

# **Brad L. Koltak, P.E.**

**Associate  
Waste Science Inc.**

## **Professional Certifications and Memberships**

Professional Engineer #028240  
#055110-E  
#24072

American Society of Civil Engineers

Virginia, 1997  
Pennsylvania, 1999  
Maryland, 1999  
1997

## **Professional Experience**

### **Feasibility and Treatability Studies**

- Dover Air Force Base Area 6 Focused Feasibility Study, Prepared the focused feasibility study for the industrial portion of Dover Air Force Base. Groundwater treatment alternatives evaluated included accelerated anaerobic degradation via nutrient addition, *in situ* aquifer sparging and vapor extraction, and conventional pump and treat technology. Vapor extraction and co-metabolic bioventing were evaluated as potential remedial alternatives for the chlorinated solvent source areas identified in the Area 6 Remedial Investigation. Modeled groundwater flow and aquifer response to pumping as related to the accelerated anaerobic degradation system and the conventional pump and treat system. Evaluated an air sparge and soil venting pilot test conducted by another consultant and expanded it to the required scale. Developed conceptual designs for each of the proposed alternatives for presentation to US Air Force and USACE representatives. Proposed sparge and vent system included 125 sparge and vapor extraction wells.
- Prepared the Environmental Engineering/Cost Analysis for the remediation of a TCE plume migrating off-site. Evaluated horizontal and conventional vertical extraction wells for the extraction system. Water treatment technologies evaluated included air stripping; ultra-violet light catalyzed oxidation, photocatalytic oxidation and granular activated carbon adsorption. Air stripping was selected as the preferred treatment alternative due to low VOC air emission rates. Prepared a conceptual design including estimated construction and operation and maintenance costs.
- Amoco Curtis Bay Terminal, Prepared an engineering feasibility study to evaluate potential water treatment system alternatives for the proposed 65 gpm ground water extraction system. VOC treatment alternatives included air stripping, fixed film bioreactors, and ultra-violet light catalyzed oxidation. Presented evaluation to Amoco managers and worked with Amoco engineers to select

## **Summary of Experience and Accomplishments**

Mr. Koltak is a professional environmental engineer with broad-based experience in site remediation, hazardous waste management, and solid waste management. Over the past 7 years he has completed CERCLA and RCRA-directed projects for DOD, local government, and private-sector clients. Mr. Koltak's wide variety of experience including his background in waste treatment system construction and operation give him the ability to add quality to project management and project deliverables. Mr. Koltak has remained abreast of changes in environmental regulations. His strong technical background allows him to provide innovative long-term solutions to all of his clients. He has work experience in Texas, Ohio, Pennsylvania, Maryland, Virginia, Delaware, and Georgia.

## **Education**

M.S.E., Environmental Engineering, University of Virginia, 1993  
B.S., Petroleum Engineering, West Virginia University, 1987

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the most maintainable, and cost-effective alternative. Prepared overall water treatment system conceptual design including metals pretreatment/primary VOC treatment unit, secondary VOC treatment unit, and off gas treatment unit. Prepared bench-scale and pilot-scale work plans to evaluate the aeration treatment system selected to treat both dissolved-phase VOCs and metals. Oversaw the conduct of the pilot-scale treatment system. Treatment system design was based on the bench and pilot scale operational data.

**Site Investigations**

- Field Manager responsible for supervision of field crews onsite to conduct a Pre-Remedial Design Investigation at the Virginia Properties Superfund Site. As the Pre-Remedial Design Investigation Field Manager, Mr. Koltak oversaw the collection of soil and sediment samples intended to delineate areas arsenic, pentachlorophenol, and carcinogenic polycyclic aromatic hydrocarbons exceeded site specific clean-up levels. Mr. Koltak also oversaw the collection and coordinated shipping of soil, groundwater, and DNAPL samples for treatability testing to ten separate treatability contractors. Prepared a Pre-Design Report summarizing site conditions, and presenting detailed delineations of soil and sediment areas requiring remediation.
- Project Engineer responsible for scoping, planning, and overseeing a RCRA Facility Investigation at the Petersburg Municipal Airport. The investigation evaluated the environmental effects resulting from past waste management practices associated with the Fixed-Base Operator's aircraft stripping and painting operation. Responsibilities included preparing a RFI Work Plan, overseeing the installation of seven monitoring wells around the perimeter of the hanger used by these operations, preparing a Phase I RFI Report for submission to the client, VDEQ, and EPA.
- Task Manager responsible for preparing the Remedial Investigation Report for the South Management Unit at Dover Air Force Base. This Unit consisted of nine sites and two commingled groundwater plumes ("Areas").
- Task Manager responsible for preparing scoping and overseeing Natural Attenuation Investigations at six petroleum contaminated sites at Dover Air Force Base. Investigations were conducted in accordance with the Air Force Center for Environmental Excellence's Natural Attenuation Protocol.

**Site Remediation**

- Project Manager responsible for pilot testing, designing, and installing an SVE system for the Carrs Mill Landfill. Tasks included preparing a Pilot-Scale SVE system to test the efficacy of using a vapor extraction trench at the subject site. Site conditions indicated that a conventional vertical SVE system would be better suited to the site. Prepared the SVE system design. Oversaw the installation and start-up of the system. Performed a 14-day air emission test in accordance with Maryland Air and Radiation Management Administration requirements. After completing the test the state was petitioned to allow the removal of the air pollution control device from the system. Since the air emissions were below Maryland air emission standards, the state granted the petition. Conducted operation and maintenance training with county employees prior to turning the system over to the county.

**UST Design, Permitting, and Removal**

- Oversaw the removal and disposal of USTs from numerous sites. Typical project responsibilities included the investigation of surface spill areas to delineate areal extent of

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contaminated material, preparation of bid documents for the tank removal and disposal as well as the excavation and disposal of contaminated surface soils and spoils from UST excavations. Preparation of Closure documents as required by state and local authority.

**Solid Waste**

- Designed the landfill gas collection and control system for the Browning Ferris Industries Carbon Limestone Landfill. Project included modelling the gas generation from the cells in Phase II, and evaluating whether the current gas collection and control system was sized appropriately to treat the gas from Phase II.
- Project Engineer for the Solid Waste Construction Group. Responsibilities included acting as a technical liaison with client and for preparing as-built drawings for several Browning Ferris Landfills in Texas.
- Project engineer for the Rappahannock County Municipal Landfill geotechnical and hydrogeologic investigation. Planned and conducted a geotechnical and hydrogeologic investigation for a 100-acre municipal landfill extension. Field work included drilling 23 soil borings, installing 19 overburden and 4 bedrock wells, and performing aquifer testing and data analysis. Prepared a report characterizing the subsurface and hydrologic conditions of the site. The report was incorporated into the Part A Landfill Application which was submitted to and approved by the Virginia Department of Environmental Quality.
- Oversaw the quarterly sampling of a municipal landfill site in accordance with VDEQ Solid Waste Regulations for Interim Phase I Monitoring. Prepared quarterly sampling and analysis reports and an annual groundwater report for submission to the VDEQ Solid Waste Management Administration.

**Environmental Audits and Assessments**

- Completed numerous property assessments, including a municipal airport, several former UST sites, warehouses, and office complexes.
- Performed a number of Phase I/II Site Assessments for a lending institution to determine potential environmental liability associated with foreclosure of the properties.
- Prepared numerous site profiles for a chemical distribution company. Profiles were used to negotiate environmental cost cap coverage for an entire portfolio.

**Professional Positions**

Associate, Waste Science Inc. Rockville, Maryland	1999 to Present
Engineering Manager, Handex of Maryland Inc. Odenton, MD	1996 - 1998
Environmental Engineer, Dames & Moore Bethesda, Maryland	1993 - 1996
Staff Geoenvironmental Engineer, Combined Technologies, Inc. Richmond, Virginia	1992 - 1993

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Staff Engineer, Soil Consultants, Inc.  
Chantilly, Virginia

1987 – 1990

**Additional Hazardous Materials Training**

Performance of Remedial Response Activities at Uncontrolled Hazardous Waste Sites,  
Worker and Site Supervisor [29 CFR 1910.120].