysis, which included other off-site sources.

**Florida Power and Light Energy, Marcus Hook, L.P. Cogeneration Facility - Marcus Hook, Pennsylvania (Project Role 1999-2000)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 750 MW combined cycle cogeneration facility consisting of three GE Frame 7FA turbines. A new auxiliary boiler house, consisting of four boilers, was also included in the permitting and modeling effort. Multiple operating scenarios, stack configurations, and fuel types were modeled to determine the optimum combination of all seven sources to yield insignificant impacts in the local area and minimize regional haze impacts in the Edwin B. Forsythe NWR Class I area.

**AES, Red Oak Combined Cycle Facility - Sayreville, New Jersey (Project Role: 1999-2000)**

Mr. Snyder served as a Team Member of an air quality modeling effort for an 816 MW combined cycle facility consisting of three Siemens-Westinghouse 501F turbines. Various stack heights and operating scenarios were modeled to determine the stack height that would result in insignificant impacts and insignificant impacts on the regional haze in the Edwin B. Forsythe NWR Class I area.

**Liberty Electric Power, LLC, Cogeneration Facility - Eddystone, Pennsylvania (Project Role: 1999)**

Mr. Snyder served as a Team Member of an air quality permitting effort for a 500 MW combined cycle facility consisting of two GE Frame 7FA turbines with duct burners. The modeling consisted of iterative modeling of numerous operating cases and stack heights to determine the optimum stack height and building configuration to yield insignificant air quality impacts in the local area and insignificant effects on the regional haze at the nearest Class I area, Edwin B. Forsythe NWR.

**Prevention of Significant Deterioration and New York Article X Permitting****KeySpan Energy, Spagnoli Road Energy Center - Huntington, New York (Project Role: 2001-2003)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 250 MW combined cycle facility consisting of one GE Frame 7FA turbine. Insignificant impacts in the local area were demonstrated for multiple operating scenarios. A toxic air pollutant modeling analysis was conducted and the need for a human-health risk assessment was examined following the New York State Article X regulations.

**KeySpan Energy, Ravenswood Cogeneration Facility - New York City, New York (Project Role: 2000-2002)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 250 MW combined cycle cogeneration facility consisting of one GE Frame 7FA turbine. Insignificant impacts in the local area were demonstrated for multiple operating scenarios and fuel types. A human-health risk assessment for potential emissions of toxic air pollutants from the proposed facility, and toxic air pollutants from the existing facility, was conducted for the New York State Article X regulations.

**New York Power Authority, 500MW Combined Cycle facility - New York City, New York (Project Role: 1999-2002)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 500 MW combined cycle facility consisting of two GE Frame 7FA turbines. Multiple operating scenarios, stack configurations, and fuel types were modeled to result in insignificant impacts in the local area. A human-health risk assessment for potential emissions of toxic air pollutants from the proposed facility and the existing facility was conducted for the New York State Article X regulations.

**Mirant Corporation, Bowline Unit 3 - Rockland County, New York (Project Role: 1999-2002)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 750 MW combined cycle facility consisting of three GE Frame 7FA turbines. Multiple operating scenarios, stack configurations, and fuel types were modeled to

determine the optimum combination to yield insignificant impacts in the local area. The permitting effort also included a human-health risk assessment for potential emissions of toxic air pollutants from the proposed facility and the existing facility for the New York State Article X regulations.

### **Class I Area and Best Available Retrofit Technology (BART) Modeling Projects**

#### **American Electric Power (AEP), Great Bend and Mountaineer Integrated Gasification Combined Cycle (IGCC) Projects – Ohio and West Virginia (Project Role: 2005-2006)**

Mr. Snyder is a Team Member of a Class I area air quality modeling effort for a 600 MW IGCC plant located in Ohio and a 629 MW IGCC plant in West Virginia. Modeling normal operation conditions for each of the proposed plants to determine the potential air quality (Class I increments), regional haze (visibility), and deposition (sulfur and nitrogen) impacts in four nearby Class I areas (Dolly Sods, Otter Creek, and James River Face Wilderness Areas and Shenandoah National Park) using the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) dataset. Conducted sensitivity analyses for different light extinction calculation methods (Method 2, Method 6, and Method 7') to determine the range of outcomes using these different methods.

#### **Southwestern Electric Power Company (SWEPCO), Hempstead County Project - Hempstead County, Arkansas (Project Role: 2005-2006)**

Mr. Snyder is a Team Member of a Class I area air quality modeling effort for a 600 MW supercritical pulverized coal plant near Fulton, Arkansas. A Class I area modeling protocol has been developed for review by the FLMs of the Caney Creek and Upper Buffalo Wilderness Areas. Preliminary modeling has been completed to determine the proposed plant's potential air quality (Class I increments), regional haze (visibility), and deposition (sulfur and nitrogen) impacts in these three Class I areas. Change in light extinction Method 6 is proposed for the Class I area regional haze analysis.

#### **Trigen-Philadelphia Energy Corporation, Schuylkill Station, Philadelphia, Pennsylvania (Project Role: 2006)**

Mr. Snyder served as the Team Leader for this Project and conducted a preliminary BART exemption Class I area modeling analysis to guide Trigen through the BART process. The analysis was conducted using the publicly available VISTAS dataset. Results of the regional haze analysis were used to assist Trigen in determining how to address the requirements of the BART regulations.

#### **Mettiki Coal, LLC - Oakland, Maryland (Project Role: 2006)**

Mr. Snyder served as the Team Leader for this Project and conducted a preliminary BART exemption Class I area modeling analysis to guide Mettiki Coal through the BART process. The analysis was conducted using the publicly

available VISTAS dataset. Results of the regional haze analysis were used to assist Mettiki Coal in determining how to address the requirements of the BART regulations.

**Pinedale Anticline Project – Wyoming (Project Role: 2006)**

Mr. Snyder served as a Team Member of a Class I area air quality modeling effort for expanding drilling and development in the Pinedale Anticline Project Area in west-central Wyoming. Developed the meteorological data and other required input data for the CALMET program.

**River Hill Power Company, LLC, River Hill Power Project - Karthaus Township, Pennsylvania (Project Role: 2004-2005)**

Mr. Snyder served as a Team Member on this Project and completed Class I area Air Quality Related Values (AQRV) modeling analyses for increment, regional haze (visibility), and deposition for the proposed Project. The analyses consisted of using the CALPUFF model to demonstrate insignificant air quality impacts (less than the Class I significant impact concentrations), no adverse visibility impacts, and sulfur and nitrogen deposition rates less than the Federal Land Manger's (FLM's) Deposition Analysis Thresholds (DATs). Analyses were conducted following FLAG procedures and were approved by the National Park Service (Shenandoah National Park) and the U.S. Forest Service (Dolly Sods and Otter Creek Wilderness Areas).

**Pollution Control Project Permitting**

**USGen New England, Inc., Salem Harbor Station - Salem, Massachusetts (Project Role: 2005)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 755 MW facility consisting of three coal-fired boilers and one residual oil-fired boiler. USGen NE agreed to conduct a modeling analysis to demonstrate continued compliance with NAAQS after the proposed project was operational. A shoreline fumigation analysis was also conducted to ensure short-term emissions of SO<sub>2</sub> would not exceed the NAAQS due to shoreline fumigation.

**USGen New England, Inc., Brayton Point Station - Somerset, Massachusetts (Project Role: 2005)**

Mr. Snyder served as the Team Leader of an air quality modeling effort for a 1,600 MW facility consisting of three coal-fired boilers and one residual oil-fired boiler. The modeling analysis was required due to an increase of actual particulate (PM) emissions greater than the PSD emission thresholds. The actual PM emissions increase was a result of the proposed pollution control units used to reduce emissions of sulfur dioxide, nitrogen oxides, carbon monoxide, and volatile organic compounds. National Ambient Air Quality Standards, PSD Increment, and Class I PSD Increment and visibility analyses were conducted to determine the air quality impacts due to the increase in actual PM emissions.

### **Other Stationary Source Modeling Projects**

#### **Texas Eastern, Danville Compressor Station - Danville, Kentucky (Project Role: 2006)**

Mr. Snyder served as the Team Leader of this Project to ensure the existing facility was compliant with Kentucky regulations. As part of the Title V Permit renewal, the Kentucky for Environmental Protection (DEP) requested that the station demonstrate compliance with the state's ambient formaldehyde annual guidance concentration. The demonstration entailed the use of the ISC model with building downwash and elevated receptors. Contour plots showing the maximum modeled annual formaldehyde concentrations displayed over a topographic map of the local area were developed for submittal to the Kentucky DEP.

#### **Texas Mining L.P., d.b.a. Oglebay Norton Industrial Sands, Inc., Voca Wet Processing Plant - Voca, Texas (Project Role: 2005)**

In support of an expansion project at the Voca Wet Processing Plant, Mr. Snyder served as the Team Leader of an air quality modeling demonstration completed to ensure the increased operations would not cause an exceedance of the Texas Commission on Environmental Quality (TCEQ) total suspended particulate (TSP) regulation, the PM-10 NAAQS, or the TCEQ Effects Screening Levels (ESLs). TCEQ guidance for modeling fugitive emissions was used to simulate emission releases from over 5,000 feet of conveyors, as well as hoppers, crushers, and screens. Maximum modeled concentrations were determined for the surrounding area outside the plant property boundary, along the roadways that bisect the plant's property, and at the nearest residence. TCEQ reviewed and approved of the air quality modeling analysis and a permit was issued.

#### **Delta Engineering Corporation - Channelview, Texas (Project Role: 2004-2005)**

In support of a permit amendment to allow increases in painting operations at the facility, Mr. Snyder served as the Team Leader for this Project to perform an air quality modeling analysis to demonstrate compliance with the ESLs as requested by the TCEQ. Detailed information on the painting operations, both inside and outside a permanent shroud, were obtained to assist in developing a range of operating options that would allow the facility the most operational flexibility without exceeding the ESLs.

#### **BMC Holding's Inc. - Beaumont, Texas (Project Role: 2004)**

Mr. Snyder served as the Team Leader and performed air quality modeling to ensure compliance with the TCEQ's ESLs during maintenance activities at the facility. Maximum modeled concentrations were determined for the surrounding area outside the facility property boundary and at the nearest residence.

**Baker Petrolite Corporation, Bayport Facility - Bayport, Texas (Project Role: 2003-2004)**

Mr. Snyder served as the Team Leader and conducted air quality modeling in support of a self-authorization permit condition for the facility. The air quality modeling consisted of modeling generic (1 gram per second) emission rates from multiple sources at the facility to determine each source's concentration at each receptor location modeled. These source- and receptor-specific generic concentrations were then input to a spreadsheet along with emission calculations. After the emission rates for each source are calculated the user can calculate the maximum modeled air quality concentrations for each pollutant to determine the compliance status with the TCEQ ESLs. This spreadsheet provides the facility with a self-authorization tool to allow it flexibility to process a variety of chemical mixes without requesting a revised permit from the TCEQ.

**Gas Turbine Association (GTA) Petition to Delete Combustion Turbines from Proposed MACT (Project Role: 2002-2004)**

In support of the GTA's petition to delete natural gas-fired combustion turbines from the pending Maximum Achievable Control Technology (MACT) requirements for the potential emissions of hazardous air pollutants (HAPs), Mr. Snyder served as the Team Leader and conducted an air quality modeling analysis and human health risk assessment for ten different combustion turbines types (size and manufacturer). The air quality analysis consisted of estimating the annual air quality HAP concentrations for each turbine in varying terrain (flat and complex), in varying settings (rural and urban), and with varying stack heights (Good Engineering Practice (GEP) stack height and non-GEP stack height). In the health risk assessment, the maximum exposed individual (MEI) was assumed to represent the entire population in determining the potential health risks due to HAP emissions from the combustion turbines. The initial petition was submitted to the U.S. EPA in August 2002, with a revised draft submitted in March 2003. As a result of the GTA's efforts, the U.S. EPA has delisted numerous types of combustion turbines from the final MACT.

**USGen New England, Inc., Salem Harbor Station - Salem, Massachusetts (Project Role: 2001-2003)**

Mr. Snyder served as a Team Leader of an air quality modeling effort for a 775 MW facility consisting of three coal-fired boilers and one residual oil-fired boiler. The modeling analysis was required by the Massachusetts Department of Environmental Protection (MADEP) to demonstrate that the facility would continue to comply with the NAAQS after the facility was retrofitted with control equipment to meet the 310 CMR 7.29 regulations. A shoreline fumigation analysis, using the CALPUFF model, was also conducted for 3-hour SO<sub>2</sub> emissions as requested by MADEP.

**USGen New England, Inc., Brayton Point Station - Somerset, Massachusetts (Project Role: 2001-2003)**

Mr. Snyder served as a Team Leader of an air quality modeling effort for a 1,600 MW facility consisting of three coal-fired boilers and one residual oil-fired boiler. The modeling analysis was required by the MADEP to demonstrate that the facility would continue to comply with the NAAQS after the facility was retrofitted with control equipment to meet the 310 CMR 7.29 regulations. In addition, a new non-GEP exhaust stack was proposed for one of the coal-fired units, thus directional dependant building downwash was calculated for the new stack using the BPIP program. A shoreline fumigation analysis, using the CALPUFF model, was also conducted for 3-hour SO<sub>2</sub> emissions as requested by MADEP.

**Astoria Gas Turbine Power, Berrians Unit 1 Turbine Project - Astoria, New York (Project Role: 2001-2002)**

Mr. Snyder served as Team Leader of an air quality modeling effort for a 79.9 MW simple cycle facility consisting of one GE Frame 7FA turbine. Multiple stack heights, fuel types, and operating scenarios were modeled to demonstrate that the project would result in insignificant impacts in the local area. The NYCDEP required toxic air pollutant modeling for the project and a cumulative analysis for over 150 sources located in New York City, along with the proposed project, to demonstrate compliance with the NAAQS.

**AES, Red Oak Combined Cycle Facility - Sayreville, New Jersey (Project Role: 1999-2000)**

Mr. Snyder served as a Team Member and used the SACTI model to assess the potential fogging and icing effects from the cooling tower of an 816 MW combined cycle cogeneration facility. Plume impacts on nearby roadways and particulate deposition were of the main concern from the cooling tower drift.

**Mobile Source Modeling****Simone Church/Division Street Mixed Use Development – New Rochelle, New York (Project Role: 2005-2006)**

Mr. Snyder served as the Team leader and conducted a screening level air quality analysis for the proposed development following the guidance in the NYSDOT's EPM. Refined air quality analyses was not required as the future LOS ratings and traffic volumes were less than the NYSDOT thresholds and no capture criteria were exceeded. Also conducted parking garage/lot air quality analyses following the U.S. EPA's guidance, modeled emissions from the building heating and hot water systems, and reviewed existing off-site sources to determine the potential impacts on the proposed development.

**Northern Westchester Hospital Master Plan – Mount Kisco, New York (Project Role: 2005)**

Mr. Snyder served as the Team leader and conducted a screening level air quality analysis for the proposed Master Plan following the guidance in the

NYSDOT's Environmental Procedures Manual (EPM). Refined air quality analyses was not required as the future level of service (LOS) ratings were less than the NYSDOT thresholds and no capture criteria were exceeded. Thus, it is extremely unlikely that there will be a potential violation of the 1-hour and 8-hour carbon monoxide (CO) NAAQS due to the proposed Master Plan.

**Grand Central Parkway Eastbound / 94<sup>th</sup> Street Interchange Improvements Project - Queens County, New York (Project Role: 2004-2006)**

Mr. Snyder served as the Team Leader and performed a refined traffic air quality analysis using the CAL3QHC model to determine the effects of the proposed Grand Central Parkway (GCP) Project on the local air quality. The analysis was performed for three future years (2007, 2017, and 2027) and followed NYSDOT and U.S. EPA guidance. Results of the analysis indicated that the proposed GCP Project would not cause an exceedance of the 1-hour or 8-hour CO NAAQS.

**Sound Trefoil LLC / Lowe's Home Improvements Center- Trumbull, Connecticut (Project Role: 2005)**

In support of the permitting for a 170,000 ft<sup>2</sup> Lowe's Home Improvement and Garden Center, Mr. Snyder served as the Team Leader and conducted a refined traffic air quality analysis to ensure the potential increase in traffic on the local roadways and entering and exiting the Lowe's parking lot would not cause an exceedance of the CO NAAQS. The roadway analysis was performed for four intersections for the estimated time of completion year (2007) and followed NYSDOT and U.S. EPA guidance. A parking lot air quality analysis was also conducted following the U.S. EPA's guidance. Results of the analyses showed that the proposed Project would not cause a violation of the CO NAAQS.

**Meadowlands Xanadu Project - East Rutherford, New Jersey (Project Role: 2003-2005)**

Mr. Snyder served as a Team Leader and conducted an air quality analysis using the CAL3QHC model to determine the effects of the proposed mixed-use (entertainment, retail, office space, and hotel) development on the local air quality. The air quality analysis was conducted following guidance provided in the New Jersey Department of Environmental Protection's (NJDEP's) Air Quality Analysis for Intersections. The analysis showed that the 1-hour and 8-hour CO NAAQS would not be threatened due to the increased traffic as a result of the proposed project.

**Seven Springs Residential Development Project -, Bedford, New Castle, and North Castle, New York (Project Role: 2004-2005)**

Mr. Snyder served as a Team Leader and performed a screening level air quality analysis for the proposed Project following the guidance in the NYSDOT's EPM. Refined air quality analyses were not necessary as the future LOS ratings were less than the NYSDOT thresholds and no capture criteria were exceeded. Thus,

it is extremely unlikely that there will be a potential violation of the 1-hour and 8-hour CO NAAQS due to the proposed project.

**Brookhaven Walk -Brookhaven, New York (Project Role: 2003-2006)**

Mr. Snyder served as the Team Leader and conducted screening and refined microscale air quality modeling analyses for the proposed development of the Brookhaven Walk Project and proposed Long Island Expressway access modifications. A mesoscale analysis was also conducted for the proposed Project. All analyses were performed following the guidance in the NYSDOT's Environmental Procedures Manual. The NYSDOT and the Federal Highway Administration (FHA) reviewed and approved the air quality analyses. The FHA reviewed the analyses because of the modifications to an interstate highway.

**Lighthouse Landing Project - Sleepy Hollow, New York (Project Role: 2003-2006)**

Mr. Snyder served as the Team Leader and performed a screening level air quality analysis for the proposed Project following the guidance in the NYSDOT's Environmental Procedures Manual. Refined air quality analyses were not necessary as the future LOS ratings and volume thresholds are less than the NYSDOT thresholds. Thus, it is extremely unlikely that there will be a potential violation of the 1-hour and 8-hour CO NAAQS due to the proposed project.

**Bells Ferry Road Project - Cherokee County, Georgia (Project Role: 2004-2005)**

Mr. Snyder served as the Team leader and performed a screening level air quality analysis for the proposed Project following guidance provided by the Georgia Department of Transportation (GDOT). According to the GDOT, a refined air quality analysis was not required because the future traffic volumes at each intersection in the study area were less than 10,000 vehicles per hour during the peak hours. Thus, it is extremely unlikely that there will be a potential violation of the 1-hour and 8-hour CO NAAQS due to the proposed project.

**Iona College - New Rochelle, New York (Project Role: 2003)**

Mr. Snyder served as the Team Leader and conducted a screening level air quality analysis to determine the traffic related air quality impacts due to the proposed East Campus Development Plan. The roadway and parking lot air quality analyses followed the NYSDEC's Air Guide 23 guidance to determine the compliance status with the 1-hour and 8-hour CO NAAQS. Results of the analyses indicated that the NAAQS will not be threatened due to the increased roadway and parking lot traffic.

**Christie Place Garage -Scarsdale, New York (Project Role: 2003)**

Mr. Snyder served as a Team Leader and performed a screening level traffic air quality analysis following guidance in the NYSDOT's Environmental Procedures Manual. Results of the screening analysis indicated that the project will not increase traffic volumes or reduce source-receptor distances at the studied

intersections, or change other existing conditions to such a degree to jeopardize attainment of the one-hour and eight-hour CO NAAQS.

**Octagon Apartments - Roosevelt Island, New York (Project Role: 2002)**

Mr. Snyder served as the Team Leader and provided third party review for a screening air quality analysis for the potential increase in traffic counts and the potential emissions from the apartment boilers associated with the Octagon Apartments Project. The analysis showed that the proposed Project would not significantly affect the local air quality. Comments were submitted and addressed in the final document.

**Stamford Urban Transitway Project - Stamford, Connecticut (Project Role: 2002)**

Mr. Snyder served as the Team Leader and conducted an air quality analysis using the CAL3QHC model to determine the effects of the proposed Stamford Urban Transitway Project on the local air quality. Modeled the expected increase in traffic counts and modifications to traffic flow due to the proposed Project and compared the air quality impacts to the NAAQS. Also modeled the local area assuming the Project would not be built and compared the build and no-build scenarios.

**Mill Pond – Port Washington North, New York (Project Role: 2001)**

Mr. Snyder served as a Team Leader and conducted a screening air quality analysis following the guidance in the New York State Department of Transportation's Environmental Procedures Manual. The screening analysis showed that no refined modeling was required because the proposed project would not increase traffic volumes, reduce source-receptor distances, or change other existing conditions to such a degree as to threaten the NAAQS.

**Woodbury Centre - Harriman, New York (Project Role: 1998-1999)**

Mr. Snyder served as the Team Leader and conducted an air quality analysis using the CAL3QHC model to determine the effects of the proposed shopping center on the local air quality. Modeled the expected increase in traffic counts and modifications to traffic flow due to the proposed shopping center and compared the air quality impacts to the NAAQS. Also modeled the local area assuming the shopping center would not be built and compared the build and no-build scenarios.

**SPECIALIZED TRAINING**

- CALPUFF Training, 1998

**PROFESSIONAL AFFILIATIONS**

- Air & Waste Management Association (A&WMA)