

Introduction

Chemtech a quality driven, service oriented company, provides its clients with high quality analytical services in an express period of time. Founded in 1967, Chemtech is privately held and minority owned. With guidance from the directors, and the dedication and experience of the management team. Chemtech has developed into a profitable, environmental service company. The directors, who are also major shareholders, are acutely aware of the dynamics of the industry, changing technology, and the need for capital investment. Chemtech has been successful in acquiring the equipment, software and automation necessary to be a leader in the analytical community.

Providing comprehensive analytical testing services for the identification and assessment of

environmental contaminates is our only business. Our services are used to meet various regulatory permits and reporting requirements, determine compliance with both State and Federal environmental regulations and assess potential present or future environmental liabilities. We provide analytical and field sampling services to consulting engineers, industry, and state and federal agencies.

Designed for maximum efficiency and safety, our laboratory is equipped with state of the art instrumentation and automated systems. Our technical staff is a highly skilled group of degreed chemists with diversified experience in environmental analysis. Our managers are a knowledgeable team of professionals who are *dedicated* to quality and client satisfaction.

CHEMTECH's capabilities and technical experience extends beyond the analysis of the routine Priority Pollutants or Target Compound List of constituents. We are often called upon to design and implement analytical schemes for identifying and quantifying the presence of non-routine, unusual or esoteric compounds. Extensive laboratory facilities and technical expertise enable Chemtech to routinely meet our client's needs and produce timely analytical data of impeccable quality.

This document provides an overview of our organization and capabilities. As you read, you will discover our commitment and our ability to provide accurate and timely analytical services.

Capabilities



Chemtech is one of the *original* participants in the Environmental Protection Agency's Superfund Contract Laboratory Program (CLP). We have had multiple organic and inorganic contracts since 1983. In addition to CLP, Chemtech participates in multiple state certifications for drinking water, ground and surface water, industrial effluents and wastewater, air, contaminated soil and solid/hazardous waste analysis. Chemtech also maintains U.S. Department of Navy (NFESC) and U. S. Army Corps of Engineers (USACE) accreditations and AFCEE approval.

In striving to meet the demands of its clients, Chemtech provides a wide selection of analytical tests and services. *Capabilities include a variety of analytical methodologies:*

- Microbiology
- Classical Chemistry
- Metals
- ✤ Volatile Organic
- Semi-volatile Organic
- Pesticides & PCB
- Herbicides
- Explosives
- Perchlorate
- Air Toxics

Chemtech works very closely with its clients. The laboratory is available for operation 24 hours a day, 7 days a week to meet the vigorous deadlines our clients need to meet.

Exceeding our client's expectations for quality and service is our primary goal. We fully realize that it is imperative that close attention is paid to details so that we fulfill the data quality objects set forth by our clients. We routinely hold project "kick-off meetings" and centralize project information in our database so that all project information is available to all chemists at all times.

Our value-added services include:

- Courier service for sample container deliveries and pickups
- Field Sampling
- Personal Project Management
- Technical Consultations
- Web Access
- Customized Reporting and Electronic Data Management

Laboratory Analytical Services

Chemtech employs state of the art instrumentation to analyze samples expediently and accurately. Instrumentation and automation technology are dynamic and Chemtech uses the best available technology at all times. Capital investments are critical to ensure that the laboratory is able to handle the vigorous data quality objectives set forth by our clients. The following is a synopsis of the types of instrumentation and analytical techniques we employ. A detailed listing of our instrumentation can be found on page 15.

1. Inorganic Analysis

After the sample preparation is completed by digestion, trace concentrations of inorganic elements can be determined by a variety of instrumental analysis.

Cold Vapor:

In environmental laboratories, Cold Vapor is primarily used for mercury analysis. Analytical tests utilizing Cold Vapor are:

- USEPA Contract Laboratory Program (CLP) Methodologies
- NYSDEC, ASP
- Synthetic Potential Leaching Procedure (SPLP)
- Total Characteristic Leaching Procedure (TCLP)
- Mercury (Methods 245.1, 7470, & 7471)

Inductively Coupled Argon Plasma Spectroscopy (ICP and ICP/MS):



The majority of elemental analysis is performed by ICP and ICP/MS simultaneous instrumentation. Our Trace ICP's and ICP/MS allow very sensitive MDL's to be achieved. They are used for the determination of dissolved, suspended, or total elements in industrial waste water, drinking, surface or ground water. This

technique can analyze up to 30 elements in a single analysis. Analytical tests routinely performed by ICP include:

- Total Characteristic Leaching Procedure (TCLP) Metals
- RCRA Metals
- Priority Pollutant Metals (PPM)
- USEPA Contract Laboratory Program (CLP) Methodologies
- NYSDEC, ASP
- Target Analyte List Metals (TAL and SW 846)
- Primary and Secondary Drinking Water Metals
- Synthetic Potential Leaching Procedure (SPLP) Metals

Classical Chemistry

A wide variety of analytical methods are conducted in our Classical Chemistry Laboratory. We routinely run tests for cyanide, phenols, BOD, COD, TOC, TOX, petroleum hydrocarbons and many others. CHEMTECH's Classical Chemistry Laboratory includes Technicon Auto Analyzer II with multiple modules, a UV-Visible Spectrophotometer, Ion Analyzers, multi distillation apparatus, and other standard laboratory equipment.



2. Organic Analysis

Gas Chromatography/Mass Spectrometry (GC/MS)

Gas chromatography combined with a mass spectrometer detector is the most powerful tool for accurate identification and quantification of complex mixtures of organic compounds. This technique is widely used in analysis of groundwater, wastewater and soil for industrial pollutants, and in special concerns where the identity of unknown but suspected trace organic contaminants must be determined.

Chemtech offers many customized analytical services as well as the following types of standard services and analytical methods:

- USEPA Contract Laboratory Program (CLP) Methodologies
- * State of New Jersey DEP Soil and Groundwater
- Commonwealth of PA DEP Soil and Groundwater
- New York State DEC Superfund ASP Organic Analyses
- Solid Waste Manual Methodologies (SW846-8000 Series)
- Priority Pollutant Analyses (US EPA 600 Series)
- Drinking Water Analyses (US EPA 500 Series)
- Identification of Tentative Compounds (TICs)
- Selected Ion Monitoring (SIM)

Gas Chromatography (GC)

Chemtech is capable of performing many GC methods for analysis of samples suspected of containing pesticides or PCB, or other known organic substances as a less expensive and often more sensitive (lower detection limit) alternative to GC/MS methods. Chemtech has Gas Chromatographs coupled with a wide range of detectors, including Halls Electrolytic Conductivity, Electron Capture, Flame Ionization and Photo-Ionization.

All GC's are equipped with auto samplers and are integrated into an automated data management system. These instruments are generally used for analyzing many types of organic compounds, including:

- Halogenated Volatile Organics (SW846- 8021B)
- Aromatic Volatile Organics (SW846- 8021B)

- Halogenated and Aromatic Volatile Organics (SW846- 8021B)
- Pesticides and PCB (EPA 608, 8081A/8082)
- PCB Congeners (8082)
- Chlorinated Herbicides (EPA 8151A)
- Gasoline and Diesel Range Organics (GRO/DRO EPA 8015M)
- USEPA Contract Laboratory Program Methodologies (SOM01.1)

High Performance Liquid Chromatography (HPLC)

HPLC is one of CHEMTECH's specialties. It is a useful analytical tool when low MDL's are required for PAH analysis.

- Low Level PAHs (SW-846, Method 8310)
- Low Level Explosives (SW-846, Method 8330)

3. Air Analysis

Another of our specialty services is air analysis. Chemtech conducts both EPA and NIOSH methods for analysis. We supply pre-cleaned summa canisters, tedlar bags, and filters as a value added service to our clients.

- ✤ TO-1 Volatile Aromatic Hydrocarbons
- TO-2 Volatiles
- TO-13 PAH
- TO-15 Summa Canisters
- Tedlar Bags
- Tenax Tubes
- PM-10 Lead Analysis
- NIOSH 6009
- NIOSH 7300

4. Waste Characterization and Treatability Analysis

Chemtech has extensive experience in the sampling and analysis of waste drums. The following are some of the analyses performed on these types of samples:

- Physical Characteristics
- Chemical Compositions
- Hazardous Characteristics
- Ignitability, Corrosively, Reactivity
- Toxicity Characteristic Leaching Procedure (TCLP)
- Synthetic Leaching Procedure (SPLP)
- ASTM Leaching Procedure
- PADEP Form U



CHEMTECH's Value-Added

1. Courier Service

Logistical support is of critical importance to our clients. Chemtech *understands* the importance of logistics and maintains a fleet of trucks to service our client's needs. We drop off sample containers and pickup samples from our client's offices or sites. A one hundred mile radius from the laboratory is typically our driving range. When distances greater than one hundred miles are encountered, we support our clients with next day air service.

Sampling containers are provided to all our clients upon request. Our typical sampling kits include pre-preserved sample containers labeled for the appropriate analysis, custody seals, chain of custodies, and coolers. Encore samplers and Methanol kits are also provided when requested.

2. Field Services

If preferred, CHEMTECH's NJ DEP Certified field technicians can collect or assist in the collection of environmental samples. Our field technician's are experienced in the proper collection techniques, sample handling, and decontamination procedures. Protocols followed include the client's approved sampling plan or the NJDEP's Field Sampling Procedures Manual.

CHEMTECH's field services include:

- Ground Water Sampling
- Influent and Effluent Sampling
- Soil/Waste Pile Sampling and Compositing
- Stream Sampling
- Potable Water Sampling
- Surficial Sampling: Wipes, Chips and Sweepings
- Field Sampling Assistance to measure: pH, Temperature Conductivity, Dissolved Oxygen and Residual Chlorine

3. Project Management -- Client Services

A crucial element to the successful completion of projects in our laboratory is our Project Management team. Our Project Managers are technical laboratory staff trained in understanding the critical nature of projects and communicating the needs of the client to the laboratory. Communication is centralized through our Laboratory Information Management System (LIMS).

The Client Service Manager assigns the new client a Project Manager. The Project Manager becomes the central point of communication for the client. Project Manager's responsibilities include scheduling bottle orders and sample pickups for the client, communicating the needs of the client to the laboratory, answering client questions regarding data, and ensuring that expedited turnaround data is sent to the client in a timely fashion.

Prior to a project's onset, the Account Executive and Project Manager will hold a project "kick-off" meeting with the client. The information is relayed to the technical staff to finalize all project details and outstanding issues. Once finalized, the Project Manager will enter project information into our LIMS system. Chemtech maintains a high-tech LIMS system that allows a chemist to view the technical specification for a project at any point in time. Information such as compound lists, method detection limits, reporting and electronic requirements are located in this central database.



4. Technical Consultations

A business relationship is a *partnership*. Each partner uses its own expertise and helps create a team. CHEMTECH's expertise is analytical testing. We offer assistance with Quality Assurance Project Plans, methods of detection for constituents of concern, or any technical issues our clients encounter.

CHEMTECH's staff consists of professionals that have been working in the environmental testing industry for many years. We have extensive experience with various types of matrices and compounds as well as diverse State and Federal environmental regulations.

5. Web Access

After requesting and obtaining a password from their Project Manager, our clients can log onto the website at any time and obtain real-time data.

Data can be retrieved in a variety of ways. One of the most useful options for data retrieval is by project identification. The project identification option allows all sampling events from a particular project to be viewed. The web will indicate whether the data is pending or approved. Only data that has been validated and approved is available on the

web. If all the data is approved, the client can download their entire hardcopy, including quality assurance information. In addition to the hardcopy, the EDD in the customized format requested, can also be downloaded.

The client may also choose to view the data right on the screen. Choosing to view the data on the screen allows the client to view the data by individual sample or by analytical fraction. In addition, data may be queried by sample identification, sample date, date of laboratory receipt, matrix, and test.

Data access is not the only advantage to CHEMTECH's website. Bottles orders and sample pickups may be scheduled via the web. The web will prompt you for all required information and your Project Manager will send you a confirmation of receipt.

Quotations may also be requested on our website. The quotation will prompt you for project identification, number of samples, tests, methods, and matrices. Hardcopy and EDD formats will also be requested. Enter all prompted information and an Account Executive will send you your quote by the next business day.

6. Report Deliverables and Electronic Data Management

Automation is the key to success in a laboratory. Chemtech is a leader in the automation of data reporting. Our automated data management capabilities provide a wide variety of report packages as well as offer options for customizing reports to meet individual client needs.

Report packages are designed to meet specific regulatory requirements. The routine report deliverable packages are as follows:

- Standard Format (Results Only)
- EPA Contract Laboratory Protocol (CLP Format)
- NJ DEP Reduced Deliverables
- NJ DEP Regulatory Format
- NYS DEC ASP A
- NYS DEC ASP B

Standard Format (Results Only)

The Standard Format reporting package includes results of the analysis (Form 1's) and the field chain of custody documentation.

EPA Superfund Contract Laboratory Program (CLP) Package

CLP packages are designed to meet Federal and most State Superfund program criteria. This format contains stringent Quality Assurance and Quality Control (QA/QC) criteria and raw data generated from instruments as well as laboratory notebooks. Chemtech routinely provides this type of reporting to EPA Regions, State Regulatory Agencies and Consulting Engineers.

NJDEP Reduced Laboratory Data Deliverables

This format includes the results and QA/QC documentation. Raw data is not included in this format. Most NJ sites require this format.

NJDEP Regulatory Data Deliverables - Non-USEPA CLP Methods

Similar to a USEPA CLP data package in contents, this format utilizes non-CLP methods and requires results, QA/QC and raw data to be reported.

New York State DEC, Analytical Services Protocol (ASP)

NY State requires several different reporting formats. Chemtech is capable of providing all NY required deliverable packages. ASP B is comprehensive and is similar to CLP. ASP A is far less comprehensive and is similar to our Standard Report package.

Electronic Data Deliverables (EDD):



Chemtech offers a variety of EDD formats. Diskettes in ASCII formats are available for CLP and ASP packages. These disks can be used to directly load analytical results into most database software.

Our basic EDD is a tabular format in EXCEL and this format can be easily customized. Chemtech also offers fully completed NJ DEP Haz-Site EDDs. We typically receive the Consultant's information via email and combine and check the Haz-Site files. Other EDD formats are customized and based on specific project requirements.

In addition to the above formats, Chemtech provides ERPIMS, SEDD, MEDD, ERIS and EQuIS EDDs in support of US Department of Defense-Air Force and

Army Corps of Engineers Projects.

The hardcopy, in its entirety, is available on a CD .The report sections are book-marked for easy reference.

Automated Data Review (ADR)

ADR is a revolutionary new technology that performs an automated EPA level III data review of an Electronic Data Deliverable (EDD) file. The application is designed to perform routine data quality and precision checks traditionally performed through a manual data review of the hardcopy report.

CHEMTECH's e-file includes:

- Table A1 Analytical Results
- Table A2 Instrument Table
- Table A3 Sample Analysis Table

Data Archival/Data Retrieval

Chemtech maintains all raw data, laboratory notebooks, reports and other important documentation for a period of five years from the date of the report. Data retrieval from our archives will be handled in a similar fashion to a request for analysis.

Laboratory Organization and Management Structure



Chemtech has a solid organizational structure, dedicated managers, and a staff that works diligently to meet the high standards our clients demand. We have developed a team of professionals that truly have a vast amount of experience and knowledge.

Emanuel Hedvat, our President has a Master's Degree in Chemistry and 21 years experience in environmental laboratories. Mr. Hedvat is responsible for the overall management of the laboratories. His responsibilities include establishing corporate objectives and formulating strategies in which to achieve them. In addition, Mr. Hedvat maintains close relationships with our clients to ensure that our services meet or exceed our client's expectations.

Divya Mehta, our Chief Operating Officer and Technical Director, is responsible for the operation, technical performance and data quality of the laboratory. Mr. Mehta is highly proficient in the analysis of organic and inorganic methodologies and provides technical guidance

for our clients and laboratory staff. He has a degree in Chemical Engineering and more than 18 years of environmental laboratory experience.

The Quality Assurance/Quality Control Director is responsible for all QA/QC policies and procedures. She ensures that the laboratory complies with appropriate regulations and coordinates performance evaluation analyses for state and federal certifications and accreditation's. The QA/QC Director is also responsible for data review and laboratory report compliance to government and client specifications.

The Inorganic Laboratory Manager brings more than 24 years of environmental laboratory experience to our firm and has a strong management background. She has worked in different capacities in both government and private sectors and has done extensive work in classical chemistry and metals analysis.

The Organic Manager is responsible for production and co-ordination of work in the organics area. In addition, the Organic Manager conducts assessments for precision and accuracy, and reviews organics data for compliance with regulatory requirements. He has 12 years of analytical laboratory experience.

The Systems Manager is responsible for the quality control of all computer systems, including hardware, software, documentation and procedures. He generates and updates the automated deliverables in accordance to client specifications. His responsibilities also include the installation, training, maintenance and operation of programs.

Quality Assurance Overview





Chemtech has designed a quality assurance program that covers every facet of its operation. Dedication to high quality data and service is at the very essence of our operation. Evidence of our diligence to quality is illustrated by our excellent performance on proficiency tests and audits.

Quality Assurance Policy

CHEMTECH's Quality Assurance Policy provides that reliable and legally defensible data is given to clients in a timely fashion. Our staff is dedicated to meeting *all* client commitments and therefore charged with providing reliable, timely data one hundred percent of the time. We

endeavor to maintain our high quality standards while always striving to improve operations through the spirit of innovation and new technology.

Quality Assurance Objectives

The Quality Assurance/Quality Control process begins prior to samples arriving at the laboratory. Account Executives and Project Managers work to ensure that the laboratory can achieve all client specifications. Our credibility is dependent upon our ability to perform. We have therefore set objectives to guarantee our success. CHEMTECH's QA/QC objectives are to:

- Ensure that our clients are provided with the greatest level of professionalism by maintaining a team of individuals on staff with experience, education, and the desire to listen, learn and act on our clients needs.
- Consistently provide high quality, legally defensible data that meets all client expectations while also complying with all state and federal methodologies, certifications, and regulations.
- Continually improve our operations by fostering and rewarding innovation, staying abreast of new technology, and creating an environment that is beneficial to both our staff and clients.

Quality System

Continuous quality improvement is the keystone to the Chemtech Quality System. The elements of our Quality System are clearly documented in our Quality Assurance Manual and utilized by all Chemtech employees. Standard Operating Procedures for all tests and procedures are developed in accordance to guidelines set forth in our Quality Assurance Manual.

The Chemtech Quality System is designed to meet the most vigorous requirements of individual States, US EPA, NELAC, and Department of Defense Agencies. Modeling our system to the most vigorous protocol established by these agencies standardizes our operation and further improves our ability to consistently provide high quality data.

Critical elements to our system involve:

- Positive and negative controls such as spikes and blanks.
- Procedures to define the variability or reproducibility of tests such as duplicates.
- Measures to assure the accuracy of the test method such as calibrations, second source standards and proficiency test samples.
- Provisions to evaluate test method capability such as detection or quantitation limits or range of applicability such as linearity.
- Selection of appropriate protocols to reduce raw data to final results such as regression analysis, comparison to internal or external standard calculations, and statistical analyses.

- Selection of appropriate grade reagents and standards to ensure high quality data.
- Measures to assure consistent test conditions for instruments as well as the laboratory such as temperature, humidity and light.
- Internal audits and corrective action reports that are distributed to the President, Chief Operating Officer, Laboratory Manager and appropriate Department Supervisor.
- Strict adherence to acceptance and rejection criteria mandated by methods and/or regulatory agencies. Procedures for development of acceptance/rejection criteria where none is defined by the method or regulatory agency.
- Communication and implementation of continuous quality and technological improvements.

For detailed documentation regarding our Quality System, please contact Chemtech and request our Quality Assurance Manual.



Facilities and Instrumentation

Facilities

Chemtech maintains a state-of-the-art facilities located in Mountainside, New Jersey. Our spacious 30,000 square foot facility is designed for optimum efficiency and automation.

The facility is equipped with high-tech security systems that have internal and external cameras and alarms. All entrances to the laboratories are locked to limit the entrance of individuals to those who are authorized to enter only. Established clients that are dropping off samples are given a code to enter the facility through the Sample Receiving Department entrance. After entering the sample receiving area, one of the Sample Custodians located in that area will assist them with their samples. The sample receipt area is equipped with hoods and benches with chemical resistant tops for receiving and safely handling the coolers and samples. Clients can drop off samples at the laboratory on weeknights and weekends as long as arrangements are made in advance.

All areas where temperature is critical such as the walk-in refrigerators, freezers, and instrumentation and computer rooms are monitored closely. Refrigerator temperatures are checked by the Sample Custodians every day and documented in logbooks. If a refrigerator needs repair, the samples and/or extracts are immediately removed from that refrigerator and placed in a temporary location until the repair is completed utilizing proper internal chain of custody procedures. Samples are kept at 4°C at all times and only the Sample Custodians are permitted access to the refrigerators. This practice allows us to keep samples under proper chain of custody at all times.

Ventilation systems for our laboratories are designed to minimize inter-departmental contamination. Each department has its own ventilation system that directly discharges to the outside, thereby greatly minimizing problems such as elevated levels of methylene chloride in samples slated for volatile analysis.

Instrumentation



Chemtech is committed to continuously updating and automating instrumentation. As you have read, continuous quality and technology improvement is a critical element of our Quality System. Our instrumentation conforms to the requirements of the analytical methods for which it is intended. Documentation of the specifications for each instrument is kept in the Quality Assurance Office.

Prior to use, each instrument is adjusted according to the manufacturer's instructions. When proper adjustment is achieved, the instrument is calibrated according to the appropriate analytical method, and the calibration is verified

by an independently prepared standard. Validation of proper adjustment, calibration, and verification is recorded or referenced in the proper notebook.

A maintenance schedule and log is maintained for each instrument. The maintenance schedule includes the manufacturer's recommended maintenance procedures as well as those found necessary by the instrument operators. All maintenance performed on the instrument is recorded in the maintenance log with date, maintenance performed, name of person performing maintenance, and downtime.

Instrumentation Summary			
Instrumentation Type	Number of Instruments		
Gas Chromatographs/Mass Spectrometers (GC/MS)	9		
Gas Chromatographs/Mass Spectrometers (GC/MS) with Archon Auto sampler	9		
Gas Chromatographs (GC)	10		
High Performance Liquid Chromatography (HPLC)	1		
Gas Chromatographs with NPD/FID detector (GC)	1		
Inductively Coupled Plasma Emission Spectrophotometers/Mass Spectrometers (ICP/MS)	1		
Trace Inductively Coupled Plasma Spectrophotometers (Trace ICP)	3		
Air Canister Auto Sampler with concentrator and GCMS	1		
Cold Vapor Atomic Absorption Spectrophotometer (CVAA)	2		
Mercury Analyzer	2		
Ion Chromatograph	1		
Wet Chemistry Auto Analyzer	2		
Automated Soxhlet Extractor	2		
Pressurized Fluid Extractor	3		
Gel Permeation Chromatography (GPC)	2		
Chemtech maintains a full array of other Laboratory instrumentation such as UV-Visible Spectrophotometers, TOX, TOC, block digesters, ultrasonic bath and analytical balances			

Project Experience and Certifications

DEPARTMENT OF DEFENSE EXPERIENCE

Client Name	Contract Description	Project Description	
Consulting Firm Chantilly, VA	US Navy CLEAN I/R	Provided analytical testing services in support of environmental engineering programs under the US Navy –Naval Facilities Engineering Command, CLEAN –LANTDIV. Analysis of Soil, Water, and Haz-Waste for various parameters. USEPA CLP analyses for both, low/medium methods. Non-CLP analyses using SW846 methodologies.	
Consulting Firm West Chester, NY	Navy Yard	Provided analytical testing services of Soil, Water and Waste samples in support of a Navy Yard Investigation utilizing NYS DEC ASP Protocols	
Consulting Firm Langhorne, PA	Navy RAC North Div	Provided analytical testing services in support of US Navy-Naval Facilities Engineering Command, NORTHERN Division Remedial Action Contract. Analysis of Water, Soil, and Waste at multiple sites. Analysis includes TCL/TAL and disposal parameters on expedited turnaround.	
Consulting Firm Coraopolis, PA	Navy CLEAN	Provided analytical testing services in support of environmental engineering programs under the US Navy –Naval Facilities Engineering Command, CLEAN–LANTDIV. Analysis of Soil, Water, and Haz-Waste for various parameters. USEPA CLP analyses for both, low/medium methods Non- CLP analyses using SW846 methodologies	
Consulting Firm Boston, MA	Submarine Base Investigation	Provided analytical testing services in support of soil and sediment remediation at the US Naval Submarine Base New London in Groton, CT. Technical scope of work included analysis of pesticides, metals, low level explosives, TCLP complete and limited chemistry.	
Consulting Firm Chantilly, VA	Navy CLEAN I/R	Provided analytical testing services in support of environmental engineering programs under the US Navy –Naval Facilities Engineering Command, CLEAN –LANTDIV. Analysis of Soil, Water, and Haz-Waste for various parameters using USEPA CLP protocol and SW846 methodologies.	
Consulting Firm Langhorne, PA	Navy Base NE BRAC	Provided analytical testing services in support of US Navy-BRAC program. Analysis of TCL/TAL and disposal parameters on expedited turnaround. In water, soil, and sediment matrices.	
Consulting Firm Langhorne, PA	Navy RAC North Div	Provided analytical testing services in support of US Navy-Naval Facilities Engineering Command, NORTHERN Division Remedial Action Contract. Analysis of Water, Soil, and Waste at multiple sites. Analysis includes TCL/TAL and disposal parameters on expedited turnaround.	
Consulting Firm Boston, MA	Defense Supply Center Project	Provided analytical testing services in support of US Navy-Naval Facilities Engineering Command, NORTHERN Division Remedial Action Contract. Analysis of water, soil, and air at a former military base. Analysis includes TCL/TAL/PA Form U disposal parameters and TO-15 on expedited turnaround.	
Consulting Firm	Air Force Base AFCEE	Remediation project involving the analysis of soil and sediment samples for disposal purposes on an expedited turnaround. All hardcopy data reported	

Client Name	Contract Description	Project Description		
Oklahoma City, OK		in Level IV format. All electronic data reported in ERPIMS format.		
Consulting Firm Oklahoma City, OK	Air Force Base AFCEE	Remediation project involving the analysis of soil and sediment samples for disposal purposes on an expedited turnaround. All hardcopy data reported in Level IV format. All electronic data reported in ERPIMS.		
Consulting Firm Knoxville, TN	Air Force Base AFCEE	Base-wide contract for analysis of monitoring wells. Approximately 1500 wells are sampled and analyzed under this project. Analytical scope includes TCL/TAL, wet chemistry, and Air analysis. Chemtech provides client-specific and USAF ERPIMS electronic and on-line data deliverables		
Consulting Firm Knoxville, TN	Air Force Base AFCEE	Provided analytical services for this multi-year Operation and Maintenance contract under the US Air Force AFCEE Guidelines. Analytical scope includes organic, inorganic and classical chemistry. All electronic data reported in ERPIMS format. All data reviewed and provided in ADR EDD format Tables 1A, 2A and 3A		
Consulting Firm Oak Ridge, TN	Air Force Base AFCEE	Base-wide contract for analysis of monitoring wells. Approximately 1600 wells are sampled and analyzed under this project. Analytical scope includes TCL/TAL, wet chemistry, and Air analysis. Chemtech provides client-specific and ERPIMS electronic and on-line data deliverables		
Consulting Firm Oklahoma City, OK	Air Force Base AFCEE	Provided analytical services for this multi-year Operation and Maintenance contract under the US Air Force AFCEE Guidelines. Analytical scope includes organic, inorganic and classical chemistry. All hardcopy data reported in Level IV format. All electronic data reported in ERPIMS format.		
Consulting Firm Edgewood, MD	US Army Corps of Engineers Ammunition Plant Remediation	US Army Corps of Engineers, Baltimore District project. Chemtech provided analytical services for approximately 100 investigative-derived waste samples for SW846 TCL/TAL parameters at Army Ammunition Plant. All hardcopy data was reported in a USEPA Level IV format for full validation. All electronic data was reported in IRDMIS format.		
Consulting Firm Plymouth Meeting, PA	US Army National Guard	Provided analytical services in support of various site investigations. Analyses include TCL/TAL for soils, waters, and sediment samples. All hardcopy data reported in a USEPA Level IV format for full validation.		

ENVIRONMENTAL CONSULTING FIRMS EXPERIENCE

Client Name	Contract Description	Project Description	
Consulting Firm Bridgeport, NJ	Con-Ed Pier 98	Dredging the Raw Water Basin for Con-Ed at Pier 98, and characterize the sediment in the basin for disposal purpose. Analytical requirement include PP VOCs, PP SVOCs, inorganic (metals), and TPH by Gas Chromatography	
	City of	Dredging the Raw Water Basin at the Baxter Water Treatment Facility,	
Consulting Firm	Philadelphia	and characterize the sediment in the basin for disposal purpose. Analytical	
Blue Bell, PA	Water	requirement include VOCs, SVOCs, pesticides/arochlors (PCBs),	
	Department	inorganic (metals), dioxins, and furans. RCRA characteristics and TCLP	
Consulting Firm	Coney Island	Analytical support of investigation for the New York City Department of	
White Plains, NY	Creek	Environmental Protection objectives for collection of environmental	

Client Name	Contract Description	Project Description	
		Sediment samples following NYSDEC Interim Guidance Navigational Dredging requirements.	
Consulting Firm Norwood, MA	Utility Dredge of MGP	Analytical protocol targeted Environmental Effect of Dredging- US Army Engineers Waterways Experiment Station, environmental Laboratory for predicting the quality of Effluent discharges for confirmed dredge material areas during dredging operations. Sediment samples targeted for Chemical, Biological and geotechnical analysis including amended Dredge sediments, Multiple Extraction procedures (MEP) where in a daily extraction for seven consecutive days and Elutriate Dredge Sediments analysis.	
Consulting Firm New York, NY	NYCDOT 3 rd Ave Bridge	Consultant oversight of Construction management services for the New York City Department of Transportation program that included Sediment analysis for potential impact of dredge materials from construction activities and for upland disposal.	
Consulting Firm White Plains, NY	WP-287 Coney Island WCPC	Analytical support by the consultant for an investigation for the New York City Department of Environmental Protection. Data objectives for the collection of environmental Sediment samples. Objectives included the assessment of the sediments to the NYSDEC Sediment screening criteria and the upland dredge spoil management plan.	
Consulting Firm Rochester, NY	Tarrytown Con-Ed	Support of a multi media Site investigation for a Utility on potential impact of bay discharge area by former Manufactured Gas plant (MGP) location. Included Sediment samples following NYSDEC Interim Guidance Navigational Dredging requirements	
Consulting Firm New York, NY	Cross Harbors Freight movement	Consultant performed Engineering assessment for the feasibility of a tunnel placement for the Port Authority of New York and New Jersey. Data Objectives included Sediment analysis for chemical analysis including simultaneous Extractable metals in metals following the protocol of the Office of Water, Office of Science and Technologies Health and Ecological Division, Washington, DC.	
Consulting Firm Nijmegan, Netherlands	Oil Terminal in Chile	Site investigation generating multiple matrices of environmental samples performed in accordance with USEPA protocols for a multinational oil corporation. USDA Soil Permit utilized for US Customs entry while providing various logistical and analytical support services.	
Consulting Firm Somerset, NJ	NYS DEC Statewide Standby Contract	Laboratory Analyses of Soil, Water, and Waste utilizing NYS ASP Protocol. The analyses include many organic and inorganic tests.	
Consulting Firm Buffalo, NY	NYS DEC Statewide Standby Contract	Laboratory Analyses of Soil, Water, and Waste utilizing NYS ASP Protocol. The analyses include many organic and inorganic tests.	
Consulting Firm Albany, NY	NYS DEC Statewide Standby Contract	Laboratory Analyses of Soil, Water, and Waste utilizing NYS ASP Protocol. The analyses include many organic and inorganic tests.	
Consulting Firm Florham Park, NJ	Waterfront Project	EPA Level IV project with GISKEY EDD's. Groundwater and Soil are analyzed for TCL/TAL parameters.	
Consulting Firm Elmwood Park,	Public Utility Project	Provided analytical services in support of a Remedial Investigation, including Waste Classification and Post Excavation Analysis	

Client Name	Contract Description	Project Description	
NJ	•		
Consulting Firm Trenton, NJ	Landfill Project	A US EPA superfund project requiring expedited turnaround time for water, soil, and air. The analyses include TCL/TAL, Limited Chemistry and Air analysis by TO-14. This project is a joint effort between the USEPA Region II and the US Army, Philadelphia District.	
Consulting Firm Garden City, NY	Site Remediation	Provided analytical services in support of a Site Remediation using NYS DEC ASP protocols	
Consulting Firm Morris Plains, NJ	Public Utility Project	Various site investigations for petroleum contaminants and natural attenuation parameters at former manufacturing gas plants.	
Consulting Firm Lebanon, NJ	Route 21 Project	Remediation project involving TCL/ TAL and TCLP analyses for soils and waters.	
Consulting Firm Oakridge, TN	Airline Project	Subsurface investigation for petroleum contaminants. Parameters include PP+40, Hazardous Waste Classification, and Fingerprinting. Expedited TAT including same day results for excavation-generated samples.	
Consulting Firm Morris Plains, NJ	Industrial Site Investigation	Provided analytical services in support of a Remedial Investigation under the US EPA RAC II Contract. The technical scope includes analysis of PCBs, PCB Congeners, metals, haloacetic acids and water quality parameters.	
Consulting Firm Plymouth Meeting, PA	Public Utility Project	Analysis required for this site investigation is TCL/TAL for soils, waters, and sediment samples at former manufacturing gas plants.	
Consulting Firm Plymouth Meeting, PA	Public Utility Project	Analysis for various site investigations for Petroleum Contaminants and Natural Attenuation parameters at former manufacturing gas plants.	
Consulting Firm Morris Plains, NJ	Public Utility Company	Various site investigations and RCRA corrective action for petroleum contaminants and natural attenuation parameters at former manufacturing gas plants.	
Consulting Firm Morris Plains, NJ	Industrial Site Investigation	Provided analytical services in support of a Remedial Investigation performed under the US EPA RAC II Contract. The technical scope includes analysis of PCBs, PCB Congeners, metals, haloacetic acids and water quality parameters.	
Consulting Engineering Firm Exton, PA	Superfund Site Investigation	Provided same-day analytical services for TCL/TAL in support of a Remedial Investigation performed under the US EPA and US Army Corps of Engineers guidance. All data reported in a US EPA CLP format. All data reviewed and provided in ADR EDD format Tables 1A, 2A and 3A.	
Consulting Firm Branchburg, NJ	Transportation Project	Provided analytical services for TCL/TAL and Classical chemistry in support of a Remedial Investigation for construction of Tunnel. Duration of project is 4 years	
Consulting Firm Lebanon, NJ	Transportation Project	Remediation project involving TCL/ TAL and TCLP analyses for soils and waters.	
Consulting Firm Oak Ridge, TN	Airline Project	Subsurface investigation for petroleum contaminants. Parameters include PP+40, Hazardous Waste Classification, and Fingerprinting. Expedited TAT including same day results for excavation-generated samples.	
Consulting Firm Langhorne, PA Consulting	Statewide Remedial Investigation NYCDEP &	Provided analytical services in support of various Remedial Investigation activities performed under statewide contract. The technical scope includes analysis of TCL/TAL and PA Form U disposal parameters. RI/FS site investigations of site that included an active firing range and	

Client Name	Contract Description	Project Description	
Firm	NYPD Site	exploded ordinance range. Data objectives included both soil and water	
Long Island, NY	Investigation	analysis for TCL/TAL analysis and low-level explosive analysis.	
Consulting Firm New York, NY	OK- DOT Site Investigation	Site investigation of properties acquired via eminent domain for expansion of interstate system. SW846 protocols utilized with EPA level III Deliverables	
Construction Co. Cambridge, MA	Landfill Cap and Cover Analysis	Analysis of landfill covers materials to Local and State Regulatory guidance values. Express turnarounds of SW846 Protocols for TCL/TAL & TCLP parameters with deliverables in support for 3 rd party validation	
Consulting Firm New York, NY	Industrial Site	Provided a cost effective alternative to a mobile lab by providing test results in less than 24 hours for a variety of organic and inorganic parameters to delineation of a former Industrial site	
Consulting Firm Hunt Valley, MD	State Court House Addition	In support of a tight construction schedule, Multiple data objectives included CLP type Deliverables and disposal requirements of out of State resource. Successful in meeting timeline and multi-reporting formats Satisfying the data objectives of the numerous concerned parties	

FEDERAL and STATE EXPERIENCE

Client Name	Contract Description	Project Description	
US EPA	Numerous contracts	Analysis of Multimedia samples for TAL Metals and Cyanide utilizing	
	from 1983 to present	CLP protocol	
LIS EPA	SOM01.1 CLP	Analysis of Multimedia samples for Organic constituents utilizing CLP	
USLIA	Contract	protocol	
NYC Transit Authority	95F6227	Sampling and Analysis of Water, Soil, and Air at various locations.	
PA of NY & NJ	PSE-688	Potable Water Analysis employing NYSDEC ASP Protocols.	
Consulting Firm Richmond, VA	US EPA Regions II and III Emergency Response	Analysis of Soil, haz-waste and unknowns for remediation and disposal activities at various superfund sites under the US EPA ERSS program.	
Consulting Firm Morris Plains, NJ	US EPA RAC II Contract Industrial Site Investigation	Provided analytical services in support of a Remedial Investigation performed under the US EPA RAC II Contract. The technical scope includes analysis of organic, inorganic and classical chemistry parameters. All data reported in a US EPA CLP format for full validation. EDDs provided in GIS/Key.	

CHEMTECH CERTIFICATIONS, ACCREDITATION AND CONTRACTS

Federal:

Agency	Status	Laboratory ID	Expiration Date
US EPA	CLP Contract	CHEMED	Certified
US Army HTRW- MRD	Validated (Certified)	N/A	Certified
US Navy – NFESC	Validated (Certified)	NFESC 413	02/21/09
USDA	Certified (Foreign Soil)	S-47647	09/30/10

STATE:

State Agency	Status	Laboratory ID	Expiration Date
New Jersey DEP	NELAP Certified	20012	Certified
New York State DOH - ELAP	Certified	11376	Certified
New York State DOH - ASP	Certified	11376	Certified
Pennsylvania DEP	Certified	DEP 68-548	Certified
Connecticut DPH	Certified	PH-0649	Certified
Massachusetts DEP	Certified	M-NJ 503	Certified
Rhode Island DOH	Certified	259	Certified
Maryland DHMH	Certified	MD296	Certified
Oklahoma DEQ	Certified	9705	Certified
Kansas DOH	Certified	E-NJ503	Certified
North Carolina DOH	Certified	630	Certified
Maine	Certified	NJ-503	09/01/09

Private Agencies

Agency	Status	Laboratory ID	Expiration Date
American Council of Independent	Seal of Excellence	321	Approved
Laboratories (ACIL)			