

10. References

Executive Summary

BEA (2014) *2014 Comprehensive Revision of the National Income and Product Accounts: Current-dollar and "real" GDP, 1929–2013*. Bureau of Economic Analysis (BEA), U.S. Department of Commerce, Washington, D.C. Last Modified November 2014. Available online at <<http://www.bea.gov/national/index.htm#gdp>>.

EIA (2015a) Electricity Generation. *Monthly Energy Review, February 2015*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2015/02).

EIA (2015b) Electricity in the United States. *Electricity Explained*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. Available online at <http://www.eia.gov/energyexplained/index.cfm?page=electricity_in_the_united_states>.

EIA (2013) *International Energy Statistics 2013*. Energy Information Administration (EIA), U.S. Department of Energy. Washington, D.C. Available online at <<http://tonto.eia.doe.gov/cfapps/ipdbproject/IEDIndex3.cfm>> EIA (2014). Accessed on 30 November 2014.

EPA (2015) “1970 - 2014 Average annual emissions, all criteria pollutants in MS Excel.” National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards. Last Modified March 2015. Available online at <<http://www.epa.gov/ttn/chieftrends/index.html>>.

IPCC (2013) *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. [Stocker, T.F., D. Qin, G.-K., Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC (2001) *Climate Change 2001: The Scientific Basis. Intergovernmental Panel on Climate Change*. J.T. Houghton, Y. Ding, D.J. Griggs, M. Noguer, P.J. van der Linden, X. Dai, C.A. Johnson, and K. Maskell (eds.). Cambridge University Press. Cambridge, United Kingdom.

IPCC (1996) *Climate Change 1995: The Science of Climate Change. Intergovernmental Panel on Climate Change*. J.T. Houghton, L.G. Meira Filho, B.A. Callander, N. Harris, A. Kattenberg, and K. Maskell (eds.). Cambridge University Press. Cambridge, United Kingdom.

NOAA/ESRL (2015) “Trends in Atmospheric Carbon Dioxide.” Available online at <<http://www.esrl.noaa.gov/gmd/ccgg/trends/>>. 4 February 2015.

UNFCCC (2014) Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013. United Nations Framework Convention on Climate Change, Warsaw. (FCCC/CP/2013/10/Add.3). January 31, 2014. Available online at <<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf>>.

U.S. Census Bureau (2014) U.S. Census Bureau International Database (IDB). November 2014. Available online at <<http://www.census.gov/ipc/www/idbnew.html>>.

Introduction

CDIAC (2014) Recent Greenhouse Gas Concentrations. T.J. Blasing; DOI: 10.3334/CDIAC/atg.032. Available online at <http://cdiac.ornl.gov/pns/current_ghg.html>. 11 November 2014.

EPA (2009) Technical Support Document for the Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act. U.S. Environmental Protection Agency. December 2009.

IPCC (2013) *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC (2001) *Climate Change 2001: The Scientific Basis. Intergovernmental Panel on Climate Change*. J.T. Houghton, Y. Ding, D.J. Griggs, M. Noguer, P.J. van der Linden, X. Dai, C.A. Johnson, and K. Maskell (eds.). Cambridge University Press. Cambridge, United Kingdom.

IPCC (1999) Aviation and the Global Atmosphere. Intergovernmental Panel on Climate Change. J.E. Penner, et al. (eds.). Cambridge University Press. Cambridge, United Kingdom.

IPCC/TEAP (2005) *Special Report: Safeguarding the Ozone Layer and the Global Climate System, Chapter 4: Refrigeration*. 2005. Available online <<http://www.auto-ts.com/hcfc/technology%20option/Refrigeration/transport%20refrigeration.pdf>>.

Jacobson, M.Z. (2001) "Strong Radiative Heating Due to the Mixing State of Black Carbon in Atmospheric Aerosols." *Nature*, 409:695-697.

NOAA (2014) Vital Signs of the Planet. Available online at <<http://climate.nasa.gov/causes/>>. 12 December 2014.

NOAA/ESRL (2015) Trends in Atmospheric Carbon Dioxide. Available online at <<http://www.esrl.noaa.gov/gmd/ccgg/trends/>>. 6 February 2015.

UNEP/WMO (1999) Information Unit on Climate Change. Framework Convention on Climate Change. Available online at <<http://unfccc.int>>.

UNFCCC (2014) Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013. United Nations Framework Convention on Climate Change, Warsaw. (FCCC/CP/2013/10/Add.3). January 31, 2014. Available online at <<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf>>

Trends in Greenhouse Gas Emissions

BEA (2014) *2013 Comprehensive Revision of the National Income and Product Accounts: Current-dollar and "real" GDP, 1929–2013*. Bureau of Economic Analysis (BEA), U.S. Department of Commerce, Washington, D.C. Available online at <<http://www.bea.gov/national/index.htm#gdp>>.

Duffield, J. (2006) Personal communication. Jim Duffield, Office of Energy Policy and New Uses, USDA and Lauren Flinn, ICF International. December 2006.

EIA (2015) *Monthly Energy Review, February 2015*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2015/02).

EPA (2015) "1970 - 2014 Average annual emissions, all criteria pollutants in MS Excel." National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, March 2015. Available online at <<http://www.epa.gov/ttn/chieftrends/index.html>>.

EPA (2014) Light-Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975 - 2014. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at <<http://www.epa.gov/otaq/fetrends-complete.htm>>.

FRB (2014) Industrial Production and Capacity Utilization. Federal Reserve Statistical Release, G.17, Federal Reserve Board. Available online at <http://www.federalreserve.gov/releases/G17/table1_2.htm>. March 28, 2014.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC (2001) *Climate Change 2001: The Scientific Basis. Intergovernmental Panel on Climate Change*. J.T. Houghton, Y. Ding, D.J. Griggs, M. Noguer, P.J. van der Linden, X. Dai, C.A. Johnson, and K. Maskell (eds.). Cambridge University Press. Cambridge, United Kingdom.

U.S. Census Bureau (2014) U.S. Census Bureau International Database (IDB). Available online at <<http://www.census.gov/ipc/www/idbnew.html>>.

Energy

EIA (2013) Indicators: CO₂ Emissions. *International Energy Statistics 2013*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available at <<http://tonto.eia.doe.gov/cfapps/ipdbproject/IEDIndex3.cfm>>.

Carbon Dioxide Emissions from Fossil Fuel Combustion

AAR (2008 through 2013) *Railroad Facts*. Policy and Economics Department, Association of American Railroads, Washington, D.C. Obtained from Clyde Crimmel at AAR.

AISI (2004 through 2013) *Annual Statistical Report*, American Iron and Steel Institute, Washington, D.C.

APTA (2007 through 2013) *Public Transportation Fact Book*. American Public Transportation Association, Washington, D.C. Available online at <<http://www.apta.com/resources/statistics/Pages/transitstats.aspx>>.

APTA (2006) *Commuter Rail National Totals*. American Public Transportation Association, Washington, D.C. Available online at <<http://www.apta.com/research/stats/rail/crsum.cfm>>.

BEA (2014) *Table 1.1.6. Real Gross Domestic Product, Chained 2009 Dollars*. Bureau of Economic Analysis (BEA), U.S. Department of Commerce, Washington, D.C. November, 2014. Available online at <<http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=3&isuri=1&904=1990&903=6&906=a&905=2013&910=x&911=0>>.

Benson, D. (2002 through 2004) Unpublished data. Upper Great Plains Transportation Institute, North Dakota State University and American Short Line & Regional Railroad Association.

Coffeyville Resources Nitrogen Fertilizers (2014) Nitrogen Fertilizer Operations. Available online at <<http://coffeyvillegroup.com/NitrogenFertilizerOperations/index.html>>.

Dakota Gasification Company (2006) *CO₂ Pipeline Route and Designation Information*. Bismarck, ND. Available online at <http://www.dakotagas.com/SafetyHealth/Pipeline_Information.html>.

DHS (2008) Email Communication. Elissa Kay, Department of Homeland Security and Joe Aamidor, ICF International. January 11, 2008.

DLA Energy (2014) Unpublished data from the Fuels Automated System (FAS). Defense Logistics Agency Energy, U.S. Department of Defense. Washington, D.C.

DOC (1991 through 2013) Unpublished Report of Bunker Fuel Oil Laden on Vessels Cleared for Foreign Countries. Form-563. Foreign Trade Division, Bureau of the Census, U.S. Department of Commerce. Washington, D.C.

DOE (1993 through 2014) *Transportation Energy Data Book*. Office of Transportation Technologies, Center for Transportation Analysis, Energy Division, Oak Ridge National Laboratory. ORNL-6978.

DOE (2012) *2010 Worldwide Gasification Database*. National Energy Technology Laboratory and Gasification Technologies Council. Available online at <<http://www.netl.doe.gov/technologies/coalpower/gasification/worlddatabase/index.html>>. Accessed on 15 March 2012.

DOT (1991 through 2013) *Airline Fuel Cost and Consumption*. U.S. Department of Transportation, Bureau of Transportation Statistics, Washington, D.C. DAI-10. <http://www.transtats.bts.gov/fuel.asp>.

Eastman Gasification Services Company (2011) Project Data on Eastman Chemical Company's Chemicals-from-Coal Complex in Kingsport, TN. Available online at <<http://www.netl.doe.gov/coal/gasification/pubs/pdf/Eastman%20Chemicals%20from%20Coal%20Complex.pdf>>.

EIA (2015) *Monthly Energy Review, February 2015*, Energy Information Administration, U.S. Department of Energy, Washington, DC. DOE/EIA-0035(2015/2).

EIA (2014a) *Natural Gas Annual 2013*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0131(06).

EIA (2014b) *Quarterly Coal Report: January – March 2014*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0121.

EIA (2014c) *U.S. Energy-Related Carbon Dioxide Emissions, 2013*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. October 2014. Available online at <<http://www.eia.gov/environment/emissions/carbon/>>.

EIA (1991 through 2014) *Fuel Oil and Kerosene Sales*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at: <<http://www.eia.gov/petroleum/fueloilkerosene/>>.

EIA (2013) Indicators: CO₂ Emissions. *International Energy Statistics 2013*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available at: <<http://tonto.eia.doe.gov/cfapps/ipdbproject/IEDIndex3.cfm>>.

EIA (2009a) *Emissions of Greenhouse Gases in the United States 2008, Draft Report*. Office of Integrated Analysis and Forecasting, Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE-EIA-0573(2009).

EIA (2009b) *Manufacturing Consumption of Energy 2006*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Released July, 2009.

EIA (2008) *Historical Natural Gas Annual, 1930 – 2008*. Energy Information Administration, U.S. Department of Energy. Washington, D.C.

- EIA (2007) Personal Communication. Joel Lou, Energy Information Administration. and Aaron Beaudette, ICF International. *Residual and Distillate Fuel Oil Consumption for Vessel Bunkering (Both International and Domestic) for American Samoa, U.S. Pacific Islands, and Wake Island*. October 24, 2007.
- EIA (2002) *Alternative Fuels Data Tables*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at <<http://www.eia.doe.gov/fuelalternate.html>>.
- EIA (2001) *U.S. Coal, Domestic and International Issues*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. March 2001.
- EPA (2014a) Acid Rain Program Dataset 1996-2013. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.
- EPA (2014b). *Motor Vehicle Emissions Simulator (MOVES) 2014*. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at <<http://www.epa.gov/otaq/models/moves/index.htm>>.
- EPA (2014c) *NONROAD 2008a Model*. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at <<http://www.epa.gov/oms/nonrdmdl.htm>>.
- EPA (2014d) Light-Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975 - 2014. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at <<http://www.epa.gov/otaq/fetrends-complete.htm>>.
- EPA (2010a) Carbon Content Coefficients Developed for EPA's Mandatory Reporting Rule. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.
- Erickson, T. (2003) *Plains CO₂ Reduction (PCOR) Partnership*. Presented at the Regional Carbon Sequestration Partnership Meeting Pittsburgh, Pennsylvania, Energy and Environmental Research Center, University of North Dakota. November 3, 2003. Available online at <<http://www.netl.doe.gov/publications/proceedings/03/carbon-seq/Erickson.pdf>>.
- FAA (2015) Personal Communication between FAA and Leif Hockstad for aviation emissions estimates from the Aviation Environmental Design Tool (AEDT). January 2014.
- FHWA (1996 through 2014) *Highway Statistics*. Federal Highway Administration, U.S. Department of Transportation, Washington, D.C. Report FHWA-PL-96-023-annual. Available online at <<http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>>.
- Fitzpatrick, E. (2002) *The Weyburn Project: A Model for International Collaboration*. Available online at <<http://www.netl.doe.gov/coalpower/sequestration/pubs/mediarelease/mr-101102.pdf>>.
- FRB (2014) *Industrial Production and Capacity Utilization*. Federal Reserve Statistical Release, G.17, Federal Reserve Board. Available online at <http://www.federalreserve.gov/releases/G17/table1_2.htm>. March 28, 2014.
- Gaffney, J. (2007) Email Communication. John Gaffney, American Public Transportation Association and Joe Aamidor, ICF International. December 17, 2007.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- Jacobs, G. (2010) Personal communication. Gwendolyn Jacobs, Energy Information Administration and Rubaab Bhangu, ICF International. *U.S. Territories Fossil Fuel Consumption, 1990–2013*. Unpublished. U.S. Energy Information Administration. Washington, D.C.
- Marland, G. and A. Pippin (1990) "United States Emissions of Carbon Dioxide to the Earth's Atmosphere by Economic Activity." *Energy Systems and Policy*, 14(4):323.
- SAIC/EIA (2001) *Monte Carlo Simulations of Uncertainty in U.S. Greenhouse Gas Emission Estimates. Final Report*. Prepared by Science Applications International Corporation (SAIC) for Office of Integrated Analysis and Forecasting, Energy Information Administration, U.S. Department of Energy. Washington, D.C. June 22, 2001.
- U.S. Census Bureau (2011) *Current Industrial Reports Fertilizer Materials and Related Products: 2010 Summary*. Available online at <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

USAA (2014) *U.S. Primary Aluminum Production 2013*. U.S. Aluminum Association, Washington, D.C. January, 2014.

USAF (1998) Fuel Logistics Planning. U.S. Air Force: AFPAM23-221. May 1, 1998.

United States Geological Survey (USGS) (1994 through 2011) *Minerals Yearbook: Lead Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (1991 through 2011) *Minerals Yearbook: Manufactured Abrasives Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (2011) *2010 Mineral Yearbook; Aluminum [Advanced Release]*. U.S. Geological Survey, Reston, VA.

USGS (1991 through 2010a) *Minerals Yearbook: Silicon Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (1991 through 2010b) *Mineral Yearbook: Titanium Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (2010) *2009 Mineral Commodity Summaries: Aluminum*. U.S. Geological Survey, Reston, VA.

USGS (2009) *2008 Mineral Yearbook: Aluminum*. U.S. Geological Survey, Reston, VA.

USGS (2007) *2006 Mineral Yearbook: Aluminum*. U.S. Geological Survey, Reston, VA.

USGS (1995, 1998, 2000 through 2002) *Mineral Yearbook: Aluminum Annual Report*. U.S. Geological Survey, Reston, VA.

Whorton, D. (2006 through 2013) Personal communication, Class II and III Rail energy consumption, American Short Line and Regional Railroad Association.

Stationary Combustion (excluding CO₂)

EIA (2015) Supplemental Tables on Petroleum Product detail. *Monthly Energy Review, February 2015*, Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2015/02).

EIA (2014) Electricity in the United States. *Electricity Explained*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. Available online at <http://www.eia.gov/energyexplained/index.cfm?page=electricity_in_the_united_states>.

EPA (2015) “1970 - 2014 Average annual emissions, all criteria pollutants in MS Excel.” National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards. Available online at <<http://www.epa.gov/ttn/chief/trends/index.html>>.

EPA (2014) *NONROAD 2008a Model*. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at <<http://www.epa.gov/oms/nonrdmdl.htm>>.

EPA (2003) E-mail correspondence. Air pollutant data. Office of Air Pollution to the Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency (EPA). December 22, 2003.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Jacobs, G. (2010) Personal communication. Gwendolyn Jacobs, Energy Information Administration and Rubaab Bhangu, ICF International. *U.S. Territories Fossil Fuel Consumption, 1990–2009*. Unpublished. U.S. Energy Information Administration. Washington, D.C.

SAIC/EIA (2001) *Monte Carlo Simulations of Uncertainty in U.S. Greenhouse Gas Emission Estimates. Final Report*. Prepared by Science Applications International Corporation (SAIC) for Office of Integrated Analysis and Forecasting, Energy Information Administration, U.S. Department of Energy. Washington, D.C. June 22, 2001.

Mobile Combustion (excluding CO₂)

AAR (2008 through 2013) *Railroad Facts*. Policy and Economics Department, Association of American Railroads, Washington, D.C. Obtained from Clyde Crimmel at AAR.

- ANL (2006) Argonne National Laboratory (2006) GREET model Version 1.7. June 2006.
- APTA (2007 through 2013) *Public Transportation Fact Book*. American Public Transportation Association, Washington, D.C. Available online at <<http://www.apta.com/resources/statistics/Pages/transitstats.aspx>>.
- APTA (2006) *Commuter Rail National Totals*. American Public Transportation Association, Washington, D.C. Available online at <<http://www.apta.com/research/stats/rail/crsum.cfm>>.
- Benson, D. (2002 through 2004) Personal communication. Unpublished data developed by the Upper Great Plains Transportation Institute, North Dakota State University and American Short Line & Regional Railroad Association.
- BEA (1991 through 2013) Unpublished BE-36 survey data. Bureau of Economic Analysis, U.S. Department of Commerce. Washington, D.C.
- Browning, L. (2015) "Methodology for Highway Vehicle Alternative Fuel GHG Estimates". Technical Memo, March 2015. Browning, L. (2009) Personal communication with Lou Browning, "Suggested New Emission Factors for Marine Vessels.", ICF International.
- Browning, L. (2005) Personal communication with Lou Browning, Emission control technologies for diesel highway vehicles specialist, ICF International.
- Browning, L. (2003) "VMT Projections for Alternative Fueled and Advanced Technology Vehicles through 2025." 13th CRC On-Road Vehicle Emissions Workshop. April 2003.
- DHS (2008) Email Communication. Elissa Kay, Department of Homeland Security and Joe Aamidor, ICF International. January 11, 2008.
- DLA Energy (2014) Unpublished data from the Defense Fuels Automated Management System (DFAMS). Defense Energy Support Center, Defense Logistics Agency, U.S. Department of Defense. Washington, D.C.
- DOC (1991 through 2013) Unpublished Report of Bunker Fuel Oil Laden on Vessels Cleared for Foreign Countries. Form-563. Foreign Trade Division, Bureau of the Census, U.S. Department of Commerce. Washington, D.C.
- DOE (1993 through 2014) *Transportation Energy Data Book*. Office of Transportation Technologies, Center for Transportation Analysis, Energy Division, Oak Ridge National Laboratory. ORNL-6978.
- DOT (1991 through 2013) *Airline Fuel Cost and Consumption*. U.S. Department of Transportation, Bureau of Transportation Statistics, Washington, D.C. DAI-10. Available online at: <<http://www.transtats.bts.gov/fuel.asp>>.
- EIA (2015). *Monthly Energy Review, February 2015*, Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2015/02).
- EIA (1991 through 2014) *Fuel Oil and Kerosene Sales*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available at: <http://www.eia.gov/petroleum/fueloilkerosene/>
- EIA (2007 through 2012) *Natural Gas Annual*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0131(11).
- EIA (2011) *Annual Energy Review 2010*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0384(2011). October 19, 2011.
- EIA (2008) "Table 3.1: World Petroleum Supply and Disposition." *International Energy Annual*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at <<http://www.eia.doe.gov/iea/pet.html>>.
- EIA (2007) Personal Communication. Joel Lou, Energy Information Administration and Aaron Beaudette, ICF International. *Residual and Distillate Fuel Oil Consumption for Vessel Bunkering (Both International and Domestic) for American Samoa, U.S. Pacific Islands, and Wake Island*. October 24, 2007.
- EIA (2002) *Alternative Fuels Data Tables*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. Available online at <<http://www.eia.doe.gov/fuelrenewable.html>>.
- EPA (2014a) Annual Certification Test Results Report. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at <<http://www.epa.gov/otaq/crtstst.htm>>.

EPA (2014b) Confidential Engine Family Sales Data Submitted To EPA By Manufacturers. Office of Transportation and Air Quality, U.S. Environmental Protection Agency.

EPA (2014c). *Motor Vehicle Emissions Simulator (Moves) 2014*. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at <<http://www.epa.gov/otaq/models/moves/index.htm>>.

EPA (2014d) *NONROAD 2008a Model*. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at <<http://www.epa.gov/oms/nonrdmdl.htm>>.

EPA (2015) “1970 - 2014 Average annual emissions, all criteria pollutants in MS Excel.” *National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data*. Office of Air Quality Planning and Standards. Available online at <<http://www.epa.gov/ttn/chief/trends/index.html>>.

EPA (2000) *Mobile6 Vehicle Emission Modeling Software*. Office of Mobile Sources, U.S. Environmental Protection Agency, Ann Arbor, Michigan.

EPA (1999a) *Emission Facts: The History of Reducing Tailpipe Emissions*. Office of Mobile Sources. May 1999. EPA 420-F-99-017. Available online at <<http://www.epa.gov/oms/consumer/f99017.pdf>>.

EPA (1999b) Regulatory Announcement: EPA's Program for Cleaner Vehicles and Cleaner Gasoline. Office of Mobile Sources. December 1999. EPA420-F-99-051. Available online at <<http://www.epa.gov/otaq/regs/ld-hwy/tier-2/frm/f99051.pdf>>.

EPA (1998) *Emissions of Nitrous Oxide from Highway Mobile Sources: Comments on the Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990–1996*. Office of Mobile Sources, Assessment and Modeling Division, U.S. Environmental Protection Agency. August 1998. EPA420-R-98-009.

EPA (1997) *Mobile Source Emission Factor Model (MOBILE5a)*. Office of Mobile Sources, U.S. Environmental Protection Agency, Ann Arbor, Michigan.

EPA (1994a) *Automobile Emissions: An Overview*. Office of Mobile Sources. August 1994. EPA 400-F-92-007. Available online at <<http://www.epa.gov/otaq/consumer/05-autos.pdf>>.

EPA (1994b) *Milestones in Auto Emissions Control*. Office of Mobile Sources. August 1994. EPA 400-F-92-014. Available online at <<http://www.epa.gov/otaq/consumer/12-miles.pdf>>.

EPA (1993) *Automobiles and Carbon Monoxide*. Office of Mobile Sources. January 1993. EPA 400-F-92-005. Available online at <<http://www.epa.gov/otaq/consumer/03-co.pdf>>.

Esser, C. (2003 through 2004) Personal Communication with Charles Esser, Residual and Distillate Fuel Oil Consumption for Vessel Bunkering (Both International and Domestic) for American Samoa, U.S. Pacific Islands, and Wake Island.

FAA (2015) Personal Communication between FAA and Leif Hockstad for aviation emissions estimates from the Aviation Environmental Design Tool (AEDT). January 2014.

FHWA (1996 through 2014) *Highway Statistics*. Federal Highway Administration, U.S. Department of Transportation, Washington, D.C. Report FHWA-PL-96-023-annual. Available online at <<http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>>.

Gaffney, J. (2007) Email Communication. John Gaffney, American Public Transportation Association and Joe Aamidor, ICF International. December 17, 2007.

ICF (2006a) *Revised Gasoline Vehicle EFs for LEV and Tier 2 Emission Levels*. Memorandum from ICF International to John Davies, Office of Transportation and Air Quality, U.S. Environmental Protection Agency. November 2006.

ICF (2006b) *Revisions to Alternative Fuel Vehicle (AFV) Emission Factors for the U.S. Greenhouse Gas Inventory*. Memorandum from ICF International to John Davies, Office of Transportation and Air Quality, U.S. Environmental Protection Agency. November 2006.

ICF (2004) *Update of Methane and Nitrous Oxide Emission Factors for On-Highway Vehicles*. Final Report to U.S. Environmental Protection Agency. February 2004.

Lipman, T. and M. Delucchi (2002) "Emissions of Nitrous Oxide and Methane from Conventional and Alternative Fuel Motor Vehicles." *Climate Change*, 53:477-516.

Santoni, G., B. Lee, E. Wood, S. Herndon, R. Miake-Lye, S Wofsy, J. McManus, D. Nelson, M. Zahniser (2011) Aircraft emissions of methane and nitrous oxide during the alternative aviation fuel experiment. *Environ Sci Technol*. 2011 Aug 15; 45(16):7075-82.

U.S. Census Bureau (2000) *Vehicle Inventory and Use Survey*. U.S. Census Bureau, Washington, D.C. Database CD-EC97-VIUS.

Unnasch, S., L. Browning, and E. Kassoy (2001) *Refinement of Selected Fuel-Cycle Emissions Analyses, Final Report to ARB*.

Whorton, D. (2006 through 2013) Personal communication, Class II and III Rail energy consumption, American Short Line and Regional Railroad Association.

Carbon Emitted from Non-Energy Uses of Fossil Fuels

ACC (2014a) "U.S. Resin Production & Sales: 2013 vs. 2012," American Chemistry Council. Available online at: <<http://www.americanchemistry.com/Jobs/EconomicStatistics/Plastics-Statistics/Production-and-Sales-Data-by-Resin.pdf>>.

ACC (2014b) "*Guide to the Business of Chemistry, 2014*," American Chemistry Council.

ACC (2012) "*Guide to the Business of Chemistry, 2012*," American Chemistry Council.

ACC (2003-2011) "PIPS Year-End Resin Statistics for 2010: Production, Sales and Captive Use." Available online at <<http://www.americanchemistry.com/Jobs/EconomicStatistics/Plastics-Statistics/Production-and-Sales-Data-by-Resin.pdf>>.

Bank of Canada (2014) Financial Markets Department Year Average of Exchange Rates. Available online at <<http://www.bankofcanada.ca/stats/assets/pdf/nraa-2013.pdf>>.

Bank of Canada (2013) Financial Markets Department Year Average of Exchange Rates. Available online at <<http://www.bankofcanada.ca/stats/assets/pdf/nraa-2012.pdf>>.

Bank of Canada (2012) Financial Markets Department Year Average of Exchange Rates. Available online at <<http://www.bankofcanada.ca/stats/assets/pdf/nraa-2011.pdf>>.

EIA (2015) Supplemental Tables on Petroleum Product detail. *Monthly Energy Review, February 2015*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2015/02).

EIA (2013) *EIA Manufacturing Consumption of Energy (MECS) 2010*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (2010) *EIA Manufacturing Consumption of Energy (MECS) 2006*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (2005) *EIA Manufacturing Consumption of Energy (MECS) 2002*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (2001) *EIA Manufacturing Consumption of Energy (MECS) 1998*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (1997) *EIA Manufacturing Consumption of Energy (MECS) 1994*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (1994) *EIA Manufacturing Consumption of Energy (MECS) 1991*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EPA (2015a) "1970 - 2014 Average annual emissions, all criteria pollutants in MS Excel." National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, March 2015. Available online at <<http://www.epa.gov/ttn/chief/trends/index.html>>.

EPA (2015b). *Resource Conservation and Recovery Act (RCRA) Info*, Biennial Report, GM Form (Section 2-Onsite Management) and WR Form.

EPA (2014a) Municipal Solid Waste in the United States: 2012 Facts and Figures. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at <<http://www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm>>.

EPA (2014b) Chemical Data Access Tool (CDAT). U.S. Environmental Protection Agency, June 2014. Available online at <http://java.epa.gov/oppt_chemical_search/>. Accessed January 2015.

EPA (2013a) Municipal Solid Waste in the United States: 2011 Facts and Figures. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at <<http://www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm>>.

EPA (2013b). *Resource Conservation and Recovery Act (RCRA) Info*, Biennial Report, GM Form (Section 2-Onsite Management) and WR Form.

EPA (2011) EPA's Pesticides Industry Sales and Usage, 2006 and 2007 Market Estimates. Available online at <<http://www.epa.gov/oppbead1/pestsales/>>. Accessed January 2012>.

EPA (2009) Biennial Reporting System (BRS) Database. U.S. Environmental Protection Agency, Envirofacts Warehouse. Washington, D.C. Available online at <<http://www.epa.gov/enviro/html/brs/>>. Data for 2001-2007 are current as of Sept. 9, 2009.

EPA (2004) EPA's Pesticides Industry Sales and Usage, 2000 and 2001 Market Estimates. Available online at <<http://www.epa.gov/oppbead1/pestsales/>>. Accessed September 2006>.

EPA (2002) EPA's Pesticides Industry Sales and Usage, 1998 and 1999 Market Estimates, table 3.6. Available online at <http://www.epa.gov/oppbead1/pestsales/99pestsales/market_estimates1999.pdf>. Accessed July 2003.

EPA (2001) AP 42, Volume I, Fifth Edition. Chapter 11: Mineral Products Industry. Available online at <<http://www.epa.gov/ttn/chief/ap42/ch11/index.html>>.

EPA (2000a) *Biennial Reporting System (BRS)*. U.S. Environmental Protection Agency, Envirofacts Warehouse. Washington, D.C. Available online at <<http://www.epa.gov/enviro/html/brs/>>.

EPA (2000b) *Toxics Release Inventory, 1998*. U.S. Environmental Protection Agency, Office of Environmental Information, Office of Information Analysis and Access, Washington, D.C. Available online at <<http://www.epa.gov/triexplorer/chemical.htm>>.

EPA (1999) EPA's Pesticides Industry Sales and Usage, 1996-1997 Market Estimates. Available online at <http://www.epa.gov/oppbead1/pestsales/97pestsales/market_estimates1997.pdf>.

EPA (1998) EPA's Pesticides Industry Sales and Usage, 1994-1995 Market Estimates. Available online at <http://www.epa.gov/oppbead1/pestsales/95pestsales/market_estimates1995.pdf>.

FEB (2013) Fiber Economics Bureau, as cited in C&EN (2013) Lackluster Year for Chemical Output: Production stayed flat or dipped in most world regions in 2012. Chemical & Engineering News, American Chemical Society, 1 July. Available online at <<http://www.cen-online.org>>.

FEB (2012) Fiber Economics Bureau, as cited in C&EN (2012) Too Quiet After the Storm: After a rebound in 2010, chemical production hardly grew in 2011. Chemical & Engineering News, American Chemical Society, 2 July. Available online at <<http://www.cen-online.org>>.

FEB (2011) *Fiber Economics Bureau, as cited in C&EN (2011) Output Ramps up in all Regions*. Chemical Engineering News, American Chemical Society, 4 July. Available online at <<http://www.cen-online.org>>.

FEB (2010) *Fiber Economics Bureau, as cited in C&EN (2010) Output Declines in U.S., Europe*. Chemical & Engineering News, American Chemical Society, 6 July. Available online at <<http://www.cen-online.org>>.

FEB (2009) *Fiber Economics Bureau, as cited in C&EN (2009) Chemical Output Slipped In Most Regions* Chemical & Engineering News, American Chemical Society, 6 July. Available online at <<http://www.cen-online.org>>.

FEB (2007) *Fiber Economics Bureau, as cited in C&EN (2007) Gains in Chemical Output Continue*. Chemical & Engineering News, American Chemical Society, July 2, 2007. Available online at <<http://www.cen-online.org>>.

- FEB (2005) *Fiber Economics Bureau, as cited in C&EN (2005) Production: Growth in Most Regions* Chemical & Engineering News, American Chemical Society, 11 July. Available online at <<http://www.cen-online.org>>.
- FEB (2003) *Fiber Economics Bureau, as cited in C&EN (2003) Production Inches Up in Most Countries*, Chemical & Engineering News, American Chemical Society, 7 July. Available online at <<http://www.cen-online.org>>.
- FEB (2001) *Fiber Economics Bureau, as cited in ACS (2001) Production: slow gains in output of chemicals and products lagged behind U.S. economy as a whole* Chemical & Engineering News, American Chemical Society, 25 June. Available online at <<http://pubs.acs.org/cen>>.
- Financial Planning Association (2006) *Canada/US Cross-Border Tools: US/Canada Exchange Rates*. Available online at <http://www.fpanet.org/global/planners/US_Canada_ex_rates.cfm>. Accessed August 16, 2006.
- Gosselin, Smith, and Hodge (1984) "Clinical Toxicology of Commercial Products." Fifth Edition, Williams & Wilkins, Baltimore.
- Huurman, J.W.F. (2006) *Recalculation of Dutch Stationary Greenhouse Gas Emissions Based on Sectoral Energy Statistics 1990-2002*. Statistics Netherlands, Voorburg, The Netherlands.
- IISRP (2003) "*IISRP Forecasts Moderate Growth in North America to 2007*" International Institute of Synthetic Rubber Producers, Inc. New Release. Available online at <<http://www.iisrp.com/press-releases/2003-Press-Releases/IISRP-NA-Forecast-03-07.html>>.
- IISRP (2000) "Synthetic Rubber Use Growth to Continue Through 2004, Says IISRP and RMA" International Institute of Synthetic Rubber Producers press release.
- INEGI (2006) *Producción bruta total de las unidades económicas manufactureras por Subsector, Rama, Subrama y Clase de actividad*. Available online at <http://www.inegi.gob.mx/est/contenidos/espanol/proyectos/censos/ce2004/tb_manufacturas.asp>. Accessed August 15.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- Marland, G., and R.M. Rotty (1984) "Carbon dioxide emissions from fossil fuels: A procedure for estimation and results for 1950-1982", *Tellus* 36b:232-261.
- NPRA (2002) *North American Wax - A Report Card*. Available online at <<http://www.npra.org/members/publications/papers/lubes/LW-02-126.pdf>>.
- RMA (2014) *2013 U.S. Scrap Tire Management Summary*. Rubber Manufacturers Association, Washington, D.C. November 2014.
- RMA (2011) *U.S. Scrap Tire Management Summary: 2005-2009*. Rubber Manufacturers Association, Washington, D.C. October 2011, updated September 2013.
- RMA (2009) "Scrap Tire Markets: Facts and Figures – Scrap Tire Characteristics." Available online at: http://www.rma.org/scrap_tires/scrap_tire_markets/scrap_tire_characteristics/ Accessed 17 September 2009.
- Schneider, S. (2007) E-mail between Shelly Schneider of Franklin Associates (a division of ERG) and Sarah Shapiro of ICF International, January 10, 2007.
- U.S. Census Bureau (2014) *2012 Economic Census*. Available online at: <http://www.census.gov/econ/census/schedule/whats_been_released.html>. Accessed November 2014.
- U.S. Census Bureau (2009) *Soap and Other Detergent Manufacturing: 2007*. Available online at <http://smpbff1.dsd.census.gov/TheDataWeb_HotReport/servlet/HotReportEngineServlet?emailname=vh@boc&filenname=mfg1.hrml&20071204152004.Var.NAICS2002=325611&forward=20071204152004.Var.NAICS2002>.
- U.S. Census Bureau (2004) *Soap and Other Detergent Manufacturing: 2002*, Issued December 2004, EC02-31I-325611 (RV). Available online at <<http://www.census.gov/prod/ec02/ec0231i325611.pdf>>.
- U.S. Census Bureau (1999) *Soap and Other Detergent Manufacturing: 1997*, Available online at <<http://www.census.gov/epcd/www/ec97stat.htm>>.

U.S. International Trade Commission (1990-2014) “Interactive Tariff and Trade DataWeb: Quick Query.” Available online at <<http://dataweb.usitc.gov/>>. Accessed November 2014.

Incineration of Waste

ArSova, Ljupka, Rob van Haaren, Nora Goldstein, Scott M. Kaufman, and Nickolas J. Themelis (2008) “16th Annual BioCycle Nationwide Survey: The State of Garbage in America” Biocycle, JG Press, Emmaus, PA. December.

Bahor, B (2009) Covanta Energy’s public review comments re: *Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2007*. Submitted via email on April 9, 2009 to Leif Hockstad, U.S. EPA.

De Soete, G.G. (1993) “Nitrous Oxide from Combustion and Industry: Chemistry, Emissions and Control.” In A. R. Van Amstel, (ed) Proc. of the International Workshop Methane and Nitrous Oxide: Methods in National Emission Inventories and Options for Control, Amersfoort, NL. February 3-5, 1993.

Energy Recovery Council (2009) “2007 Directory of Waste-to-Energy Plants in the United States.” Accessed September 29, 2009.

EPA (2007, 2008, 2011, 2013, 2014) Municipal Solid Waste in the United States: Facts and Figures. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency. Washington, D.C. Available online at <<http://www.epa.gov/osw/nonhaz/municipal/msw99.htm>>.

EPA (2006) Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency. Washington, D.C.

EPA (2000) Characterization of Municipal Solid Waste in the United States: Source Data on the 1999 Update. Office of Solid Waste, U.S. Environmental Protection Agency. Washington, D.C. EPA530-F-00-024.

Goldstein, N. and C. Madtes (2001) “13th Annual BioCycle Nationwide Survey: The State of Garbage in America.” BioCycles, JG Press, Emmaus, PA. December 2001.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Kaufman, et al. (2004) “14th Annual BioCycle Nationwide Survey: The State of Garbage in America 2004” Biocycle, JG Press, Emmaus, PA. January, 2004.

RMA (2014) “2013 U.S. Scrap Tire Management Summary.” Rubber Manufacturers Association. November 2014. Available online at: <http://www.rma.org/download/scrap-tires/market-reports/US_STMarket2013.pdf>.

RMA (2012a) "Rubber FAQs." Rubber Manufacturers Association. Available online at <<http://www.rma.org/about-rma/rubber-faqs/>>. Accessed 19 November 2014.

RMA (2012b) “Scrap Tire Markets: Facts and Figures – Scrap Tire Characteristics.” Available online at <http://www.rma.org/scrap_tires/scrap_tire_markets/scrap_tire_characteristics/>. Accessed 18 January 2012.

RMA (2011) “U.S. Scrap Tire Management Summary 2005-2009.” Rubber Manufacturers Association. October 2011. Available online at: <http://www.rma.org/scrap_tires/scrap_tire_markets/2009_summary.pdf>.

RTI (2009) Updated Hospital/Medical/Infectious Waste Incinerator (HMIWI) Inventory Database. Memo dated July 6, 2009. Available online at: <http://www.epa.gov/ttnatw01/129/hmiwi/hmiwi_inventory.pdf>.

Schneider, S. (2007) E-mail between Shelly Schneider of Franklin Associates (a division of ERG) and Sarah Shapiro of ICF International, January 10, 2007.

Simmons, et al. (2006) “15th Nationwide Survey of Municipal Solid Waste Management in the United States: The State of Garbage in America.” BioCycle, JG Press, Emmaus, PA. April 2006.

van Haaren, Rob, Themelis, N., and Goldstein, N. (2010) "The State of Garbage in America." BioCycle, October 2010. Volume 51, Number 10, pg. 16-23.

Coal Mining

- AAPG (1984) *Coalbed Methane Resources of the United States*. AAPG Studies in Geology Series #17.
- CAR (2014) *Project Database*. Climate Action Reserve. Available at <<http://www.climateactionreserve.org/>>.
- Consol (2014) Ruby Canyon Summary 2013. *CONSOL Energy Inc. excel spreadsheet*
- Creedy, D.P. (1993) *Chemosphere*. Vol. 26, pp. 419-440.
- EIA (2014) *Annual Coal Report 1991-2013* (Formerly called *Coal Industry Annual*). Table 1. Energy Information Administration, U.S. Department of Energy, Washington, D.C.
- EPA (2014) *Greenhouse Gas Reporting Program (GHGRP): Underground Coal Mines*. Retrieved from <http://www.epa.gov/ghgreporting/ghgdata/reported/coalmines.html>
- EPA (2005) *Surface Mines Emissions Assessment*. U.S. Environmental Protection Agency Draft Report.
- EPA (1996) *Evaluation and Analysis of Gas Content and Coal Properties of Major Coal Bearing Regions of the United States*. U.S. Environmental Protection Agency. EPA/600/R-96-065.
- GSA (2014) *Well Records Database*. Geological Survey of Alabama State Oil and Gas Board. Retrieved from <<http://www.gsa.state.al.us/ogb/database.aspx>>.
- IEA (2014) *Key World Energy Statistics*. Coal Production, International Energy Agency.
- IPCC (2011) Use of Models and Facility-Level Data in Greenhouse Gas Inventories (Report of IPCC Expert Meeting on Use of Models and Measurements in Greenhouse Gas Inventories 9-11 August 2010, Sydney, Australia) eds: Eggleston H.S., Srivastava N., Tanabe K., Baasansuren J., Fukuda M., Pub. IGES, Japan 2011.
- JWR (2014) Wells Intercepted 2013. *Jim Walter Resources excel spreadsheet*.
- JWR (2010) No. 4 & 7 Mines General Area Maps. *Walter Energy: Jim Walter Resources*.
- King, Brian (1994) Management of Methane Emissions from Coal Mines: Environmental, Engineering, Economic and Institutional Implication of Options, Neil and Gunter Ltd., Halifax, March 1994.
- MSHA (2014) *Data Transparency at MSHA*. Mine Safety and Health Administration. Retrieved from <<http://www.msha.gov>>.
- Mutmansky, Jan M. and Yanbei Wang (2000) "Analysis of Potential Errors in Determination of Coal Mine Annual Methane Emissions." *Mineral Resources Engineering*, 9(4). December 2000.
- Saghafi, Abouna (2013) Estimation of fugitive emissions from open cut coal mining and measurable gas content, 13th Coal Operators' Conference, University of Wollongong, The Australian Institute of Mining and Metallurgy & Mine Managers Association of Australia, 2013, 306-313.
- USBM (1986) *Results of the Direct Method Determination of the Gas Contents of U.S. Coal Basins*. Circular 9067, U.S. Bureau of Mines.
- West Virginia Geological & Economic Survey (WVGES) (2014) *Oil & Gas Production Data*. Retrieved from <<http://www.wvgs.wvnet.edu/www/datastat/datastat.htm>>.

Abandoned Underground Coal Mines

- EPA (2004) *Methane Emissions Estimates & Methodology for Abandoned Coal Mines in the U.S.* Draft Final Report. Washington, D.C. April 2004.
- Mutmansky, Jan M., and Yanbei Wang (2000) *Analysis of Potential Errors in Determination of Coal Mine Annual Methane Emissions*. Department of Energy and Geo-Environmental Engineering, Pennsylvania State University. University Park, PA.
- U.S. Department of Labor, Mine Health & Safety Administration (2014) *Data Retrieval System*. Available online at <<http://www.msha.gov/drs/drshome.htm>>.

Petroleum Systems

Allen et al. (2014) Methane Emissions from Process Equipment at Natural Gas Production Sites in the United States: Pneumatic Controllers. *ES&T*. December 9, 2014. Available online at: <<http://pubs.acs.org/doi/pdf/10.1021/es5040156>>.

API (2009) Compendium of Greenhouse gas Emissions Methodologies for the Oil and Gas Industry. American Petroleum Institute. Austin, TX, August 2009.

BOEM (2011a) *OCS Platform Activity*. Bureau of Ocean Energy Management, U.S. Department of Interior. Available online at <http://www.boem.gov/uploadedFiles/BOEM/Newsroom/Offshore_Stats_and_Facts/Gulf_of_Mexico_Region/OCSPlatformActivity.pdf>.

BOEM (2011b) *Platform Information and Data*. Bureau of Ocean Energy Management, U.S. Department of Interior. Available online at <https://www.data.boem.gov/homepg/data_center/platform/platform.asp>.

BOEM (2011c) *Pacific OCS Region*. Bureau of Ocean Energy Management, U.S. Department of Interior. Available online at <http://www.data.boem.gov/homepg/data_center/platform/PacificFreePlat.asp>.

BOEM (2014) *Year 2011 Gulfwide Emission Inventory Study*. Bureau of Ocean Energy Management, U.S. Department of Interior. OCS Study BOEM 2014-666. Available online at <<http://www.data.boem.gov/PI/PDFImages/ESPIS/5/5440.pdf>>

DrillingInfo (2014) December 2014 Download. DI Desktop® DrillingInfo, Inc.

EIA (1990 through 2014) *Refinery Capacity Report*. Energy Information Administration, U.S. Department of Energy. Washington, DC. Available online at <<http://www.eia.gov/petroleum/refinerycapacity/>>.

EIA (1995 through 2014a) *Annual Energy Review*. Energy Information Administration, U.S. Department of Energy. Washington, DC. Available online at <<http://www.eia.gov/totalenergy/data/annual/index.cfm>>.

EIA (1995 through 2014b) *Monthly Energy Review*. Energy Information Administration, U.S. Department of Energy. Washington, DC. Available online at <<http://www.eia.gov/totalenergy/data/monthly/index.cfm>>.

EIA (1995 through 2014c) *Petroleum Supply Annual. Volume 1*. U.S. Department of Energy Washington, DC. Available online at: <<http://www.eia.gov/petroleum/supply/annual/volume1/>>.

EPA (2015a) Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2013: Update to Data Source for Well Counts. Available at <http://www.epa.gov/climatechange/ghgemissions/usinventoryreport/natural-gas-systems.html>.

EPA (2015b) Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2013: Update to Offshore Oil and Gas Platforms Emissions Estimate. Available at <http://www.epa.gov/climatechange/ghgemissions/usinventoryreport/natural-gas-systems.html>.

EPA (2015c) Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2013: Update to Refineries Emissions Estimate. Available at <<http://www.epa.gov/climatechange/ghgemissions/usinventoryreport/natural-gas-systems.html>>.

EPA (2015d) Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2013: Potential Updates to Pneumatic Controller Emissions Estimate. Available at <<http://www.epa.gov/climatechange/ghgemissions/usinventoryreport/natural-gas-systems.html>>.

EPA (2014) *Greenhouse Gas Reporting Program*. Environmental Protection Agency. Data reported as of August 18, 2014.

EPA (2005) *Incorporating the Mineral Management Service Gulfwide Offshore Activities Data System (GOADS) 2000 data into the methane emissions inventories*. Prepared by ICF International. U.S. Environmental Protection Agency. 2005.

EPA (1999a) *Estimates of Methane Emissions from the U.S. Oil Industry (Draft Report)*. Prepared by ICF International. Office of Air and Radiation, U.S. Environmental Protection Agency. October 1999.

- EPA (1999b) *Methane Emissions from the U.S. Petroleum Industry*. Prepared by Radian International. U.S. Environmental Protection Agency. February 1999.
- EPA/GRI (1996a) *Methane Emissions from the Natural Gas Industry, V7: Blow and Purge Activities*. Prepared by Radian. U.S. Environmental Protection Agency. April 1996.
- EPA/GRI (1996b) *Methane Emissions from the Natural Gas Industry, V11: Compressor Driver Exhaust*. Prepared by Radian. U.S. Environmental Protection Agency. April 1996.
- EPA/GRI (1996c) *Methane Emissions from the Natural Gas Industry, V12: Pneumatic Devices*. Prepared by Radian. U.S. Environmental Protection Agency. April 1996.
- EPA/GRI (1996d) *Methane Emissions from the Natural Gas Industry, V13: Chemical Injection Pumps*. Prepared by Radian. U.S. Environmental Protection Agency. April 1996.
- HPDI (2011) Production and Permit Data, October 2009.
- IOGCC (2011) *Marginal Wells: fuel for economic growth 2010 Report*. Interstate Oil & Gas Compact Commission. Available online at <<http://iogcc.myshopify.com/collections/frontpage/products/2010-marginal-well-report>>.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- IPCC (2007) *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Pachauri, R.K and Reisinger, A. eds.; IPCC, Geneva, Switzerland.
- OGJ (2014a) *Oil and Gas Journal 1990-2013*. Pipeline Economics Issue, September 2014.
- OGJ (2013b) *Oil and Gas Journal 1990-2013*. Worldwide Refining Issue, January 2013.
- United States Army Corps of Engineers (1995 through 2012) *Waterborne Commerce of the United States, Part 5: National Summaries*. U.S. Army Corps of Engineers. Washington, DC.

Natural Gas Systems

- AGA (1991 through 1998) Gas Facts. American Gas Association. Washington, DC.
- Alabama (2014) Alabama State Oil and Gas Board. Available online at <<http://www.ogb.state.al.us>>.
- Allen et al. (2014a) Methane Emissions from Process Equipment at Natural Gas Production Sites in the United States: Liquids Unloading. ES&T. December 9, 2014. Available online at: <<http://pubs.acs.org/doi/abs/10.1021/es504016r>>.
- Allen et al. (2014b) Methane Emissions from Process Equipment at Natural Gas Production Sites in the United States: Pneumatic Controllers. ES&T. December 9, 2014. Available online at: <<http://pubs.acs.org/doi/pdf/10.1021/es5040156>>.
- Allen et al. (2013) Measurements of methane emissions at natural gas production sites in the United States. doi: 10.1073/pnas.1304880110 PNAS September 16, 2013. Available online at <<http://www.pnas.org/content/early/2013/09/10/1304880110.abstract>>.
- API/ANGA (2012) *Characterizing Pivotal Sources of Methane Emissions from Natural Gas Production – Summary and Analysis of API and ANGA Survey Responses*. Final Report. American Petroleum Institute and America's Natural Gas Alliance. September 21.
- BOEMRE (2011a) Gulf of Mexico Region Offshore Information. Bureau of Ocean Energy Management, Regulation and Enforcement, U.S. Department of Interior.
- BOEMRE (2011b) Pacific OCS Region Offshore Information. Bureau of Ocean Energy Management, Regulation and Enforcement, U.S. Department of Interior.

BOEMRE (2011c) GOM and Pacific OCS Platform Activity. Bureau of Ocean Energy Management, Regulation and Enforcement, U.S. Department of Interior.

BOEMRE (2011d) Pacific OCS Region. Bureau of Ocean Energy Management, Regulation and Enforcement, U.S. Department of Interior.

DrillingInfo (2014) December 2014 Download. DI Desktop® DrillingInfo, Inc.

EIA (2014a) “Table 1— Summary of natural gas supply and disposition in the United States, 2009-2014.” Natural Gas Monthly, Energy Information Administration, U.S. Department of Energy, Washington, DC. Available online at <<http://www.eia.doe.gov>>.

EIA (2014b) “Table 2—Natural Gas Consumption in the United States, 2009-2014.” Natural Gas Monthly, Energy Information Administration, U.S. Department of Energy, Washington, DC. Available online at <<http://www.eia.doe.gov>>.

EIA (2014c) “Table 7 - Marketed production of natural gas in selected states and the Federal Gulf of Mexico, 2009-2014.” Natural Gas Monthly, Energy Information Administration, U.S. Department of Energy, Washington, DC. Available online at <<http://www.eia.doe.gov>>.

EIA (2014d) U.S. Natural Gas Imports by Country. Energy Information Administration, U.S. Department of Energy, Washington, DC. Available online at <<http://www.eia.doe.gov>>.

EIA (2014e) Natural Gas Gross Withdrawals and Production. Energy Information Administration, U.S. Department of Energy, Washington, DC. Available online at <<http://www.eia.doe.gov>>.

EIA (2012a) Formation crosswalk. Energy Information Administration, U.S. Department of Energy, Washington, DC. Provided July 7.

EIA (2012b) Lease Condensate Production, 1979-2012, Natural Gas Navigator. Energy Information Administration, U.S. Department of Energy, Washington, DC. Available online at <http://www.eia.gov/dnav/ng/ng_prod_lc_s1_a.htm>.

EIA (2005) “Table 5—U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1977-2003.” Energy Information Administration, Department of Energy, Washington, DC.

EIA (2004) *US LNG Markets and Uses*. Energy Information Administration, U.S. Department of Energy, Washington, DC. June 2004.

EIA (2001) “Documentation of the Oil and Gas Supply Module (OGSM).” Energy Information Administration, U.S. Department of Energy, Washington, DC.

EPA (2015a) Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2013: Update to Data Source for Well Counts. Available at <<http://www.epa.gov/climatechange/ghgemissions/usinventoryreport/natural-gas-systems.html>>.

EPA (2015b) Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2013: Update to Offshore Oil and Gas Platform Emission Estimates. Available at <<http://www.epa.gov/climatechange/ghgemissions/usinventoryreport/natural-gas-systems.html>>.

EPA (2015c) Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2013: Update to Hydraulically Fractured Gas Well Completions and Workover Estimate. Available at <<http://www.epa.gov/climatechange/ghgemissions/usinventoryreport/natural-gas-systems.html>>.

EPA (2015d) Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2013: Potential Updates to Pneumatic Controller Emissions Estimate. Available at <<http://www.epa.gov/climatechange/ghgemissions/usinventoryreport/natural-gas-systems.html>>.

EPA (2015e) Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2013: Potential Updates to Liquids Unloading Emissions Estimate. Available at <<http://www.epa.gov/climatechange/ghgemissions/usinventoryreport/natural-gas-systems.html>>.

EPA (2014) *Greenhouse Gas Reporting Program- Subpart W – Petroleum and Natural Gas Systems*. Environmental Protection Agency. Data reported as of August 18, 2014.

- EPA (2013a) *Oil and Natural Gas Sector: Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution. Background Supplemental Technical Support Document for the Final New Source Performance Standards*. Environmental Protection Agency. September 2013.
- EPA (2013b) *Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews*. Environmental Protection Agency, 40 CFR Parts 60 and 63, [EPA-HQ-OAR-2010-0505; FRL-9665-1], RIN 2060-AP76.
- EPA (2013c) Natural Gas STAR Reductions 1990-2012. Natural Gas STAR Program. September 2013.
- EPA (2013d) Updating GHG Inventory Estimate for Hydraulically Fractured Gas Well Completions and Workovers. Available online at <<http://www.epa.gov/climatechange/Downloads/ghgemissions/memo-update-emissions-for-hydraulically-workovers.pdf>>.
- EPA (1999) *Estimates of Methane Emissions from the U.S. Oil Industry (Draft Report)*. Prepared by ICF-Kaiser, Office of Air and Radiation, U.S. Environmental Protection Agency. October 1999.
- EPA/GRI (1996) *Methane Emissions from the Natural Gas Industry*. Prepared by Harrison, M., T. Shires, J. Wessels, and R. Cowgill, eds., Radian International LLC for National Risk Management Research Laboratory, Air Pollution Prevention and Control Division, Research Triangle Park, NC. EPA-600/R-96-080a.
- FERC (2014) *North American LNG Terminals*. Federal Energy Regulatory Commission, Washington, D.C.
- GTI (2001) Gas Resource Database: Unconventional Natural Gas and Gas Composition Databases. Second Edition. GRI-01/0136.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- Jackson et al., (2014) *Natural Gas Pipeline Leaks Across Washington, D.C.*, 48 Environ. Science Technology 2051-2058, January 16, 2014. Available online at <<http://pubs.acs.org/doi/abs/10.1021/es404474x>>. March 24, 2014.
- McGeehan et al., (2014) *Beneath Cities, a Decaying Tangle of Gas Pipes*, N.Y. Times, March 24, 2014. Available online at <http://www.nytimes.com/2014/03/24/nyregion/beneath-cities-a-decaying-tangle-of-gas-pipes.html?hp&_r=0>.
- Miller et al. (2013) Anthropogenic emissions of methane in the United States. November 25, 2013, doi: 10.1073/pnas.1314392110. Available online at <<http://www.pnas.org/content/early/2013/11/20/1314392110.abstract>>.
- OGJ (1997-2013) “Worldwide Gas Processing.” *Oil & Gas Journal*, PennWell Corporation, Tulsa, OK. Available online at <<http://www.ogj.com/>>.
- Payne, B & Ackley, R., (2013a) “Extended Report and Preliminary Investigation of Ground-Level Ambient Methane Levels in Manhattan, New York, NY” (11 March 2013).
- Payne, B. & Ackley, R., (2013b) “Report on a Survey of Ground-Level Ambient Methane Levels in the Vicinity of Wyalusing, Bradford County, PA,” (Nov. 2013).
- Payne, B. & Ackley, R., (2012) “Report to the Clean Air Council on 8 June, 2012 Field Inspection and Methane Sampling Survey of Parts of Leroy, Granville and Franklin Townships, Bradford County, PA,” (2012).
- Peischl, J. et al., (2013) “Quantifying Sources of Methane Using Light Alkenes in the Los Angeles Basin, CA,” J. Geophys. Res. Atmos. 118, 4974-4990, doi: 10.1002/jgrd.50413
- Petron, Gabrielle, et al. (2012) Hydrocarbon Emissions Characterization in the Colorado Front Range: A Pilot Study, Journal of Geophysical Research doi:10.1029/2011JD016360.
- Phillips, N.G., et al., (2012) “Mapping Urban Pipeline Leaks: Methane Levels Across Boston,” Environmental Pollution Available online at <<http://www.ncbi.nlm.nih.gov/pubmed/23174345>>.

PHMSA (2013a) Transmission Annuals Data. Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington, DC. Available online at <<http://phmsa.dot.gov/pipeline/library/data-stats>>.

PHMSA (2013b) Gas Distribution Annual Data. Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington, DC. Available online at <<http://phmsa.dot.gov/pipeline/library/data-stats>>.

Wyoming (2013) Wyoming Oil and Gas Conservation Commission. Available online at <<http://wogcc.state.wy.us/coalbedchart.cfm>>.

Energy Sources of Indirect Greenhouse Gases

EPA (2015) “1970 - 2014 Average annual emissions, all criteria pollutants in MS Excel.” National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, March 2015. Available online at <<http://www.epa.gov/ttn/chieftrends/index.html>>.

EPA (2003) E-mail correspondence containing preliminary ambient air pollutant data. Office of Air Pollution and the Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. December 22, 2003.

EPA (1997) *Compilation of Air Pollutant Emission Factors, AP-42*. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. October 1997.

International Bunker Fuels

Anderson, B.E., et al., *Alternative Aviation Fuel Experiment (AAFEX)*, NASA Technical Memorandum, in press, 2011.

ASTM (1989) *Military Specification for Turbine Fuels, Aviation, Kerosene Types*, NATO F-34 (JP-8) and NATO F-35. February 10, 1989. Available online at <http://test.wbdg.org/ccb/FEDMIL/t_83133d.pdf>.

Chevron (2000) *Aviation Fuels Technical Review (FTR-3)*. Chevron Products Company, Chapter 2. Available online at <http://www.chevron.com/products/prod_serv/fuels/bulletin/aviationfuel/2_at_fuel_perf.shtm>.

DHS (2008) Personal Communication with Elissa Kay, Residual and Distillate Fuel Oil Consumption (International Bunker Fuels). Department of Homeland Security, Bunker Report. January 11, 2008.

DLA Energy (2014) Unpublished data from the Defense Fuels Automated Management System (DFAMS). Defense Energy Support Center, Defense Logistics Agency, U.S. Department of Defense. Washington, D.C.

DOC (2013) Unpublished Report of Bunker Fuel Oil Laden on Vessels Cleared for Foreign Countries. Form-563. Foreign Trade Division, Bureau of the Census, U.S. Department of Commerce. Washington, D.C.

DOT (1991 through 2013) Fuel Cost and Consumption. Federal Aviation Administration, Bureau of Transportation Statistics, U.S. Department of Transportation. Washington, D.C. DAI-10.

EIA (2015) *Monthly Energy Review, February 2015*, Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2015/2).

FAA (2013) Personal Communication between FAA and Leif Hockstad for aviation emissions estimates from the Aviation Environmental Design Tool (AEDT). January 2013.

FAA (2006) *System for assessing Aviation's Global Emission (SAGE) Model*. Federal Aviation Administration's Office of Aviation Policy, Planning, and Transportation Topics, 2006.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

USAF (1998) *Fuel Logistics Planning*. U.S. Air Force pamphlet AFPAM23-221, May 1, 1998.

Wood Biomass and Ethanol Consumption

EIA (2015) *Monthly Energy Review, February 2015*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0035(2015/2).

EPA (2014) Acid Rain Program Dataset 1996-2013. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

EPA (2010) Carbon Content Coefficients Developed for EPA's Mandatory Reporting Rule. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

Lindstrom, P. (2006) Personal Communication. Perry Lindstrom, Energy Information Administration and Jean Kim, ICF International.

Industrial Processes and Product Use

IPCC (2011) Use of Models and Facility-Level Data in Greenhouse Gas Inventories (Report of IPCC Expert Meeting on Use of Models and Measurements in Greenhouse Gas Inventories 9-11 August 2010, Sydney, Australia) eds: Eggleston H.S., Srivastava N., Tanabe K., Baasansuren J., Fukuda M., Pub. IGES, Japan 2011.

Cement Production

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

U.S. Bureau of Mines (1990 through 1993) *Minerals Yearbook: Cement Annual Report*. U.S. Department of the Interior, Washington, D.C.

United States Geological Survey (USGS) (2014) *Mineral Industry Survey: Cement in June 2014*. U.S. Geological Survey, Reston, VA. August, 2014.

USGS (1995 through 2013) *Minerals Yearbook - Cement*. U.S. Geological Survey, Reston, VA.

Van Oss (2013a) 1990-2012 Clinker Production Data Provided by Hendrik van Oss (USGS) via email on November 8, 2013.

Van Oss (2013b) Personal communication. Hendrik van Oss, Commodity Specialist of the U.S. Geological Survey and Gopi Manne, Eastern Research Group, Inc. October 28, 2013.

Lime Production

Corathers (2014) Personal communication, Michael Miller, U.S. Geological Survey and Gopi Manne, Eastern Research Group, Inc. September 23, 2014.

EPA (2014) Greenhouse Gas Reporting Program (GHGRP). Aggregation of reported facility level data under Subpart S -National Lime production for calendar years 2010-2013. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Lutter (2009) Personal communication. Karen Lutter, California Air Resources Board and Daisy Wang, ERG. October 18, 2012; October 24, 2012.

Males, E. (2003) Memorandum from Eric Males, National Lime Association to Mr. William N. Irving & Mr. Leif Hockstad, Environmental Protection Agency. March 6, 2003.

Miller (2013) Personal communication, Michael Miller, U.S. Geological Survey and Gopi Manne, Eastern Research Group, Inc. October 25, 2013.

Miller (2012) Personal communication, Michael Miller, U.S. Geological Survey and Daisy Wang, Eastern Research Group, Inc. November 5, 2012.

Miner, R. and B. Upton (2002) Methods for estimating greenhouse gas emissions from lime kilns at kraft pulp mills. *Energy*. Vol. 27 (2002), p. 729-738.

Prillaman (2008 through 2012) Personal communication. Hunter Prillaman, National Lime Association and Daisy Wang, Eastern Research Group, Inc. October 24, 2012.

Seeger (2013) Memorandum from Arline M. Seeger, National Lime Association to Mr. Leif Hockstad, Environmental Protection Agency. March 15, 2013.

United States Geological Survey (USGS) (1992 through 2013) *Minerals Yearbook: Lime*. U.S. Geological Survey, Reston, VA.

Glass Production

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

OIT (2002) *Glass Industry of the Future: Energy and Environmental Profile of the U.S. Glass Industry*. Office of Industrial Technologies, U.S. Department of Energy. Washington, D.C.

U.S. Bureau of Mines (1991 and 1993a) *Minerals Yearbook: Crushed Stone Annual Report*. U.S. Department of the Interior. Washington, D.C.

U.S. EPA (2009) *Technical Support Document for the Glass Manufacturing Sector: Proposed Rule for Mandatory Reporting of Greenhouse Gases*. U.S. Environmental Protection Agency, Washington, D.C.

United States Geological Survey (USGS) (1995 through 2014a) *Minerals Yearbook: Crushed Stone Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (2014b) *Minerals Industry Surveys; Soda Ash in August 2015*. U.S. Geological Survey, Reston, VA.

USGS (1995 through 2013b) *Minerals Yearbook: Soda Ash Annual Report*. U.S. Geological Survey, Reston, VA.

Willett (2014) Personal communication, Jason Christopher Willett, U.S. Geological Survey and Gopi Manne, Eastern Research Group, Inc. September 25, 2014.

Willett (2013) Personal communication., Jason Christopher Willett, U.S. Geological Survey and Gopi Manne, Eastern Research Group, Inc. October 29, 2013.

Other Process Uses of Carbonates

U.S. Bureau of Mines (1991 and 1993a) *Minerals Yearbook: Crushed Stone Annual Report*. U.S. Department of the Interior. Washington, D.C.

U.S. Bureau of Mines (1990 through 1993b) *Minerals Yearbook: Magnesium and Magnesium Compounds Annual Report*. U.S. Department of the Interior. Washington, D.C.

United States Geological Survey (USGS) (2013a) *Magnesium Metal Mineral Commodity Summary for 2013*. U.S. Geological Survey, Reston, VA.

USGS (1995 through 2014) *Minerals Yearbook: Crushed Stone Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (1995 through 2012) *Minerals Yearbook: Magnesium Annual Report*. U.S. Geological Survey, Reston, VA.

Willett (2014) Personal communication, Jason Christopher Willett, U.S. Geological Survey and Gopi Manne, Eastern Research Group, Inc. September 25, 2014.

Ammonia Production

- ACC (2014b) *Business of Chemistry (Annual Data)*. American Chemistry Council, Arlington, VA.
- Bark (2004) *Coffeyville Nitrogen Plant* Available online at <http://www.gasification.org/uploads/downloads/Conferences/2003/07BARK.pdf>. December 15, 2004.
- Coffeyville Resources Nitrogen Fertilizers (2012) *Nitrogen Fertilizer Operations*. Available online at <http://coffeyvillegroup.com/NitrogenFertilizerOperations/index.html>.
- Coffeyville Resources Nitrogen Fertilizers (2011) *Nitrogen Fertilizer Operations*. Available online at <http://coffeyvillegroup.com/NitrogenFertilizerOperations/index.html>.
- Coffeyville Resources Nitrogen Fertilizers (2010) *Nitrogen Fertilizer Operations*. Available online at <http://coffeyvillegroup.com/NitrogenFertilizerOperations/index.html>.
- Coffeyville Resources Nitrogen Fertilizers (2009) *Nitrogen Fertilizer Operations*. Available online at <http://coffeyvillegroup.com/NitrogenFertilizerOperations/index.html>.
- Coffeyville Resources Nitrogen Fertilizers, LLC (2005 through 2007a) *Business Data*. Available online at <http://www.coffeyvillegroup.com/businessSnapshot.asp>.
- Coffeyville Resources Nitrogen Fertilizers (2007b) *Nitrogen Fertilizer Operations*. Available online at <http://coffeyvillegroup.com/nitrogenMain.aspx>.
- CVR (2014) *CVR Energy, Inc. 2013 Annual Report*. Available online at <http://cvrenergy.com>.
- CVR (2012) *CVR Energy, Inc. 2012 Annual Report*. Available online at <http://cvrenergy.com>.
- CVR (2008) *CVR Energy, Inc. 2008 Annual Report*. Available online at <http://cvrenergy.com>.
- EFMA (2000a) *Best Available Techniques for Pollution Prevention and Control in the European Fertilizer Industry*. Booklet No. 1 of 8: Production of Ammonium. Available online at <http://fertilizerseurope.com/site/index.php?id=390>.
- EFMA (2000b) *Best Available Techniques for Pollution Prevention and Control in the European Fertilizer Industry*. Booklet No. 5 of 8: Production of Urea and Urea Ammonium Nitrate. Available online at <http://fertilizerseurope.com/site/index.php?id=390>.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- U.S. Census Bureau (2011) *Current Industrial Reports Fertilizer Materials and Related Products: 2010 Summary*. Available online at http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html.
- U.S. Census Bureau (2010) *Current Industrial Reports Fertilizer Materials and Related Products: 2009 Summary*. Available online at http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html.
- U.S. Census Bureau (2009) *Current Industrial Reports Fertilizer Materials and Related Products: 2008 Summary*. Available online at http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html.
- U.S. Census Bureau (2008) *Current Industrial Reports Fertilizer Materials and Related Products: 2007 Summary*. Available online at <http://www.census.gov/cir/www/325/mq325b/mq325b075.xls>.
- U.S. Census Bureau (2007) *Current Industrial Reports Fertilizer Materials and Related Products: 2006 Summary*. Available online at <http://www.census.gov/industry/1/mq325b065.pdf>.
- U.S. Census Bureau (2006) *Current Industrial Reports Fertilizer Materials and Related Products: 2005 Summary*. Available online at <http://www.census.gov/cir/www/325/mq325b.html>.
- U.S. Census Bureau (2002, 2004, 2005) *Current Industrial Reports Fertilizer Materials and Related Products: Fourth Quarter Report Summary*. Available online at <http://www.census.gov/cir/www/325/mq325b.html>.

U.S. Census Bureau (1998 through 2002b, 2003) *Current Industrial Reports Fertilizer Materials and Related Products: Annual Reports Summary*. Available online at <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (2002a) *Current Industrial Reports Fertilizer Materials and Related Products: First Quarter 2002*. June 2002. Available online at <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (2002b) *Current Industrial Reports Fertilizer Materials and Related Products: Third Quarter 2001*. January 2002. Available online at <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (2001a) *Current Industrial Reports Fertilizer Materials and Related Products: Second Quarter 2001*. September 2001. Available online at <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (1991 through 1994) *Current Industrial Reports Fertilizer Materials Annual Report*. Report No. MQ28B. U.S. Census Bureau, Washington, D.C.

United States Geological Survey (USGS) (1994 through 2009) *Minerals Yearbook: Nitrogen*. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/>>.

USGS (2014) *2012 Minerals Yearbook: Nitrogen [Advance Release]*. September 2014. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/myb1-2012-nitro.pdf>>.

Urea Consumption for Non-Agricultural Purposes

EFMA (2000) *Best Available Techniques for Pollution Prevention and Control in the European Fertilizer Industry*. Booklet No. 5 of 8: Production of Urea and Urea Ammonium Nitrate.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

TFI (2002) *U.S. Nitrogen Imports/Exports Table*. The Fertilizer Institute. Available online at <<http://www.tfi.org/statistics/usnexim.asp>>. August 2002.

U.S. Census Bureau (2011) *Current Industrial Reports Fertilizer Materials and Related Products: 2010 Summary*. Available online at <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

U.S. Census Bureau (2010) *Current Industrial Reports Fertilizer Materials and Related Products: 2009 Summary*. Available online at <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

U.S. Census Bureau (2009) *Current Industrial Reports Fertilizer Materials and Related Products: 2008 Summary*. Available online at <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

U.S. Census Bureau (2008) *Current Industrial Reports Fertilizer Materials and Related Products: 2007 Summary*. Available online at <<http://www.census.gov/cir/www/325/mq325b/mq325b075.xls>>.

U.S. Census Bureau (2007) *Current Industrial Reports Fertilizer Materials and Related Products: 2006 Summary*. Available online at <<http://www.census.gov/industry/1/mq325b065.pdf>>.

U.S. Census Bureau (2006) *Current Industrial Reports Fertilizer Materials and Related Products: 2005 Summary*. Available online at <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (2002, 2004, 2005) *Current Industrial Reports Fertilizer Materials and Related Products: Fourth Quarter Report Summary*. Available online at <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (1998 through 2002b, 2003) *Current Industrial Reports Fertilizer Materials and Related Products: Annual Reports Summary*. Available online at <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (2002a) *Current Industrial Reports Fertilizer Materials and Related Products: First Quarter 2002*. June 2002. Available online at <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (2002b) *Current Industrial Reports Fertilizer Materials and Related Products: Third Quarter 2001*. January 2002. Available online at <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (2001a) *Current Industrial Reports Fertilizer Materials and Related Products: Second Quarter 2001*. September 2001. Available online at <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Department of Agriculture (2012) Economic Research Service Data Sets, Data Sets, U.S. Fertilizer Imports/Exports: Standard Tables. Available online at <<http://www.ers.usda.gov/data-products/fertilizer-importsexports/standard-tables.aspx>>.

U.S. ITC (2002) *United States International Trade Commission Interactive Tariff and Trade DataWeb, Version 2.5.0*. Available online at <http://dataweb.usitc.gov/scripts/user_set.asp>. August 2002.

United States Geological Survey (USGS) (2014) 2012 Minerals Yearbook: Nitrogen [Advance Release]. September 2014. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/>>.

USGS (1994 through 2009) Minerals Yearbook: Nitrogen. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/>>.

Nitric Acid Production

Climate Action Reserve (CAR) (2013), Project Report, <<https://thereserve2.apx.com/myModule/rpt/myrpt.asp?r=111>>. Accessed on January 18, 2013.

Desai (2012) Personal communication. Mausami Desai, U.S. Environmental Protection Agency, January 25, 2012.

EPA (2014) Greenhouse Gas Reporting Program (GHGRP). Aggregation of reported facility level data under Subpart V -National Nitric Acid production for calendar years 2010-2013. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

EPA (2013a) Personal communication, Mausami Desai, U.S. Environmental Protection Agency, January 23, 2013. Includes file “NitricAcidProduction_1990-2011 (EPA).xls.”

EPA (2010a, 2013b) *Draft Nitric Acid Database*. U.S. Environmental Protection Agency, Office of Air and Radiation. September, 2010.

EPA (2012) Memorandum from Mausami Desai, U.S. EPA to Mr. Bill Herz, The Fertilizer Institute. November 26, 2012.

EPA (2010b) *Available and Emerging Technologies for Reducing Greenhouse Gas Emissions from the Nitric Acid Production Industry*. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. December 2010. Available online at: <<http://www.epa.gov/nsr/ghgdocs/nitricacid.pdf>>.

EPA (1997) *Compilation of Air Pollutant Emission Factors, AP-42*. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. October 1997.

IFDC (2012) *North America Fertilizer Capacity*. September, 2012. Provided by The Fertilizer Institute (TFI) to Mausami Desai, EPA, December 10, 2012.

IPCC (2007) Forster, P., V. Ramaswamy, P. Artaxo, T. Berntsen, R. Betts, D.W. Fahey, J. Haywood, J. Lean, D.C. Lowe, G. Myhre, J. Nganga, R. Prinn, G. Raga, M. Schulz and R. Van Dorland, 2007: Changes in Atmospheric Constituents and in Radiative Forcing. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M.Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

U.S. Census Bureau (2010a) *Current Industrial Reports. Fertilizers and Related Chemicals: 2009*. “Table 1: Summary of Production of Principle Fertilizers and Related Chemicals: 2009 and 2008.” June, 2010. MQ325B(08)-5. Available online at <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

U.S. Census Bureau (2010b) Personal communication between Hilda Ward (of U.S. Census Bureau) and Caroline Cochran (of ICF International). October 26, 2010 and November 5, 2010.

U.S. Census Bureau (2009) *Current Industrial Reports. Fertilizers and Related Chemicals: 2008*. “Table 1: Shipments and Production of Principal Fertilizers and Related Chemicals: 2004 to 2008.” June, 2009. MQ325B(08)-5. Available online at <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

U.S. Census Bureau (2008) *Current Industrial Reports. Fertilizers and Related Chemicals: 2007*. “Table 1: Shipments and Production of Principal Fertilizers and Related Chemicals: 2003 to 2007.” June, 2008. MQ325B(07)-5. Available online at <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

United States Geological Survey (USGS) (2012) *2011 Minerals Yearbook: Nitrogen [Advance Release]*. December, 2012. U.S. Geological Survey, Reston, VA.

Adipic Acid Production

ACC (2014) Business of Chemistry (Annual Data). American Chemistry Council, Arlington, VA.

C&EN (1995) “Production of Top 50 Chemicals Increased Substantially in 1994.” *Chemical & Engineering News*, 73(15):17. April 10, 1995.

C&EN (1994) “Top 50 Chemicals Production Rose Modestly Last Year.” *Chemical & Engineering News*, 72(15):13. April 11, 1994.

C&EN (1993) “Top 50 Chemicals Production Recovered Last Year.” *Chemical & Engineering News*, 71(15):11. April 12, 1993.

C&EN (1992) “Production of Top 50 Chemicals Stagnates in 1991.” *Chemical & Engineering News*, 70(15): 17. April 13, 1992.

CMR (2001) “Chemical Profile: Adipic Acid.” *Chemical Market Reporter*. July 16, 2001.

CMR (1998) “Chemical Profile: Adipic Acid.” *Chemical Market Reporter*. June 15, 1998.

CW (2005) “Product Focus: Adipic Acid.” *Chemical Week*. May 4, 2005.

CW (1999) “Product Focus: Adipic Acid/Adiponitrile.” *Chemical Week*, p. 31. March 10, 1999.

Desai (2012) Personal communication. Mausami Desai, U.S. Environmental Protection Agency and Toby Mandel, ICF International, January 25, 2012.

Desai (2011a) Personal communication. Mausami Desai, U.S. Environmental Protection Agency and Roy Nobel, Ascend Performance Materials, October 18, 2011.

Desai (2011b) Personal communication. Mausami Desai, U.S. Environmental Protection Agency with Steve Zuiss of Invista, November 18, 2011.

Desai (2010) Personal communication. Mausami Desai, U.S. Environmental Protection Agency with Steve Zuiss of Invista, October 15, 2010.

EPA (2014) Greenhouse Gas Reporting Program. 2013, 2012, 2011 and 2010 Detailed Data for Additional Industry Types (Adipic Acid Tab). Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C. Accessed 11/18/2014, Available online at: <<http://www.epa.gov/ghgreporting/ghgdata/reportingdatasets.html>>.

EPA (2013) Greenhouse Gas Reporting Program data, Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C. available at <<http://ghgdata.epa.gov/ghgp/main.do>>. ICIS (2007) “Adipic Acid.” *ICIS Chemical Business Americas*. July 9, 2007.

EPA (2012) Analysis of Greenhouse Gas Reporting Program data – Subpart E (Adipic Acid), Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Reimer, R.A., Slaten, C.S., Seapan, M., Koch, T.A. and Triner, V.G. (1999) "Implementation of Technologies for Abatement of N₂O Emissions Associated with Adipic Acid Manufacture." Proceedings of the 2nd Symposium on Non-CO₂ Greenhouse Gases (NCGG-2), Noordwijkerhout, The Netherlands, 8-10 Sept. 1999, Ed. J. van Ham *et al.*, Kluwer Academic Publishers, Dordrecht, pp. 347-358.

SEI (2010) *Industrial N₂O Projects Under the CDM: Adipic Acid – A Case for Carbon Leakage?* Stockholm Environment Institute Working Paper WP-US-1006. October 9, 2010.

Thiemens, M.H., and W.C. Troglor (1991) "Nylon production; an unknown source of atmospheric nitrous oxide." *Science* 251:932-934.

VA DEQ (2010) Personal communication. Stanley Faggert, Virginia Department of Environmental Quality and Joseph Herr, ICF International. March 12, 2010.

VA DEQ (2009) Personal communication. Stanley Faggert, Virginia Department of Environmental Quality and Joseph Herr, ICF International. October 26, 2009.

VA DEQ (2006) Virginia Title V Operating Permit. Honeywell International Inc. Hopewell Plant. Virginia Department of Environmental Quality. Permit No. PRO50232. Effective January 1, 2007.

Silicon Carbide Production

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

U.S. Census Bureau (2005 through 2014) *U.S. International Trade Commission (USITC) Trade DataWeb*. Available online at <<http://dataweb.usitc.gov/>>.

United States Geological Survey (USGS) (2014) *Minerals Industry Surveys: Abrasives (Manufactured) in Fourth Quarter of 2013*. U.S. Geological Survey, Reston, VA. December 2013. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/abrasives/myb1-2012-abras.pdf>>.

USGS (1991a through 2013a) *Minerals Yearbook: Manufactured Abrasives Annual Report*. U.S. Geological Survey, Reston, VA. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/abrasives/>>.

USGS (1991b through 2011b, 2012c, and 2013b) *Minerals Yearbook: Silicon Annual Report*. U.S. Geological Survey, Reston, VA. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/silicon/>>.

Titanium Dioxide Production

Gambogi, J. (2002) Telephone communication. Joseph Gambogi, Commodity Specialist, U.S. Geological Survey and Philip Groth, ICF International. November 2002.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

United States Geological Survey (USGS) (USGS 1991 through 2014a) *Minerals Yearbook: Titanium*. U.S. Geological Survey, Reston, VA.

USGS (2014b) *Mineral Commodity Summary: Titanium and Titanium Dioxide 2013*. U.S. Geological Survey, Reston, VA.

Soda Ash Production and Consumption

Kostick, D. S. (2012) Personal communication. Dennis S. Kostick of U.S. Department of the Interior - U.S. Geological Survey, Soda Ash Commodity Specialist with Gopi Manne and Bryan Lange of Eastern Research Group, Inc. October 2012.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

United States Geological Survey (USGS) (2014) *Mineral Industry Surveys: Soda Ash in August 2014*. U.S. Geological Survey, Reston, VA.

USGS (1994 through 2013) *Minerals Yearbook: Soda Ash Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (1995a) *Trona Resources in the Green River Basin, Southwest Wyoming*. U.S. Department of the Interior, U.S. Geological Survey. Open-File Report 95-476. Wiig, Stephen, Grundy, W.D., Dyni, John R.

Petrochemical Production

ACC (2014a) *U.S. Chemical Industry Statistical Handbook*. American Chemistry Council, Arlington, VA.

ACC (2014b) *Business of Chemistry (Annual Data)*. American Chemistry Council, Arlington, VA.

ACC (2002, 2003, 2005 through 2011) *Guide to the Business of Chemistry*. American Chemistry Council, Arlington, VA.

AN (2014) *About Acrylonitrile: Production*. AN Group, Washington, D.C. Available online at: <http://www.angroup.org/about/production.cfm>

Argus JJ&A (2014). U.S. Methanol Production data for 2009-2013. Argus Media Inc., Houston, TX. Obtained via personal communication between Mausami Desai (EPA) and Argus Media Inc. Email received 01/30/2015.

EPA Greenhouse Gas Reporting Program (2014). Aggregation of reported facility level data under Subpart X - National Petrochemical production for calendar years 2010-2013. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

EPA (2008) *Technical Support Document for the Petrochemical Production Sector: Proposed Rule for Mandatory Reporting of Greenhouse Gases*. U.S. Environmental Protection Agency. September 2008.

EPA (2000) *Economic Impact Analysis for the Proposed Carbon Black Manufacturing NESHAP*, U.S. Environmental Protection Agency. Research Triangle Park, NC. EPA-452/D-00-003. May 2000.

European IPPC Bureau (2004) *Draft Reference Document on Best Available Techniques in the Large Volume Inorganic Chemicals—Solid and Others Industry*, Table 4.21. European Commission, 224. August 2004.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Jordan, J. (2011) Personal communication, Jim Jordan of Jordan Associates on behalf of the Methanol Institute and Pier LaFarge, ICF International. October 18, 2011

Johnson, G. L. (2010) Personal communication. Greg Johnson of Liskow & Lewis, on behalf of the International Carbon Black Association (ICBA) and Caroline Cochran, ICF International. September 2010.

Johnson, G. L. (2009) Personal communication. Greg Johnson of Liskow & Lewis, on behalf of the International Carbon Black Association (ICBA) and Jean Y. Kim, ICF International. October 2009.

Johnson, G. L. (2008) Personal communication. Greg Johnson of Liskow & Lewis, on behalf of the International Carbon Black Association (ICBA) and Jean Y. Kim, ICF International. November 2008.

Johnson, G. L. (2007) Personal communication. Greg Johnson of Liskow & Lewis, on behalf of the International Carbon Black Association (ICBA) and Tristan Kessler, ICF International. November 2007.

Johnson, G. L. (2006) Personal communication. Greg Johnson of Liskow & Lewis, on behalf of the International Carbon Black Association (ICBA) and Erin Fraser, ICF International. October 2006.

Johnson, G. L. (2005) Personal communication. Greg Johnson of Liskow & Lewis, on behalf of the International Carbon Black Association (ICBA) and Erin Fraser, ICF International. October 2005.

Johnson, G. L. (2003) Personal communication. Greg Johnson of Liskow & Lewis, on behalf of the International Carbon Black Association (ICBA) and Caren Mintz, ICF International November 2003.

Othmer, K. (1992) Carbon (*Carbon Black*), Vol. 4, 1045.

HCFC-22 Production

ARAP (2010) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. September 10, 2010.

ARAP (2009) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. September 21, 2009.

ARAP (2008) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. October 17, 2008.

ARAP (2007) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. October 2, 2007.

ARAP (2006) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Sally Rand of the U.S. Environmental Protection Agency. July 11, 2006.

ARAP (2005) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. August 9, 2005.

ARAP (2004) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. June 3, 2004.

ARAP (2003) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Sally Rand of the U.S. Environmental Protection Agency. August 18, 2003.

ARAP (2002) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. August 7, 2002.

ARAP (2001) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. August 6, 2001.

ARAP (2000) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Sally Rand of the U.S. Environmental Protection Agency. August 13, 2000.

ARAP (1999) Facsimile from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger Schaefer of the U.S. Environmental Protection Agency. September 23, 1999.

ARAP (1997) Letter from Dave Stirpe, Director, Alliance for Responsible Atmospheric Policy to Elizabeth Dutrow of the U.S. Environmental Protection Agency. December 23, 1997.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC (1996) *Climate Change 1995: The Science of Climate Change*. Intergovernmental Panel on Climate Change, J.T. Houghton, L.G. Meira Filho, B.A. Callander, N. Harris, A. Kattenberg, and K. Maskell (eds.). Cambridge University Press. Cambridge, United Kingdom.

RTI (2008) “Verification of Emission Estimates of HFC-23 from the Production of HCFC-22: Emissions from 1990 through 2006.” Report prepared by RTI International for the Climate Change Division. March, 2008.

RTI (1997) “Verification of Emission Estimates of HFC-23 from the Production of HCFC-22: Emissions from 1990 through 1996.” Report prepared by Research Triangle Institute for the Cadmus Group. November 25, 1997; revised February 16, 1998.

UNFCCC (2014) Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013. United Nations Framework Convention on Climate Change, Warsaw. (FCCC/CP/2013/10/Add.3). January 31, 2014. Available online at <<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf>>.

Carbon Dioxide Consumption

Allis, R. et al. (2000) *Natural CO₂ Reservoirs on the Colorado Plateau and Southern Rocky Mountains: Candidates for CO₂ Sequestration*. Utah Geological Survey and Utah Energy and Geoscience Institute. Salt Lake City, Utah.

ARI (1990 through 2010) *CO₂ Use in Enhanced Oil Recovery*. Deliverable to ICF International under Task Order 102, July 15, 2011.

ARI (2007) *CO₂-EOR: An Enabling Bridge for the Oil Transition*. Presented at “Modeling the Oil Transition—a DOE/EPA Workshop on the Economic and Environmental Implications of Global Energy Transitions.” Washington, D.C. April 20-21, 2007.

ARI (2006) *CO₂-EOR: An Enabling Bridge for the Oil Transition*. Presented at “Modeling the Oil Transition—a DOE/EPA Workshop on the Economic and Environmental Implications of Global Energy Transitions.” Washington, D.C. April 20-21, 2006.

Broadhead (2003) Personal communication. Ron Broadhead, Principal Senior Petroleum Geologist and Adjunct faculty, Earth and Environmental Sciences Department, New Mexico Bureau of Geology and Mineral Resources, and Robin Pestrusak, ICF International. September 5, 2003.

COGCC (1999 through 2014) Monthly CO₂ Produced by County. Available online at <<http://cogcc.state.co.us/COGCCReports/production.aspx?id=MonthlyCO2ProdByCounty>>. Accessed October 2014.

Denbury Resources Inc. (2002 through 2010) Annual Report: 2001 through 2009, Form 10-K. Available online at <<http://www.denbury.com/investor-relations/SEC-Filings/SEC-Filings-Details/default.aspx?FilingId=9823015>>. Accessed September 2014.

EPA (2014) Greenhouse Gas Reporting Program (GHGRP). Aggregation of Reported Facility Level Information on Greenhouse Gases Tool (FLIGHT) on Suppliers of CO₂. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C. Available online at <<http://ghgdata.epa.gov/ghgp/main.do>>. Accessed October 2014.

New Mexico Bureau of Geology and Mineral Resources (2006) Natural Accumulations of Carbon Dioxide in New Mexico and Adjacent Parts of Colorado and Arizona: Commercial Accumulation of CO₂. Available online at <<http://geoinfo.nmt.edu/staff/broadhead/CO2.html#commercial>>.

Phosphoric Acid Production

EFMA (2000) “Production of Phosphoric Acid.” *Best Available Techniques for Pollution Prevention and Control in the European Fertilizer Industry*. Booklet 4 of 8. European Fertilizer Manufacturers Association. Available online at <<http://www.efma.org/Publications/BAT%202000/Bat04/section04.asp>>.

FIPR (2003a) “Analyses of Some Phosphate Rocks.” Facsimile Gary Albarelli, the Florida Institute of Phosphate Research, Bartow, Florida, to Robert Lanza, ICF International. July 29, 2003.

FIPR (2003b) Florida Institute of Phosphate Research. Personal communication. Mr. Michael Lloyd, Laboratory Manager, FIPR, Bartow, Florida, to Mr. Robert Lanza, ICF International. August 2003.

NCDENR (2013) North Carolina Department of Environment and Natural Resources, Title V Air Permit Review for PCS Phosphate Company, Inc. – Aurora. Available online at <http://www.ncair.org/permits/permit_reviews/PCS_rev_08282012.pdf>. Accessed on January 25, 2013.

United States Geological Survey (USGS) (1994 through 2013) *Minerals Yearbook. Phosphate Rock Annual Report*. U.S. Geological Survey, Reston, VA. USGS (2012b) Personal communication between Stephen Jasinski (USGS) and Mausami Desai (EPA) on October 12, 2012.

USGS (2014) Mineral Commodity Summaries: Phosphate Rock. February 2014. U.S. Geological Survey, Reston, VA. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/phosphate_rock/mcs-2014-phosp.pdf>.

Iron and Steel Production and Metallurgical Coke Production

AIISI (2004 through 2014a) *Annual Statistical Report*, American Iron and Steel Institute, Washington, D.C.

AIISI (2006 through 2014b) Personal communication, Mausami Desai, U.S. EPA, and American Iron and Steel Institute, December 8, 2014.

AIISI (2008c) Personal communication, Mausami Desai, U.S. EPA, and Bruce Steiner, Technical Consultant with the American Iron and Steel Institute, October 2008.

DOE (2000) *Energy and Environmental Profile of the U.S. Iron and Steel Industry*. Office of Industrial Technologies, U.S. Department of Energy. August 2000. DOE/EE-0229.EIA

EIA (1998 through 2014) *Quarterly Coal Report: October-December*, Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0121.

EIA (2012a) *Annual Energy Review 2011*, Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0384(2011).

EIA (2012b) *Natural Gas Annual 2011*, Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0131(11).

EIA (2012c) Supplemental Tables on Petroleum Product detail. *Monthly Energy Review*, September 2012, Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2012/09).

EIA (1992) Coal and lignite production. *EIA State Energy Data Report 1992*, Energy Information Administration, U.S. Department of Energy, Washington, D.C.

EPA (2010) Carbon Content Coefficients Developed for EPA's Mandatory Reporting Rule. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

Fenton (2014) Personal communication. Michael Fenton, Commodity Specialist, U.S. Geological Survey and Marty Wolf, Eastern Research Group. December 19, 2014.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC/UNEP/OECD/IEA (1995) “Volume 3: Greenhouse Gas Inventory Reference Manual. Table 2-2”. *IPCC Guidelines for National Greenhouse Gas Inventories*. Intergovernmental Panel on Climate Change, United Nations Environment Programme, Organization for Economic Co-Operation and Development, International Energy Agency. IPCC WG1 Technical Support Unit, United Kingdom.

United States Geological Survey (USGS) (1991 through 2013) *USGS Minerals Yearbook – Iron and Steel Scrap*. U.S. Geological Survey, Reston, VA.

Ferroalloy Production

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Onder, H., and E.A. Bagdoyan (1993) *Everything You've Always Wanted to Know about Petroleum Coke*. Allis Mineral Systems.

Tuck, C. (2013) Personal communication. Christopher Tuck, Commodity Specialist, U.S. Geological Survey and Marty Wolf, Eastern Research Group. October 30, 2013.

United States Geological Survey (USGS) (2014) *Mineral Industry Surveys: Silicon in September 2014*. U.S. Geological Survey, Reston, VA.

USGS (1996 through 2013) *Minerals Yearbook: Silicon*. U.S. Geological Survey, Reston, VA.

Aluminum Production

EPA (2014) Greenhouse Gas Reporting Program (GHGRP). Envirofacts, Subpart: F Aluminum Production. Available online at <<http://www.epa.gov/enviro/facts/ghg/search.html>>. Accessed on: November 13, 2014.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC (1996) *Climate Change 1995: The Science of Climate Change*. Intergovernmental Panel on Climate Change, J.T. Houghton, L.G. Meira Filho, B.A. Callander, N. Harris, A. Kattenberg, and K. Maskell (eds.). Cambridge University Press. Cambridge, United Kingdom.

USAA (2014) *U.S. Primary Aluminum Production 2013*. U.S. Aluminum Association, Washington, D.C. October, 2014.

USAA (2013) *U.S. Primary Aluminum Production 2012*. U.S. Aluminum Association, Washington, D.C. January, 2013.

USAA (2012) *U.S. Primary Aluminum Production 2011*. U.S. Aluminum Association, Washington, D.C. January, 2012.

USAA (2011) *U.S. Primary Aluminum Production 2010*. U.S. Aluminum Association, Washington, D.C.

USAA (2010) *U.S. Primary Aluminum Production 2009*. U.S. Aluminum Association, Washington, D.C.

USAA (2008, 2009) *U.S. Primary Aluminum Production*. U.S. Aluminum Association, Washington, D.C.

USAA (2004, 2005, 2006) *Primary Aluminum Statistics*. U.S. Aluminum Association, Washington, D.C.

USGS (2014) *2014 Mineral Commodity Summaries: Aluminum*. U.S. Geological Survey, Reston, VA.

USGS (2007) *2006 Mineral Yearbook: Aluminum*. U.S. Geological Survey, Reston, VA.

USGS (1995, 1998, 2000, 2001, 2002) *Minerals Yearbook: Aluminum Annual Report*. U.S. Geological Survey, Reston, VA.

Magnesium Production and Processing

Bartos S., C. Laush, J. Scharfenberg, and R. Kantamaneni (2007) "Reducing greenhouse gas emissions from magnesium die casting." *Journal of Cleaner Production*, 15: 979-987, March.

EPA (2014) Envirofacts. Greenhouse Gas Reporting Program (GHGRP), Subpart T: Magnesium Production and Processing. Available online at <<http://www.epa.gov/enviro/facts/ghg/search.html>>. Accessed on: November, 2014.

Gjestland, H. and D. Magers (1996) "Practical Usage of Sulphur [Sulfur] Hexafluoride for Melt Protection in the Magnesium Die Casting Industry." #13, *1996 Annual Conference Proceedings*, International Magnesium Association. Ube City, Japan.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

RAND (2002) RAND Environmental Science and Policy Center, "Production and Distribution of SF₆ by End-Use Applications" Katie D. Smythe. *International Conference on SF₆ and the Environment: Emission Reduction Strategies*. San Diego, CA. November 21-22, 2002.

United States Geological Survey (USGS) (2002, 2003, 2005 through 2008, 2011b, 2012, and 2013) *Minerals Yearbook: Magnesium Annual Report*. U.S. Geological Survey, Reston, VA. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/magnesium/index.html#mis>>.

USGS (2010a) *Mineral Commodity Summaries: Magnesium Metal*. U.S. Geological Survey, Reston, VA. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/magnesium/mcs-2010-mgmet.pdf>>.

Lead Production

Dutrizac, J.E., V. Ramachandran, and J.A. Gonzalez (2000) *Lead-Zinc 2000*. The Minerals, Metals, and Materials Society.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Morris, D., F.R. Steward, and P. Evans (1983) *Energy Efficiency of a Lead Smelter*. *Energy* 8(5):337-349.

Sjardin, M. (2003) *CO₂ Emission Factors for Non-Energy Use in the Non-Ferrous Metal, Ferroalloys and Inorganics Industry*. Copernicus Institute. Utrecht, the Netherlands.

Ullman (1997) *Ullman's Encyclopedia of Industrial Chemistry: Fifth Edition*. Volume A5. John Wiley and Sons.

United States Geological Survey (USGS) (2014a) *2014 Mineral Commodity Summary, Lead*. U.S. Geological Survey, Reston, VA.

USGS (2014b) *Mineral Industry Surveys: Lead in June 2014*. U.S. Geological Survey, Reston, VA.

USGS (1995 through 2013) *Minerals Yearbook: Lead Annual Report*. U.S. Geological Survey, Reston, VA.

Zinc Production

Horsehead Corp. (2014) Form 10-k, Annual Report for the Fiscal Year Ended December 31, 2013. Available at: <<http://www.sec.gov/Archives/edgar/data/1385544/000138554414000003/zinc-2013123110k.htm>>. Submitted March 13, 2014.

Horsehead Corp. (2013) Form 10-k, Annual Report for the Fiscal Year Ended December 31, 2012. Available at: <<http://www.sec.gov/Archives/edgar/data/1385544/000119312513110431/0001193125-13-110431-index.htm>>. Submitted March 18, 2013.

Horsehead Corp. (2012) Form 10-k, Annual Report for the Fiscal Year Ended December, 31, 2011. Available at: <<http://www.sec.gov/Archives/edgar/data/1385544/000119312512107345/d293011d10k.htm>>. Submitted March 9, 2012.

Horsehead Corp. (2011) 10-k Annual Report for the Fiscal Year Ended December, 31 2010. Available at: <<http://google.brand.edgar-online.com/default.aspx?sym=zinc>>. Submitted March 16, 2011.

Horsehead Corp. (2010a) 10-k Annual Report for the Fiscal Year Ended December, 31 2009. Available at: <<http://google.brand.edgar-online.com/default.aspx?sym=zinc>>. Submitted March 16, 2010.

Horsehead Corp. (2010b) *Horsehead Holding Corp. Provides Update on Operations at its Monaca, PA Plant*. July 28, 2010. Available at: <<http://www.horsehead.net/pressreleases.php?showall=no&news=&ID=65>>.

Horsehead Corp (2008) 10-k Annual Report for the Fiscal Year Ended December, 31 2007. Available at: <<http://google.brand.edgar-online.com/default.aspx?sym=zinc>>. Submitted March 31, 2008.

Horsehead Corp (2007) Registration Statement (General Form) S-1. Available at <<http://google.brand.edgar-online.com/default.aspx?sym=zinc>>. Submitted April 13, 2007.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

PIZO (2014) Available at <<http://pizotech.com/index.html>>. Accessed December 9, 2014.

PIZO (2012) Available at <<http://pizotech.com/index.html>>. Accessed October 10, 2012.

Rowland (2014) Personal communication. Art Rowland, Plant Manager, Steel Dust Recycling LLC and Gopi Manne, Eastern Research Group, Inc. December 9, 2014.

Rowland (2012) Personal communication. Art Rowland, Plant Manager, Steel Dust Recycling LLC and Gopi Manne, Eastern Research Group, Inc. October 5, 2012.

Sjardin (2003) *CO₂ Emission Factors for Non-Energy Use in the Non-Ferrous Metal, Ferroalloys and Inorganics Industry*. Copernicus Institute. Utrecht, the Netherlands.

Steel Dust Recycling LLC (2013) Available at <<http://steeldust.com/home.htm>>. Accessed October 29, 2013.

United States Geological Survey (USGS) (2014b) *2014 Mineral Commodity Summary: Zinc*. U.S. Geological Survey, Reston, VA.

USGS (1995 through 2014a) *Minerals Yearbook: Zinc Annual Report*. U.S. Geological Survey, Reston, VA.

Viklund-White C. (2000) “The Use of LCA for the Environmental Evaluation of the Recycling of Galvanized Steel.” ISIJ International. Volume 40 No. 3: 292-299.

Semiconductor Manufacture

Burton, C.S., and R. Beizaie (2001) “EPA’s PFC Emissions Model (PEVM) v. 2.14: Description and Documentation” prepared for Office of Global Programs, U. S. Environmental Protection Agency, Washington, DC. November 2001.

Citigroup Smith Barney (2005) *Global Supply/Demand Model for Semiconductors*. March 2005.

Doering, R. and Nishi, Y (2000) “Handbook of Semiconductor Manufacturing Technology”, Marcel Dekker, New York, USA, 2000.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

ISMI (2009) *Analysis of Nitrous Oxide Survey Data*. Walter Worth. June 8, 2009. Available online at <<http://sematech.org/docubase/document/5015atr.pdf>>

ITRS (2007, 2008, 2011, 2013) *International Technology Roadmap for Semiconductors: 2006 Update*, January 2007; *International Technology Roadmap for Semiconductors: 2007 Edition*, January 2008; *International Technology Roadmap for Semiconductors: 2011, January 2012; Update, International Technology Roadmap for Semiconductors: 2013 Edition*, Available online at <<http://www.itrs.net/Links/2013ITRS/Home2013.htm>>. These and earlier editions and updates are available at <<http://public.itrs.net>>. Information about the number of interconnect layers for years 1990–2010 is contained in Burton and Beizaie, 2001. PEVM is updated using new editions and updates of the ITRS, which are published annually.

SEMI - Semiconductor Equipment and Materials Industry (2013) *World Fab Forecast, May 2013 Edition*.

SEMI - Semiconductor Equipment and Materials Industry (2012) *World Fab Forecast, August 2012 Edition*.

Semiconductor Industry Association (SIA) (2011) SICAS Capacity and Utilization Rates Q4 2011. Available online at <http://www.semiconductors.org/industry_statistics/semiconductor_capacity_utilization_sicas_reports/>.

Semiconductor Industry Association (SIA) (2009) STATS: SICAS Capacity and Utilization Rates Q1-Q4 2008, Q1-Q4 2009, Q1-Q4 2010, Q1-Q4 2011. Available online at <http://www.semiconductors.org/industry_statistics/semiconductor_capacity_utilization_sicas_reports/>.

U.S. EPA (2006) *Uses and Emissions of Liquid PFC Heat Transfer Fluids from the Electronics Sector*. U.S. Environmental Protection Agency, Washington, DC. EPA-430-R-06-901.

U.S. EPA Greenhouse Gas Reporting Program (GHGRP) Envirofacts. Subpart I: Electronics Manufacture. Available online at <<http://www.epa.gov/enviro/facts/ghg/search.html>>

VLSI Research, Inc. (2012) *Worldwide Silicon Demand*. August 2012.

Substitution of Ozone Depleting Substances

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Electrical Transmission and Distribution

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC (1996) *Climate Change 1995: The Science of Climate Change*. Intergovernmental Panel on Climate Change, J.T. Houghton, L.G. Meira Filho, B.A. Callander, N. Harris, A. Kattenberg, and K. Maskell (eds.). Cambridge University Press. Cambridge, United Kingdom.

Levin et al. (2010) “The Global SF₆ Source Inferred from Long-term High Precision Atmospheric Measurements and its Comparison with Emission Inventories.” *Atmospheric Chemistry and Physics*, 10: 2655–2662.

O’Connell, P., F. Heil, J. Henriot, G. Mauthe, H. Morrison, L. Neimeyer, M. Pittroff, R. Probst, J.P. Taillebois (2002) *SF₆ in the Electric Industry, Status 2000*, CIGRE. February 2002.

RAND (2004) “Trends in SF₆ Sales and End-Use Applications: 1961-2003,” Katie D. Smythe. *International Conference on SF₆ and the Environment: Emission Reduction Strategies*. RAND Environmental Science and Policy Center, Scottsdale, AZ. December 1-3, 2004.

UDI (2013). *2013 UDI Directory of Electric Power Producers and Distributors, 121st Edition*, Platts.

UDI (2010) *2010 UDI Directory of Electric Power Producers and Distributors, 118th Edition*, Platts.

UDI (2007) *2007 UDI Directory of Electric Power Producers and Distributors, 115th Edition*, Platts.

UDI (2004) *2004 UDI Directory of Electric Power Producers and Distributors, 112th Edition*, Platts.

UDI (2001) *2001 UDI Directory of Electric Power Producers and Distributors, 109th Edition*, Platts.

UNFCCC (2014) Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013. United Nations Framework Convention on Climate Change, Warsaw. (FCCC/CP/2013/10/Add.3). January 31, 2014. Available online at <<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf>>.

Nitrous Oxide from Product Use

Airgas (2012) Airgas, INC. Form 10-K. Annual Report Pursuant to Section 13 or 15 (d) of the SEC Act of 1934. Fiscal year ended March, 31, 2012. Available online at <<http://files.shareholder.com/downloads/ARG/2085226304x0xS804212-12-16/804212/filing.pdf>>.

CGA (2003) “CGA Nitrous Oxide Abuse Hotline: CGA/NWSA Nitrous Oxide Fact Sheet.” Compressed Gas Association. November 3, 2003.

CGA (2002) “CGA/NWSA Nitrous Oxide Fact Sheet.” Compressed Gas Association. March 25, 2002.

FTC (2001) Federal Trade Commission: *Analysis of Agreement Containing Consent Order To Aid Public Comment*. FTC File No. 001-0040. October, 2001. Available online at <<http://www.ftc.gov/os/2001/10/airgasanalysis.htm>>.

Heydorn, B. (1997) “Nitrous Oxide—North America.” *Chemical Economics Handbook*, SRI Consulting. May 1997.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Ottinger (2014) Personal communication. Deborah Ottinger (CCD, U.S. EPA) and Mausami Desai (U.S. EPA). Email received on January 29, 2014.

Tupman, M. (2003) Personal communication .Martin Tupman, Airgas Nitrous Oxide and Daniel Lieberman, ICF International. August 8, 2003.

Industrial Processes and Product Use Sources of Indirect Greenhouse Gases

EPA (2015) “1970 - 2014 Average annual emissions, all criteria pollutants in MS Excel.” National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, March 2015. Available online at <<http://www.epa.gov/ttn/chieftrends/index.html>>.

EPA (2003) E-mail correspondence containing preliminary ambient air pollutant data. Office of Air Pollution and the Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. December 22, 2003.

EPA (1997) *Compilation of Air Pollutant Emission Factors, AP-42*. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. October 1997.

Agriculture

Enteric Fermentation

- Archibeque, S. (2011) Personal Communication. Shawn Archibeque, Colorado State University, Fort Collins, Colorado and staff at ICF International.
- Crutzen, P.J., I. Aselmann, and W. Seiler (1986) Methane Production by Domestic Animals, Wild Ruminants, Other Herbivores, Fauna, and Humans. *Tellus*, 38B:271-284.
- Donovan, K. (1999) Personal Communication. Kacey Donovan, University of California at Davis and staff at ICF International.
- Doren, P.E., J. F. Baker, C. R. Long and T. C. Cartwright (1989) Estimating Parameters of Growth Curves of Bulls, *J Animal Science* 67:1432-1445.
- Enns, M. (2008) Personal Communication. Dr. Mark Enns, Colorado State University and staff at ICF International.
- Galyean and Gleghorn (2001) Summary of the 2000 Texas Tech University Consulting Nutritionist Survey. Texas Tech University. Available online at <http://www.depts.ttu.edu/afs/burnett_center/progress_reports/bc12.pdf>. June 2009.
- Holstein Association (2010) *History of the Holstein Breed* (website). Available online at <http://www.holsteinusa.com/holstein_breed/breedhistory.html>. Accessed September 2010.
- ICF (2006) *Cattle Enteric Fermentation Model: Model Documentation*. Prepared by ICF International for the Environmental Protection Agency. June 2006.
- ICF (2003) *Uncertainty Analysis of 2001 Inventory Estimates of Methane Emissions from Livestock Enteric Fermentation in the U.S.* Memorandum from ICF International to the Environmental Protection Agency. May 2003.
- IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- Johnson, D. (2002) Personal Communication. Don Johnson, Colorado State University, Fort Collins, and ICF International.
- Johnson, D. (1999) Personal Communication. Don Johnson, Colorado State University, Fort Collins, and David Conneely, ICF International.
- Johnson, K. (2010) Personal Communication. Kris Johnson, Washington State University, Pullman, and ICF International.
- Kebreab E., K. A. Johnson, S. L. Archibeque, D. Pape, and T. Wirth (2008) Model for estimating enteric methane emissions from United States dairy and feedlot cattle. *J. Anim. Sci.* 86: 2738-2748.
- Lippke, H., T. D. Forbes, and W. C. Ellis. (2000) Effect of supplements on growth and forage intake by stocker steers grazing wheat pasture. *J. Anim. Sci.* 78:1625-1635
- National Bison Association (2011) Handling & Carcass Info (on website). Available online at: <<http://www.bisoncentral.com/about-bison/handling-and-carcass-info>>. Accessed August 16, 2011.
- National Bison Association (1999) Total Bison Population—1999. Report provided during personal email communication with Dave Carter, Executive Director, National Bison Association July 19, 2011.
- NRC (1999) *1996 Beef NRC: Appendix Table 22*. National Research Council.

- NRC (1984) *Nutrient requirements for beef cattle (6th Ed.)*. National Academy Press, Washington, DC.
- Pinchak, W.E., D. R. Tolleson, M. McCloy, L. J. Hunt, R. J. Gill, R. J. Ansley, and S. J. Bevers (2004) Morbidity effects on productivity and profitability of stocker cattle grazing in the southern plains. *J. Anim. Sci.* 82:2773-2779.
- Platter, W. J., J. D. Tatum, K. E. Belk, J. A. Scanga, and G. C. Smith (2003) Effects of repetitive use of hormonal implants on beef carcass quality, tenderness, and consumer ratings of beef palatability. *J. Anim. Sci.* 81:984-996.
- Preston, R.L. (2010) What's The Feed Composition Value of That Cattle Feed? *Beef Magazine*, March 1, 2010. Available at: <<http://beefmagazine.com/nutrition/feed-composition-tables/feed-composition-value-cattle--0301>>.
- Skogerboe, T. L., L. Thompson, J. M. Cunningham, A. C. Brake, V. K. Karle (2000) The effectiveness of a single dose of doramectin pour-on in the control of gastrointestinal nematodes in yearling stocker cattle. *Vet. Parasitology* 87:173-181.
- Soliva, C.R. (2006) Report to the attention of IPCC about the data set and calculation method used to estimate methane formation from enteric fermentation of agricultural livestock population and manure management in Swiss agriculture. On behalf of the Federal Office for the Environment (FOEN), Berne, Switzerland,
- USDA (2014) *Quick Stats: Agricultural Statistics Database*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. Available online at <<http://quickstats.nass.usda.gov/>>. Accessed August 13, 2014.
- USDA (2007) *Census of Agriculture: 2007 Census Report*. United States Department of Agriculture. Available online at: <<http://www.agcensus.usda.gov/Publications/2007/index.asp>>.
- USDA (2002) *Census of Agriculture: 2002 Census Report*. United States Department of Agriculture. Available online at: <<http://www.agcensus.usda.gov/Publications/2002/index.asp>>.
- USDA (1997) *Census of Agriculture: 1997 Census Report*. United States Department of Agriculture. Available online at: <<http://www.agcensus.usda.gov/Publications/1997/index.asp>>. Accessed July 18, 2011.
- USDA (1996) *Beef Cow/Calf Health and Productivity Audit (CHAPA): Forage Analyses from Cow/Calf Herds in 18 States*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. Available online at <<http://www.aphis.usda.gov/vs/ceah/cahm>>. March 1996.
- USDA (1992) *Census of Agriculture: 1992 Census Report*. United States Department of Agriculture. Available online at: <<http://www.agcensus.usda.gov/Publications/1992/index.asp>>. Accessed July 18, 2011.
- USDA:APHIS:VS (2010) *Beef 2007–08, Part V: Reference of Beef Cow-calf Management Practices in the United States, 2007–08*. USDA–APHIS–VS, CEAH. Fort Collins, CO.
- USDA:APHIS:VS (2002) *Reference of 2002 Dairy Management Practices*. USDA–APHIS–VS, CEAH. Fort Collins, CO. Available online at <<http://www.aphis.usda.gov/vs/ceah/cahm>>.
- USDA:APHIS:VS (1998) *Beef '97, Parts I-IV*. USDA–APHIS–VS, CEAH. Fort Collins, CO. Available online at <http://www.aphis.usda.gov/animal_health/nahms/beefcowcalf/index.shtml#beef97>
- USDA:APHIS:VS (1996) *Reference of 1996 Dairy Management Practices*. USDA–APHIS–VS, CEAH. Fort Collins, CO. Available online at <<http://www.aphis.usda.gov/vs/ceah/cahm>>.
- USDA:APHIS:VS (1994) *Beef Cow/Calf Health and Productivity Audit*. USDA–APHIS–VS, CEAH. Fort Collins, CO. Available online at <<http://www.aphis.usda.gov/vs/ceah/cahm>>.
- USDA:APHIS:VS (1993) *Beef Cow/Calf Health and Productivity Audit*. USDA–APHIS–VS, CEAH. Fort Collins, CO. August 1993. Available online at <<http://www.aphis.usda.gov/vs/ceah/cahm>>.
- Vasconcelos and Galyean (2007) Nutritional recommendations of feedlot consulting nutritionists: The 2007 Texas Tech University Study. *J. Anim. Sci.* 85:2772-2781.

Manure Management

Anderson, S. (2000) Personal Communication. Steve Anderson, Agricultural Statistician, National Agriculture Statistics Service, U.S. Department of Agriculture and Lee-Ann Tracy, ERG. Washington, D.C. May 31, 2000.

- ASAE (1998) *ASAE Standards 1998, 45th Edition*. American Society of Agricultural Engineers. St. Joseph, MI.
- Bryant, M.P., V.H. Varel, R.A. Frobish, and H.R. Isaacson (1976) In H.G. Schlegel (ed.); *Seminar on Microbial Energy Conversion*. E. Goltz KG. Göttingen, Germany.
- Bush, E. (1998) Personal communication with Eric Bush, Centers for Epidemiology and Animal Health , U.S. Department of Agriculture regarding *National Animal Health Monitoring System's (NAHMS) Swine '95 Study*.
- Deal, P. (2000) Personal Communication. Peter B. Deal, Rangeland Management Specialist, Florida Natural Resource Conservation Service and Lee-Ann Tracy, ERG. June 21, 2000.
- EPA (2012) AgSTAR Anaerobic Digester Database. Available online at: <<http://www.epa.gov/agstar/projects/index.html#database>>.
- EPA (2008) *Climate Leaders Greenhouse Gas Inventory Protocol Offset Project Methodology for Project Type Managing Manure with Biogas Recovery Systems*. Available online at <http://www.epa.gov/climateleaders/documents/resources/ClimateLeaders_DraftManureOffsetProtocol.pdf>.
- EPA (2006) *AgSTAR Digest*. Office of Air and Radiation, U.S. Environmental Protection Agency. Washington, D.C. Winter 2006. Available online at <<http://www.epa.gov/agstar/pdf/2006digest.pdf>>. Retrieved July 2006.
- EPA (2005) *National Emission Inventory—Ammonia Emissions from Animal Agricultural Operations, Revised Draft Report*. U.S. Environmental Protection Agency. Washington, D.C. April 22, 2005. Available online at <ftp://ftp.epa.gov/EmisInventory/2002finalnei/documentation/nonpoint/nh3inventory_draft_042205.pdf>. Retrieved August 2007.
- EPA (2003) *AgSTAR Digest*. Office of Air and Radiation, U.S. Environmental Protection Agency. Washington, D.C. Winter 2003. Available online at <<http://www.epa.gov/agstar/pdf/2003digest.pdf>>. Retrieved July 2006.
- EPA (2002a) *Development Document for the Final Revisions to the National Pollutant Discharge Elimination System (NPDES) Regulation and the Effluent Guidelines for Concentrated Animal Feeding Operations (CAFOS)*. U.S. Environmental Protection Agency. EPA-821-R-03-001. December 2002.
- EPA (2002b) *Cost Methodology for the Final Revisions to the National Pollutant Discharge Elimination System Regulation and the Effluent Guidelines for Concentrated Animal Feeding Operations*. U.S. Environmental Protection Agency. EPA-821-R-03-004. December 2002.
- EPA (2000) *AgSTAR Digest*. Office of Air and Radiation, U.S. Environmental Protection Agency. Washington, D.C. Spring 2000. Available online at: <<http://www.epa.gov/agstar/news-events/digest/2000digest.pdf>>.
- EPA (1992) *Global Methane Emissions from Livestock and Poultry Manure*, Office of Air and Radiation, U.S. Environmental Protection Agency. February 1992.
- ERG (2010a) “Typical Animal Mass Values for Inventory Swine Categories.” Memorandum to EPA from ERG. July 19, 2010.
- ERG (2010b) Telecon with William Boyd of USDA NRCS and Cortney Itle of ERG Concerning Updated VS and Nex Rates. August 8, 2010.
- ERG (2010c) “Updating Current Inventory Manure Characteristics new USDA Agricultural Waste Management Field Handbook Values.” Memorandum to EPA from ERG. August 13, 2010.
- ERG (2008) “Methodology for Improving Methane Emissions Estimates and Emission Reductions from Anaerobic Digestion System for the 1990-2007 Greenhouse Gas Inventory for Manure Management.” Memorandum to EPA from ERG. August 18, 2008.
- ERG (2003a) “Methodology for Estimating Uncertainty for Manure Management Greenhouse Gas Inventory.” Contract No. GS-10F-0036, Task Order 005. Memorandum to EPA from ERG, Lexington, MA. September 26, 2003.
- ERG (2003b) “Changes to Beef Calves and Beef Cows Typical Animal Mass in the Manure Management Greenhouse Gas Inventory.” Memorandum to EPA from ERG, October 7, 2003.
- ERG (2001) *Summary of development of MDP Factor for methane conversion factor calculations*. ERG, Lexington, MA. September 2001.

- ERG (2000a) *Calculations: Percent Distribution of Manure for Waste Management Systems*. ERG, Lexington, MA. August 2000.
- ERG (2000b) *Discussion of Methodology for Estimating Animal Waste Characteristics* (Summary of B_o Literature Review). ERG, Lexington, MA. June 2000.
- Garrett, W.N. and D.E. Johnson (1983) "Nutritional energetics of ruminants." *Journal of Animal Science*, 57(suppl.2):478-497.
- Groffman, P.M., R. Brumme, K. Butterbach-Bahl, K.E. Dobbie, A.R. Mosier, D. Ojima, H. Papen, W.J. Parton, K.A. Smith, and C. Wagner-Riddle (2000) "Evaluating annual nitrous oxide fluxes at the ecosystem scale." *Global Biogeochemical Cycles*, 14(4):1061-1070.
- Hashimoto, A.G. (1984) "Methane from Swine Manure: Effect of Temperature and Influent Substrate Composition on Kinetic Parameter (k)." *Agricultural Wastes*, 9:299-308.
- Hashimoto, A.G., V.H. Varel, and Y.R. Chen (1981) "Ultimate Methane Yield from Beef Cattle Manure; Effect of Temperature, Ration Constituents, Antibiotics and Manure Age." *Agricultural Wastes*, 3:241-256.
- Hill, D.T. (1984) "Methane Productivity of the Major Animal Types." *Transactions of the ASAE*, 27(2):530-540.
- Hill, D.T. (1982) "Design of Digestion Systems for Maximum Methane Production." *Transactions of the ASAE*, 25(1):226-230.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- Johnson, D. (2000) Personal Communication. Dan Johnson, State Water Management Engineer, California Natural Resource Conservation Service and Lee-Ann Tracy, ERG. June 23, 2000.
- Lange, J. (2000) Personal Communication. John Lange, Agricultural Statistician, U.S. Department of Agriculture, National Agriculture Statistics Service and Lee-Ann Tracy, ERG. Washington, D.C. May 8, 2000.
- Meagher, M. (1986). *Bison bison*. *Mammalian Species*. 266: 1-8.
- Miller, P. (2000) Personal Communication. Paul Miller, Iowa Natural Resource Conservation Service and Lee-Ann Tracy, ERG. June 12, 2000.
- Milton, B. (2000) Personal Communication. Bob Milton, Chief of Livestock Branch, U.S. Department of Agriculture, National Agriculture Statistics Service and Lee-Ann Tracy, ERG. May 1, 2000.
- Moffroid, K and D. Pape. (2014) *1990-2013 Volatile Solids and Nitrogen Excretion Rates*. Dataset to EPA from ICF International. August 2014.
- Morris, G.R. (1976) *Anaerobic Fermentation of Animal Wastes: A Kinetic and Empirical Design Fermentation*. M.S. Thesis. Cornell University.
- National Bison Association (1999) Total Bison Population—1999. Report provided during personal email communication with Dave Carter, Executive Director, National Bison Association July 19, 2011.
- NOAA (2014) *National Climate Data Center (NCDC)*. Available online at <ftp://ftp.ncdc.noaa.gov/pub/data/cirs/climdiv/> (for all states except Alaska and Hawaii) and <ftp://ftp.ncdc.noaa.gov/pub/data/g sod/2008/>. (for Alaska and Hawaii). September 2014.
- Ott, S.L. (2000) *Dairy '96 Study*. Stephen L. Ott, Animal and Plant Health Inspection Service, U.S. Department of Agriculture. June 19, 2000.
- Poe, G., N. Bills, B. Bellows, P. Crosscombe, R. Koelsch, M. Kreher, and P. Wright (1999) *Staff Paper Documenting the Status of Dairy Manure Management in New York: Current Practices and Willingness to Participate in Voluntary Programs*. Department of Agricultural, Resource, and Managerial Economics; Cornell University, Ithaca, New York, September.
- Robel, J. (2014) Personal Communication. Jeff Robel, Physical Scientist, National Climate Data Center and Sara Matasci, ERG. September 30, 2014.

- Safley, L.M., Jr. (2000) Personal Communication. Deb Bartram, ERG and L.M. Safley, President, Agri-Waste Technology. June and October 2000.
- Safley, L.M., Jr. and P.W. Westerman (1990) "Psychrophilic anaerobic digestion of animal manure: proposed design methodology." *Biological Wastes*, 34:133-148.
- Stettler, D. (2000) Personal Communication. Don Stettler, Environmental Engineer, National Climate Center, Oregon Natural Resource Conservation Service and Lee-Ann Tracy, ERG. June 27, 2000.
- Sweeten, J. (2000) Personal Communication. John Sweeten, Texas A&M University and Indra Mitra, ERG. June 2000.
- UEP (1999) *Voluntary Survey Results—Estimated Percentage Participation/Activity*. Caged Layer Environmental Management Practices, Industry data submissions for EPA profile development, United Egg Producers and National Chicken Council. Received from John Thorne, Capitolink. June 2000.
- USDA (2014a) *1987, 1992, 1997, 2002, 2007, and 2012 Census of Agriculture*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. Available online at <<http://www.nass.usda.gov/census/>>. May 2014.
- USDA (2014b) *Quick Stats: Agricultural Statistics Database*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. Available online at <<http://quickstats.nass.usda.gov/>>.
- USDA (2014c) *Chicken and Eggs 2013 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2014. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2014d) *Poultry - Production and Value 2013 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2014. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2013a) *Chicken and Eggs 2012 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2013. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2013b) *Poultry - Production and Value 2012 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2013. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2012a) *Chicken and Eggs 2011 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2012. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2012b) *Poultry - Production and Value 2011 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2012. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2011a) *Chicken and Eggs 2010 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2011. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2011b) *Poultry - Production and Value 2010 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2011. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2010a) *Chicken and Eggs 2009 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2010. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2010b) *Poultry - Production and Value 2009 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2010. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.

- USDA (2009a) *Chicken and Eggs 2008 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2009. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2009b) *Poultry - Production and Value 2008 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2009. Available online at <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2009c) *Chicken and Eggs – Final Estimates 2003-2007*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. March 2009. Available online at <<http://usda.mannlib.cornell.edu/usda/nass/SB980/sb1024.pdf>>.
- USDA (2009d) *Poultry Production and Value—Final Estimates 2003-2007*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. May 2009. Available online at <<http://usda.mannlib.cornell.edu/usda/nass/SB994/sb1028.pdf>>.
- USDA (2008) *Agricultural Waste Management Field Handbook, National Engineering Handbook (NEH)*, Part 651. Natural Resources Conservation Service, U.S. Department of Agriculture.
- USDA (2004a) *Chicken and Eggs—Final Estimates 1998-2003*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2004. Available online at <<http://usda.mannlib.cornell.edu/reports/general/sb/>>.
- USDA (2004b) *Poultry Production and Value—Final Estimates 1998-2002*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2004. Available online at <<http://usda.mannlib.cornell.edu/reports/general/sb/>>.
- USDA (1999) *Poultry Production and Value—Final Estimates 1994-97*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. March 1999. Available online at <<http://usda.mannlib.cornell.edu/reports/general/sb/>>.
- USDA (1998) *Chicken and Eggs—Final Estimates 1994-97*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. December 1998. Available online at <<http://usda.mannlib.cornell.edu/reports/general/sb/>>.
- USDA (1996) *Agricultural Waste Management Field Handbook, National Engineering Handbook (NEH)*, Part 651. Natural Resources Conservation Service, U.S. Department of Agriculture. July 1996.
- USDA (1995a) *Poultry Production and Value—Final Estimates 1988-1993*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. March 1995. Available online at <<http://usda.mannlib.cornell.edu/reports/general/sb/>>.
- USDA (1995b) *Chicken and Eggs—Final Estimates 1988-1993*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. December 1995. Available online at <<http://usda.mannlib.cornell.edu/reports/general/sb/>>.
- USDA (1994) *Sheep and Goats—Final Estimates 1989-1993*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. January 31, 1994. Available online at <<http://usda.mannlib.cornell.edu/reports/general/sb/>>.
- USDA, APHIS (2003) *Sheep 2001, Part I: Reference of Sheep Management in the United States, 2001 and Part IV: Baseline Reference of 2001 Sheep Feedlot Health and Management*. USDA-APHIS-VS. Fort Collins, CO. #N356.0702. <http://www.aphis.usda.gov/animal_health/nahms/sheep/index.shtml#sheep2001>.
- USDA, APHIS (2000) *Layers '99—Part II: References of 1999 Table Egg Layer Management in the U.S.* USDA-APHIS-VS. Fort Collins, CO. <http://www.aphis.usda.gov/animal_health/nahms/poultry/downloads/layers99/Layers99_dr_PartII.pdf>.
- USDA, APHIS (1996) *Swine '95: Grower/Finisher Part II: Reference of 1995 U.S. Grower/Finisher Health & Management Practices*. USDA-APHIS-VS. Fort Collins, CO. <http://www.aphis.usda.gov/animal_health/nahms/swine/downloads/swine95/Swine95_dr_PartII.pdf>.
- Wright, P. (2000) Personal Communication. Lee-Ann Tracy, ERG and Peter Wright, Cornell University, College of Agriculture and Life Sciences. June 23, 2000.

Rice Cultivation

- Anderson, M. (2008 through 2014) Email correspondence. Monte Anderson, Oklahoma Farm Service Agency and ICF International.
- Baldwin, K., E. Dohman, N. Childs and L. Forman (2010). Consolidation and Structural Change in the U.S. Rice Sector. Economic Research Service: U.S. Department of Agriculture, Washington D.C. Available online at <http://www.ers.usda.gov/media/111364/rcs11d01_1_.pdf>. September 2013.
- Baicich, P. (2013). The Birds and Rice Connection. *Bird Watcher's Digest*. Available online at <<http://www.usarice.com/doclib/194/6867.pdf>>.
- Beighley, D. (2011 through 2012) Email correspondence. Donn Beighley, Southeast Missouri State University, Department of Agriculture and ICF International.
- Bossio, D.A., W. Horwath, R.G. Mutters, and C. van Kessel (1999) "Methane pool and flux dynamics in a rice field following straw incorporation." *Soil Biology and Biochemistry*, 31:1313-1322.
- Buehring, N. (2009 through 2011) Email correspondence. Nathan Buehring, Assistant Professor and Extension Rice Specialist, Mississippi State University Delta Branch Exp. Station and ICF International.
- Byrd, G. T., F. M. Fisher, & R. L. Sass. (2000) Relationships between methane production and emission to lacunal methane concentrations in rice. *Global biogeochemical cycles*, 14(1), 73-83.
- California Air Resources Board (2003) 2003 Progress Report on the Phase-down of Rice Straw Burning in the Sacramento Valley Air Basin. Available online at <<http://www.arb.ca.gov/smp/rice/phsdown/rice2003.pdf>>.
- Cantens, G. (2004 through 2005) Personal Communication. Janet Lewis, Assistant to Gaston Cantens, Vice President of Corporate Relations, Florida Crystals Company and ICF International.
- Deren, C. (2002) Personal Communication and Dr. Chris Deren, Everglades Research and Education Centre at the University of Florida and Caren Mintz, ICF International. August 15, 2002.
- Environmental Defense Fund (2011) Creating and Quantifying Carbon Credits from Voluntary Practices on Rice. Available online at <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044916.pdf>.
- Fife, L. (2011) Email correspondence. Les Fife, Sacramento Valley Agricultural Burning Coordinator and ICF International.
- Fitzgerald, G.J., K. M. Scow & J. E. Hill (2000) "Fallow Season Straw and Rice Management Effects on Methane Emissions in California Rice." *Global biogeochemical cycles*, 14 (3), 767-776.
- Gonzalez, R. (2007 through 2014) Email correspondence. Rene Gonzalez, Plant Manager, Sem-Chi Rice Company and ICF International.
- Hardke, J. (2014) Personal Communication. Dr. Jarrod Hardke, Rice Extension Agronomist at the University of Arkansas Rice Research and Extension Center and Kirsten Jaglo, ICF International. September 11, 2014.
- Hardke, J. (2013) Email correspondence. Dr. Jarrod Hardke, Rice Extension Agronomist at the University of Arkansas Rice Research and Extension Center and Cassandra Snow, ICF International. July 15, 2013.
- Holzappel-Pschorn, A., R. Conrad, and W. Seiler (1985) "Production, Oxidation, and Emissions of Methane in Rice Paddies." *FEMS Microbiology Ecology*, 31:343-351.
- IPCC (2007) *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report (AR4) of the IPCC*. The Intergovernmental Panel on Climate Change, R.K. Pachauri, A. Resinger (eds.). Geneva, Switzerland.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- IPCC/UNEP/OECD/IEA (1997) *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*. Intergovernmental Panel on Climate Change, United Nations Environment Programme, Organization for Economic Co-Operation and Development, International Energy Agency, Paris, France.

Kirstein, A. (2003 through 2004, 2006) Personal Communication. Arthur Kirstein, Coordinator, Agricultural Economic Development Program, Palm Beach County Cooperative Extension Service, FL and ICF International.

Klosterboer, A. (1997, 1999 through 2003) Personal Communication. Arlen Klosterboer, retired Extension Agronomist, Texas A&M University and ICF International. July 7, 2003.

Kongchum, M. (2005). Effect of Plant Residue and Water Management Practices on Soil Redox Chemistry, Methane Emission, and Rice Productivity. LSU PhD Thesis.

Lee, D. (2003 through 2007) Email correspondence. Danny Lee, OK Farm Service Agency and ICF International.

Lindau, C.W. and P.K. Bollich (1993) "Methane Emissions from Louisiana First and Ratoon Crop Rice." *Soil Science*, 156:42-48.

Lindau, C.W., P.K. Bollich, and R.D. DeLaune (1995) "Effect of Rice Variety on Methane Emission from Louisiana Rice." *Agriculture, Ecosystems and Environment*, 54:109-114.

Linscombe, S. (1999, 2001 through 2014) Email correspondence. Steve Linscombe, Professor with the Rice Research Station at Louisiana State University Agriculture Center and ICF International.

McMillan, A., M. L.Goulden, and S.C. Tyler. (2007) Stoichiometry of CH₄ and CO₂ flux in a California rice paddy. *Journal of Geophysical Research: Biogeosciences* (2005–2012), 112(G1).

Mutters, C. (2001 through 2005) Personal Communication. Mr. Cass Mutters, Rice Farm Advisor for Butte, Glen, and Tehama Counties University of California, Cooperative Extension Service and ICF International.

Rogers, C.W., K. R. Brye, R.J. Norman, T. Gasnier, D. Frizzell, and J. Branson. (2011). Methane Emissions from a Silt-Loam Soil Under Direct-Seeded, Delayed-Flood Rice Management. B.R. Wells Rice Research Studies 2011. 306-315.

Sass, R. L. (2001). CH₄ Emissions from Rice Agriculture. Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories. 399-417. Available at <http://www.ipcc-nggip.iges.or.jp/public/gp/bgp/4_7_CH4_Rice_Agriculture.pdf>.

Sass, R. L., J.A. Andrews, A. Ding and F.M. Fisher Jr. (2002a). Spatial and temporal variability in methane emissions from rice paddies: Implications for assessing regional methane budgets. *Nutrient Cycling in Agroecosystems*, 64(1-2), 3-7.

Sass, R. L., F.M. Fisher, and J. A. Andrews. (2002b). Spatial variability in methane emissions from a Texas rice field with some general implications. *Global biogeochemical cycles*, 16(1), 15-1.

Sass, R.L., F.M. Fisher, P.A. Harcombe, and F.T. Turner (1991a) "Mitigation of Methane Emissions from Rice Fields: Possible Adverse Effects of Incorporated Rice Straw." *Global Biogeochemical Cycles*, 5:275-287.

Sass, R.L., F.M. Fisher, F.T. Turner, and M.F. Jund (1991b) "Methane Emissions from Rice Fields as Influenced by Solar Radiation, Temperature, and Straw Incorporation." *Global Biogeochemical Cycles*, 5:335-350.

Sass, R.L., F.M. Fisher, P.A. Harcombe, and F.T. Turner (1990) "Methane Production and Emissions in a Texas Rice Field." *Global Biogeochemical Cycles*, 4:47-68.

Schueneman, T. (1997, 1999 through 2001) Personal Communication. Tom Schueneman, Agricultural Extension Agent, Palm Beach County, FL and ICF International.

Slaton, N. (1999 through 2001) Personal Communication. Nathan Slaton, Extension Agronomist—Rice, University of Arkansas Division of Agriculture Cooperative Extension Service and ICF International.

Stansel, J. (2004 through 2005) Email correspondence. Dr. Jim Stansel, Resident Director and Professor Emeritus, Texas A&M University Agricultural Research and Extension Center and ICF International.

Street, J. (1999 through 2003) Personal Communication. Joe Street, Rice Specialist, Mississippi State University, Delta Research Center and ICF International.

Texas Agricultural Experiment Station (2007 through 2014) *Texas Rice Acreage by Variety*. Agricultural Research and Extension Center, Texas Agricultural Experiment Station, Texas A&M University System. Available online at <<http://beaumont.tamu.edu/CropSurvey/CropSurveyReport.aspx>>.

Texas Agricultural Experiment Station (2006) *2005 - Texas Rice Crop Statistics Report*. Agricultural Research and Extension Center, Texas Agricultural Experiment Station, Texas A&M University System, p. 8. Available online at <http://beaumont.tamu.edu/eLibrary/TRRFReport_default.htm>.

USDA (2005 through 2014) *Crop Production Summary*. National Agricultural Statistics Service, Agricultural Statistics Board, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu>>.

USDA (2012) *Summary of USDA-ARS Research on the Interrelationship of Genetic and Cultural Management Factors That Impact Grain Arsenic Accumulation in Rice*. News and Events. Agricultural Research Service, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://www.ars.usda.gov/is/pr/2012/120919.htm>>. September 2013.

USDA (2003) *Field Crops, Final Estimates 1997-2002*. Statistical Bulletin No. 982. National Agricultural Statistics Service, Agricultural Statistics Board, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/usda/reports/general/sb/>>. September 2005.

USDA (1998) *Field Crops Final Estimates 1992-1997*. Statistical Bulletin Number 947 a. National Agricultural Statistics Service, Agricultural Statistics Board, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/>>. July 2001.

USDA (1994) *Field Crops Final Estimates 1987-1992*. Statistical Bulletin Number 896. National Agricultural Statistics Service, Agricultural Statistics Board, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/>>. July 2001.

Vayssières, M. (2013). Email correspondance. Marc Vayssières, Ph.D. Cal/EPA Air Resources Board Air Quality Planning & Science Division and Rachel Steele, ICF International. January 2014.

Walker, T. (2005, 2007 through 2008) Email correspondence. Tim Walker, Assistant Research Professor, Mississippi State University Delta Branch Exp. Station and ICF International.

Wang, J.J., S.K. Dodla, S. Viator, M. Kongchum, S. Harrison, S. D. Mudi, S. Liu, Z. Tian (2013). Agriculture Field Management Practices and Greenhouse Gas Emissions from Louisiana Soils. *Louisiana Agriculture*, Spring 2013: 8-9. Available online at <<http://www.lsuagcenter.com/NR/rdonlyres/78D8B61A-96A8-49E1-B2EF-BA1D4CE4E698/93016/v56no2Spring2013.pdf>>.

Wilson, C. (2002 through 2007, 2009 through 2012) Personal Communication. Dr. Chuck Wilson, Rice Specialist at the University of Arkansas Cooperative Extension Service and ICF International.

Yao, H., J. Jingyan, Z. Lianggang, R. L. Sass, and F. M. Fisher. (2001). Comparison of field measurements of CH₄ emission from rice cultivation in Nanjing, China and in Texas, USA. *Advances in Atmospheric Sciences*, 18(6), 1121-1130.

Young, M. (2013) *Rice and Ducks*. Ducks Unlimited, Memphis, TN. Available online at <<http://www.ducks.org/conservation/farm-bill/rice-and-ducks---by-matt-young>>.

Agricultural Soil Management

AAPFCO (2008 through 2014) *Commercial Fertilizers*. Association of American Plant Food Control Officials. University of Missouri. Columbia, MO.

AAPFCO (1995 through 2000a, 2002 through 2007) *Commercial Fertilizers*. Association of American Plant Food Control Officials. University of Kentucky. Lexington, KY.

Bateman, E. J. and E. M. Baggs (2005) "Contributions of nitrification and denitrification to N₂O emissions from soils at different water-filled pore space." *Biology and Fertility of Soils* 41(6): 379-388.

Cibrowski, P. (1996) Personal Communication. Peter Cibrowski, Minnesota Pollution Control Agency and Heike Mainhardt, ICF Incorporated. July 29, 1996.

CTIC (2004) *2004 Crop Residue Management Survey*. Conservation Technology Information Center. Available at <<http://www.ctic.purdue.edu/CRM/>>.

- Del Grosso, S.J., A.R. Mosier, W.J. Parton, and D.S. Ojima (2005) "DAYCENT Model Analysis of Past and Contemporary Soil N₂O and Net Greenhouse Gas Flux for Major Crops in the USA." *Soil Tillage and Research*, 83: 9-24. doi: 10.1016/j.still.2005.02.007.
- Del Grosso, S.J., S.M. Ogle, W.J. Parton, and F.J. Breidt (2010) "Estimating Uncertainty in N₂O Emissions from U.S. Cropland Soils." *Global Biogeochemical Cycles*, 24, GB1009, doi:10.1029/2009GB003544.
- Del Grosso, S.J., W.J. Parton, C.A. Keough, and M. Reyes-Fox. (2011) Special features of the DayCent modeling package and additional procedures for parameterization, calibration, validation, and applications, in *Methods of Introducing System Models into Agricultural Research*, L.R. Ahuja and Liwang Ma, editors, p. 155-176, American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, Madison, WI. USA.
- Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In Schaffer, M., L. Ma, S. Hansen, (eds.). *Modeling Carbon and Nitrogen Dynamics for Soil Management*. CRC Press. Boca Raton, Florida. 303-332.
- Del Grosso, S.J., T. Wirth, S.M. Ogle, W.J. Parton (2008) Estimating agricultural nitrous oxide emissions. *EOS* 89, 529-530.
- Delgado, J.A., S.J. Del Grosso, and S.M. Ogle (2009) "15N isotopic crop residue cycling studies and modeling suggest that IPCC methodologies to assess residue contributions to N₂O-N emissions should be reevaluated." *Nutrient Cycling in Agroecosystems*, DOI 10.1007/s10705-009-9300-9.
- Edmonds, L., N. Gollehon, R.L. Kellogg, B. Kintzer, L. Knight, C. Lander, J. Lemunyon, D. Meyer, D.C. Moffitt, and J. Schaeffer (2003) "Costs Associated with Development and Implementation of Comprehensive Nutrient Management Plans." Part 1. Nutrient Management, Land Treatment, Manure and Wastewater Handling and Storage, and Recordkeeping. Natural Resource Conservation Service, U.S. Department of Agriculture.
- EPA (2003) Clean Watersheds Needs Survey 2000—Report to Congress, U.S. Environmental Protection Agency. Washington, D.C. Available online at <<http://www.epa.gov/owm/mtb/cwns/2000rtc/toc.htm>>.
- EPA (1999) Biosolids Generation, Use and Disposal in the United States. Office of Solid Waste, U.S. Environmental Protection Agency. Available online at <<http://biosolids.policy.net/relatives/18941.PDF>>.
- EPA (1993) Federal Register. Part II. Standards for the Use and Disposal of Sewage Sludge; Final Rules. U.S. Environmental Protection Agency, 40 CFR Parts 257, 403, and 503.
- Firestone, M. K., and E.A. Davidson, Ed. (1989). *Microbiological basis of NO and N₂O production and consumption in soil. Exchange of trace gases between terrestrial ecosystems and the atmosphere*. New York, John Wiley & Sons.
- Gurung, R.B., F.J. Breidt, A. Dutin, and S.M. Ogle (2009) Predicting Enhanced Vegetation Index (EVI) for ecosystem modeling applications. *Remote Sensing of Environment* 113:2186-2193.
- H. Berbery, M. B. Ek, Y. Fan, R. Grumbine, W. Higgins, H. Li, Y. Lin, G. Manikin, D. Parrish, and W. Shi (2006) North American regional reanalysis. *Bulletin of the American Meteorological Society* 87:343-360.
- ILENR (1993) Illinois Inventory of Greenhouse Gas Emissions and Sinks: 1990. Office of Research and Planning, Illinois Department of Energy and Natural Resources. Springfield, IL.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- Kessavalou, A., A.R. Mosier, J.W. Doran, R.A. Drijber, D.J. Lyon, and O. Heinemeyer (1998). "Fluxes of carbon dioxide, nitrogen oxide, and methane in grass sod and winter wheat -fallow tillage management." *Journal of Environmental Quality* 27: 1094-1104.
- McFarland, M.J. (2001) *Biosolids Engineering*, New York: McGraw-Hill, p. 2.12.
- McGill, W.B., and C.V. Cole (1981) Comparative aspects of cycling of organic C, N, S and P through soil organic matter. *Geoderma* 26:267-286.

- Mesinger, F., G. DiMego, E. Kalnay, K. Mitchell, P. C. Shafran, W. Ebisuzaki, D. Jovic, J. Woollen, E. Rogers, E. Mosier, A. R., J.M. Duxbury, J.R. Freney, O. Heinemeyer, K. Minami (1998) "Assessing and mitigating N₂O emissions from agricultural soils." *Climatic Change* 40: 7-38.
- NASS (2004) Agricultural Chemical Usage: 2003 Field Crops Summary. Report AgCh1(04)a, National Agricultural Statistics Service, U.S. Department of Agriculture. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agcs0504.pdf>>.
- NASS (1999) Agricultural Chemical Usage: 1998 Field Crops Summary. Report AgCh1(99). National Agricultural Statistics Service, U.S. Department of Agriculture. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0599.pdf>>.
- NASS (1992) Agricultural Chemical Usage: 1991 Field Crops Summary. Report AgCh1(92). National Agricultural Statistics Service, U.S. Department of Agriculture. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0392.txt>>.
- NEBRA (2007) A National Biosolids Regulation, Quality, End Use & Disposal Survey. North East Biosolids and Residuals Association, July 21, 2007
- Noller, J. (1996) Personal Communication. John Noller, Missouri Department of Natural Resources and Heike Mainhardt, ICF Incorporated. July 30, 1996.
- Nusser, S.M., J.J. Goebel (1997) The national resources inventory: a long term monitoring programme. *Environmental and Ecological Statistics*, 4, 181-204.
- Oregon Department of Energy (1995) Report on Reducing Oregon's Greenhouse Gas Emissions: Appendix D Inventory and Technical Discussion. Oregon Department of Energy. Salem, OR.
- Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) "DAYCENT: Its Land Surface Submodel: Description and Testing". *Glob. Planet. Chang.* 19: 35-48.
- Potter, C., S. Klooster, A. Huete, and V. Genovese (2007) Terrestrial carbon sinks for the United States predicted from MODIS satellite data and ecosystem modeling. *Earth Interactions* 11, Article No. 13, DOI 10.1175/EI228.1.
- Potter, C. S., J.T. Randerson, C.B. Fields, P.A. Matson, P.M. Vitousek, H.A. Mooney, and S.A. Klooster (1993) "Terrestrial ecosystem production: a process model based on global satellite and surface data." *Global Biogeochemical Cycles* 7:811-841.
- Ruddy B.C., D.L. Lorenz, and D.K. Mueller (2006) County-level estimates of nutrient inputs to the land surface of the conterminous United States, 1982-2001. Scientific Investigations Report 2006-5012. U.S Department of the Interior.
- Scheer, C., S.J. Del Grosso, W.J. Parton, D.W. Rowlings, P.R. Grace (2013) Modeling Nitrous Oxide Emissions from Irrigated Agriculture: Testing DAYCENT with High Frequency Measurements, *Ecological Applications*, in press, <<http://dx.doi.org/10.1890/13-0570.1>>.
- Soil Survey Staff (2011) State Soil Geographic (STATSGO) Database for State. Natural Resources Conservation Service, United States Department of Agriculture. Available online at <<http://www.ncgc.nrcs.usda.gov/products/datasets/statsgo/index.html>>.
- Towery, D. (2001) Personal Communication. Dan Towery regarding adjustments to the CTIC (1998) tillage data to reflect long-term trends, Conservation Technology Information Center, West Lafayette, IN, and Marlen Eve, National Resource Ecology Laboratory, Fort Collins, CO. February 2001.
- TVA (1991 through 1992a, 1993 through 1994) Commercial Fertilizers. Tennessee Valley Authority, Muscle Shoals, AL.
- USDA-ERS (2011) Agricultural Resource Management Survey (ARMS) Farm Financial and Crop Production Practices: Tailored Reports. Online at: <<http://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices.aspx>>.
- USDA-ERS (1997) Cropping Practices Survey Data—1995. Economic Research Service, United States Department of Agriculture. Available online at <<http://www.ers.usda.gov/data/archive/93018/>>.

USDA-NASS (2014) Quick Stats. National Agricultural Statistics Service, United States Department of Agriculture, Washington, D.C. <<http://quickstats.nass.usda.gov/>>.

USDA-NRCS (2013) *Summary Report: 2010 National Resources Inventory*, Natural Resources Conservation Service, Washington, D.C, and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1167354.pdf>

USDA-NRCS (2009) *Summary Report: 2007 National Resources Inventory*, Natural Resources Conservation Service, Washington, D.C, and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa, <http://www.nrcs.usda.gov/technical/NRI/2007/2007_NRI_Summary.pdf>.

Vogelman, J.E., S.M. Howard, L. Yang, C. R. Larson, B. K. Wylie, and J. N. Van Driel (2001) "Completion of the 1990's National Land Cover Data Set for the conterminous United States." *Photogrammetric Engineering and Remote Sensing*, 67:650-662.

Wisconsin Department of Natural Resources (1993) *Wisconsin Greenhouse Gas Emissions: Estimates for 1990*. Bureau of Air Management, Wisconsin Department of Natural Resources, Madison, WI.

Field Burning of Agricultural Residues

Anderson, M. (2008 through 2014) Email correspondence. Monte Anderson, Oklahoma Farm Service Agency and ICF International. August 21, 2014.

Barnard, G., and L. Kristoferson (1985) *Agricultural Residues as Fuel in the Third World*. Earthscan Energy Information Programme and the Beijer Institute of the Royal Swedish Academy of Sciences. London, England.

Cantens, G. (2004 through 2005) Personal Communication. Janet Lewis, Assistant to Gaston Cantens, Vice President of Corporate Relations, Florida Crystals Company and ICF International.

Deren, C. (2002) Personal communication. Dr. Chris Deren, Everglades Research and Education Centre at the University of Florida and Caren Mintz, ICF International. August 15, 2002.

EPA (1994) *International Anthropogenic Methane Emissions: Estimates for 1990, Report to Congress*. EPA 230-R-93-010. Office of Policy Planning and Evaluation, U.S. Environmental Protection Agency, Washington, D.C.

Gonzalez, R. (2007 through 2014) Email correspondence. Rene Gonzalez, Plant Manager, Sem-Chi Rice Company and ICF International.

Huang, Y., W. Zhang, W. Sun, and X. Zheng (2007) "Net Primary Production of Chinese Croplands from 1950 to 1999." *Ecological Applications*, 17(3):692-701.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC/UNEP/OECD/IEA (1997) *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*. Intergovernmental Panel on Climate Change, United Nations Environment Programme, Organization for Economic Co-Operation and Development, International Energy Agency, Paris, France.

Kinoshita, C.M. (1988) "Composition and processing of burned and unburned cane in Hawaii." *Intl. Sugar Jnl.* 90:1070, 34-37.

Kirstein, A. (2003 through 2004) Personal Communication. Arthur Kirstein, Coordinator, Agricultural Economic Development Program, Palm Beach County Cooperative Extension Service, Florida and ICF International.

Lachnicht, S.L., P.F. Hendrix, R.L. Potter, D.C. Coleman, and D.A. Crossley Jr. (2004) "Winter decomposition of transgenic cotton residue in conventional-till and no-till systems." *Applied Soil Ecology*, 27:135-142.

Lee, D. (2003 through 2007) Email correspondence. Danny Lee, OK Farm Service Agency and ICF International.

McCarty, J.L. (2011) "Remote Sensing-Based Estimates of Annual and Seasonal Emissions from Crop Residue Burning in the Contiguous United States." *Journal of the Air & Waste Management Association*, 61:1,22-34, DOI: 10.3155/1047-3289.61.1.22.

McCarty, J.L. (2010) Agricultural Residue Burning in the Contiguous United States by Crop Type and State. Geographic Information Systems (GIS) Data provided to the EPA Climate Change Division by George Pouliot, Atmospheric Modeling and Analysis Division, EPA. Dr. McCarty's research was supported by the NRI Air Quality Program of the Cooperative State Research, Education, and Extension Service, USDA, under Agreement No. 20063511216669 and the NASA Earth System Science Fellowship.

McCarty, J.L. (2009) *Seasonal and Interannual Variability of Emissions from Crop Residue Burning in the Contiguous United States*. Dissertation. University of Maryland, College Park.

Murphy, W.J. (1993). "Tables for weights and measurement: crops". *Extension publications*. (University of Missouri Extension) <<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G4020>>.

Schueneman, T. (1999 through 2001) Personal Communication. Tom Schueneman, Agricultural Extension Agent, Palm Beach County, FL and ICF International. July 30, 2001.

Schueneman, T.J. and C.W. Deren (2002) "An Overview of the Florida Rice Industry." SS-AGR-77, Agronomy Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Revised November 2002.

Strehler, A., and W. Stütze (1987) "Biomass Residues." In Hall, D.O. and Overend, R.P. (eds.). *Biomass*. John Wiley and Sons, Ltd. Chichester, UK.

Turn, S.Q., B.M. Jenkins, J.C. Chow, L.C. Pritchett, D. Campbell, T. Cahill, and S.A. Whalen (1997) "Elemental characterization of particulate matter emitted from biomass burning: Wind tunnel derived source profiles for herbaceous and wood fuels." *Journal of Geophysical Research* 102(D3):3683-3699.

USDA (2014) Quick Stats: U.S. & All States Data; Crops; Production and Area Harvested; 1990 - 2013. National Agricultural Statistics Service, U.S. Department of Agriculture. Washington, D.C. U.S. Department of Agriculture, National Agricultural Statistics Service. Washington, D.C., Available online at <<http://quickstats.nass.usda.gov/>>.

Land Use, Land-Use Change, and Forestry

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Representation of the U.S. Land Base

Alaska Department of Natural Resources (2006) Alaska Infrastructure 1:63,360. Available online at <<http://dnr.alaska.gov/SpatialUtility/SUC?cmd=extract&layerid=75>>.

Alaska Interagency Fire Management Council (1998) Alaska Interagency Wildland Fire Management Plan. Available online at <<http://agdc.usgs.gov/data/blm/fire/index.html>>.

Alaska Oil and Gas Conservation Commission (2009) Oil and Gas Information System. Available online at <<http://doa.alaska.gov/ogc/publicdb.html>>.

EIA (2011) Coal Production and Preparation Report Shapefile. Available online at <<http://www.eia.gov/state/notes-sources.cfm#maps>>.

ESRI (2008) ESRI Data & Maps. Redlands, CA: Environmental Systems Research Institute. [CD-ROM]

Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and J. Wickham. (2011) Completion of the 2006 National Land Cover Database for the Conterminous United States, *PE&RS*, Vol. 77(9):858-864.

Homer, C., J. Dewitz, J. Fry, M. Coan, N. Hossain, C. Larson, N. Herold, A. McKerrow, J.N. VanDriel and J. Wickham. (2007) Completion of the 2001 National Land Cover Database for the Conterminous United States, *Photogrammetric Engineering and Remote Sensing*, Vol. 73, No. 4, pp 337-341.

IPCC (2010) Revisiting the use of managed land as a proxy for estimating national anthropogenic emissions and removals. Eggleston HS, Srivastava N, Tanabe K, Baasansuren J, (eds.). Institute for Global Environmental Studies, Intergovernmental Panel on Climate Change, Hayama, Kanagawa, Japan.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Jin, S., L. Yang, P. Danielson, C. Homer, J. Fry, and G. Xian. (2013) A comprehensive change detection method for updating the National Land Cover Database to circa 2011. *Remote Sensing of Environment*, 132: 159-175.

NOAA Coastal Change Analysis Program (C-CAP) Regional Land Cover Database. Data collected 1995-present. Charleston, SC: National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center. Data accessed at <www.csc.noaa.gov/landcover>.

Nusser, S.M. and J.J. Goebel (1997) "The national resources inventory: a long-term multi-resource monitoring programme." *Environmental and Ecological Statistics* 4:181-204.

Smith, W.B., P.D. Miles, C.H. Perry, and S.A. Pugh (2009) *Forest Resources of the United States, 2007*. Gen. Tech. Rep. WO-78. U.S. Department of Agriculture Forest Service, Washington, D.C.

U.S. Census Bureau (2010) Topologically Integrated Geographic Encoding and Referencing (TIGER) system shapefiles. U.S. Census Bureau, Washington, D.C. Available online at <<http://www.census.gov/geo/www/tiger>>.

U.S. Department of Agriculture (2011) County Data - Livestock, 1990-2011. U.S. Department of Agriculture, National Agriculture Statistics Service, Washington, D.C.

U.S. Department of Interior (2005) *Federal Lands of the United States*. National Atlas of the United States, U.S. Department of the Interior, Washington D.C. Available online at <<http://nationalatlas.gov/atlasftp.html?openChapters=chpbound#chpbound>>.

United States Geological Survey (USGS), Gap Analysis Program (2012) Protected Areas Database of the United States (PADUS), version 1.3 Combined Feature Class. November 2012.

USGS (2012) Alaska Resource Data File. Available online at <<http://ardf.wr.usgs.gov/>>.

USGS (2005) Active Mines and Mineral Processing Plants in the United States in 2003. U.S. Geological Survey, Reston, VA.

Forest Land Remaining Forest Land: Changes in Forest Carbon Stocks

AF&PA (2006a and earlier) Statistical roundup. (Monthly). Washington, D.C. American Forest & Paper Association.

AF&PA (2006b and earlier) Statistics of paper, paperboard and wood pulp. Washington, D.C. American Forest & Paper Association.

Amichev, B.Y. and J.M. Galbraith (2004) "A Revised Methodology for Estimation of Forest Soil Carbon from Spatial Soils and Forest Inventory Data Sets." *Environmental Management* 33(Suppl. 1):S74-S86.

Barlaz, M.A. (1998) "Carbon storage during biodegradation of municipal solid waste components in laboratory-scale landfills." *Global Biogeochemical Cycles* 12 (2):373-380.

Bechtold, W.A.; Patterson, P.L. (2005) The enhanced forest inventory and analysis program—national sampling design and estimation procedures. Gen. Tech. Rep. SRS-80. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 85 p.

Birdsey, R. (1996) "Carbon Storage for Major Forest Types and Regions in the Conterminous United States." In R.N. Sampson and D. Hair, (eds.). *Forest and Global Change, Volume 2: Forest Management Opportunities for Mitigating Carbon Emissions*. American Forests. Washington, D.C., 1-26 and 261-379 (appendices 262 and 263).

- Birdsey, R., and L.S. Heath (2001) "Forest Inventory Data, Models, and Assumptions for Monitoring Carbon Flux." In *Soil Carbon Sequestration and the Greenhouse Effect*. Soil Science Society of America. Madison, WI, 125-135.
- Birdsey, R.A., and L.S. Heath (1995) "Carbon Changes in U.S. Forests." In *Productivity of America's Forests and Climate Change*. Gen. Tech. Rep. RM-271. Rocky Mountain Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture. Fort Collins, CO, 56-70.
- Birdsey, R.A., and G.M. Lewis (2003) "Current and Historical Trends in Use, Management, and Disturbance of U.S. Forestlands." In J.M. Kimble, L.S. Heath, R.A. Birdsey, and R. Lal, (eds.). *The Potential of U.S. Forest Soils to Sequester Carbon and Mitigate the Greenhouse Effect*. CRC Press, New York, 15-34.
- Birdsey R, Pregitzer K, Lucier A (2006) Forest carbon management in the United States: 1600–2100. *J Environ Qual* 35: 1461–1469.
- Coulston, J.W., Woodall, C.W., Domke, G.M., and Walters, B.F. (in preparation) Refined Delineation between Woodlands and Forests with Implications for U.S. National Greenhouse Gas Inventory of Forests. *Climatic Change*.
- Coulston, J.W., Wear, D.N., and Vose, J.M. (in review) Complex forest dynamics indicate potential for slowing carbon accumulation in the southeastern United States. *Scientific Reports*.
- Domke, G.M., J.E. Smith, and C.W. Woodall. (2011) Accounting for density reduction and structural loss in standing dead trees: Implications for forest biomass and carbon stock estimates in the United States. *Carbon Balance and Management*. 6:14.
- Domke, G.M., Woodall, C.W., Smith, J.E., Westfall, J.A., McRoberts, R.E. (2012) Consequences of alternative tree-level biomass estimation procedures on U.S. forest carbon stock estimates. *Forest Ecology and Management*. 270: 108-116
- Domke, G.M., Perry, C.H., Walters, B.F., Woodall, C.W., and Smith, J.E. (in preparation) Estimation of forest floor carbon using the national forest inventory of the United States. Intended outlet: *Geoderma*. Eleazer, W.E., W.S. Odle, III, Y.S. Wang, and M.A. Barlaz (1997) "Biodegradability of municipal solid waste components in laboratory-scale landfills." *Env. Sci. Tech.* 31(3):911-917.
- Domke, G.M., Woodall, C.W., Walters, B.F., Smith, J.E. (2013). From models to measurements: comparing down dead wood carbon stock estimates in the U.S. forest inventory. *PLoS ONE* 8(3): e59949.
- EPA (2012) *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2010*. EPA, Office of Atmospheric Programs. Washington, D.C.
- EPA (2006) *Municipal solid waste in the United States: 2005 Facts and figures*. Office of Solid Waste, U.S. Environmental Protection Agency. Washington, D.C. (5306P) EPA530-R-06-011. Available online at <<http://www.epa.gov/msw/msw99.htm>>.
- FAO (2010) *Global forest resources assessment 2010*. United Nations, Food and Agriculture Organization. FAO Forestry Paper 163. Rome, Italy. 340p.
- Frayser, W.E., and G.M. Furnival (1999) "Forest Survey Sampling Designs: A History." *Journal of Forestry* 97(12): 4-10.
- Freed, R. (2004) Open-dump and Landfill timeline spreadsheet (unpublished). ICF International. Washington, D.C.
- Genet et al. (in preparation) Synthesis of the role of dynamic driving factors (climate, fire, permafrost dynamics, and forest management) on the historical and projected vegetation and soil organic carbon dynamics in upland ecosystems of Alaska. Intended outlet: *Ecological Applications*.
- Hair, D. (1958) "Historical forestry statistics of the United States." Statistical Bull. 228. U.S. Department of Agriculture Forest Service, Washington, D.C.
- Hair, D. and A.H. Ulrich (1963) *The Demand and price situation for forest products – 1963*. U.S. Department of Agriculture Forest Service, Misc Publication No. 953. Washington, D.C.
- Harmon, M.E., C.W. Woodall, B. Fasth, J. Sexton, M. Yatkov. (2011) Differences between standing and downed dead tree wood density reduction factors: A comparison across decay classes and tree species. Res. Paper. NRS-15. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 40 p.

- Heath, L.S. (2012) Using FIA data to inform United States forest carbon national-level accounting needs: 1990-2010. P. 149-160 in Camp, A.E.; Irland, L.C.; Carroll, C.J.W. Long-term Silvicultural & Ecological Studies: Results for Science and Management, Volume 2. Yale University School of Forestry & Environmental Studies, Global Institute of Sustainable Forestry. GISF Research Paper 013.
- Heath, L.S., and Smith, J.E. (2000) "Soil Carbon Accounting and Assumptions for Forestry and Forest-related Land Use Change." In *The Impact of Climate Change on America's Forests*. Joyce, L.A., and Birdsey, R.A. Gen. Tech. Rep. RMRS-59. Rocky Mountain Research Station, Forest Service, U.S. Department of Agriculture. Fort Collins, CO, 89-101.
- Heath, L.S., Smith, J.E., and Birdsey, R.A. (2003) Carbon Trends in U. S. Forestlands: A Context for the Role of Soils in Forest Carbon Sequestration. In J. M. Kimble, L. S. Heath, R. A. Birdsey, and R. Lal, editors. *The Potential of U. S. Forest Soils to Sequester Carbon and Mitigate the Greenhouse Effect*. Lewis Publishers (CRC Press). Boca Raton, FL, 35-45.
- Heath, L.S., Smith, J.E., Skog, K., Nowak, D., Woodall, C. (2011) Managed forest carbon estimates for the U.S. Greenhouse Gas Inventory, 1990-2008. *Journal of Forestry* April/May 2011: 167-173.
- Heath, L.S., Smith, J.E., Woodall, J.E., Azuma, D.L., and Waddell, K.L. (2011) Carbon stocks on forestlands of the United States, with emphasis on USDA Forest Service ownership. *Ecosphere* 2(1), article 6, 21 p.
- Howard, J. L. (forthcoming) *U.S. timber production, trade, consumption, and price statistics 1965 to 2013*. Res. Pap. FPL-RP-XXX. Madison, WI: USDA, Forest Service, Forest Products Laboratory.
- Howard, J. L. (2007) *U.S. timber production, trade, consumption, and price statistics 1965 to 2005*. Res. Pap. FPL-RP-637. Madison, WI: USDA, Forest Service, Forest Products Laboratory.
- Howard, J. L. (2003) *U.S. timber production, trade, consumption, and price statistics 1965 to 2002*. Res. Pap. FPL-RP-615. Madison, WI: USDA, Forest Service, Forest Products Laboratory. Available online at <<http://www.fpl.fs.fed.us/documnts/fplrp/fplrp615/fplrp615.pdf>>.
- Howard, J. L., Westby, R. M. (2013) *U.S. timber production, trade, consumption, and price statistics 1965 to 2011*. Res. Pap. FPL-RP-676. Madison, WI: USDA, Forest Service, Forest Products Laboratory.
- IPCC (2007) *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report (AR4) of the IPCC*. The Intergovernmental Panel on Climate Change, R.K. Pachauri, A. Resinger (eds.). Geneva, Switzerland.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- IPCC (2003) *Good Practice Guidance for Land Use, Land-Use Change, and Forestry*. The Intergovernmental Panel on Climate Change, National Greenhouse Gas Inventories Programme, J. Penman, et al. (eds.). August 13, 2004. Available online at <<http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf.htm>>.
- Jenkins, J.C., D.C. Chojnacky, L.S. Heath, and R.A. Birdsey (2003) "National-scale biomass estimators for United States tree species." *Forest Science* 49(1):12-35.
- Johnson, D. W., and P. S. Curtis (2001) "Effects of Forest Management on Soil C and N Storage: Meta Analysis." *Forest Ecology and Management* 140:227-238.
- McGuire et al. (in preparation) A synthesis of terrestrial carbon balance of Alaska and projected changes in the 21st Century: Implications for climate policy and carbon management at local, regional, national, and international scales. Intended for: *Ecological Applications*.
- Melosi, M. (2000) *The Sanitary City*. Johns Hopkins University Press. Baltimore, MD.
- Melosi, M. (1981) *Garbage in The Cities: Refuse Reform and the Environment: 1880-1980*. Texas A&M Press.
- Micales, J.A. and K.E. Skog (1997) "The decomposition of forest products in landfills." *International Biodeterioration & Biodegradation*. 39(2-3):145-158.
- NASA CMS (2014) NASA Carbon Monitoring System. <<http://carbon.nasa.gov/>>.

- National Association of State Foresters (2007a) State Forestry Statistics 1998 Report. Available online at <http://www.stateforesters.org/statistics/FY98_Statistics/Resource%20Base.htm>. March 2008.
- National Association of State Foresters (2007b) State Forestry Statistics 2002 Report. Available online at <http://www.stateforesters.org/statistics/FY02_Statistics/2002%20Stat%20Resource%20Base.pdf>. March 2008.
- National Association of State Foresters (2007c) State Forestry Statistics 2004 Report. Available online at <http://www.stateforesters.org/statistics/FY04_Statistics/FY2004Statistics.pdf>. March 2008.
- Ogle, S.M., Woodall, C.W., Swan, A., Smith, J.E., and Wirth, T. (in preparation) Determining the Managed Land Base for Delineating Carbon Sources and Sinks in the United States. Environmental Science and Policy.
- Oswalt, S.N., W.B. Smith, P.D. Miles, and S.A. Pugh (in preparation/2014) Forest Resources of the United States, 2012. Gen. Tech. Rep. WO-XXX. Washington, D.C. U.S. Department of Agriculture, Forest Service, Washington Office. XXX p.
- Perry, C.H., C.W. Woodall, and M. Schoeneberger (2005) Inventorying trees in agricultural landscapes: towards an accounting of “working trees”. In: “Moving Agroforestry into the Mainstream.” *Proc. 9th N. Am. Agroforestry Conf.*, Brooks, K.N. and Folliott, P.F. (eds.). 12-15 June 2005, Rochester, MN [CD-ROM]. Dept. of Forest Resources, Univ. Minnesota, St. Paul, MN, 12 p. Available online at <<http://cinram.umn.edu/afta2005/>>. (verified 23 Sept 2006).
- Phillips, D.L., S.L. Brown, P.E. Schroeder, and R.A. Birdsey (2000) “Toward Error Analysis of Large-Scale Forest Carbon Budgets.” *Global Ecology and Biogeography* 9:305-313.
- Russell, M.B., A.W. D’Amato, B.K. Schulz, C.W. Woodall, G.M. Domke, and J.B. Bradford (in press) Quantifying understory vegetation in the U.S. Lake States: a proposed framework to inform regional forest carbon stocks. Forestry.
- Russell, M.B., Domke, G.M., Woodall, C.W., and D’Amato, A.W (in preparation) Comparisons of allometric and climate-derived estimates of tree coarse root carbon in forests of the United States: implications for the National Greenhouse Gas Inventory. Climatic Change.
- Saatchi et al. (in preparation) Distribution of Carbon Stocks in Managed and Unmanaged Forests of Alaska. Intended for: *Journal of Carbon Balance and Management*.
- Skog, K.E. (2008) “Sequestration of carbon in harvested wood products for the United States.” *Forest Products Journal* 58:56-72.
- Skog, K.E., K. Pingoud, and J.E. Smith (2004) “A method countries can use to estimate changes in carbon stored in harvested wood products and the uncertainty of such estimates.” *Environmental Management* 33(Suppl. 1):S65-S73.
- Smith, J. (2013) Estimates of Forest Carbon Stocks and Flux: 1990-2013. E-mail correspondence between ICF and Jim Smith, USDA Forest Service. September 18, 2013.
- Smith, J.E., and L.S. Heath (2010) “Exploring the assumed invariance of implied emission factors for forest biomass in greenhouse gas inventories.” *Environmental Science & Policy* 13:55-62.
- Smith, J.E., and L.S. Heath (2002) “A model of forest floor carbon mass for United States forest types.” Res. Paper NE-722. USDA Forest Service, Northeastern Research Station, Newtown Square, PA.
- Smith, J.E., L.S. Heath, and J. C. Jenkins (2003) *Forest Volume-to-Biomass Models and Estimates of Mass for Live and Standing Dead Trees of U.S. Forests*. General Technical Report NE-298, USDA Forest Service, Northeastern Research Station, Newtown Square, PA.
- Smith, J.E., L.S. Heath, and M.C. Nichols (2010) U.S. Forest Carbon Calculation Tool User’s Guide: Forestland Carbon Stocks and Net Annual Stock Change. General Technical Report NRS-13 revised, U.S. Department of Agriculture Forest Service, Northern Research Station, 34p.
- Smith, J. E., L. S. Heath, and P. B. Woodbury (2004) “How to estimate forest carbon for large areas from inventory data.” *Journal of Forestry* 102:25-31.
- Smith, W. B., P. D. Miles, C. H. Perry, and S. A. Pugh (2009) *Forest Resources of the United States, 2007*. General Technical Report WO-78, U.S. Department of Agriculture Forest Service, Washington Office.

- Steer, Henry B. (1948) *Lumber production in the United States*. Misc. Pub. 669, U.S. Department of Agriculture Forest Service. Washington, D.C.
- Ulrich, Alice (1985) *U.S. Timber Production, Trade, Consumption, and Price Statistics 1950-1985*. Misc. Pub. 1453, U.S. Department of Agriculture Forest Service. Washington, D.C.
- Ulrich, A.H. (1989) *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1950-1987*. USDA Miscellaneous Publication No. 1471, U.S. Department of Agriculture Forest Service. Washington, D.C., 77.
- USDA (1991) *State Soil Geographic (STATSGO) Data Base Data use information*. Miscellaneous Publication Number 1492, National Soil Survey Center, Natural Resources Conservation Service, U.S. Department of Agriculture, Fort Worth, TX.
- USDA Forest Service (2014a) Forest Inventory and Analysis National Program: Program Features. U.S. Department of Agriculture Forest Service. Washington, D.C. Available online at <<http://fia.fs.fed.us/program-features/>>. Accessed 17 September 2014.
- USDA Forest Service. (2014b) Forest Inventory and Analysis National Program: FIA Data Mart. U.S. Department of Agriculture Forest Service. Washington, D.C. Available online at <<http://apps.fs.fed.us/fiadb-downloads/datamart.html>>. Accessed 17 September 2014.
- USDA Forest Service. (2014c) Forest Inventory and Analysis National Program, FIA library: Field Guides, Methods and Procedures. U.S. Department of Agriculture Forest Service. Washington, D.C. Available online at <<http://www.fia.fs.fed.us/library/field-guides-methods-proc/>>. Accessed 17 September 2014.
- USDA Forest Service (2014d) Forest Inventory and Analysis National Program, FIA library: Database Documentation. U.S. Department of Agriculture, Forest Service, Washington Office. Available online at <<http://fia.fs.fed.us/library/database-documentation/>>. Accessed 17 September 2014.
- USDA Forest Service (2008) Forest Inventory and Analysis National Program, FIA library: Database Documentation. U.S. Department of Agriculture, Forest Service, Washington Office. Available online at <<http://www.fia.fs.fed.us/library/database-documentation/>>. Accessed 15 December 2009.
- USDA Forest Service (1992) “1984-1990 Wildfire Statistics.” Prepared by State and Private Forestry Fire and Aviation Management Staff. Facsimile from Helene Cleveland, USDA Forest Service, to ICF International. January 30, 2008.
- U.S. Census Bureau (1976) *Historical Statistics of the United States, Colonial Times to 1970, Vol. 1*. Washington, D.C.
- Waddell, K., and B. Hiserote. (2005) The PNW-FIA Integrated Database User Guide: A database of forest inventory information for California, Oregon, and Washington. Forest Inventory and Analysis Program, Pacific Northwest Research Station, Portland, Oregon, USA.
- Wear, D. and J. Coulston 2014. Projecting changes in U.S. forest carbon pools and net forest C sequestration. Working Paper. Center for Integrated Forest Science, 5227 Jordan Hall, North Carolina State University, Raleigh, North Carolina.
- Westfall, J.A., Woodall, C.W., Hatfield, M.A. (2013) A statistical power analysis of woody carbon flux from forest inventory data. *Climatic Change*. 118: 919-931.
- Wilson, B.T., Woodall, C.W., Griffith, D. (2013) Imputing forest carbon stock estimates from inventory plots to a nationally continuous coverage. *Carbon Balance and Management*. 8: 1.
- Woodall, C.W. (2012) Where did the U.S. forest biomass/carbon go? *Journal of Forestry*. 110: 113-114.
- Woodall, C.W., Amacher, M.C., Bechtold, W.A., Coulston, J.W., Jovan, S., Perry, C.H., Randolph, K.C., Schulz, B.K., Smith, G.C., Tkacz, B., and Will-Wolf, S. (2011a) “Status and future of the forest health indicators program of the United States.” *Environmental Monitoring and Assessment*, 177:419-436.
- Woodall, C.W., Amacher, M.C., Bechtold, W.A., Coulston, J.W., Jovan, S., Perry, C.H., Randolph, K.C., Schulz, B.K., Smith, G.C., Tkacz, B., Will-Wolf, S. (2011b) “Status and future of the forest health indicators program of the United States.” *Environmental Monitoring and Assessment*. 177: 419-436.

Woodall, C.W., B.L. Conkling, M.C. Amacher, J.W. Coulston, S. Jovan, C.H. Perry, B. Schulz, G.C. Smith, S. Will Wolf. (2010). The Forest Inventory and Analysis Database Version 4.0: Database Description and User's Manual for Phase 3. Gen. Tech. Rep. NRS-61. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 180 p.

Woodall, C.W., Domke, G.M., MacFarlane, D.W., Oswalt, C.M. (2012) Comparing Field- and Model-Based Standing Dead Tree Carbon Stock Estimates Across Forests of the United States. *Forestry* 85(1): 125-133.

Woodall, C.W., Domke, G.M., Riley, K, Oswalt, C.M., Crocker, S.J. Yohe, G.W. (2013) Developing a framework for assessing global change risks to forest carbon stocks. *PLOS One*. 8: e73222.

Woodall, C.W., L.S. Heath, G.M. Domke, and M.C. Nichols (2011a) Methods and equations for estimating aboveground volume, biomass, and carbon for trees in the U.S. forest inventory, 2010. Gen. Tech. Rep. NRS-88. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 30 p.

Woodall, C.W., and V.J. Monleon (2008) Sampling protocol, estimation, and analysis procedures for the down woody materials indicator of the FIA program. Gen. Tech. Rep. NRS-22. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 68 p.

Woodall, C.W., Walters, B.F., Oswalt, S.N., Domke, G.M., Toney, C., Gray, A.N. (2013) Biomass and carbon attributes of downed woody materials in forests of the United States. *Forest Ecology and Management* 305: 48-59.

Woodbury, P.B., Heath, L.S., and Smith, J.E. (2007) Effects of land use change on soil carbon cycling in the conterminous United States from 1900 to 2050, *Global Biogeochem. Cycles*, 21, GB3006, doi:10.1029/2007GB002950.

Woodbury, P.B., Heath, L.S., and Smith, J.E. (2006) "Land Use Change Effects on Forest Carbon Cycling Throughout the Southern United States." *Journal of Environmental Quality*, 35:1348-1363.

Forest Land Remaining Forest Land: Non-CO₂ Emissions from Forest Fires

deVries, R.E. (1987) A Preliminary Investigation of the Growth and Longevity of Trees in Central Park. M.S. thesis, Rutgers University, New Brunswick, NJ.

Dwyer, J.F., D.J. Nowak, M.H. Noble, and S.M. Sisinni (2000) Connecting People with Ecosystems in the 21st Century: An Assessment of Our Nation's Urban Forests. General Technical Report PNW-GTR-490, U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, OR.

Fleming, L.E. (1988) Growth Estimation of Street Trees in Central New Jersey. M.S. thesis, Rutgers University, New Brunswick, NJ.

Frelich, L.E. (1992) Predicting Dimensional Relationships for Twin Cities Shade Trees. University of Minnesota, Department of Forest Resources, St. Paul, MN, p. 33.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Nowak, D.J. (2011) Phone conference regarding Changes in Carbon Stocks in Urban Trees estimation methodology. David Nowak, USDA, Jennifer Jenkins, EPA, and Mark Flugge and Nikhil Nadkarni, ICF International. January 4, 2011.

Nowak, D.J. (2009) E-mail correspondence regarding new data for Chicago's urban forest. David Nowak, USDA Forest Service to Nikhil Nadkarni, ICF International. October 7, 2009.

Nowak, D.J. (2007a) "New York City's Urban Forest." USDA Forest Service. Newtown Square, PA, February 2007.

Nowak, D.J. (2007b) E-mail correspondence regarding revised sequestration values and standard errors for sequestration values. David Nowak, USDA Forest Service to Susan Asam, ICF International. October 31, 2007.

- Nowak, D.J. (1994) "Atmospheric Carbon Dioxide Reduction by Chicago's Urban Forest." In: Chicago's Urban Forest Ecosystem: Results of the Chicago Urban Forest Climate Project. E.G. McPherson, D.J. Nowak, and R.A. Rowntree (eds.). General Technical Report NE-186. U.S. Department of Agriculture Forest Service, Radnor, PA. pp. 83–94.
- Nowak, D.J. (1986) "Silvics of an Urban Tree Species: Norway Maple (*Acer platanoides* L.)." M.S. thesis, College of Environmental Science and Forestry, State University of New York, Syracuse, NY.
- Nowak, D.J., Buckelew-Cumming, A., Twardus, D., Hoehn, R., and Mielke, M. (2007). National Forest Health Monitoring Program, Monitoring Urban Forests in Indiana: Pilot Study 2002, Part 2: Statewide Estimates Using the UFORE Model. Northeastern Area Report. NA-FR-01e07, p. 13.
- Nowak, D.J. and D.E. Crane (2002) "Carbon Storage and Sequestration by Urban Trees in the United States." *Environmental Pollution* 116(3):381–389.
- Nowak, D.J., D.E. Crane, J.C. Stevens, and M. Ibarra (2002) Brooklyn's Urban Forest. General Technical Report NE-290. U.S. Department of Agriculture Forest Service, Newtown Square, PA.
- Nowak, D.J., and E.J. Greenfield (2012) Tree and impervious cover in the United States. *Journal of Landscape and Urban Planning* (107) pp. 21-30.
- Nowak, D.J., E.J. Greenfield, R.E. Hoehn, and E. Lapoint (2013) Carbon Storage and Sequestration by Trees in Urban and Community Areas of the United States. *Environmental Pollution* 178: 229-236. March 12, 2013.
- Nowak, D.J., J.T. Walton, L.G. Kaya, and J.F. Dwyer (2005) "The Increasing Influence of Urban Environments on U.S. Forest Management." *Journal of Forestry* 103(8):377–382.
- Smith, W.B. and S.R. Shifley (1984) Diameter Growth, Survival, and Volume Estimates for Trees in Indiana and Illinois. Research Paper NC-257. North Central Forest Experiment Station, U.S. Department of Agriculture Forest Service, St. Paul, MN.
- U.S. Census Bureau (2012) "A national 2010 urban area file containing a list of all urbanized areas and urban clusters (including Puerto Rico and the Island Areas) sorted by UACE code." U.S. Census Bureau, Geography Division.

Forest Land Remaining Forest Land: N₂O Fluxes from Soils

- Albaugh, T.J., Allen, H.L., Fox, T.R. (2007) Historical Patterns of Forest Fertilization in the Southeastern United States from 1969 to 2004. *Southern Journal of Applied Forestry*, 31, 129-137(9).
- Binkley, D. (2004) Email correspondence regarding the 95% CI for area estimates of southern pine plantations receiving N fertilizer ($\pm 20\%$) and the rate applied for areas receiving N fertilizer (100 to 200 pounds/acre). Dan Binkley, Department of Forest, Rangeland, and Watershed Stewardship, Colorado State University and Stephen Del Grosso, Natural Resource Ecology Laboratory, Colorado State University. September 19, 2004.
- Binkley, D., R. Carter, and H.L. Allen (1995) Nitrogen Fertilization Practices in Forestry. In: *Nitrogen Fertilization in the Environment*, P.E. Bacon (ed.), Marcel Decker, Inc., New York.
- Briggs, D. (2007) *Management Practices on Pacific Northwest West-Side Industrial Forest Lands, 1991-2005: With Projections to 2010*. Stand Management Cooperative, SMC Working Paper Number 6, College of Forest Resources, University of Washington, Seattle.
- Fox, T.R., H. L. Allen, T.J. Albaugh, R. Rubilar, and C.A. Carlson (2007) Tree Nutrition and Forest Fertilization of Pine Plantations in the Southern United States. *Southern Journal of Applied Forestry*. 31, 5-11.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- USDA Forest Service (2001) *U.S. Forest Facts and Historical Trends*. FS-696. U.S. Department of Agriculture Forest Service, Washington, D.C. Available online at <<http://www.fia.fs.fed.us/library/ForestFactsMetric.pdf>>.

Cropland Remaining Cropland: Mineral and Organic Soil Carbon Stock Changes

- Armentano, T. V., and E.S. Menges (1986). Patterns of change in the carbon balance of organic soil-wetlands of the temperate zone. *Journal of Ecology* 74: 755-774.
- Brady, N.C. and R.R. Weil (1999) *The Nature and Properties of Soils*. Prentice Hall. Upper Saddle River, NJ, 881.
- Conant, R. T., K. Paustian, and E.T. Elliott (2001). "Grassland management and conversion into grassland: effects on soil carbon." *Ecological Applications* 11: 343-355.
- CTIC (2004) National Crop Residue Management Survey: 1989-2004. Conservation Technology Information Center, Purdue University, Available at <<http://www.ctic.purdue.edu/CRM/>>
- Daly, C., R.P. Neilson, and D.L. Phillips (1994) "A Statistical-Topographic Model for Mapping Climatological Precipitation Over Mountainous Terrain." *Journal of Applied Meteorology* 33:140-158.
- Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In *Modeling Carbon and Nitrogen Dynamics for Soil Management*, Schaffer, M., L. Ma, S. Hansen, (eds.). CRC Press, Boca Raton, Florida, pp. 303-332.
- Del Grosso, S.J., S.M. Ogle, W.J. Parton (2011) Soil organic matter cycling and greenhouse gas accounting methodologies, Chapter 1, pp 3-13 DOI: 10.1021/bk-2011-1072.ch001. In: *Understanding Greenhouse Gas Emissions from Agricultural Management*, L. Guo, A. Gunasekara, L. McConnell (eds.). American Chemical Society, Washington, D.C.
- Edmonds, L., R. L. Kellogg, B. Kintzer, L. Knight, C. Lander, J. Lemunyon, D. Meyer, D.C. Moffitt, and J. Schaefer (2003) "Costs associated with development and implementation of Comprehensive Nutrient Management Plans." Part I—Nutrient management, land treatment, manure and wastewater handling and storage, and recordkeeping. Natural Resources Conservation Service, U.S. Department of Agriculture. Available online at <<http://www.nrcs.usda.gov/technical/land/pubs/cnmp1.html>>.
- Euliss, N., and R. Gleason (2002) Personal communication regarding wetland restoration factor estimates and restoration activity data. Ned Euliss and Robert Gleason of the U.S. Geological Survey, Jamestown, ND, to Stephen Ogle of the National Resource Ecology Laboratory, Fort Collins, CO. August 2002.
- Gurung, R.B., F.J. Breidt, A. Dutin, and S.M. Ogle (2009) Predicting Enhanced Vegetation Index (EVI) for ecosystem modeling applications. *Remote Sensing of Environment* 113:2186-2193.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- IPCC (2003) *Good Practice Guidance for Land Use, Land-Use Change, and Forestry*. The Intergovernmental Panel on Climate Change, National Greenhouse Gas Inventories Programme, J. Penman, et al., eds. August 13, 2004. Available online at <<http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf.htm>>.
- Jones, C., R. Claassen, E. Marx and S.M. Ogle (forthcoming) GHG mitigation and the CRP: the role of post-contract land use change.
- McGill, W.B., and C.V. Cole (1981) Comparative aspects of cycling of organic C, N, S and P through soil organic matter. *Geoderma* 26:267-286.
- Metherell, A.K., L.A. Harding, C.V. Cole, and W.J. Parton (1993) "CENTURY Soil Organic Matter Model Environment." Agroecosystem version 4.0. Technical documentation, GPSR Tech. Report No. 4, USDA/ARS, Ft. Collins, CO.
- Mesinger, F., G. DiMego, E. Kalnay, K. Mitchell, P. C. Shafran, W. Ebisuzaki, D. Jovic, J. Woollen, E. Rogers, E. H. Berbery, M. B. Ek, Y. Fan, R. Grumbine, W. Higgins, H. Li, Y. Lin, G. Manikin, D. Parrish, and W. Shi (2006) North American regional reanalysis. *Bulletin of the American Meteorological Society* 87:343-360.

- NASS (2004) Agricultural Chemical Usage: 2003 Field Crops Summary. Report AgCh1(04)a. National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agcs0504.pdf>>.
- NASS (1999) Agricultural Chemical Usage: 1998 Field Crops Summary. Report AgCH1(99). National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, DC. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0599.pdf>>.
- NASS (1992) Agricultural Chemical Usage: 1991 Field Crops Summary. Report AgCh1(92). National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0392.txt>>.
- NRCS (1999) Soil Taxonomy: A basic system of soil classification for making and interpreting soil surveys, 2nd Edition. Agricultural Handbook Number 436, Natural Resources Conservation Service, U.S. Department of Agriculture, Washington, D.C.
- NRCS (1997) "National Soil Survey Laboratory Characterization Data," Digital Data, Natural Resources Conservation Service, U.S. Department of Agriculture. Lincoln, NE.
- NRCS (1981) Land Resource Regions and Major Land Resource Areas of the United States, USDA Agriculture Handbook 296, United States Department of Agriculture, Natural Resources Conservation Service, National Soil Survey Center, Lincoln, NE, pp. 156.
- Ogle, S.M., F.J. Breidt, M. Easter, S. Williams, K. Killian, and K. Paustian (2010) "Scale and uncertainty in modeled soil organic carbon stock changes for U.S. croplands using a process-based model." *Global Change Biology* 16:810-820.
- Ogle, S.M., F.J. Breidt, M. Easter, S. Williams and K. Paustian. (2007) "Empirically-Based Uncertainty Associated with Modeling Carbon Sequestration Rates in Soils." *Ecological Modeling* 205:453-463.
- Ogle, S.M., F.J. Breidt, and K. Paustian. (2006) "Bias and variance in model results due to spatial scaling of measurements for parameterization in regional assessments." *Global Change Biology* 12:516-523.
- Ogle, S. M., et al. (2005) "Agricultural management impacts on soil organic carbon storage under moist and dry climatic conditions of temperate and tropical regions." *Biogeochemistry* 72: 87-121.
- Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) "Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997." *Global Change Biology* 9:1521-1542.
- Ogle, S., M. Eve, M. Sperrow, F.J. Breidt, and K. Paustian (2002) Agricultural Soil C Emissions, 1990-2001: Documentation to Accompany EPA Inventory Tables. Natural Resources Ecology Laboratory, Fort Collins, CO. Provided in an e-mail from Stephen Ogle, NREL to Barbara Braatz, ICF International. September 23, 2002
- Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) "DAYCENT: Its Land Surface Submodel: Description and Testing". *Glob. Planet. Chang.* 19: 35-48.
- Parton, W.J., D.S. Ojima, C.V. Cole, and D.S. Schimel (1994) "A General Model for Soil Organic Matter Dynamics: Sensitivity to litter chemistry, texture and management," in *Quantitative Modeling of Soil Forming Processes*. Special Publication 39, Soil Science Society of America, Madison, WI, 147-167.
- Parton, W.J., D.S. Schimel, C.V. Cole, D.S. Ojima (1987) "Analysis of factors controlling soil organic matter levels in Great Plains grasslands." *Soil Science Society of America Journal* 51:1173-1179.
- Parton, W.J., J.W.B. Stewart, C.V. Cole. (1988) "Dynamics of C, N, P, and S in grassland soils: a model." *Biogeochemistry* 5:109-131.
- Paustian, K., et al. (1997a). "Agricultural soils as a sink to mitigate CO₂ emissions." *Soil Use and Management* 13: 230-244.
- Paustian, K., et al. (1997b). Management controls on soil carbon. In *Soil organic matter in temperate agroecosystems: long-term experiments in North America* (Paul E.A., K. Paustian, and C.V. Cole, eds). Boca Raton, CRC Press, pp. 15-49.

- Potter, C. S., J.T. Randerson, C.B. Fields, P.A. Matson, P.M. Vitousek, H.A. Mooney, and S.A. Klooster. (1993) "Terrestrial ecosystem production: a process model based on global satellite and surface data." *Global Biogeochemical Cycles* 7:811-841.
- Potter, C., S. Klooster, A. Huete, and V. Genovese (2007) Terrestrial carbon sinks for the United States predicted from MODIS satellite data and ecosystem modeling. *Earth Interactions* 11, Article No. 13, DOI 10.1175/EI228.1.
- Soil Survey Staff (2005) State Soil Geographic (STATSGO) Database for State. Natural Resources Conservation Service, United States Department of Agriculture. Available online at <<http://www.ncgc.nrcs.usda.gov/products/datasets/statsgo/index.html>>.
- Towery, D. (2001) Personal Communication. Dan Towery regarding adjustments to the CTIC (1998) tillage data to reflect long-term trends, Conservation Technology Information Center, West Lafayette, IN, and Marlen Eve, National Resource Ecology Laboratory, Fort Collins, CO. February 2001.
- USDA-ERS (2011) Agricultural Resource Management Survey (ARMS) Farm Financial and Crop Production Practices: Tailored Reports. Online at: <<http://ers.usda.gov/Data/ARMS/CropOverview.htm>>.
- USDA-ERS (1997) Cropping Practices Survey Data—1995. Economic Research Service, United States Department of Agriculture. Available online at <<http://www.ers.usda.gov/data/archive/93018/>>.
- USDA-FSA (2013) Conservation Reserve Program Monthly Summary – September 2013. U.S. Department of Agriculture, Farm Service Agency, Washington, D.C. Available online at <http://www.fsa.usda.gov/Internet/FSA_File/sep2013summary.pdf>.
- USDA-NRCS (2000) Digital Data and Summary Report: 1997 National Resources Inventory. Revised December 2000. Resources Inventory Division, Natural Resources Conservation Service, United States Department of Agriculture, Beltsville, MD.
- USDA-NRCS (2013) Summary Report: 2010 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1167354.pdf>.
- USDA-NRCS (2009) Summary Report: 2007 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa, <http://www.nrcs.usda.gov/technical/NRI/2007/2007_NRI_Summary.pdf>.

Cropland Remaining Cropland: Liming of Agriculture Soils

- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- Tepordei, V.V. (1997 through 2006) "Crushed Stone," In *Minerals Yearbook*. U.S. Department of the Interior/U.S. Geological Survey. Washington, D.C. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.
- Tepordei, V.V. (2003b) Personal communication. Valentin Tepordei, U.S. Geological Survey and ICF Consulting, August 18, 2003.
- Tepordei, V.V. (1996) "Crushed Stone," In *Minerals Yearbook 1994*. U.S. Department of the Interior/Bureau of Mines, Washington, D.C. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2000.
- Tepordei, V.V. (1995) "Crushed Stone," In *Minerals Yearbook 1993*. U.S. Department of the Interior/Bureau of Mines, Washington, D.C. pp. 1107–1147.
- Tepordei, V. V. (1994) "Crushed Stone," In *Minerals Yearbook 1992*. U.S. Department of the Interior/Bureau of Mines, Washington, D.C. pp. 1279-1303.
- Tepordei, V.V. (1993) "Crushed Stone," In *Minerals Yearbook 1991*. U.S. Department of the Interior/Bureau of Mines, Washington, D.C. pp. 1469-1511.

United States Geological Survey (USGS) (2014) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2014*, U.S. Geological Survey, Reston, VA. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2013) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2013*, U.S. Geological Survey, Reston, VA. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2012) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2012*, U.S. Geological Survey, Reston, VA. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2011) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2011*, U.S. Geological Survey, Reston, VA. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2010) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2010*, U.S. Geological Survey, Reston, VA. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2009) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2009*, U.S. Geological Survey, Reston, VA. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2008) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2008*, U.S. Geological Survey, Reston, VA. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2007) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2007*. U.S. Geological Survey, Reston, VA. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

West, T.O. (2008) Email correspondence. Tristram West, Environmental Sciences Division, Oak Ridge National Laboratory, U.S. Department of Energy and Nikhil Nadkarni, ICF International on suitability of liming emission factor for the entire United States. June 9, 2008.

West, T.O., and A.C. McBride (2005) "The contribution of agricultural lime to carbon dioxide emissions in the United States: dissolution, transport, and net emissions," *Agricultural Ecosystems & Environment* 108:145-154.

Willett, J.C. (2014) "Crushed Stone," In *Minerals Yearbook 2012*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed September 2014.

Willett, J.C. (2013a) "Crushed Stone," In *Minerals Yearbook 2011*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed May 2013.

Willett, J.C. (2013b) Personal Communication. Jason Willett, U.S. Geological Survey and ICF International. September 9, 2013.

Willett, J.C. (2011a) "Crushed Stone," In *Minerals Yearbook 2009*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2011.

Willett, J.C. (2011b) "Crushed Stone," In *Minerals Yearbook 2010*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed September 2012.

Willett, J.C. (2010) "Crushed Stone," In *Minerals Yearbook 2008*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2010.

Willett, J.C. (2009) "Crushed Stone," In *Minerals Yearbook 2007*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2009.

Willett, J.C. (2007a) "Crushed Stone," In *Minerals Yearbook 2005*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2007.

Willett, J.C. (2007b) "Crushed Stone," In *Minerals Yearbook 2006*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2008.

Cropland Remaining Cropland: Urea Fertilization

AAPFCO (2008 through 2014) Commercial Fertilizers. Association of American Plant Food Control Officials. University of Missouri. Columbia, MO.

AAPFCO (1995 through 2000a, 2002 through 2007) Commercial Fertilizers. Association of American Plant Food Control Officials. University of Kentucky. Lexington, KY.

AAPFCO (2000b) *1999-2000 Commercial Fertilizers Data, ASCII files*. Available from David Terry, Secretary, AAPFCO.

EPA (2000) Preliminary Data Summary: Airport Deicing Operations (Revised). EPA-821-R-00-016. August 2000.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Itle, C. (2009) Email correspondence. Cortney Itle, ERG and Tom Wirth, U.S. Environmental Protection Agency on the amount of urea used in aircraft deicing. January 7, 2009.

Terry, D. (2007) Email correspondence. David Terry, Fertilizer Regulatory program, University of Kentucky and David Berv, ICF International. September 7, 2007.

TVA (1991 through 1994) *Commercial Fertilizers*. Tennessee Valley Authority, Muscle Shoals, AL.

TVA (1992b) Fertilizer Summary Data 1992. Tennessee Valley Authority, Muscle Shoals, AL.

Land Converted to Cropland

Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In *Modeling Carbon and Nitrogen Dynamics for Soil Management*, Schaffer, M., L. Ma, S. Hansen, (eds.). CRC Press, Boca Raton, Florida, pp. 303-332.

Del Grosso, S.J., S.M. Ogle, W.J. Parton (2011) Soil organic matter cycling and greenhouse gas accounting methodologies, Chapter 1, pp 3-13 DOI: 10.1021/bk-2011-1072.ch001. In: *Understanding Greenhouse Gas Emissions from Agricultural Management* (L. Guo, A. Gunasekara, L. McConnell. Eds.), American Chemical Society, Washington, D.C.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Metherell, A.K., L.A. Harding, C.V. Cole, and W.J. Parton (1993) "CENTURY Soil Organic Matter Model Environment." Agroecosystem version 4.0. Technical documentation, GPSR Tech. Report No. 4, USDA/ARS, Ft. Collins, CO.

Ogle, S.M., F.J. Breidt, M. Easter, S. Williams, K. Killian, and K. Paustian (2010) "Scale and uncertainty in modeled soil organic carbon stock changes for U.S. croplands using a process-based model." *Global Change Biology* 16:810-820.

Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) "Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997." *Global Change Biology* 9:1521-1542.

Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) "DAYCENT: Its Land Surface Submodel: Description and Testing". *Glob. Planet. Chang.* 19: 35-48.

Parton, W.J., D.S. Ojima, C.V. Cole, and D.S. Schimel (1994) "A General Model for Soil Organic Matter Dynamics: Sensitivity to litter chemistry, texture and management," in *Quantitative Modeling of Soil Forming Processes*. Special Publication 39, Soil Science Society of America, Madison, WI, 147-167.

Grassland Remaining Grassland

Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In *Modeling Carbon and Nitrogen Dynamics for Soil Management*, Schaffer, M., L. Ma, S. Hansen, (eds.). CRC Press, Boca Raton, Florida, pp. 303-332.

Del Grosso, S.J., S.M. Ogle, W.J. Parton. 2011. Soil organic matter cycling and greenhouse gas accounting methodologies, Chapter 1, pp 3-13 DOI: 10.1021/bk-2011-1072.ch001. In: *Understanding Greenhouse Gas Emissions from Agricultural Management* (L. Guo, A. Gunasekara, L. McConnell. Eds.), American Chemical Society, Washington, D.C.

Edmonds, L., R. L. Kellogg, B. Kintzer, L. Knight, C. Lander, J. Lemunyon, D. Meyer, D.C. Moffitt, and J. Schaefer (2003) "Costs associated with development and implementation of Comprehensive Nutrient Management Plans." Part I—Nutrient management, land treatment, manure and wastewater handling and storage, and recordkeeping. Natural Resources Conservation Service, U.S. Department of Agriculture. Available online at <<http://www.nrcs.usda.gov/technical/land/pubs/cnmp1.html>>.

EPA (1999) *Biosolids Generation, Use and Disposal in the United States*. Office of Solid Waste, U.S. Environmental Protection Agency. Available online at <<http://biosolids.policy.net/relatives/18941.PDF>>.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Kellogg, R.L., C.H. Lander, D.C. Moffitt, and N. Gollehon (2000) *Manure Nutrients Relative to the Capacity of Cropland and Pastureland to Assimilate Nutrients: Spatial and Temporal Trends for the United States*. U.S. Department of Agriculture, Washington, D.C. Publication number nps00-0579.

Metherell, A.K., L.A. Harding, C.V. Cole, and W.J. Parton (1993) "CENTURY Soil Organic Matter Model Environment." Agroecosystem version 4.0. Technical documentation, GPSR Tech. Report No. 4, USDA/ARS, Ft. Collins, CO.

NASS (2004) *Agricultural Chemical Usage: 2003 Field Crops Summary*. Report AgCh1(04)a. National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agcs0504.pdfH>>.

NASS (1999) *Agricultural Chemical Usage: 1998 Field Crops Summary*. Report AgCH1(99). National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0599.pdf>>.

NASS (1992) *Agricultural Chemical Usage: 1991 Field Crops Summary*. Report AgCh1(92). National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0392.txtH>>.

NEBRA (2007) *A National Biosolids Regulation, Quality, End Use & Disposal Survey*. North East Biosolids and Residuals Association. July 21, 2007.

Ogle, S.M., F.J. Breidt, M. Easter, S. Williams, K. Killian, and K. Paustian (2010) "Scale and uncertainty in modeled soil organic carbon stock changes for U.S. croplands using a process-based model." *Global Change Biology* 16:810-820.

Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) "Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997." *Global Change Biology* 9:1521-1542.

Parton, W.J., D.S. Ojima, C.V. Cole, and D.S. Schimel (1994) "A General Model for Soil Organic Matter Dynamics: Sensitivity to litter chemistry, texture and management," in *Quantitative Modeling of Soil Forming Processes*. Special Publication 39, Soil Science Society of America, Madison, WI, 147-167.

Parton, W.J., D.S. Schimel, C.V. Cole, D.S. Ojima (1987) "Analysis of factors controlling soil organic matter levels in Great Plains grasslands." *Soil Science Society of America Journal* 51:1173-1179.

Parton, W.J., J.W.B. Stewart, C.V. Cole. (1988) "Dynamics of C, N, P, and S in grassland soils: a model." *Biogeochemistry* 5:109-131.

Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) "DAYCENT: Its Land Surface Submodel: Description and Testing". *Glob. Planet. Chang.* 19: 35-48.

USDA-ERS (2011) *Agricultural Resource Management Survey (ARMS) Farm Financial and Crop Production Practices: Tailored Reports*. Online at: <<http://ers.usda.gov/Data/ARMS/CropOverview.htm>>.

USDA-ERS (1997) *Cropping Practices Survey Data—1995*. Economic Research Service, United States Department of Agriculture. Available online at <<http://www.ers.usda.gov/data/archive/93018/>>.

USDA-NRCS (2013) *Summary Report: 2010 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa*. <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1167354.pdf>.

USDA-NRCS (2009) *Summary Report: 2007 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa*. <http://www.nrcs.usda.gov/technical/NRI/2007/2007_NRI_Summary.pdf>.

Land Converted to Grassland

Del Grosso, S.J., S.M. Ogle, W.J. Parton. (2011). Soil organic matter cycling and greenhouse gas accounting methodologies, Chapter 1, pp 3-13 DOI: 10.1021/bk-2011-1072.ch001. In: *Understanding Greenhouse Gas Emissions from Agricultural Management* (L. Guo, A. Gunasekara, L. McConnell. Eds.), American Chemical Society, Washington, D.C.

Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In *Modeling Carbon and Nitrogen Dynamics for Soil Management* (Schaffer, M., L. Ma, S. Hansen, (eds.). CRC Press, Boca Raton, Florida, pp. 303-332.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change, H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Metherell, A.K., L.A. Harding, C.V. Cole, and W.J. Parton (1993) "CENTURY Soil Organic Matter Model Environment." *Agroecosystem version 4.0*. Technical documentation, GPSR Tech. Report No. 4, USDA/ARS, Ft. Collins, CO.

NASS (2004) *Agricultural Chemical Usage: 2003 Field Crops Summary*. Report AgCh1(04)a. National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agcs0504.pdf>>.

NASS (1999) *Agricultural Chemical Usage: 1998 Field Crops Summary*. Report AgCH1(99). National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0599.pdf>>.

NASS (1992) *Agricultural Chemical Usage: 1991 Field Crops Summary*. Report AgCh1(92). National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C. Available online at <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0392.txt>>.

Ogle, S.M., F.J. Breidt, M. Easter, S. Williams, K. Killian, and K. Paustian (2010) “Scale and uncertainty in modeled soil organic carbon stock changes for U.S. croplands using a process-based model.” *Global Change Biology* 16:810-820.

Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) “Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997.” *Global Change Biology* 9:1521-1542.

Parton, W.J., D.S. Ojima, C.V. Cole, and D.S. Schimel (1994) “A General Model for Soil Organic Matter Dynamics: Sensitivity to litter chemistry, texture and management,” in *Quantitative Modeling of Soil Forming Processes*. Special Publication 39, Soil Science Society of America, Madison, WI, 147-167.

Parton, W.J., D.S. Schimel, C.V. Cole, D.S. Ojima (1987) “Analysis of factors controlling soil organic matter levels in Great Plains grasslands.” *Soil Science Society of America Journal* 51:1173-1179.

Parton, W.J., J.W.B. Stewart, C.V. Cole. (1988) “Dynamics of C, N, P, and S in grassland soils: a model.” *Biogeochemistry* 5:109-131.

Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) “DAYCENT: Its Land Surface Submodel: Description and Testing”. *Glob. Planet. Chang.* 19: 35-48.

USDA-ERS (2011) *Agricultural Resource Management Survey (ARMS) Farm Financial and Crop Production Practices: Tailored Reports*. Online at: <<http://ers.usda.gov/Data/ARMS/CropOverview.htm>>.

USDA-ERS (1997) *Cropping Practices Survey Data—1995*. Economic Research Service, United States Department of Agriculture. Available online at <<http://www.ers.usda.gov/data/archive/93018/>>.

USDA-NRCS (2013) *Summary Report: 2010 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C. and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa*. <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1167354.pdf>.

USDA-NRCS (2009) *Summary Report: 2007 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C. and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa*, <http://www.nrcs.usda.gov/technical/NRI/2007/2007_NRI_Summary.pdf>.

Wetlands Remaining Wetlands: CO₂, CH₄, and N₂O Emissions from Peatlands Remaining Peatlands

Apodaca, L. (2011) Email correspondence. Lori Apodaca, Peat Commodity Specialist, USGS and Emily Rowan, ICF International. November.

Apodaca, L. (2008) E-mail correspondence. Lori Apodaca, Peat Commodity Specialist, USGS and Emily Rowan, ICF International. October and November.

Cleary, J., N. Roulet and T.R. Moore (2005) “Greenhouse gas emissions from Canadian peat extraction, 1990-2000: A life-cycle analysis.” *Ambio* 34:456-461.

Division of Geological & Geophysical Surveys (DGGS), Alaska Department of Natural Resources (1997–2014) *Alaska's Mineral Industry Report (1997–2013)*. Alaska Department of Natural Resources, Fairbanks, AK. Available online at <<http://www.dggs.dnr.state.ak.us/pubs/pubs?reqtype=minerals>>.

IPCC (2013) *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*. Hiraishi, T., Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M. and Troxler, T.G. (eds.). Published: IPCC, Switzerland.

IPCC (2007) *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report (AR4) of the IPCC*. The Intergovernmental Panel on Climate Change, R.K. Pachauri, A. Resinger (eds.). Geneva, Switzerland.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Szumigala, D.J. (2011) Phone conversation. Dr. David Szumigala, Division of Geological and Geophysical Surveys, Alaska Department of Natural Resources and Emily Rowan, ICF International. January 18, 2011.

Szumigala, D.J. (2008) Phone conversation. Dr. David Szumigala, Division of Geological and Geophysical Surveys, Alaska Department of Natural Resources and Emily Rowan, ICF International. October 17, 2008.

United States Geological Survey (USGS) (2014b) *Mineral Commodity Summaries: Peat (2013)*. United States Geological Survey, Reston, VA. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/aluminum/index.html#mcs>>.

USGS (2015) *Mineral Commodity Summaries: Peat (2014)*. United States Geological Survey, Reston, VA. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/aluminum/index.html#mcs>>.

USGS (1991–2014a) *Minerals Yearbook: Peat (1994–2013)*. United States Geological Survey, Reston, VA. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/peat/index.html#myb>>.

Settlements Remaining Settlements: Changes in Carbon Stocks in Urban Trees

deVries, R.E. (1987) A Preliminary Investigation of the Growth and Longevity of Trees in Central Park. M.S. thesis, Rutgers University, New Brunswick, NJ.

Dwyer, J.F., D.J. Nowak, M.H. Noble, and S.M. Sisinni (2000) Connecting People with Ecosystems in the 21st Century: An Assessment of Our Nation's Urban Forests. General Technical Report PNW-GTR-490, U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, OR.

Fleming, L.E. (1988) Growth Estimation of Street Trees in Central New Jersey. M.S. thesis, Rutgers University, New Brunswick, NJ.

Frelich, L.E. (1992) Predicting Dimensional Relationships for Twin Cities Shade Trees. University of Minnesota, Department of Forest Resources, St. Paul, MN, p. 33.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Nowak, D.J. (2011) Phone conference regarding Changes in Carbon Stocks in Urban Trees estimation methodology. David Nowak, USDA, Jennifer Jenkins, EPA, and Mark Flugge and Nikhil Nadkarni, ICF International. January 4, 2011.

Nowak, D.J. (2009) E-mail correspondence regarding new data for Chicago's urban forest. David Nowak, USDA Forest Service to Nikhil Nadkarni, ICF International. October 7, 2009.

Nowak, D.J. (2007a) "New York City's Urban Forest." USDA Forest Service. Newtown Square, PA, February 2007.

Nowak, D.J. (2007b) E-mail correspondence regarding revised sequestration values and standard errors for sequestration values. David Nowak, USDA Forest Service to Susan Asam, ICF International. October 31, 2007.

Nowak, D.J. (1994) "Atmospheric Carbon Dioxide Reduction by Chicago's Urban Forest." In: Chicago's Urban Forest Ecosystem: Results of the Chicago Urban Forest Climate Project. E.G. McPherson, D.J. Nowak, and R.A. Rowntree (eds.). General Technical Report NE-186. U.S. Department of Agriculture Forest Service, Radnor, PA. pp. 83–94.

Nowak, D.J. (1986) "Silvics of an Urban Tree Species: Norway Maple (*Acer platanoides* L.)." M.S. thesis, College of Environmental Science and Forestry, State University of New York, Syracuse, NY.

Nowak, D.J., Buckelew-Cumming, A., Twardus, D., Hoehn, R., and Mielke, M. (2007). National Forest Health Monitoring Program, Monitoring Urban Forests in Indiana: Pilot Study 2002, Part 2: Statewide Estimates Using the UFORE Model. Northeastern Area Report. NA-FR-01e07, p. 13.

Nowak, D.J. and D.E. Crane (2002) "Carbon Storage and Sequestration by Urban Trees in the United States." *Environmental Pollution* 116(3):381–389.

Nowak, D.J., D.E. Crane, J.C. Stevens, and M. Ibarra (2002) Brooklyn's Urban Forest. General Technical Report NE-290. U.S. Department of Agriculture Forest Service, Newtown Square, PA.

Nowak, D.J., and E.J. Greenfield (2012) Tree and impervious cover in the United States. *Journal of Landscape and Urban Planning* (107) pp. 21-30.

Nowak, D.J., E.J. Greenfield, R.E. Hoehn, and E. Lapoint (2013) Carbon Storage and Sequestration by Trees in Urban and Community Areas of the United States. *Environmental Pollution* 178: 229-236. March 12, 2013.

Nowak, D.J., J.T. Walton, L.G. Kaya, and J.F. Dwyer (2005) "The Increasing Influence of Urban Environments on U.S. Forest Management." *Journal of Forestry* 103(8):377–382.

Smith, W.B. and S.R. Shifley (1984) Diameter Growth, Survival, and Volume Estimates for Trees in Indiana and Illinois. Research Paper NC-257. North Central Forest Experiment Station, U.S. Department of Agriculture Forest Service, St. Paul, MN.

U.S. Census Bureau (2012) "A national 2010 urban area file containing a list of all urbanized areas and urban clusters (including Puerto Rico and the Island Areas) sorted by UACE code." U.S. Census Bureau, Geography Division.

Settlements Remaining Settlements: N₂O Fluxes from Soils

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Ruddy B.C., D.L. Lorenz, and D.K. Mueller (2006) *County-level estimates of nutrient inputs to the land surface of the conterminous United States, 1982-2001*. Scientific Investigations Report 2006-5012. U.S. Department of the Interior.

Other: Changes in Yard Trimming and Food Scrap Carbon Stocks in Landfills

Barlaz, M.A. (2008) "Re: Corrections to Previously Published Carbon Storage Factors." Memorandum to Randall Freed, ICF International. February 28, 2008.

Barlaz, M.A. (2005) "Decomposition of Leaves in Simulated Landfill." Letter report to Randall Freed, ICF Consulting. June 29, 2005.

Barlaz, M.A. (1998) "Carbon Storage during Biodegradation of Municipal Solid Waste Components in Laboratory-Scale Landfills." *Global Biogeochemical Cycles* 12:373–380.

De la Cruz, F.B. and M.A. Barlaz (2010) "Estimation of Waste Component Specific Landfill Decay Rates Using Laboratory-Scale Decomposition Data" *Environmental Science & Technology* 44:4722–4728.

Eleazer, W.E., W.S. Odle, Y. Wang, and M.A. Barlaz (1997) "Biodegradability of Municipal Solid Waste Components in Laboratory-Scale Landfills." *Environmental Science & Technology* 31:911–917.

EPA (2014a) *Municipal Solid Waste Generation, Recycling, and Disposal in the United States: 2012 Facts and Figures*. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C. Available online at <<http://www.epa.gov/osw/nonhaz/municipal/msw99.htm>>.

EPA (2014b) *Municipal Solid Waste Generation, Recycling, and Disposal in the United States: 2012 Historical (summary) Data Tables*. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C. Available online at <http://www.epa.gov/solidwaste/conservation/tools/recmeas/msw_improv.htm#H>.

IPCC (2003) *Good Practice Guidance for Land Use, Land-Use Change, and Forestry*. The Intergovernmental Panel on Climate Change, National Greenhouse Gas Inventories Programme, J. Penman et al. (eds.). Available online at <<http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf.htm>>.

Oshins, C. and D. Block (2000) "Feedstock Composition at Composting Sites." *Biocycle* 41(9):31–34.

Tchobanoglous, G., H. Theisen, and S.A. Vigil (1993) *Integrated Solid Waste Management, 1st edition*. McGraw-Hill, NY. Cited by Barlaz (1998) "Carbon Storage during Biodegradation of Municipal Solid Waste Components in Laboratory-Scale Landfills." *Global Biogeochemical Cycles* 12:373–380.

Waste

Landfills

40 CFR Part 60, Subpart CC (2005) Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, 60.30c--60.36c, Code of Federal Regulations, Title 40. Available online at <http://www.access.gpo.gov/nara/cfr/waisidx_05/40cfr60_05.html>.

40 CFR Part 60, Subpart WWW (2005) Standards of Performance for Municipal Solid Waste Landfills, 60.750--60.759, Code of Federal Regulations, Title 40. Available online at <http://www.access.gpo.gov/nara/cfr/waisidx_05/40cfr60_05.html>.

Barlaz, M.A. (2006) "Forest Products Decomposition in Municipal Solid Waste Landfills." *Waste Management*, 26(4): 321-333.

Barlaz, M.A. (1998) "Carbon Storage During Biodegradation of Municipal Solid Waste Components in Laboratory-scale Landfills." *Global Biogeochemical Cycles*, 12(2): 373-380, June 1998.

BioCycle (2010) "The State of Garbage in America" By L. Arsova, R. Van Haaren, N. Goldstein, S. Kaufman, and N. Themelis. *BioCycle*. December 2010. Available online at <http://www.jgpress.com/archives/_free/002191.html>.

BioCycle (2008) "The State of Garbage in America" By L. Arsova, R. Van Haaren, N. Goldstein, S. Kaufman, and N. Themelis. *BioCycle*. December 2008. Available online at <http://www.jgpress.com/archives/_free/001782.html>.

BioCycle (2006) "15th Annual BioCycle Nationwide Survey: The State of Garbage in America" By P. Simmons, N. Goldstein, S. Kaufman, N. Goldstein, N. Themelis, and J. Thompson. *BioCycle*. April 2006.

Bronstein, K., Coburn, J., and R. Schmeltz (2012) "Understanding the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks and Mandatory GHG Reporting Program for Landfills: Methodologies, Uncertainties, Improvements and Deferrals." Prepared for the U.S. EPA International Emissions Inventory Conference, August 2012, Tampa, Florida. Available online at <<http://www.epa.gov/ttnchie1/conference/ei20/session3/kbronstein.pdf>>.

Czepiel, P., B. Mosher, P. Crill, and R. Harriss (1996) "Quantifying the Effect of Oxidation on Landfill Methane Emissions." *Journal of Geophysical Research*, 101(D11):16721-16730.

EIA (2007) Voluntary Greenhouse Gas Reports for EIA Form 1605B (Reporting Year 2006). Available online at <<ftp://ftp.eia.doe.gov/pub/oiaf/1605/cdrom/>>.

EPA (2014a) *Landfill Gas-to-Energy Project Database*. Landfill Methane and Outreach Program. January 2014.

EPA (2014b) Greenhouse Gas Reporting Program (GHGRP). 2014 Envirofacts. Subpart HH: Municipal Solid Waste Landfills. Available online at <<http://www.epa.gov/enviro/facts/ghg/search.html>>.

EPA (2014c) Municipal Solid Waste Generation, Recycling, and Disposal in the United States Detailed Tables and Figures for 2012. February 2014. Available online at <http://epa.gov/epawaste/nonhaz/municipal/pubs/2012_msw_dat_tbls.pdf>.

EPA (2008) *Compilation of Air Pollution Emission Factors, Publication AP-42*, Draft Section 2.4 Municipal Solid Waste Landfills. October 2008.

EPA (1998) *Compilation of Air Pollution Emission Factors, Publication AP-42*, Section 2.4 Municipal Solid Waste Landfills. November 1998.

EPA (1993) *Anthropogenic Methane Emissions in the United States, Estimates for 1990: Report to Congress*, U.S. Environmental Protection Agency, Office of Air and Radiation. Washington, D.C. EPA/430-R-93-003. April 1993.

EPA (1988) *National Survey of Solid Waste (Municipal) Landfill Facilities*, U.S. Environmental Protection Agency. Washington, D.C. EPA/530-SW-88-011. September 1988.

ERG (2014) Draft Production Data Supplied by ERG for 1990-2013 for Pulp and Paper, Fruits and Vegetables, and Meat. August.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC (2003) *Good Practice Guidance for Land Use, Land-Use Change and Forestry*, The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change, J. Penman, M. Gytarsky, T. Hiraishi, T. Krug, D. Kruger, R. Pipatti, L. Buendia, K. Miwa, T. Ngara, K. Tanabe, and F. Wagner (eds.). Hayama, Kanagawa, Japan.

Mancinelli, R. and C. McKay (1985) "Methane-Oxidizing Bacteria in Sanitary Landfills." *Proc. First Symposium on Biotechnical Advances in Processing Municipal Wastes for Fuels and Chemicals*, Minneapolis, MN, 437-450. August.

Peer, R., S. Thorneloe, and D. Epperson (1993) "A Comparison of Methods for Estimating Global Methane Emissions from Landfills." *Chemosphere*, 26(1-4):387-400.

RTI (2013) Review of State of Garbage Data Used in the U.S. Non-CO₂ Greenhouse Gas Inventory for Landfills. Memorandum prepared by K. Weitz and K. Bronstein (RTI) for R. Schmeltz (EPA), November 25, 2013.

RTI (2011) Updated Research on Methane Oxidation in Landfills. Memorandum prepared by K. Weitz (RTI) for R. Schmeltz (EPA), January 14, 2011.

RTI (2004) Documentation for Changes to the Methodology for the Inventory of Methane Emissions from Landfills. Memorandum prepared by M. Branscome and J. Coburn (RTI) to E. Scheehle (EPA), August 26, 2004.

Shin, D. (2014). Generation and Disposition of Municipal Solid Waste (MSW) in the United States – A National Survey. Master of Science thesis submitted to the Department of Earth and Environmental Engineering Fu Foundation School of Engineering and Applied Science, Columbia University. January 3, 2014. Available online at <http://www.seas.columbia.edu/earth/wtert/sofos/Dolly_Shin_Thesis.pdf>.

Solid Waste Association of North America (SWANA) (1998) *Comparison of Models for Predicting Landfill Methane Recovery*. Publication No. GR-LG 0075. March 1998.

U.S. Census Bureau (2014). Annual Population Estimates, Vintage 2012 April 1, 2010 to July 1, 2013. Available online at <<http://www.census.gov/popest/data/national/totals/2013/index.html>>.

Waste Business Journal (WBJ) (2010). Directory of Waste Processing & Disposal Sites 2010.

Wastewater Treatment

Ahn et al. (2010) N₂O Emissions from Activated Sludge Processes, 2008-2009: Results of a National Monitoring Survey in the United States. *Environ. Sci. Technol.* 44: 4505-4511.

Beecher et al. (2007) "A National Biosolids Regulation, Quality, End Use & Disposal Survey, Preliminary Report." Northeast Biosolids and Residuals Association, April 14, 2007.

Benyahia, F., M. Abdulkarim, A. Embaby, and M. Rao. (2006) Refinery Wastewater Treatment: A true Technological Challenge. Presented at the Seventh Annual U.A.E. University Research Conference.

Climate Action Reserve (CAR) (2011) Landfill Project Protocol V4.0, June 2011. Available online at <<http://www.climateactionreserve.org/how/protocols/us-landfill/>>.

- Chandran, K. (2012) Greenhouse Nitrogen Emissions from Wastewater Treatment Operation Phase I: Molecular Level Through Whole Reactor Level Characterization. WERF Report U4R07.
- Donovan (1996) Siting an Ethanol Plant in the Northeast. C.T. Donovan Associates, Inc. Report presented to Northeast Regional Biomass Program (NRBP). (April). Available online at <<http://www.nrbp.org/pdfs/pub09.pdf>>. Accessed October 2006.
- EIA (2014) Energy Information Administration. U.S. Refinery and Blender Net Production of Crude Oil and Petroleum Products (Thousand Barrels). Available online at: <<http://tonto.eia.doe.gov/dnav/pet/hist/mtrtrus1a.htm>>. Accessed June 2014.
- EPA (2008) US Environmental Protection Agency. Municipal Nutrient Removal Technologies Reference Document: Volume 2 – Appendices. U.S. Environmental Protection Agency, Office of Wastewater Management. Washington, D.C.
- EPA (2004) U.S. Environmental Protection Agency. Clean Watersheds Needs Survey 2004 – Report to Congress. U.S. Environmental Protection Agency, Office of Wastewater Management. Washington, D.C.
- EPA (2002) U.S. Environmental Protection Agency. Development Document for the Proposed Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Industry Point Source Category (40 CFR 432). EPA-821-B-01-007. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. January 2002.
- EPA (2000) U.S. Environmental Protection Agency. Clean Watersheds Needs Survey 2000 - Report to Congress. Office of Wastewater Management, U.S. Environmental Protection Agency. Washington, D.C. Available online at <<http://www.epa.gov/owm/mtb/cwns/2000rtc/toc.htm>>. Accessed July 2007.
- EPA (1999) U.S. Environmental Protection Agency. Biosolids Generation, Use and Disposal in the United States. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency. Washington, D.C. EPA530-R-99-009. September 1999.
- EPA (1998) U.S. Environmental Protection Agency. “AP-42 Compilation of Air Pollutant Emission Factors.” Chapter 2.4, Table 2.4-3, page 2.4-13. Available online at <<http://www.epa.gov/ttn/chief/ap42/ch02/final/c02s04.pdf>>.
- EPA (1997a) U.S. Environmental Protection Agency. Estimates of Global Greenhouse Gas Emissions from Industrial and Domestic Wastewater Treatment. EPA-600/R-97-091. Office of Policy, Planning, and Evaluation, U.S. Environmental Protection Agency. Washington, D.C. September 1997.
- EPA (1997b) U.S. Environmental Protection Agency. Supplemental Technical Development Document for Effluent Guidelines and Standards (Subparts B & E). EPA-821-R-97-011. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. October 1997.
- EPA (1996) U.S. Environmental Protection Agency. 1996 Clean Water Needs Survey Report to Congress. Assessment of Needs for Publicly Owned Wastewater Treatment Facilities, Correction of Combined Sewer Overflows, and Management of Storm Water and Nonpoint Source Pollution in the United States. Office of Wastewater Management, U.S. Environmental Protection Agency. Washington, D.C. Available online at <<http://www.epa.gov/owm/mtb/cwns/1996rtc/toc.htm>>. Accessed July 2007.
- EPA (1993) U.S. Environmental Protection Agency. Development Document for the Proposed Effluent Limitations Guidelines and Standards for the Pulp, Paper and Paperboard Point Source Category. EPA-821-R-93-019. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. October 1993.
- EPA (1992) U.S. Environmental Protection Agency. Clean Watersheds Needs Survey 1992 – Report to Congress. Office of Wastewater Management, U.S. Environmental Protection Agency. Washington, D.C.
- EPA (1975) U.S. Environmental Protection Agency. Development Document for Interim Final and Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Fruits, Vegetables, and Specialties Segment of the Canned and Preserved Fruits and Vegetables Point Source Category. United States Environmental Protection Agency, Office of Water. EPA-440/1-75-046. Washington D.C. October 1975.
- EPA (1974) U.S. Environmental Protection Agency. Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Apple, Citrus, and Potato Processing Segment of the Canned and

- Preserved Fruits and Vegetables Point Source Category. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-440/1-74-027-a. March 1974.
- ERG (2014a) Recommended Improvements to the 1990-2013 Wastewater Greenhouse Gas Inventory. September 2014.
- ERG (2014b) Recommended Improvements to the 1990-2013 Wastewater Greenhouse Gas Inventory Using the GHGRP Data. September 2014.
- ERG (2013a) Revisions to Pulp and Paper Wastewater Inventory. October 2013.
- ERG (2013b) Revisions to the Petroleum Wastewater Inventory. October 2013.
- ERG (2011) Review of Current Research on Nitrous Oxide Emissions from Wastewater Treatment. April 2011.
- ERG (2008) Planned Revisions of the Industrial Wastewater Inventory Emission Estimates for the 1990-2007 Inventory. August 10, 2008.
- ERG (2006) Memorandum: Assessment of Greenhouse Gas Emissions from Wastewater Treatment of U.S. Ethanol Production Wastewaters. Prepared for Melissa Weitz, EPA. 10 October 2006.
- FAO (2014) FAOSTAT-Forestry Database. Available online at <<http://faostat3.fao.org/home/index.html#DOWNLOAD>> Accessed July 2013.
- Global Water Research Coalition (GWRC) (2011) N₂O and CH₄ Emission from Wastewater Collection and Treatment Systems - technical Report. GWRC Report 2011-30.
- Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers. (2004) Recommended Standards for Wastewater Facilities (Ten-State Standards).
- IPCC (2014) *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*. Hiraishi, T., Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M. and Troxler, T.G. (eds.). Published: IPCC, Switzerland.
- IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- Leverenz, H.L., G. Tchobanoglous, and J.L. Darby (2010) "Evaluation of Greenhouse Gas Emissions from Septic Systems". Water Environment Research Foundation. Alexandria, VA.
- Lockwood-Post (2002) Lockwood-Post's Directory of Pulp, Paper and Allied Trades, Miller-Freeman Publications. San Francisco, CA.
- McFarland (2001) Biosolids Engineering, New York: McGraw-Hill, p. 2.12.
- Merrick (1998) Wastewater Treatment Options for the Biomass-to-Ethanol Process. Report presented to National Renewable Energy Laboratory (NREL). Merrick & Company. Subcontract No. AXE-8-18020-01. October 22, 1998.
- Metcalf & Eddy, Inc. (2003) Wastewater Engineering: Treatment, Disposal and Reuse, 4th ed. McGraw Hill Publishing.
- Nemerow, N.L. and A. Dasgupta (1991) Industrial and Hazardous Waste Treatment. Van Nostrand Reinhold. NY. ISBN 0-442-31934-7.
- NRBP (2001) Northeast Regional Biomass Program. An Ethanol Production Guidebook for Northeast States. Washington, D.C. (May 3). Available online at <<http://www.nrbp.org/pdfs/pub26.pdf>>. Accessed October 2006.
- Rendleman, C.M. and Shapouri, H. (2007) New Technologies in Ethanol Production. USDA Agricultural Economic Report Number 842.

- RFA (2014) Renewable Fuels Association. Historic U.S. Fuel Ethanol Production. Available online at <<http://www.ethanolrfa.org/pages/statistics>>. Accessed October 2012.
- Ruocco (2006a) Email correspondence. Dr. Joe Ruocco, Phoenix Bio-Systems to Sarah Holman, ERG. "Capacity of Bio-Methanators (Dry Milling)." October 6, 2006.
- Ruocco (2006b) Email correspondence. Dr. Joe Ruocco, Phoenix Bio-Systems to Sarah Holman, ERG. "Capacity of Bio-Methanators (Wet Milling)." October 16, 2006.
- Scheehle, E.A., and Doorn, M.R. (2001) "Improvements to the U.S. Wastewater Methane and Nitrous Oxide Emissions Estimate." July 2001.
- Sullivan (SCS Engineers) (2010) The Importance of Landfill Gas Capture and Utilization in the U.S. Presented to SWICS, April 6, 2010. Available online at <http://www.scsengineers.com/Papers/Sullivan_Importance_of_LFG_Capture_and_Utilization_in_the_US.pdf>.
- Sullivan (SCS Engineers) (2007) Current MSW Industry Position and State of the Practice on Methane Destruction Efficiency in Flares, Turbines, and Engines. Presented to Solid Waste Industry for Climate Solutions (SWICS). July 2007. Available online at <http://www.scsengineers.com/Papers/Sullivan_LFG_Destruction_Efficiency_White_Paper.pdf>.
- UNFCCC (2012) CDM Methodological tool, Project emissions from flaring (Version 02.0.0). EB 68 Report. Annex 15. Available online at <http://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-06-v1.pdf/history_view>.
- U.S. Census Bureau (2014) International Database. Available online at <<http://www.census.gov/ipc/www/idb/>> and <<http://www.census.gov/ipc/www/idbprint.html>>. Accessed August 2014.
- U.S. Census Bureau (2011) "American Housing Survey." Table 1A-4: Selected Equipment and Plumbing--All Housing Units. From 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, 2009 and 2011 reports. Available online at <<http://www.census.gov/hhes/www/housing/ahs/nationaldata.html>>. Accessed October 2012.
- U.S. DOE (2013) U.S. Department of Energy Bioenergy Technologies Office. Biofuels Basics. Available online at <http://www1.eere.energy.gov/bioenergy/biofuels_basics.html#Ethanol>. Accessed September 2013.
- USDA (2014a) U.S. Department of Agriculture. National Agricultural Statistics Service. Washington, D.C. Available online at <http://www.nass.usda.gov/Publications/Ag_Statistics/index.asp> and <http://www.nass.usda.gov/Data_and_Statistics/Quick_Stats/>. Accessed June 2014.
- USDA (2014b) U.S. Department of Agriculture. Economic Research Service. Nutrient Availability. Washington D.C. Available online at <http://www.ers.usda.gov/datafiles/Food_Availabilty_Per_Capita_Data_System/Nutrient_Availability/nutrients.xls>. Accessed August 2014.
- USPoultry (2006) Email correspondence. John Starkey, USPOULTRY to D. Bartram, ERG. 30 August 2006.
- White and Johnson (2003) White, P.J. and Johnson, L.A. Editors. Corn: Chemistry and Technology. 2nd ed. AACC Monograph Series. American Association of Cereal Chemists. St. Paul, MN.
- Willis et al. (2013) Methane Evolution from Lagoons and Ponds. Prepared for the Water Environment Research Foundation under contract U2R08c.
- World Bank (1999) Pollution Prevention and Abatement Handbook 1998, Toward Cleaner Production. The International Bank for Reconstruction and Development, The World Bank, Washington, D.C. ISBN 0-8213-3638-X.

Composting

- BioCycle (2010) *The State of Garbage in America*. Prepared by Rob van Haaren, Nickolas Themelis and Nora Goldstein. Available online at <http://www.biocycle.net/images/art/1010/bc101016_s.pdf>.

EPA (2014) *Municipal Solid Waste in the United States: 2012 Facts and Figures*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at <http://epa.gov/epawaste/nonhaz/municipal/pubs/2012_msw_dat_tbls.pdf>.

EPA (2011) *Municipal Solid Waste in the United States: 2010 Facts and Figures*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at <http://www.epa.gov/osw/nonhaz/municipal/pubs/2010_MSW_Tables_and_Figures_508.pdf>.

EPA (2007) *Municipal Solid Waste in the United States: 2006 Facts and Figures*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at <<http://www.epa.gov/osw/nonhaz/municipal/pubs/06data.pdf>>.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. Volume 5: Waste, Chapter 4: Biological Treatment of Solid Waste, Table 4.1. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change, H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan. Available online at <http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/5_Volume5/V5_4_Ch4_Bio_Treat.pdf>.

Shin, D. (2014). Generation and Disposition of Municipal Solid Waste (MSW) in the United States – A National Survey. Table 3. Master of Science thesis, Department of Earth and Environmental Engineering, Fu Foundation School of Engineering and Applied Science, Columbia University. Available online at <http://www.seas.columbia.edu/earth/wtert/sofos/Dolly_Shin_Thesis.pdf>.

U.S. Census Bureau (2014) Population Estimates: National Totals: Vintage 2013. Available online at <<http://www.census.gov/popest/data/national/totals/2013/index.html>>.

U.S. Composting Council (2010). *Yard Trimmings Bans: Impact and Support*. Prepared by Stuart Buckner, Executive Director, U.S. Composting Council. Available online at <<http://recyclingorganizations.org/webinars/RONA-YT-Ban-impacts-and-support-8.19.pdf>>.

Waste Sources of Indirect Greenhouse Gas Emissions

EPA (2015) “1970 - 2014 Average annual emissions, all criteria pollutants in MS Excel.” National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, March 2015. Available online at <<http://www.epa.gov/ttn/chieftrends/index.html>>.

EPA (2003) E-mail correspondence containing preliminary ambient air pollutant data. Office of Air Pollution and the Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. December 22, 2003.

EPA (1997) *Compilation of Air Pollutant Emission Factors, AP-42*. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. October 1997.

Recalculations and Improvements

ACC (2014a) *U.S. Chemical Industry Statistical Handbook*. American Chemistry Council, Arlington, VA.

ACC (2014b) *Business of Chemistry (Annual Data)*. American Chemistry Council, Arlington, VA.

Bronstein, K., Coburn, J., and R. Schmeltz (2012) “Understanding the EPA’s Inventory of U.S. Greenhouse Gas Emissions and Sinks and Mandatory GHG Reporting Program for Landfills: Methodologies, Uncertainties, Improvements and Deferrals.” Prepared for the U.S. EPA International Emissions Inventory Conference, August 2012, Tampa, Florida. Available online at <<http://www.epa.gov/ttnchie1/conference/ei20/session3/kbronstein.pdf>>.

EIA (2015) *Monthly Energy Review, February 2015*, Energy Information Administration, U.S. Department of Energy, Washington, DC. DOE/EIA-0035(2015/2).

EPA (2014) Greenhouse Gas Reporting Program. Aggregation of reported facility level data under Subpart V - National Nitric Acid production for calendar years 2010-2013. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

Howard, J. L. (forthcoming) *U.S. timber production, trade, consumption, and price statistics 1965 to 2013*. Res. Pap. FPL-RP-XXX. Madison, WI: USDA, Forest Service, Forest Products Laboratory.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.