

Michael R. Fontana, LSRP Director of Environmental Services

Mr. Fontana is a New Jersey Licensed Site Remediation Professional (LSRP). With over 30 years of professional experience, Mr. Fontana oversees technical studies and offers consulting services for soil and groundwater assessment, investigation and remediation. Mr. Fontana specializes in complex hazardous site investigation and remediation, above-ground and underground storage tank (AST/UST) investigations and remediation, litigation support, regulatory compliance and the environmental aspects of real estate transactions. In addition, Mr. Fontana directs project and case file research, prepares expert reports, and consults on a wide variety of environmental litigation matters. During his career, Mr. Fontana has been gualified as an expert witness in state court and provided successful expert testimony on numerous environmental technical issues including groundwater contamination timing, corrosion rates of USTs, appropriateness of remedial action selection and historic hazardous material usage in industry-specific applications.

SELECTED PROJECTS

Specialty Chemical Manufacturer, Jersey City, New Jersey - The work at the site included the excavation and removal of 20 USTs. The closure of the tanks involved the use of well-planned engineering procedures in order to safely remove the tanks within the constraints of a busy physical plant in a heavily urbanized area. Following UST closure, significant soil and groundwater contamination was detected, including the presence of a resin-type product on the water table surface. A site assessment program was implemented using both and conventional investigation methods alternative including Hydropunch® groundwater sampling, Cone Penetrometer Testing for detailed soil lithology evaluation, and computerized groundwater flow and contaminant fate and transport modeling. The remedial alternative included an appropriate balance of product recovery, source control and natural attenuation of the contaminant plume. The approach resulted in short-term savings to the client for the assessment of soil and groundwater media beneath the site and provided the basis for long-In addition, the cost control measures term remedial cost savings. enabled new construction of essential manufacturing capability for the client at the remediated areas.

Commuter Bus Facility, Bergenfield, New Jersey – Mr. Fontana managed the closure of numerous petroleum USTs. Subsequent assessment through the Geoprobe® technique was used to develop a cost-effective soil remediation program that was successful in attaining state-mandated soil cleanup goals. In addition, groundwater contamination was detected beneath the former UST areas at the site. Incorporating conventional and innovative investigation methods, Mr. Fontana was able to determine the presence of two distinct contaminant plumes and implemented remedial measures at the site. An active remedial program was designed and installed at the site to address

Education

M.S./Geoscience University of Alaska – Fairbanks Fairbanks, Alaska June 1988

B.S./Geology York College of the City University of New York New York, New York June 1984

Professional/Business Training

Technical and Regulatory Training in Underground Storage Tanks, Rutgers University, New Brunswick, NJ – 1992, 1998, 2001, 2004, 2007, and 2010

Environmental Law and Regulation, Cook College, Rutgers University, New Brunswick, NJ – 1993

40-hour Waste Site Worker Protection, Hygiene Safety and Training Co., OSHA 1910.120(e)(2) - 1988

8-Hour Supervisor Training, Hygiene Safety and Training Co., OSHA 1910.120(e)(3) - 1988

Hazardous Waste Operations, Health and Safety 8-Hour Refresher Training Programs for Workers, OSHA 1910.120(e)(8).

Licenses/Certifications

New Jersey Licensed Site Remediation Specialist, License No. 508614

New Jersey Subsurface Evaluator, License No. 0010713

Awards

Geology Graduate of the Year 1984

Northwest Regional College Bowl Champion 1986

Professional Affiliations

New Jersey Licensed Site Remediation Professional Association

National Ground Water Association

Association of Engineering Geologists (AEG)

significant groundwater contamination consisting of chlorinated volatile organic compounds (cVOCs). The technologies employed included product separation, shallow tray air stripper an off-gas carbon treatment. The entire system was designed to provide remote monitoring and control. In addition, Mr. Fontana developed and implemented a large-scale stormwater pollution prevention program (SPPP) at the client's facility that encompassed several blocks in a commercial/residential area.

The SPPP included the identification of numerous potential stormwater pollution sources. Mr. Fontana designed and supervised construction of source reduction alternatives resulting in full compliance with the state's stormwater regulations. In addition, the facility successfully underwent compliance evaluation audits by NJDEP inspectors evaluating the overall SPPP.

Commuter Bus Facility, Westwood, New Jersey – Mr. Fontana successfully implemented a comprehensive and innovative approach to assessing soil and groundwater contamination at former UST areas around the site through the use of a passive soil vapor survey, cone penetrometer testing and Hydropunch® groundwater sampling. This cost-effective approach resulted in successful delineation of soil and groundwater contaminant plumes in a timely manner. In addition, Mr. Fontana implemented a program for free product recovery from various wells and was successful in employing new techniques for remediating very thin layers of residual product thickness. Finally, Mr. Fontana was successful in developing an NJDEP-approved natural remediation program for both soil and groundwater contamination beneath the site.

In addition, Mr. Fontana successfully completed a Memorandum of Agreement (MOA) for remediation of a former industrial septic leach field at the client's facility. Utilizing a comprehensive, cost-effective approach to the project, the scope of work was reduced through aggressive negotiation with the state, determining soil quality by compliance averaging to demonstrate acceptable groundwater quality. In addition, Mr. Fontana developed a site-wide comprehensive stormwater pollution prevention plan (SPPP) in order to assist the client in compliance with the Clean Water Act.

Beverage Distributor Warehouses, Georgia and Alabama - During a period of several months, Mr. Fontana managed UST closures at nine sites in Georgia and Alabama. The UST closures included the successful completion of soil remediation at several sites where sophisticated project scheduling techniques were utilized to maintain the logistical requirements of moving personnel and equipment to widely disparate locations throughout Georgia and Alabama. The use of innovative scheduling techniques resulted in completing the project significantly ahead of the proposed schedule, and enabled the satisfactory completion of remedial requirements at the sites.

During closure of the tank farms, Mr. Fontana implemented several soil remediation programs that included an evaluation of a variety of remedial alternatives including a soil recycling option. Several local recycling facilities were identified and researched for their capabilities to perform low-temperature thermal desorption and the facility's permitting and compliance history was evaluated. As a result, a disposal alternative was selected that saved the client significant money due to reduced transportation costs, and provided the client a method for minimal liability exposure due to the selection of a permanent disposal option.

Dairy Products Processing Facility, Union, New Jersey – Mr. Fontana oversaw the design and installation of a high-volume (>400 gpm) groundwater treatment system at a major food processing facility. The system was designed to treat influent production well water used as non-contact cooling water within the facility. Several treatment methods were evaluated and air

stripping was determined to be the most economical method to treat aliphatic hydrocarbons detected in groundwater. In addition, the system was also designed to sequester natural groundwater compounds to prevent fouling of the system during operation.

Automobile Dealership, Union, New Jersey – Mr. Fontana was retained by a large, multibrand automobile dealership that had numerous areas of concern (AOCs) previously identified by another consulting firm. The state directed the active remediation of all the AOCs based on the report submitted by the client's original consultant. Mr. Fontana re-evaluated the existing data and developed an effective program to determine the necessity for costly active remediation. Mr. Fontana implemented a comprehensive work plan that included AOC resampling and analysis, evaluation of existing data to remedial criteria acceptable to the state, and active soil remediation. As a result, a cost-effective solution was developed for the soil contamination at several AOCs, and the environmental regulatory burden on the client was streamlined.

Automotive Service Center, Hoboken, New Jersey – Mr. Fontana managed the excavation and removal of USTs at the client's site. During UST closure, soil contamination was detected, delineated and successfully remediated. Mr. Fontana employed a soil-recycling program that resulted in significant soil remediation cost savings for the client. Subsequent groundwater sampling using a Geoprobe® drill rig revealed the presence of contamination in the underlying water table and determined the existence of an off-site contaminant plume migrating beneath the site. The client had limited resources and was solely dependent on completing the sale of the subject property, which was in turn dependent on obtaining a No Further Action (NFA) requirement from the state. Mr. Fontana evaluated the local hydrogeologic and historical environmental conditions around the site and utilized the information to successfully negotiate an NFA from NJDEP.

Commercial Vehicle Maintenance Facility, Linden, New Jersey – Mr. Fontana successfully completed a UST investigation involving a gasoline release at a construction vehicle maintenance facility. The gasoline release impacted both soil and groundwater. The soil contamination was remediated during the excavation of the USTs. Groundwater contamination was delineated using shallow on-site monitoring wells. The extent of the release was identified and a Classification Exception Area (CEA) program was successfully implemented in accordance with the guidelines for remediation by natural attenuation of the CEA program revealed that the compound of concern (benzene) had reached non-detectable levels. Based on this data, Mr. Fontana successfully obtained an NFA determination from NJDEP under the MOA program.

Rock Product Quarry, Mt. Hope, New Jersey – Mr. Fontana was retained by a large rock quarry operation to implement its quarterly groundwater monitoring as defined in the facility's New Jersey Pollution Discharge Elimination System (NJPDES) permit that allowed discharge to both surface and groundwater at and beneath the site. The permit conditions involved the sampling and analyses of both on-site monitoring wells and surface water locations. Mr. Fontana was instrumental in reducing the discharge requirements for the facility in conjunction with the submittal of a NJPDES permit renewal application. The new permit sampling requirements stipulated that fewer surface water locations would have to be sampled instead of both groundwater and surface water locations. The new NJPDES permit requirements resulted in significant cost savings for the client.

Metal Fabricator, Livingston, New Jersey - On behalf of a nationwide insurance carrier, Mr. Fontana evaluated an extensive environmental file regarding dense, non-aqueous phase liquid (DNAPL) contamination at a large industrial site. Based on a thorough research of the existing file, and application of innovative and unique parameter assessment techniques, Mr. Fontana was successful in proving our client's assertion of the source and history of contaminant impact to groundwater.

Commuter Bus Facilities, Bergen and Hudson Counties, New Jersey – Mr. Fontana provided litigation support on behalf of the plaintiff who recovered remediation costs from their long- term insurance carrier. The remediation costs were the result of significant soil and groundwater contamination from UST releases at various sites. Working closely with the plaintiffs lawyers, Mr. Fontana's work was successful in assisting to prove the validity of the client's claim. Based upon an innovative, comprehensive and precise approach to assessing and understanding environmental conditions at each of the sites, a significant settlement was achieved for our client.

Former Chemical Plant, Jersey City, New Jersey – Mr. Fontana was retained by the client's counsel to assist in cost recovery from an insurance carrier. Mr. Fontana completed a thorough file review, provided an expert report in support of its client's position and provided expert testimony.

Active Chemical Plants, Jersey City and Hackensack, New Jersey - At both sites, Mr. Fontana reviewed the extensive environmental files that indicated widespread groundwater contamination. His research enabled the development of fate and transport evaluation of cVOCs and ammonia resulting in the establishment of groundwater impact timing, which in turn established liability responsibility to the benefit of his client.

Former Industrial Site, Paterson, New Jersey – Mr. Fontana was retained by client's counsel to replace an existing consultant to continue an ongoing site assessment and remedial investigation at a large industrial tract with a long industrial/commercial history undergoing ISRA. Due to pending litigation, it was important to utilize the most time-effective methodologies to fully evaluate the site and remediate as many AOCs as possible given the limited time constraints. The work included soil remediation at numerous AOCs, an evaluation of groundwater contamination consisting of chlorinated VOCs in two hydraulic zones beneath the site, and development of conceptual groundwater remediation scenarios through the use of contaminant fate and transport models.

Mr. Fontana was further retained by the client's counsel to determine the timing of the discharge of chlorinated VOCs in the groundwater beneath the site. In addition, Mr. Fontana developed opinions regarding the use of chlorinated solvent-based chemicals in industry- and site-specific applications, thereby establishing the historic presence of hazardous chemicals at the subject property. Through research, expert reporting, deposition testimony and court testimony during trial, Mr. Fontana strongly supported the client's successful damage recovery claim.

Machine Manufacturer, Fairfield, New Jersey – Mr. Fontana was retained by a client operating a manufacturing facility to evaluate the environmental conditions at the subject site. The purpose of the evaluation was to provide the information necessary to support a successful application to refinance the property in order to provide needed capital for planned business expansion. The subject site was approximately five acres and multiple areas of concern (AOCs) were identified during the investigation. In addition, the site was surrounded on three sides by a Superfund site with significant soil and groundwater contamination. Mr. Fontana was successful in evaluating and identifying impact directly resulting from the subject site, separating

the masking effects of the contaminants emanating from the adjoining Superfund site. This careful investigation and assessment resulted in the client successfully completing its refinance plan.

Newspaper Publisher, Various Locations, New Jersey – Mr. Fontana was retained by client's counsel to perform expedited Phase I Environmental Site Assessments (ESAs) at numerous sites throughout New Jersey as part of a complex, rapidly evolving property and business transfer. Working under strict timeframes, Mr. Fontana identified key issues of concern, prepared comprehensive reports and provided risk assessment expertise to assist in completing transactions while minimizing environmental exposure to the client.

Recycled Paperboard Manufacturer, Clifton, New Jersey – Mr. Fontana was retained by the client to implement a site wide environmental inspection to enable cost assessment related to site closure under bankruptcy proceedings. The project involved assessment of a 25-acre industrial facility, implementation of selected remedial actions, consulting potential site and heavy equipment buyers and completion of an ISRA for the entire site.

Multi-Use Commercial Development, Mountainside, New Jersey - The subject site encompassed approximately 10 acres and consisted of multiple operating facilities that included a bowling alley, warehouse, office building and restaurant. The purpose of the assessment was to provide information for the client, a developer, regarding the site in order to obtain bank financing for the project. Separate assessments were completed for each aspect of the site in conjunction with subsequent increases in the size of the proposed redevelopment. Mr. Fontana synthesized all of the assessments into a unified approach to obtain financing for the overall project. Based on his work, a large commercial tract that had lain unused or unproductive for many years was successfully developed into a viable and ongoing commercial development.

Commercial Warehouses, Jersey City, New Jersey – Mr. Fontana was indirectly retained by the client through the client's lending institution to conduct three Phase I Environmental Site Assessments (ESAs) at three separate warehouse storage properties located in Jersey City, New Jersey. The client sought to refinance all three properties. After successful completion of the Phase I ESAs, Phase II investigations were completed at two of the three evaluated properties. The Phase II investigations included soil investigations of several potential AOCs that were identified during the performance of Phase I ESAs. The investigations and assessment revealed that the identified AOCs had not adversely impacted the subsurface environment and resulted in the client successfully completing its refinancing requirements.

Packaging Wholesaler Distribution Warehouse, Cleveland, Ohio – Mr. Fontana was retained by a nationwide packaging manufacturer and distributor to evaluate its site that consisted of approximately five acres. The evaluation included a Phase I ESA supplemented by a subsurface investigation utilizing alternative soil and groundwater sampling techniques including Geoprobe® drilling. Mr. Fontana was able to satisfactorily demonstrate the client's compliance within the context of the local and state regulatory criteria.

NJDEP UST Fund – Mr. Fontana assisted the state legislature in the enactment of several environmental bills that provided environmental grants and low interest loans to eligible facility owners. Mr. Fontana managed the preparation, processing and submittal of applications to both the NJDEP and the New Jersey Economic Development Authority (NJEDA) for nearly \$25 million of funding on behalf of nearly 70 facility owners and operators for site remediation throughout urbanized areas in New Jersey.

SELECT EXPERT QUALIFICATIONS

Truetech, Inc. v. Hartford Ace. & Indemnity Co., et al.- Docket No. 98-5318 (KSH)

Kent Realty Company v. Whitney Rand Mfg Corp., *et al.*- Docket No. PAS-L-9391-97 Halocarbon Products Corp. v. Hartford - Docket No. BER-L-10748-97

White Revere LLC v. Utica Mutual Insurance Group, et al. - Docket No. ESX-L-1292-06

Amerace Corp. v. Aetna Casualty and Surety Co., et al.- Docket No. BER-L-5039-00

BASF Catalysts, LLC (f/k/a Engelhard Corporation) v. Allstate Insurance Company, et al. - Docket No. MID-L-2061-05

EMPLOYMENT HISTORY

2011 – Present	Senior Consultant/Senior Hydrogeologist VERINA Consulting Group, LLC, Bridgewater, New Jersey
2011 – 2011	Senior Consultant AMEC Earth & Environment, Inc., Somerset, New Jersey
1992 – 2011	President AquaTek Environmental Consulting, Inc., Livingston, New Jersey
1988 – 1992	Project Manager/Hydrogeologist/Corporate H&S Officer Dan Raviv Associates, Inc., Millburn, New Jersey

SELECTED PUBLICATIONS

Fontana, M. R. March 1987. Multiple Holocene Tephra Layers in South-central Alaska, GSA Abstracts with Programs, Vol. 19, No. 6.

Fontana, Michael R. May 1988. Holocene Tephrochronology of The Matanuska Valley, Alaska, A Thesis

Rong, Y., Hansen, M., Gan, D. R., Fontana, M. R. 2015. In-Situ Chemical Oxidation Application of High pH Activated Persulfate at a Challenging DNAPL Contaminated Site, Abstracts with Programs, NGWA Groundwater Summit 2015.