

Timothy Lavallee, P.E.
Senior Environmental Engineer / Air-Quality and Noise Specialist
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Education

B.S. Mechanical Engineering, 1992
Northeastern University, Boston, MA

M.S. Civil and Environmental Engineering, 1997
Tufts University, Medford, MA

Professional Registration

Registered Professional Engineer, Commonwealth of Virginia and State of Maryland

Professional Organizations

Society of American Military Engineers, Member
American Society of Civil Engineers, Member
Acoustical Society of America, Member and Regional Chairman
Institute of Noise Control Engineering, Member

Qualifications

Timothy Lavallee is well qualified as an air-quality and noise specialist with more than a decade of experience in the environmental and transportation fields. Mr. Lavallee has managed or been directly involved in a number of environmental and transportation related projects, including Environmental Assessments (EA), Environmental Impact Statements (EIS), transportation modeling and prediction, transportation noise prediction and impact. Mr. Lavallee is well versed in the NEPA process, air quality, hazardous waste, regulatory compliance and environmental noise assessment.

In addition to his core competencies, Mr. Lavallee is proficient in many areas of computer science and information technologies, including computer programming, data reduction and analysis, GIS (ARCVIEW/ARCInfo), and document and graphics production. Mr. Lavallee previously worked for Lockheed Martin at the National Aeronautics and Space Administration's (NASA) Langley Research Center in flight test support and environmental noise reduction. Before this he worked at Logan International Airport, Boston, MA for the Massachusetts Port Authority's environmental planning branch.

Selected Areas of Interest and Expertise

- Transportation and Environmental Planning
- Environmental Compliance, particularly at and around airports
- NEPA Document Preparation
- Air Quality Analysis
- Environmental Noise Prediction and Impact Assessment

Air-quality and Noise Assessment Experience

Mr. Lavallee has been directly involved in or oversaw the development of the many environmental and transportation planning documents. As well as overall project management, Mr. Lavallee traditionally performs the air-quality, noise, hydrological, traffic and land use assessment. Recent projects include:

- Beulah Street Realignment, Environmental Assessment, Fort Belvoir, VA
- DCEETA Remote Delivery Facility, Environmental Assessment, Fort Belvoir, VA
- Rehabilitation of the Chamberlin Hotel Environmental Assessment, Fort Monroe, VA
- Relocation SDDC Headquarters, Environmental Assessment, Fort Eustis, VA
- Fort Sam Gate Closure EA, San Antonio, TX
- Space Utilization EA, Andrews AFB, MD
- Fire Training Facility EA, Andrews AFB, MD
- Pope C-130J Beddown EA, Pope AFB, NC
- Buckley IMRMP EA, Buckley AFB, CO
- Buckley AFB Fire Fighting Training Facility EA, Buckley AFB, Colorado
- Buckley AFB H70 Storage Facility EA, Buckley AFB, CO
- Buckley AFB Entomology Facility EA, Buckley AFB, CO
- Buckley AFB HWSF EA, Buckley AFB, Colorado
- Buckley AFB Landscape Design, Buckley AFB, Colorado
- Buckley AFB Consolidated Fuels, Buckley AFB, Colorado
- Buckley AFB Recreational Facility, Buckley AFB, Colorado
- GSA Austin Federal Courthouse EA, Austin, TX.
- Lane Addition for Lockhill Selma EA, San Antonio, TX
- Westmoreland Road Lane Closure, CATEX, Dallas, TX
- Fort Hancock Point of Entry EA, Fort Hancock TX
- DFW International Commerce Park EA, Dallas TX
- Immigration Naturalization Service Triple Fence EIS, Fort Worth, TX.
- El Paso Courthouse Annex EA, El Paso, TX
- Little Rock Courthouse Annex EA, Little Rock, AK
- FBI Building Construction EA, Dallas, TX
- GSA San Antonio Federal Courthouse EA, San Antonio, TX

Rehabilitation of the Chamberlin Hotel Environmental Assessment, Fort Monroe, VA. Mr. Lavallee developed the draft air-quality and noise analysis for the environmental assessment of the proposed renovation of the Chamberlin Hotel to convert it to a military retirement community, with an assisted living facility and parking deck. This analysis included a regulatory analysis, a review of existing information for the project corridor, an analysis of the impacts of the proposed action and no-action alternative and associated mitigation measures. Emission calculations for an applicability analysis were performed to determine if the general conformity rule applied. Records of non-applicability (RONA) and appropriated calculations were also provided.

Relocation SDDC Headquarters, Environmental Assessment, Fort Eustis, VA. Mr. Lavallee developed the final air-quality analysis for the proposed construction and operation of a 22-acre facility for temporary accommodation of Surface Deployment and Distribution Command Headquarters. Emission calculations for an applicability analysis were performed to determine if the general conformity rule applied. Emissions due to off-road construction equipment were included in the analysis. Air-quality impacts, primarily increased CO emissions, associated with increase traffic at near-by roadways were addressed.

Beulah Street Realignment, Environmental Assessment, Fort Belvoir, VA. Mr. Lavallee developed the air-quality analysis for the proposed relocation a 0.5-mile section of Beulah Street between Snyder Road and Telegraph Road in the North Area of Fort Belvoir. This analysis included several alternative actions.

DCEETA Remote Delivery Facility, Environmental Assessment, Fort Belvoir, VA. Mr. Lavallee developed the air-quality, noise and traffic section for the proposed construction and operation of a 30-acre remote delivery facility and associated road network at Fort Belvoir.

Fort Sam Gate Closure EA, San Antonio, TX. Mr. Lavallee developed the air-quality and noise analysis for the proposed gate closure environmental assessment at Fort Sam, Houston. The bulk of the work addressed construction and traffic and preparing sections for the existing conditions and the four alternatives. Modeling of construction and traffic noise and potential emissions were key aspects of this effort.

Del Rio Point of Entry SEIS, Del Rio, TX. Mr. Lavallee developed the land-use and transportation, air-quality and noise analysis for the proposed Security Upgrades at the Del Rio Point of Entry SEIS, Del Rio TX. Demolition, construction, operation (including traffic) and cumulative impacts were addressed. Cumulative impacts sections considered past, current and reasonably foreseeable developments and actions. This included the previous development and establishment of the POE itself, the land purchase and expansion to date, future POE expansion and reasonably foreseeable municipal and private traffic and land use changes.

Immigration Naturalization Service Triple Fence EIS, Fort Worth, TX. Mr. Lavallee completed an analysis of noise coming from the site and surrounding haul road traffic and its impact to surrounding communities for the INS proposed Multiple Fence System Master Plan. Planned infrastructure improvements included construction and operation of patrol roads, secondary fencing maintenance roads, light standards, and remote video surveillance cameras.

Refugio Street Housing Development, San Antonio Housing Authority, San Antonio, TX. Mr. Lavallee performed the noise assessment for a proposed community housing development near a major highway. Architectural drawings were review and exposure calculations made to ensure compliance with HUD Noise Guidelines.

Engineer, Compliance, Massachusetts Port Authority. Mr. Lavallee was responsible for a number of compliance related activities for Logan International Airport and Hanscom Airfield including: environmental site auditing and evaluation, storm-water and sewer field investigations, spill prevention and pollution prevention.

Publications

Digital Identification of Intrusive Noise in Soundscapes Acoustical Society of America May 2005, Vancouver, BC (*In Prep/Invited*)

Natural and Urban Soundscapes: The need for multi-disciplined research Acoustical Society of America November 2004, San Diego, CA, (*Invited*)

Prediction of Aircraft Flight Tracks From Noise Measurements, Acoustical Society of America December 2001, Ft. Lauderdale Florida, (*Invited*)

Acoustically Triggered Infrared Video Monitoring Unit, Acoustical Society of America, December 2000 Newport Beach California

Wind Tunnel Data Acquisition and Analysis System, Users Manual II - System Software, Information Report 98-DF19-16, Lockheed Space Missions and Support Service, Inc. 1999

Wind Tunnel Data Acquisition and Analysis System, Users Manual I - System Hardware, Information Report 98-DF19-16, Lockheed Space Missions And Support Services, Inc. 1999

Airframe Noise Test - Data Encryption Display and Look-Up System (DAEDALUS) – Users Manual, Information Report 98-DF05-10, Lockheed Martin Science and Engineering Company, Inc. 1999

Wind Tunnel Data Acquisition and Analysis System, Users Manual I, Information Report 98-DF19-16, Lockheed Martin Science and Engineering Company, Inc. 1998

Airframe Noise Test - Data Analysis Procedures, Information Report 98-DF05-10, Lockheed Martin Science and Engineering Company, Inc. 1998

Design and Use of Microphone Directional Arrays for Aeroacoustic Measurements AIAA 98-0471, 1998

Flap Edge Aeroacoustic Measurements and Predictions AIAA 2000-19751998

Evaluation of RCRA Part B Exemptions and Impact to Innovative Technologies EPA Region I, Office of Environmental Stewardship and Tufts University 1997

Awards

Merit Award, National Aeronautics and Space Administration (NASA), ‘Turning Goals into Reality’ (TIGR) for work on the Environmental Noise and Civil Tilt Rotor Transport projects at NASA Langley 1998

Individual Achievement Award, Lockheed Martin Space Support and Sciences, Inc. for work on the Airframe Noise Reduction Project at NASA Langley Research Center 1997