

Design Projects by Jeffrey Gage, Project Manager and Systems Designer for GMT

Jeff has overseen the design permitting, installation and sometimes operation of over 30 composting facilities ranging from positive and/or negative aeration, windrow systems with and without aeration, within buildings under covers, and just static piles. He works with what you have and what you want to do and makes it work right. Here is the list of compost facilities he has done significant work on to establish and expand their operations:

Woodland Park Zoo, Seattle, Washington, loader turned manure and bedding piles, operations, permits 1985

Cedar Grove Compost, Maple Valley, WA, Windrow turned green waste design, permits 1986

Seattle Parks Department, onsite organics management planning for 5 sites, 1986

Longacres Racetrack, Renton Washington, aerated windrows of horse track bedding design, permits 1987

Land Recovery, Inc. Puyallup Washington four facilities developed and operated 1987 to 2002:

- 120 TPD Green waste first TAP aerated floor design at Pierce County Compost Facility 2.1 acres
- 80 TPD Green Mulch farm land application of short term composted green waste. 0.5 acres
- 27 TPD In-vessel food waste composting system using drop boxes and Gore covers. 0.5 acres
- 220 TPD Compost Factory using green waste, manure, food waste and biosolids fully enclosed 3.5 acres. Using TAP air floor, side turners, biofilters, automation system by GMT

Inland Empire Compost Facility, Colton CA Biosolids & Green waste Ops Plans & facility design 2003

Little Hanaford Farms, Centralia, Washington, Turned continuous pile Chicken DAF, Green waste and fish. 2003

City of Tacoma, WA Green waste and food waste TAP feasibility design and cost analysis with Parametrix 2003

Edmonton, Canada Biosolids and MSW temporary bypass compost facility design with Earth Tech 2003

Waste Connections, Vancouver WA Food waste and green waste compost facility design, permitting 2003

Silver Springs Ranch, Randle, WA Green waste ASP system design and land use permitting 2003

Skokomish Indian Tribe, Washington, fish waste and wood waste windrow composting 2004

Boise Cascade, Wallula, Washington Paper mill sludge, ash and butcher waste in windrows 2004

Washington Corrections Center, Shelton Food waste digestion and composting system analysis 2004

American Compost & Recycling, Portland, Oregon, large static composting green waste and lentils 2005-2008

Clackamas Compost, Clackamas, Oregon, Green waste Turned windrows 2005-2008

S&H Logging, West Linn, OR TAP Compost facility design and permitting for green waste 2006

Swanson Bark & Wood Products, Longview, WA Design and permitting for green waste compost facility 2008

Sandoval County, New Mexico, In-vessel biosolids composting system, startup support and training 2009

Vision Recycling, Santa Cruz County, CA, Green waste composting facility TAP on landfill design 2009

Cold Creek Compost, Ukiah, CA Green waste grape pomace and chicken manure Windrow and ASP 2009

Nature's Needs, North Plains, OR Green Waste Food Waste TAP and ASP and Windrow 2009

Greenlands, Aumsville OR Green waste extended ASP facility design and land use permitting 2009

Merriton International, Fusan, China, MSW and food waste TAP system design, 2010

Lenz Enterprises, Stanwood WA, Paunch manure, green waste, food waste, mortalities. Manager for ASP and extended windrow operations, facility expansion & upgrades, zero leachate discharge systems 2008-2011

Annen Brothers, Mt. Angel, OR Hop Waste TAP system design and start-up, 2013

EnviroSmart, Delta BC Green waste and food waste TAP under roof design and startup 2014

Graton WWTP, CA Biosolids and wood waste, ASP under roof retrofit existing building design 2014

Dirt Hugger, The Dalles, OR Green waste and food waste TAP design and leachate control design 2014

City of Phoenix, AZ Green waste and food waste TAP with biofiltration design, permitting, training 2015



Project Manager – Green Mountain Technologies. Bainbridge Island, WA 2011 to Present

- As project manager, Jeff has overseen the design and installation of 6 ASP composting facilities ranging from less than 100 tons per year to 200,000 tons per year over the last 4 years. Clients include the City of Phoenix, Recology Waste Solutions, the Town of Graton, California and EnviroSmart Composting of Vancouver, BC. Jeff is founder and a lead instructor for the Compost Facility Operator Training courses for the Washington Organic Recycling Council and the US Composting Council. He regularly presents technical papers and leads training sessions at the USCC conferences.

Compost Facility Manager - Lenz Enterprises, Inc. Stanwood, WA 11/2008 to 1/2011

- Responsible for directing employees and installing and operating new process controls and methods to reduce odors, vectors and increase process efficiencies in a new compost facility handling paunch manure, broiler bedding and yard debris & food waste using Aerated Static Piles and turned windrows. Scale up of facility capacity from 25 to 350 tons per day.

Director of Research & Development - Swanson Bark & Wood Products, Inc. Longview, WA, 2/2005 to 11/2008 -

- Responsible for regulatory permitting and compliance for solid waste, stormwater, and air permits at six compost and yard debris collection sites in Oregon and Washington
- Market development and web page development for composted products, mulch, tools manufactured soil, and green roof media at <http://www.compostproducts.com>
- Representation of 4 companies to regulatory, policy and industry groups in WA and OR Developed Pathogen BMP's and Odor Management for Advanced Operator Training
- Compost facility development for regional compost facility for food waste and yard waste

Owner - Compost Design Services Olympia, WA, March 2002 to February 2005 -

- Design for food & yard debris composting facility in Vancouver WA for Waste Connections
- Washington Corrections Center in Shelton, Washington food waste handling system analysis anaerobic digestion and composting, with Economic & Engineering Services, Olympia
- Development of aerobic turned mass bed system for Little Hanaford Farms, Centralia, Washington for odor best management practices establishment for air permit, waste permits

- Sub-contractor to Tetra Tech Infrastructure Services Group on Inland Empire Compost Facility design for biosolids and green waste composting operations
- Bid evaluations for Waste Recycling Action Programme for compost facility funding and guest trainer for the Landmark Compost Training
- California Integrated Waste Management Board (CIWMB) seminar development for compost facility operators and regulatory officials on odor management programs
- City of Tacoma food waste composting feasibility study with Parametrix
- Sub-contractor to Shaw Environmental to provide updated permit compliance for Boise Cascade Wallula Paper pulp mill sludge and paunch manure composting facility
- Portland Metro Health Agency odor remediation compliance inspector on food waste odor violations at American Compost & Recycling after lentil waste acceptance.
- Sandoval County New Mexico In-vessel compost facility startup support and training
- Developed the Field Guide to Verifying Soil Quality and Depth in New Landscapes for Snohomish County in conjunction with Stenn Design

Director of Recycling Services - Pierce Co. Recycling, Composting & Disposal d.b.a. LRI, Puyallup, WA, 1987-2002

- Developed the Compost Factory, a 245 TPD fully enclosed compost facility and the 120 TPD partially enclosed Pierce County Compost Facility. Managed for environmental compliance on odors, noise and operations permits, worker safety, product quality requirements and marketed products, research on biological disease control agents production, golf course use of compost
- Developed a Green Mulch land application program. Obtained State Environmental Excellence Program approval for use of this product. Performed applied research and market development on 5 day old composted yard debris or Green Mulch on corn, triticale, beets, rhubarb, strawberries, daffodils, tulips, raspberries, blueberries, in conjunction with Washington State University Puyallup Research Station (WSU) soil scientists Andy Bary and Craig Cogger, for Knutzen Farms, Terries Berries, Moseby Brothers Farms in Sumner and Puyallup

EDUCATION

The Evergreen State College, Class of 1984

Bachelors in Environmental Science and Energy Systems