



19 4th Street Suite 200, Petaluma, CA 94952 • 1.707.773.3737

TODD M. TAMURA, QEP

Over fifteen years of experience as an air quality consultant, with project experience including regulatory analysis and tracking, compliance assistance and evaluation, permitting, strategic evaluations, training, other technical analysis and communications relevant to air pollution laws and regulations, and legal support. Project manager and senior scientist at the consulting firms Sonoma Technology, Inc. (2002-2005) and Tech Environmental, Inc. (1993-2002) prior to founding Tamura Environmental in 2005. Conducted fuel combustion research for the M.I.T. Sloan Automotive Laboratory and Lawrence Livermore National Laboratory prior to consulting career.

EDUCATION

Massachusetts Institute of Technology, M.S. Technology and Policy, 1993

University of California, Los Angeles, M.S. Chemistry, 1990

Harvey Mudd College, B.S. Chemistry with Distinction and Departmental Honors, 1988

AFFILIATIONS AND CERTIFICATIONS

Association of Environmental Professionals, member, 2005-present

Institute of Professional Environmental Practice, Qualified Environmental Professional (QEP) #10990058, 1999-present

Air & Waste Management Association, member, 1993-present; Golden West Section, Executive Board member, 2005-2006; New England Section, Executive Board member, 1996-2002

Vice Chair, Editorial Advisory Committee, *EM* magazine (environmental management journal of the Air & Waste Management Association), 2004-2007.

American Association for the Advancement of Science, member, 1997-present

American Chemical Society, member, 1991-present

Source Evaluation Society, 2001-present

Society of Automotive Engineers, member, 1993-2008

EXAMPLES OF RELEVANT PROJECT EXPERIENCE

(More examples of project experience can be provided upon request. Some project experience shown is for work conducted as an employee of firms other than Tamura Environmental.)

CEQA Review for Legal Counsel (2008). Developed comments on a development project EIS health risk assessment, which focused on risk from air emissions of diesel particulate matter. Comments focused on identification of air emissions sources, dispersion modeling, risk assessment techniques, and risk communication.

CEQA Review of Petroleum Terminal Expansion (2008). Reviewed proponents' air emissions/air quality technical documentation and developed comments as a subconsultant to the city; prepared the air quality section of a Mitigated Negative Declaration document.

Compliance Review – Rock Quarry and Brick Manufacturer (2005). Evaluated an existing rock quarry and brick manufacturing facility with respect to compliance with state and local air pollution laws and regulations, on behalf of the County of Marin's Department of Public Works. Work included site visits and file reviews.

LNG Terminal/Pipeline DEIS preparation (2006 – present). Reviewed proponent's FERC resource reports, permit applications, and other data submittals pertinent to air emissions and air quality; prepared comments for FERC to send to proponent; developed air quality section of DEIS.

White Paper: EIS Evaluation of Mobile Source Air Toxics (2002-2003). Lead author of a white paper for the Federal Highway Administration regarding air toxics and cancer risk that was cited in *Sierra Club v. U.S. DOT et al.*

Facility-Level Regulatory Compliance Assurance (various projects). Provided compliance assistance for facilities in multiple states with respect to interpretation/organization of permit/regulatory requirements and associated technical support (e.g., emissions estimation/measurement support, development of recordkeeping templates, submittal of reports). Clientele for these services have included but are not limited to: the Town of North Andover Board of Health; Excelerate Energy; Toray Plastics (America), Inc.; Columbia Electric; Massachusetts Water Resources Authority; Parlex Corporation; Genetics Institute; Innovative Membrane Systems; Eastern Manufacturing Co.; BME Engineering; Milwaukee Metropolitan Sewerage District. Developed compliance notebooks for operating personnel for Gulf Gateway Energy Bridge and Ceredo Generating Station. Compliance for the Toray Plastics (America) facility was confirmed by a third-party audit under the auspices of EPA's StarTrack program.

Due Diligence and Other Compliance Audits. Evaluated technical issues associated with compliance at retail gasoline outlets (RGOs) in California for the Western States Petroleum Association (WSPA). Evaluated and monetarized known and projected air pollution-related assets and liabilities (within the applicable regulatory framework) associated with electric generating capacity owned by New England Electric Systems, Boston Edison Company, and Central Maine Power for a bidder on these assets (The Energy Group, based in the UK). Similar project conducted for three sewage sludge incineration facilities in Connecticut and Rhode Island purchased by Synagro.

Technical Assessment – Particulate Matter (Federal Highway Administration). Managed a Sonoma Technology, Inc. project team to evaluate state-of-the-art knowledge with regard to particulate matter and transportation, for purposes of guiding development of the Federal Highway Administration's 2005-2010 strategic research workplan for particulate matter. Authored report sections addressing emissions measurement, emissions models, control strategies, and dispersion models.

Miscellaneous Legal Counsel Support (various projects). Provided technical and/or regulatory support (with respect to air pollution regulations) to legal counsel for various clients. Cases have included quantification of fugitive emissions from asphalt, quantification of fugitive and other emissions from manufacturing and investigation of NSPS applicability history, and evaluation of suspected fraudulent air pollution control equipment.

Comment Preparation for Regulations and Policies (2002 – present). Developed comments on various California air district and Air Resources Board regulations and policies for the Western States Petroleum Association (WSPA). Work has focused on the area of retail gasoline dispensing facilities (GDFs) and bulk terminals.

Emissions Inventories and Control Measure Analyses (2003-2004). Developed emission inventory guidance and control measure assessments for the San Joaquin Valley Unified Air Pollution Control District. Analyses of winery fermentation processes involved detailed evaluation of air emissions testing programs, technical assumptions, and cost analyses, and was used by the District to support Regulation 4694 (adopted December 2005).

Alternative Fuel Evaluations (1996-1997). Provided emissions estimates for evaluating alternative fuel usage in U.S. Postal Service delivery vehicles; moderated roundtable discussions between interested parties. Developed a decisionmaking tool for evaluating alternative fuel usage in Massachusetts Bay Transportation Authority transit buses, with regard to cost-effectiveness and compliance with EPA regulations for urban bus retrofits.

Greenhouse Gas Inventory Evaluations (2006-2008). Reviewed GHG emissions issues associated with five LNG terminal projects proposed (or expected to be proposed) in southern California. Conducted technical review of El Paso Energy's national corporate emissions inventory for compressor stations, storage facilities, and related sources within the framework of the California Climate Action Registry (CCAR).

State Implementation Plan Revision (2004). Project manager for the development of a revision to the 2009 Minneapolis/St. Paul Maintenance Plan for carbon monoxide (CO) as a consultant to the Minnesota Pollution Control Agency. Incorporated interagency consultation (as required by statute), authored final report, and completed project two months after contract authorization. EPA Region V issued a direct final approval of this revision (69 FR 71375, December 9, 2004) one month after receiving it.

Environmental Sampling/Monitoring and Analysis (multiple projects). Planned, supervised, executed, and/or reviewed dozens of source testing programs, localized ambient air quality sampling programs, and indoor air quality sampling programs for a variety of clientele. Evaluated a variety of continuous emissions monitoring system (CEMS) technologies for multiple clients. Special focus on quality assurance of results, including evaluation of laboratory analyses.

Other Technical Evaluations (various projects). Developed emissions inventories and evaluated control technology information for the San Joaquin Valley Unified Air Pollution Control District, Mid-Ohio Regional Planning Commission (MORPC, Columbus, OH), and Mid-America Regional Council (MARC, Kansas City). Vetted vendors for marine vessel emissions control equipment on behalf of Excelebrate Energy. Summarized key operating experiences and other technical information regarding coal-fired utility boiler NO_x control technologies for Orion Power's Director of Environmental Technologies (and developed a flexible cost-benefit tool for decisionmaking purposes).

SELECTED PUBLICLY AVAILABLE REPORTS AND PUBLICATIONS

- Tamura T.M. (2006) Key Questions for Analysts of Energy Balances and Other Policy Analyses. *EM – The Magazine for Environmental Managers*. June, pp. 14-16. (Also available from <http://www.environmental-expert.com/resultEachArticle.aspx?cid=6477&codi=6607&idproducttype=6&idmainpage=62&level=0.>)
- Tamura T.M. (2006) Revisiting Earth Day. *EM – The Magazine for Environmental Managers*. April, pp. 31-34.
- Tamura T.M. (2005) Environmental Policies to Reduce Cancer Risk. *EM – The Magazine for Environmental Managers*, June, p. 8.
- Tamura T.M., McCarthy M.C., Hafner H.R., Eisinger D.S., Roberts P.T., Lurmann F.W., Clark N., McMurry P.H., and Winer A. (2005) Transportation and Particulate Matter: Assessment of Recent Literature and Ongoing Research. Final report prepared for the Federal Highway Administration Office of Natural Environment, Washington, DC, by Sonoma Technology, Inc. and others, STI-904751-2669-FR, March 15.
- Tamura T.M. and Reid S.B. (2004) Quality Assurance Issues Associated With Draft NONROAD2002a. Paper presented at EPA's 13th International Emission Inventory Conference, Clearwater, FL, June 8-10. Available from the internet at <<http://www.epa.gov/ttn/chief/conference/ei13/qaqc/tamura.pdf>>.
- Coe D.L., Funk T.H., Gorin C.A., Reid S.B., Stiefer P.S., and Tamura T.M. (2004) Compilation of Emission Inventory Methods, Control Measures Assessments, and Estimated Emissions. Final compilation prepared for the San Joaquin Valley Unified Air Pollution Control District, Fresno, CA by Sonoma Technology, Inc., STI-903340-2429-FC, January.
- Tamura T.M. and Eisinger D.S. (2003) Transportation-Related Air Toxics: Case Study Materials Related to US 95 in Nevada. Revised final white paper prepared for the Federal Highway Administration, Washington, DC by Sonoma Technology, Inc., STI-902370-2308-RFWP, March.
- Tamura, T.M. (2001) "Devils in the Details: Air Emissions of Volatile Organic Compounds." *EM – The Magazine for Environmental Managers*, **51**: 26-31.
- Tamura, T.M. (2001) "Innovative Emission Control Technology Under the Clean Air Act." *EM – The Magazine for Environmental Managers*, **50**: 30-35.
- Tamura T.M. et al. (1996) 40 CFR 85.1403 Program 2 evaluation and cost of compliance analysis of biodiesel fuel for MBTA buses. Report prepared for Massachusetts Bay Transportation Authority, Boston, MA by Rizzo Associates (Natick, MA), Tech Environmental, Inc. (Waltham, MA), and others, November.
- Guldberg, P. H. and T. M. Tamura (1994) "Use of Hourly Meteorological Data in CAL3QHC2 to Improve 8-Hour CO Predictions." Paper A376 presented at the Air & Waste Management Association Annual Meeting, June, Cincinnati, OH. Air & Waste Management Association, Pittsburgh, PA.