**Craig S. Coker**

2186 Mountain Pass Rd., Troutville, VA 24175

(540) 874-5168; ccoker@cokercompost.com

**EXPERIENCE:**

**2023 – present.** *Star City Compost LLC, Roanoke VA.* **Member.** Part-owner of a start-up aerated static pile food waste composting facility.

**2005- present.** *Coker Composting and Consulting, Troutville, VA.* **Principal.**  A sole proprietorship providing technical and managerial support to private and public organics recycling programs and composting facilities in planning, permitting, design, construction, and operations and in product marketing and sales. Over 300 completed projects since 2005. See [www.cokercompost.com](http://www.cokercompost.com) for project descriptions.

**2007-present.** *BioCycle CONNECT, Emmaus PA.* **Senior Editor.** Writer and editor of technical articles for national trade weekly electronic periodical in the fields of composting and anaerobic digestion.

**2003- 2006.** *McGill Environmental Systems of NC, Inc., Harrells, NC.* **Technical Advisor.** Provided composting technical support to two 80,000 ton-per-year (tpy) multi-feedstock enclosed aerated static pile solid waste/biosolids composting facilities. Managed planning, permitting, and design of new 130,000 tpy aerated static pile solid waste composting facility in Waverly, VA.

**2001- 2003.** *Mountain Organic Materials, LLC, Candler, NC.* **Vice President & Operations Manager.** Planning, design, construction and operation of 8,000 tpy aerated bin dairy manure composting operation at 650-head dairy farm. Directed product sales for compost and compost-amended topsoil. Management of wood waste recycling center, including retail and wholesale sales. Development of proprietary aerated composting bin technology.

**1998-2001.**  *NC Dept. of Environment & Natural Resources, Div. Of Pollution Prevention & Env. Assistance, Raleigh, NC.* **Composting Specialist.** Provided technical assistance to solid and animal waste composting industry (source-separated organics collection/transport, facility planning and siting, compost process control and product marketing). Served as technical resource in development of site-specific equipment, technology and operational solutions for existing and planned organics recycling operations.

**1983-1998.** *Parsons Engineering Science, Inc., Fairfax, VA.* **Senior Associate.** Managed projects in facilities planning, engineering, construction and operation of wastewater treatment and biosolids management facilities (composting, incineration, drying).

**1980-1983.** *Montgomery County, Maryland Department of Environmental Protection, Rockville, MD.* **Senior Environmental Planner**. Oversaw two projects in biosolids composting planning, design, construction and operation (Dickerson Interim Composting Facility, WSSC Composting Facility in Calverton, MD); wastewater treatment plant siting (Rock Run AWT); and solid waste management planning (Dickerson Quarry Balefill).

**1975-1980.** *Planning Research Corporation/Toups & Loiderman Engineers, Rockville, MD*. **Project Manager**. Managed projects in biosolids composting (siting, facility planning) and environmental assessments/impact statements.

**LICENSES, CERTIFICATIONS, & EDUCATION**

**2009-2022.** Virginia Nutrient Management Planner

**2007.** Virginia Waste Management Facility Operator License # 4605 002846, expires 8/31/2025

**2004.** *Solid Waste Association of North America.* Certified Compost Systems Manager. Certificate No. 57591

**2001.** *University of Maine Cooperative Extension.* Certificate of Technical Competence in Composting

**2000.** *University of Georgia.* Completion of Compost Operator Training Course

**1980.** *George Washington University, Washington, DC,* M.S. in Sanitary Engineering

**1975**.  *University of Virginia, Charlottesville, Virginia*. B.A. in Environmental Science

**PROFESSIONAL AFFILIATIONS & BOARD SEATS**

Virginia Recycling Association – Board of Directors (2013 - 2017)

Bedford County (VA) Economic Development Authority - Board of Directors (2009 – 2014, Chairman 2013-2014)

Virginia Composting Council - Chairman, Board of Directors (2011 - 2014)

U.S. Composting Council – Board of Directors (2005-2008, 2009 - 2012)

Water Environment Federation – Biosolids Management Committee (2003-2007, 1989-1994)

North Carolina Composting Council – Board of Directors (1997-2011, President 2003-2005)

Carolina Recycling Association – Board of Directors (2001-2003)

Solid Waste Association of North America – member

American Biogas Council – member

### PERSONAL

Born Dec. 23, 1953 in Auckland, New Zealand. Naturalized American Citizen. Married

# articles and Publications

 “Bulking Agent Selection in Compost Plant Design”, *Compost Science*, November 1979

“Multiple Hearth ReHeat-OXidation Process”, 19th National Conference on Municipal Sewage Treatment Plant Sludge Management, June 1989. Also published in conference proceedings.

“Dewatering Municipal Sewage Sludge for Incineration”, *Water Environment and Technology,* Vol. 3, No. 3, March 1991

“Impact of the Ocean Dumping Ban Act”, WPCF Specialty Conference on Residuals Management, August 1991. Also published in conference proceedings.

“Alkaline Stabilization Processes”, WPCF Specialty Conference on Residuals Management, August 1991. Also published in conference proceedings.

“Evaluation of In-Vessel Composting Technologies”, 64th Annual WPCF Conference, October 1991. Also published in conference proceedings.

“Co-composting municipal sewage sludge with leaves, yard wastes and other recyclables a case study”, Air & Waste Management Association. 85th Annual Meeting and Exhibition, Kansas City, Missouri, June 1992. Also published in conference proceedings.

“Pathogen Inactivation Using Thermal and Digestion Processes”, 65th Annual Water Environment Federation Conference, October 1992. Also published in conference proceedings.

Water Environment Federation, Beneficial Use Programs for Biosolids Management, 1994 (contributing author)

“Special Events: The Role of Recycling and Composting”, *Resource Recycling*, September, 1999, p. 26

“North Carolina Builds Organics Recycling Infrastructure”, *BioCycle,* Vol. 41, No. 1, January 2000, p. 48

“Food Wastes Composting at the 1999 Special Olympics World Summer Games”, proceedings of the Y2K Composting in the Southeast Conference, October 2000

“Turning Food Scraps Into Feedstock”, *Resource Recycling*, November 2000

“Characterizing the Composting Industry”, *BioCycle,* Vol. 45, No. 12, December 2004, p. 20

“Emissions and Air Quality Compliance”, *BioCycle,* Vol. 47, No. 1, January 2006, p. 37

“Composting Grease Trap Wastes”, *BioCycle,* Vol. 47, No. 8, August 2006, p. 27

“Environmental Remediation By Composting”, *BioCycle,* Vol. 47, No. 12, December 2006, p. 18

“What’s New in Grinders”, *BioCycle,* Vol. 48, No. 1, January 2007, p. 24

“Smart Financing”, *BioCycle,* Vol. 48, No. 2, February 2007, p. 23

“Smart Equipment Purchasing and Leasing”, *BioCycle,* Vol. 48, No. 3, March 2007, p. 18

“What’s New in Live Bottom Trailers”, *BioCycle,* Vol. 48, No. 4, April 2007, p. 20

“Turning Waste Into Black Gold”, *2007 Public Works Manual*, May 2007

“Composting Site Remediation Success”, *BioCycle*, Vol. 48, No. 5, May 2007, p. 35

“Smart Operator Training”, *BioCycle*, Vol. 48, No. 6, June 2007, p. 22

“Compost Data Tracking and Analysis”, *BioCycle*, Vol. 48, No. 7, July 2007, p. 26

“What’s New in Baggers & Blenders”, *BioCycle*, Vol. 48, No. 8, August 2007, p. 45

“Smart Equipment Maintenance”, *BioCycle,* Vol. 48, No. 10, November 2007, p. 29

“What’s New in Windrow Turners”, *BioCycle,* Vol. 48, No. 10, November 2007, p. 19

“Compost Storm Water: Is It A Problem?” (Parts 1 – 3), *BioCycle,* Vol. 49, No. 2-4, Feb – May 2008

“Collecting Source-Separated Organic Material”, *BioCycle*, Vol. 50, No. 1, January 2009, p. 23

“Compost Economics”, *On-Farm Composting Handbook, 2nd Edition*, NRAES, in press

“Uncle Sam Buys Green”, *BioCycle*, Vol. 50, No. 3, March 2009, p. 25

“Composting Integrated Into Family Business”, *BioCycle*, Vol. 50, No. 10, October 2009

“GIS Tools to Streamline Organics Diversion”, *BioCycle*, Vol. 51, Nos. 3 & 4, March & April, 2010

“Selecting A Slow-Speed Shredder”, *BioCycle*, Vol. 51, No. 7, July 2010

“Controlling Costs in Compost Manufacturing”, *BioCycle*, Vol. 51, No. 9, September 2010

“Add a Dash of Carbon”, *BioCycle*, Vol. 52, No. 12, December 2011

“Composting Process Optimization”, *BioCycle*, Vol. 53, No. 1, January 2012

“Managing Odors in Organics Recycling”, *BioCycle*, Vol. 53, No. 4, April 2012, p. 25

“Odor Defense Strategy”, *BioCycle*, Vol. 53, No. 5, May 2012, p. 35

“Going on Offense Against Odors”, *BioCycle*, Vol. 53, No. 6, June 2012, p. 25

“Odor Treatment At Composting Facilities”, *BioCycle*, Vol. 53, No. 8, August 2012, p. 21

“Resolving Odor Challenges”, *BioCycle*, Vol. 53, No. 11, November 2012, p. 22

“Design Considerations in ASP Composting”, *BioCycle*, Vol. 54, No. 1, January 2013, p.30

“Pipe and Blower Fan Fundamentals in ASP Design”, *BioCycle*, Vol. 54, No. 2, February 2013, p.24

“Design Considerations in Covered Aerated Static Pile Composting”, *BioCycle*, Vol. 54, No. 5, May 2013, p.21

“Odor Dispersion Fundamentals”, *BioCycle*, Vol. 54, No. 6, June 2013, p.26

“The Art and Science of Odor Modeling”, *BioCycle*, Vol. 54, No. 7, July 2013, p.43

“Composters Defend Against Persistent Herbicides”, *BioCycle*, Vol. 54, No. 8, August 2013, p. 21

“Odor Monitoring and Detection Tools”, *BioCycle*, Vol. 54, No. 10, October 2013, p. 16

“Testing for Persistent Herbicides in Compost and Feedstocks”, *BioCycle*, Vol. 55, No. 1, January 2014, p. 21

“Composting vs. Anaerobic Digestion: Comparing Biological Systems”, *BioCycle*, Vol. 55, No. 4, April, 2014, p.32

“Contaminant Removal Strategies”, *BioCycle*, Vol. 55, No. 6, June 2014, p. 46

“Organics Recycling Facility Siting”, *BioCycle,* Vol. 55, No. 8, August 2014, p. 29

“Coping with Persistent Herbicides in Composting Feedstocks”, *BioCycle*, Vol. 56, No. 1, Jan. 2015, p. 44

Persistent Herbicide Fact Sheets, U.S. Composting Council, March 2015

“Food Scraps Diversion Feasibility in a Small City”, *BioCycle*, Vol. 56, No. 3, Mar/Apr 2015, p. 67

"Calculating Costs for Organics Processing", *BioCycle*, Vol. 56, No. 4, May 2015, p. 25

“Strategic Partnering for Composting Facility Growth”, *BioCycle*, Vol. 56, No. 7, July 2015, p. 19

“Economic Tool to Evaluate Organics Recycling Options”, *BioCycle*, Vol. 56, No. 11, Dec. 2015, p. 24

“Volume-Based Measuring at Composting Facilities”, *BioCycle*, Vol. 57, No. 1, Jan. 2016, p. 24

“Weighting Factors in Organics Recycling Facility Development”, *BioCycle*, Vol. 57, No. 1, Jan. 2016, p. 45

"Controlling Composting Odors", *BioCycle*, Vol. 57, No. 2, February 2016, p. 14

"Opportunities and Challenges with University CoDigestion Facility", *BioCycle*, Vol. 57, No. 2, February 2016, p.30

"Tackling Contamination in Food Scraps Stream", *BioCycle*, Vol. 57, No. 3, Mar/Apr 2016, p. 29

"Compost Bioassay Tests Show Persistent Herbicide Impact", *BioCycle*, Vol. 57, No. 3, Mar/Apr 2016, p. 53

“Health and Safety Planning in Anaerobic Digestion”, *BioCycle*, Vol. 57, No. 4, May 2016, p. 51

“Space Utilization in Composting”, *BioCycle*, Vol. 57, No. 5, June 2016, p. 29

“Biogas Piping Design and Safety”, *BioCycle*, Vol. 57, No. 5, June 2016, p. 44

“Food Safety Rule Impacts on Organics Recyclers”, *BioCycle*, Vol. 57, No. 6, July 2016, p. 22

“Managing Insect Infestations in Green Waste”, *BioCycle*, Vol. 57, No. 6, July 2016, p. 28

“Upgrading Biogas to Renewable Natural Gas”, *BioCycle*, Vol. 57, No. 7, August 2016, p. 48

“Separation Code and Switch in Contaminant Removal”, *BioCycle*, Vol. 57, No. 8, Sept. 2016, p. 53

“Residential SSO to High-Solids Digestion”, *BioCycle*, Vol. 57, No. 9, Oct. 2016, p. 43

“Sampling Plans for Organics Recycling Facilities”, *BioCycle*, Vol. 57, No. 10, Nov. 2016, p. 21

“Regional Digester Increases Food Scraps Processing”, *BioCycle*, Vol. 57, No. 10, Nov. 2016, p. 34

“Food Scraps Collection in a Rural County”, *BioCycle*, Vol. 57, No. 12, Dec. 2016, p. 16

“Regional Composter Confronts Contamination”, *BioCycle*, Vol. 58, No. 1, Jan. 2017, p. 35

“Los Angeles County WRRF Embraces Co-Digestion,” *BioCycle*, Vol. 58, No. 1, Jan. 2017, p.53

“Microaeration Reduces Hydrogen Sulfide in Biogas”, *BioCycle*, Vol. 58, No. 1, Jan. 2017, p.57

“Digester Mixing Fundamentals”, *BioCycle*, Vol. 58, No. 2, Feb. 2017, p.33

“Site Restoration with Compost and Subsoiling”, *BioCycle*, Vol. 58, No. 3, Mar./Apr. 2017, p.50

“Particle Size Reduction Strategies”, , *BioCycle*, Vol. 58, No. 3, Mar./Apr. 2017, p.58

“Aeration Floor Fundamentals”, *BioCycle*, Vol. 58, No. 5, June 2017, p.30

“Liquid Manure and Digestate Composting”, *BioCycle*, Vol. 58, No. 6, July 2017, p.23

“Composting Aeration Floors Functions and Designs”, *BioCycle*, Vol. 58, No. 6, July 2017, p.28

“Food Waste to Renewable Natural Gas”, *BioCycle*, Vol. 58, No. 7, Aug. 2017, p.41

“Poultry Litter Digestion – Part 1 & 2”, *BioCycle*, Vol. 58, Nos. 8 & 9, Sept. 2017, p.50 and Oct. 2017, p. 42

“Sensor-Controlled Contaminant Removal, Organics Separation”, *BioCycle*, Vol. 59, No. 1, Jan. 2018, p.30

“Feedstock Mixing Systems”, *BioCycle*, Vol. 59, No. 2, Feb. 2018, p. 15

“Anaerobic Digestion of Paper and Paperboard”, *BioCycle*, Vol. 59, No. 2, Feb. 2018, p. 28

“Pipeline Injection of Biomethane”, *BioCycle*, Vol. 59, No. 3, Mar. 2018, p. 32

“Waste Hauling Franchise Agreement Fundamentals”, *BioCycle*, Vol. 59, No. 4, May 2018, p. 24

“Swine Manure to Biomethane”, *BioCycle*, Vol. 59, No. 5, June 2018, p. 25

“Evaluating the Economics of Facility Structures”, *BioCycle*, Vol. 59, No. 5, June 2018, p. 14

“Workers’ Compensation in The Organics Recycling Industry”, *BioCycle*, Vol. 59, No. 10, Nov/Dec 2018, p. 23

“Managing Compost and Mulch Fires”, *BioCycle*, Vol. 60, No. 1, Jan. 2019, p. 26

“Composting and Microbial Inoculants”, *BioCycle*, Vol. 60, No. 2, Feb. 2019, p. 16

“Managing Moisture in the Desert”, *BioCycle*, Vol. 60, No. 3, Mar/Apr 2019, p. 48

“Food Waste Depackaging Systems”, *BioCycle*, Vol. 60, No. 4, July 2019, p. 51

“Managing PFAS Chemicals in Composting & Anaerobic Digestion”, *BioCycle* CONNECT, Jan. 2020

“Treatment of PFAS-Contaminated Composting Site Runoff”, *BioCycle* CONNECT, Jan. 2020

“Financial and Non-Financial Evaluations in Composting” *BioCycle* CONNECT, February 2020

“Composting Business Management: Revenue Forecasts for Composters”, *BioCycle* CONNECT, March 2020

“Composting Business Management: Capital Cost of Composting Facility Construction”, *BioCycle* CONNECT, March, 2020

“Composting Business Management: Composting Facility Operating Cost Estimates”, *BioCycle* CONNECT, March, 2020

“Composting Business Management: Net Present Value of Composting Expenditures”, *BioCycle* CONNECT, March, 2020

“Composting Business Management: Composter Tool for Triple Bottom Line Assessment”, *BioCycle* CONNECT, April 2020

“Compost Utilization in Crop Production”, Chapter 7. Compost Utilization in Ornamental and Nursery Crop Production and Chapter 11. Compost Teas Uses in Horticultural Crops, Taylor and Francis Publishers, Dec. 2020

“Using Drones to Measure Compost Piles”, *BioCycle* CONNECT, May, 2021

“Compostable Products Primer for Compost Manufacturers”, *BioCycle* CONNECT, June, 2021

“Spontaneous Combustion in Composting: The Causes”, *BioCycle* CONNECT, July, 2021

“Spontaneous Combustion in Composting: Prevention and Extinguishing”, *BioCycle* CONNECT, July, 2021

“Soil Organic Matter Mandates” and “Soil Profile Rebuilding Using Compost”, *BioCycle* CONNECT, July, 2021

“Compost Manufacturers’ Decision-Making Guide to Compostable Products Acceptance”, *BioCycle* CONNECT, September, 2021

“Food Depackaging Systems”, *BioCycle* CONNECT, September, 2021

“Food Depackaging: The Systems”, *BioCycle* CONNECT, October 2021

“Facility Design: Food Waste Preprocessing”, *BioCycle* CONNECT, November, 2021

“Facility Design: Managing Residuals from Food Waste Preprocessing”, *BioCycle* CONNECT, December2021

“Calculating A Composting Facility Footprint” *BioCycle* CONNECT, April, 2022

“Compost Facility Planning: Waste Capture Plans”, *BioCycle* CONNECT, April, 2022

“Compost Facility Planning: Compost Process Design”, *BioCycle* CONNECT, May, 2022

“Compost Facility Planning: Product Market Assessments”, BioCycle CONNECT, May, 2022

“Compost Facility Planning: Composting Technology Evaluation”, *BioCycle* CONNECT, June, 2022

“Compost Facility Planning: Composting Site Selection, *BioCycle* CONNECT, July, 2022

“The Composting Handbook”, Chapter 2. Enterprise Planning and Chapter 15. Composting Economics, Elsevier Publishers, 2022

“Compost Facility Planning: Composting Facility Approvals and Permits”, BioCycle CONNECT, August 2022

“Compost Facility Planning: Composting Facility Cost Estimates”, *BioCycle* CONNECT, September 2022

“Assessing Contamination In Source Separated Organics”, *BioCycle* CONNECT, September 2022

“Community and Composter Impacted by Forever Chemicals”, *BioCycle* CONNECT, October 2022

“Microplastics: The What, Where, Why and Impact”, *BioCycle* CONNECT, April, 2023

“Microplastics: How Many and How To Regulate”, *BioCycle* CONNECT, May, 2023

“Technology Innovation Targets Microplastics in Food Waste Streams”, *BioCycle* CONNECT, June, 2023