

Professional Record

Professional Synopsis:

Prior to joining RSG, Ms. Brockmann provided contractor services to the United States Environmental Protection Agency's (EPA's) Office of Air Quality Planning and Standards (OAQPS) in the regulatory development of national emission standards for hazardous air pollutants (NESHAP). Ms. Brockmann was involved in development of NESHAP for several industries including lime manufacturing, wool fiberglass manufacturing, iron and steel foundries, electric utilities, and secondary aluminum processing.

As part of her regulatory development work Ms. Brockmann conducted site visits and emission testing at more than 30 industrial facilities; compiled and analyzed process and emission data to characterize emissions and control technology performance; evaluated various regulatory strategies (work practices, equipment modifications, materials substitutions, add-on controls) in terms of emission reductions, cost, energy use, environmental impacts; and drafted numerous documents including site visit reports, emission test reports, industry profiles, and preambles.

In conjunction with her regulatory development work Ms. Brockmann also worked with EPA's Office of Research and Development to evaluate pollution prevention techniques to reduce indoor air emissions from engineered wood products. As part of this work, Ms. Brockmann designed and headed a 3-year research project that tested various raw material substitutions for reducing indoor air emissions from engineered wood products.

Since joining RSG, Ms. Brockmann has been assisting with various air emission projects such as compliance with Title V permits (which includes compliance with NESHAP and New Source Performance Standards for municipal solid waste [MSW] landfills), landfill gas generation rate modeling, carbon offset verification, and landfill gas to energy feasibility studies. Her focus of work is the verification of carbon offsets at landfills per protocols of the Chicago Climate Exchange (CCX). Ms. Brockmann's verification work involves evaluating flow meters and methane analyzers per CCX guidelines for measurement frequency and calibration frequency; calculating methane offsets using flow and methane data and power production records; evaluating project eligibility in terms of additionality, project ownership, and federal, state, and local regulatory criteria; and preparing verification reports summarizing all pertinent information.

Cybele Brockmann Staff Engineer

Academic Credentials:

M.S., Environmental Engineering, University of North Carolina at Chapel Hill, 1999
B.S., Chemical Engineering, B.A., Chemistry, North Carolina State University, 1992

Employment Record:

2008-present - Richardson Smith Gardner & Associates
1992-2001 - Research Triangle Institute (RTI) Intl.
1990-1991 - Northern Telecom

Principal Areas of Expertise:

Title V permit application submittal and compliance
Air emission inventory reporting
Carbon offset verification

Publications:

- Zerbonia, R., C. Brockmann, P. Peterson, and D. Housley. *Carbon Bed Fires and the Use of Carbon Canisters for Air Emissions Control on Fixed-roof Tanks*. Journal of the Air Waste Management Association 12/1/01.
- Brockmann, Cybele M. *The Effects of Relative Humidity and Compound Interaction on the Adsorption of Mineral Oil Vapor by Activated Carbon*. 1999 Masters Thesis.
- Brockmann, C., L. Sheldon, D. Whitaker, and J. Baskir. *The Application of Pollution Prevention Techniques to Reduce Indoor Air Emissions from Engineered Wood Products*. EPA-600/R-98-146; NTIS PB99-118309, 1998.
- Turner, S., C. Martin, R. Hetes, and C. Northeim. *Sources and Factors Affecting Indoor Air Emissions from Engineered Wood Products: Summary and Evaluation of Current Literature*. EPA/600/SR-96/067 June 1996.
- Martin, C., and C. Northeim. *Characterization of Manufacturing Processes and Emissions and Pollution Prevention Options for the Composite Wood Panel Industry*. EPA/600/SR-96/066 June 1996.

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