

**AT-GRADE AND SUB-GRADE
DEMOLITION PHASE ENVIRONMENTAL WORK PLAN**

**300, 304-308, 320 ANDREWS STREET AND 25 EVANS STREET
ROCHESTER, NEW YORK**

NYSDEC SITE # E828144

Prepared For: City of Rochester
Division of Environmental Quality
30 Church Street, Room 300B
Rochester, New York, 14614-1278

Prepared By: Day Environmental, Inc.
40 Commercial Street
Rochester, New York 14614

Project #: 4265S-09

Date: October 2010

**AT-GRADE AND SUB-GRADE
DEMOLITION PHASE ENVIRONMENTAL WORK PLAN**

**300, 304-308, 320 ANDREWS STREET AND 25 EVANS STREET
ROCHESTER, NEW YORK**

NYSDEC SITE # E828144

A handwritten signature in blue ink, reading "Nathan Simon", written over a horizontal line.

Nathan E. Simon
Project Engineer

A handwritten signature in blue ink, reading "Jeffrey A. Danzinger", written over a horizontal line.

Jeffrey A. Danzinger
Project Manager

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Background.....	1
1.2	Previous Environmental Studies.....	2
1.3	Overburden Stratigraphic Conditions and Characteristics of the Site.....	4
1.4	Proposed Future Use of Site.....	4
1.5	Objectives.....	4
1.6	Applicable Project Standards, Criteria and Guidance.....	5
2.0	DEMOLITION PHASE ENVIRONMENTAL SERVICES	6
2.1	Site Preparation.....	6
2.2	At-Grade and Sub-Grade Building Demolition and Removal.....	7
2.3	Post-Foundation/Slab Soil Sampling and Analysis.....	10
2.4	Backfilling of Excavations.....	11
2.5	Daily Site Reports.....	11
2.6	Demolition Phase Derived Environmental Wastes.....	12
3.0	FINAL DEMOLITION PHASE REPORT	13
4.0	PROJECT SCHEDULE	14
5.0	ACRONYMS	15

FIGURES

Figure 1	Project Locus Map
Figure 2	Site Plan with 1950 Sanborn Overlay
Figure 3	Site Plan Depicting Tentative Work Zone Locations and Test Pit Locations

APPENDICES

Appendix A	Health and Safety Plan
Appendix B	Quality Assurance Project Plan

1.0 INTRODUCTION

DAY prepared this At-Grade and Sub-Grade Demolition Phase Environmental Work Plan (Work Plan) for four adjacent parcels with a combined area of approximately 1.49 acres that are addressed as 300, 304-308, 320 Andrews Street and 25 Evans Street, City of Rochester, County of Monroe, New York (Site). This Work Plan was developed for the City of Rochester (the City) under the New York State Department of Environmental Conservation (NYSDEC) Environmental Restoration Program (ERP) using guidance from the NYSDEC document titled “*DER-10, Technical Guidance for Site Investigation and Remediation*” dated May 2010.

This Work Plan summarizes the known environmental conditions that exist at the Site, and the environmental monitoring, sampling, documentation and health and safety provisions that will be conducted during demolition activities associated with the removal of at-grade or below-grade structures (i.e., building slabs, below-grade building foundations, floor drains, underground utilities, etc.) that have the potential to disturb subsurface soils. It is not anticipated that this Work Plan will be implemented during the demolition of the above-grade portions of the on-site buildings.

The demolition of the site buildings is not part of the State Assistance Contract (SAC). The demolition will be managed and procured under a separate contract by the City of Rochester Department of Neighborhood and Business Development.

1.1 BACKGROUND

The Site is improved with four vacant buildings with associated paved parking lots and city streets. A narrow city street known as Evans Street separates the 320 Andrews Street parcel from the other three parcels that are contiguous with each other. It is understood that Evans Street is not currently used for vehicle traffic, but does contain underground utilities (e.g., sewer). It is also understood that Bristol Street borders the western portion of the Andrews Street Site and is a narrow alley with underground utilities. A project locus map and a site plan with previous test locations are provided as Figure 1 and Figure 2, respectively. The four buildings have a total floor area of approximately 38,300 square feet and consist of single and two-story brick or concrete block buildings with partial basements and/or slab-on-grade construction, constructed between 1925 and 1965. Specific information regarding the structures located on the Site is provided below:

- 300 Andrews Street – one approximate 4,224 square-foot one and two-story brick building with a partial basement reportedly constructed in 1925.
- 304-308 Andrews Street – one approximate 15,425 square-foot one and two-story brick building with a partial basement reportedly constructed in 1920 with an addition in 1961.
- 320 Andrews Street – one approximate 8,000 square-foot one-story block building with a partial basement reportedly constructed in 1965.

- ❑ 25 Evans Street – one approximate 10,700 square-foot one-story slab-on-grade block building reportedly constructed in 1950.

The Site is located in a commercial-use urban area in downtown Rochester, New York. The Site is bounded to the north by the Inner Loop highway, to the east by a vacant parcel, to the south by Andrews Street with commercial properties beyond, and to the west by Bristol Street with commercial properties beyond.

The Site and surrounding area are generally level with the exception of the road cut associated with the Inner Loop to the north that is approximately 15 feet lower in elevation. The Genesee River is located approximately 1,600 feet west of the Site. Surface water appears to flow off the Site toward Andrews Street to the South and into the City of Rochester sewer system. Based on the Phase II Environmental Site Assessment (Phase II ESA) (refer to section 1.2) groundwater appears to flow north toward the Inner Loop highway. The groundwater flow direction may be influenced locally due to buried utilities, seasonal conditions, or other factors.

1.2 PREVIOUS ENVIRONMENTAL STUDIES

The previous environmental assessments and studies completed at the site are summarized below.

Phase I Environmental Site Assessments (Phase I ESAs)

In June 2006, a Phase I ESA was completed for each of the four parcels that comprise the Site. In addition, some other Phase I ESAs and asbestos surveys were performed on portions of the Andrews Street site between 1990 and 2005. The Phase I ESAs identified that the Site has been used for various commercial and industrial purposes since the early 1920s, including plumbing supply, electrical supply, bakery, printer, commercial bus depot and bus repair garage, gasoline station, chemical sales/distribution, dry cleaning equipment distributor, fuel oil contractor, and warehousing. Recognized environmental conditions (RECs) identified in the previous Phase I ESAs for each parcel are listed below.

25 Evans Street

- ❑ Two closed in place 5,000-gallon underground storage tanks (USTs) and one out-of-service approximate 3,000-gallon aboveground storage tank (AST) located inside the building;
- ❑ the presence of a floor trench drain system inside the building;
- ❑ a former below grade service pit in the concrete floor inside the building that had been filled with crushed stone; and
- ❑ off-site concerns on adjoining properties.

300 Andrews Street

- ❑ The presence of containers of oil, anti-freeze and paint in the building, and minor floor stains; and

- off-site concerns on adjoining properties.

304-308 Andrews Street

- The presence of two out-of-service 275-gallon ASTs in the basement of the building;
- a floor drain inside the garage area of 308 Andrews St.;
- the historic use of the building by a dry cleaning supply company, a chemical distributor, and a printer; and
- off-site concerns on adjoining properties.

320 Andrews Street

- The historic use of the property by a retail gasoline station and by a commercial bus company; and
- off-site concerns on adjoining properties.

Phase II Environmental Site Assessment (Phase II ESA)

A Phase II ESA of the Site was performed by Leader Professional Services, Inc. in 2006. The Phase II ESA consisted of advancing test borings, the installation of three overburden groundwater monitoring wells, the preliminary evaluation of select floor drains and their point of discharge, and the collection and analysis of soil and groundwater samples. The findings of the Phase II ESA documented soil and groundwater impacted by volatile organic compounds (VOCs), most notably tetrachloroethene, (a/k/a perchloroethene or PCE), that exceed regulatory criteria. Some suspected petroleum fuel related VOCs were also detected. The findings of the Phase II ESA are summarized below:

- PCE was detected in 19 of the 21 soil samples collected, eight of which contained PCE concentrations exceeding the NYSDEC Technical Administrative Guidance Manual (TAGM) 4046 Recommend Soil Cleanup Objective (RSCO). These eight samples were collected at interior and exterior locations in proximity to the eastern side of the 304-308 Andrews Street building and included a sample collected from 1 foot below the ground surface that contained a PCE concentration of 3,560 milligrams per kilogram (mg/kg) or parts per million (ppm).
- PCE breakdown products (i.e., trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE) were detected in one sample collected east of the 304-308 Andrews Street building at depth of 3 feet below the ground surface.
- TCE was detected in a soil sample collected east of the 320 Andrews Street building at a depth of 2.5 feet and in a soil sample collected within the western portion of the 25 Evans Street building in proximity to the former vehicle service pit at a depth of 3.5 feet below the ground surface.
- Polychlorinated Biphenyls (PCBs) were not detected in the four samples analyzed.
- Select soil samples collected within the garage footprint at 25 Evans Street at depths ranging between 2.5 and 6-feet below the ground surface contained concentrations of

petroleum related compounds (p-isopropyltoluene, naphthalene, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene) exceeding NYSDEC TAGM 4046 RSCOs.

- PCE was detected in the three on-site monitoring wells located east of the 304-308 Andrews Street building and the 25 Evans Street building at concentrations ranging between 420 micrograms per liter (ug/L) or parts per billion (ppb) and 70,000 ug/L or ppb, which exceeded the NYSDEC TOGS 1.1.1 groundwater standard of 5 ug/L. In addition to PCE, monitoring well MW-2 also contained TCE and cis-1,2-DCE at concentrations exceeding NYSDEC TOGs 1.1.1 standards and guidance values.
- Evidence of light non-aqueous phase liquid (LNAPL) or dense non-aqueous phase liquid (DNAPL) was not detected at test boring or monitoring well locations.

1.3 OVERBURDEN STRATIGRAPHIC CONDITIONS AND CHARACTERISTICS OF THE SITE

Based on the findings of the Phase II ESA, the Site soils consist of miscellaneous fill materials that are generally underlain by lacustrine deposits and till. The miscellaneous fill deposits consisted of soil, cinders, ash and construction debris (i.e., wood, brick, concrete). Fill deposits were observed to approximate depths ranging from 1.5 feet to 8 feet below the ground surface. The lacustrine deposits ranged in type from clay to sand and were found frequently in layers ranging in thickness from less than one-inch to several feet. In general, the lacustrine deposits terminated in a fine sand-silt. Direct-push refusal depth typically ranged from 13 to 15 feet below the ground surface. Hollow stem augers were capable of penetrating further, but a noticeable drop in sample recovery and an increase in gravel content was observed from samples collected at depths greater than 15 feet below the ground surface. It appears that this 15±-foot horizon suggests a boundary between lacustrine deposits and a till layer. Groundwater was found in the overburden at a depth of 11.3 to 12.3 feet below the ground surface. Bedrock was encountered in soil borings at depths of 25.3 and 27 feet below the ground surface.

1.4 PROPOSED FUTURE USE OF SITE

The Site is located in the Center City District (CCD), and it is understood that the Site is anticipated to be redeveloped for mixed residential and commercial use. Based on the CCD zoning and proposed mixed-use development scenario, the soil sample analytical results will be compared to NYSDEC Part 375 Soil Cleanup Objectives (SCOs) for “Restricted-Residential Use”, as well as the Protection of Groundwater as deemed applicable.

1.5 OBJECTIVES

The objectives of this Work Plan include:

- Environmental monitoring and documentation services during select demolition activities (i.e., at-grade and sub-grade) of the four vacant buildings on the Site in accordance with the Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) developed for the Site.

- Identifying and documenting areas of suspect environmental contamination and structures of concern as well as sampling and analytical laboratory testing of suspected contaminants. The information obtained can be used to supplement the Remedial Investigation that is to subsequently be performed at this Site.

1.6 APPLICABLE PROJECT STANDARDS, CRITERIA AND GUIDANCE

Applicable standards, criteria and guidance (SCG) values that may be used for this project are outlined below:

- Guidelines referenced in the NYSDEC document titled “DER-10 Technical Guidance for Site Investigation and Remediation”, May 2010.
- Appropriate SCOs and guidelines as set forth in the NYSDEC document titled “6 NYCRR Part 375 Environmental Remediation Programs” dated December 14, 2006.
- Appropriate groundwater standards and guidance values as set forth in the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) document titled “Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations”, June 1998 and amended by a January 1999 Errata Sheet, an April 2000 Addendum and a June 2004 Addendum.

2.0 DEMOLITION PHASE ENVIRONMENTAL SERVICES

The demolition activities are intended to prepare the Site for future study and remediation by removing the majority of the existing buildings' sub-grade structure and superstructure. During select portions of the at-grade and sub-grade demolition work, a DAY representative will document and locate, via global positioning system (GPS), areas of suspect environmental contamination and structures of concern (i.e., drains, dry wells, USTs, etc.) beneath the building floors and foundations, and collect soil and fill samples for possible analytical laboratory testing. This section of the Work Plan provides details on the environmental services that will be conducted in conjunction with the demolition work.

A site-specific HASP for this project is included in Appendix A. This HASP outlines the policies and procedures that will be implemented to protect workers and the public from potential environmental hazards during at-grade and sub-grade demolition activities that have the potential to disturb contaminated subsurface media (soil, till, groundwater, etc.). The HASP also includes a CAMP and Emergency Contingency Plan (ECP).

Chemtech Consulting Group Inc. (Chemtech), a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory (NYSDOH ELAP ID #11376), will analyze samples (i.e., soil, fill, concrete, waste, etc.) that are collected throughout the duration of the demolition-phase environmental services. A quality assurance project plan (QAPP) for this project is included as Appendix B.

2.1 SITE PREPARATION

Prior to the Site work, site security measures (i.e., 6 foot high chain-link fence along the perimeter of the Site with at least one locking gate, steel plates over flush mounted curb boxes, etc.) will be implemented/installed in accordance with the City's demolition specifications. A kickoff meeting between DAY, the City, and the demolition contractor representatives will be conducted prior to initiating the demolition activities. During this meeting the involved parties will be made aware of the currently-known or suspected areas that have the potential to contain contamination, including the following:

- Beneath and in proximity to the east side of the 304-308 parcel where the highest concentrations of chlorinated VOCs, such as PCE, have been detected in near-surface soil samples;
- Along the west side of the 300 and 304-308 Andrews Street and 25 Evans Street parcels in proximity to an adjoining property to the west (i.e., addressed as 164 North Clinton Avenue) where dry cleaning operations were historically conducted;
- In proximity to the southeast portion of the 320 Andrews Street parcel where a "filling station" was historically operated;
- In proximity to the building on the 25 Evans Street parcel where petroleum compounds and other VOCs have been detected in soil samples collected beneath the floor of the building and there are records or observations pertaining to former tank systems (i.e., aboveground, and filled-in-place underground), trench drains, and an equipment pit; and

- In proximity to buried utilities that may be acting as preferential migration pathways of contaminants. An example is the buried utilities along the east side of the 304-308 Andrews Street and the 25 Evans Street parcels that are present between the apparent chlorinated VOC source in soil and well MW-1 to the north that contained the highest concentration of chlorinated VOCs in groundwater (refer to Figure 2).

2.2 AT-GRADE AND SUB-GRADE BUILDING DEMOLITION AND REMOVAL

During at-grade and sub-grade demolition work, a designated DAY representative will be in daily communication with designated representatives of the City and the demolition contractor to coordinate when the DAY representative should be on-site to evaluate, monitor, collect samples, obtain measurements and document the subsurface conditions beneath the building floors and foundations, and also during removal of select buried utilities. Due to the identified known environmental conditions at the Site, the DAY representatives and subcontractors used on this project for on-site work involving disturbance of subsurface media within the designated exclusion zones will be 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) trained in accordance with Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120. Decontamination procedures outlined in the QAPP will be implemented during at-grade and sub-grade demolition activities. In addition, DAY's office is located less than 5-minutes from the Site, which will allow DAY to manage abrupt work stoppages and starts in a timely and efficient manner.

Above-Grade Demolition

The demolition contractor will demolish the above-grade portions of the four buildings located at the Site and subsequently remove the generated material from the Site. It is anticipated that heavy equipment to be used at the Site may include trucks, excavators, a bulldozer and a loader. It is not anticipated that a DAY representative will be on-site to document or monitor this work.

At-Grade or Sub-Grade Demolition Monitoring, Documentation, and Possible Sampling and Analysis

Following the removal of the above-grade portion of the buildings, DAY will provide oversight of the at-grade and sub-grade demolition activities (i.e., foundation and building slab removal, etc.). This work will include identifying, documenting and locating via GPS, areas of suspect environmental contamination and structures of concern (i.e., drains, dry wells, USTs, etc.) as well as sampling and analytical laboratory testing of samples for suspected contaminants. [Note: Due to the potential of compromising underground utility integrity or undermining of public sidewalks, foundations bordering streets and right-of-ways will be left in-place in accordance with the City demolition specifications. The foundation walls left in-place will be documented.]

In the event dewatering is necessary, it is anticipated that the generated water will be discharged to the Monroe County sewer system. As such, a Monroe County Pure Waters (MCPW) sewer discharge permit will be obtained prior to discharging the generated water to the sewer system in accordance with applicable regulations. If obtained, a copy of the MCPW sewer discharge permit will be submitted to the NYSDEC.

It is anticipated that the dewatering procedure will include extracting water from the low point(s) of the excavation using a pump and discharged via flexible piping to the MCPW sewer system or staged in a storage vessel(s) (i.e., 55-gallon New York State Department of Transportation (NYSDOT) approved drum, FRAC tank, etc.) located in the tentative location presented on Figure 3. [Note: The location of the storage vessel(s) will be subject to change depending on locations of exclusion zones, other active work areas, staging areas, etc.] Prior to disposal, the staged liquid waste will be tested in accordance with the requirements of the MCPW sewer use permit, or characterized in accordance with the designated disposal facilities requirements. If the liquid waste generated during Site activities requires treatment prior to disposal, a schematic of the proposed treatment system will be submitted to the NYSDEC for review and approval.

During at-grade and sub-grade demolition activities, a DAY representative will conduct air monitoring for VOCs and particulates in accordance with provisions of the HASP and CAMP (refer to Appendix A). The contractor will either utilize this HASP or the components of its own HASP (accepted by regulatory agencies) for the protection of its on-site workers. Upon arrival at the Site, the DAY representative will calibrate the field instruments [i.e., photoionization detector (PID), real-time aerosol monitor (RTAM), etc.] in accordance with the QAPP (refer to Appendix B) and the manufacture's specifications. Following satisfactory calibration, the VOC and particulate background concentrations will be measured in accordance with the CAMP. Once background VOC and particulate concentrations have been measured, demolition of at-grade and sub-grade structures can commence, and the on-site DAY representative will monitor VOC and particulate concentrations in the work zone and downwind locations in accordance with the site-specific HASP and CAMP. If VOC and/or particulate action levels are exceeded, corrective actions will be implemented in accordance with the HASP and CAMP as deemed necessary.

As the demolition project progresses, the DAY representative will observe and PID screen portions of the at-grade and sub-grade structures as they are removed for evidence of impact. Once the at-grade and sub-grade demolition work in a specific area is complete, the DAY representative will also screen the exposed soil in accessible areas for evidence of suspect contamination. Screening will involve visual observation for areas of staining or discoloration, olfactory evidence of volatile, chemical, or petroleum-type odors and PID screening the ambient air above or around at-grade and sub-grade structures, fill, soil, etc. For the purposes of this Work Plan, media with such visual or olfactory observations and/or containing PID screening results greater than 10 ppm will be characterized as impacted. If evidence of impact is documented (olfactory evidence, staining or PID measurements greater than 10 ppm above background), a sample will be collected for possible analytical laboratory testing in accordance with the procedures presented in the QAPP for this Site. Following consultation with the NYSDEC, select samples collected from media characterized as impacted will be submitted for analytical laboratory testing. Impacted demolition materials will be staged on, and covered with, a minimum single layer of 12 millimeter polyethylene sheeting or reinforced 6 millimeter polyethylene sheeting at the staged material exclusion zone presented on Figure 3. The demolition material will be covered at all times to prevent wind and precipitation erosion until waste characterization testing and disposal in accordance with applicable regulations is conducted.

In general accordance with DER-10, non-aqueous phase liquids (NAPL) and/or grossly contaminated materials encountered during the at-grade or sub-grade demolition activities will be removed to the extent feasible (i.e., up to two excavator buckets of solids, and any readily extractable liquid will be removed). The volume of NAPL and grossly contaminated material removed will be dependent on the volume of material removed as part of the at-grade and sub-grade investigational activities. This will also include solid or semi-solid hazardous substances. Removed solid material will be staged on-site on, and covered with, a minimum single layer of 12 millimeter polyethylene sheeting or reinforced 6 millimeter polyethylene sheeting, and removed liquids will be containerized in one or more NYS DOT approved 55-gallon drum(s). The staging of the solid and liquid materials will be performed at the "Staged Material Exclusion Zone" presented on Figure 3. Source area locations will be documented using GPS technology and restored to eliminate exposure to the extent feasible. If warranted, such areas will be further addressed during subsequent investigative and remedial activities in accordance with NYCRR Part 375-1.8(c).

Based on current information, it is anticipated that up to five samples of the previously segregated materials may be collected to determine the off-site disposal requirements of these potentially impacted solid materials in accordance with applicable regulations. The samples will be submitted to Chemtech under chain-of-custody control for testing of one or more of the following parameters depending upon field conditions encountered, type of material, and input from City and NYSDEC representatives:

- Target Compound List (TCL) VOCs including Tentatively Identified Compounds (TICs) using United States Environmental Protection Agency (USEPA) Method 8260;
- TCL Semi-Volatile Compounds (SVOCs) including TICs using USEPA Method 8270;
- Target Analyte List (TAL) Metals using USEPA Methods 6010 and 7471/7470;
- Cyanide using USEPA Method 335.4;
- Polychlorinated Biphenyls (PCBs) using USEPA Method 8082;
- Pesticides using USEPA Method 8081;
- Toxicity Characteristic Leaching Procedure (TCLP) VOCs, SVOCs, Metals, Pesticides and/or herbicides (using USEPA Methods 1311, 8260, 8270, 6010/7470, 8081 and 8151); and
- Ignitability, corrosivity, and/or reactivity using Methods 1010, SW846, 7.3 and 9040.

Analytical laboratory testing results will generally be available 10 business days from the time the samples are received at the analytical laboratory.

To document the various aspects of the at-grade and sub-grade demolition work (i.e., sample locations, areas of contamination, structures of concern, etc.), DAY will utilize its Trimble Geo-XH sub-foot accuracy GPS with ESRI ArcPad installed software with Geographic Information System (GIS) shape files that have been developed for the Site. DAY's Trimble GeoBeacon can also be available for use to perform real-time differential correction during the fieldwork. The GPS will be used during the fieldwork to: reference pre-existing information; determine locations of potential sources of contamination; evaluate whether samples were previously collected from a specific location on the Site; identify Site

boundaries; identify Site features such as buildings; provide reference to an orthophoto; identify environmental test locations with joined PID readings and laboratory data; identify on-site buried utilities; and provide reference to historical Sanborn maps and Platt maps.

During the at-grade and sub-grade demolition activities, DAYs on-site representative will use the Geo-XH GPS to record the locations of new sample locations, areas of contamination, structures of concern, buried utilities, etc. Each structure of concern, area of contamination, and data point will be joined with pertinent information such as PID readings, odors, staining, descriptions, and whether additional follow up work is required. Such information will be disseminated in accordance with Section 2.5.

2.3 POST-FOUNDATION/SLAB SOIL SAMPLING AND ANALYSIS

Following the removal of building foundations and slabs from the 25 Evans Street, 300 Andrews Street and 304-308 Andrews Street parcels, it is anticipated that up to 10 discrete soil or fill samples will be selected for analytical laboratory testing from locations with the greatest field evidence of impact (i.e., staining, olfactory, PID readings, etc.). However, some samples may be collected for analytical laboratory testing from at-grade and sub-grade structures of concern, areas that do not contain field evidence of impact (i.e., to confirm the area is not impacted) or at other locations to fill in data gaps. The GPS will be used to document sample locations, associated conditions, etc. The subcontractor retained to provide foundation and building slab removal work may use an excavator to collect soil samples from the walls or bottom of excavations that cannot be safely accessed by the DAY representative. Soil sample locations that can be directly accessed by the DAY representative will be collected using grab techniques with nitrile/latex gloved hands. New gloves will be used for each sample collected.

Following foundation and concrete slab removal at the 320 Andrews Street parcel, the contractor, under direction from DAY, will excavate up to ten test pits within the footprint of the former foundation and concrete slab with an excavator up to four feet in depth (measured from the bottom of former foundation/concrete slab elevations). Using the excavator bucket, the contractor will bring the excavated soil from the test pits to a location where DAY can safely observe and screen the soil and collect up to ten analytical laboratory samples. In accordance with DER 10, excavated materials will be staged on polyethylene plastic sheeting to prevent cross contamination with other Site media. Tentative test pit locations are presented on Figure 3, and actual locations will vary depending upon field conditions encountered. Sample selection for analytical laboratory testing will be biased towards soil/fill with the greatest field evidence of impact (i.e., staining, olfactory, PID readings, etc.). Test pitting investigative-derived waste will be managed in general accordance with DER-10 Section 3.3(e)4. For example, during test pit advancement, any drums, containers, and/or NAPL or other free product encountered will be overpacked or otherwise containerized for characterization testing and disposal in accordance with applicable regulations. Such materials will be placed in the “Staged Material Exclusion Zone” presented on Figure 3. The remaining excavated material (i.e., fill, soil, etc.) will be placed back in the excavation in the same general strata from which it was removed, and compacted using the excavator bucket. Equipment used during test pitting activities will be decontaminated in accordance with the decontamination procedures presented in the QAPP included in Appendix B. The recovered soil samples will be visually examined by a DAY

representative for evidence of suspect contamination (e.g., staining, unusual odors) and screened with a PID. The post-foundation/slab soil sampling procedure that will be followed is outlined in Section 3.0 of the QAPP.

Based on the scope of this project, it is anticipated that the up to 20 field samples will be selected for analytical laboratory testing. These samples will be analyzed for the following full suite of parameters:

- ❑ TCL VOCs including TICs using USEPA Method 8260;
- ❑ TCL SVOCs including TICs using USEPA Method 8270;
- ❑ TAL Metals using USEPA Methods 6010 and 7471;
- ❑ Cyanide using USEPA Method 335.4;
- ❑ PCBs using USEPA Method 8082; and
- ❑ Pesticides using USEPA Method 8081.

Matrix spike/matrix spike duplicate (MS/MSD) samples and field blank samples (i.e., rinsate samples) will also be collected and analyzed in accordance with the QAPP established for the Site (refer to Appendix B). Based on the number of field samples specified above, it is anticipated that two MS/MSD soil/fill samples and one equipment rinsate sample will be tested with these soil/fill field samples.

Following receipt of an Analytical Services Protocol (ASP) Category B deliverables data package, DAY will retain Data Validation Services (DVS) to perform a Data Usability Summary Report (DUSR) on the soil sample data package. The validated analytical laboratory test results for the post-excavation soil samples will be compared to appropriate SCOs.

2.4 Backfilling of Excavations

Subsequent to the removal of at-grade and sub-grade structures, the resulting excavations will be backfilled. Imported fill material will be NYSDOT Type 2 Stone Sub-Base, possibly to be overlain at the ground surface with a 6-inch layer of NYSDOT Type 1 and/or Type 1ST Stone. Each backfill material used will contain less than 10% by weight material that would pass through a size 80 sieve, and will consist of virgin rock, stone or gravel from a permitted mine or quarry. These materials meet the requirements of DER-10 Section 5.4(e)5, and do not require chemical testing. The name, address, permit information and telephone number of the imported backfill source, and the gradation of the backfill will be provided to the NYSDEC for approval prior to importing the material onto the Site for use as backfill

2.5 DAILY SITE REPORTS

DAY will provide daily reports to the City and the NYSDEC to summarize and document work activities associated with the environmental services completed during the at-grade and sub-grade demolition phase of the project. The daily reports will be submitted electronically via email, and will include: a summary of the work completed, observations regarding at-grade and sub-grade structures or contamination, and identification of potential issues or concerns that may require additional investigation or remediation; photographs;

environmental monitoring measurements (CAMP, worker zone, collected samples, etc.) and description of health and safety corrective actions (if deemed necessary) implemented; sample descriptions; copies of chain-of-custody documentation for samples submitted for laboratory analysis; laboratory test results; and electronic GPS shape files, as deemed appropriate.

2.6 DEMOLITION PHASE DERIVED ENVIRONMENTAL WASTES

Decontamination water; disposable personal protective equipment (PPE); containerized sludges, non-aqueous liquids, contaminated water; hazardous and non-hazardous impacted soil; hazardous impacted concrete and brick; sediments and other wastes that may be generated during this at-grade and sub-grade demolition-phase environmental work will be characterized in accordance with disposal facility requirements, transported off-site, and disposed/treated in accordance with applicable regulations.

3.0 FINAL DEMOLITION PHASE REPORT

A final demolition phase report will be developed for the at-grade and sub-grade demolition phase environmental services. This report will summarize the environmental activities at the Site, including daily site observation and environmental monitoring logs, analytical laboratory summary tables with comparison to applicable SCOs (i.e., unrestricted SCOs, restricted residential SCOs, restricted commercial SCOs, protection of groundwater SCOs, and/or protection of ecological resources SCOs), photographs of the work, ASP Category B analytical laboratory packages, a DUSR for the soil data, a figure showing locations of sub-grade structures and sample locations, and a listing of subsurface conditions and structures of concern.

Hard copies and electronic copies of the report will be provided to the City and appropriate regulatory agencies (e.g., NYSDEC, NYSDOH, MCDPH). Electronic copies of GIS data and shape files will also be provided to the City.

4.0 PROJECT SCHEDULE

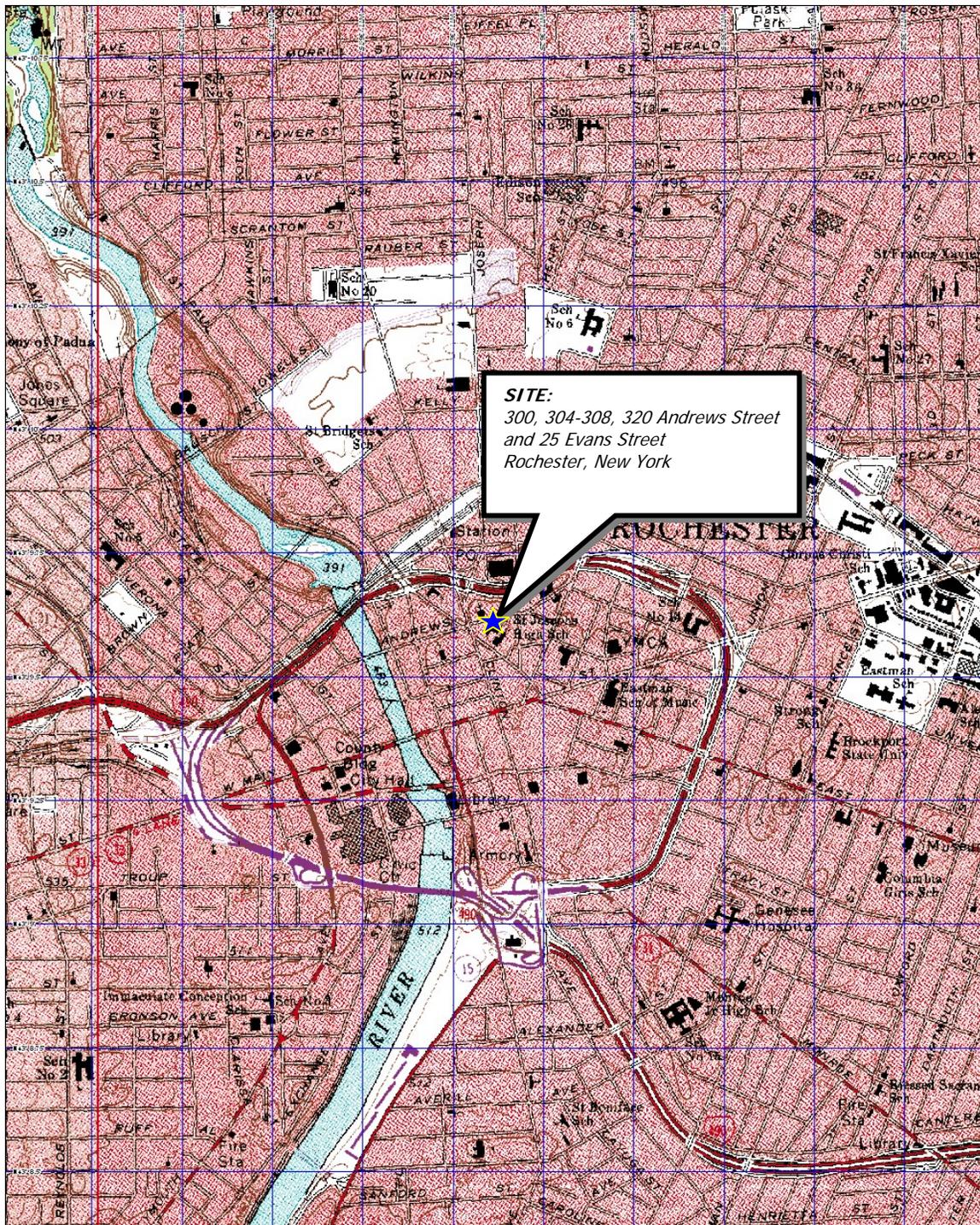
The schedule of the demolition-phase environmental services is dependent upon the schedule of the demolition activities. DAY will provide the necessary personnel and flexibility to account for abrupt work stoppages and starts to ensure that its representative is on-site during critical at-grade and sub-grade demolition activities.

Upon receiving the ASP Category B data package from Chemtech for the soil samples, DAY will forward it to DVS for completion of the DUSR. Once DAY has received the DUSR (anticipated to be three weeks from submission), DAY will prepare the demolition report. It is anticipated that a draft version of this report will be submitted to the City in about four weeks after receiving the DUSR. It is anticipated that the report will then be provided to regulatory agencies within two weeks from receipt of any City comments to the draft version.

5.0 ACRONYMS

ASP	Analytical Services Protocol
AST	Aboveground Storage Tank
CAMP	Community Air Monitoring Plan
CCD	Center City District
Chemtech	Chemtech Consulting Group, Inc.
DAY	Day Environmental, Inc.
DNAPL	Dense Non-Aqueous Phase Liquid
DVS	Data Validation Services
DUSR	Data Usability Summary Report
ECP	Emergency Contingency Plan
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
GIS	Geographic Information System
GPS	Global Positioning System
HASP	Health And Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
LNAPL	Light Non-Aqueous Phase Liquid
MCPW	Monroe County Pure Waters
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NAPL	Non-Aqueous Phase Liquid
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
OSHA	Occupational Safety and Health Administration
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene (a/k/a perchloroethene)
Phase I ESA	Phase I Environmental Site Assessment
Phase II ESA	Phase II Environmental Site Assessment
PID	Photoionization Detector
PPB	Parts Per Billion
PPM	Parts Per Million
QAPP	Quality Assurance Project Plan
REC	Recognized Environmental Condition
RTAM	Real-Time Aerosol Monitor
SAC	State Assistance Contract
SCG	Standard, Criteria and Guidance
SCO	Soil Cleanup Objective
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TCE	Trichloroethene
TCL	Target Compound List
TIC	Tentatively Identified Compound
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound

FIGURES



SITE:
 300, 304-308, 320 Andrews Street
 and 25 Evans Street
 Rochester, New York

3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 1:50,000 Scale: 1:19,200 Detail: 14:0 Datum: WGS84

Drawing Produced From: 3-D TopoQuads, DeLorme Map Co., referencing USGS quad map Rochester East (NY) 1995. Site Lat/Long: N43° 9.62' – W77° 36.38'

DATE
10/11/2010

DRAWN BY
RJM

SCALE
1" = 2000'

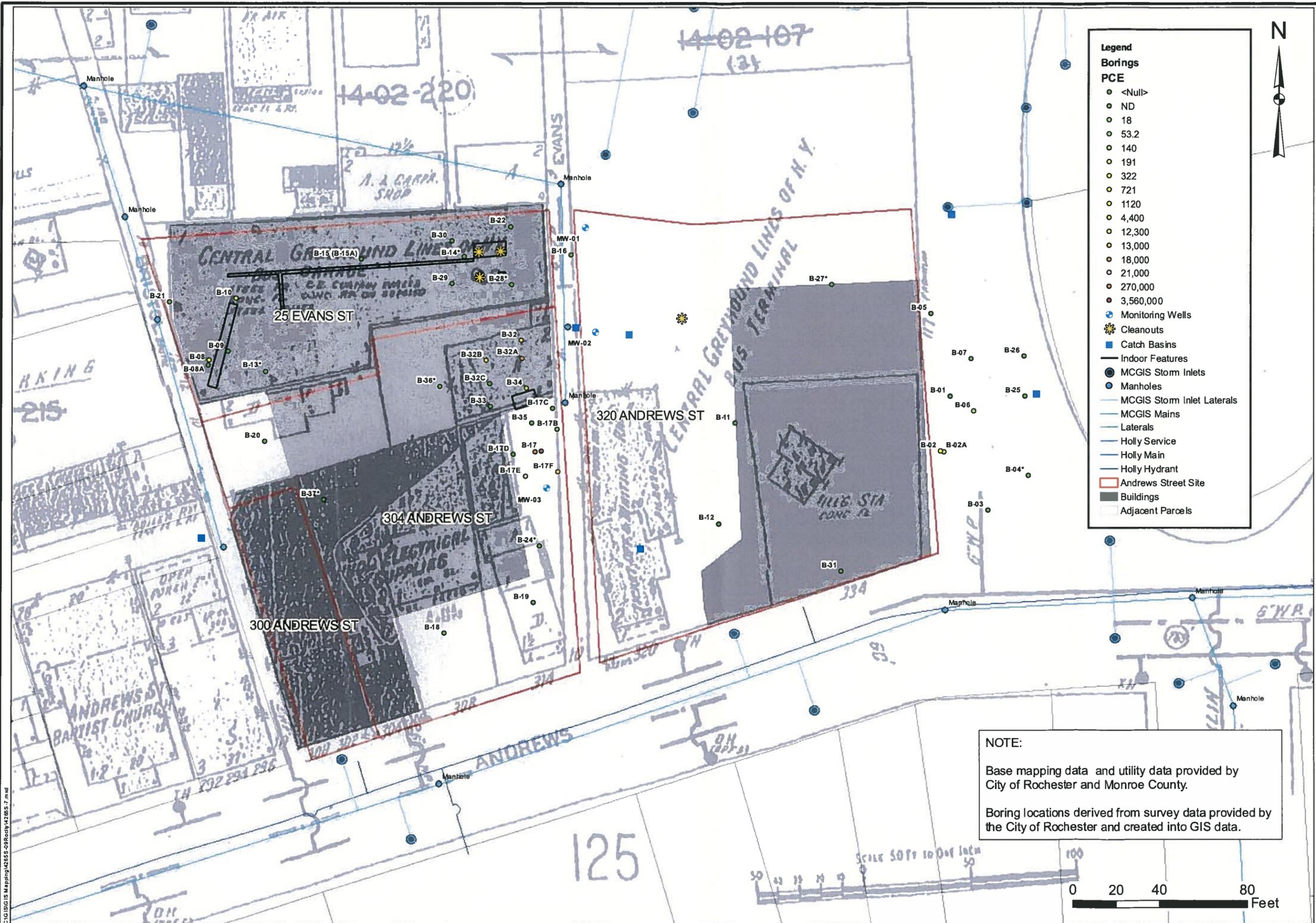
day
DAY ENVIRONMENTAL, INC.
 ENVIRONMENTAL CONSULTANTS
 ROCHESTER, NEW YORK 14614-1008
 NEW YORK, NEW YORK 10165-1617

PROJECT TITLE
**300, 304-308, 320 ANDREWS STREET
 AND 25 EVANS STREET
 ROCHESTER, NY
 NYSDEC SITE #: E828144
 ENVIRONMENTAL RESTORATION PROJECT**

DRAWING TITLE
PROJECT LOCUS MAP

PROJECT NO.
4265S-09

FIGURE 1



Legend

Borings

- <Null>
- ND
- 18
- 53.2
- 140
- 191
- 322
- 721
- 1120
- 4,400
- 12,300
- 13,000
- 18,000
- 21,000
- 270,000
- 3,560,000

PCE

- Monitoring Wells
- ★ Cleanouts
- Catch Basins
- Indoor Features
- MCGIS Storm Inlets
- Manholes
- MCGIS Storm Inlet Laterals
- MCGIS Mains
- Laterals
- Holly Service
- Holly Main
- Holly Hydrant
- ▭ Andrews Street Site
- Buildings
- ▭ Adjacent Parcels

NOTE:

Base mapping data and utility data provided by City of Rochester and Monroe County.

Boring locations derived from survey data provided by the City of Rochester and created into GIS data.

DESIGNED BY	NES	DATE	03-2010
DRAWN BY	CPS	DATE DRAWN	03-2010
SCALE	AS NOTED	DATE ISSUED	09-20-2010

day
DAY ENVIRONMENTAL, INC.
 Environmental Consultants
 Rochester, New York 14614-1008
 New York, New York 10016-0710

Project Title
 300, 304-308, 320 ANDREWS STREET
 AND 25 EVANS STREET
 ROCHESTER, NEW YORK

ENVIRONMENTAL RESTORATION PROJECT_NYSDEC SITE #_E828144
 Drawing Title

Site Plan with 1950 Sanborn Overlay

Project No.
 4265S-09

FIGURE 2

C:\GIS\GIS Mapping\4265S-09\Recov\4265S-7.mxd

Inner Loop (NYref940T)

St Paul St/ N Clinton Ave/ Joseph Ave to Inner Loop Ramp

Legend

-  Proposed Test Pit location
-  Andrews Street Site
-  Buildings
-  Tentative location of staged material exclusion zone, location may vary depending on Site conditions
-  Tentative location of dewatering holding vessels (i.e., NYSDOT approved 55 - gallon drums, Frac Tank, etc.), location may vary depending on Site conditions
-  Tentative location of decon pad, location may vary depending on Site conditions



DESIGNED BY	DATE
NES	09-2010
DRAWN BY	DATE DRAWN
CPS	09-2010
SCALE	DATE ISSUED
AS NOTED	09-16-2010

day
DAY ENVIRONMENTAL, INC.
 Environmental Consultants
 Rochester, New York 14614-1008
 New York, New York 10016-0710

25 EVANS ST

304-308 ANDREWS ST

300 ANDREWS ST

Franklin St

320 ANDREWS ST

Evans St

Decon. Pad

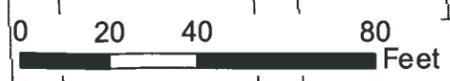
Dewatering Staging Area

Andrews St

Staged Material Exclusion Zone

Franklin Sq

NOTE:
 Base mapping data and utility data provided by City of Rochester and Monroe County.



Project Title
 300, 304-308, 320 ANDREWS STREET
 AND 25 EVANS STREET
 ROCHESTER, NEW YORK

ENVIRONMENTAL RESTORATION PROJECT NYSDEC SITE # E828144
 Drawing Title

Site Plan Depicting Tentative Work Zone Locations and Test Pit Locations

Project No.
 4265S-09

FIGURE 3

C:\GIS\MapInfo\4265S-09\Ready\4265S-09.mxd

APPENDIX A

Health and Safety Plan

HEALTH AND SAFETY PLAN

ENVIRONMENTAL RESTORATION PROGRAM
300, 304-308, 320 ANDREWS STREET AND 25 EVANS STREET
ROCHESTER, NEW YORK

NYSDEC SITE # E828144

Prepared for: City of Rochester
Division of Environmental Quality
30 Church Street, Room 300B
Rochester, New York, 14614-1278

Prepared by: Day Environmental, Inc.
40 Commercial Street
Rochester, New York 14614

Project #: 4265S-09

Date: October 2010

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Site History/Overview	1
1.2	Planned Activities Covered by HASP	3
2.0	KEY PERSONNEL AND MANAGEMENT	4
2.1	Project Manager	4
2.2	Site Safety Officer.....	4
2.3	Employee Safety Responsibility	4
2.4	Key Safety Personnel.....	4
3.0	SAFETY RESPONSIBILITY	5
4.0	JOB HAZARD ANALYSIS	6
4.1	Chemical Hazards	6
4.2	Physical Hazards.....	6
4.3	Environmental Hazards	7
	4.3.1 Heat Stress	7
	4.3.2 Exposure to Cold.....	8
5.0	SITE CONTROLS	9
5.1	Site Zones	9
5.2	General	9
6.0	PROTECTIVE EQUIPMENT	10
6.1	Anticipated Protection Levels	10
6.2	Protection Level Descriptions	10
	6.2.1 Level D	10
	6.2.2 Modified Level D.....	11
	6.2.3 Level C	11
	6.2.4 Level B	11
	6.2.5 Level A	11
6.3	Respiratory Protection	12
7.0	DECONTAMINATION PROCEDURES	13
7.1	Personnel Decontamination.....	13
7.2	Equipment Decontamination.....	13
7.3	Disposal	13
8.0	AIR MONITORING	14
8.1	Particulate Monitoring	14
8.2	Volatile Organic Compound Monitoring	15
8.3	Community Air Monitoring Plan.....	15
	8.3.1 VOC Monitoring, Response Levels, and Actions.....	15
	8.3.2 Particulate Monitoring, Response Levels, and Actions.....	16

9.0	EMERGENCY RESPONSE	17
9.1	Emergency Telephone Numbers.....	17
9.2	Evacuation.....	18
9.3	Medical Emergency.....	18
9.4	Contamination Emergency.....	18
9.5	Fire Emergency.....	18
9.6	Spill or Air Release.....	19
9.7	Locating Containerized Waste and/or Underground Storage Tanks.....	19
10.0	ABBREVIATIONS	21

ATTACHMENTS

- | | |
|--------------|---|
| Attachment 1 | Figure 1- Route for Emergency Service |
| Attachment 2 | Figure 2 - Site Plan Depicting Tentative CAMP Station Locations |

1.0 INTRODUCTION

This Health and Safety Plan (HASP) outlines the policies and procedures to protect workers and the public from potential environmental hazards during demolition activities that have the potential to disturb contaminated subsurface soil or fill material (i.e., during removal of building floors and foundations and select buried utilities). This project is being conducted under the New York State Department of Environmental Protection (NYSDEC) Environmental Restoration Program (ERP) for the City of Rochester (the City). The subject Site is comprised of four parcels with a combined area of approximately 1.49 acres addressed as 300, 304-308, 320 Andrews Street and 25 Evans Street, City of Rochester, County of Monroe, New York (Site). Figure 1 included in Attachment 1 depicts the general location of the Site. As outlined in this HASP, the demolition activities shall be conducted in a manner to minimize the probability of injury, accident, or incident occurrence.

Although the HASP focuses on the specific work activities planned for this Site, it must remain flexible due to the nature of this work. Conditions may change and unforeseen situations can arise that require deviations from the original HASP.

1.1 SITE HISTORY/OVERVIEW

The Site is improved with four vacant buildings with associated paved parking lots and portions of public right-of-ways (i.e, Evans Street and Bristol street). The four buildings have a total floor area of approximately 38,300 square feet and consist of single and two-story brick or concrete block buildings with partial basements and/or slab-on-grade construction. Specific information regarding the structures located on the Site is provided below:

- ❑ 300 Andrews Street – one approximate 4,224 square-foot one and two-story brick building with a partial basement reportedly constructed in 1925.
- ❑ 304-308 Andrews Street – one approximate 15,425 square-foot one and two-story brick building with a partial basement reportedly constructed in 1920 with an addition in 1961.
- ❑ 320 Andrews Street – one approximate 8,000 square-foot one-story block building with a partial basement reportedly constructed in 1965.
- ❑ 25 Evans Street – one approximate 10,700 square-foot one-story slab-on-grade block building reportedly constructed in 1950.

The Site has been used for various commercial and industrial purposes since the early 1920s including plumbing supply, electrical supply, bakery, printer, commercial bus depot and bus garage, gas station, chemical sales/distribution, dry cleaning equipment distributor, fuel oil contractor and warehousing. The existing buildings will be demolished by the City.

The Site is located in a commercial area in downtown Rochester, New York. The Site is bounded to the north by the Inner Loop highway, to the east by a vacant parcel, to the south by Andrews Street with commercial properties beyond, and to the west by Bristol Street with commercial properties beyond.

The Site and surrounding area are generally level with the exception of the road cut associated

with the Inner Loop to the north that is approximately 15 feet lower in elevation. The Genesee River is located approximately 1,600 feet west of the Site. Surface water appears to flow off the Site toward Andrews Street to the South, and into the City of Rochester sewer system. Based on previous studies conducted at the Site, groundwater appears to flow north toward the Inner Loop highway. The groundwater flow direction may be influenced locally due to buried utilities, seasonal conditions, or other factors.

Previous studies performed at the Site have identified the following recognized environmental conditions (RECs):

- ❑ Past use and handling of various types of petroleum and chemicals at the Site including by a distributor of laundry and dry cleaning equipment;
- ❑ Past presence of a retail gasoline station on the 320 Andrews Street parcel (gas station demolished and parcel redeveloped for bus terminal in early/mid 1960s);
- ❑ Two abandoned and closed in place underground storage tanks (USTs; one 5,000-gallon diesel and one 5,000-gallon gasoline) located beneath the concrete floor inside the 25 Evans Street building (former Greyhound bus garage);
- ❑ An adjacent property to the west that operated a dry cleaning plant for at least 20 years (164 North Clinton Avenue);
- ❑ Volatile organic compounds (VOCs), including tetrachloroethene (PCE) and trichloroethene (TCE), were detected in soil and groundwater samples collected from the Site; and
- ❑ Petroleum related VOCs were detected in soil samples from the Site.

- ❑ The findings of the environmental studies are summarized below:
 - ❑ PCE was detected in 19 of the 21 soil samples collected, eight of which contained PCE concentrations exceeding the NYSDEC TAGM 4046 RSCO. These eight samples were collected at interior and exterior locations in proximity to the eastern side of the 304-308 Andrews Street building and included a sample collected from 1 foot below the ground surface that contained a PCE concentration of 3,560 milligrams per kilogram (mg/kg) or parts per million (ppm).
 - ❑ PCE breakdown products (i.e., trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE) were detected in one sample collected east of the 304-308 Andrews Street building at depth of 3 feet below the ground surface.
 - ❑ TCE was detected in a soil sample collected east of the 320 Andrews Street building at a depth of 2.5 feet and in a soil sample collected within the western portion of the 25 Evans Street building in proximity to the former vehicle service pit at a depth of 3.5 feet below the ground surface.
 - ❑ Polychlorinated Biphenyls (PCBs) were not detected in the four samples analyzed.
 - ❑ Select soil samples collected within the garage footprint at 25 Evans Street at depths

ranging between 2.5 and 6-feet below the ground surface contained concentrations of petroleum related compounds (p-isopropyltoluene, naphthalene, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene) exceeding NYSDEC TAGM 4046 RSCOs.

- PCE was detected in the three on-site monitoring wells located east of the 304-308 Andrews Street building and the 25 Evans Street building at concentrations ranging between 420 micrograms per liter (ug/L) or parts per billion (ppb) and 70,000 ug/L or ppb, which exceed NYSDEC TOGS 1.1.1 groundwater standards of 5 ug/L or ppb. In addition to PCE, monitoring well MW-2 also contained TCE and cis-1,2-DCE at concentrations exceeding NYSDEC TOGs 1.1.1 standards and guidance values.
- Evidence of light non-aqueous phase liquid (LNAPL) or dense non-aqueous phase liquid (DNAPL) was not detected at test boring or monitoring well locations.

1.2 PLANNED ACTIVITIES COVERED BY HASP

This HASP is intended to be used during this NYSDEC ERP project for the on-site environmental activities. Currently, identified activities include:

- Site preparation activities;
- Environmental monitoring during subsurface demolition activities (i.e., building slab and foundation removal, buried utilities removal/disconnects);
- Post-slab and foundation removal soil sampling via grab sampling techniques;
- Backfilling excavation areas; and
- Miscellaneous on-site tasks that may arise during this project.

This HASP can be modified to cover other site activities as deemed appropriate. The owner of the property, its contractors, and other site workers will be responsible for the development and/or implementation of health and safety provisions associated with normal demolition activities or site activities.

2.0 KEY PERSONNEL AND MANAGEMENT

The Project Manager (PM) and Site Safety Officer (SSO) are responsible for formulating health and safety requirements, and implementing the HASP.

2.1 PROJECT MANAGER

The PM has the overall responsibility for the project and will coordinate with the SSO to ensure that the goals of the project are attained in a manner consistent with the HASP requirements.

2.2 SITE SAFETY OFFICER

The SSO has responsibility for administering the HASP relative to site activities, and will be in the field while subsurface demolition activities are in progress. The SSO's operational responsibilities will be monitoring, including personal and environmental monitoring, ensuring personal protective equipment (PPE) maintenance, and identification of protection levels. The air monitoring data obtained by the SSO will be available for review by the City, regulatory agencies, demolition contractors, and other on-site personnel.

2.3 EMPLOYEE SAFETY RESPONSIBILITY

Each employee is responsible for personal safety as well as the safety of others in the area. The employee will use the equipment provided in a safe and responsible manner as directed by the SSO.

2.4 KEY SAFETY PERSONNEL

The following individuals are anticipated to share responsibility for health and safety of DAY representatives at the Site.

Project Manager

Jeffrey A. Danzinger

Site Safety Officer

Kelly A. Crandall, or Nathan E. Simon

3.0 SAFETY RESPONSIBILITY

Contractors, consultants, state or local agencies, or other parties, and their employees, involved with this project will be responsible for their own safety while on-site. Their employees will be required to understand the information contained in this HASP, and must follow the recommendations that are made in this document. As an alternative, contractors, consultants, state or local agencies, or other parties, and their employees, involved with this project can utilize their own health and safety plan for this project as long as it is found acceptable to the New York State Department of Health (NYSDOH) and/or the Monroe County Department of Public Health (MCDPH).

4.0 JOB HAZARD ANALYSIS

There are many hazards associated with environmental work on a site, and this HASP discusses some of the anticipated hazards for this Site. The hazards listed below deal specifically with those hazards associated with the management of potentially contaminated media (e.g., soil, fill, etc.).

4.1 CHEMICAL HAZARDS

Chemical substances can enter the unprotected body by inhalation, skin absorption, ingestion, or injection (i.e., a puncture wound, etc.). A contaminant can cause damage to the point of contact or can act systemically, causing a toxic effect at a part of the body distant from the point of initial contact.

A list of selected VOCs that have been detected at the Site and exceed soil or groundwater standards, criteria and guidance (SCG) values are presented below. This list also presents the Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs), National Institute for Occupational Safety and Health (NIOSH) recommended exposure limits (RELs), and NIOSH immediately dangerous to life or health (IDLH) levels.

CONSTITUENT	OSHA PEL	NIOSH REL	IDLH
Tetrachloroethene (PCE)	100 ppm	NA	150 ppm
Trichloroethene (TCE)	100 ppm	25 ppm	1000 ppm
Isopropylbenzene	50 ppm	50 ppm	900 ppm
1,2-dichloroethene	200 ppm	200 ppm	1000 ppm
Naphthalene	10 ppm	10 ppm	250 ppm
1,2,4-Trimethylbenzene	25 ppm	25 ppm	NA
1,3,5-Trimethylbenzene	25 ppm	25 ppm	NA

NA = Not Available

The potential routes of exposure for these analytes and chemicals include inhalation, ingestion, skin absorption and/or skin/eye contact. The potential for exposure through any one of these routes will depend on the activity conducted. The most likely routes of exposure for the activities that are performed during environmental activities at the Site include inhalation and skin/eye contact.

4.2 PHYSICAL HAZARDS

There are physical hazards associated with this project, which might compound the chemical hazards. Hazard identification, training, adherence to the planned environmental measures, and careful housekeeping can prevent many problems or accidents arising from physical hazards. Potential physical hazards associated with this project and suggested preventative measures include:

- ❑ Slip/Trip/Fall Hazards - Some areas may have wet or frozen surfaces that will greatly increase the possibility of inadvertent slips. Caution must be exercised when using steps and stairs due

to slippery surfaces in conjunction with the fall hazard. Good housekeeping practices are essential to minimize the trip hazards.

- ❑ Small Quantity Flammable Liquids - Small quantities of flammable liquids will be stored in "safety" cans and labeled according to contents.
- ❑ Electrical Hazards - Electrical devices and equipment shall be de-energized prior to working near them. All extension cords will be kept out of water, protected from crushing, and observed regularly to ensure structural integrity. Temporary electrical circuits will be protected with ground fault circuit interrupters. Only qualified electricians are authorized to work on electrical circuits. Heavy equipment (e.g., excavator, backhoe, drill rig) shall not be operated within 10 feet of high voltage lines, unless proper protection from the high voltage lines is provided by the appropriate utility company.
- ❑ Noise - Work around large equipment often creates excessive noise. The effects of noise can include:
 - Workers being startled, annoyed, or distracted.
 - Physical damage to the ear resulting in pain, or temporary and/or permanent hearing loss.
 - Communication interference that may increase potential hazards due to the inability to warn of danger and proper safety precautions to be taken.

Proper hearing protection will be worn as deemed necessary. In general, feasible administrative or engineering controls shall be utilized when on-site personnel are subjected to noise exceeding an 8-hour time weighted average (TWA) sound level of 90 decibels on the A-weighted scale (dBA). In addition, whenever employee noise exposures equal or exceed an 8-hour TWA sound level of 85 dBA, employers shall administer a continuing, effective hearing conservation program as described in the OSHA Regulation 29 CFR Part 1910.95.

- ❑ Heavy Equipment - Each morning before start-up, heavy equipment will be checked to ensure safety equipment and devices are operational and ready for immediate use.
- ❑ Subsurface and Overhead Hazards - Before any excavation activity, efforts will be made to determine whether underground utilities and potential overhead hazards will be encountered. Underground utility clearance must be obtained prior to subsurface work.

4.3 ENVIRONMENTAL HAZARDS

Environmental factors such as weather, wild animals, insects, snakes and irritant plants can pose a hazard when performing outdoor tasks. Although not anticipated, the SSO shall make reasonable efforts to alleviate these hazards should they arise.

4.3.1 Heat Stress

The combination of warm ambient temperature and protective clothing increases the potential for heat stress. In particular:

- ❑ Heat rash
- ❑ Heat cramps

- Heat exhaustion
- Heat stroke

Site workers will be encouraged to increase consumption of water or electrolyte-containing beverages such as Gatorade® when the potential for heat stress exists. In addition, workers are encouraged to take rests whenever they feel any adverse effects that may be heat-related. The frequency of breaks may need to be increased upon worker recommendation to the SSO.

4.3.2 Exposure to Cold

With outdoor work in the winter months, the potential exists for hypothermia and frostbite. Protective clothing greatly reduces the possibility of hypothermia in workers. However, personnel will be instructed to wear warm clothing and to stop work to obtain more clothing if they become too cold. Employees will also be advised to change into dry clothes if their clothing becomes wet from perspiration or from exposure to precipitation.

5.0 SITE CONTROLS

To prevent migration of contamination caused through tracking by personnel or equipment, work areas, and personal protective equipment staging/decontamination areas will be specified prior to beginning operations.

5.1 SITE ZONES

In the area where contaminated materials present the potential for worker exposure (work zone), personnel entering the area must wear the mandated level of protection for the area. A "transition zone" shall be established where personnel can begin and complete personal and equipment decontamination procedures. This can reduce potential off-site migration of contaminated media. Contaminated equipment or clothing will not be allowed outside the transition zone (e.g., on clean portions of the Site) unless properly containerized for disposal. Operational support facilities will be located outside the transition zone (i.e., in a "support zone"), and normal work clothing and support equipment are appropriate in this area. If possible, the support zone should be located upwind of the work zone and transition zone.

5.2 GENERAL

The following items will be requirements to protect the health and safety of workers during implementation of activities that disturb contaminated material.

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand to mouth transfer and ingestion of contamination shall not occur in the work zone and/or transition zone during disturbance of contaminated material.
- Personnel admitted in the work zone shall be properly trained in health and safety techniques and equipment usage.
- No personnel shall be admitted in the work zone without the proper safety equipment.
- Proper decontamination procedures shall be followed before leaving the Site.

6.0 PROTECTIVE EQUIPMENT

This section addresses the various levels of personal protective equipment (PPE), which are or may be required at this job site. Personnel entering the work zone and transition zone shall be trained in the use of the anticipated PPE to be utilized.

6.1 ANTICIPATED PROTECTION LEVELS

The following table summarizes the protection levels (refer to Section 6.2) anticipated for tasks to be implemented during this project.

TASK	PROTECTION LEVEL	COMMENTS/MODIFICATIONS
Site mobilization	D	
Site preparation	D	
Extrusive work (e.g., demolition of above-ground superstructure, etc.)	D	
Intrusive work (e.g., demolition of floor slabs and foundation, excavation/disconnection of buried utilities, collecting samples, etc.)	C/Modified D/D	Based on air monitoring, and SSO discretion
Support zone	D	
Site breakdown and demobilization	D	

It is anticipated that work conducted as part of this project will be performed in Level D or modified Level D PPE. If conditions are encountered that require Level A or Level B PPE, the work will immediately be stopped. The appropriate government agencies (e.g., City, NYSDEC, NYSDOH, MCDPH, etc.) will be notified and the proper health and safety measures will be implemented (e.g., develop and implement engineering controls, upgrade in PPE, etc.).

6.2 PROTECTION LEVEL DESCRIPTIONS

This section lists the minimum requirements for each protection level. Modifications to these requirements can be made upon approval of the SSO. If Level A, Level B, and/or Level C PPE is required, Site personnel that enter the work zone and/or transition zone must be properly trained and certified in the use of those levels of PPE.

6.2.1 Level D

Level D consists of the following:

- Safety glasses

- ❑ Hard hat when working with heavy equipment
- ❑ Steel-toed or composite-toed work boots
- ❑ Protective gloves during sampling or handling of potentially contaminated media
- ❑ Work clothing as prescribed by weather

6.2.2 Modified Level D

Modified Level D consists of the following:

- ❑ Safety glasses with side shields
- ❑ Hard hat when working with heavy equipment
- ❑ Steel-toed or composite-toed work boots
- ❑ Protective gloves during sampling or handling of potentially contaminated media
- ❑ Outer protective wear, such as Tyvek coverall [Tyveks (Sarans) and polyvinyl chloride (PVC) acid gear will be required when workers have a potential to be exposed to impacted liquids or impacted particulates].

6.2.3 Level C

Level C consists of the following:

- ❑ Air-purifying respirator with appropriate cartridges
- ❑ Outer protective wear, such as Tyvek coverall [Tyveks (Sarans) and PVC acid gear will be required when workers have a potential to be exposed to impacted liquids or particulates].
- ❑ Hard hat when working with heavy equipment
- ❑ Steel-toed or composite-toed work boots
- ❑ Nitrile, neoprene, or PVC overboots, if appropriate
- ❑ Nitrile, neoprene, or PVC gloves, if appropriate
- ❑ Face shield (when projectiles or splashes pose a hazard)

6.2.4 Level B

Level B protection consists of the items required for Level C protection with the exception that an air-supplied respirator is used in place of the air-purifying respirator. Level B PPE is not anticipated to be required during this project. If the need for level B PPE becomes evident, activities in the affected area will be stopped until conditions are further evaluated, and any necessary modifications to the HASP have been approved by the PM and SSO. Subsequently, the appropriate safety measures (including Level B PPE) must be implemented prior to commencing site activities.

6.2.5 Level A

Level A protection consists of the items required for Level B protection with the addition of a fully-encapsulating, vapor-proof suit capable of maintaining positive pressure. Level A PPE is not anticipated to be required during this project. If the need for level A PPE becomes evident,

activities in the affected area will be stopped until conditions are further evaluated, and any necessary modifications to the HASP have been approved by the PM and SSO. Subsequently, the appropriate safety measures (including Level A PPE) must be implemented prior to commencing site activities.

6.3 RESPIRATORY PROTECTION

Any respirator used will meet the requirements of the OSHA 29 CFR 1910.134. Both the respirator and cartridges specified shall be fit-tested prior to use in accordance with OSHA regulations (29 CFR 1910). Air purifying respirators shall not be worn if contaminant levels exceed designated use concentrations. The workers will wear respirators with approval for: organic vapors <1,000 ppm; and dusts, fumes and mists with a TWA < 0.05 milligrams per cubic meter (mg/m^3).

No personnel who have facial hair, which interferes with respirator sealing surface, will be permitted to wear a respirator and will not be permitted to work in areas requiring respirator use.

Only workers who have been certified by a physician as being physically capable of respirator usage shall be issued a respirator. Personnel unable to pass a respiratory fit test or without medical clearance for respirator use will not be permitted to enter or work in areas that require respirator protection.

7.0 DECONTAMINATION PROCEDURES

This section describes the procedures necessary to ensure that both personnel and equipment are free from contamination when they leave the work site.

7.1 PERSONNEL DECONTAMINATION

Personnel involved with activities that involve disturbing contaminated media will follow the decontamination procedures described herein to ensure that material which workers may have contacted in the work zone and/or transition zone does not result in personal exposure and is not spread to clean areas of the Site. This sequence describes the general decontamination procedure. The specific stages can vary depending on the Site, the task, and the protection level, etc.

1. Leave work zone and go to transition zone
2. Remove soil/debris from boots and gloves
3. Remove boots
4. Remove gloves
5. Remove Tyvek suit and discard, if applicable
6. Remove and wash respirator, if applicable
7. Go to support zone

7.2 EQUIPMENT DECONTAMINATION

Decontamination procedures for equipment are presented as Section 4.0 of the QAPP.

7.3 DISPOSAL

Disposable clothing will be disposed in accordance with applicable regulations. Liquids (e.g., decontamination water, etc.) or solids (e.g., soil) generated by remedial activities will be disposed in accordance with applicable regulations.

8.0 AIR MONITORING

During activities that have the potential to disturb contaminated soil, fill material, or groundwater, air monitoring will be conducted in order to determine airborne particulate and contamination levels. This ensures that respiratory protection is adequate to protect personnel against the chemicals that are encountered and that chemical contaminants are not migrating off-site. Additional air monitoring may be conducted at the discretion of the SSO. Readings will be recorded and be available for review.

The following chart describes the direct reading instrumentation that will be utilized and appropriate action levels.

Monitoring Device	Action level	Response/Level of PPE
PID Volatile Organic Compound Meter	< 1 ppm in breathing zone, sustained 5 minutes	<u>Level D</u>
	1-25 ppm in breathing zone, sustained 5 minutes	<u>Level C</u>
	26-250 ppm in breathing zone, sustained 5 minutes	<u>Level B</u> , Stop work, evaluate the use of engineering controls, etc.
	>250 ppm in breathing zone	<u>Level A</u> , Stop work, evaluate the use of engineering controls, etc.
RTAM Particulate Meter	< 150 $\mu\text{g}/\text{m}^3$ over an integrated period not to exceed 15 minutes.	Continue working
	> 150 $\mu\text{g}/\text{m}^3$	Cease work, implement dust suppression, change in way work performed, etc. If levels can not be brought below 150 $\mu\text{g}/\text{m}^3$, then upgrade PPE to <u>Level C</u> .

8.1 PARTICULATE MONITORING

During activities where contaminated materials (e.g., soil, fill, etc.) may be disturbed, air monitoring will include real-time monitoring for particulates less than ten microns in diameter using a real-time aerosol monitor (RTAM) particulate meter at the perimeter of the work zone in accordance with Appendix 1B of *DER-10, Technical Guidance for Site Investigation and Remediation* dated May 2010. DER-10 uses an action level of 150 $\mu\text{g}/\text{m}^3$ (0.15 mg/m^3) over an integrated period not to exceed 15 minutes. If the action level is exceeded, the upwind background will be confirmed immediately. If the working site particulate measurement is greater than 100 $\mu\text{g}/\text{m}^3$ above the background level, or if visible dust is encountered, then work shall be discontinued until corrective actions are implemented. Corrective actions may include dust suppression (i.e., applying water to hauling roads, excavator buckets and/or excavation faces), hauling materials in properly covered or watertight containers, restricting vehicle speeds to 10 miles per hour or less, reducing the excavation size or number, change in the way work is performed, and/or upgrade of personal protective

equipment.

8.2 VOLATILE ORGANIC COMPOUND MONITORING

During activities where contaminated materials may be disturbed, a photoionization detector (PID) will be used to monitor total VOCs in the ambient air. The PID will prove useful as a direct reading instrument to aid in determining if current respiratory protection is adequate or needs to be upgraded. The SSO will take measurements before operations begin in an area to determine the amount of VOCs naturally occurring in the air. This is referred to as a background level. Levels of VOCs will periodically be measured in the air at active work sites, and at the transition zone when levels are detected above background in the work zone.

8.3 COMMUNITY AIR MONITORING PLAN

During activities that have the potential to disturb contaminated soil, fill material, or groundwater, this Community Air Monitoring Plan (CAMP) will be implemented. The CAMP includes real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when activities with the potential to release VOCs or dust are in progress at the Site. The tentative locations of the CAMP monitoring stations are presented on Figure 2 in Attachment 2. This CAMP is based on the NYSDOH Generic CAMP included as Appendix 1A of the NYSDEC document titled “*DER-10, Technical Guidance for Site Investigation and Remediation*” dated May 2010. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of project activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air. Reliance on the CAMP should not preclude simple, common sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Continuous monitoring will be conducted during ground intrusive activities and demolition of at-grade and sub-grade structures involving potentially contaminated soil, fill material or groundwater. Ground intrusive and at-grade and sub-grade activities include, but are not limited to, removal of building floors and foundations, removal/disconnection of buried utilities, soil/waste excavation and handling, test pitting or trenching, advancement/installation of test borings or monitoring wells, etc.

Periodic monitoring for VOCs will be conducted during non-intrusive activities involving potentially contaminated soil, fill material or groundwater where deemed appropriate (e.g., during collection of soil samples or groundwater samples, etc.).

8.3.1 VOC Monitoring, Response Levels, and Actions

VOCs must be monitored at the downwind perimeter of the immediate work area (i.e., the work zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified in Appendix 1A of the May 2010 DER-10, and summarized below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 ppm above background for the 15-minute average, work activities must be temporarily halted and monitoring must be continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source or vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less (but in no case less than 20 feet), is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

The 15-minute readings must be recorded and made available for NYSDEC and NYSDOH personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded. The VOC monitoring results will be submitted to the NYSDEC for review with the Daily Site Reports (refer to Section 2.5 of the Work Plan).

8.3.2 Particulate Monitoring, Response Levels, and Actions

- Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the work zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level specified in Appendix 1A of the May 2010 DER-10, and summarized below. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during work activities. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (g/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 g/m^3 above the upwind level and provided that no

visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \mu\text{g}/\text{m}^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \mu\text{g}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

Readings will be recorded and made available for review. The particulate monitoring results will be submitted to the NYSDEC for review with the Daily Site Reports (refer to Section 2.5 of the Work Plan).

9.0 EMERGENCY CONTINGENCY PLAN

This section presents the emergency contingency plan (ECP) describing the procedures to be performed in the event of an emergency (e.g., fire, spill, tank/drum release, etc.). To provide first-line assistance to field personnel in the case of illness or injury, the following items will be made immediately available on the Site:

- First-aid kit;
- Portable emergency eye wash; and
- Supply of clean water.

9.1 EMERGENCY TELEPHONE NUMBERS

The following telephone numbers are listed in case there is an emergency at the Site:

Fire/Police Department:	911
Poison Control Center:	(800) 222-1222
<u>NYSDEC</u>	
Charlotte Theobald	(585) 226-5354
Spills Hotline	(585) 226-2466
<u>NYSDOH</u>	
Melissa Menetti	(518) 402-7860
<u>MCDPH</u>	
Jeffrey Kosmala, P.E.	(585) 753-5470
<u>CITY OF ROCHESTER</u>	
Joseph Biondolillo	(585) 428-6649
<u>DAY ENVIRONMENTAL, INC.</u>	
Jeffrey Danzinger	(585) 454-0210 x114
Nathan Simon	(585) 454-0210 x109
Nearest Hospital	Highland Hospital 1000 South Avenue Rochester, NY 14620 (585) 473-2200 (Main) (585) 341-6880 (Emergency Department)
Directions to the Hospital:	Turn west on Andrews Street toward Bristol Street. Proceed approximately 0.2 miles on Andrews Street, then turn left onto St Paul Street. Proceed approximately 0.2 miles on St. Paul Street, which then becomes South Avenue. Proceed approximately 1.5 miles on South Avenue, then turn left into Highland Hospital. Follow signs to Emergency Medical Services (Refer to Figure 1).

9.2 EVACUATION

During activities involving potential disturbance of contaminated soil, fill material, or groundwater, a log of each individual entering and leaving the Site will be kept for emergency accounting practices. Although unlikely, it is possible that a site emergency could require evacuating personnel from the Site. If required, the SSO will give the appropriate signal for site evacuation (i.e., hand signals, alarms, etc.).

All personnel shall exit the Site and shall congregate in an area designated by the SSO. The SSO shall ensure that all personnel are accounted for. If someone is missing, the SSO will alert emergency personnel. The appropriate government agencies will be notified as soon as possible regarding the evacuation, and any necessary measures that may be required to mitigate the reason for the evacuation.

9.3 MEDICAL EMERGENCY

In the event of a medical emergency involving illness or injury to one of the on-site personnel, Emergency Medical Services (EMS) and the appropriate government agencies should be notified immediately. The area in which the injury or illness occurred shall not be entered until the cause of the illness or injury is known. The nature of injury or illness shall be assessed. If the victim appears to be critically injured, administer first aid and/or cardio-pulmonary resuscitation (CPR) as needed. If appropriate, instantaneous real-time air monitoring shall be done in accordance with air monitoring outlined in Section 8.0 of this HASP.

9.4 CONTAMINATION EMERGENCY

It is unlikely that a contamination emergency will occur; however, if such an emergency does occur, the specific work area shall be shut down and immediately secured. If an emergency rescue is needed, notify Police, Fire Department and EMS units immediately. Advise them of the situation and request an expedient response. The appropriate government agencies shall be notified immediately. The area in which the contamination occurred shall not be entered until the arrival of trained personnel who are properly equipped with the appropriate PPE and monitoring instrumentation as outlined in Section 8.0 of this HASP.

9.5 FIRE EMERGENCY

In the event of a fire on-site, all non-essential site personnel shall be evacuated to a safe, secure area. The Fire Department will be notified immediately, and advised of the situation and the identification of any hazardous materials involved. The appropriate government agencies shall be notified as soon as possible.

The four classes of fire along with their constituents are as follows:

- Class A: Wood, cloth, paper, rubber, many plastics, and ordinary combustible materials.
- Class B: Flammable liquids, gases and greases.

- Class C: Energized electrical equipment.
- Class D: Combustible metals such as magnesium, titanium, sodium, potassium.

Small fires on-site may be actively extinguished; however, extreme care shall be taken while in this operation. Approaches to the fire shall be done from the upwind side if possible. Distance from on-site personnel to the fire shall be close enough to ensure proper application of the extinguishing material, but far enough away to ensure that the personnel are safe. The proper extinguisher shall be utilized for the Class(s) of fire present on the Site. If possible, the fuel source shall be cut off or separated from the fire. Care must be taken when performing operations involving the shut-off of valves and manifolds, if present.

Examples of proper extinguishing agent as follows:

- Class A: Water
Water with 1% AFFF Foam (Wet Water)
Water with 6% AFFF or Fluoroprotein Foam
ABC Dry Chemical
- Class B: ABC Dry Chemical
Purple K
Carbon Dioxide
Water with 6% AFFF Foam
- Class C: ABC Dry Chemical
Carbon Dioxide
- Class D: Metal-X Dry Powder

No attempt shall be made against large fires. These shall be handled by the Fire Department.

9.6 SPILL OR AIR RELEASE

In the event of a spill or air release of hazardous materials on-site, the specific area of the spill or release shall be shut down and immediately secured. The area in which the spill or release occurred shall not be entered until the cause can be determined and site safety can be evaluated. Non-essential site personnel shall be evacuated to a safe and secure area. The appropriate government agencies shall be notified as soon as possible. The spilled or released material shall be immediately identified and appropriate containment measures shall be implemented, if possible. Real-time air monitoring shall be implemented as outlined in Section 8.0 of this HASP. If the materials are unknown, Level B protection is mandatory. If warranted, samples of the materials shall be acquired to facilitate identification.

9.7 LOCATING CONTAINERIZED WASTE AND/OR UNDERGROUND STORAGE TANKS

In the event that unanticipated containerized waste (e.g., drums) and/or USTs are located during remedial activities, the work will be stopped in the specific area until site safety can be evaluated and addressed. Non-essential Site personnel shall not work in the immediate area until conditions

including possible exposure hazards are addressed. The appropriate government agencies shall be notified as soon as possible. The SSO shall monitor the area as outlined in Section 8.0 of this HASP.

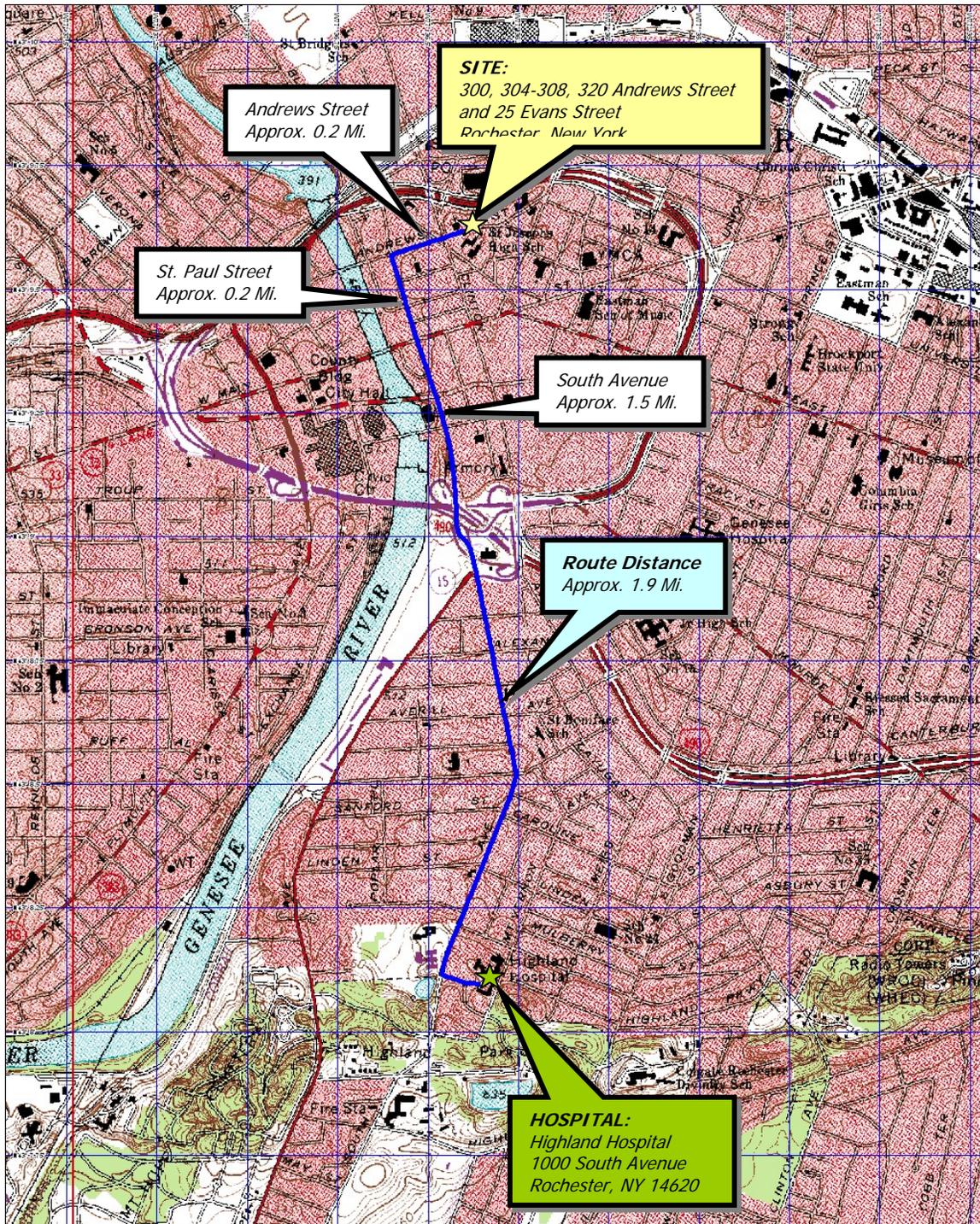
Prior to any handling, unanticipated containers will be visually assessed by the SSO to gain as much information as possible about their contents. As a precautionary measure, personnel shall assume that unlabelled containers and/or tanks contain hazardous materials until their contents are characterized. To the extent possible based upon the nature of the containers encountered, actions may be taken to stabilize the area and prevent migration (e.g., placement of berms, etc.). Subsequent to initial visual assessment and any required stabilization, properly trained personnel will sample, test, remove, and dispose of any containers and/or tanks, and their contents. After visual assessment and air monitoring, if the material remains unknown, Level B protection is mandatory.

10.0 ABBREVIATIONS

CAMP	Community Air Monitoring Program
CPR	Cardio-Pulmonary Resuscitation
DAY	Day Environmental, Inc.
dBA	Decibels on the A-Weighted Scale
DNAPL	Dense Non-Aqueous Phase Liquid
ECP	Emergency Contingency Plan
EMS	Emergency Medical Service
ERP	Environmental Restoration Program
HASP	Health and Safety Plan
IDLH	Immediately Dangerous to Life or Health
LNAPL	Light Non Aqueous Phase Liquid
MCDPH	Monroe County Department of Public Health
mg/m ³	Milligram Per Meter Cubed
NIOSH	National Institute for Occupational Safety and Health
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PID	Photoionization Detector
PM	Project Manager
PM-10	Particulate Matter Less Than 10 Micrometers In Diameter
PPE	Personal Protection Equipment
ppm	Parts Per Million
PVC	Polyvinyl Chloride
REC	Recognized Environmental Condition
REL	Recommended Exposure Limit
RTAM	Real-Time Aerosol Monitor
SCG	Standards, Criteria and Guidance
SSO	Site Safety Officer
TAGM	Technical and Administrative Guidance Memorandum
TWA	Time-Weighted Average
µg/m ³	Micrograms Per Meter Cubed
UST	Underground Storage Tank
VOC	Volatile Organic Compound

ATTACHMENT 1

Figure 1- Route for Emergency Services



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 1:550 ft Scale: 1:19,200 Detail: 14:0 Datum: WGS84

Drawing Produced From: 3-D TopoQuads, DeLorme Map Co., referencing USGS quad map Rochester East (NY) 1995.

DATE 9-17-2010	 DAY ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14614-1008	PROJECT TITLE 300, 304-308, 320 ANDREWS STREET AND 25 EVANS STREET ROCHESTER, NEW YORK NYSDEC SITE NO. E828144 HEALTH AND SAFETY PLAN	PROJECT NO. 4265S-09 FIGURE 1
DRAWN BY RJM		DRAWING TITLE ROUTE FOR EMERGENCY SERVICES	
SCALE As Noted			

ATTACHMENT 2

Figure 2- Site Plan Depicting Tentative CAMP Station Locations

St Paul St/N Clinton Ave/Joseph Ave to Inner Loop Ramp

Legend

-  CAMP Monitoring Location
-  curbs
-  Centerlines_City
-  Andrews Street Site
-  Buildings
-  Adjacent Parcels



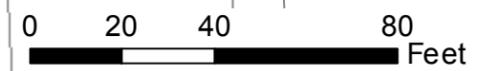
DESIGNED BY	DATE
NES	03-2010
DRAWN BY	DATE DRAWN
CPS	03-2010
SCALE	DATE ISSUED
AS NOTED	03-04-2010

day
DAY ENVIRONMENTAL, INC.
 Environmental Consultants
 Rochester, New York 14614-1008
 New York, New York 10016-0710

Project Title
 300, 304-308, 320 ANDREWS STREET
 AND 25 EVANS STREET
 ROCHESTER, NEW YORK

ENVIRONMENTAL RESTORATION PROJECT_NYSDEC SITE #_E828144
 Drawing Title
 Site Plan Depicting Tentative CAMP Station Locations

NOTE:
 Base mapping data and utility data provided by
 City of Rochester and Monroe County.



Project No.
 4265S-09

FIGURE 2

C:\GIS\GIS Mapping\4265S-09\Rectly 4265S-3.mxd

APPENDIX B

Quality Assurance Project Plan

QUALITY ASSURANCE PROJECT PLAN

**300, 304-308, 320 ANDREWS STREET AND 25 EVANS STREET
ROCHESTER, NEW YORK**

NYSDEC SITE # E828144

Prepared For: City of Rochester
Division of Environmental Quality
30 Church Street, Room 300B
Rochester, New York, 14614-1278

Prepared By: Day Environmental, Inc.
40 Commercial Street
Rochester, New York 14614

Project #: 4265S-09

Date: September 2010

TABLE OF CONTENTS

	<u>PAGE</u>
1.0 PROJECT SCOPE AND PROJECT GOALS.....	1
2.0 PROJECT/TASK ORGANIZATION	1
3.0 SAMPLING PROCEDURES	2
4.0 EQUIPMENT DECONTAMINATION PROCEDURES.....	4
5.0 OPERATIONS AND CALIBRATION OF ON-SITE MONITORING EQUIPMENT.....	5
6.0 SAMPLE HANDLING AND CUSTODY REQUIREMENTS	5
7.0 ANALYTICAL QUALITY ASSURANCE/QUALITY CONTROL	7
8.0 RECORD KEEPING AND DATA MANAGEMENT	8

QUALITY ASSURANCE PROJECT PLAN

This project-specific Quality Assurance Project Plan (QAPP) was prepared for 300, 304-308, 320 Andrews Street and 25 Evans Street (Site) in accordance with Section 2.4 of the May 2010 New York State Department of Environmental Conservation (NYSDEC) “DER-10 Technical Guidance for Site Investigation and Remediation” document. This QAPP provides quality assurance/quality control (QA/QC) protocols and guidance that are to be followed when implementing the Demolition-Phase Environmental Work Plan (Work Plan) for the Site to ensure that data of a known and acceptable precision and accuracy are generated. The QAPP also provides a summary of the demolition project, identifies personnel responsibilities, and provides procedures to be used during sampling of environmental media, other field activities, and the analytical laboratory testing of samples. The components of the QAPP are provided herein.

1.0 PROJECT SCOPE AND PROJECT GOALS

The QAPP applies to the aspects of the project associated with the collection of field data, the collection and analytical laboratory testing of field samples and QA/QC samples, and the evaluation of the quality of the data that is generated. Specifically, the demolition of the on-site buildings will include utility disconnect and removal of foundations and/or building slabs and off-site disposal with post-removal soil sampling and analysis from the excavations.

2.0 PROJECT/TASK ORGANIZATION

Project organization and tentative personnel to implement the work are outlined in this section of the QAPP.

City Project Manager

Mr. Joseph J. Biondolillo will serve as the City’s Project Manager on this project. Mr. Biondolillo will review project documents, assist in key decisions as they relate to various components of the project, etc., as deemed necessary by the City.

DAY Principal in Charge

The Principal in Charge is responsible for review of project documents and ensuring the project is completed in accordance with relative work plans. Mr. David D. Day, P.E., a Day Environmental, Inc. (DAY) representative, will serve as DAY’s Principle-in-Charge on this project. A copy of Mr. Day’s resume is included in Attachment 1.

DAY Project Manager

The Project Manager has the overall responsibility for implementing the project and ensuring that the project meets the objectives and quality standards as presented in this QAPP. Mr. Jeffrey A. Danzinger, a DAY representative, will serve as DAY’s Project Manager on this project, and will serve as DAY’s primary point of contact and control for the project. A copy of Mr. Danzinger’s resume is included in Attachment 1.

DAY Quality Assurance Officer

The Quality Assurance Officer is responsible for QA/QC on this project. The Quality Assurance Officer's responsibilities on this project are not as a project manager or task manager involved with project productivity or profitability as job performance criteria. Mr. Bart Kline, P.E., a DAY representative, will serve as DAY's Quality Assurance Officer on this project. The Quality Assurance Officer may conduct audits of the operations at the Site to ensure that work is being performed in accordance with the QAPP. A copy of Mr. Kline's resume is included in Attachment 1.

DAY Technical Staff, Subconsultants and Subcontractors

DAY's technical staff for this project consist of experienced professionals (e.g., professional engineers, engineers-in-training, scientists, technicians, etc.) that possess the qualifications necessary to effectively and efficiently complete the project tasks. The technical staff will be used to gather and analyze data, prepare various project documentation, etc. Subconsultants and subcontractors used on this project will consist of firms and companies with experience in the services to be provided.

Analytical Laboratory

It is anticipated that Chemtech Consulting Group, Inc. (Chemtech), with facilities at 284 Sheffield Street, Mountainside, New Jersey, will be retained to complete the required analytical laboratory testing of samples as part of this project. Chemtech is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory (ELAP ID11376).

Divya Mehta is the Chief Operating Officer and Technical Director for Chemtech. The laboratory director is responsible for operation, technical performance and data quality of the laboratory and works in conjunction with the Laboratory Manager and QA unit regarding QA and chain-of-custody requirements.

Mohammed Ahmed of Chemtech will act as the Laboratory Manager on this project. The Laboratory Manager will work in conjunction with the laboratory QA unit regarding QA elements of specific sample analyses tasks.

3.0 SAMPLING PROCEDURES

This section of the QAPP provides the protocols for collection of soil and/or fill samples following building foundations and/or building slab removal and sub-grade utility disconnection.

Collection of Soil Samples

The soil and/or fill samples to be collected in accessible areas using grab techniques following at-grade and sub-grade foundation/slab removal and disconnection and/or removal

of buried utilities. In locations that prevent DAY's representative from safely accessing the sample location, the demolition contractor retained to provide foundation and building slab removal work or utility disconnection work may use an excavator to collect soil samples from the walls or bottom of the excavation. During sample collection, the NYSDEC DER-10 document will be referenced for sampling program guidelines and procedures. Soil samples will be taken within 24 hours of excavation, and may be collected from sidewalls and the bottom of the excavation between zero and six inches from the soil surface. If soil samples are taken after 24 hours of excavation, the samples will be collected from sidewalls and the bottom of the excavation between six and twelve inches from the soil surface. Based on the scope of this project, it is not anticipated that soil samples would be taken more than two weeks after excavation.

The recovered soil samples will be visually examined by a DAY representative for evidence of suspect contamination (e.g., staining, unusual odors) and screened with a PID. Portions of the samples will be placed in containers for possible analytical laboratory testing. Different portions of the soil samples will be placed in sealable Ziploc[®]-type plastic baggies, and will be field screened the same day they are collected. Each sample will be agitated and homogenized for at least 30 seconds and allowed to equilibrate for at least three minutes. The ambient headspace air inside the baggie above each sample will be screened for total VOC vapors with a RAE Systems MiniRAE 2000 PID equipped with a 10.6 eV lamp (or equivalent). The sampling port for the PID will be placed in the ambient air headspace inside the bag by opening a corner of the "locked" portion of the bag. The PID will monitor air inside the baggie for a period of at least 15 seconds and the peak readings measured will be recorded on a log sheet or log book.

A DAY representative will record pertinent information for each sample, including:

- ❑ Date and time sample collected.
- ❑ Sample identification/designation.
- ❑ Sample location (e.g., sidewall, bottom, relative location within excavation).
- ❑ Depth of sample recorded in feet and fractions thereof (tenths of inches) referenced to ground surface.
- ❑ Soil type of the sample collected.
- ❑ PID screening results of ambient headspace air above selected samples.

Collection of Hard Material Samples - Contingency

Although not anticipated, impacted hard materials (i.e., poured concrete floors and walls, pre-cast concrete, concrete block walls, brick, etc.) that are removed will be sampled to determine disposal requirements in accordance with applicable regulations. If necessary, hard material core barrel samples will be collected by advancing a core barrel bit through the hard material and retrieving the resulting core sample. The core barrel sample or hard material samples that are small enough to be crushed without advancing a core barrel, will be loosely wrapped in a 6-millimeter polyethylene sheet several times and crushed using a hammer. The resulting aggregate less than 3/4-inch in diameter (approximately the diameter of a dime) will be collected using a latex/nitrile gloved hand, and placed in containers

supplied by the analytical laboratory. Hard material samples will be taken within 24 hours of removal. New polyethylene sheeting and latex/nitrile gloves will be used during the collection of each sample.

The recovered concrete samples will be visually examined by a DAY representative for evidence of suspect contamination (e.g., staining, unusual odors) and screened with a PID. Different portions of each hard material sample will be placed in sealable Ziploc[®]-type plastic baggies and will be field screened the same day they are collected. Each sample will be agitated and homogenized for at least 30 seconds and allowed to equilibrate for at least three minutes. The ambient headspace air inside the baggie above each sample will be screened for total VOC vapors with a RAE Systems MiniRAE 2000 PID equipped with a 10.6 eV lamp (or equivalent). The sampling port for the PID will be placed in the ambient air headspace inside the bag by opening a corner of the “locked” portion of the bag. The PID will monitor air inside the baggie for a period of at least 15 seconds and the peak readings measured will be recorded on a log sheet or log book.

A DAY representative will record pertinent information for each hard material sample, including:

- Date and time sample collected.
- Sample identification/designation.
- Sample location (e.g., floor, sidewall, foundation slab, etc.).
- Depth of sample recorded in feet and fractions thereof (tenths of inches) referenced to ground surface.
- PID screening results of ambient headspace air above selected samples.

4.0 EQUIPMENT DECONTAMINATION PROCEDURES

In order to reduce the potential for cross-contamination of samples collected during this project, the following procedures will be implemented to ensure that the data collected (primarily the laboratory data) is acceptable.

It is anticipated that most of the materials used to assist in obtaining samples will be disposable one-use materials (e.g., sampling containers, latex gloves, etc.). When equipment must be re-used (e.g., spoons, hand core sediment sampler, etc.), it will be decontaminated by at least one of the following methods:

- Steam clean the equipment; or
- Rough wash in tap water; wash in mixture of tap water andalconox-type soap; double rinse with deionized or distilled water; and air dry and/or dry with clean paper towel.

Re-usable equipment will be decontaminated between each use.

When deemed necessary, a temporary decontamination pad will be constructed for decontamination of equipment. Any decontamination pad will be removed following completion of associated activities. Decontamination liquids and disposable equipment and

personal protective equipment will be containerized in NYSDOT-approved 55-gallon drums and left on-site until the disposal method is determined. Investigation derived waste will be disposed in accordance with applicable regulations.

Decontamination procedures for heavy equipment (i.e., excavators, dump trucks, bulldozers, etc) can vary depending upon the contaminant involved, but may include sweeping, wiping, scraping, hosing, or steam cleaning the exterior of the equipment. Personnel performing this task will wear the proper PPE.

5.0 OPERATIONS AND CALIBRATION OF ON-SITE MONITORING EQUIPMENT

The field personnel will be familiar with the equipment being used. Volatile vapor monitoring will be conducted using a PID. It is anticipated that a RAE Systems MiniRAE 2000 PID equipped with a 10.6 eV lamp, or equivalent, will be used during this project. The PID will be calibrated in accordance with the manufacturer's specifications using an isobutylene gas standard prior to use and as necessary during fieldwork. Measurements will be collected in accordance with the protocols outlined in the HASP.

Other miscellaneous field instruments that may be used during this project include:

- A global positioning system (GPS); and
- Real-Time Aerosol Monitor (RTAM).

These meters will be calibrated, operated, and maintained in accordance with the manufacturer's recommendations.

Chemtec's preventative maintenance procedures and calibration procedures for laboratory equipment are provided in its Quality Assurance Manual (QAM) included in Attachment 2.

6.0 SAMPLE HANDLING AND CUSTODY REQUIREMENTS

During sampling activities, personnel will wear disposable latex or nitrile gloves. Between collection of samples, personnel performing the sampling will discard used latex gloves and put on new gloves to preclude cross-contamination between samples. As few personnel as possible will handle samples or be in charge of their custody prior to shipment to the analytical laboratory.

New laboratory-grade sample containers will be used to collect soil and fill samples. Sufficient volume (i.e., as specified by the analytical laboratory and on Chemtech Table included in Attachment 3) will be collected to ensure that the laboratory has adequate sample to perform the specified analyses.

Samples will be preserved as specified by the analytical laboratory for the type of parameters and matrices being tested. The Chemtech Table included in Attachment 3 provides sample preservation requirements. Sample holding times and preservation protocols will be adhered to during this project in accordance with the requirements presented on Chemtech's Table in Attachment 3.

Chain-Of-Custody

Samples that are collected for subsequent testing as part of this project will be handled using chain-of-custody control. Chain-of-custody documentation will accompany samples from their inception to their analysis, and copies of chain-of-custody documentation will be included with the laboratory's report. The chain-of-custody will include the date and time the sample was collected, the sample identity and sampling location, the requested analysis, and any request for accelerated turnaround time.

Sample Labels

Sample labels for field samples and QC samples with adhesive backing will be placed on sample containers in order to identify the sample. Sample information will be clearly written on the sample labels using waterproof ink. Sufficient sample information will be provided on the label to allow for cross-reference with the field sampling records or sample logbook.

The following information will be provided on each sample label:

Name of company;
Initials of sampler;
Date and time of collection;
Sample identification;
Intended analyses; and
Preservation required.

Custody Seals

Custody seals are preprinted adhesive-backed seals that are designed to break if disturbed. Seals will be signed and dated before being placed on the shipping cooler. Seals will be placed on one or more location on each shipping cooler as necessary to ensure security. Shipping tape will be placed over the seals on the coolers to ensure that the seals are not accidentally broken during shipment. Sample receipt personnel at the laboratory will check and document whether the seals on the shipping coolers are intact when received.

Sample Identification

The following format will be used on the labels affixed to sample containers to identify samples:

Each sample will be numbered starting at 001, and continue in succession (i.e., 001, 002, 003, etc.). The sample test location will also be provided after the sample number using the following test location designations:

S-(x') Soil sample location with depth or depth interval in parentheses.

TBxx/xx/xx- Trip Blank with day/month/year

FBxx/xx/xx- Field Blank (equipment rinsate) with day/month/year

As an example, assuming the first project sample is a soil sample collected from soil sample location S-1 at a depth of 10 feet, the sample will be designated as 001/S-1(10').

Transportation of Samples

Samples will be handled, packaged and shipped in accordance with applicable regulations, and in a manner that does not diminish their quality or integrity. Samples will be delivered to the laboratory no later than 48 hours from the day of collection.

7.0 ANALYTICAL QUALITY ASSURANCE/QUALITY CONTROL

Analytical laboratory testing will be completed by Chemtech (NYSDOH ELAP ID #11376). The analytical laboratory test results for soil and fill samples collected following building foundation and building slab removal will be reported in NYSDEC ASP Category B deliverable reports. Analytical laboratory test results for soil samples will be reported on a dry-weight basis. Chemtech will analyze the samples using the lowest practical quantitation limits (PQLs) possible.

Chemtech will provide internal QA/QC checks that are required by NYSDEC ASP and/or United States Environmental Protection Agency (USEPA) CLP protocol, such as analyses performed, spike blanks, internal standards, surrogate samples, calibration standards, and reference standards. Laboratory reports will be reviewed by Chemtech as outlined in its Quality Assurance Manual (QAM) that is included in Attachment 2, and also by the Quality Assurance Officer.

Laboratory results will be compared to data quality indicators in accordance with Chemtech's QAM included in Attachment 2 and NYSDEC ASP. Data quality indicators include: precision, accuracy, representation, completeness, and comparability.

The analytical methods to be used for each type of sample and sample matrix are identified on Table 1 included in Attachment 4. As shown, sample methods include the following:

- ❑ Target compound list (TCL) VOCs including tentatively identified compounds (TICs) using United States Environmental Protection Agency (USEPA) Method 8260;
- ❑ TCL semi-volatile organic compounds (SVOCs) including TICs using USEPA Method 8270;
- ❑ Target Analyte List (TAL) metals using USEPA Methods 6010 and 7471;
- ❑ Cyanide using USEPA Method 335.4;
- ❑ Polychlorinated Biphenyls (PCBs) using USEPA Method 8082; and
- ❑ Pesticides using USEPA Method 8081.

In order to provide control over the collection, analysis, review, and interpretation of analytical laboratory data, the following QA/QC samples will be included as part of this project (refer to Table 1 in Attachment 4):

- One matrix spike/matrix spike duplicate (MS/MSD) for each sample matrix, for each sampling event of 20 samples, or per shipment if less than 20 samples, within a seven-day period. Specific parameters that MS/MSD samples will be tested for by Chemtech will be dependent upon the test parameters of the samples that are being analyzed.
- One field blank (i.e., rinsate sample) will be collected from reusable sampling equipment for each sampling event of 20 samples, or per shipment if less than 20 samples. The field blank(s) will be tested for the test parameters of the samples that are being analyzed by Chemtech.

Data Usability Summary Report

Judy Harry of Data Validation Services (DVS) will complete a data usability summary report (DUSR) on the analytical laboratory data that is generated as part of the scope of work in the demolition work plan. The DUSR will be conducted in accordance with the provisions set forth in Appendix 2B of the DER-10 Technical Guidance for Site Investigation and Remediation dated May 2010. The findings of the DUSR will be incorporated in the final demolition report. A copy of Ms. Harry's resume is included in Attachment 5.

Reporting

Analytical and QC data will be included in the final demolition report. The final demolition report will summarize the environmental work and provide evaluation of the data that is generated, including the validity of the results in the context of QA/QC procedures.

8.0 Record Keeping and Data Management

DAY will document project activities in a bound field book on a daily basis. Information that will be recorded in the field book will include:

- Dates and time work is performed;
- Details on work being performed;
- Details on field equipment being used;
- Visual and olfactory observations during field activities;
- Field meter measurements collected during monitoring activities;
- Sampling locations and depths;
- Measurements of sample locations, and test locations, excavations, etc.;
- Personnel and equipment on-site;
- Weather conditions; and
- Other pertinent information as warranted.

The analytical data will be reported as electronic data deliverables (EDDs) and as hard copies. Differential GPS, swing ties from existing surveyed site structures, and/or a licensed surveyor will be used to collect spatial data. The spatial data will be plotted using integrated geographic information system (GIS) and/or computer-aided design (CAD) mapping. Electronic and hard copy files will be maintained by DAY.

DAY will utilize its Trimble Geo-XH sub-foot accuracy GPS with ESRI ArcPad installed software with GIS shape files that have been developed for the Site. DAY's Trimble GeoBeacon will also be available for use to perform real-time differential correction during the fieldwork. During the at-grade and sub-grade demolition activities, DAY's on-site representative will use the Geo-XH GPS to measure the locations of new sample locations, structures of concern, buried utilities, etc. Each structure of concern and data point will be joined with pertinent information such as PID readings, odors, staining, descriptions, and whether additional follow up work is required.

ATTACHMENT 1

Resumes: Day Environmental, Inc. Representatives

EXPERIENCE

Day Engineering, P.C./Day Environmental, Inc.: 1985 to present
Years with Other Companies: 10 years

AREAS OF SPECIALIZATION

- Environmental Restoration/Remediation
- Environmental Site Assessment
- Environmental Compliance

EDUCATION

University of Michigan, M.S. Environmental Engineering, 1975
Michigan State University, B.S. Civil/Sanitary Engineering, 1974

REGISTRATION/AFFILIATIONS

Licensed Professional Engineer in New York
40-Hour OSHA Hazardous Waste Site Worker Training
8-Hour OSHA Hazardous Waste Site Supervisor Training
8-Hour OSHA Hazardous Waste Site Worker Refresher Training
National Society of Professional Engineers

Water Environment Federation
Rochester Engineering Society, Inc.
Environmental Assessment Association
Certified Environmental Inspector
Certified Environmental Specialist

RESPONSIBILITIES AND PROJECT EXPERIENCE

President, Day Engineering, P.C. and Day Environmental, Inc. (DAY). As a founder and principal of these firms, Mr. Day is responsible for their overall management and operation. He also provides technical guidance and support to the Industrial Compliance Group, Phase I Assessment Group, and the Phase II/Remediation Group. In addition, he periodically serves as Project Manager on some of the firm's larger or more complicated projects.

Mr. Day has over 30 years of experience working on environmental projects for industry or as a consultant. Examples of the types of environmental projects that he has worked on are described below.

Brownfield Assistance Program, City of Rochester. Principal for a project to assist the City of Rochester (City) in implementing its EPA funded Brownfield Assistance Program (BAP). The project has involved working with the City's Department of Environmental Services and Department of Economic Development to evaluate potential sites as candidates for the BAP program. DAY has conducted Phase I Environmental Site Assessments, Phase I confirmational intrusive studies, environmental management plans, and health and safety plans for this project at under-utilized sites within the City. This work has led to the redevelopment of some of the BAP sites into active, tax-producing sites.

Investigation/Remediation of Former Department of Defense Site, Rochester, NY. Principal for a project to conduct investigation/remediation at a site that was formerly used by the Department of Defense (DOD) for the production of ocean-going ships, and missiles. DAY has negotiated with the New York State Department of Environmental Conservation (NYSDEC) to conduct this work under a Voluntary Clean-Up Agreement. The study is scheduled to take place over a period of 10+ years, with interim remedial measures being implemented on an as-needed basis. Soils, groundwater, and wetlands in the vicinity of the site are contaminated with a variety of contaminants including volatile organic compounds, metals, and PCBs.

Remediation at a Former Printed Circuit Board Facility, Rochester, NY. Principal for a project to conduct remedial activities at a NYSDEC listed inactive hazardous waste disposal site. The remediation is being conducted under the Brownfield Cleanup Program (BCP). DAY completed a Remedial Investigation/Feasibility Study (RI/FS), and a remedial alternative was proposed for the site. The NYSDEC approved the proposed remedial alternative, and remedial activities are currently being implemented. After remedial activities are completed, operation of a groundwater remedial system and on-going monitoring will continue for 20+ years.

Phase I/Phase II/Remediation Services, City of Rochester, NY. Principal for a project to conduct Phase I, Phase II, and remediation services for the City of Rochester on an as-needed basis. These services have been provided on a variety of different types of sites within the City.

Slag and Fill Management Project, Greece and Rochester, NY. Principal for a project to coordinate and oversee the removal of 25,000+ yards of slag-contaminated fill material from a residential site in Greece, NY. The fill material was contaminated with slag that came from a site that was being redeveloped in the City of Rochester. The contaminated fill material was removed from the residential site to a site within the City, where the fill material was screened, and the separated slag was transported to a solid waste facility for disposal. DAY worked closely with City officials, the NYSDEC, contractors, the public, and other regulatory authorities on this project.

Compliance Audits at Various Industrial Facilities in New York. Project Manager/Principal for compliance audits conducted at industrial facilities. The compliance audits encompassed the following types of environmental issues: air pollution, water pollution, hazardous and solid waste management, tank management, and petroleum handling and storage. The compliance audits have been conducted at a variety of different types of facilities including: plating facilities, auto dealerships, heat treating facilities, packaging/printing facilities, power generating facilities, tool and die operations, and other types of manufacturing operations.

Phase I Assessments Throughout New York State. Principal to review 1,500+ environmental assessments conducted for the purpose of real estate transactions. These assessments were conducted on a variety of different types of facilities, including industrial sites, manufacturing operations, and former railroad properties.

Electric Utility SPCC Plan Implementation, Western, New York. Project Manager/Principal and certifying professional engineer for a Spill Prevention Control and Countermeasures (SPCC) Plan covering 162 electrical substations located throughout western New York. The project involved identifying potential spill pathways at each of the substations, and ranking the potential for a spill to impact navigable water (i.e., low, medium or high risk). When needed, recommendations were also developed to reduce the risk of navigable water impact. The approach utilized on this project was very cost effective and resulted in the certification of one SPCC plan for 162 electrical substations.

Hazardous Waste and Hazardous Material Compliance Audit at a Major Railroad Yard Facility. Project Manager/Principal for conducting a compliance audit at the Railroad Yard facility to assess hazardous waste and hazardous material handling and storage. The audit report outlined recommendations for improving the handling and storage of hazardous materials and wastes.

RCRA Training For a Major Railroad Operation in New York and Connecticut. Provided training to over 400 railroad personnel on handling and storage of hazardous waste as required by the Resource, Conservation, and Recovery Act (RCRA).

Hazardous Waste Tank Certification Project at Large Industrial Facility, Rochester, NY. Project Manager/Principal responsible for developing tank certification reports for 50 hazardous waste storage tanks as required by the New York State hazardous waste regulations.

Remedial Investigation on a New York State Inactive Hazardous Waste Site, Clarendon, NY. Project Manager/Principal for a \$300,000 remedial investigation at a site where groundwater was contaminated by volatile organic compounds. Worked with client's attorney to secure funding of this project by insurance companies. The project was completed as required by the New York State Department of Environmental Conservation (NYSDEC) Order-on-Consent.

Drain Study at a Major Manufacturing Facility, New York. Project Manager/Principal for conducting a \$200,000+ investigation to determine the discharge location (i.e., sanitary sewer, storm sewer, drywells, subsurface, etc.) of the various operations (i.e., processes, floor drains, hub drains, roof drains, sumps, scrubber drains, sinks, etc.) at a 5 million square foot manufacturing facility that contained over 40 buildings. A database was established to identify and track the discharge sources and locations to ensure compliance with local, State, and federal regulations.

Remediation at a Scrap Yard, Olean, NY. Project Manager/Principal for investigation and remediation of several hundred drums and containers that were abandoned at a scrap yard. The drums and containers contained a variety of types of hazardous wastes. The investigation and clean-up was conducted and completed under a USEPA Order-On-Consent.

EXPERIENCE

Day Environmental, Inc.: October 1991 to present
Years with Other Firms: 5 years

AREAS OF SPECIALIZATION

- Environmental Site Assessment
- Environmental Restoration/Remediation
- Environmental Computer Modeling
- Risk Assessment/Geology/Hydrogeology

EDUCATION

University of Colorado at Boulder; B.A. Geology; 1986
Various continuing education courses/seminars in environmental studies and remediation

REGISTRATIONS/AFFILIATIONS

- OSHA Hazardous Waste Site Worker and Supervisor Training, and Confined Space Training
- Member of the National Groundwater Association (NGWA)

RESPONSIBILITIES AND PROJECT EXPERIENCE

Mr. Danzinger has over 20 years of professional experience working on environmental projects as a consultant. Mr. Danzinger is responsible for development and completion of Phase II studies, hydrogeologic studies, environmental restoration, remediation and Brownfield projects for independent clients and government agencies. He also serves as the company Assistant Health and Safety Officer. Mr. Danzinger has performed over 240 Phase I Environmental Site Assessments, over 180 Phase II Environmental Site Assessments and over 20 environmental restoration projects. Examples are provided below:

Former Air Force Plant No. 51, Greece, New York: This Site was used for the manufacture of ocean-going ships and cranes during and immediately following World War II, and for the manufacture of B-52 aircraft parts and Talos ground handling equipment during the 1950's. Mr. Danzinger acts as Project Manager for the investigation of this Site under the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP). Fifteen areas of concern (AOCs) have been incorporated into seven operable units (OUs) and investigation/remediation is on-going. Tasks Mr. Danzinger has managed include: development of environmental work plans and site-specific health and safety plans; inventory, characterization and disposal of abandoned wastes; sampling and dismantling of abandoned wet-type electrical equipment; investigation of, and development of a remedial work plan for a former wastewater treatment lagoon/pond area; investigation of the existing stormwater system and former septic system areas; investigation and remediation of the former underground storage tank area; and monitoring and recovery of dense non-aqueous phase liquid (DNAPL) as an interim remedial measure.

Former Photech Imaging Systems, 1000 Driving Park Avenue, Rochester, New York: Mr. Danzinger was responsible for managing the completion of a SI/RA report (NYSDEC Environmental Restoration Program Site ID B-00016-8) at this Brownfield Site that consists of 12 vacant buildings of varying degrees of disrepair that are situated on an approximate 12.5-acre parcel. The buildings formerly housed various manufacturing, laboratory, office and warehouse operations. Various underground and aboveground storage tank systems and a wastewater silver recovery system were operated at the Site. Other features at the Site included a burn pit area, and a retention pond basin.

Former Ford Garage, 2624 Main Street, Gorham, New York: On behalf of the Town of Gorham, New York, Mr. Danzinger is managing environmental services at this Brownfield Site under the New York State Department of Environmental Conservation (NYSDEC) Environmental Restoration Program (Site ID#B-00153-8). These services include a Phase I ESA report, a Site Investigation/Remedial Alternatives (SI/RA) report, development of a Remedial Work Plan (RWP), Health and Safety Plan (HASP), and Citizen Participation Plan (CPP). The Site was formerly operated as an automobile sales and service facility, and also as a gasoline station. Remediation consists of a source area soil removal, in-situ bioremediation, institutional controls and engineering controls.

Slag and Fill Management Project, Greece and Rochester, New York: Project Manager to address fill material containing regulated solid waste (slag) that was generated during a City of Rochester redevelopment project and was inadvertently placed on a vacant residential subdivision parcel in the Town of Greece. Mr. Danzinger's responsibilities included: preparing for and attending meetings with municipalities, regulators, and the general public; development of work plans; coordination and management of field activities; and development of closure reports.

Former Vogt Manufacturing Facility, 100 Fernwood Ave., Rochester, New York: Under the NYSDEC Brownfield Cleanup Program (BCP Site #C828119), Mr. Danzinger managed remedial investigation and implementation of interim remedial measures at this Brownfield Site. Mr. Danzinger was also responsible for the development of a Remedial Investigation/Remedial Alternatives Analysis (RI/RAA) report and a subsequent remedial work Plan (RWP). The RWP was approved by the NYSDEC and will be implemented in the near future. This industrial-zoned Site consists of eleven contiguous parcels totaling approximately 8.14 acres that was originally occupied by Vogt Manufacturing Corporation, which manufactured auto trimmings (e.g., textile trimmings spinning and weaving). The main building was later converted for multi-tenant light industrial/commercial use, including plastic products manufacturer, tool and die makers, machine shops, painters, printers, graphics companies, and sheet metal contractors.

High-Rise Apartment Complex, 185 Mt. Hope Ave., Rochester, New York: Under the NYSDEC Brownfield Cleanup Program (BCP Site #C828124), Mr. Danzinger managed remedial investigation and implementation of remedial measures at this Brownfield Site. This Site consists of an apartment building with an associated paved parking lot located on approximately 1.106 acres of land. The apartment building houses 202 residential units, totals approximately 143,000 square feet, and consists of a multi-level eight to twelve-story brick and concrete-block, slab-on-grade building constructed in 1975. Prior to the residential development in 1975, former uses at the Site included: rail yards, former Erie Canal feeder, and possibly a portion of a gasoline station.

Low-Rise Apartment Complex, 225-405 Mt. Hope Ave., Rochester, New York: Under the NYSDEC Brownfield Cleanup Program (BCP Site #C828125), Mr. Danzinger is managing a remedial investigation at this Brownfield Site. This Site consists of approximately 6.016 acres of land improved with five four-story apartment buildings. The brick and concrete-block, slab-on-grade apartment buildings were constructed in 1975, and these buildings house 200 units totaling approximately 205,000 square feet. Prior to residential development in 1975, past uses/activities at the Site included commercial, warehouse, feeder canal, rail yards, a work shop, auto repair, car sales, a wagon shop, a junk-yard and iron cutting facility, a brick storage yard, a tannery, and a coal yard.

Former Hallman's Auto Dealership, Rochester, New York: Site was formerly used as an automobile dealership and service center for over 50 years. Redevelopment plans for this Brownfield site included demolition of the service garage, construction of new residential apartments and townhouses, and conversion of a portion of the existing building (including former automobile showroom) into retail/restaurant commercial space. Mr. Danzinger completed an ASTM RBCA risk assessment using site-specific data generated during a Phase II environmental study and the proposed residential and commercial uses of portions of the site. As a result of performing the risk assessment, risk-based corrective measures that were completed in conjunction with redevelopment at this Site included: removal of over 20 underground storage tanks, removal and off-site disposal of petroleum-contaminated soils and fill material containing ash with elevated levels of heavy metals; design and installation of a free product recovery system; design and installation of passive venting systems with a vapor barrier; and design and installation of a soil vapor extraction system. Mr. Danzinger was responsible for developing and implementing an environmental project work plan, a health and safety plan, and an environmental management plan for this redevelopment project. In addition, DAY provided on-site environmental air monitoring services and site documentation services during construction activities that had the potential to disturb contaminated media. After the project was completed, Mr. Danzinger was involved with the development of a closure report for this Site.

Assessment of Transformer Maintenance Shop at Utility Company, Rochester, New York: A utility company's facility contained a transformer maintenance shop that had been operated since the 1950s. Mr. Danzinger managed the development and implementation of a characterization sampling plan; evaluated the characterization data and identified areas requiring remediation; and developed a report documenting the investigation and proposed remedial actions. This project was conducted in accordance with 40 CFR §§ 761. The USEPA documents titled "Verification of PCB Spill Cleanup by Sampling and Analysis" dated August 1985, "Field Manual for Grid sampling of PCB Spill Sites to Verify Cleanup" dated May 1986, "Wipe Sampling and Double Wash/Rinse Cleanup" dated April 18, 1991, and Region 1 "Draft" document titled "Standard Operating Procedure For Sampling Concrete in the Field" dated December 1, 1997 were utilized in the sampling protocol.

Former Manufactured Gas Plant (MGP), Canandaigua, New York: Mr. Danzinger was involved with the development and implementation of a work plan and health and safety plan to evaluate this Site. Mr. Danzinger managed the associated site studies consisting of test borings/monitoring well installation, soil gas studies, sampling and

testing of impacted media (e.g. soil/fill, groundwater, surface waters/sediments) to characterize site conditions and delineate contaminant plumes. Based upon the assessment of site conditions, Mr. Danzinger assisted in the development of a report that summarized the findings of the environmental studies, identified various remedial options consisting of a combination of waste removal/isolation and in-situ treatment, and presented conceptual remedial design schemes with estimated implementation costs.

Former Railroad Car Shops Site, East Rochester, New York: Mr. Danzinger was responsible for managing subsurface studies and an ASTM RBCA risk assessment on a portion of this former railroad car shop site. The Site was confirmed to be impacted with fill containing elevated heavy metals and weathered petroleum product. Mr. Danzinger was involved with the development and implementation of a health and safety plan and environmental management plan that included the design and monitoring of a passive vapor barrier vent system that was installed beneath a new industrial building that was constructed on this Site. In addition, DAY provided on-site environmental air monitoring services and site documentation services during construction activities that had the potential to disturb contaminated media. This project was successful in identifying pre-existing environmental conditions prior to transfer of ownership while obtaining regulatory agency approvals for the new owner to redevelop the vacant parcel with a new industrial facility.

Residential Care Facility, Rochester, New York: DAY's Client developed this approximate 3-acre property into a residential care facility on property that formerly contained several vehicle repair shops/gasoline stations, the City of Rochester Streets Department maintenance facility and the City of Rochester automobile pound. In addition, a portion of the Erie Canal, later converted to a trolley system, traversed the property. Subsequently, the canal/trolley line was backfilled with various construction-type debris and other assorted material (including petroleum-contaminated material). Mr. Danzinger was involved with development of a health and safety plan and an environmental management plan (EMP), which included the removal of localized areas of petroleum-contaminated soil for treatment via an on-site 4,500 cubic yard biopile, the installation of an active venting system installed beneath the building footprint, and long-term monitoring. DAY also provided on-site environmental air monitoring services and site documentation services during construction activities that had the potential to disturb contaminated media.

Multiple-Parcel Brownfield Site, Rochester, New York: Responsible for the completion of a Phase I ESA for the City of Rochester at a five-parcel Brownfield site. The Site is located within the Western Gateway Zone of the New York State Economic Development Zone (EDZ) Program, and the City of Rochester was evaluating the restoration of these parcels for incorporation into an adjoining industrial park. Site improvements encompassed over 610,000 square feet of floor space in multiple level industrial buildings of varying structural condition. Former uses of the Site included: appliance manufacturing, tool and die shops, printing/lithographing operations, shoe manufacturing, circuit board manufacturing, box manufacturing; cabinet manufacturing; possible foundry operations, chromium plating operations, basket manufacturing, automobile services, welding operations, and warehousing/distribution operations. Mr. Danzinger was also responsible for the management of Phase II Studies on a portion of this Site.

Former Petroleum Bulk Storage Facility, Mt. Morris, New York: Mr. Danzinger managed an environmental site investigation at this former petroleum bulk storage facility under the New York State Environmental Restoration Bond Act Program. Mr. Danzinger was involved in the preparation and implementation of detailed work plans, implementation of fieldwork, and preparation of a Site Investigation/Remedial Alternatives Report (SI/RAR).

14-60 Charlotte Street, Rochester, New York: This Brownfield Site consists seven parcels of underutilized commercial land totaling approximately 1.3 acres. Mr. Danzinger was responsible for managing a Phase I ESA, Phase II studies, and remediation services at the Site. Contamination addressed at this Site was attributable to an on-site UST, on-site former automobile repair operations, on-site fill materials, and off-site dry-cleaning and automobile repair operations. Project deliverables included: a Phase I ESA report, Phase II reports, a Corrective Action Plan (CAP); a Health and Safety Plan (HASP) that included a Community Air Monitoring Plan (CAMP); an Environmental Management Plan (EMP); an exposure assessment with site-specific PSSI calculations; a closure report, and conceptual sub-slab depressurization system (engineering control) designs for use during redevelopment of the Site.

80-100 Charlotte Street, Rochester, New York: DAY initially completed Phase I ESA, Phase II ESA and cost estimating services for this Site using City of Rochester funding mechanisms. Through a competitive request for proposal process, the City of Rochester subsequently awarded DAY the Brownfield Cleanup Project for this Site that was funded with a USEPA Brownfield Initiative Grant. DAY's services under the USEPA Brownfields Initiative Grant included: the development of an Analysis of Brownfields Cleanup Alternatives (ABCA) report;

review of a Citizens Participation Plan (CPP) that was developed by the City of Rochester; the development of a corrective action plan (CAP) and a health and safety plan HASP); coordination, management, documentation and implementation of a source area soil removal enhanced by the placement of bioremediation stimulant product in a portion of the excavation; utilization of global positioning system (GPS) and geographical information system (GIS) on the project, installation and monitoring of groundwater wells on a long-term basis; and associated reporting of the work completed at the Site. No further action is required by the NYSDEC for this Site.

EXPERIENCE

Day Engineering, P.C.: April 1992 to present
Years with Other Firms: 4 years

AREAS OF SPECIALIZATION

- Process and Facilities Design
- Design/Build Services

EDUCATION

University of Rochester, B.S. Chemical Engineering, 1987
University of California at Berkeley, Graduate Coursework, Chemical Engineering

REGISTRATIONS/AFFILIATIONS

- Registered Professional Engineer in State of New York
- 40 Hour OSHA Hazardous Waste Site Worker Training
- Member, Water Environment Federation
- Member, National Fire Protection Association

RESPONSIBILITIES AND PROJECT EXPERIENCE

Mr. Kline has over 20 years of professional experience. At Day Engineering, he is primarily responsible for engineering, design, and project coordination for the installation of environmental facilities and support systems. Areas of expertise include water and wastewater conveyance and treatment, industrial ventilation, air pollution control, petroleum and chemical bulk storage and dispensing facilities, solid waste management, soil and groundwater remedial treatment, process automation and data management systems. Representative projects are described below.

Process and Facilities Design

Rochester Gas & Electric Corp., Rochester, New York. Senior engineer responsible for:

- engineering and design of stormwater control and oil spill containment structures at seven different electrical substations
- computer modeling and development and certification of Spill Prevention Control and Countermeasures Plan covering 162 electric substations and hydroelectric facilities throughout western New York
- engineering and design of groundwater treatment system for pretreatment of tunnel infiltration and dewatering during ongoing multi-year rehabilitation and renovation of a hydroelectric facility.

Metro-North Railroad Transportation Facilities, New York, New York. Project Manager / Senior Engineer for design and/or installation of multiple facility systems since 1992, including:

- 200,000-gallon diesel fuel storage tank and remote filling station (Harmon)
- industrial wastewater transfer and aeration facilities (Brewster) – discharge agreement was negotiated with Town to eliminate significant trucking costs.
- storm sewer modifications and automated facilities construction to remove oil from fueling pad operations runoff (Harmon) – system eliminates disposal costs, and oil is recovered for burning in facility heaters, reducing heating costs.
- lube and waste oil handling, transport and storage facilities (Harmon)
- industrial wastewater pretreatment system (White Plains)
- biological industrial wastewater treatment system (Harmon)
- train car wash recycling system (Brewster) – development of a zero-discharge treatment system (design only – system not installed).

Brunner International, Medina, New York. Project Manager for stormwater management and environmental compliance for a large (40,000+ sq.ft.) industrial manufacturing building construction project at a brownfield site. Supervised collection of soil and groundwater samples and designed subslab ventilation system to mitigate potential soil vapor intrusion. Developed stormwater management plan in accordance with NYSDEC requirements, including design of pocket pond system for stormwater detention and treatment. Generated erosion and sedimentation control plan for construction activities, coordinated activities with NYSDEC, and provided monitoring and oversight throughout construction project.

Corning-Tropel Corporation, Fairport, New York. Project Manager responsible for: (i) design and implementation of multiple ventilation, process exhaust, and particulate and organic vapor removal systems associated with manufacturing operations; (ii) design and implementation of closed-loop heated and chilled process water supply systems to meet strict requirements of multi-million dollar precision optics equipment; (iii) design and automation of HVAC control systems (multi-zone temp. control maintains temp. within tenths of a degree for temperature-sensitive precision optics manufacturing operations); and (iv) design and implementation of an evaporative waste treatment system to reduce waste disposal costs.

Teledyne CAE Aeronautical Defense Plating Facility, Toledo, Ohio. Project Manager for military facility projects totaling approximately \$700,000 involving: (i) waste source evaluation, segregation, and waste minimization activities; (ii) renovation, upgrade and automation of wastewater treatment system; (iii) air pollution control equipment renovation and upgrade; (iv) development/modification of Personnel Training Program, Contingency Plan, and Spill Prevention Control and Countermeasures Plan. These systems eliminated intermittent discharge violations the facility was experiencing, and reduced treatment operating costs.

FBC Technologies, Inc. Project Manager for ongoing provision of engineering support services to a local wastewater treatment systems manufacturer with annual sales of \$1,000,000 to \$2,000,000. Responsible for review and sizing of equipment for industrial and municipal biological treatment and aeration systems proposals, and for assistance in improvement of equipment line.

Monroe County Department of Environmental Services, Rochester, New York. Senior Engineer for various municipal facilities designs, including multiple sanitary sewer, pump station, and controls renovation projects.

Design/Build Services

Saint-Gobain Technical Fabrics Thermal Oxidation System, Albion, New York. Project Manager and Lead Engineer for \$900,000 design-build project involving installation of a 50,000 CFM ventilation system and regenerative thermal oxidizer to remove VOC emissions from manufacturing operations.

American Packaging Corp. Chemical Bulk Storage Facilities, Rochester, New York. Senior Engineer for \$200,000 design-build project involving installation of new underground storage tanks, new chemical pump and dispensing assemblies, and monitoring systems for hazardous organic solvents. Also currently providing design services for installation of an indoor chemical bulk storage area for large quantities of drummed flammable materials.

Corning Glass Wastewater Treatment Plant Automation, Corning, New York. Project Manager for \$200,000 design-build project involving installation of instrumentation and controls for automation and remote monitoring of a wastewater treatment plant/process. This system improved treatment efficiencies and reduced manual labor requirements by 70%.

Heat Treating Facility Chemical Containment, Rochester, New York. Project Manager for design-build project installing an outdoor containment system for a large anhydrous ammonia tank. Also negotiated variance request with NYSDEC to reduce containment requirements/costs.

ATTACHMENT 2

Chemtech Quality Assurance Manual (QAM)

QUALITY ASSURANCE MANUAL

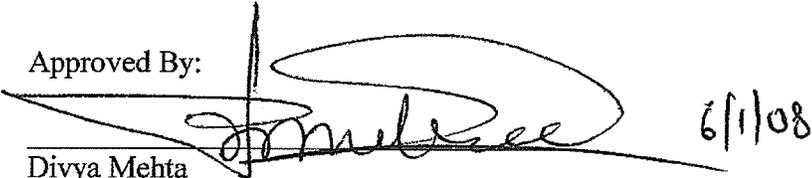
CHEMTECH
284 Sheffield Street
Mountainside, NJ 07092
Tel: (908) 789-8900

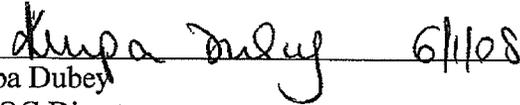
Document Control Number: A2040129

Revision Number: 19

Date Effective: June 01, 2008

Approved By:


Divya Mehta
Technical Director


Krupa Dubey
QA/QC Director

“The technical information contained herein is to be considered confidential and proprietary and is not to be disclosed, copied, or otherwise made available to other parties without the express written consent of Chemtech.”

INTRODUCTION

The Chemtech Quality Program, outlined in this document, has been prepared to meet the requirements of ISO/IEC DIS 17025 and National Environmental Laboratory Accreditation Program (NELAP). The program establishes all Quality Assurance (QA) policies and Quality Control (QC) procedures to follow in order to ensure and document the quality of the analytical data produced by the Laboratory. The Quality Program is reviewed periodically and revisions are implemented as required.

Chemtech Standard Operating Procedures (SOP's), provide explicit instructions on the implementation of each element of the plan and assure that compliance with the requirements of the plan are achieved. All employees are required to adhere to the requirements of the SOP's in performing their specific job functions. SOP's are reviewed periodically and revisions are implemented as required when change occurs.

The goal of the Quality Program is to consistently produce accurate, defensible analytical data through the implementation of sound and useful Quality Assurance/Quality Control management practices. The plan will ensure that Chemtech, its employees and client expectations are achieved.

TABLE OF CONTENTS

S.#	TOPIC	Page #
1.	Quality Policy	1
1.1	Chemtech Mission	1
1.2	Policy Statement	1
1.3	Annual reviews and planning.....	2
2.	Organization and Management.....	3
2.1	Organizational Entity	3
2.2	Management Responsibilities	3
3.	Relationship Between Management, Technical Operations, Support Services, and Quality System.....	6
4.	Job Description of Key Personnel	8
5.	Approved Signatories	10
5.1	Signature Authority.....	10
5.2	Signature Requirement	10
5.3	Signature and Initial Log	10
6.	Personnel Training.....	11
6.1	Employee Orientation and Training	11
6.2	Personnel Qualifications and Training	11
6.3	Technical Skills.....	11
6.4	Training Records.....	12
6.5	Training requirements for key positions	12
7.	Ethics Policy	14
7.1	Code of Ethics.....	14
7.2	Employee Ethics Training	14
8.	Facilities and Resources for New Analytical Projects and Implementing Client Requirements	16
8.1	Review of New Analytical Projects.....	16
8.2	Resource Availability	16
8.3	New Work Coordination.....	16
9.	Client Confidentiality	18
10.	Clients Complaints and Resolutions	19
10.1	Procedure	19
10.2	Documentation.....	19
10.3	Corrective Action.....	19
10.4	QA/QC Auditing.....	20
11.	Sample Management Process	21
11.1	Analytical Request.....	21
11.2	Sample Container Preparation & Shipment.....	21
11.3	Sample Acceptance.....	22
11.4	Sample Receipt	22
11.5	Sample Custodian Responsibilities.....	22
11.6	Sample Management Staff Responsibilities	23

TABLE OF CONTENTS

S.#	TOPIC	Page #
	11.7 Subcontracted Analysis.....	23
	11.8 Sample Storage	25
12.	Analytical Capabilities.....	26
13.	Major Equipment	30
14.	Document Control.....	42
	14.1 Document Oversight	42
	14.2 Distribution of Controlled Documents	42
	14.3 Document Revisions	43
	14.4 Standard Operating Procedures (SOP's).....	43
	14.5 Logbook Control.....	43
	14.6 Analytical Document Maintenance and Storage	43
	14.7 Personnel Records.....	44
	14.8 Internal Audits	44
	14.9 Management Reviews.....	45
15.	Traceability of Measurements	46
	15.1 Metric Measurements – Thermometer and Balance Calibration	46
	15.2 Chemical Standards	46
16.	Calibration and Verification of Test Procedures	47
	16.1 Organic Test Procedures	47
	16.2 Inorganic Test Procedures	48
17.	Calibration, Verification, and Maintenance of Equipment.....	51
	17.1 Instrument Calibration	51
	17.2 Instrument Maintenance	51
	17.3 Calibration/Maintenance Log	51
18.	Verification Practices.....	52
	18.1 Proficiency Testing (PT) Programs	52
	18.2 Use of Reference Material and Supplies.....	52
	18.3 Internal Quality Control Procedures	53
19.	Laboratory Management Policy for Exceptionally Permitted Departures from Documented Policies and Procedures	56
	19.1 Procedure	56
20.	Corrective Actions for Testing Discrepancies	57
	20.1 Out-of-Control Events	57
	20.2 Corrective Action Process	57
	20.3 Departures from Documented Policies and Procedures	57
	20.4 Corrective Action Monitoring	58
21.	Reporting Analytical Results.....	59
	21.1 Required Documentation	59
	21.2 Significant Figures in Analytical Reports.....	59
	21.3 Units used to Express Analytical Results	60
	21.4 Report Contents.....	60

TABLE OF CONTENTS

S.#	TOPIC	Page #
	21.5 Data Collection, Reduction, Reporting and Validation Procedure.....	61
22.	Data Review and Internal Quality Audits.....	62
	22.1 Data Review.....	62
	22.2 Internal Quality System Audits.....	63
23.	Electronic Data.....	64
	23.1 Software.....	64
	23.2 Documentation.....	64
	23.3 Security.....	64
	23.4 Electronic audit.....	64
24.	Glossary	66
25.	References	70
26.	Resumes of Key Personnel and Certification List.....	71
	26.1 Certification List.....	71
	26.2 Key Employee Resume.....	72
27.	Laboratory SOP list.....	100
28.	Nelac Certificate and Parameter List.....	120

1 QUALITY POLICY

1.1 CHEMTECH MISSION

Chemtech will be recognized as a dynamic, professional organization, which provides high quality analytical services to the environmental market.

It will consistently meet client expectations while providing a challenging work environment for its employees and acceptable profit margins for its shareholders.

1.2 POLICY STATEMENT

Chemtech is committed to the production of analytical data meeting specific defined quality standards and to continue improvements in all areas of our operation. As a result of having a focus on environmental analyses, an emphasis is placed on timelines of work, meeting data quality objectives, and the legal defensibility of the data. Each operation maintains a local perspective in its scope of services and client relations and maintains a national perspective in terms of quality. Chemtech has policies and procedures to avoid involvement in any activities that would diminish confidence in its competence, impartiality, judgment or operational integrity. Under the guidance of this quality assurance manual, a level of quality, which is acceptable on a national and international scale, is upheld in all Chemtech laboratory operations. Chemtech management is committed to be compliant with NELAC Standard (06/2003) and NELAP policies.

Our corporate goal for all segments of Chemtech operations is to have uniform products and service quality standards, while encouraging local variation to meet state regulations and customer specific needs. The process of achieving this goal entails continuous evaluation and action. Chemtech management requires documentation of existing practices and improvement action plans at every stage in the analytical measurement process. Documentation is fundamental to the demonstration and management of quality practices in environmental analytical laboratories.

A spirit of innovation is an essential element to the success of Chemtech in solving the complicated analytical problems encountered with environmental samples. This spirit, combined with the discipline and attention to detail required to provide the level of service expected by our customers, is what makes Chemtech stand out among others in this field. This same spirit is what drives continuous quality improvement and which is the keystone to the Chemtech quality program.

1.3 ANNUAL REVIEWS AND PLANNING

As part of our 2003 NELAC Standard Certification requirement, the QA/QC Director produces an annual report to the Management to discuss deficiencies, corrective actions and planning for the upcoming year. All corrective actions in the laboratory are documented and updated in the Corrective Action Report Database. These Corrective Action Reports are also graphed. The QA/QC Director submits this report to the Management at the beginning of the year and the management performs annual review and planning based on this report. The issues discussed in the report are New Certifications, New Instrumentation, Performance Evaluation, Assessment, Quality Assurance Programs and Goals for the next year.

2. ORGANIZATION AND MANAGEMENT

2.1 ORGANIZATIONAL ENTITY

Chemtech, located in Mountainside, New Jersey, is a privately held independent analytical laboratory established in 1967. Chemtech is incorporated in the State of New York and registered to do business in the State of New Jersey. Our Directors, many of who are also major shareholders are acutely aware of the dynamics of our industry, the changing technology, and need for capital investment. Capital for investment in technology and expansion is mainly derived from operating profits and our shareholders. We have been successful in acquiring the necessary equipment, software and automation necessary to be a leader in the analytical community.

2.2 MANAGEMENT RESPONSIBILITIES

Objective: The laboratory has an established chain of command as detailed in the Organizational Chart. The responsibilities of the management staff are linked to the President of Chemtech who establishes the strategy and direction for all company activities.

President: Primarily responsible for all operations and business activities. Develops and implements strategies, initiatives and direction for the company. Delegates authority to Laboratory Directors, all Managers, and Quality Assurance/Quality Control Director to conduct day-to-day operations and execute quality assurance duties.

Chief Operating Officer/Technical Director: Facilitates uniformity and focus in all aspects of the company's technical affairs; including, Quality Assurance, Information Systems, and Organic and Inorganic technical direction. Strives to align the strategies, initiative and direction of technical affairs with the strategic direction of the company. Reports to the President. QA/QC Director executes these responsibilities in his/her absence.

Quality Assurance/Quality Control (QA/QC) Director: Implements, supervises, and facilitates responsibility for all QA activities established by the Quality Program. Reports to the President.

Laboratory Manager: Plans, directs, and controls the day-to-day company's operational performance expectations. Reports to the Chief Operating Officer/Technical Director.

Department Manager: Supervises, plans, directs, and controls the day-to-day responsibility of a specific laboratory department. Report to Laboratory Manager.

Department Supervisors: Supervise day-to-day responsibility of a specific laboratory department. Report to Department Manager.

3. **RELATIONSHIP BETWEEN MANAGEMENT, TECHNICAL OPERATIONS, SUPPORT SERVICES, AND QUALITY SYSTEM**

Objective: The members of the management team have defined responsibility for the Quality Program. The development and implementation of the Quality Program is the responsibility of Quality Assurance/Quality Control Director. The implementation and operation of the Program is the responsibility of the operations management.

President: Responsible for all quality activities including the overall responsibility of implementing the Program. Is the primary alternate in the absence of QA/QC Director. Authorizes the QA/QC Director to design, implement, and coordinate the Program.

Chief Operating Officer/Technical Director: Responsible for executing and coordinating the Program in all laboratory departments. Responsible to certify and document that personnel have the appropriate education and/or technical background to perform the tests for which the laboratory is accredited to perform. Responsible for the development and implementation of corrective actions, including the authority to delegate Quality Program implementation responsibilities.

Quality Assurance/Quality Control Director: Responsible for the establishment, execution, support, training, and monitoring of the Quality Program. Identifies all product, process, or operational defects through statistical monitoring and audits including implementation of corrective action. Audits corrective actions for compliance with the Program.

Laboratory Manager: Responsible for coordinating and monitoring the requirements of the Quality Program in the laboratory. Assures that subordinates follow the requirements of the Quality Program. Implement corrective actions as necessary to address quality deficiencies. Is the primary alternate in the absence of Technical Director

Department Managers: Responsible for implementing the requirements of the Quality Program in their departments. To assure all subordinates and analysts follow the requirements of the Quality Program. Implement corrective actions as necessary to address quality deficiencies.

Department Supervisors: Responsible for implementing the requirements of the Quality Program within their department. To assure all analysts follow the requirements of Quality Program. Implement corrective actions as necessary to address quality deficiencies.

Analysts: Responsible for applying the requirements of the Quality Program to the analyses they perform. To evaluate QC data and initiate corrective action for quality control deficiencies within their control. Implement corrective actions as directed by superiors.

Support Services: Sample Management, MIS, Client Services and the Account Executives are responsible for applying the applicable requirements of the Quality Program to their specific tasks.

4. JOB DESCRIPTION OF KEY PERSONNEL

Objective: Job descriptions of key positions are defined to communicate a clear understanding of the duties and responsibilities including reporting relationships.

President: Responsible for all business activities including the strategic direction, mission and expectations of the company. Builds a strong, cohesive management team that is constantly focused on improving the operating, technical and financial performance of the company.

Chief Operating Officer/Technical Director: Coordinates the operational activities and the technical direction of the laboratory. Responsible to certify and document that personnel have the appropriate education and/or technical background to perform the tests for which the laboratory is accredited to perform. Develops the strategy to evaluate new methods, technology and objectives. Provides assistance and leadership to management teams to implement new innovated technologies. Reports to the President.

Quality Assurance/Quality Control Director: Establishes and audits the company quality program. Provides technical assistance to ensure that the procedure and data quality is technically sound, legally defensible and consistently meets the objectives of the QA Manual. Reports to the President.

System Manager: Provides the operational support for all information systems. Develops and implements MIS software to meet the strategic and technical goal of the company. Reports to the Technical Director.

Client Service Manager: Responsible for the planning, directing and control of the Sample Management Department and the Project Management staff. Supervises the sample log in operation and coordinates the project management activities. Communicates client expectations to the laboratory regarding analytical and reporting requirements. Reports to the President.

Laboratory Manager: Provides the technical, operational and administrative leadership through planning, allocation and management of personnel and equipment resources. Maintains a clearly qualified model of laboratory capacity. Uses this model as a basis for controlling the flow of work into and through the laboratory. Reports to the Technical Director.

Department Manager: Directs, plans and controls the operations of the department. Supervises daily production to ensure compliance with the requirements of the Quality Program and client expectations. Reports to the Laboratory Manager.

Department Supervisor: Provides supervision and directions for the group. Implements the daily analysis schedule. Ensures that the group and the analytical data are in compliance with the Quality Program. Reports to the Department Manager.

5. APPROVED SIGNATORIES

Objective: For traceability of data and related documents procedures are required which detail the authorization of signature approvals of data and information within Chemtech. A log of signatures and initials of all the analytical staff is maintained in the QA/QC office for cross-reference check.

5.1 SIGNATURE AUTHORITY

President: Authorizes contracts and binding agreements.

Chief Operating Officer/Technical Director: Approves the QA policy and SOP's and approves final reports in the absence of QC supervisor and QA/QC Director.

Quality Assurance/Quality Control Director: Approves SOP's, and the QA Plan. Approves final reports in the absence of QC supervisor.

5.2 SIGNATURE REQUIREMENT: All laboratory activities, commencing with sample receipt through the release of data, are approved by appropriate personnel by initialing or signing and dating the documents. A document signed or initialed by an employee, is within their limits of authority. All raw data are initialed and dated by the analyst conducting the analysis. All signatures and initials can be cross-referenced to the signatures and initial log.

5.3 SIGNATURE AND INITIAL LOG: The QA/QC office keeps a logbook of all signatures and initials of all technical personnel. New technical employee's signatures and initials are added to the logbook on the first day of their employment. Ex-employee signatures are kept on file but annotated with the last day of employment.

6. PERSONNEL TRAINING

Objective: To ensure that all analysts are properly trained, acquire an adequate amount of experience prior to performing independent analyses and maintain technical competence. These factors are an essential part of the laboratory QA Program.

- 6.1 EMPLOYEE ORIENTATION AND TRAINING:** All new employees go through a training period which includes introducing new personnel to Chemtech company policies, QA/QC practices, safety and health, and ethics training in addition to training related to their job functions. The training period extends approximately 1 to 6 months, depending upon the level of experience of the individual.
- 6.2 PERSONNEL QUALIFICATIONS AND TRAINING:** All technical employees at Chemtech fulfill the educational, work experience, and training requirements for their positions as outlined in their job description. As workload permits, Chemtech encourages cross training of personnel as appropriate.

All employees must undergo laboratory health and safety training and ethics training and must read laboratory QA Manual. A signed and dated statement from each technical employee that they have read, understood, and is using the latest version of the laboratory QA manual and SOP's is maintained in their training file.

A signed and dated statement from each employee that they have read, acknowledged and understood their personal ethical and legal responsibilities is kept in their training record.

The analysts are also required to take any QA/QC training (Introduction to Quality Assurance and specialized QC courses) provided by the QA/QC Director.

- 6.3 TECHNICAL SKILLS:** Analysts are initially qualified by education with a minimum of a BS degree in Chemistry, Physical and/or Biological sciences, wherever required. Every new analyst is trained, regardless of education and outside experience, in the individual analytical procedures by a senior analyst. All Chemtech analyst capabilities are determined initially with Initial Demonstration of Capability studies.

When new equipment is purchased, appropriate Chemtech personnel are trained locally by the manufacturer, vendor or at the manufacturer's training course.

Any significant change to an analytical system requires that the analyst perform an initial demonstration of precision and accuracy, and recalibration of the instrument. For example, replacing a column in a gas chromatograph, cleaning the mass spectrometer ion source, etc.

- 6.4 TRAINING RECORDS:** Training records for technical employees are kept in the QA office. The Technical Director certifies and documents that all technical employees have the appropriate education and/or technical background to perform the tests for which the laboratory is accredited to perform. It is the responsibility of each employee to assure that records of completed training are provided to the QA/QC Director to update his/her personnel file.

In addition to the ethics and QA manual statements, the employee record file contains: read receipts of SOP's, a Demonstration of Capability for each accredited method that he/she performs; documentation of any training courses, seminars, and/or workshops; and documentation of continued proficiency to perform each test.

Continued analyst proficiency can be achieved by one of the following: acceptable performance of blind samples for each accredited method that he/she performs; through the analysis of Laboratory Control Samples - at least four consecutive Laboratory Control Samples with acceptable levels of precision and accuracy.

- 6.5 Training requirements for key positions:** Training requirements are assigned depending on the position and department the employee is in.

QA/QC Director: The QA/QC Director must have ample knowledge of the laboratory procedures, have at least 5 years of laboratory experience preferably in Organics and have at least 2 years of data review procedures training.

Department Manager- A department manager must have at least 3 years of experience in the area of Supervision. Must have proper training in methodology and the skill to organize, schedule and train personnel for a successful operation of their department.

Department Supervisor: A department supervisor must have at least 2 years of experience in the area they are to supervise. Be able to write SOPs

7. ETHICS POLICY

Chemtech provides comprehensive analytical testing services for the qualitative and quantitative assessment of environmental contaminants. Our services are used to meet various regulatory permitting and reporting requirements, determine compliance for both State and Federal environmental regulations to assess potential present and future environmental liability or health risks.

Our policy is to conduct our business with honesty and integrity; to produce accurate and usable data, and provide our employees with guidelines leading to an understanding of the ethical and quality standard required by Chemtech.

7.1 **CODE OF ETHICS:** Chemtech is managed in accordance with the following principals:

To produce analytical test results that are accurate and meet the requirements of our Quality program.

To operate our laboratory in a manner that protects the environment, as well as the health and safety of all our employees.

To provide employees with guidelines leading to an understanding of the ethical and quality standards required by Chemtech.

To report analytical data without any considerations or self-interests.

To provide analytical services in a confidential, truthful, and candid manner.

To abide by all Federal, State, and Local regulations that affects our business.

To have processes to ensure that its management and personnel are free from any undue internal and external commercial, financial and other pressures and influences that may adversely affect the quality of their work.

7.2 **EMPLOYEE ETHICS TRAINING:** Each employee receives ethics training during employee orientation and must sign an Employee Ethics Statement. During the orientation, an employee is made aware of the ethical and legal responsibilities including potential punishments and penalties for improper, unethical or illegal actions. The Employee Ethics Training program is updated annually (or more frequently if required). Ethics Training Seminars are presented annually, and all employees are required

to attend. Personnel files are updated to include the date the employee attended the annual Ethics Training Seminar.

8. FACILITIES AND RESOURCES FOR NEW ANALYTICAL PROJECTS AND IMPLEMENTING CLIENT REQUIREMENTS

Objective: To ensure that appropriate facilities and resources are available to meet the demand for new analytical projects and process to implement client requirements.

8.1 REVIEW OF NEW ANALYTICAL PROJECTS: A Project Chronicle (PC) is prepared by the Account Executive prior to a quotation preparation and/or an award, and presented to the Technical Director and his staff for review and comments. The PC outlines all the client requirements and includes copies (if available) of the clients Quality Assurance Project Plan (QAPP), Statement of Work (SOW) and contractual provisions. The PC and associated information are scanned and stored on the network for future reference.

A “Kick Off Meeting” chaired by the Technical Director is scheduled to discuss the PC and its associated information. Project Management, the QA/QC Director, Laboratory Manager, including appropriate Department Managers/Supervisors, Sample Management and MIS staff are present to familiarize themselves with the requirements, and are asked to participate in the planning and implementation of the project.

8.2 RESOURCE AVAILABILITY: Chemtech maintains a 30,000 square foot laboratory designed for maximum efficiency and safety. There is a redundancy of equipment to ensure ample equipment resources. The laboratory is adequately staffed by a highly skilled group of chemists with diversified experience in environmental analysis; and managed by a knowledgeable team of professionals who are committed to quality and client satisfaction.

The laboratory management maintains a clearly defined model of laboratory capacity based upon historical data. This model is the basis for controlling resources, management of personnel and equipment, including the flow of work into and through the laboratory.

8.3 NEW WORK COORDINATION: Project Management coordinates the project logistics with the client and Sample Management in addition to overseeing the analytical progress through the laboratory. Sample Management initiates the Log-In process, which includes requirements, detailed in the PC and Quotation.

Prior to release of data to the client, the Department Managers, Supervisors, and the QC/Report Production staff review the data for

CHEMTECH

Facilities and Resources for New Projects
Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19
Page 17 of 168

completeness, accuracy, and conformance with applicable regulatory and clients requirements.

9. CLIENT CONFIDENTIALITY

Objective: To design and implement policies and procedures to protect the confidentiality and proprietary rights of our clients.

9.1 CLIENT CONFIDENTIALITY

Information related to a Client and or a Project are entered and stored in Chemtech's LIMS SQL Server. Employees with the appropriate level of authority enter the information. Security levels within Chemtech's system define an individual's access to information levels. Information on the Server is backed up at defined intervals, and the backup information is stored offsite.

Analytical data is prepared in a report format, as required by the client. The report is copied and scanned electronically. A paginated copy of the report or the original copy is distributed as directed by the client while the scanned copy and related information is kept on site in the Document Storage Area on our LIMS Server. The employee's security authorization levels limit access to the Document Storage Area or the LIMS Server. The files are archived for a period of five years.

Electronic data stored in Chemtech's database is protected by a variety of systems including, Virtual Private Networks (VPS), firewalls, log in user names and passwords. A Gateway system is also employed to restrict access to specific users based upon their authorization level.

Reports or client information requested by a third party must be accompanied by written authorization from our Client. Client information is released when directed by a subpoena from a court with valid jurisdiction. The Client is promptly notified of the subpoena requesting their information.

10. CLIENT COMPLAINTS AND RESOLUTIONS

Objective: To establish a system to address and resolve client complaints regarding any laboratory activity. The process for dealing with complaints must include a procedure, documentation, corrective action, and monitoring of the implemented corrective action.

- 10.1 PROCEDURE:** When a client calls or e-mails an inquiry regarding a project or a report to the Project Manager (PM), the PM receiving the call (or e-mail) summarizes the client issue or requests the client to mail/fax any questions. Once a formal request is received, the PM communicates to the QA/QC Director, who prepares a Corrective Action (CA) report form, which includes the client name, laboratory project numbers(s), and summary of issues. The CA report form is assigned a three digit tracking number, by the QA/QC Director. The CA report form is submitted to the Technical Director, who assigns the CA report form to the affected department supervisor to review, comment and correct the issue within 24 hours. All technical and data reporting inquiries are submitted to the QA/QC Director for review. Once the response comes back from the laboratory, the QC Supervisor and QA/QC Director reviews it, and if satisfactory, the CA report form is filed in the QA/QC office. The client is sent the corrected information.
- 10.2 DOCUMENTATION:** Client's complaints are documented using CA report form, which originates from the QA/QC Director's office. The original communication (phone log, e-mail, or fax) is kept in the PM office while closed CA report form is filed in the QC office. The CA report contains the date and name of the person receiving the complaint, a description of the complaint, source of the complaint, the resolution, and any written material accompanying the complaint. The CA database is updated by QA/QC office to which only QA/QC Director has access. A database is maintained where client inquiries are logged-in including date, client name, project number, department in question, and a summary of the inquiry and CA taken.
- 10.3 CORRECTIVE ACTION:** The CA report is entered in a database to monitor systematic defects. The appropriate department supervisor must deal with the complaint by responding to the inquiry. The response must address the issue(s) and provide an explanation and resolution. The response may involve reprocessing of data and issuing a revised data report. The QA/QC Director reviews the CA for a persistent defect in case the respective SOP needs modifications.

- 10.4 QA/QC AUDITING:** The CA is entered in a database to monitor systematic defects. The QA/QC Director investigates complaints and promptly audits all areas of activity to assure that the CA implemented has resolved the defect. If the defect persists, the QA/QC Director, and Department Manager and Supervisor develop and implement an effective process. When the defect is resolved, monitoring is incorporated as a part of the annual system audit. For detailed information on client inquiries refer to the SOP for handling client inquiries.

11. SAMPLE MANAGEMENT PROCESS

Objective: To establish a system to process client requests for analytical services and samples upon arrival at the laboratory. Please refer to P204-Chain of Custody SOP and P250-Log in SOP for detailed information for sample receipt, containers and all other related information.

11.1 ANALYTICAL REQUEST: Project Managers prepare an Analytical Request (AR) Form from the information detailed on the Project Chronicle (PC) and provide a copy to Sample Management in order to initiate a sampling event.

11.2 SAMPLE CONTAINER PREPARATION AND SHIPMENT: All bottle orders prepared from the Analytical Requests are prepared with bottles that are certified pre-cleaned by the manufacturer according to US EPA specifications. Reagent grade preservatives are added to the bottles at the laboratory. All preservative solutions are checked to assure that they are free of contamination. Chemtech utilizes laboratory reagent water for trip and field blanks.

Bottle orders are prepared by one individual and checked by a second individual to ensure that the bottle order was properly prepared. The bottles are then relinquished from Sample Management to the appropriate courier. When the bottles arrive at the client destination, the courier will then relinquish custody of the bottles to the client or the client designee.

Samples arrive at the laboratory via Chemtech couriers, common carrier, or client delivery. All shipments and deliveries of samples are received through the shipping & receiving door located in the rear of the facility. All deliveries enter in the same location and go directly to the sample room. The SOP's for Chain of Custody (CoC) and Sample Acceptance and Receipt are followed.

Sample Management personnel will sign for all shipments received and notify the Sample Custodian immediately. The samples are then relinquished to the Sample Custodian.

A sample or sample container is considered to be in custody if: it is in the persons' actual possession; it is in the person's view after being in their physical possession; it was in their possession and then locked in a refrigerator or sealed in a cooler; it is in a designated secure area.

11.3 SAMPLE ACCEPTANCE

Upon receipt of sample coolers at the laboratory, coolers are examined for damaged or broken custody seals. Records of the condition of the custody seals and coolers are recorded on the Laboratory Chronicles. If seals and coolers are intact, the sample acceptance procedure is continued. If they are not intact, the appropriate Laboratory Project Manager (PM) is notified. The PM will seek guidance from the client whether to proceed with the analysis of the samples or discard or send back the samples. The PM will communicate information given by the Client to Sample Management via a Record of Communication.

11.4 SAMPLE RECEIPT

Once the samples have been accepted, the sample receipt process begins. The Sample Custodian will line up the samples according to the CoC and begin comparing the information documented on the CoC to the samples received. Any deviation noted from the CoC or non-conformance is recorded on the Laboratory Chronicle and communicated to the appropriate Laboratory Project Manager.

11.5 SAMPLE CUSTODIAN RESPONSIBILITIES

The Sample Custodian must take a cooler temperature soon after sample receipt and record it on the Laboratory Chronicle and the Field CoC. This will verify that the samples were transported and received at the required temperature.

The Sample Custodian must ensure that samples are received in good condition and ensure that samples listed on the CoC are all present. The Sample Custodian must compare the sample identification on the CoC to the labels on the bottles, and make sure that the information on the CoC exactly matches the bottle labels. Verification that enough volume has been received for the sample tests requested and absence of headspace for volatile analysis must be noted.

The Sample Custodian must ensure that all samples are properly preserved. Appropriate preservation of samples is determined by checking the pH of the samples. Sample Management Staff are issued a reference table that lists the tests methods we utilize and their appropriate preservation techniques. The pH of the samples is checked, and any discrepancies are recorded on the Laboratory Chronicle and communicated to the client.

The Sample Custodian must sign the CoC and other documentation received with the samples. Documentation of custody is initiated when the field sampler is collecting the samples. Custody documentation includes

all information that provides a clear record of the sample identification, time of collection, and collection chronology. This record is kept on the Chemtech or Client CoC Forms.

The Sample Custodian must place the samples in storage or relinquish to the appropriate laboratory analyst after labeling the samples with the unique laboratory number.

11.6 SAMPLE MANAGEMENT STAFF RESPONSIBILITIES

Sample Management staff must review the Field CoC submitted by the Sample Custodian and procure the correct Analytical Request (AR) form from the file. They must compare the AR to the Field CoC and ensure that all information on the CoC follows the AR exactly. If not, contact the appropriate PM for further guidance. The PM should resolve all discrepancies between the AR and the CoC prior to sample login. Once the discrepancies are resolved the PM will issue a Record of Communication to document the client's instructions.

If an unapproved rush analysis is received, Sample Management staff must inform the PM, and contact the appropriate Department Supervisor via email. Proceed to login the samples. Create a folder with the original Field CoC, the sample and delivery tickets, any third party delivery documentation, and the login report.

11.7 SUBCONTRACTED ANALYSIS

Projects sometimes contain analyses that Chemtech does not perform. In order to give a high level of service to our clients, Chemtech will subcontract these analyses to other laboratories. All subcontracted laboratories must meet vigorous standards set forth by QA/QC Department as well as standards established for the environmental laboratory industry. A documented procedure is followed to qualify laboratories for subcontracting and a list is maintained in our QA/QC Department. Procedures have also been established to assure that CoC is maintained and the subcontract laboratory achieves all client objectives.

Note: For DoD work: Subcontracting laboratories must have an established and documented laboratory quality system that complies with DoD QSM requirements, must be approved by the specific DoD component, must be able to generate acceptable results from PT sample analysis, must receive project-specific approval from DoD client before any samples are analyzed, and must identify those samples requiring special reports (e.g. MCL exceedence).

A subcontracted laboratory must provide our QA/QC Department the following information in order to be used as a subcontractor: a valid state certification for the required tests, Quality Assurance Plan, PT Studies for the required tests, and copies of the SOP's for the required tests.

The subcontracting procedure is a documented procedure that is initiated by an Account Executive. The Account Executive is responsible for ensuring that the subcontracted laboratory meets all client specifications. When a client issues a Scope of Work, the Account Executive thoroughly reviews the document. If subcontracting is required, the Account Executive will consult the established subcontracting list that is issued by the QA/QC Department. If a particular analysis is not conducted by one of these approved laboratories, the Account Executive must then request that QA/QC Director locates and approves a laboratory for the requested analysis.

Once a subcontract laboratory is found, the Account Executive must contact the laboratory to communicate the client's requirements and request a quotation from the laboratory. The Account Executive then creates a Project Chronicle that documents the client requirements, the subcontract laboratory to be used, and attaches a quote to this document. The Project Chronicle is an electronic document available to all appropriate personnel. This procedure is followed prior to the receipt of samples from the client.

When the client calls to order the bottles for the project, the PM initiates an Analytical Request Form (AR) from the information documented on the Project Chronicle. The AR includes the information for the subcontract laboratory as well as any special bottle instructions for the subcontracted tests, and is given to Sample Management. Sample Management then creates the bottle order and sends it to the client.

Upon receipt of the samples, the Sample Custodian will give a copy of the CoC to the Client Service Manager. The Client Service Manager will then create a subcontract chain of custody and procure a Purchase Order from Accounting. This documentation is given to Sample Management to send to the subcontract laboratory along with the samples. A copy of this documentation is retained and placed in the login folder and double-checked by the appropriate Project Manager.

All subcontracted samples are logged into the LIMS System to allow for sample tracking and data reporting. A PM will track the samples to ensure that client deadlines and specifications are met. Once the data packages arrive from the subcontract laboratory, the PM will check the report for

completeness. If the data package is deficient, the PM will immediately notify the subcontract laboratory to remediate the deficiencies. The report is then passed to the QA/QC Department for further review. If any corrective action is required at this point, the QA/QC staff will call the subcontractor laboratory. All data that is subcontracted is clearly designated.

11.8 SAMPLE STORAGE

Chemtech maintains a 40-foot walk-in refrigerator that contains a multitude of shelves. All samples, with the exception of volatiles, are kept in this refrigerator. The refrigerator temperature is monitored constantly and recorded once a day. All shelves in the walk-in refrigerator are identified with a code. The Sample Custodian assigns samples to a refrigerator shelve and gives the shelve location to Sample Management to login with the sample information. This documented procedure allows the samples to be found very easily.

The volatile refrigerators are located in the Volatile Department and kept secure. All Volatile refrigerators are also monitored for temperature. The temperature is recorded every day on a log page. Samples for Volatile Organic analysis are stored separately from other samples. Samples suspected of containing high levels of Volatile Organic Compounds are further isolated from other Volatile Organic samples.

Back-up refrigerators are available should any mechanical problem present itself. All samples are securely moved to the backup refrigerators if necessary.

Only the Sample Custodians are permitted access to sample storage. Analysts create a sample request electronically and send the request to the Sample Custodians. Once received, the Sample Custodians fill out the appropriate paperwork and issue the samples to the Analysts.

Periodically throughout the day, the Sample Custodians will pick up samples from the laboratory and sign them back into storage. Analysts will submit a signed work list to the Sample Custodian along with the samples when they finished with the samples. All samples must be back in refrigeration at the end of a shift and the chain of custody is required to be kept at all times.

12. ANALYTICAL CAPABILITIES

Analytical Fraction	Soil/Solid Matrix Methods	Aqueous Matrix Methods
Volatile Organics by GC/MS	SW 5030B/8260B SW 5035/8260B SOM01.2	SW 5030B/SW 8260B SW5035/SW 8260B OLC02.1 OLC03.1 EPA 524.2 EPA 624 SOM01.2
Volatile Organics by GC	SW 8015B SW 5030B/SW 8021B SW 5035/8021B	SW 8015B SW 5030B/SW 8021B SW 5035/8021B EPA 601 EPA 602
Semi volatiles by GC/MS	SW 3510C/SW 8270C SW 3520C/SW 8270C SW 3540C/SW 8270C SW 3545/SW 8270C SW 3580A/SW 8270C SW 3550B SOM01.2	EPA 625 SW 3510C/SW 8270C SW 3520C/SW 8270C SW 3540C/SW 8270C SW 3545/SW 8270C SW 3580A/SW 8270C OLC02.1 OLC03.1 SOM01.2
Semi volatiles by GC	SW 8015B	SW 8015B
Pesticides &/ or PCBs	SW 3510C/SW 8081A&/or 8082 SW 3520C/SW 8081A&/or 8082 SW 3540C/SW 8081A&/or 8082 SW 3545/SW 8081A&/or 8082 SW 3580A/SW 8081A&/or 8082 SOM01.2	SW 3510C/SW 8081A&/or 8082 SW 3520C/SW 8081A&/or 8082 SW 3540C/SW 8081A&/or 8082 SW 3545/SW 8081A&/or 8082 SW 3580A/SW 8081A&/or 8082 EPA 608 SOM01.2
Chlorinated Herbicides	SW 8151A	SW 8151A
Volatile Organics by GC/MS	Air Matrix Method: TO-15	

Analytical Fraction	Soil/Solid Matrix Methods	Aqueous Matrix Methods
Metals	SW 6010B SW 7471A SW 3050B ILM05.4	EPA 200.7 EPA 245.1 SW 6010B SW 7470A SW 3005A SW 3010A ILM05.4
Wet Chemistry		
Acidity	-----	ASTM D1067-92
Alkalinity	-----	SM 2320 B
Alkalinity, Bicarbonate	-----	SM 2320 B
Ammonia	-----	SM 4500-NH3 H
Anions: Bromate Bromide Chloride Fluoride Nitrate Nitrite Orthophosphate Sulfate	-----	EPA 300.0
ASTM Leaching Procedure	ASTM 3987	-----
Biochemical Oxygen Demand (BOD5)	-----	SM 5210B
Bromide	-----	EPA 300.0
Carbon Dioxide	-----	SM4500
Carbonaceous BOD (cBOD)	-----	SM 5210B
Cation-Exchange Capacity	SW 9080 SW 9081	-----
Chemical Oxygen Demand (COD)	-----	SM 5220D
Chloride	SW 9056	EPA 300.0 SM 4500-Cl C
Color	-----	SM 2120B
Conductivity	SW 9050A	EPA 120.1 SM 2510 B
Corrosivity	SW 9040B	SW 9040B
Corrosivity Toward Steel	SW 1110	SW 1110

Analytical Fraction	Soil/Solid Matrix Methods	Aqueous Matrix Methods
Cyanide	SW 9010B SW 9012A	SM 4500-CN C&E
Cyanide-Amenable	SW 9010B	SM 4500-CN C,G
Dissolved Oxygen	-----	SM 4500-O G
Extractions	SW 3610 SW 3620 SW 3640 SW 3665 SW 8440	SW 3610 SW 3620 SW 3640 SW 3665 SW 8440
Ferrous Iron	-----	SM 3500 B SM 3500FE-D
Flashpoint	SW 1010 SW 1030	SW 1010 SW 1030
Foaming Agents	-----	SM 5540 C
Fluoride	SW 9056	EPA 300.0
Hardness, Calcium	-----	EPA 200.7
Hardness, Total	-----	EPA 200.7
Hexavalent Chromium	SW 3060A/SW 7196A	SM 3500-Cr D
Ignitability	SW 1010 SW 1030	SW 1010 SW 1030
Methylene Blue Active Substances (MBAS) Surfactants	-----	SM 5540 C
Nitrate	SW 9056	EPA 300.0
Nitrate/Nitrite	-----	EPA 300.0
Nitrite	SW 9056	EPA 300.0
Odor	-----	SM 2150 B
Oil & Grease	SW 9071B	EPA 1664A
Orthophosphate	SW 9056	EPA 300.0 SM 4500-P,E
Paint Filter Test	-----	SW 9095
pH	SW 9040B SW 9045C	SM 18 4500-H B SW 9041A

Analytical Fraction	Soil/Solid Matrix Methods	Aqueous Matrix Methods
Phenolics	SW 9065	EPA 420.1
Phosphorus, Ortho	SW 9056	EPA 300.0 SM 4500 P-E
Phosphorus, Total	EPA 365.3	-----
Reactive Cyanide	SW 7.3.3.2 Rev 3	SW 7.3.3.2 Rev 3
Reactive Sulfide	SW 7.3.4.2 Rev 3	SW 7.3.4.2 Rev 3
Residual Chlorine	-----	SM 4500-Cl G
Settleable Solids	-----	SM 2540 F
Silica	SW 6010B	EPA 200.7
SPLP Extraction	SW 1312	SW 1312
Sulfate	SW9038 SW9056	EPA 300.0 SM 4500SO4 E
Sulfide	SW 9030B SW 9031 SW 9034	-----
Sulfide, Acid Soluble & Insoluble	SW 9030B	SW 9030B SW 9031
TCLP Leaching Procedure	SW 1311	SW 1311
Temperature	SW 2550B	SM 2550B
Total Dissolved Solids (TDS)	-----	SM 2540 C
Total Kjeldahl Nitrogen (TKN)	-----	SM 4500-N Org B or C
Total Organic Carbon (TOC)	SW 9060 Lloyd Kahn	SM 5310 B
Total Organic Halides (TOX)	SW 9020B	SW 9020B
Extractable Organic Halides (EOX)	SW 9023	SW 9023
Total Solids (TS)	-----	SM 2540 B
Total Suspended Solids (TSS)	-----	SM 2540 D
Total Volatile Solids (TVS)	-----	EPA 160.4
Turbidity	-----	EPA 180.1 SM 2130 B
Volatile Suspended Solids (VSS)	-----	EPA 160.4

13. MAJOR EQUIPMENT

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
<u>GC/MS SEMI VOA Lab</u>							
GC	BNA-A	Hewlett Packard 5890 Series II	3223A43380	June 1992	July 2001	BNA Lab	used
MSD	BNA-A	Hewlett Packard 5971 Series	2919A00378	June 1992	July 2001	BNA Lab	Used
Auto Sampler	BNA-A	Hewlett Packard 18596B	2718A04705	June 1992	July 2001	BNA Lab	Used
Injector Tower	BNA-A	Hewlett Packard 7673 A	3048A24622	June 1992	July 2001	BNA Lab	Used
Controller	BNA-A	Hewlett Packard 7673 A 18594B	3330A32763	June 1992	July 2001	BNA Lab	Used
Computer	BNA-A	Minta	CN548014089	June 1992	July 2001	BNA Lab	Used
GC	BNA-B	Hewlett Packard 5890	2750A18411	July 1994	July 2001	BNA Lab	Used
MSD	BNA-B	Hewlett Packard 5971 Series	3188A03673	July 1994	July 2001	BNA Lab	Used
Auto Sampler	BNA-B	Hewlett Packard 18596B	3021A21493	July 1994	July 2001	BNA Lab	Used
Injector Tower	BNA-B	Hewlett Packard 7673 A	2704A04914	July 1994	July 2001	BNA Lab	Used
Controller	BNA-B	Hewlett Packard 7673 A 18594B	320A28097	July 1994	July 2001	BNA Lab	Used
Computer	BNA-B	Minta	93001897	July 1994	July 2001	BNA Lab	Used
GC	BNA-E	Hewlett Packard 5890 Series	4500030441	Dec 2002	Jan 2003	BNA Lab	New
MSD	BNA-E	Hewlett Packard 5973	4591422501	Dec 2002	Jan 2003	BNA Lab	New
Auto Sampler	BNA-E	Agilent 7683 Series	4514413296	Dec 2002	Jan 2003	BNA Lab	New
Injector Tower	BNA-E	Agilent 7683 Series	CN13922355	Dec 2002	Jan 2003	BNA Lab	New
Computer	BNA-E	Hewlett Packard Vectra VL 420 DT	4522100267	Dec 2002	Jan 2003	BNA Lab	New
GC	BNA-F	Thermo Finnigan Trace Ultra	20041853	March 2004	March 2004	BNA Lab	New
MSD	BNA-F	Thermo Finnigan Trace DSQ	100166	March 2004	March 2004	BNA Lab	New
Auto Sampler	BNA-F	Thermo Finnigan AS 3000	20041111	March 2004	March 2004	BNA Lab	Used
Refrigerator	BNA-Ref-1	Roper	ED2933135	May 1999	July 2001	BNA Lab	Used
Refrigerator	BNA-Ref-2	White Westinghouse	-----	June 2006	June 2006	BNA Lab	New
Refrigerator	BNA-Ref-3	Frigidaire	WA81100949	1999	Mar. 2008	BNA Lab	Used
<u>GC SEMI VOA Lab</u>							
HPLC	HPLC-1	Hewlett Packard Series 1100 DAD	JP73007001/ US72101011/ US72101340	May 1999	July 2001	Pest Lab	Used
Auto sampler	HPLC-1	Hewlett Packard 1313 AS	US72102636	May 1999	July 2001	Pest Lab	Used
Computer	HPLC-1	HP Vectra XA	US73465640	May 1999	July 2001	Pest Lab	Used
ECD	ECD-1	Shimadzu AOC-20	C11144007149KG	Feb 2004	Feb 2004	Pest Lab	Used
Auto Sampler	ECD-1	Hewlett Packard 7673A	2718A07921	June 1992	July 2001	Pest Lab	Used

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
GC SEMI VOA Lab							
Inject Tower	ECD-1	Hewlett Packard 7673A	2843A11812	June 1992	July 2001	Pest Lab	Used
Controller	ECD-1	Hewlett Packard 7673A	2843A11812	June 1992	July 2001	Pest Lab	Used
Computer	ECD-1	Seventeam	3862A403	June 1992	July 2001	Pest Lab	Used
ECD	ECD-4	Hewlett Packard 5890	3203A40376	May 1999	July 2001	Pest Lab	Used
Auto Sampler	ECD-4	Hewlett Packard 7673A	2718A05058	May 1999	July 2001	Pest Lab	Used
Inject Tower	ECD-4	Hewlett Packard 7673A	3120A26762	May 1999	July 2001	Pest Lab	Used
Computer	ECD-4	ACER 324	93006805	May 1999	July 2001	Pest Lab	Used
Controller	ECD-4	Hewlett Packard 7673A	3113A26547	May 1999	July 2001	Pest Lab	Used
ECD	ECD-5	Hewlett Packard 5890 Series II	3115A34809	June 1992	July 2001	Pest Lab	Used
Auto Sampler	ECD-5	Hewlett Packard 7673A	3137A26240	June 1992	July 2001	Pest Lab	Used
Inject Tower	ECD-5	Hewlett Packard 7673A	3033A23016	June 1992	July 2001	Pest Lab	Used
Controller	ECD-5	Hewlett Packard 7673A	3329A32728	June 1992	July 2001	Pest Lab	Used
Computer	ECD-5	Expert Group 36X MAX	-----	June 1992	July 2001	Pest Lab	Used
ECD	ECD-6	Hewlett Packard 5890 Series II	3235A44756	May 1999	July 2001	Pest Lab	Used
Auto Sampler	ECD-6	Hewlett Packard 7673A	2718A07968	May 1999	July 2001	Pest Lab	Used
Inject Tower	ECD-6	Hewlett Packard 7673A	2546A01644	May 1999	July 2001	Pest Lab	Used
Controller	ECD-6	Hewlett Packard 7673A	2546A01644	May 1999	July 2001	Pest Lab	Used
Computer	ECD-6	Expert Group	CN548014091	May 1999	July 2001	Pest Lab	Used
ECD	ECD-7	Agilent Technologies 6890N	CN10521041	June 2005	June 2005	Pest Lab	New
Auto Sampler	ECD-7	Agilent 7683	CN52033127	June 2005	June 2005	Pest Lab	New
Inject Tower	ECD-7	Agilent 7683B	CN51825037	June 2005	June 2005	Pest Lab	New
Computer	ECD-7	Dell	CN-0G1494-70821-359-25-KF	June 2005	June 2005	Pest Lab	New
ECD	ECD-8	Hewlett Packard 5890 Series II	2541A06937	May 1999	July 2001	Pest Lab	Used

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
<u>GC SEMI VOA Lab</u>							
Auto Sampler	ECD-8	Agilent 7683	CN1115410412 1	May 1999	July 2001	Pest Lab	Used
Inject Tower	ECD-8	Agilent 7683	CN1114410779 0	May 1999	July 2001	Pest Lab	Used
Controller	ECD-8	-----	S00132	May 1999	July 2001	Pest Lab	Used
FID	FID-1	Hewlett Packard 5890	2643A09798	May 1999	July 2001	Pest Lab	Used
Auto Sampler	FID-1	Hewlett Packard 7673A	2718A08986	May 1999	July 2001	Pest Lab	Used
Inject Tower	FID-1	Hewlett Packard 7673A	CN41235695	May 1999	July 2001	Pest Lab	Used
Computer	FID-1	44X Max Expert Group	-----	May 1999	July 2001	Pest Lab	Used
Controller	FID-1	Hewlett Packard 7673A	2702A05818	May 1999	July 2001	Pest Lab	Used
Refrigerator	GC ext- Ref 1	General Electric	ST734619	May 1999	July 2001	Pest Lab	Used
Refrigerator	GC ext- Ref 2	Kelvinator	-----	May 1999	July 2001	Pest Lab	Used
Refrigerator	GC ext- Ref 3	General Electric	MT841152	May 1999	July 2001	Pest Lab	Used
Refrigerator	GC ext- Ref 4	Revco	T09G3404071G	May 1999	Mar. 2008	Pest Lab	Used
<u>GC/GC MS VOA Lab</u>							
MSD	MSVOA- D	Hewlett Packard 5971	3234A04258	May 1999	July 2001	VOA Lab	Used
GC	MSVOA- D	Hewlett Packard 5890	3033A31948	May 1999	July 2001	VOA Lab	Used
Auto Sampler	MSVOA- D	OI Analytical 4552	13990	May 1999	July 2001	VOA Lab	Used
Concentrator	MSVOA- D	OI 4660 Eclipse	A405466417P	2004	Feb 04	VOA Lab	New
Computer	MSVOA- D	MINTA ACER 32X	93007352	May 1999	July 2001	VOA Lab	Used
MSD	MSVOA-E	Hewlett Packard 5972	3435A01877	May 1999	July 2001	VOA Lab	Used
GC	MSVOA-E	Hewlett Packard 5890	2443A3670	May 1999	July 2001	VOA Lab	Used
Auto Sampler	MSVOA-E	OI Analytical 4552	13854	May 1999	July 2001	VOA Lab	Used

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
<u>GC/GC MS VOA Lab</u>							
Concentrator	MSVOA-E	OI 4660 Eclipse	A405466419P	2004	Feb 04	VOA Lab	New
Computer	MSVOA-E	-----	-----	May 1999	July 2001	VOA Lab	Used
MSD	MSVOA-F	Hewlett Packard 5971 Series	3118A02237	May 1999	July 2001	VOA Lab	Used
GC	MSVOA-F	Hewlett Packard 5890	3108A34429	May 1999	July 2001	VOA Lab	Used
Concentrator	MSVOA-F	TEKMAR LCS 2000	92056013	July 2001	July 2001	VOA Lab	Recondition
Auto Sampler	MSVOA-F	TEKMAR ALS 2016	92231005	July 2001	July 2001	VOA Lab	Recondition
Computer	MSVOA-F	MINTA ACER 32X	93007037	May 1999	July 2001	VOA Lab	Used
MSD	MSVOA-G	Hewlett Packard 5971A	2749A00075	May 1999	July 2001	VOA Lab	Used
GC	MSVOA-G	Hewlett Packard 5890 Series II	3020A11012	May 1999	July 2001	VOA Lab	Used
Concentrator	MSVOA-G	OI Eclipse 4660	338466642P	2003	March 2003	VOA Lab	Used
Auto Sampler	MSVOA-G	OI Archon 5100	12971	May 1999	July 2001	VOA Lab	Used
Computer	MSVOA-G	Expert Group	-----	May 1999	July 2001	VOA Lab	Used
MSD	MSVOA-H	Hewlett Packard 5971 Series	3188A03008	May 1999	July 2001	VOA Lab	Used
GC	MSVOA-H	Hewlett Packard 5890	2750A17849	May 1999	July 2001	VOA Lab	Used
Concentrator	MSVOA-H	OI Eclipse 4660	A401466023P	2004	Feb 2004	VOA Lab	Used
Auto Sampler	MSVOA-H	OI Archon 5100	12225	May 1999	July 2001	VOA Lab	Used
Computer	MSVOA-H	MINTA ACER 32X	93006275	May 1999	July 2001	VOA Lab	Used
MSD	MSVOA-I	Hewlett Packard 5971 Series	IOW24-528	June 1992	July 2001	VOA Lab	Used
GC	MSVOA-I	Hewlett Packard 5890 Series II	3235A45496	June 1992	July 2001	VOA Lab	Used
Concentrator	MSVOA-I	OI 4660 Eclipse	338466643P	2003	March 2003	VOA Lab	New
Auto Sampler	MSVOA-I	OI 4552 Archon	14293	2003	March 2003	VOA Lab	Used
Computer	MSVOA-I	Expert Group 36X Max	-----	June 1992	July 2001	VOA Lab	Used
MSD	MSVOA-K	Hewlett Packard 5971A Series	3324A04574	December 2002	Jan 2003	VOA Lab	New
GC	MSVOA-K	Hewlett Packard 5890 Series II	3235A45495	December 2002	Jan 2003	VOA Lab	New
P&T 2	MSVOA-K	OI Analytical 4560	N249460496	December 2002	Jan 2003	VOA Lab	New

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
GC/GC MS VOA Lab							
Auto Sampler	MSVOA-K	OI Analytical 4552	13843	December 2002	Jan 2003	VOA Lab	New
Computer	MSVOA-K	Dell XPS D233	DLCY9	December 2002	Jan 2003	VOA Lab	New
MSD	MSVOA-L	Agilent 5975	US52430266	2004	March 2004	VOA Lab	New
GC	MSVOA-L	Agilent 6890	CN10524059	2004	March 2004	VOA Lab	New
Concentrator	MSVOA-L	Entech 7100A	1224	2004	March 2004	VOA Lab	New
Auto Sampler	MSVOA-L	Entech 7500	-----	2004	March 2004	VOA Lab	New
Computer	MSVOA-L	Dell XP	-----	2004	March 2004	VOA Lab	New
MSD	MSVOA-M	Agilent 5971	-----	2004	March 2004	VOA Lab	New
GC	MSVOA-M	Agilent 5890	2429A02327	2004	March 2004	VOA Lab	New
Concentrator	MSVOA-M	Entech 7100A	1129	2004	March 2004	VOA Lab	New
Auto Sampler	MSVOA-M	Entech 7500	-----	2004	March 2004	VOA Lab	New
Computer	MSVOA-M	Dell XP	-----	2004	March 2004	VOA Lab	New
Refrigerator	VOA-Ref-1	Frigidaire	WB50332890	June 2005	June 2005	VOA Lab	New
Refrigerator	VOA-Ref-2	Frigidaire	WB50332901	June 2005	June 2005	VOA Lab	New
Refrigerator	VOA-Ref-3	Sanyo	911246533	May 1999	July 2001	VOA Lab	Used
Refrigerator	VOA-Ref-4	Glenco	JJ-371503	May 1999	July 2001	VOA Lab	Used
Refrigerator	VOA-Ref-5	Beverage Air KR48-IAS	7054308	May 1999	July 2001	VOA Lab	Used
Refrigerator	VOA-Ref-6	True Refrigerator T-72	682166	May 1999	July 2001	VOA Lab	Used
Oven	VOA-Oven 1	Fisher Scientific 230F	2876	May 1999	July 2001	VOA Lab	Used
Oven	VOA-Oven 2	Precision Scientific	9402-010	May 1999	July 2001	VOA Lab	Used
Scale	VOA SC-1	Mettler PE 300	E28222	May 1999	July 2001	VOA Lab	Used
Hot Plate	VOA HP-1	VWR Dylathern	-----	May 1999	July 2001	VOA Lab	Used
GC	GC-VOA-1-A	Perkin Elmer PID	610N4101940	May 1999	July 2001	GC Lab	Used

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
<u>GC/GC MS VOA Lab</u>							
Hall Detector	GC-VOA-1-A	Perkin Elmer 1000 Hall	920071	May 1999	July 2001	GC Lab	Used
Concentrator	GC-VOA-1-A	TEKMAR LCS 2000	91343002	May 1999	July 2001	GC Lab	Used
Auto Sampler	GC-VOA-1-A	Hewlett Packard Purge & Trap	3449A20171	May 1999	July 2001	GC Lab	Used
Computer	GC-VOA-1-A	MINTA	93001817	May 1999	July 2001	GC Lab	Used
GC	GC-VOA-2-B	Hewlett Packard 5890 Series II PID	3235A46097	May 1999	July 2001	GC Lab	Used
Concentrator	GC-VOA-2-B	TEKMAR LCS 2000	91233006	May 1999	July 2001	GC Lab	Used
Auto Sampler	GC-VOA-2-B	Hewlett Packard Purge & Trap	3449A20164	May 1999	July 2001	GC Lab	Used
Computer	GC-VOA-2-B	MINTA	93001817	May 1999	July 2001	GC Lab	Used
GC	GC-VOA-3-C	Dimension PID/FID	921105	May 1999	July 2001	GC Lab	Used
Concentrator	GC-VOA-3-C	TEKMAR LCS 2000	93257007	May 1999	July 2001	GC Lab	Used
Auto Sampler	GC-VOA-3-C	TEKMAR 2016	94067022	May 1999	July 2001	GC Lab	Used
Computer	GC-VOA-3-C	MINTA	93001817	May 1999	July 2001	GC Lab	Used
<u>Metals Lab</u>							
ICAP	ICP-1	Thermo Jarrell Ash (ICAP 61E Trace Analyzer)	346590	June 1999	July 2001	Metals Lab	New
Power Unit	ICP-1	Thermo Jarrell Ash Power Unit	2579	June 1999	July 2001	Metals Lab	New
Circulator	ICP-1	Thermo Jarrell Ash (Water Circulator)	J95048013	June 1999	July 2001	Metals Lab	New
Computer	ICP-1	Dell	-----	June 2002	June 2002	Metals Lab	New
ICAP	ICP-2	Thermo Jarrell Ash (ICAP 61E Trace Analyzer)	357490	May 1999	July 2001	Metals Lab	Used
Power Unit	ICP-2	Thermo Jarrell Ash Power Unit	2653	May 1999	July 2001	Metals Lab	Used
Circulator	ICP-2	Thermo Jarrell Ash (Water Circulator)	J95048013	May 1999	July 2001	Metals Lab	Used
Computer	ICP-2	Dell	-----	June 2002	June 2002	Metals Lab	New

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
Metals Lab							
ICAP	ICP-3	Thermo Jarrell Ash (ICAP 61E Trace Analyzer	249490	May 1994	July 2001	Metals Lab	Used
Power Unit	ICP-3	Thermo Jarrell Ash Power Unit	2244	May 1994	July 2001	Metals Lab	Used
Circulator	ICP-3	Thermo Jarrell Ash (Water Circulator)	20205	May 1999	July 2001	Metals Lab	Used
Computer	ICP-3	Dell	-----	June 2002	June 2002	Metals Lab	New
ICP MS	ICPMS 1	Thermo Elemental	X0315	Dec 2003	Feb 2004	Metals Lab	New
Auto Sampler	ICPMS-1	ASX-510 Autosampler	120308ASX	Dec 2003	Feb 2004	Metals Lab	New
Circulator	ICP MS 1	Thermo Neslab (Water Circulator)	103240043	Dec 2003	Feb 2004	Metals Lab	New
Computer	ICP MS 1	Dell XP	1 DCV V0J	Dec 2003	Feb 2004	Metals Lab	New
Mercury Analyzer	CV-1	Leeman Labs PS 200II Automated Mercury Analyzer	62345	Jan 2002	Jan 2002	Metals Lab	New
Computer	CV-1	Dell	-----	June 2002	June 2002	Metals Lab	New
Mercury Analyzer	CV-2	Leeman Labs Hydra AA Automated Mercury Analyzer	62598	June 2002	June 2002	Metals Lab	New
Computer	CV-2	Dell	CJ85K11	June 2002	June 2002	Metals Lab	New
Hot Plate	M HP-1	Valad Electric Co. 24 X 36	1920	Jan 2002	Jan 2002	Metals Digestion Lab	New
Oven	M Oven-1	Lab-Line Model 3512	0700-0078	May 1999	July 2001	Metals Digestion Lab	Used
Water Bath	M WB-1	National Model 230	1SW-7	2003	2003	Metals Digestion Lab	New
Scale	M SC-1	Adventurer Pro	8027100143	June 2006	June 2006	Metals Digestion Lab	New
Scale	M SC-2	Mettler PJ 400	G62435	May 1999	July 2001	Metals Digestion Lab	Used
Scale	M SC-3	Mettler PE360	47890	May 1999	July 2001	Metals Digestion Lab	Used
Block Digestor	M BD-1	Environmental Express Hot Block	615CEC0814	Jan 2002	Jan 2002	Metals Digestion Lab	New

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
Metals Lab							
Microwave Digestor	MD-1	Mars	MD8656	June 2006	June 2006	Metals Digestion Lab	New
General Chemistry Lab							
Ion Chromatograph	IC-1	Metrohm 761 Compact Ion Chromatograph	17610020/09119	June 2002	June 2002	General Chemistry Lab	New
Sample Processor	IC-1	Metrohm 766	62041430	June 2002	June 2002	General Chemistry Lab	New
Computer	IC-1	Micron	13186350008	June 2002	June 2002	General Chemistry Lab	New
Incubator	Incubator-3	Forma-Scientific Model 3918 Incubator	60147-89	May 1999	July 2001	General Chemistry Lab	Used
Scale	WC SC-1	Mettler PJ 400	J39330	May 1999	July 2001	General Chemistry Lab	Used
Scale	WC SC-2	Mettler AE200	J39333	May 1999	July 2001	General Chemistry Lab	Used
Hot Plate	WC HP-1	Hach Hot Plate 16500-10	4069	May 1999	July 2001	General Chemistry Lab	Used
Hot Plate	WC HP-2	COD Reactor	880711134	May 1999	July 2001	General Chemistry Lab	Used
Stirrer	WC S-1	PMC	-----	June 2006	June 2006	General Chemistry Lab	New
Stirrer	WC S-2	Fisher Thermix Model 220T	101	May 1999	July 2001	General Chemistry Lab	Used
Stirrer	WC S-3	Corning	-----	June 2000	June 2000	General Chemistry Lab	New
Tumbler	T-1	Env. Express	-----	June 1997	July 2001	General Chemistry Lab	New
Tumbler	T-2	Env. Express	-----	June 1997	July 2001	General Chemistry Lab	New
Zero Headspace Extractor	ZHE-1	ZHE	3745-ZHE	June 1997	July 2001	General Chemistry Lab	New
Zero Headspace Extractor	ZHE-2	ZHE	3740-12-BRE	May 1999	July 2001	General Chemistry Lab	Used

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
General Chemistry Lab							
pH Meter	WC pH meter-1	ThermoOrion 350	-----	July 2004	July 2004	General Chemistry Lab	New
TOX 10 Sigma	TOX	Cosa Instrument Corp. 10 sigma	-----	May 1999	July 2001	General Chemistry Lab	Used
TOX 10 Sigma Boat Controller	TOX	Cosa Instrument Corp. 10 sigma	-----	May 1999	July 2001	General Chemistry Lab	Used
Konelab	Konelab	Konelab	P4719011	Dec 2002	Jan 2003	General Chemistry Lab	new
Computer	Konelab	Dell	2000-256036	Dec 2002	Jan 2003	General Chemistry Lab	new
Refrigerator	WC-Ref-1	Gibson Model RM18F5WX	-----	May 1999	July 2001	General Chemistry Lab	used
Refrigerator	WC-Ref-2	Frigidaire	-----	May 1999	July 2001	General Chemistry Lab	used
Oven	WC-Oven 1	VWR 1305U	-----	Dec 1997	July 2001	General Chemistry Lab	Used
Oven	WC- Oven 2	Fisher Model 516G	803N0088	May 1999	July 2001	General Chemistry Lab	used
Oven	WC- Oven 3	VWR 1305U	-----	May 1999	July 2001	General Chemistry Lab	Used
COD	COD-1	Hach DR/2010 Spectrophotometer	971100006417	May 1999	July 2001	General Chemistry Lab	used
GBC	GBC	Monitek-TA 1/Nephelometer	T04136701H7E	May 1999	July 2001	General Chemistry Lab	used
Conductance Meter	Conductance Meter	YSI Model 35 Conductance Meter	K8002530	May 1999	July 2001	General Chemistry Lab	used
Muffle Furnace	Muffle Furnace	Blue M Model M15A-2A	7419	May 1999	July 2001	General Chemistry Lab	used
TKN Heater	TKN Heater	Labconco TKN Heater (6 position)	183300	May 1999	July 2001	General Chemistry Lab	used
Midi Cyanide	MC-1	Andrews Glass (Cyanide Distillation)	ABX0409	May 1999	July 2001	General Chemistry Lab	used

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
General Chemistry Lab							
Midi Cyanide	MC-2	Andrews Glass (Cyanide Distillation)	-----	2002	2002	General Chemistry Lab	New
TOC Analyzer	TOC	Tekmar Appolo 9000	US03227003	Aug 2003	Aug 2003	General Chemistry Lab	new
TOC Boat Sampler	TOC	Boat Sampler 183	-----	Aug 2003	Aug 2003	General Chemistry Lab	new
Auto-Titrator	Titrator	Titroline Alpha	441912	March 2004	March 2004	General Chemistry Lab	new
Auto-Titrator Sampler	Titrator	TW Alpha 16 Sample Changer	00472248	March 2004	March 2004	General Chemistry Lab	new
Digestor	Digestor	Westco Easy Digest 40/20	1102	March 2003	March 2003	General Chemistry Lab	new
Ignitability instrument	IGN-1	Koehlex closed cup (Penske substitute)	R61091858	March 2004	April 2004	General Chemistry Lab	new
Dissolved Oxygen meter	DO Meter	YSI 5000 Dissolved Oxygen Meter	98C0951AB	May 1999	July 2001	General Chemistry Lab	Used
Microbiology Lab							
Autoclave	Autoclave-1	Tuttnauer Autoclave Model 2540M	9603296	May 1999	July 2001	Microbiology Lab	used
Refrigerator	Micro-Ref-4	Goldstar (GR-142BP)	20019795	May 1999	July 2001	Microbiology Lab	used
Colony Counter	Colony Counter	Darkfield Quebec Colony Counter	3325	May 1999	July 2001	Microbiology Lab	used
Incubator Bath	Incubator-1	Precision Coliform Incubator Bath	10AY-11	May 1999	July 2001	Microbiology Lab	used
Incubator	Incubator-2	VWR 1540 Incubator	0102290	May 1999	July 2001	Microbiology Lab	used
Incubator	Incubator-3	Shel-Lab 1545 Incubator	1100691	May 1999	July 2001	Microbiology Lab	used
Sample Management							
Refrigerator	SM Ref-1	Kelvinator (Ice Packs)	-----	May 1999	July 2001	Sample Management	used
Refrigerator	SM Ref-2	White Westinghouse (Ice Packs)	-----	May 1999	July 2001	Sample Management	used
Walk in Refrigerator	SM-Walk in-1	Bally (10' X 38')	-----	May 1999	July 2001	Sample Management	used

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
Sample Management							
Scale	SMB-3	Sartorius Model L320	36050083	May 1999	July 2001	Sample Management	used
Temperature Gun	Temperature Gun	Mannix Model # IRT4	-----	2005	2005	Sample Management	New
Extractions Lab							
Sonicator	SONC-1	TEKMAR Sonicator	-----	May 1999	July 2001	Extractions Lab	used
Sonicator	SONC-2	TEKMAR Sonicator	-----	May 1999	July 2001	Extractions Lab	used
Sonicator	SONC-3	Heat Systems-Ultrasonics Inc (W-380)	-----	May 1999	July 2001	Extractions Lab	used
N-EVAP	N-EVAP	Organomation Nitrogen Evaporation System	-----	May 1999	July 2001	Extractions Lab	used
Water Bath	EX-WB-1	Boekel	-----	May 1999	July 2001	Extractions Lab	used
Water Bath	EX-WB-2	Boekel	-----	May 1999	July 2001	Extractions Lab	used
Water Bath	EX-WB-3	Boekel	-----	May 1999	July 2001	Extractions Lab	used
Water Bath	EX-WB-4	Boekel	-----	May 1999	July 2001	Extractions Lab	used
GPC	GPC-1	Accuprep JZ Scientific	03B-1060-3.0	2003	March 2003	Extractions Lab	used
S-Evaporator	Evaporator-1	Organomation Analytical Evaporator	10688	May 1999	July 2001	Extractions Lab	used
IR	IR-1	Perkin Elmer 1310 Infrared Spectrophotometer	135039	May 1999	July 2001	Extractions Lab	used
Oven	EX Oven-1	VWR 13054	01002393	May 1999	July 2001	Extractions Lab	used
Oven	EX Oven-2	Fisher 117G	-----	May 1999	July 2001	General Chemistry Lab	Used
Heater	Heater-1	Lab line Extraction Heater 6 position	-----	May 1999	July 2001	Extractions Lab	used
Heater	Heater-2	Lab line Extraction Heater 6 position	-----	May 1999	July 2001	Extractions Lab	used
ASE	ASE-1	Dionex Accelerated Extraction	03010456	March 2003	October 2003	Extractions Lab	new
ASE	ASE-2	Dionex Accelerated Extraction	03060034	March 2003	October 2003	Extractions Lab	new
ASE	ASE-3	Dionex Accelerated Extraction	03060032	March 2003	October 2003	Extractions Lab	new
Ultrasonic Bath	Sonicator Bath	Branson Ultrasonic Cleaner 8510	RPA020497187 E	March 2004	March 2004	Extractions Lab	new
Turbovap II	Turbovap	Zymark	TV9751N7885	1997	July 2001	Extractions Lab	New
Refrigerator	EX Ref-1	Gibson	LA23601205	May 1999	July 2001	Extractions Lab	used

Instrument	Lab ID	Manufacturer Description	Serial Number	Year Purchased	Date placed in service at this location	Current Location	Condition Received (used, new, recondition)
Extractions Lab							
Refrigerator	EX Ref-2	Welbilt	-----	May 1999	July 2001	General Chemistry Lab	Used
Hot Plate	EX HP-1	Corning PC-35	-----	May 1999	July 2001	General Chemistry Lab	Used
pH Meter	EX pH meter-1	Hanna Instruments pH 211	283704	2004	2004	Extractions Lab	New
Touch Vortexer	Vortex	Glas-Col	263248	May 1999	July 2001	General Chemistry Lab	Used
Centrifuge	Centrifuge	Damon/IEC Division	AE0921	1984	July 2001	Extractions Lab	New
Scale	EX-SC-1	Mettler PM 4600	975690	May 1999	July 2001	Extractions Lab	used
Scale	EX SC-2	Ohaus GA110	1348	2000	July 2001	Extractions Lab	Used
Scale	EX SC-3	Sartorius A 200S	36100008	2000	July 2001	Extractions Lab	Used
Auto Soxhlet	Auto Soxhlet-1	Soxtherm/Multistat	4031743	Feb 2004	March 2004	Extractions Lab	New
Soxtherm	SOX-1	Soxtherm	4032298	Feb 2004	March 2004	Extractions Lab	New
Soxtherm	SOX-2	Soxtherm	4040032	Feb 2004	March 2004	Extractions Lab	New
Soxtherm	SOX-3	Soxtherm	4031744	Feb 2004	March 2004	Extractions Lab	New
Soxtherm	SOX-4	Soxtherm	4031743	Feb 2004	March 2004	Extractions Lab	New
SPE DEX Extractor	SPE-1	Horizon 4790 series	04-0509	2004	2004	Extractions Lab	New
SPE DEX Extractor	SPE-2	Horizon 4790 series	04-0510	2004	2004	Extractions Lab	New
SPE DEX Extractor	SPE-3	Horizon 4790 series	04-0507	2004	2004	Extractions Lab	New
SPE DEX Extractor	SPE-4	Horizon 4790 series	04-0508	2004	2004	Extractions Lab	New
SPE DEX Controller	SPE Controller	Horizon	04-0433	2004	2004	Extractions Lab	New
ROT-X-TRACT-LC	LL-Extractor	Organomation Liquid-Liquid extractor	-----	Nov 2005	Nov 2005	Extractions Lab	New

14. DOCUMENT CONTROL

Objective: To establish a system in order to have all information related to the production of analytical data controlled, protected, and stored to ensure its integrity and traceability. The system must ensure that only most recent version of required documentation is used by the appropriate personnel in the laboratory. Insure that invalid or obsolete documents are promptly removed from all points of issue or use, or otherwise assured against unintended use. All internal regulatory documents including the QA manual, SOP's, software, and equipment user's manuals are subject to document control.

Quality Assurance Manual: The QA Manual outlines how Chemtech plans, implements, and assesses the effectiveness of QA/QC control actions in the functioning of its analytical services.

Standard Operating Procedures (SOP's): An SOP is a written document, which details the method of an operation, analysis or action whose techniques and procedures are thoroughly prescribed, and which is accepted as the method for performing certain routine or repetitive task. SOP's are an integral part of consistent quality laboratory work.

14.1 DOCUMENT OVERSIGHT: The QA/QC Director is responsible for the document control system and maintains a current list of controlled documents, their location, and revision number. The QA/QC Director and Technical Director approve all newly released operating procedures and any revision to controlled documents.

14.2 DISTRIBUTION OF CONTROLLED DOCUMENTS: Controlled documents are signed by QA/QC Director and Technical Director. Copies of documents not signed or assigned a control number are considered uncontrolled documents. All departments supervisor receive a copy of the updated document control of the QA Manual, SOP's, and any other related documents. With the document, the supervisor receives a distribution document log that is signed and returned to the QA Office to be filed in a binder. This distribution log has the name of the document the printed name of the person receiving it, the signature and date of distribution.

A copy of current applicable SOP (analytical, administrative, and or procedural) and QA Manual is kept in each department. The original document of each outdated SOP or QA manual is retained in the QA/QC office.

- 14.3 DOCUMENTS REVISIONS:** All laboratory documents under document control are reviewed annually and revised as appropriate. A request to change a document is detailed on a "Document Change/Revision Form." For further details refer to the SOP for writing SOP's. The Technical Director and QA/QC Director review the requested change. The QA/QC Director is responsible for updating the appropriate document and Document Control List once a change has been approved.
- 14.4 STANDARD OPERATING PROCEDURES (SOP's):** Three (3) types of SOP's are used at Chemtech.
- 14.4.1 **Analytical SOP:** Provides stepwise instructions to an analyst on how to perform a particular analysis.
 - 14.4.2 **Administrative SOP:** Details the process of documentation of all administrative activities.
 - 14.4.3 **Procedural SOP:** Provides instructions and information for support activities in the laboratory.

Each SOP developed is assigned a unique document control number. SOP's are reviewed annually and updated if necessary. SOP's can be edited more frequently if systematic errors dictate a need for process change or the originating regulatory agency promulgates a new revision of the method.

SOP's are maintained in electronic read only format on Chemtech LIMS network server. All original hard copies are kept in the QA/QC office in official SOP file. A list of available SOPs is enclosed as Section 27.

- 14.5 LOGBOOK CONTROL:** Laboratory logbooks maintained at Chemtech are preprinted, numbered and include a title which identifies the purpose of the logbook. Each logbook indicates the instrument name, manufacturer, model number and a Chemtech identification number. The logbooks also include calibration and maintenance schedules. Extraction department activities are recorded in preparation logbooks. All quality control activities are recorded in the logbooks.

Active logbooks are maintained in the laboratory and retired logbooks are maintained in the QA/QC office. Laboratory staff may keep two recent sequentially dated logbooks of the same type in order to simplify review of recently conducted analysis.

- 14.6 ANALYTICAL DOCUMENT MAINTENANCE AND STORAGE:** Analytical data logbooks and clients reports are retained for five years unless specified otherwise. After five years, the analytical data and reports are

systematically destroyed. The data is retained for ten years for clients from Massachusetts.

Projects completed in the current year are maintained in the Report Production area. All other analytical data, reports, and logbooks are kept in the Document Storage Area. The electronically scanned data are archived on LIMS Server. Levels of authorization limit access to Document Storage Area and the LIMS Server.

In the event of an ownership change all appropriate regulatory agencies will be notified. As a condition of the ownership change the buyer will be requested to maintain all records and reports prior to the time of legal transfer.

In the event of a bankruptcy all appropriate regulatory agencies and clients will be notified. They will be given the opportunity to retrieve their records and reports within 30 days of notification. The records and reports will be destroyed after the 30 days notification period has expired.

14.7 PERSONNEL RECORDS: The QA/QC office maintains personnel folders for all analytical staff members. These folders document that analysts have received instructions for their job related activities including read receipts for SOP's and the QA Manual. Personnel records also include health and safety training received and a signed ethics agreement, in addition to technical training records, demonstration of capability, and precision and accuracy for the tests.

14.8 INTERNAL AUDITS: The QA/QC Director conducts annual internal audits of the laboratory activities to verify that the laboratory operations continue to comply with the requirements of the quality system and the NELAC standard. The internal audit program addresses all elements of the quality system, including the environmental testing activities.

When audit findings cast a doubt on the effectiveness of the operations or on the correctness or validity of the laboratory's environmental test results, corrective actions are taken. Clients are notified in writing if investigations show that the laboratory results may have been affected.

The project manager notifies the clients promptly, in writing, within 48 hours, of any event such as identification of defective measuring or test equipment that casts doubt on the validity of results given in any test report or amendment to a report.

The area of activity audited, the audit findings and corrective actions that arise from them are recorded. The management ensures that these actions are discharged within the agreed time frame.

Follow-up audit activities verify and record the implementation and effectiveness of the corrective action taken.

A review is conducted with respect to any evidence of inappropriate actions or vulnerabilities related to data integrity. Discovery of potential issues is handled in a confidential manner until such time as a follow up of evaluation, full investigation, or other appropriate actions have been completed and issues clarified. All investigations that result in finding of inappropriate activity are documented and include any disciplinary actions involved, corrective actions taken, and all appropriate notifications of client. All documentation of these investigation and actions taken are maintained for at least five years.

14.9 MANAGEMENT REVIEWS: The executive management conducts a review of the laboratory's quality system and environmental testing activities annually to ensure their continuing suitability and effectiveness, and to introduce necessary changes or improvements. The review takes account of:

- The suitability of policies and procedures
- Reports from managerial and supervisory personnel
- The outcome of recent internal audits
- Corrective and preventive actions
- Assessments by external bodies
- The results of interlaboratory comparisons or proficiency tests
- Changes in the volume and type of work
- Client feedback
- Complaints and other relevant factors, such as quality control activities, resources and staff training.

Findings from the management reviews and the actions that arise from them are recorded. The management ensures that those actions are carried out within an appropriate and agreed timescale. The records of review findings and actions are maintained.

15. TRACEABILITY OF MEASUREMENTS

Objective: To establish procedures for achieving traceability of measurements between a measured value and a national reference standard.

15.1 METRIC MEASUREMENTS – THERMOMETER AND BALANCE CALIBRATION: Verification and/or validation of balances and thermometers are performed with National Institute of Standards and Technology (NIST) traceable standards. All new thermometers used in the laboratory are calibrated prior to their use and all thermometers are calibrated annually. A tag attached to the calibrated thermometer documents the date it was calibrated and any correction factor if necessary. The calibration readings are recorded in a logbook. Test equipment used in the laboratory requiring temperature control is assigned a separate calibrated thermometer. The temperature is recorded daily in a temperature log for all required equipment. For further details refer to the “Thermometer Calibration SOP.”

Class S Calibration weights are used to calibrate all the balances used in the laboratory. Calibration checks are performed on a daily basis and recorded in a logbook. An annual balance calibration is conducted by a certified agency or organization. Calibration certificates include the location of the equipment, model, serial number, manufacturer and sensitivity information. This information is maintained in the QA/QC office.

15.2 CHEMICAL STANDARDS: All reference and working standards used for calibration must be NIST traceable and have a traceability certificate. Vendors provide a traceability certificate for all chemical standards, which include a lot number and expiration date. Working standards are prepared from the vendor traceable standards and are documented in the “Standard Preparation Logbook” and include the vendor lot number, dates of preparation, and preparer’s initials and date. Reagents are checked for contamination by analyzing the Method Blank. The certificates of traceability are affixed to the logbook to keep a permanent record. The vials, in which working standards are kept, are labeled with the lot number, preparation date, and expiration date. All reagents that do not have an expiration date from the manufacturer will be labeled as expiring 10 years from the date the reagent container was opened. All expired standards must be stored separately from the working standards.

16. CALIBRATION AND VERIFICATION OF TEST PROCEDURES

Objective: To ensure that instrumentation is performing to predetermined operational standard prior to the analysis of any samples and that the data are of known quality and appropriate for a given regulatory agency requirements must be established by the laboratory.

16.1 ORGANIC TEST PROCEDURES

Tuning Criteria for GC/MS Instruments: Each GC/MS system must pass the performance criteria for 4-Bromofluorobenzene (BFB) or Decafluorotriphenylphosphine (DFTPP) before any samples, standards or blanks can be analyzed. The tuning standard must meet the criteria specified in each analytical SOP. The chromatogram should not contain any baseline drift and the peaks should be symmetrical. Each GC/MS system must be tuned every 12 hours for SW846 methods, OLM04.2 and SOM01.1 analyses and 24 hours for 600 series methods.

Initial Calibration: Second source standards are obtained from a different manufacturer than the original standards, unless one is not available and are used to verify the initial calibration. An initial calibration is run on all instruments. Initial calibration is rerun when continuing calibration criteria cannot be met. The criterion for an initial calibration curve consists of a minimum of five points for SW846 Methods, OLM04.2 and SOM01.1 analyses and a minimum of three points for 600 series methods. The lowest standard analyzed must be equal to or less than the reporting limit, however, the five points are specified in the analytical SOP for CLP work. The response factor (RF) must be calculated for all compounds. The Relative Standard Deviation (RSD) is used to determine linearity. See individual SOPs for limits, criteria and allowances. The system performance check compounds (SPCC) are checked for SW 846 methods for a minimum average response factor. These compounds must meet the minimum response factors specified in each analytical SOP. If the minimum average response factor for any SPCC does not meet the criteria then corrective action is required and the GC/MS system recalibrated. The initial calibration verification must be successfully completed prior to running any samples.

If more stringent standards or requirements are included in a mandated test method or by regulation, Chemtech will demonstrate that such requirements are met. If it is not apparent which standard is more stringent, then the requirements of the regulation or mandated test method are to be followed.

Continuing Calibration Verification (CCV): The initial calibration curve for each compound of interest is checked and verified once every 12 hours for SW846 methods, OLMO4.2 and SOM01.1 analyses, and once every 24 hours for 600 series methods. This is accomplished by analyzing a midpoint calibration standard and verifying all continuing calibration criteria for a given method are met. Sample, blank, and QC standards cannot be analyzed unless a CCV meets method criteria. For further details refer to the individual SOP's.

Formulas:

$$RF = \frac{\text{Area of compound} \times \text{Concentration of ISTD}}{\text{Area of ISTD} \times \text{Concentration of compound}}$$

$$\% \text{ RSD} = \frac{SD}{RF} \times 100 \quad \text{where } SD \text{ is the standard deviation for all compounds and } RF \text{ is the average response factor}$$

When the %RSD exceeds criteria for any analyte, a linear regression of the instrument response versus the concentration of the standards is performed for 600 series and SW846 methods. The regression will produce the slope and intercept terms for a linear equation in the form

$$y = ax + b,$$

where:

- y = instrument response (peak area or height)
- a = slope of the line(also called the coefficient of x)
- x = concentration of the calibration standard
- b = intercept

- The use of linear regression may not be used as a rationale for reporting results below the calibration range demonstrated by the analysis of the standards.
- The regression calculation will generate a correlation coefficient(r).

In order to be used for quantitative purposes, the correlation coefficient must be greater or equal to 0.99

16.2 INORGANIC TEST PROCEDURES

Balance Calibration: All balances are calibrated each day with 3 class "S" weights covering the expected range of analysis and recorded in the balance calibration logbook. The non-reference weights are calibrated annually using reference weights and the results are recorded. The

accuracy of the reference weights is certified every five years. An outside contractor certifies each balance for accuracy once a year. A calibration sticker is placed on the balance and all associated information is maintained in the QA/QC department.

Titrant Standardization: All titrants used in the laboratory are standardized when opened to verify the titrant's normality in duplicate. These values are recorded in the appropriate analytical logbook. Each titrant must be within 90-110% of the known value. If not, the titrant is restandardized.

Instrument Calibration: An initial calibration is run on all instruments.

Mercury analyzer must be calibrated using a blank and 5 standards in graduated amounts that define the linear range of analysis. The correlation coefficient for the curve must be > 0.995 .

Spectrophotometric analyses are calibrated by using a blank and minimum 5 standards. The correlation coefficient must be > 0.995 , or as defined in the analytical SOP

If any calibration curve has a correlation coefficient < 0.995 , corrective action is taken and a new calibration curve is analyzed. Samples, blanks, and standards are not analyzed until the curve passes the criteria. For all calibrations the lowest standard analyzed must be equal to or less than the reporting limit.

Formula:

$$y = ax \pm b,$$

where:

y = instrument response (peak area or height)
a = slope of the line(also called the coefficient of x)
x = concentration of the calibration standard
b = intercept

Initial Calibration Verification (ICV): Second source standards are obtained from a different manufacturer than the original standards, whenever possible, or a different lot number from the same manufacturer is obtained, unless one is not available, and are used to verify the initial calibration. The ICV must be performed immediately after calibration of each metal and spectrophotometric analysis. This is accomplished by analyzing a midpoint calibration standard. The ICV must have a percent

recovery between 90-110% from the initial calibration curve for inorganic analyses and between 70-130% from the initial calibration curve for organic analyses. If the criterion is not met, corrective action must be taken. If the source of the problem can be determined after corrective action has been taken, a new calibration **MUST** be generated. Samples, blank, and QC standards cannot be analyzed unless the ICV meets method criteria. The initial calibration shall be verified and documented for every analyte at each wavelength used for analysis.

Continuing Calibration Verification (CCV): CCV analysis is performed every 10 samples for all FLAA and spectrophotometric analyses. The CCV must be analyzed at the beginning of the run and after the last analytical sample. The CCV concentration is at or near the midpoint of the calibration curve and is analyzed at every wavelength used for the analysis of each analyte. The CCV results must fall within the control limits of 85-115% of the true value or the control limits specified in each analytical SOP.

Thermometer Calibration: Every glass and electronic thermometer used in the laboratory is certified annually, metal thermometer is certified quarterly, infrared detection devices are verified every six months, against a NIST certified thermometer, which is traceable to the manufacturer. The certified reference thermometer is calibrated once every five years. All data is recorded in a logbook.

pH meter Calibration: Each pH meter is calibrated daily at pH of 4 and 7 and then checked with a pH 10 buffer solution. The calibration is recorded in the pH logbook along with the date and time of calibration. The calibration is checked every 3 hours during use and any adjustments are made. The pH meter slope is recorded monthly after calibration. Corrective action is taken if the slope falls outside the 95 to 105% range.

Spectrophotometer Wavelength Check: A wavelength check of each spectrophotometer is performed annually against Platinum/Cobalt standards and recorded in the maintenance logbook. If the wavelength does not meet the manufacturer's specified conditions, service is performed on the instruments.

Autoclave test strip: A temperature sensitive tape is used to verify the content of each autoclave run is processed.

Linear range Verification & Calibration for ICP - Metals: Linear range verification is performed for all ICP instruments. A series of

calibration standards are analyzed over a broad range of concentration and data from these analyses are used to determine the valid analytical range for the instrument. ICP instrument calibration is routinely performed using a single standard at a concentration within the linear range and a blank.

17. CALIBRATION, VERIFICATION, AND MAINTENANCE OF EQUIPMENT

Objective: To establish a system to ensure accurate calibration and maintenance of all laboratory equipment. All instrument maintenance activities must be recorded in the instrument logbooks. Instrument should be labeled as a dedicated piece of equipment when an instrument is used for a unique activity.

17.1 INSTRUMENT CALIBRATION: Instruments are calibrated according to the requirements set forth by the manufacturer or as dictated by the respective SOP's for the test method for which the instruments are used. The frequency and type of maintenance and calibration activity performed must be documented in the instrument logbook. If an instrument is out of working order, out of calibration or in need of repair, a tag is affixed to the instrument directing the analysts to use another instrument.

Support instruments are calibrated and verified using NIST traceable reference standards over the range of use. Balances, ovens, incubators, water baths, freezers, and refrigerators are checked daily if in use and readings are recorded in their respective logbooks.

17.2 INSTRUMENT MAINTENANCE: Some instruments are purchased with a service contract. If a service contract is purchased, it is recorded in the logbook along with a contact phone number. Calibration is necessary after instrument repair and prior to using any new instrument. Instrument servicing includes routine cleaning and the repair and/or replacement of any faulty parts. For further information refer to the instrument manual or the SOP for the test method the equipment is used.

17.3 CALIBRATION/MAINTENANCE LOG: Each instrument has an associated maintenance and calibration logbook. The interval maintenance/calibrations are guided by the manufacturer's instructions or as often as needed based on individual instrument performance. It may be modified by user's experience and frequency of use. The instrument is identified on the first page of the logbook. The logbook must document the calibration and maintenance of the instrument.

18. VERIFICATION PRACTICES

Objective: To establish a process for the verification practices in effect to assure adherence to the Quality Assurance Plan. A system for proficiency testing, use of reference materials, and internal QC schemes must be in place in order to ensure compliance.

18.1 PROFICIENCY TESTING (PT) PROGRAMS:

External PT Samples: Chemtech participates in NYSDOH Potable, Non Potable and Solid/Hazardous Categories and USEPA CLP. The results are used to evaluate the ability of the laboratory to produce accurate data. PT reports and raw data are retained in the laboratory for a minimum of five years. These records include results and supporting documentation of analyses of test samples and all related Quality Control analysis. The laboratory participates in the PT from other providers as well, e.g., client specific PT samples and Environmental Resources Association (ERA).

All PT samples are handled (i.e. managed, analyzed and reported) in the same manner as real environmental samples utilizing the same staff, methods as used for routine analysis of that analyte, procedures, equipment, facilities, and frequency of analysis. When analyzing a PT sample, the same calibration, laboratory quality control and acceptance criteria, sequence of analytical steps, number of replicates and other procedures are used as when analyzing routine samples.

Internal PT Samples: The QA/QC Director is responsible for administering an in-house blind check sample program, at QA/QC Director's discretion. Quality control samples are obtained from the EPA and from a private supplier. The known samples are blindly introduced into the system as a typical sample and analyzed as such. The results are reported to the QA/QC Director and evaluated.

This process allows for close monitoring of the accuracy of laboratory analyses on blind samples. If a problem is discovered, the QA/QC Director brings it to the attention of the Company President and Laboratory and Department Manager. With the assistance of the Technical Director, the cause of the problem is determined and appropriate corrective action is taken. Another blind sample is sent through the laboratory to confirm the problem has been resolved.

18.2 USE OF REFERENCE MATERIAL AND SUPPLIES: The laboratory purchases external reference samples from known vendors. All reference samples are certified and the laboratory maintains the manufacturer's Certificate of

Analysis on file. Pre-certified and pre-cleaned supplies are purchased for DoD Work. Each lot of supplies is analyzed to ensure that no target analytes are present at concentrations above $\frac{1}{2}$ Reporting Limit for DoD Work.

- 18.3 INTERNAL QUALITY CONTROL PROCEDURES:** The data acquired from QC procedures are used to judge the analytical quality of the data, to determine the need for a corrective action, and to interpret results after the implementation of corrective actions. Each test method SOP details the QC procedures to be followed.

Method Blank: A method blank is an aliquot of reagent water for aqueous samples and an aliquot of a solid matrix, whenever possible, carried through the entire sample preparation and analytical procedure. A method blank must not contain any target analyte(s) at concentrations that exceed method requirements. If it does, the source of contamination must be removed or minimized before proceeding with sample analysis.

Note: For DoD Work: A method blank must not contain any analyte at $\geq 1/2$ Reporting Limit and for common laboratory contaminants, no analyte must be present at \geq Reporting Limit. If method blank contamination does not meet criteria, reprocess the associated samples in a subsequent preparation batch, except when sample analysis results in non-detect. If no sample volume remains for reprocessing, then results will be reported with appropriate data qualifiers.

Laboratory Control Samples (LCS): A LCS is an aliquot of reagent water for aqueous samples and aliquot of a solid matrix, whenever possible, spiked with the target analyte list analyzed with each batch of samples to demonstrate the method accuracy within acceptance QC limits. The results are used to determine batch acceptance. Each method SOP includes detailed QC procedures and QC limits.

Sample Duplicates: Sample duplicates are performed to measure analytical precision. One duplicate sample must be analyzed from each group of samples of similar matrix type for each batch of 20 samples. If a duplicate result falls outside QC limits the original sample and the duplicate sample data are regarded as unreliable and may necessitate corrective action.

Matrix Spikes: Matrix spikes are analyzed at a frequency of one per twenty samples to measure analytical precision and accuracy of the specified matrix. If precision and accuracy are out of QC limits, corrective action is required.

Surrogate Spikes: Surrogates are organic compounds that are similar in behavior to the target analytes but are not found in nature. They are added to all blanks, samples, and standards except the tuning standards at a concentration specified in relevant SOP's. All surrogates must meet the recovery limits specified in each SOP. If any surrogate does not meet the limits, the sample must be reanalyzed.

Internal Standard: An internal standard (IS) is a known amount of standard added to a test portion of a sample as a reference for evaluating and controlling the precision and bias of the applied analytical method. Retention time (RT) for an IS is also compared to reference standards to assure that target analytes can be located by their individual relative RT. If the criteria for IS response or RT criteria are not achieved corrective action is required, e.g., recalibration and reanalysis.

Sample Analysis: The analyst is responsible for performing all QC requirements before and after analyzing the sample to make sure that required QC criteria are met. If the sample QC criteria are not met, the analyst must take corrective action to rectify any problems. If the analyst is not able to remediate the issue, then must notify the supervisor who will take necessary corrective action.

Storage Blank, GPC Blank and Blank Spike analysis: Storage and GPC Blank and GPC Blank Spikes are logged weekly every Monday, and monitored by the QA/QC Director. Storage Blanks are analyzed to ensure that cross-contamination has not affected the sample results. GPC Blank and Blank Spike samples are monitored to ensure efficiency of the GPC cleanup process.

Data Package Review: Data review is performed at four different levels to assure that all QC criteria are met. The analyst conducting the analysis performs first data review. Another analyst conducts a peer review and then the data is submitted for supervisory review. The final review of the data is conducted in the QC department before the data are released to the client. The QA/QC Director conducts a spot check review of the completed data packages. For further details refer to "Procedures for Audits and Data Review" section of this QA Manual and "Data Review/Validation" SOP.

Monitoring Quality Control Limits: Quality Control data generated from duplicate analysis and matrix spikes/matrix spike duplicates are monitored and plotted on Quality Control Charts. Chemtech utilizes the

Quality Control charts to identify data trends and assure that all tests are within control.

Chemtech records the theoretical or true value, then calculates and plots the mean value. In general, our warning limits are ± 2 Standard Deviations from the true value. Corrective action is taken when ± 3 Standard Deviations from the mean value are encountered. The Percent Recovery for all quality control samples must be within the limits stated in the method.

In addition to control chart limits, the laboratory uses limits of 75-125% and RPD limits of $\pm 20\%$ for inorganic analysis. For organic analysis %R limits and RPD limits as stated in applicable methods are used.

In control charts application, any points beyond the control limits indicate an out of control situation. When data points are out of statistical control, Chemtech investigates the source of the statistical perturbation. When an out-of-control situation occurs, analyses must be stopped immediately until the problem has been identified and resolved. The control charts are also utilized to identify trends, which can be checked and resolved before the system goes out-of-control.

Annual Quality Audits: An annual quality review of the system is important to ensure that laboratory management can continue to be confident that all measures are being taken to produce the highest quality of data and services. Annual audits, along with day-to-day data review, provide effective means for ensuring that QC activities are being implemented and that each analyst performs in a manner consistent with the quality system. The QA/QC Director conducts the audits, which are scheduled and announced in advance. For further details refer to the "Data Review and Internal Quality Audits" section of this manual.

19. LABORATORY MANAGEMENT POLICY FOR PERMITTED DEPARTURES FROM DOCUMENTED POLICIES AND PROCEDURES

Objective: To establish a process for an event which requires departure from the documented policies and procedures.

19.1 PROCEDURE: The Technical Director, Laboratory Manager, and QA/QC Director have the responsibility for ensuring that all personnel adhere to the laboratory's policies. A departure from documented policies is allowed if fully documented and approved by the appropriate level of authority. Documentation of the departure includes the reason for the departure, the effected SOP(s), intended results of the departure and the actual results.

If the departure affects data, the client is notified before conducting the analysis for approval. This departure is also noted in the case narrative of the final report.

If the Client requests a method modification that represents a significant departure from a reference method, the client must acknowledge in writing the authorization of the modification. The acknowledgment can be in the form of a contract modification or signing the quotation acceptance page.

The quotation details the analytical requirements including the test methods for the project, the acceptance page to be signed by the client, states that "the quotation accurately describes the analytical requirements".

20. CORRECTIVE ACTIONS FOR TESTING DISCREPANCIES

Objective: To establish a system for actions taken in response to non-conformance reports issued during performance, data review, or a client complaint. The goal of the corrective action program is to correct and monitor out-of-control events, which effect the integrity of analytical results. All conditions that adversely impact data quality must be identified and corrected.

20.1 OUT-OF-CONTROL EVENTS: Out-of-control situations are identified through analytical data validation procedures. An out-of-control event is a situation, which results in the development of unacceptable results. Once a problem has been identified, the QA/QC Director must contact the department supervisor using the Corrective Action (CA) report form. The supervisor must initiate investigation into cause, and must ensure that corrective action is implemented and is effective. The CA must be documented on the (CA) report form and filed in QA/QC office. Refer to Corrective Action SOP for details of the corrective action report forms.

There are many situations that present an out-of-control situation. Contamination, percent recoveries and duplicate variations that are not within control limits, and failing calibrations are examples of situations considered out-of-control. Whenever a situation of this nature is encountered, Chemtech diligently develops the appropriate corrective action.

20.2 CORRECTIVE ACTION PROCESS: A corrective action is a response to an out-of-control event, which brings back a system to produce acceptable results. Corrective actions taken to control an event can be: stop analytical work immediately; identify the symptom of the out-of-control event; identify the cause of the out-of-control event; implement a corrective action; confirm that a return to control has been achieved by analyzing reference samples; document entire process by completing a CA Report Form; complete and return the CA Report Form to the QA/QC office.

20.3 DEPARTURES FROM DOCUMENTED POLICIES AND PROCEDURES: Method SOP's provide QC acceptance criteria and specific protocols for corrective actions. When testing discrepancies are detected such as out-of-control QC, the analyst must follow the corrective action protocol as described in the applicable method SOP.

Technical Director and QA/QC Director first approve any corrective action taken that is not mentioned in the SOP. This action is recorded in the CA Report Form and is documented in the electronic database of

corrective actions. If necessary, the method SOP is then revised to incorporate the corrective action to make it a part of SOP for future uses.

- 20.4 CORRECTIVE ACTION MONITORING:** Laboratory Manager, Department Managers and QA/QC Director routinely monitor corrective actions implemented in the laboratory for effectiveness and to ensure that the deficiency has been completely removed from the system. If the deficiency still exists after a given period of time, the corrective action is reevaluated and modified.

21. REPORTING ANALYTICAL RESULTS

Objective: To ensure that the reported results are accurate, clear, objective, and unambiguous. The contents of the final report must include all necessary information and must be clear and understandable for the end-user.

21.1 REQUIRED DOCUMENTATION: All documentation used to approve and defend reported data must be collected and should be available and referenced so it can be found at any time it may be needed. Chemtech reports meet all applicable regulatory and client requirements. Electronic reports can be customized to meet the client specific requirements.

Documentation for Sample Identification: Includes at minimum sample identification, chain-of-custody, Field QC, if any and any other related documents.

Documentation of the Analytical Performance: Analytical method used and method detection limit (MDL, if required); Instrumentation (manufacturer, model, performance checks); Calibration data (initial and continuing); Detailed analytical work (raw data, run logs, standard and reagent preparation, calculations)

QA/QC Documentation and Data: Analysis of blanks; Source of QC check standards; Preparation of spike stock solution.

Checks and Validation of Analytical Data: QC review Checklists; Corrective actions (when applicable); Date and signature of approval of the reportable data of each parameter tested; Date and signature for approval of the final report.

21.2 SIGNIFICANT FIGURES IN ANALYTICAL REPORTS: Numerical data are often obtained with more digits than are justified by their accuracy and precision, therefore must be reported by the accuracy of the analytical method.

The number of significant figures refers to the number of digits reported for the value of a measured or calculated quantity indicating the accuracy and precision of the value. Nonzero integers always count as significant figures. Leading zeros are zeros that precede all the zero digits and do not count as significant figures. The zeros simply indicate the position of the decimal point.

Captive zeros are zeros between nonzero digits, and always count as significant figures. Trailing zeros are zeros at the right end of the number and are significant only if the number contains a decimal point. At Chemtech the results are reported to two significant figures.

When rounding a number carry at least one digit beyond the last significant digit throughout all calculations. Round the final result by changing all digits beyond the last significant digit to zeros; drop these zeros if they are to the right of the decimal point.

- 21.3 UNITS USED TO EXPRESS ANALYTICAL RESULTS:** Units used to express analytical results depend on the analytical method used, the concentration of the analytes, and the matrices of the sample analyzed.

The most common unit used to express results is milligrams per liter (mg/L), which is equal to parts per million (ppm) or milligrams per kilogram (mg/Kg). Other units used are microgram per liter ($\mu\text{g/L}$), which is equal to parts per billion (ppb) or micrograms per kilogram ($\mu\text{g/Kg}$).

- 21.4 REPORT CONTENTS:** The final report includes the following information:

Client Information: name and address of the client

Project Information: Client project name and location (if specified by the client)

Chemtech Reference Information: Chemtech project number

Evidence Receipt: Description and identification of samples, chain-of-custody

Case narrative (if applicable): Description and/or identification of analysis performed with a description of deviations from the SOP if required

Summary and Results: Analytical results supported by raw data, chromatograms, initial calibration and continuous calibration, etc.

Report is sequentially numbered and all raw data and chromatograms are initialed and dated by the analyst. The final report is signed and dated by the QC supervisor.

21.5 DATA COLLECTION , REDUCTION, REPORTING AND VALIDATION PROCEDURE

Data collection:

All data is collected from the instrumentation electronically. This data is then transferred electronically to a data processing computer where the data is revised and verified for method adherence and compliance.

For some analysis the data cannot be transferred electronically. The data is then entered manually to the reporting software and verified by a peer review.

Data reduction:

Analyst then processes the data and saves all instrument data collected in a designated folder in Mars (data storage server). The data is then brought electronically into the data reporting system where the data is reviewed against the method requirements and QC limits.

Data reporting:

Once the data is approved, the forms are printed. The data package is arranged with the necessary forms, depending on the method and client specifications. Once the data package is complete, the package is then brought to the Reporting Department for review and validation.

Data validation:

The first review is done in the lab by the analyst performing the analysis with the help of the reporting software (EISC), which contains all the method requirements.

The supervisor for the department performs a secondary review.

The third and last review is done at the reporting department where data reviewers go through the data package in detail and verify compliance with the method and client requirements.

22. DATA REVIEW AND INTERNAL QUALITY AUDITS

Objective: To design a process to assess compliance of laboratory activities with the operational requirements of the QA manual and to evaluate the performance of all analytical departments. The validation of data must be accomplished by a data review procedure.

22.1 DATA REVIEW: At Chemtech there are several stages for the data review/validation process. The analyst performing the analysis conducts the first data review. A department peer performs a secondary review. The supervisor reviews the data after the peer review. The QC/Report Production performs the final review.

Analyst Review: The analyst is responsible for ensuring that all work performed meets the specifications and criteria outlined in the Statement of Work. They are to double-check all aspects of their analyses, including instrumental conditions, QA/ QC limits, calculations, and compound identification. When manual integration's are performed, the raw data records shall include a complete audit trail for those manipulations. Raw data output showing the results of the manual integration's, a notation of the rationale for the manual integration, including the date and initials/signature of the person performing the manual operation must be included in the raw data file.

Peer Review: A qualified peer performs a technical data review, verifying the analysis logbook that the correct method was used, the accurate analytical sequence was employed, all QA/QC criteria were met, compounds were properly identified, and checked for standard, dilutions, and calculations. The supervisor signs the logbook following this review.

Supervisor Review: Supervisor performs a technical data review to ensure that proper analytical sequence was employed, all QA/QC criteria were met, compounds were properly identified and flagged if required, correct standard, dilutions, and calculations were made.

Quality Control/Report Production Review: The completed data is reviewed by the QC/Report Production. Sample information from the sample receiving documentation is compared to in-house laboratory information to ensure consistency. The data are checked for general completeness, compliance, and QA/QC requirements, and random calculations are performed. If a quality control measure is found to be out of control, and the results are to be reported, all samples associated with the failed quality control measure will be reported with the appropriate data qualifier(s).

If a defect is identified in the data package, that can be corrected before the data are released to the client, the data package is returned to the laboratory for corrections along with a CA report form. Immediate action is taken by the affected department to rectify the problem and corrected data package is returned to QC/Report Production office for review and final release of the data.

Spot Check Review by QA/QC Director: The QA/QC Director performs spot-check reviews on data packages before they are released to the client. He/she focuses on all elements of data deliverables including sample identification, sample custody documentation, analytical quality control, and client specifications and requirements.

- 22.2 INTERNAL QUALITY SYSTEM AUDITS:** Annual internal audits are conducted under the direction of the QA/QC Director. These audits are used to detect and correct any specific problems. The audit involves a thorough laboratory inspection to evaluate the following areas: adherence to all laboratory procedures as specified in applicable New Jersey, Pennsylvania, New York and other state regulations; verification of methodology; adherence to all method QC requirements; frequency of duplicates, spikes, blanks, and QC sample analyses; maintenance of documentation in adherence with good laboratory practices; and verification that laboratory equipment, supplies, and reagents are properly maintained. The internal audits also include the analyst qualifications and training documents.

A comprehensive audit checklist is used for the department to be audited based on the method SOP and includes the cycle of a sample analysis beginning from sample receiving till the disposal of the sample and the release of data to the client. Deficiencies are noted on the checklist and CA reports are issued to the area being audited.

Findings of the audit are documented and copies of the findings are given to the Company President, the Technical Director, the Laboratory Manager, and the Department Supervisor. A copy of the findings is also provided to the analyst. Any problems and their prospective resolutions are discussed among the QA/QC Director, Technical Director, and Department Supervisor. After an agreed upon time period, it is the responsibility of the QA/QC Director to ensure that the required corrective action has been implemented. All audit documents are kept on file by the QA/QC Director in the QA office.

23. Electronic Data

Objective: To establish a system to control, verify, validate and document computer software used by LIMS.

23.1 Software: To ensure that the software that is used to collect, analyze, process and or maintain LIMS Raw Data, SOP's are established, approved and managed for:

Testing and quality assurance methods to ensure that all LIMS software accurately performs its intended functions, including acceptance criteria, tests to be used, personnel responsible for conducting the tests, documentation of test results, and test review and approval.

Change control methods that include instructions for requesting, testing, approving, documenting and implementing changes. When indicated, change control methods shall also include reporting and evaluating problems, as well as implementing corrective actions.

23.2 Documentation: Documentation is established and maintained to demonstrate the validity of all software used in the LIMS and includes:

A description of the software and functional requirements; a listing of all algorithms and formulas; and as they occur, testing and quality assurance, installation and operation/enhancement, and retirement.

23.3 Security: SOP's are established to implement appropriate security procedures to assure the integrity of LIMS data are adequate.

23.4 Electronic Audit: The organics laboratory uses two different software packages to collect the data and two different software packages to produce the report. Both the volatiles and semi-volatiles departments use the combination of Hewlett Packard (HP) Chemstation/Enviroforms and EISC to collect and produce reports. GC volatiles only use TurboChrom software to process and quantitate the data. TurboChrom generates 3 separate files. The raw files contain no quantitation, only the output from the instrument. The .TXT files contain a process file, and the rpt. file contains a detailed report table. The raw file cannot be tampered with or changed. This file is protected by the software to preserve the original output. The PST/PCB data is collected on a different version of Chemstation and the EISC software is used to produce the reports. HP and EISC have set up security for the data itself and there is no way to effect any changes to the raw data. The quantitation is similarly secured by the software in that any data produced has information on it that can be used to determine its origin.

24. Glossary

1. Acceptance Criteria: specified limits placed on characteristics of an item, process, or service defined in requirement documents.
2. Analytical Detection Limit: the smallest amount of an analyte that can be distinguished in a sample by a given measurement procedure throughout a given confidence interval.
3. Analyst: the designated individual who performs the "hands-on" analytical methods and associated techniques and who is the one responsible for applying required laboratory practices and other pertinent quality controls to meet the required level of quality.
4. Audit: a systematic evaluation to determine the conformance to quantitative and qualitative specifications of some operational function or activity.
5. Calibration: to determine, by measurement or comparison with a standard, the correct value of each scale reading on a meter, instrument, or other device. The levels of the applied calibration standard should bracket the range of planned or expected sample measurements.
6. Chain of custody: an unbroken trail of accountability that ensures the physical security of samples and includes the signatures of all who handle the samples.
7. Confidential Business Information: Information that an organization designates as having the potential of providing a competitor with inappropriate insight into its management, operation or products.
8. Confirmation: verification of the identity of a component through the use of an approach with a different scientific principle from the original method. These may include, but are not limited to: second column confirmation; alternate wavelength, derivatization, mass spectral interpretation, alternative detectors or additional cleanup procedures.
9. Corrective Action: the action taken to eliminate the causes of an existing nonconformity, defect or other undesirable situation in order to prevent recurrence.
10. Data Audit: a qualitative and quantitative evaluation of the documentation and procedures associated with environmental measurements to verify that the resulting data are of acceptable quality.
11. Demonstration of Capability: a procedure to establish the ability of the analyst to generate acceptable accuracy.

12. Document Control: the act of ensuring that documents and revisions are proposed, reviewed for accuracy, approved for release by authorized personnel, distributed properly and controlled to ensure use of the correct version at the location where the prescribed activity is performed.
13. Holding Times: the maximum times that samples may be held prior to analysis and still be considered valid or not compromised.
14. Laboratory: a defined facility performing environmental analyses in a controlled and scientific manner.
15. Laboratory Control Sample (lab fortified blank, blank spike, QC check sample): a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes from a source independent of the calibration standards or a material containing known and verified amounts of analytes. It is generally used to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
16. Manager: the individual designated as being responsible for the overall operation, all personnel, and the physical plant of the environmental laboratory.
17. Method Detection Limit : the minimum concentration of a substance an analyte that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.
18. NELAC standards: the plan of procedures for consistently evaluating and documenting the ability of laboratories performing environmental measurements to meet nationally defined standards established by the National Environmental Laboratory Accreditation Conference.
19. Nonconformance: An indication or judgement that a product or service has not met the requirements of the relevant specifications, contract or regulation; also the state of failing to meet the requirements.
20. Precision: the degree to which a set of observations or measurements of the same property, obtained under similar conditions, conform to themselves; a data quality indicator.
21. Preservation: refrigeration and/or reagents added at the time of sample collection to maintain the chemical and/or biological integrity of the sample.

22. Proficiency testing: a means of evaluating a laboratory's performance under controlled conditions relative to a given set of criteria through analysis of unknown samples provided by an external source.
23. Quality Assurance: an integrated system of activities involving planning, quality control, quality assessment, reporting and quality improvement to ensure that a product or service meets defined standards of quality with a stated level of confidence.
24. Quality Assurance Plan: a formal document describing the detailed quality control procedures by which the quality requirements defined for the data and decisions pertaining to a specific project are to be achieved.
25. Quality Control Sample: an uncontaminated sample matrix spiked with known amounts of analytes from a source independent from the calibration standards. It is generally used to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
26. Quality System: a structured and documented management system describing the policies objectives, principles, organizational authority, responsibilities, accountability and implementation plan of an organization for ensuring quality in its work processes products and services. The quality system provides the framework for planning, implementing, and assessing work performed by the organization and for carrying out required QA and QC.
27. Raw data: any original factual information from a measurement activity or study recorded in a laboratory notebook, worksheets, records memoranda, notes, or exact copies thereof that are necessary for the reconstruction and evaluation of the report of the activity or study.
28. Record Retention: The systematic collection, indexing and storing of documented information under secure conditions.
29. Reference Method: a method of known and documented accuracy and precision issued by an organization recognized as competent to do so.
30. Reporting Limit: A specific concentration at or above the lower quantitation limit that is reported to the client with confidence. It is often defined on a project-specific basis. If set by the client below the lower quantitation limit, method modification is required or the client will be required to accept the lowest technically valid value that can be provided by the laboratory.
31. Standard Operating Procedures: a written document which details the method of an operation, analysis or action whose techniques and procedures are thoroughly

prescribed and which is accepted as the method for performing certain routine or repetitive tasks.

32. Technical Director: individuals who has overall responsibility for the technical operation of the environmental testing laboratory.
33. Traceability: the property of a result of a measurement whereby it can be related to appropriate standards, generally international or national standards, through an unbroken chain of comparisons

25. References

1. ISO/IEC DIS 17025: 1990. General requirements for the competence of calibration and testing laboratories.
2. NELAC, Program Policy and Structure, July, 2003.
3. NELAC, Quality Systems, July, 2002.
4. DOD Quality Systems Manual for Environmental Laboratories Version 1 October 2000

26. Resume of Key Personnel and Certification list

26.1 Certification List

STATE	STATUS	LABORATORY ID	Expiration Date	Certification Categories
NJ-NELAP	Certified	20012	30-Jun-08	DW, WW, SHW
NY-ELAP	Certified	11376	1-Apr-09	DW, WW, SHW, AIR
NY-ASP	Certified	11376	1-Apr-09	DW, WW, SHW, AIR
CONNETICUT	Certified	PH-0649	30-Jun 09	DW, WW, SHW
MARYLAND	Certified	296	30-Jun-08	DW
MASSACHUSETTS	Certified	M-NJ503	30-Jun-08	WW
Maine	Certified	NJ0503	1-Sep-09	DW, WW, GRO,DRO
OKLAHOMA	Certified	9705	31-Aug-08	WW
PENNSYLVANIA	Certified	68-548	31-Jan-09	DW
RHODE ISLAND	Certified	LAO00259	30-Jun-08	DW,WW,,SHW, Air
USDA	Certified	S-47647	30-Sep.-10	Soil Permit
USEPA	CLP(ILM05.4)	CHEMED	N/A	metals, cyanide
USEPA	CLP(SOM1.2)	CHEMED	N/A	VOC,SVOC,PEST,PCB

26.2 Key Employee Resume

NAME: Krupa Dubey	POSITION: QA/QC Director
Dates: Feb. 2006 – Present	
<p>RESPONSIBILITIES: Enforcement of all QA/QC requirements as per EPA, CLP protocols and all state regulations, Internal Audit of the lab, write and annually update Standard Operating Procedures, Assure that lab QA/QC practices are kept by conducting Internal Audit Annually, Verify all QC Client Contract compliance and Screening, Provide clients with technical support upon request, Development and maintenance of corrective action reports, regulatory and client document review, monitor external assessments, monitor compliance of lab systems with quality system guidelines established by federal and state agencies.</p>	

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>LTM Medical College Mumbai, India</i>	<i>1991</i>	<i>1993</i>	<i>Medical Lab Technology</i>	<i>-----</i>	<i>1993</i>
<i>Khalsa College Mumbai, India</i>	<i>1988</i>	<i>1991</i>	<i>Microbiology</i>	<i>-----</i>	<i>BS, 1991</i>

Professional Experience

<p>Name & Address of Employer: CHEMTECH Mountainside, NJ 07092</p>	<p>Responsibilities included: Supervision of data deliverable production, data review of GC/MS Volatile and Semi-Volatile, Pesticides, PCBs, Herbicides, Metals and Wet Chemistry based on SW-846, EPA CLP and 40 CFR methodologies, Verify all QC requirements, contract compliance, screening and requirements.</p>
<p>Title of Position & Dates: <i>QC Supervisor;</i> <i>11/2002 – 01/06</i></p>	
<p>Name & Address of Employer: CHEMTECH Mountainside, NJ 07092</p>	<p>Responsibilities included: Supervision of GC/MS analysts, production scheduling and co-ordination of work flow, perform and review GC/MS analyses using SW-846, EPA CLP methodologies and interpretation of mass spectra, perform SIM analysis, plot control charts for establishing QC acceptance criteria, conduct assessments, precision and accuracy, proficiency, technical data review, troubleshoot instrument operations and other technical problems.</p>
<p>Title of Position & Dates: <i>GC & GC/MS Volatiles and Extractables Supervisor;</i> <i>5/2000 – 11/2002</i></p>	

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 73 of 168

Name & Address of Employer: CHEMTECH 205, Campus Plaza 1, Edison, NJ	Responsibilities included: Analysis of water, wastewater, soil, and air samples for volatile and semivolatile organics, pesticides and PCBs using SW846, CLP, and USEPA methodologies. Daily maintenance of instruments. Data reduction.
Title of Position & Dates: <i>GC/MS Analyst,</i> 5/1999 – 5/2000	
Name & Address of Employer: CHEMTECH Consulting 205, Campus Plaza 1, Edison, NJ	Responsibilities included: Analysis of water samples for Bacteria Count, Total Coliform, and <i>E.coli</i> , Fecal Coliform, and Standard Plate Count using Standard Methods and EPA procedures. BOD, COD, analyses. Preparation of agar media and standard solutions.
Title of Position & Dates: <i>Microbiologist,</i> 4/1998 – 4/1999	
Name & Address of Employer: Medline Pathology Laboratory	Responsibilities included: Supervision of Medical Laboratory technologists; scheduling workflow. Microbiological detection of infectious diseases, serological testing, antibiotic testing, review of laboratory procedures.
Title of Position & Dates <i>Lab Manager,</i> 3/95 – 4/97	
Name & Address of Employer: Shree Hospital & ICCU	Responsibilities included: Agar plating, isolation of bacteria; plate count, bacteria count; preparation of agar media; antibiotic sensitivity testing.
Title of Position: <i>Medial Laboratory Technologist,</i> 3/93 – 2/95	

Professional Skills

- Troubleshooting of GC/MS, Tekmar autosampler
- Data package production using Enviroforms
- Acquisition and analysis of samples using Enviroquant and RTE software
- ASP Deliverables, CLP Deliverables

Computer Skills

- MS Office – MS Word, MS Excel, MS PowerPoint
- Use of Environmental Data Reduction Software – Enviroquant & Enviroform

NAME: Deepak Patel	POSITION: Extractions Supervisor
DATES: Nov 2003-Present	
RESPONSIBILITIES: Supervision of Extractions department, schedule and coordinate workflow for the extractions analysts. Perform extractions on samples for BNA and Pesticide/PCB analyses. Updating LIM system. Review and updating of Extractions SOPs.	

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>Polytechnic of NY</i>		1975	<i>Chemical Engineering</i>	<i>Environmental</i>	<i>MS 5 / 75</i>
<i>Polytechnic of NY</i>		1976	<i>Management</i>	<i>Business</i>	<i>MS 5/ 77</i>

Professional Experience

Name & Address of Employer: NYCTA (MTA) New York, NY	Responsibilities included: Monitor Installation of 3 elevators.
Title of Position: <i>Construction Supervisor II</i>	
Name & Address of Employer: CHEMTECH Edison, NJ	Responsibilities included: Supervision of Extractions department, schedule and coordinate workflow for the extractions analysts. Perform extractions on samples for BNA and Pesticide/PCB analyses. Updating LIM system. Review and updating of Extractions SOPs.
Title of Position: <i>Organic Extraction</i>	

Professional Skills

OSHA- training- 8 hour course

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 75 of 168

NAME: Rajesh Parikh**POSITION: Extraction analyst****DATES: June 2003-Present**

RESPONSIBILITIES: Extract samples for BNA, Pesticides, PCBs, Herbicides and TPH based on EPA 600 series, SW 846 and CLP methodologies. Assist supervisor with SOPs updates. Update LIMS system. Troubleshoot instrument. Prep and Analysis of Oil and Grease based on method SW 1664.

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>University of Baroda, India</i>	1967	1971	<i>Chemistry</i>	-----	<i>BS 1970</i>

Professional Experience

Name & Address of Employer: Godak Mills India	Responsibilities included: Testing and analysis of raw materials and Dyes. Analysis of In-process and finished products.
Title of Position: <i>Chemist</i> <i>Jan 1977-Nov 2002</i>	
Name & Address of Employer: Calico Mills India	Responsibilities included: Testing and analysis of raw materials and Dyes. Analysis of In-process and finished products.
Title of Position: <i>Chemist</i> <i>Jan 1972-Dec 1976</i>	

Computer Skills

Microsoft Office 2000-Excel, Windows

NAME: Danuta Roguska	POSITION: Metals analysis Supervisor
Dates: 5/99 to Present	
<p>RESPONSIBILITIES: Supervision of Metals and General Chemistry departments. Flow of work; analyses of samples within holding times, scheduling of work with the analysts, verify the test results performed by analysts. Technical data review of analyses (ICP data run – Methods 6010, 200.7, CLP, Hg data run – Methods 7470, 7471, 245.1, CLP. Report preparation and handle centralize computer system for analytical reports.</p>	

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>Warsaw University Warsaw, Poland</i>	<i>1976</i>	<i>1981</i>	<i>Chemistry</i>	<i>-----</i>	<i>BS; 1981</i>

Professional Experience

<p>Name & Address of Employer: Analab Inc. 205 Campus Plaza 1, Edison, NJ 08837</p>	<p>Responsibilities included: Analyses of General Chemistry and Metals parameters including cyanide, nitrate-nitrite, TKN, TDS, TSS, BOD, COD, TOC, hardness, etc. of wastewater, drinking water, soil, and sludges. Reporting of data as required.</p>
<p>Title of Position & Dates: <i>Laboratory Chemist;</i> <i>9/90 to 5/99</i></p>	
<p>Name & Address of Employer: Analab, Inc.</p>	<p>Responsibilities included: Phenolics distillations, titrations, PHC, reactive CB (EPA Method 9010, 9012), pH, TSS, TDS, COD, TCLP leaching for solids, semisolids, drinking-, ground-, and wastewater.</p>
<p>Title of Position & Dates: <i>Laboratory Chemist;</i> <i>9/90 to 4/92</i></p>	
<p>Name & Address of Employer: Analab Inc. 205 Campus Plaza 1, Edison, NJ</p>	<p>Responsibilities included: Running AA spectroscope, Flame PE 1100B; AA spectroscope, Furnace PE 5100 HGA & PE4100; Cold vapor Mercury analysis; regular maintenance of AA spectroscopes; analytical reporting.</p>
<p>Title of Position & Dates: <i>Analyst;</i> <i>4/92 to 8/99</i></p>	
<p>Name & Address of Employer: Analyst Chem Laboratory Parczew, Poland</p>	<p>Responsibilities included: Wet Chemistry Analytical Methods; procedures – distillation, acid/base titrations, PHC, reactive CN, pH, TSS, TDS, COD.</p>
<p>Title of Position: <i>Analyst;</i> <i>7/83 to 9/86</i></p>	

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 77 of 168

Name & Address of Employer: Debowa Kloda Middle School Debowa Kloda, Poland	Responsibilities included: Taught Chemistry and Physics; Grades 7-9.
Title of Position: <i>Science Teacher;</i> <i>9/81 – 6/83</i>	

Professional Skills

- Experience in EPA methods, NYSDOH, NJDEP, and CLP requirements.
- Hands on experience for running ICP/Hg analyzer, TOC, Lachate, UV spectrophotometer, etc.
- Troubleshooting of above-mentioned instruments.

Computer Skills

- MS Office – MS Word, MS Excel, MS PowerPoint

CHEMTECH

Resume and Certification List
 Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19
 Page 78 of 168

NAME: James Moore	POSITION: General Chemistry Analyst
Dates: 03/08 to Present	
RESPONSIBILITIES: Perform General Chemistry analysis as per SW846 protocol. Update LIMS system. Troubleshoot instruments.	

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>Cook College, Rutgers</i>	<i>2002</i>	<i>2004</i>	<i>Env. Science</i>	<i>-----</i>	<i>BS; 2004</i>

Professional Experience

Name & Address of Employer: Cook College	Responsibilities included: Manage surface water lab, operate Lachat Quikchem FIA autoanalyzer, test surface water for total coliforms, write SOPs.
Title of Position & Dates: <i>Graduate Assistant</i> 07/05 – 01/08	
Name & Address of Employer: Cook College	Responsibilities included: Operated autolab to measure nutrients, entered and maintained data in database, prepared media, monitored growth of species.
Title of Position & Dates: <i>Research Assistant</i> 09/03 – 06/05	
Name & Address of Employer: Sussex County community college	Responsibilities included: Set-up lab assignments, assist and prepare media.
Title of Position & Dates: <i>Laboratory Assistant</i> 09/98 – 05/02	

Computer Skills

Microsoft Windows, EISC reporting software and Internet.
--

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 79 of 168

NAME: Jaswal Sarabjit**POSITION: Inorganics Analyst****Dates: 12/89 to Present**

RESPONSIBILITIES: Supervision of Metals and General Chemistry departments. Flow of work; analyses of samples within holding times, scheduling of work with the analysts, verify the test results performed by analysts. Technical data review of analyses (ICP data run – Methods 6010, 200.7, CLP, Hg data run – Methods 7470, 7471, 245.1, CLP. Report preparation and handle centralize computer system for analytical reports.

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>Punjab University, India</i>	<i>1976</i>	<i>1981</i>	<i>Chemistry</i>	<i>-----</i>	<i>BS; 1981</i>

Professional Experience

Name & Address of Employer: CHEMTECH 205 Campus Plaza 1, Edison, NJ 08837	Responsibilities included: Analyses of General Chemistry and Metals parameters including cyanide, nitrate-nitrite, TKN, TDS, TSS, BOD, COD, TOC, hardness, etc. of wastewater, drinking water, soil, and sludges. Reporting of data as required.
Title of Position & Dates: <i>Laboratory Chemist;</i> <i>7/88 to 12/89</i>	
Name & Address of Employer: JCT Mills (Nylon Plant).	Responsibilities included: Analysis of General Chemistry methods.
Title of Position & Dates: <i>Laboratory Chemist;</i> <i>1/83 to 11/85</i>	

Professional Skills

- Experience in EPA methods, NYSDOH, NJDEP, and CLP requirements.
- Hands on experience for running ICP/Hg analyzer, TOC, Lachate, UV spectrophotometer, etc.
- Troubleshooting of above-mentioned instruments.

Computer Skills

MS Office – MS Word, MS Excel, MS PowerPoint

NAME: Ugochukwu Amadioha POSITION: GC Extractables Supervisor

DATES : MAY 06 – PRESENT

RESPONSIBILITIES: Supervision of Pesticide/PCB department, co-ordination of workflow in the department, analysis of samples within the specified holding times, scheduling the work with the analysts, and training of the new employees.

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>COLLEGE OF NEW JERSEY</i>		<i>2003</i>	<i>Biology</i>	<i>-----</i>	<i>BS 2003</i>

Professional Experience

Name & Address of Employer: CHEMTECH Mountainside, NJ 07092	Responsibilities included: VOC water, soil and gases analysis by method EPA 600 and SW846. Operate Archon autosampler, GC FID. Prepare standards. Follow GLP. Daily calibration of lab scales, refrigerators, autoclaves.
Title of Position: <i>GC and GC/MS analyst;</i> <i>10/04-05/06</i>	
Name & Address of Employer: Roche Molecular systems Branchburg, NJ	Responsibilities included: Support manufacturing of Qualitative standards and Internal Controls for Polymerase Chain Reaction kits. Operate PCR instruments and Real Time PCR. Review controlled testing and manufacturing documents.
Title of Position: <i>PCR Control Scientist;</i> <i>06/05-02/06</i>	
Name & Address of Employer: Medco Health Solution, LLC Parsippany, NJ	Responsibilities included: Educate members about prescription drug benefits managed by Medco Health and on plan attributes as it relates to copay, deductible, Out of Pocket expenses and CAP.
Title of Position: <i>Customer Services Representative;</i> <i>10/03-08/04</i>	

Professional Skills

Lab Techniques in Cell and Molecular Biology and Genetics: PAGE and Agrose Gel Electrophoresis. Protein purification, DNA isolation, Column Affinity Chromatography, PCR and Restrictive Fragment Analysis, Pour Plating, Colony Isolation, and Aseptic techniques.

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 81 of 168

NAME: Jonghun Jung**POSITION: GC Semivolatile Analyst****DATES: June 2004- Present**

RESPONSIBILITIES: Perform analysis on samples for Pesticide/PCB analyses. Updating LIM system. Review and updating of GC Semi Volatile SOPs. Review and finalize data before Supervisor review

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>University of Seoul Seoul, South Korea</i>	<i>1993</i>	<i>1996</i>	<i>Physics</i>	<i>-----</i>	<i>BS 1996</i>
<i>New York University, New York NY</i>	<i>1997</i>	<i>1999</i>	<i>English language and liberal arts</i>	<i>-----</i>	<i>Certificate 1999</i>
<i>New York University, New York, NY</i>	<i>1999</i>	<i>2002</i>	<i>Environmental Health Science</i>	<i>-----</i>	<i>MS 2002</i>
<i>College of Staten Island (CUNY)</i>	<i>2002</i>	<i>Present</i>	<i>Environmental Science</i>	<i>-----</i>	<i>Expected MS 2005</i>

Professional Experience

Name & Address of Employer: Chemtech 284 Sheffield Street	Responsibilities included: Updating LIM system. Review and updating of Metals data per ILM05.3. Review and finalize data before Supervisor review. Generate reports and assist QC on the final data report.
Title of Position: <i>Metals data processing Feb, 2004- June 2004</i>	
Name & Address of Employer: College of Staten Island Staten Island, New York	Responsibilities included: Laboratory technician in the Engineering sciences and Physics department.
Title of Position: <i>Lab Tech 2002-2003</i>	

Name & Address of Employer: NY University Graduate School of Arts and Science New York, NY	Responsibilities included: Teaching assistant in environmental hygiene measurement course. Worked at WTC-ground zero for air sampling and monitoring. Analyzed samples using GC instrument.
Title of Position: <i>Teaching assistant</i> 1999-2002	

Professional Skills

Indoor Air Quality Inspection, Environmental pollutants measurements, Gas Chromatography, microbalance, fluorescence spectroscopy and AA spectrophotometry.

Computer Skills

Microsoft Office, EISC

Other Achievements or Awards

<i>Travel Award to participate in Asian Aerosol Conference</i>
--

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 83 of 168

NAME: Himanshu N. Prajapati**POSITION: GC/MS Extractables Supervisor****Dates: 10/2002 – Present**

RESPONSIBILITIES: Responsible for review of CLP packages, maintenance and troubleshooting of instruments, training other lab personnel in Semi-Volatile analysis and instrumentation. Prepare and analyze proficiency samples. Schedule workflow for other analysts.

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>L.D. College of Engineering Ahmedabad, Gujarat, India</i>	<i>1993</i>	<i>1997</i>	<i>Chemical Engineering</i>	<i>NA</i>	<i>B.E. Chemical Engineering</i>
<i>Stevens Institute of Technology NJ, USA</i>	<i>1999</i>	<i>-</i>	<i>MS Chemical Engineering</i>	<i>NA</i>	<i>-----</i>

Professional Experience

Name & Address of Employer: CHEMTECH 284 Sheffield Street Mountainside, NJ 07092	Responsibilities Included: Assist supervisor with all aspects of data deliverable production, review data based on SW-846, CLP and 40 CFR methodology, depending on project requirement. Verify all QC requirements, contract compliance, screening and method requirements.
Title of Position: <i>QC Analyst;</i> <i>9/04-12/04</i>	
Name & Address of Employer: CHEMTECH 284 Sheffield Street Mountainside, NJ 07092	Responsibilities Included: Perform BNA analysis as per EPA 600 series, SW 846 and CLP protocols. Assist supervisor with SOPs updates. Update LIMS system. Troubleshoot instrument.
Title of Position: <i>GC/MS Analyst;</i> <i>04/00-10/02</i>	
Name & Address of Employer: G.S.F.C Surat, Gujarat, India	Responsibilities included: Supervising a continuously running plant of plastic manufacturing. Testing of raw materials and final products.
Title of Position: <i>Shift Engineer;</i> <i>02/98-11/98</i>	

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 84 of 168

Name & Address of Employer: ECT Engineers & Associated Ahmedabad, Gujarat, India	Responsibilities included: Surveying of company/factory for energy conservation. Implementing energy conservation plans.
Title of Position: <i>Energy Saving Engineer;</i> 10/97-2/98	

Professional Skills

Proficient with the analysis of samples for inorganic parameters.

Computer SkillsMS Office- Word and Excel
Data Processing software

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 85 of 168

NAME: Divyajit Mehta POSITION: Technical Director/Chief Operating Officer**Dates: 1989 – Present**

RESPONSIBILITIES: Responsible for all technical efforts of the Laboratory to meet all terms and conditions of EPA contract as well as all of CHEMTECH's clients. Experienced in the analysis of inorganic soil and water samples according to the requirements of the EPA Superfund, Contract Laboratory Program. Hands on experience in the use of the modern analytical instrumentation and wet chemical techniques. Currently responsible for the overall technical performance of the laboratory. Review the technical and QA/QC requirements during the analysis. Oversees the laboratory operations and compliance with all regulations.

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>Gujarat University INDIA</i>	<i>1979</i>	<i>1982</i>	<i>CHEMICAL ENGINEERING</i>	<i>-----</i>	<i>BS, 1982</i>
<i>NJIT</i>	<i>1984</i>		<i>CHEMICAL ENGINEERING</i>	<i>-----</i>	<i>INCOMPLETE</i>

Professional Experience

Name & Address of Employer: CHEMTECH MOUNTAINSIDE, NJ	Responsibilities included: Oversee overall technical laboratory performance and compliance with regulations and contracts.
Title of Position: <i>CHIEF OPERATIONS/LABORATORY DIRECTOR</i> 1/99-Present	
Name & Address of Employer: CHEMTECH ENGLEWOOD, NJ	Responsibilities included: Responsible for the technical efforts of the inorganic department and compliance with EPA contract
Title of Position: <i>INORGANIC MANAGER</i> 1/89 – 1/99	

Professional Skills

Hands on experience in a variety of instruments such as GC/MS, ICP, GC and various Wet chemistry techniques. Various training such NELAC training, instrument training and other seminars related with the Analytical procedures and instrumentation.

Computer Skills

Computer literate- MS Office- MS Word, MS Excel, MS Power Point
Use and design of Environmental Data Reduction Software
Enviroquant & Enviroforms, LIMS- Sample Master, EISC data reduction Software.

Other Achievements or Awards

Divyajit has completed various training in the Environmental field. Examples of these are: Inorganic Data validation training, Region II Organic data validation, Sample Master LIMS advance course, ICP training course and others

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 87 of 168

NAME: Mildred V. Reyes**POSITION:** QC Supervisor**DATES:** Feb.2006-Present

RESPONSIBILITIES: Supervision of data deliverable production, data review based on SW-846, CLP and 40 CFR methodologies. Verify QC requirements, contract compliance and screening requirements.

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
UNIVERSITY OF PUERTO RICO	1982	1987	Biology	-----	BS 1987

Professional Experience

Name & Address of Employer: CHEMTECH Mountainside, NJ 07092	Responsibilities included: Enforcement of QA/QC requirements, Internal Audit of the lab, Write and update SOP, Verify QC Client Contract Compliance and Screening, Provide clients with technical support.
Title of Position: <i>QA/QC Director</i> 2002-2006	
Name & Address of Employer: CHEMTECH Mountainside, NJ 07092	Responsibilities included: Supervision of all aspects of data deliverable production, data review of GC/MS Volatile and Semi volatile, Pesticides, PCBs, Herbicides, Metals and Wet Chemistry based on SW 846, EPA, CLP and 40 CFR methodologies. Verify all QC requirements, contract compliance, screening and requirements.
Title of Position: <i>QA/QC Supervisor</i> 1999-2002	
Name & Address of Employer: Analab/ICM Division 205 Campus Plaza 1, Edison, NJ 08837	Responsibilities included: Supervision of four GC analysts; coordination of work flow and schedule; technical review of all data generated for GC Volatile, Pest, PCB Herbicides analysis; instrument trouble shooting and other technical problems.
Title of Position: <i>GC, Supervisor</i> 1995-1999	

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 88 of 168

Name & Address of Employer: Cycle Chem, INC Elizabeth, NJ	Responsibilities included: Perform daily lab analysis on disposal material based on SW 846 and 40 CFR requirements. Analysis included PCB analysis, Metals and Wet Chemistry; inventory of all incoming samples
Title of Position: <i>Production Chemist</i> 1993-1995	
Name & Address of Employer: Safety Kleen, Linden, NJ	Responsibilities included: Senior Technician overseen laboratory operations during night shift. Perform daily lab analysis, which included Volatile Organic analysis, PCB analysis, and Wet Chemistry.
Title of Position: <i>Laboratory Technician</i> 1990-1993	

Other Achievements or Awards

Environmental Laboratories Seminar
Internal Assessment Training

Professional Skills

GC Volatile, Pesticides, PCBs, Herbicides analysis by GC using EPA, SW 846 and 40 CFR methodology.
ASP and CLP deliverable.

Computer Skills

MS Office- MS Excel, MS Word, MS Power Point
Use of Environmental data reduction software

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 89 of 168

NAME: Kalpana Raythatha	POSITION: Data Reviewer
Dates: Nov 2002 – Present	
RESPONSIBILITIES: Data deliverable production, data review of GC/MS Volatile, GC/MS Semivolatile, Pesticides, PCB, Herbicides, Metals and Wet Chemistry based on SW-846, CLP and 40 CFR methodology depending on the project requirement. Verify all QC requirements; contract compliance, screening and method requirements. Verify client requirements were met. Assist on data assembly for final data package.	

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>HK Arts College Gujarat University, India</i>	<i>1973</i>	<i>1977</i>	<i>Arts</i>	<i>Statistics</i>	<i>BA 1977</i>

Professional Experience

Name & Address of Employer: CHEMTECH 284 Sheffield Street Mountainside, NJ 07092	Responsibilities included: Review data submitted for reports for Metals based on SW 846, EPA and CLP methodology. Process raw metals data into reporting format and integrate the sections of data for final report. Assist the QC department with any data corrections.
Title of Position & Dates: <i>Metals Report Production</i> <i>May 00-Nov 2002</i>	
Name & Address of Employer: Chemtech <i>Englewood, NJ</i>	Responsibilities included: Review data submitted for reports for Wet Chem based on SW 846, EPA and CLP methodology. Entered data in the LIMS System and integrate the sections of data for final report. Assist the QC department with any data corrections.
Title of Position & Dates: <i>Wet Chemistry Report Production</i>	
Name & Address of Employer: Chemtech <i>Englewood, NJ</i>	Responsibilities included: Maintained hard copy and electronic file and records of analytical data. Responsible for arranging pick up and delivery of Data Packages by interfacing Fedex, UPS and courier.
Title of Position & Dates: <i>Wet Chemistry Report Production</i>	
Name & Address of Employer: S. Goldberg & Co. Hackensack, NJ	Responsibilities included: Worked on molding production line.
Title of Position & Dates: <i>Production Operator</i>	

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 90 of 168

Professional Skills

Familiar with most Quality Control/Quality Assurance procedures.
Proficient in most General Chemistry test procedures.

Computer Skills

MS Office – MS Word, MS Excel

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 91 of 168

NAME: Shelly Guha**POSITION: Data Reviewer****Dates: Feb. 2006 – Present**

RESPONSIBILITIES: Data deliverable production, data review of GC/MS Volatile, GC/MS Semivolatile, Pesticides, PCB, Herbicides, Metals and Wet Chemistry based on SW-846, CLP and 40 CFR methodology depending on the project requirement. Verify all QC requirements; contract compliance, screening and method requirements. Verify client requirements were met. Assist on data assembly for final data package.

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>Osmania University, India</i>	<i>1987</i>	<i>1989</i>	<i>Organic Chemistry</i>	<i>-----</i>	<i>MS 1989</i>
<i>Osmania University, India</i>	<i>1983</i>	<i>1986</i>	<i>Science</i>	<i>-----</i>	<i>BS 1986</i>

Professional Experience

Name & Address of Employer: <i>CHEMTECH</i> 284 Sheffield Street Mountainside, NJ 07092	Responsibilities included: Perform sample analysis as per EPA 600 series, SW 846 and CLP protocols. Assist supervisor with SOP updates. Update LIMS system. Troubleshoot instrument.
Title of Position & Dates: <i>GC/MS analyst</i> <i>Dec. 04-Feb. 06</i>	
Name & Address of Employer: Molecu Wire Corp, NJ	Responsibilities included: Carried out conductivity, resistance tests on wires. Preparation and standardization of solutions. Maintaining test results and procedures in Electronic media.
Title of Position & Dates: <i>Lab Technician</i> <i>Feb. 04-Dec. 04</i>	

Professional Skills

Familiar with most Quality Control/Quality Assurance procedures.

Computer Skills

Windows NT Server, UNIX and DOS, Developer/2000, Visual Basic 6.0, ORACLE 7.0/8.0, MS-SQL 7.0, Chem-Win, HTML FoxPro 2.6, Office Tools and Internet

NAME: Parveen Hasan	POSITION: QC/Report Production Supervisor
DATES: 06/02 - Present	
RESPONSIBILITIES: Responsible for all EPA-CLP related work. Sample login, Data Package Assembly, QA/QC and project management for Inorganic work. Supervise technical performance of the Inorganic Laboratory.	

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>DHAKA UNIVERSITY, BANGLADESH</i>	<i>1984</i>	<i>1987</i>	<i>Mathematics</i>	<i>----</i>	<i>BS, 1987</i>
<i>Jersey City State University, NJ</i>	<i>1987</i>	<i>1992</i>	<i>Chemistry</i>	<i>----</i>	<i>BS, 1992</i>

Professional Experience

Name & Address of Employer: CHEMTECH Mountainside, NJ 07092	Responsibilities included: Supervise technical performance of inorganic laboratory. Review QA/QC requirements. Review contract requirements and compliance. Develop and implement techniques in support of remedial investigation studies, troubleshoot problems.
Title of Position: <i>Inorganic Lab Manager</i> <i>01/00 – 06/02</i>	
Name & Address of Employer: CHEMTECH Mountainside, NJ 07092	Responsibilities included: Update QA Manual and SOPs, responsible for the quality of data, implementation and troubleshooting reporting software, method review and development.
Title of Position: <i>QA/QC Director/Project Manager</i> <i>01/97 – 01/00</i>	
Name & Address of Employer: CHEMTECH Mountainside, NJ 07092	Responsibilities included: Review and validate analytical data. Responsible for managing sample preparation analysis, methodology review, development and review of quality assurance data of final reports, review technical and QA/QC requirement, Prepare reports and Data Package as per different client requirements.
Title of Position: <i>QA/QC Officer/Data Reviewer</i> <i>06/93 – 01/97</i>	

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 93 of 168

Name & Address of Employer: CHEMTECH Mountainside, NJ 07092	Responsibilities included: Analyze samples for Metals, Mercury, Cyanide. Analyzed water and soil samples for Alkalinity, TKN, COD, Orthophosphorus, Chloride, Phosphate, Hardness, Phenols, Ammonia, Nitrate, Acidity, pH, specific conductance, etc.
Title of Position: <i>Lab Chemist</i> 02/88 – 06/93	

Professional Skills

MS Office- MS Excel, MS Word, MS Power Point
Use of Environmental data reduction software

Computer Skills

MS Office – MS Word, MS Excel

NAME: Zubair Ali	POSITION: Sample Management Analyst
Dates: 07/04 – Present	
RESPONSIBILITIES: Login samples. Prepare bottle orders and receiving samples, sample custodian.	

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>National College, Pakistan</i>	<i>1981</i>	<i>1983</i>	<i>-----</i>	<i>-----</i>	
<i>Middlesex County College, NJ</i>	<i>1983</i>	<i>1984</i>	<i>Chemistry</i>	<i>-----</i>	<i>BS, 1984</i>

Professional Experience

Name & Address of Employer: Days Inn Bridgewater, NJ	Responsibilities included: Back up database, Night audit, management reports, inventory, maintenance, customer service.
Title of Position & Dates: <i>On Duty Manager</i> <i>1986 – 2003</i>	

Computer Skills

MS Office – MS Word, MS Excel, MS PowerPoint
--

CHEMTECH

Resume and Certification List
 Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19
 Page 95 of 168

NAME: Semsettin (Sam) Yesiljurt**POSITION: GC/MS Analyst (Volatile)****Dates: 7/2001 – Present**

RESPONSIBILITIES: Analyze and QA/QC water and soil samples using SW 846 8000 series and EPA 600 series methods. Preparing data packages to be reported to the client. Keeping track of projects pertaining to the department. Troubleshooting of instruments and other technical problems according to methodology.

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>Gazi University Ankara, Turkey</i>	<i>1976</i>	<i>1980</i>	<i>Chemical Engineering</i>	<i>-----</i>	<i>BS, 1980</i>

Professional Experience

Name & Address of Employer: CHEMTECH Consulting 205 Campus Plaza, Raritan Ctr. Edison NJ	Responsibilities included: Analyze and QA/QC water and soil samples using SW 846 8000 series and EPA 600 series methods for Pest, PCB, Herb. Preparing data packages to be reported to the client. Troubleshooting of instruments and other technical problems according to methodology.
Title of Position & Dates: <i>GC Analyst</i> <i>7/99 – 7/01</i>	
Name & Address of Employer: All Test Environmental Lab	Responsibilities included: Analyze and QA/QC water and soil samples using SW 846 8000 series and EPA 600 series methods.
Title of Position & Dates: <i>GC/MS analyst,</i> <i>2/99 – 7/99</i>	
Name & Address of Employer: Technion	Responsibilities included: Analyze and QA/QC water and soil samples using SW 846 8000 series and EPA 600 series methods.
Title of Position & Dates <i>GC/MS Analyst</i> <i>8/96-2/99</i>	
Name & Address of Employer: Technion	Responsibilities included: Analyze and QA/QC water and soil samples using SW 846 8000 series and EPA 600 series methods.
Title of Position: <i>GC Analyst</i> <i>4/93-8/96</i>	

Professional Skills

- Troubleshooting of GC/MS, Tekmar autosampler
- Data package production using Enviroforms and EISC software
- Acquisition and analysis of samples using Enviroquant and RTE software
- ASP Deliverables, CLP Deliverables

Computer Skills

MS Office – MS Word, MS Excel, MS PowerPoint

Use of Environmental Data Reduction Software – Enviroquant & Enviroform, EISC, LIMS

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 97 of 168

NAME: Malgorzata Starzec**POSITION:** GC/MS Analyst (Volatile)**Dates:** 11/2002 – Present

RESPONSIBILITIES: Analyze and QA/QC water and soil samples using SW 846 8000 series and EPA 600 series methods. Preparing data packages to be reported to the client. Keeping track of projects pertaining to the department. Troubleshooting of instruments and other technical problems according to methodology.

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>Warsaw University, Poland</i>	1987	1992	<i>Chemistry</i>	-----	<i>BS, 1992</i>

Professional Experience

Name & Address of Employer: CHEMTECH Consulting Mountainside, NJ	Responsibilities included: Analyze and QA/QC water and soil samples using SW 846 8000 series and EPA 600 series methods. Preparing data packages to be reported to the client. Troubleshooting of instruments and other technical problems according to methodology
Title of Position & Dates: <i>GC/MS Analyst</i> <i>11/02 – Present</i>	

Professional Skills

- Acquisition and analysis of samples using Enviroquant and RTE software
- ASP Deliverables, CLP Deliverables

Computer Skills

- *MS Office – MS Word, MS Excel, MS PowerPoint*
- Use of Environmental Data Reduction Software – Enviroquant & Enviroform, EISC, LIMS

NAME: Mohammad Ahmed	POSITION: Laboratory Manager
Dates: Nov. 2005 - Present	
RESPONSIBILITIES: Responsible for all technical efforts of the Laboratory to meet all terms and conditions of CHEMTECH clients. Hands-on experience in the use of modern analytical instrumentation and wet chemical techniques. Currently responsible for the overall technical performance of the laboratory. Review technical and QA/QC requirements during the analysis. Oversee the laboratory operations and compliance with all regulations.	

Educational Background

College/University	Dates Attended		Major	Minor	Degree & Date
	From	To			
<i>University of Punjab</i>	1996	2001	<i>Science</i>	----	<i>BS, 2001</i>

Professional Experience

Name & Address of Employer: CHEMTECH Mountainside, NJ	Responsibilities included: Oversee all technical laboratory performance and compliance with regulations and contracts.
Title of Position & Dates: <i>Laboratory Manager Nov. 2005-Present</i>	
Name & Address of Employer: Naturex	Responsibilities included: Responsible for SOP prep. and review, method development, perform analysis using different instruments, calibrate and maintain instruments.
Title of Position & Dates: <i>Senior Chemist Oct.2005-Nov.2006</i>	
Name & Address of Employer: Garden State Laboratories	Responsibilities included: Supervise organic department, oversee sampling projects, produce monthly reports, supervise PT analysis.
Title of Position & Dates: <i>Team Leader May 2001-Oct.2005</i>	
Name & Address of Employer: Accutest laboratories	Responsibilities included: Responsible for laboratory audits, review data, create SOPs, perform organic and inorganic analysis.
Title of Position & Dates: <i>Senior Chemist Sept..2002-Oct.2003</i>	

CHEMTECH

Resume and Certification List

Doc Control #: A2040129

Quality Assurance Manual

Revision #: 19

Page 99 of 168

Professional Skills

- Hands on experience in a variety of instruments such as GC/MS, ICP, GC, and various Wet chemistry methods.

Computer Skills

- *MS Office – MS Word, MS Excel*
- Use of Environmental Data Reduction Software – Enviroquant, EISC, LIMS

27. Laboratory SOP list

CHEMTECH DOC CONTROL

Title: QA Manual-18

Revision#: 18

Revision Date: 4/14/2008

File: QA Manual Rev 2001-18.doc

Title: Chemical Hygiene Plan

Revision#: 08

Revision Date: 4/11/2008

File: Chemical Hygiene Plan 2008.doc

Field Methods

Title: M4020-PCB Immunoassay-04

Revision#: 04

Revision Date:
11/26/2007

File: M4020-PCB Immunoassay-04.doc

Title: M3815-Field GC-03

Revision#: 3.0

Revision Date: 4/11/2008

File: M3815-Field GC-03.doc

General Chemistry

Title: M1010-Flash Point-04

Revision#: 4.0

Revision Date: 4/11/2008

File: M1010-Flash Point-04.doc

Title: M1110-Corrosivity-04

Revision#: 4.0

Revision Date:
11/26/2007

File: M7.2-Corrosivity-04.doc

Title: M1311-TCLP-05

Revision#: 5.0

Revision Date: 4/11/2008

File: M1311-TCLP-05.doc

Title: MSM2540B &160.4,SM2540G- TS&T&VS-07

Revision#: 7.0

Revision Date: 11/5/2007

File: MSM2540B & 160.4-SM2540G-TS
& T&VS-07.doc

Title: M180.1 Turbidity-09

Revision#: 9.0 Revision Date: 11/5/2007

File: M180.1-Turbidity-09.doc

Title: M300.0-Inorganic Anions-09

Revision#: 9.0

Revision Date: 11/5/2007

File: M300.0-Inorganic Anions-09.doc

Title: M3060,7196A-Hex.Chromium-08

Revision#: 9.0

Revision Date: 4/11/2008

File: M3060,7196-Hex.Chromium-09.doc

Title: M3500-CRD- Hex. Chromium-04

Revision#: 4.0

Revision Date:
11/26/2007

File: M3500-CRD-Hex.Chromium-04.doc

Title: M365.3&SM4500-P E,B5-08

Revision#: 8.0

Revision Date: 7/2/2007

File: M365.3 & SM4500-P E,B5-08.doc

Title: MSM5210B-BOD-CBOD-05

Revision#: 5.0

Revision Date: 6/20/2007

File: MSM5210B-BOD-CBOD-05.doc

Title: MSM4500-Cl G-Residual Chlorine-04

Revision#: 4.0

Revision Date: 4/11/2008

File: M4500-Cl-04.doc

Title: MSM4500- SO4 E-Sulfate-03

Revision#: 4.0

Revision Date: 3/31/2008

File: M4500E-Sulfate-04.doc

Title: MChpt.7- Reactivity-05

Revision#: 5.0

Revision Date:
11/26/2007

File: MChpt.7-Reactivity-05.doc

Title: M9010-Total Cyanide-07

Revision#: 7.0

Revision Date: 11/5/2007

File: M9010-Total Cyanide-07.doc

Title: M9020B TOX-03

Revision#: 4.0

Revision Date: 7/2/2007

File: M9020B-TOX-04.doc

Title: M9023EOX-Total Organic Halide-05

Revision#: 5.0

Revision Date: 4/11/2008

File: M9023EOX-Total Organic Halide-05.doc

Title: M9040B-pH-04

Revision#: 4.0

Revision Date: 4/11/2008

File: M9040B-pH-04.doc

Title: M9045C-pH-03

Revision#: 4.0

Revision Date: 3/31/2008

File: M9045C-pH-04.doc

Title: M9060-TOC-10

Revision#: 10

Revision Date: 6/20/2007

File: M9060-TOC-10.doc

Title: MASTM-grain size-04

Revision#: 4.0

Revision Date:
11/26/2007

File: MD422-Grain Size-04.doc

Title: MAVS-03

Revision#: 3.0

Revision Date:
11/26/2007

File: M-AVS-03.doc

Title: MLloyd Kahn-TOC-03

Revision#: 3.0

Revision Date:
11/26/2007

File: MLloyd Kahn-TOC-03.doc

Title: Musathama-Nitrocellulose-soil-03

Revision#: 3.0

Revision Date:
11/26/2007

File: MUSATHAMA-Nitrocellulose-soil-03.doc

Title: Musasthama-Nitrocellulose-water-03

Revision#: 3.0

Revision Date:
11/26/2007

File: MUSATHAMA-Nitrocellulose-water-03.doc

Title: M120.1-Conductivity-03

Revision#: 3.0

Revision Date:
11/26/2007

File: M120.1-Conductivity-03.doc

Title: M2150B-Odor-03

Revision#: 3.0

Revision Date:
11/26/2007

File: M2150B-odor-03.doc

Title: M2320B-Alkalinity-05

Revision#: 5.0

Revision Date: 6/20/2007

File: M2320B-Alkalinity-05.doc

Title: M2120B-Color-04

Revision#: 4.0

Revision Date:
11/26/2007

File: M2120B-Color-04.doc

Title: M5220 C&D-COD-05

Revision#: 6.0

Revision Date: 3/31/2008

File: M5220 D-COD-06.doc

Title: M4500HB-pH-03

Revision#: 3.0

Revision Date: 3/31/2008

File: M4500HB-pH-03.doc

Title: M5310-TOC-03

Revision#: 3.0

Revision Date: 4/11/2008

File: M5310 C-TOC-03.doc

Title: M5540C-MBAS-04

Revision#: 4.0

Revision Date: 4/11/2008

File: M5540C-MBAS-04.doc

Title: M9041A-pH-02

Revision#: 2.0

Revision Date: 4/11/2008

File: M9041A-pH-02.doc

Title: M9056-Inorganic Anions-03

Revision#: 3.0

Revision Date: 4/11/2008

File: M9056-Inorganic Anions-03.doc

Title: M9065-Phenols-03

Revision#: 3.0

Revision Date: 4/11/2008

File: M9065-Phenolics-03.doc

Title: M9071B-Oil & Grease-06

Revision#: 6.0

Revision Date: 4/11/2008

File: M9071B-Oil & Grease-06.doc

Title: M9080-Cation Exchange-02

Revision#: 2.0

Revision Date: 4/11/2008

File: M9080-Cation Exchange-02.doc

Title: M9081-Cation Exchange-02

Revision#: 2.0

Revision Date: 4/11/2008

File: M9081-Cation Exchange-02.doc

Title: M9095A-Free liquids-05

Revision#: 5.0

Revision Date: 3/31/2008

File: M9095A-Free Liquids-05.doc

Title: M-percent solids-04

Revision#: 4.0

Revision Date:
11/26/2007

File: M-percent solids-04.doc

Title: M1312-SPLP-04

Revision#: 4.0

Revision Date:
11/26/2007

File: M1312-SPLP-04.doc

Title: M1664-O&G-NPM-05

Revision#: 6.0

Revision Date: 11/5/2007

File: M1664-O&G-NPM-06.doc

Title: M350.1/SM4500-NH3 G,H-Ammonia-06

Revision#: 6.0

Revision Date: 11/5/2007

File: M350.1-SM4500-NH3 G,H-

Ammonia-06.doc

Title: M9012-Total Cyanide-09

Revision#: 9.0

Revision Date: 11/5/2007

File: M9012-Total Cyanide-09.doc

Title: M9030-Sulfide-03

Revision#: 3.0

Revision Date: 11/5/2007

File: M9030-Sulfide-03.doc

Title: MILM05.2CN-Cyanide-05

Revision#: 5.0

Revision Date: 11/5/2007

File: MILM05.2CN-Cyanide-05.DOC

Title: M9050-Conductivity-02

Revision#: 2.0

Revision Date: 4/11/2008

File: M9050-Conductivity-02.DOC

Title: MSW846,7.1-Ignitability-04

Revision#: 4.0

Revision Date:
11/26/2007

File: MSW846 7.1-Ignitability-04.doc

Title: M7.2-Corrosivity-04

Revision#: 4.0

Revision Date:
11/26/2007

File: M7.2-Corrosivity-04.doc

Title: M1030-Ignitability-03

Revision#: 3.0

Revision Date: 4/11/2008

File: M1030-Ignitability-03.doc

Title: MILM4.1CN-Cyanide-04

Revision#: 4.0

Revision Date: 11/5/2007

File: MILM04.1CN-Cyanide-04.doc

Title: M9034-Sulfide-04

Revision#: 4.0

Revision Date: 11/5/2007

File: M9034-Sulfide-04.doc

Title: M420.1-Phenolics-03

Revision#: 3.0

Revision Date:
11/26/2007

File: M420.1-Phenolics-03.doc
Title: MILM05.3CN-Cyanide-07
Revision#: 7.0 Revision Date: 11/5/2007
File: MILM5.3CN-Cyanide-07.pdf
Title: MD1498-Redox Potential-02
Revision#: 2.0 Revision Date:
11/26/2007
File: M1498-Redox Potential-02.doc
Title: MILM5.4CN-Cyanide-03
Revision#: 3.0 Revision Date: 11/5/2007
File: MILM5.4CN-Cyanide-03.doc
Title: MASTM D1067-92-Acidity-01
Revision#: 1.0 Revision Date: 6/20/2007
File: MASTM D1067-92-Acidity-01.doc
Title: MSM2130B-Turbidity-02
Revision#: 2.0 Revision Date: 11/5/2007
File: MSM2130B-Turbidity-02.doc
Title: MSM2510B-Conductivity-02
Revision#: 2.0 Revision Date: 11/5/2007
File: MSM2510B-Conductivity-02.doc
Title: MSM2540C-Total Dissolved Solids-01
Revision#: 1.0 Revision Date: 6/20/2007
File: MSM2540C-Total Dissolved
Solids-01.doc
Title: MSM2540D-Suspended Solids-01
Revision#: 1.0 Revision Date: 6/20/2007
File: MSM2540D-Suspended Solids-
01.doc
Title: MSM2540F-Settleable Solids-01
Revision#: 1.0 Revision Date: 6/20/2007
File: MSM2540F-Settleable Solids-
01.doc
Title: MSM2550B-Temperature-01

Revision#: 1.0 Revision Date: 6/20/2007

File: MSM2550B-Temperature-01.doc

Title: MSM4500 Cl-C-Chloride-01

Revision#: 2.0 Revision Date: 4/11/2008

File: MSM4500 Cl-C, E-Chloride-02.doc

Title: MSM4500-CN C,E-Cyanide-02

Revision#: 2.0 Revision Date: 11/5/2007

File: MSM4500-CN C,E-Cyanide-02.doc

Title: MSM4500-CN C,G-Amenable Cyanide-02

Revision#: 2.0 Revision Date: 11/5/2007

File: MSM4500-CN C,G-Amenable
Cyanide-02.doc

Title: MSM4500-O C-Dissolved Oxygen-02

Revision#: 2.0 Revision Date: 11/5/2007

File: MSM4500-O C-Dissolved Oxygen-
02.doc

Title: MSM4500-O G-Dissolved Oxygen-02

Revision#: 2.0 Revision Date: 11/5/2007

File: MSM4500-O G-Dissolved Oxygen-
02.doc

Title: MSM4500-SO3 B-Sulfite-02

Revision#: 2.0 Revision Date: 11/5/2007

File: MSM4500-SO3 B-Sulfite-02.doc

Title: MSM4500-NO2 B-Nitrite-01

Revision#: 2.0 Revision Date: 11/5/2007

File: MSM4500-NO2 B-Nitrite-02.doc

Title: MSM4500-N Org BorC-TKN-02

Revision#: 2.0 Revision Date: 11/5/2007

File: MSM4500-N Org BorC-TKN-
02.doc

Title: MSM5310B-TOC-02

Revision#: 2.0 Revision Date: 11/5/2007

File: MSM5310B-TOC-02.doc

Title: M9013-Cyanide Distillation-02
Revision#: 2.0 Revision Date: 11/5/2007
File: M9013-Cyanide Distillation-02.doc

Title: M9031-Sulfide-02
Revision#: 2.0 Revision Date: 11/5/2007
File: M9031-Sulfide-02.doc

Title: MOQA-QAM-025-TPH-02
Revision#: 2.0 Revision Date: 11/5/2007
File: MOQA-QAM-025-TPH-02.doc

Title: MHACH8146-Ferrous Iron-01
Revision#: 1.0 Revision Date: 3/3/2008
File: MHACH8146-Ferrous Iron-01.doc

Title: MHACH8110-Formaldehyde-01
Revision#: 1.0 Revision Date: 2/15/2008
File: MHACH8110-Formaldehyde-01.doc

Metals

Title: M3010A-Digestion-08
Revision#: 8.0 Revision Date: 7/2/2007
File: M3010A-Digestion-08.doc

Title: M7470A-Mercury-08
Revision#: 8.0 Revision Date: 7/2/2007
File: M7470A-Mercury-08.doc

Title: M200.7-2340B-Hardness-05
Revision#: 5.0 Revision Date: 2/15/2008
File: M200.7-2340B-Hardness-05.doc

Title: M7471A-Mercury-07
Revision#: 7.0 Revision Date: 7/2/2007
File: M7471A-Mercury-07.doc

Title: M200.7-Trace Elements-07
Revision#: 7.0 Revision Date: 7/2/2007
File: M200.7-Trace Elements-07.doc

Title: M245.1-Mercury-06

Revision#: 6.0 Revision Date: 7/2/2007
File: M245.1-Mercury-06.doc
Title: M3050B-Digestion-11
Revision#: 11 Revision Date: 7/2/2007
File: M3050B-Digestion-11.doc
Title: M6010B-Trace elements-12
Revision#: 13 Revision Date: 4/11/2008
File: M6010B-Trace Elements-13.doc
Title: M3005A-Digestion-06
Revision#: 6.0 Revision Date: 7/2/2007
File: M3005A-Digestion-06.doc
Title: M200.8-Trace Elements-06
Revision#: 6.0 Revision Date: 6/20/2007
File: M200.8-Trace Elements-06.doc
Title: MILM05.3-Trace Metals-08
Revision#: 8.0 Revision Date: 6/20/2007
File: MILM05.3-Trace Metals-08.doc
Title: MILM5.3HGS-Mercury in soil-06
Revision#: 6.0 Revision Date: 4/11/2008
File: MILM5.3HGS-Mercury in Soil-06.doc
Title: MILM5.3HGW-Mercury in water-06
Revision#: 6.0 Revision Date: 6/20/2007
File: MILM5.3HGW-Mercury in Water-06.doc
Title: MILM05.3-Metals ICPMS-02
Revision#: 3.0 Revision Date: 11/5/2007
File: MILM05.3-Metals ICPMS-03.doc
Title: MILM5.4HGS-Mercury in Soil-02
Revision#: 2.0 Revision Date: 6/20/2007
File: MILM5.4HGS-Mercury in Soil-02.doc
Title: MILM5.4HGW-Mercury in Water-01

Revision#: 2.0 Revision Date: 6/20/2007

File: MILM5.4HGW-Mercury in Water-02.doc

Title: MILM05.4-Metals ICPMS-05

Revision#: 5.0 Revision Date: 4/11/2008

File: MILM05.4-Metals ICPMS-05.doc

Title: MILM05.4-Trace Metals-03

Revision#: 3.0 Revision Date: 4/8/2008

File: MILM05.4-Trace Metals-03.doc

Title: M6010-SM2340B-Hardness-01

Revision#: 1.0 Revision Date: 2/15/2008

File: M6010-SM2340B-Hardness-01.doc

Title: MPM-10-Digestion-01

Revision#: 1.0 Revision Date:
12/17/2007

File: MPM-10-Digestion-01.doc

Organic CLP

Title: MSOM01.1-GCMS VOA-06

Revision#: 6.0 Revision Date: 9/17/2007

File: MSOM01.1-GCMS VOA-06.doc

Title: MSOM01.1-SVOC-06

Revision#: 6.0 Revision Date: 9/17/2007

File: MSOM01.1-SVOC-06.doc

Title: MSOM01.1-GCMS VOA Trace and SIM-06

Revision#: 6.0 Revision Date: 9/17/2007

File: MSOM01.1-GCMS VOA Trace and SIM-06.doc

Title: MSOM01.1-Pesticides-07

Revision#: 7.0 Revision Date: 11/5/2007

File: MSOM01.1-Pesticides-07.doc

Title: MSOM01.1-PCB-07

Revision#: 7.0 Revision Date: 11/5/2007

File: MSOM01.1-PCB-07.doc

Title: MSOM01.1-Sample Prep-06

Revision#: 8.0

Revision Date: 11/5/2007

File: MSOM01.1-Sample Prep-08.doc

Procedural

Title: P201-Data Review-12

Revision#: 12

Revision Date: 2/26/2008

File: P201-Data Review-12.doc

Title: P202-Reagent Check-04

Revision#: 5.0

Revision Date: 3/31/2008

File: P202-Reagent Check-05.doc

Title: P203-MDL, IDOC-10

Revision#: 10

Revision Date: 4/11/2008

File: P203-MDL, IDOC-10.doc

Title: P205-Chemical Waste Disposal-06

Revision#: 6.0

Revision Date: 3/31/2008

File: P205-Waste Disposal-06.doc

Title: P206-Bottle Check-04

Revision#: 4.0

Revision Date: 3/31/2008

File: P206-Bottle Check-04.doc

Title: P207-ASTM Type II Water-05

Revision#: 5.0

Revision Date: 3/31/2008

File: P207-ASTM Type II Water-05.doc

Title: P208-Thermometer Calibration-06

Revision#: 6.0

Revision Date: 3/31/2008

File: P208-Thermometer Calibration-06.doc

Title: P209-Scale Calibration-06

Revision#: 6.0

Revision Date: 3/31/2008

File: P209-Scale Calibration-06.doc

Title: P210-CAR-06

Revision#: 6.0

Revision Date: 3/31/2008

File: P210-CAR-06.doc

Title: P211-Control Charts-05

Revision#: 5.0 Revision Date: 3/31/2008

File: P211-Control Charts-05.doc

Title: P212-Water Purity-06

Revision#: 6.0 Revision Date: 3/31/2008

File: P212-Water purity-06.doc

Title: P213-Calibration of Auto Pipettes-06

Revision#: 6.0 Revision Date: 3/31/2008

File: P213-Calibration of Auto Pipettes-06.doc

Title: P214-Subcontracting-06

Revision#: 6.0 Revision Date: 4/11/2008

File: P214-Subcontracting-06.doc

Title: P215-Hood Calibration-05

Revision#: 5.0 Revision Date: 3/31/2008

File: P215-Hood Calibration-05.doc

Title: P216-Calibration and Temperature Setting-06

Revision#: 6.0 Revision Date: 3/31/2008

File: P216- Calibration and Temperature setting-06.doc

Title: P217-Glassware Cleaning-07

Revision#: 7.0 Revision Date: 3/31/2008

File: P217-Glassware Cleaning-07.doc

Title: P218-Chemical Storage-06

Revision#: 6.0 Revision Date: 3/31/2008

File: P218-Chemical Storage-06.doc

Title: P219-Disposal of Chemicals-05

Revision#: 5.0 Revision Date: 3/31/2008

File: P219-Disposal of Chemicals-05.doc

Title: P220-Traceability-06

Revision#: 6.0 Revision Date: 3/31/2008

File: P220-Traceability-06.doc

Title: P222-Standard Operating Procedures Prep-06

Revision#: 6.0 Revision Date: 3/31/2008

File: P222-Standard Operating
Procedures Prep-06.doc

Title: P225-Rules for Rounding-06

Revision#: 6.0

Revision Date: 3/31/2008

File: P225-Rules for Rounding-06.doc

Title: P223-Material Safety Data and Records-05

Revision#: 5.0

Revision Date: 3/31/2008

File: P223-Material Safety Data and
Records-05.doc

Title: P226-Corrections-05

Revision#: 5.0

Revision Date: 9/17/2007

File: P226-Corrections-05.doc

Title: P227-Services and Daily Maintenance-06

Revision#: 6.0

Revision Date: 3/31/2008

File: P227-Services and Daily
Maintenance-06.doc

Title: P250-Log-in Procedure-11

Revision#: 11

Revision Date: 4/11/2008

File: P250-Log-in Procedure-11.doc

Title: P229-Computer Security and Backup-06

Revision#: 6.0

Revision Date: 3/31/2008

File: P229-Computer Backup and
Storage-06.doc

Title: P230-Sample Aliquot-04

Revision#: 4.0

Revision Date: 4/11/2008

File: P230-Sample Aliquot-04.doc

Title: P231-Data Archive-05

Revision#: 5.0

Revision Date: 3/31/2008

File: P231-Data Archive-05.doc

Title: P232-Data Storage-06

Revision#: 6.0

Revision Date: 3/31/2008

File: P232-Data Storage-06.DOC

Title: P204-COC Procedure-05

Revision#: 6.0
Revision Date: 11/26/2007
File: P204-COC Procedure-06.doc
Title: P228-Storage and Disposal of PCBs-04
Revision#: 4.0
Revision Date: 4/11/2008
File: P228-Storage & Disposal PCB Materials-04.doc
Title: P236-fax procedure-02
Revision#: 2.0
Revision Date: 4/11/2008
File: P236-fax procedure-02.doc
Title: P235-Worklist-03
Revision#: 3.0
Revision Date: 3/31/2008
File: P235-Worklist-03.doc
Title: P234-Field Sampling-02
Revision#: 2.0
Revision Date: 4/11/2008
File: P234-Field Sampling-02.doc
Title: P224-Bottle Prep-05
Revision#: 5.0
Revision Date: 4/11/2008
File: P224-Bottle Prep-05.doc
Title: P237-Training-05
Revision#: 5.0
Revision Date: 3/31/2008
File: P237-Training-05.doc
Title: P238-Field Chlorine test-01
Revision#: 1.0
Revision Date: 4/11/2008
File: P238-Field Chlorine test-01.doc
Title: P243-Electronic Logbook-04
Revision#: 04
Revision Date: 3/31/2008
File: P243-Electronic Logbook-04.doc
Title: P244-Calibration Policy-03
Revision#: 3.0
Revision Date: 2/26/2008
File: P244-Calibration Policy-03.doc
Title: P241-Air Canister Cleanup-04
Revision#: 4.0
Revision Date: 3/31/2008

File: P241-Air Canister Cleanup-04.DOC

Title: P251-Quotation Project Chronicle-02

Revision#: 2.0

Revision Date: 6/20/2007

File: P251-Quotation Project Chronicle-02.doc

Title: P252-Ethics Policy-01

Revision#: 1.0

Revision Date: 7/2/2007

File: P252-Ethics policy-01.doc

Title: P253-Uncertainty Policy-02

Revision#: 2.0

Revision Date: 11/5/2007

File: P253-Uncertainty Policy-02.doc

GC VOA

Title: M602-Purgeable Aromatics-08

Revision#: 8.0

Revision Date: 11/5/2007

File: M602-Purgeable Aromatics-08.doc

Title: M8015-GRO-08

Revision#: 8.0

Revision Date: 4/11/2008

File: M8015-GRO-08.doc

Title: M8021-GCVOC-08

Revision#: 10

Revision Date: 11/5/2007

File: M8021-GCVOC-10.doc

Title: M601-Purgeables Halocarbons-07

Revision#: 7.0

Revision Date: 11/6/2007

File: M601-Purgeable Halocarbons-07.doc

Title: M3810-Gases-04

Revision#: 4.0

Revision Date: 4/11/2008

File: M3810-gases-04.doc

GCMS VOC

Title: M524.2-DWVOA-09

Revision#: 9.0

Revision Date: 7/2/2007

File: M524.2-DWVOA-09.doc

Title: M5035-Closed P&T-05

Revision#: 5.0 Revision Date: 3/31/2008

File: M5035-Closed P&T-05.doc

Title: M624-WW-VOA-06

Revision#: 6.0 Revision Date: 3/3/2008

File: M624-WWMSVOA-06.DOC

Title: M8260-SWGCMSVOA-12

Revision#: 13 Revision Date: 3/31/2008

File: M8260-SWGCMSVOA-13.doc

Title: M5030-P&T-04

Revision#: 5.0 Revision Date: 3/31/2008

File: M5030B-P&TWater-05.doc

Title: MTO-15-Air VOC-05

Revision#: 6.0 Revision Date: 3/31/2008

File: MTO15-Air VOC-06.doc

Title: MSOM01.2-GCMS VOA-01

Revision#: 1.0 Revision Date:
12/24/2007

File: MSOM01.2-GCMS VOA-01.doc

Title: MSOM01.2-GCMS VOA Trace and SIM-01

Revision#: 1.0 Revision Date:
12/24/2007

File: MSOM01.2-GCMS VOA Trace
and SIM-01.doc

Extractions

Title: M3510C, 3520, 3550B, 3580A-Extraction Semi-VOA

Revision#: 10 Revision Date: 3/31/2008

File: M3510C,3520C,3550B,3580A-
Extraction SVOC-10.doc

Title: M3510C,3550B, 3580A-Extraction DRO-05

Revision#: 5.0 Revision Date: 4/11/2008

File: M3510C,3550B,3580A-Extraction
DRO-05.doc

Title: M3510C,3550B,3580A-Extraction-PCB-07

Revision#: 7.0 Revision Date: 4/11/2008

File: M3510C,3550B,3580A-Extraction
PCB-07.doc

Title: M3510C,3550B,3580A-Extraction Pesticide-06

Revision#: 6.0

Revision Date: 4/11/2008

File: M3510C,3550B,3580A-Extraction
Pesticide-06.doc

Title: M3510C,3550B-Extraction HPLCPAH-03

Revision#: 4.0

Revision Date: 4/11/2008

File: M3510C,3550B-Extraction
HPLCPAH-04.doc

Title: M3610-Alumina cln up-01

Revision#: 3.0

Revision Date: 4/11/2008

File: M3610-Alumina cleanup-03.doc

Title: M3620-Florisil clnup-01

Revision#: 3.0

Revision Date: 4/11/2008

File: M3620-florisil cleanup-03.doc

Title: M3630-Silica GelCleanUp-03

Revision#: 3.0

Revision Date: 4/11/2008

File: M3630-SilicaGelcleanup-03.doc

Title: M3640-GPC cleanup-03

Revision#: 3.0

Revision Date: 4/11/2008

File: M3640-GPC cleanup-03.doc

Title: M3660-Sulfur Cleanup-03

Revision#: 3.0

Revision Date: 4/11/2008

File: M3660-Sulfur cleanup-03.doc

Title: M3665-Sulfuric Acid Cleanup-03

Revision#: 3.0

Revision Date: 4/11/2008

File: M3665-Sulfuric Acid cleanup-
03.doc

Title: M3545C-Pressurized Fluid Extraction-05

Revision#: 5.0

Revision Date: 3/31/2008

File: M3545C-Pressurized Fluid
Extraction-05.doc

Title: M3520C-Pest-PCB Liquid-Liquid extraction-03

Revision#: 3.0

Revision Date: 3/31/2008

File: M3520C-Pest-PCB Liquid-Liquid
extraction-03.doc

Title: M3541-Extraction by Auto Soxhlet-03

Revision#: 3.0

Revision Date: 4/11/2008

File: M3541-ASE extraction-03.doc

Title: MSOM01.2-Sample Prep-01

Revision#: 1.0

Revision Date:
12/24/2007

File: MSOM01.2-Sample Prep-01.doc

GC SVOC

Title: M608-WW Pesticide PCB-07

Revision#: 7.0

Revision Date: 7/2/2007

File: M608-WW Pesticide PCB-07.doc

Title: M8015-DRO-11

Revision#: 11

Revision Date: 4/11/2008

File: M8015-DRO-11.doc

Title: M8081-Pesticide-09

Revision#: 11

Revision Date: 4/11/2008

File: M8081A-Pesticide-11.doc

Title: M8082-PCB-09

Revision#: 9.0

Revision Date: 7/2/2007

File: M8082-PCB-09.doc

Title: M8151-Herbicide-10

Revision#: 10

Revision Date: 4/11/2008

File: M8151-Herbicide-10.doc

Title: MOLC03.2-Pesticide-PCB-03

Revision#: 3.0

Revision Date: 4/11/2008

File: MOLC03.2-Pesticide-PCB-03.doc

Title: M8082-PCB screening-01

Revision#: 1.0

Revision Date: 4/11/2008

File: M8082-PCB screening-01.doc

Title: M8015Modified-Direct Inject-01

Revision#: 1.0

Revision Date: 2/15/2008

File: M8015Modified-Direct Inject-01.doc

Title: MSOM01.2-PCB-01

Revision#: 1.0

Revision Date:

12/24/2007

File: MSOM01.2-PCB-01.doc

Title: MSOM01.2-Pesticide-01

Revision#: 1.0

Revision Date:

12/24/2007

File: MSOM01.2-Pesticide-01.doc

GCMS SVOC

Title: M625-BNA-07

Revision#: 8.0

Revision Date: 7/2/2007

File: M625-BNA-08.doc

Title: M8270C-BNA-12

Revision#: 13

Revision Date: 3/31/2008

File: M8270C-BNA-13.doc

Title: MSOM01.2-SVOC-01

Revision#: 1.0

Revision Date:

12/24/2007

File: MSOM01.2-SVOC-01.doc

28. Nelac Certificate and Parameter List

State of New Jersey
Department of Environmental Protection

Certifies That

Chemtech

Laboratory Certification ID #: 20012

having duly met the requirements of the

Regulations Governing The Certification Of
Laboratories And Environmental Measurements N.J.A.C. 7:18 et. seq.

and

having been found compliant with the standard approved by the

National Environmental Laboratory Accreditation Conference

is hereby approved as a

Nationally Accredited Environmental Laboratory
*to perform the analyses as indicated on the Annual Certified Parameter List
which must accompany this certificate to be valid*

Expiration Date June 30, 2008



NJDEP is a NELAP Recognized Accrediting Authority



Joseph F. Aiello
Joseph F. Aiello, Chief
Office of Quality Assurance

THIS CERTIFICATE IS TO BE CONSPICUOUSLY DISPLAYED AT THE LABORATORY WITH THE ANNUAL CERTIFIED PARAMETER LIST IN A LOCATION ON THE PREMISES VISIBLE TO THE PUBLIC

New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008



Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: CAP03 -- Atmospheric Organic Parameters

Status	Eligible to Report	Nf Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	CAP03.00180	AE	GC/MS, Canisters	[EPA TO-15]	Acetaldehyde
Certified	Yes		NJ	CAP03.00184	AE	GC/MS, Canisters	[EPA TO-15]	Acetone
Certified	Yes		NJ	CAP03.00185	AE	GC/MS, Canisters	[EPA TO-15]	Acetonitrile
Certified	Yes		NJ	CAP03.00190	AE	GC/MS, Canisters	[EPA TO-15]	Acetophenone
Certified	Yes		NJ	CAP03.00195	AE	GC/MS, Canisters	[EPA TO-15]	Acrolein
Certified	Yes		NJ	CAP03.00200	AE	GC/MS, Canisters	[EPA TO-15]	Acrylamide
Certified	Yes		NJ	CAP03.00205	AE	GC/MS, Canisters	[EPA TO-15]	Acrylic acid
Certified	Yes		NJ	CAP03.00210	AE	GC/MS, Canisters	[EPA TO-15]	Acrylonitrile
Certified	Yes		NJ	CAP03.00215	AE	GC/MS, Canisters	[EPA TO-15]	Allyl chloride
Certified	Yes		NJ	CAP03.00220	AE	GC/MS, Canisters	[EPA TO-15]	Aniline
Certified	Yes		NJ	CAP03.00225	AE	GC/MS, Canisters	[EPA TO-15]	Benzene
Certified	Yes		NJ	CAP03.00230	AE	GC/MS, Canisters	[EPA TO-15]	Benzyl chloride
Certified	Yes		NJ	CAP03.00235	AE	GC/MS, Canisters	[EPA TO-15]	Propiolactone (beta-)
Certified	Yes		NJ	CAP03.00240	AE	GC/MS, Canisters	[EPA TO-15]	Bis (2-chloroethyl) ether
Certified	Yes		NJ	CAP03.00245	AE	GC/MS, Canisters	[EPA TO-15]	Bis (chloromethyl) ether
Certified	Yes		NJ	CAP03.00250	AE	GC/MS, Canisters	[EPA TO-15]	Bromodichloromethane
Certified	Yes		NJ	CAP03.00255	AE	GC/MS, Canisters	[EPA TO-15]	Bromoform
Certified	Yes		NJ	CAP03.00260	AE	GC/MS, Canisters	[EPA TO-15]	Bromomethane
Certified	Yes		NJ	CAP03.00265	AE	GC/MS, Canisters	[EPA TO-15]	Butadiene (1,3-)
Certified	Yes		NJ	CAP03.00270	AE	GC/MS, Canisters	[EPA TO-15]	Carbon disulfide
Certified	Yes		NJ	CAP03.00275	AE	GC/MS, Canisters	[EPA TO-15]	Carbon tetrachloride
Certified	Yes		NJ	CAP03.00280	AE	GC/MS, Canisters	[EPA TO-15]	Carbon oxysulfide (Carbonyl sulfide)
Certified	Yes		NJ	CAP03.00285	AE	GC/MS, Canisters	[EPA TO-15]	Catechol
Certified	Yes		NJ	CAP03.00290	AE	GC/MS, Canisters	[EPA TO-15]	Butadiene (2-chloro-1,3-)
Certified	Yes		NJ	CAP03.00295	AE	GC/MS, Canisters	[EPA TO-15]	Chloroacetic acid
Certified	Yes		NJ	CAP03.00300	AE	GC/MS, Canisters	[EPA TO-15]	Chlorobenzene
Certified	Yes		NJ	CAP03.00305	AE	GC/MS, Canisters	[EPA TO-15]	Chloroethane
Certified	Yes		NJ	CAP03.00310	AE	GC/MS, Canisters	[EPA TO-15]	Chloroform
Certified	Yes		NJ	CAP03.00315	AE	GC/MS, Canisters	[EPA TO-15]	Chloromethane
Certified	Yes		NJ	CAP03.00320	AE	GC/MS, Canisters	[EPA TO-15]	Chloromethyl methyl ether
Certified	Yes		NJ	CAP03.00325	AE	GC/MS, Canisters	[EPA TO-15]	Chlorotoluene (2-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092



Category: CAP03 - Atmospheric Organic Parameters

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	CAP03.00330	AE	GC/MS, Canisters	[EPA TO-15]	Cresols/Cresylic acid
Certified	Yes		NJ	CAP03.00335	AE	GC/MS, Canisters	[EPA TO-15]	Cyclohexane
Certified	Yes		NJ	CAP03.00340	AE	GC/MS, Canisters	[EPA TO-15]	Diazomethane
Certified	Yes		NJ	CAP03.00342	AE	GC/MS, Canisters	[EPA TO-15]	Dibromochloromethane
Certified	Yes		NJ	CAP03.00345	AE	GC/MS, Canisters	[EPA TO-15]	Dibromo-3-chloropropane (1,2-)
Certified	Yes		NJ	CAP03.00350	AE	GC/MS, Canisters	[EPA TO-15]	Dibromoethane (1,2-) (EDB)
Certified	Yes		NJ	CAP03.00355	AE	GC/MS, Canisters	[EPA TO-15]	Dichlorobenzene (1,2-)
Certified	Yes		NJ	CAP03.00360	AE	GC/MS, Canisters	[EPA TO-15]	Dichlorobenzene (1,3-)
Certified	Yes		NJ	CAP03.00365	AE	GC/MS, Canisters	[EPA TO-15]	Dichlorobenzene (1,4-)
Certified	Yes		NJ	CAP03.00368	AE	GC/MS, Canisters	[EPA TO-15]	Dichlorodifluoromethane
Certified	Yes		NJ	CAP03.00370	AE	GC/MS, Canisters	[EPA TO-15]	Dichloroethane (1,1-)
Certified	Yes		NJ	CAP03.00375	AE	GC/MS, Canisters	[EPA TO-15]	Dichloroethane (1,2-)
Certified	Yes		NJ	CAP03.00380	AE	GC/MS, Canisters	[EPA TO-15]	Dichloroethene (1,1-)
Certified	Yes		NJ	CAP03.00384	AE	GC/MS, Canisters	[EPA TO-15]	Dichloroethene (cis-1,2-)
Certified	Yes		NJ	CAP03.00385	AE	GC/MS, Canisters	[EPA TO-15]	Dichloroethene (trans-1,2-)
Certified	Yes		NJ	CAP03.00390	AE	GC/MS, Canisters	[EPA TO-15]	Dichlorofluoromethane
Certified	Yes		NJ	CAP03.00395	AE	GC/MS, Canisters	[EPA TO-15]	Dichloropropane (1,2-)
Certified	Yes		NJ	CAP03.00400	AE	GC/MS, Canisters	[EPA TO-15]	Dichloropropene (cis-1,3-)
Certified	Yes		NJ	CAP03.00401	AE	GC/MS, Canisters	[EPA TO-15]	Dichloropropene (trans-1,3-)
Certified	Yes		NJ	CAP03.00405	AE	GC/MS, Canisters	[EPA TO-15]	Dichlorotetrafluoroethane (1,2-)
Certified	Yes		NJ	CAP03.00410	AE	GC/MS, Canisters	[EPA TO-15]	Diethyl sulfate
Certified	Yes		NJ	CAP03.00415	AE	GC/MS, Canisters	[EPA TO-15]	Dimethyl sulfate
Certified	Yes		NJ	CAP03.00420	AE	GC/MS, Canisters	[EPA TO-15]	Dimethylamine (N, N-)
Certified	Yes		NJ	CAP03.00425	AE	GC/MS, Canisters	[EPA TO-15]	Dimethylcarbamoyl chloride
Certified	Yes		NJ	CAP03.00430	AE	GC/MS, Canisters	[EPA TO-15]	Dimethyl formamide (N, N-)
Certified	Yes		NJ	CAP03.00435	AE	GC/MS, Canisters	[EPA TO-15]	Dimethyl hydrazine (1,1-)
Certified	Yes		NJ	CAP03.00440	AE	GC/MS, Canisters	[EPA TO-15]	Dioxane (1,4-)
Certified	Yes		NJ	CAP03.00445	AE	GC/MS, Canisters	[EPA TO-15]	Epichlorohydrin
Certified	Yes		NJ	CAP03.00450	AE	GC/MS, Canisters	[EPA TO-15]	Epoxybutane (1,2-)
Certified	Yes		NJ	CAP03.00451	AE	GC/MS, Canisters	[EPA TO-15]	Ethanol
Certified	Yes		NJ	CAP03.00452	AE	GC/MS, Canisters	[EPA TO-15]	Ethyl acetate
Certified	Yes		NJ	CAP03.00455	AE	GC/MS, Canisters	[EPA TO-15]	Ethyl acrylate

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008



Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: CAP03 - Atmospheric Organic Parameters

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	CAP03.00460	AE	GC/MS, Canisters	[EPA TO-15]	Ethyl carbamate (Urethane)
Certified	Yes	NJ	CAP03.00465	AE	GC/MS, Canisters	[EPA TO-15]	Ethylbenzene
Certified	Yes	NJ	CAP03.00470	AE	GC/MS, Canisters	[EPA TO-15]	Ethylene Oxide
Certified	Yes	NJ	CAP03.00475	AE	GC/MS, Canisters	[EPA TO-15]	Ethyleneimine
Certified	Yes	NJ	CAP03.00480	AE	GC/MS, Canisters	[EPA TO-15]	Ethyltoluene (4-)
Certified	Yes	NJ	CAP03.00485	AE	GC/MS, Canisters	[EPA TO-15]	Formaldehyde
Certified	Yes	NJ	CAP03.00490	AE	GC/MS, Canisters	[EPA TO-15]	Hexachlorobutadiene (1,3-)
Certified	Yes	NJ	CAP03.00495	AE	GC/MS, Canisters	[EPA TO-15]	Hexachloroethane
Certified	Yes	NJ	CAP03.00498	AE	GC/MS, Canisters	[EPA TO-15]	Hexanone (2-)
Certified	Yes	NJ	CAP03.00500	AE	GC/MS, Canisters	[EPA TO-15]	Hexane (n-)
Certified	Yes	NJ	CAP03.00505	AE	GC/MS, Canisters	[EPA TO-15]	Hexane (n-)
Certified	Yes	NJ	CAP03.00510	AE	GC/MS, Canisters	[EPA TO-15]	Isoparone
Certified	Yes	NJ	CAP03.00511	AE	GC/MS, Canisters	[EPA TO-15]	Isopropanol
Certified	Yes	NJ	CAP03.00515	AE	GC/MS, Canisters	[EPA TO-15]	Isopropylbenzene
Certified	Yes	NJ	CAP03.00520	AE	GC/MS, Canisters	[EPA TO-15]	Methyl alcohol (Methanol)
Certified	Yes	NJ	CAP03.00525	AE	GC/MS, Canisters	[EPA TO-15]	Methyl ethyl ketone
Certified	Yes	NJ	CAP03.00530	AE	GC/MS, Canisters	[EPA TO-15]	Methyl iodide
Certified	Yes	NJ	CAP03.00535	AE	GC/MS, Canisters	[EPA TO-15]	Methyl isobutyl ketone
Certified	Yes	NJ	CAP03.00540	AE	GC/MS, Canisters	[EPA TO-15]	Methyl isocyanate
Certified	Yes	NJ	CAP03.00545	AE	GC/MS, Canisters	[EPA TO-15]	Methyl methacrylate
Certified	Yes	NJ	CAP03.00550	AE	GC/MS, Canisters	[EPA TO-15]	Methyl tert-butyl ether
Certified	Yes	NJ	CAP03.00555	AE	GC/MS, Canisters	[EPA TO-15]	Methylene chloride (Dichloromethane)
Certified	Yes	NJ	CAP03.00560	AE	GC/MS, Canisters	[EPA TO-15]	Methylhydrazine
Certified	Yes	NJ	CAP03.00565	AE	GC/MS, Canisters	[EPA TO-15]	Methylphenol (2-)
Certified	Yes	NJ	CAP03.00570	AE	GC/MS, Canisters	[EPA TO-15]	Nitrobenzene
Certified	Yes	NJ	CAP03.00575	AE	GC/MS, Canisters	[EPA TO-15]	Nitropropane (2-)
Certified	Yes	NJ	CAP03.00580	AE	GC/MS, Canisters	[EPA TO-15]	N-Nitrosodimethylamine
Certified	Yes	NJ	CAP03.00585	AE	GC/MS, Canisters	[EPA TO-15]	N-Nitrosomorpholine
Certified	Yes	NJ	CAP03.00590	AE	GC/MS, Canisters	[EPA TO-15]	N-Nitroso-N-methylurea
Certified	Yes	NJ	CAP03.00595	AE	GC/MS, Canisters	[EPA TO-15]	Phenol
Certified	Yes	NJ	CAP03.00600	AE	GC/MS, Canisters	[EPA TO-15]	Phosgene
Certified	Yes	NJ	CAP03.00605	AE	GC/MS, Canisters	[EPA TO-15]	Propionaldehyde

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: CAP03 - Atmospheric Organic Parameters

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	CAP03.00610	AE	GC/MS, Canisters	[EPA TO-15]	Propylencaine (1,2-)
Certified	Yes		NJ	CAP03.00612	AE	GC/MS, Canisters	[EPA TO-15]	Propylene
Certified	Yes		NJ	CAP03.00615	AE	GC/MS, Canisters	[EPA TO-15]	Propylene oxide
Certified	Yes		NJ	CAP03.00620	AE	GC/MS, Canisters	[EPA TO-15]	Propane sulfone (1,3-)
Certified	Yes		NJ	CAP03.00625	AE	GC/MS, Canisters	[EPA TO-15]	Styrene
Certified	Yes		NJ	CAP03.00630	AE	GC/MS, Canisters	[EPA TO-15]	Styrene oxide
Certified	Yes		NJ	CAP03.00635	AE	GC/MS, Canisters	[EPA TO-15]	Trichlorobenzene (1,2,4-)
Certified	Yes		NJ	CAP03.00640	AE	GC/MS, Canisters	[EPA TO-15]	Trimethylbenzene (1,3,5-)
Certified	Yes		NJ	CAP03.00645	AE	GC/MS, Canisters	[EPA TO-15]	Trimethylbenzene (1,2,4-)
Certified	Yes		NJ	CAP03.00650	AE	GC/MS, Canisters	[EPA TO-15]	Trimethylbenzene (2,2,4-)
Certified	Yes		NJ	CAP03.00652	AE	GC/MS, Canisters	[EPA TO-15]	Tert-butyl alcohol
Certified	Yes		NJ	CAP03.00653	AE	GC/MS, Canisters	[EPA TO-15]	Tetrachloroethane (1,1,2,2-)
Certified	Yes		NJ	CAP03.00660	AE	GC/MS, Canisters	[EPA TO-15]	Tetrahydroethene
Certified	Yes		NJ	CAP03.00662	AE	GC/MS, Canisters	[EPA TO-15]	Tetrahydrofuran
Certified	Yes		NJ	CAP03.00665	AE	GC/MS, Canisters	[EPA TO-15]	Toluene
Certified	Yes		NJ	CAP03.00670	AE	GC/MS, Canisters	[EPA TO-15]	Trichloroethane (1,1,1-)
Certified	Yes		NJ	CAP03.00675	AE	GC/MS, Canisters	[EPA TO-15]	Trichloroethane (1,1,2-)
Certified	Yes		NJ	CAP03.00680	AE	GC/MS, Canisters	[EPA TO-15]	Trichloroethene
Certified	Yes		NJ	CAP03.00684	AE	GC/MS, Canisters	[EPA TO-15]	Trichlorofluoromethane
Certified	Yes		NJ	CAP03.00685	AE	GC/MS, Canisters	[EPA TO-15]	Trichloro (1,1,2-) trifluoroethane (1,2,2-)
Certified	Yes		NJ	CAP03.00690	AE	GC/MS, Canisters	[EPA TO-15]	Trichloroethane
Certified	Yes		NJ	CAP03.00695	AE	GC/MS, Canisters	[EPA TO-15]	Trichloroethene
Certified	Yes		NJ	CAP03.00700	AE	GC/MS, Canisters	[EPA TO-15]	Trifluoromethane
Certified	Yes		NJ	CAP03.00705	AE	GC/MS, Canisters	[EPA TO-15]	Vinyl acetate
Certified	Yes		NJ	CAP03.00710	AE	GC/MS, Canisters	[EPA TO-15]	Vinyl bromide
Certified	Yes		NJ	CAP03.00715	AE	GC/MS, Canisters	[EPA TO-15]	Vinyl chloride
Certified	Yes		NJ	CAP03.00720	AE	GC/MS, Canisters	[EPA TO-15]	Xylene (m-)
Certified	Yes		NJ	CAP03.00725	AE	GC/MS, Canisters	[EPA TO-15]	Xylene (o-)
Certified	Yes		NJ	CAP03.00730	AE	GC/MS, Canisters	[EPA TO-15]	Xylene (p-)
Certified	Yes		NJ	CAP03.00735	AE	GC/MS, Sorbent Tubes	[EPA TO-15]	Xylenes (total)
Applied	No		NJ	CAP03.00740	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Acetic acid
Applied	No		NJ	CAP03.00745	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Acetone
Applied	No		NJ	CAP03.00745	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Acetonitrile

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: CAP03 - Atmospheric Organic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	CAP03.00750	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Acrylonitrile
Applied	No	NJ	CAP03.00755	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Aniline
Applied	No	NJ	CAP03.00760	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Benzene
Applied	No	NJ	CAP03.00765	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Butane
Applied	No	NJ	CAP03.00770	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Butanol (1-)
Applied	No	NJ	CAP03.00775	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Butoxyethanol
Applied	No	NJ	CAP03.00780	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Butoxyethylacetate
Applied	No	NJ	CAP03.00785	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Butyl Acetate (n-)
Applied	No	NJ	CAP03.00790	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Butyl Acetate (tert-)
Applied	No	NJ	CAP03.00795	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Carbon tetrachloride
Applied	No	NJ	CAP03.00800	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Chlorobenzene
Applied	No	NJ	CAP03.00805	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Cyclohexanone
Applied	No	NJ	CAP03.00810	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Decane (n-)
Applied	No	NJ	CAP03.00815	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Dichloroethane (1,2-)
Applied	No	NJ	CAP03.00820	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Dodecane (n-)
Applied	No	NJ	CAP03.00825	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethanol
Applied	No	NJ	CAP03.00830	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethoxyethanol
Applied	No	NJ	CAP03.00835	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethoxyethylacetate
Applied	No	NJ	CAP03.00840	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethyl acetate
Applied	No	NJ	CAP03.00845	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethyl acrylate
Applied	No	NJ	CAP03.00850	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethylbenzene
Applied	No	NJ	CAP03.00855	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethylbenzene (1-methyl-2-)
Applied	No	NJ	CAP03.00860	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethylbenzene (1-methyl-3-)
Applied	No	NJ	CAP03.00865	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethylbenzene (1-methyl-4-)
Applied	No	NJ	CAP03.00870	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Furfural
Applied	No	NJ	CAP03.00875	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Heptane (n-)
Applied	No	NJ	CAP03.00880	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Hexane (n-)
Applied	No	NJ	CAP03.00885	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Iso-butyl alcohol
Applied	No	NJ	CAP03.00890	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Isobutylacetate
Applied	No	NJ	CAP03.00895	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Isophorane
Applied	No	NJ	CAP03.00900	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Isopropanol
Applied	No	NJ	CAP03.00905	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: CAP03 - Atmospheric Organic Parameters

Status	Eligible to Report		State	Code	Matrix	Technique Description	Approved Method	Parameter Description
	NJ Data	AE						
Applied	No	AE	NJ	CAP03.00910	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Isopropyl acetate
Applied	No	AE	NJ	CAP03.00915	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Isopropylbenzene
Applied	No	AE	NJ	CAP03.00920	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Maleic anhydride
Applied	No	AE	NJ	CAP03.00925	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methoxyethanol (2-) (methyl cellosolve)
Applied	No	AE	NJ	CAP03.00930	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methoxyethylacetate
Applied	No	AE	NJ	CAP03.00935	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methoxypropanol
Applied	No	AE	NJ	CAP03.00940	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl alcohol (Methanol)
Applied	No	AE	NJ	CAP03.00945	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl ethyl ketone
Applied	No	AE	NJ	CAP03.00950	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl isobutyl ketone
Applied	No	AE	NJ	CAP03.00955	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl methacrylate
Applied	No	AE	NJ	CAP03.00960	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl tert-butyl ether
Applied	No	AE	NJ	CAP03.00965	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl acetate
Applied	No	AE	NJ	CAP03.00970	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methylene chloride (Dichloromethane)
Applied	No	AE	NJ	CAP03.00975	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methylstyrene
Applied	No	AE	NJ	CAP03.00980	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Nitrobenzene
Applied	No	AE	NJ	CAP03.00985	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Nonane (-n)
Applied	No	AE	NJ	CAP03.00990	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Propyl Alcohol (n-)
Applied	No	AE	NJ	CAP03.00995	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Octane (-n)
Applied	No	AE	NJ	CAP03.01000	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Octanol (1-)
Applied	No	AE	NJ	CAP03.01005	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Penatane (-n)
Applied	No	AE	NJ	CAP03.01010	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1016
Applied	No	AE	NJ	CAP03.01015	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1221
Applied	No	AE	NJ	CAP03.01020	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1232
Applied	No	AE	NJ	CAP03.01025	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1242
Applied	No	AE	NJ	CAP03.01030	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1248
Applied	No	AE	NJ	CAP03.01035	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1254
Applied	No	AE	NJ	CAP03.01040	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1260
Applied	No	AE	NJ	CAP03.01045	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Phenol
Applied	No	AE	NJ	CAP03.01050	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Propionitrile
Applied	No	AE	NJ	CAP03.01055	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Propyl acetate
Applied	No	AE	NJ	CAP03.01060	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Pyridine
Applied	No	AE	NJ	CAP03.01065	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Propylbenzene (n-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NFW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: CAP03 - Atmospheric Organic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	CAP03.01070	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Styrene
Applied	No	NJ	CAP03.01075	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Tetrachloroethane (1,1,1,2-)
Applied	No	NJ	CAP03.01080	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Tetrachloroethane (1,1,2,2-)
Applied	No	NJ	CAP03.01085	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Tetrachloroethene
Applied	No	NJ	CAP03.01090	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Toluene
Applied	No	NJ	CAP03.01095	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Trichloroethane (1,1,1-)
Applied	No	NJ	CAP03.01100	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Trichloroethane (1,1,2-)
Applied	No	NJ	CAP03.01105	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Trichloroethene
Applied	No	NJ	CAP03.01110	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Trimethylbenzene (1,2,3-)
Applied	No	NJ	CAP03.01115	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Trimethylbenzene (1,2,4-)
Applied	No	NJ	CAP03.01120	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Trimethylbenzene (1,3,5-)
Applied	No	NJ	CAP03.01125	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Xylenes (total)
Applied	No	NJ	CAP03.01130	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Undecane (n-)
Applied	No	NJ	CAP03.06850	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Acetone
Applied	No	NJ	CAP03.06852	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Allyl chloride
Applied	No	NJ	CAP03.06854	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Benzene
Applied	No	NJ	CAP03.06856	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Bromochloromethane
Applied	No	NJ	CAP03.06858	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Bromoform
Applied	No	NJ	CAP03.06860	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Bromomethane
Applied	No	NJ	CAP03.06862	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Butadiene (1,3-)
Applied	No	NJ	CAP03.06864	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Carbon disulfide
Applied	No	NJ	CAP03.06866	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Carbon tetrachloride
Applied	No	NJ	CAP03.06868	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Chlorobenzene
Applied	No	NJ	CAP03.06870	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Chloroethane
Applied	No	NJ	CAP03.06872	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Chloroform
Applied	No	NJ	CAP03.06874	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Chloromethane
Applied	No	NJ	CAP03.06876	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Chlorotoluene (2-)
Applied	No	NJ	CAP03.06878	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Cyclohexane
Applied	No	NJ	CAP03.06880	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dibromochloromethane
Applied	No	NJ	CAP03.06882	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dibromoethane (1,2-) (EDB)
Applied	No	NJ	CAP03.06884	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichlorobenzene (1,2-)
Applied	No	NJ	CAP03.06886	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichlorobenzene (1,3-)

KEY: AE = Air and Emissions, BT = Biological, Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST.
 Mountainside, NJ 07092

Category: CAP03 -- Atmospheric Organic Parameters

Status	Eligible to Report	NJ Data		State	Code	Matrix	Technique Description	Approved Method	Parameter Description
		No	AE						
Applied	No		AE	NJ	CAP03.06888	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichlorobenzene (1,4-)
Applied	No		AE	NJ	CAP03.06890	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichlorodifluoromethane
Applied	No		AE	NJ	CAP03.06892	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichloroethane (1,1-)
Applied	No		AE	NJ	CAP03.06894	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichloroethane (1,2-)
Applied	No		AE	NJ	CAP03.06896	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichloroethane (cis-1,2-)
Applied	No		AE	NJ	CAP03.06898	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichloroethane (trans-1,2-)
Applied	No		AE	NJ	CAP03.06900	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichloroethane (trans-1,2-)
Applied	No		AE	NJ	CAP03.06902	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichloropropane (cis-1,3-)
Applied	No		AE	NJ	CAP03.06904	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichloropropane (trans-1,3-)
Applied	No		AE	NJ	CAP03.06906	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dichlorotetrafluoroethane (1,2-)
Applied	No		AE	NJ	CAP03.06908	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Dioxane (1,4-)
Applied	No		AE	NJ	CAP03.06910	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Ethanol
Applied	No		AE	NJ	CAP03.06912	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Ethylbenzene
Applied	No		AE	NJ	CAP03.06914	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Ethyltoluene (4-)
Applied	No		AE	NJ	CAP03.06916	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Heptane (n-)
Applied	No		AE	NJ	CAP03.06918	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Hexachlorobutadiene (1,3-)
Applied	No		AE	NJ	CAP03.06920	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Hexane (n-)
Applied	No		AE	NJ	CAP03.06922	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Isopropanol
Applied	No		AE	NJ	CAP03.06924	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Methylene chloride (Dichloromethane)
Applied	No		AE	NJ	CAP03.06926	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Methyl ethyl ketone
Applied	No		AE	NJ	CAP03.06928	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Methyl isobutyl ketone
Applied	No		AE	NJ	CAP03.06930	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Methyl methacrylate
Applied	No		AE	NJ	CAP03.06932	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Methyl tert-butyl ether
Applied	No		AE	NJ	CAP03.06934	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Styrene
Applied	No		AE	NJ	CAP03.06936	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	tert-butyl alcohol
Applied	No		AE	NJ	CAP03.06938	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Tetrachloroethane (1,1,2,2-)
Applied	No		AE	NJ	CAP03.06940	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Tetrachloroethane
Applied	No		AE	NJ	CAP03.06942	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Tetrahydrofuran
Applied	No		AE	NJ	CAP03.06944	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Toluene
Applied	No		AE	NJ	CAP03.06946	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Trichlorobenzene (1,2,4-)
Applied	No		AE	NJ	CAP03.06948	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Trichloroethane (1,1,1-)
Applied	No		AE	NJ	CAP03.06950	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: CAP03 - Atmospheric Organic Parameters

Eligible to Report		State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Status	NJ Data						
Applied	No	NJ	CAPO3.06952	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Trichloroethane (1,1,2-)
Applied	No	NJ	CAPO3.06954	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Trichloroethane
Applied	No	NJ	CAPO3.06956	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Trichlorofluoromethane
Applied	No	NJ	CAPO3.06958	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Trichloro (1,1,2-) trifluoroethane (1,2,2-)
Applied	No	NJ	CAPO3.06960	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Trimethylbenzene (1,2,4-)
Applied	No	NJ	CAPO3.06962	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Trimethylbenzene (1,3,5-)
Applied	No	NJ	CAPO3.06964	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Trimethylpentane (2,2,4-)
Applied	No	NJ	CAPO3.06966	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Vinyl bromide
Applied	No	NJ	CAPO3.06968	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Vinyl chloride
Applied	No	NJ	CAPO3.06970	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Xylene (m- + p-)
Applied	No	NJ	CAPO3.06972	AE	GC/MS, Canisters	[OTHER NIDEP-LLTO-15-3/2007]	Xylene (o-)

Category: SDW02 - Inorganic Parameters Including Na + Ca

Eligible to Report		State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Status	NJ Data						
Certified	Yes	NJ	SDW02.01000	DW	Nephelometric	[EPA 180.1] [SM 2130 B]	Turbidity
Applied	No	NJ	SDW02.02000	DW	Automated Cadmium Reduction	[EPA 353.2]	Nitrate
Certified	Yes	NJ	SDW02.04000	DW	Ion Chromatography	[EPA 300.0]	Nitrate
Dropped	No	NJ	SDW02.06000	DW	Automated Cadmium Reduction	[SM 4500-NO3 F]	Nitrite
Certified	No	NJ	SDW02.08000	DW	Ion Chromatography	[EPA 300.0]	Nitrite
Applied	No	NJ	SDW02.13000	DW	Manual Potentiometric Ion Select Electrode	[SM 4500-F C]	Nitrite
Certified	Yes	NJ	SDW02.14000	DW	Ion Chromatography	[EPA 300.0]	Fluoride
Certified	Yes	NJ	SDW02.18100	DW	Turbidity, Spectrophotometric	[SM 4500-SO4 B]	Fluoride
Certified	Yes	NJ	SDW02.19000	DW	Ion Chromatography	[EPA 300.0]	Sulfate
Certified	Yes	NJ	SDW02.20000	DW	ICP	[EPA 200.7]	Sulfate
Certified	Yes	NJ	SDW02.24000	DW	Gravimetric At 180	[SM 2540 C]	Sodium
Certified	Yes	NJ	SDW02.27000	DW	ICP	[EPA 200.7]	Total dissolved solids (TDS)
Certified	Yes	NJ	SDW02.27200	DW	Ca as Carbonate	[EPA 200.7] [SM 3120 B]	Calcium
Certified	Yes	NJ	SDW02.27300	DW	Hardness By Calculation	[EPA 200.7]	Calcium-hardness
Certified	Yes	NJ	SDW02.28000	DW	Titrimetric Indicator	[SM 2320 B]	Total hardness Alkalinity

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SDW02 - Inorganic Parameters Including Na + Ca

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	NJ	SDW02.29000	DW	Electrometric Titration	[SM 2320 B]	Alkalinity
Certified	No	NJ	NJ	SDW02.29310	DW	Automated Phenate	[SM 4500-NH3 G]	Ammonia
Applied	No	NJ	NJ	SDW02.29500	DW	Ion Chromatography	[EPA 300.0]	Bromide
Dropped	No	NJ	NJ	SDW02.30000	DW	Potentiometric	[SM 4500-Cl D]	Chloride
Certified	Yes	NJ	NJ	SDW02.31000	DW	Ion Chromatography	[EPA 300.0]	Chlorate
Certified	Yes	NJ	NJ	SDW02.31100	DW	Ion Chromatography	[EPA 300.0]	Chlorate
Applied	No	NJ	NJ	SDW02.31120	DW	Ion Chromatography	[EPA 314.0]	Perchlorate
Applied	No	NJ	NJ	SDW02.31125	DW	LC MS/MS	[EPA 331.0]	Perchlorate
Applied	No	NJ	NJ	SDW02.31200	DW	Ion Chromatography	[EPA 300.1]	Chlorite (monthly)
Dropped	No	NJ	NJ	SDW02.31400	DW	Ion Chromatography	[EPA 300.1]	Bromate
Certified	Yes	NJ	NJ	SDW02.32000	DW	Platinum-Cobalt	[SM 2120 B]	Color
Certified	Yes	NJ	NJ	SDW02.33000	DW	Methylene Blue	[SM 5540 C]	Foaming agents
Certified	Yes	NJ	NJ	SDW02.34000	DW	Consistent Series	[SM 2150 B]	Odor
Certified	Yes	NJ	NJ	SDW02.35000	DW	Conductance	[SM 2510 B]	Conductivity
Applied	No	NJ	NJ	SDW02.36400	DW	ICP	[EPA 200.7]	Silica
Certified	No	NJ	NJ	SDW02.37000	DW	Colorimetric	[SM 4500-P E]	Orthophosphate
Certified	Yes	NJ	NJ	SDW02.38000	DW	Ion Chromatography	[EPA 300.0]	Orthophosphate
Certified	No	NJ	NJ	SDW02.39600	DW	High Temp. Combustion	[SM 5310 B]	Total organic carbon (TOC)
Dropped	No	NJ	NJ	SDW02.40000	DW	Pyrolysis, Titrimetric	[SM 5520 B]	Total organic halides (TOX)

Category: SDW03 - Analyze-Immediately Inorganic Parameter

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	NJ	SDW03.03000	DW	DPD, Colorimetric	[SM 4500-Cl G]	Chlorine - residual
Certified	Yes	NJ	NJ	SDW03.08000	DW	Electrometric	[SM 4500-H B]	pH
Certified	Yes	NJ	NJ	SDW03.09000	DW	Thermometric	[SM 2550 B]	Temperature

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: SDW04 - Inorganic Parameters, Metals

Status	NJ Data	Eligible to Report	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	SDW04.03000	DW	ICP	[EPA 200.7] [SM 3120 B]	Aluminum
Certified	Yes		NJ	SDW04.03100	DW	ICP/MS	[EPA 200.8]	Aluminum
Certified	Yes		NJ	SDW04.07000	DW	ICP/MS	[EPA 200.8]	Antimony
Certified	Yes		NJ	SDW04.12000	DW	ICP/MS	[EPA 200.8]	Arsenic
Certified	Yes		NJ	SDW04.16000	DW	ICP	[EPA 200.7]	Barium
Certified	Yes		NJ	SDW04.17000	DW	ICP/MS	[EPA 200.8]	Barium
Certified	Yes		NJ	SDW04.20000	DW	ICP	[EPA 200.7]	Beryllium
Certified	Yes		NJ	SDW04.21000	DW	ICP/MS	[EPA 200.8]	Beryllium
Certified	Yes		NJ	SDW04.24000	DW	ICP	[EPA 200.7]	Cadmium
Certified	Yes		NJ	SDW04.25000	DW	ICP/MS	[EPA 200.8]	Cadmium
Certified	Yes		NJ	SDW04.28000	DW	ICP	[EPA 200.7]	Chromium
Certified	Yes		NJ	SDW04.29000	DW	ICP/MS	[EPA 200.8]	Chromium
Certified	Yes		NJ	SDW04.33000	DW	ICP	[EPA 200.7]	Copper
Certified	Yes		NJ	SDW04.34000	DW	ICP/MS	[EPA 200.8]	Copper
Certified	Yes		NJ	SDW04.37000	DW	ICP	[EPA 200.7] [SM 3120 B]	Iron
Certified	Yes		NJ	SDW04.40000	DW	ICP/MS	[EPA 200.8]	Lead
Certified	Yes		NJ	SDW04.41100	DW	ICP	[EPA 200.7]	Magnesium
Certified	Yes		NJ	SDW04.44000	DW	ICP	[EPA 200.7]	Manganese
Certified	Yes		NJ	SDW04.45000	DW	ICP/MS	[EPA 200.8]	Manganese
Certified	Yes		NJ	SDW04.46000	DW	Manual Cold Vapor	[EPA 245.1]	Mercury
Certified	Yes		NJ	SDW04.52000	DW	ICP	[EPA 200.7]	Nickel
Certified	Yes		NJ	SDW04.53000	DW	ICP/MS	[EPA 200.8]	Nickel
Certified	Yes		NJ	SDW04.57000	DW	ICP/MS	[EPA 200.8]	Selenium
Certified	Yes		NJ	SDW04.62000	DW	ICP	[EPA 200.7] [SM 3120 B]	Silver
Certified	Yes		NJ	SDW04.63000	DW	ICP/MS	[EPA 200.8]	Silver
Certified	Yes		NJ	SDW04.65000	DW	ICP/MS	[EPA 200.8]	Thallium
Certified	Yes		NJ	SDW04.67000	DW	ICP	[EPA 200.7] [SM 3120 B]	Zinc
Certified	Yes		NJ	SDW04.68000	DW	ICP/MS	[EPA 200.8]	Zinc

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SDW06 - Organic Parameters, Chromatography/MS

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	SDW06.01010	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Bromoform
Certified	Yes		NJ	SDW06.01020	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chloroform
Certified	Yes		NJ	SDW06.01030	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dibromochloromethane
Certified	Yes		NJ	SDW06.01040	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Bromodichloromethane
Certified	Yes		NJ	SDW06.02010	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Benzene
Certified	Yes		NJ	SDW06.02020	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Carbon tetrachloride
Certified	Yes		NJ	SDW06.02030	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chlorobenzene
Certified	Yes		NJ	SDW06.02040	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichlorobenzene (1,2-)
Certified	Yes		NJ	SDW06.02050	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichlorobenzene (1,3-)
Certified	Yes		NJ	SDW06.02060	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichlorobenzene (1,4-)
Certified	Yes		NJ	SDW06.02070	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloroethane (1,1-)
Certified	Yes		NJ	SDW06.02080	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloroethane (1,2-)
Certified	Yes		NJ	SDW06.02090	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloroethene (cis-1,2-)
Certified	Yes		NJ	SDW06.02100	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloroethene (trans-1,2-)
Certified	Yes		NJ	SDW06.02110	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methylene chloride (Dichloromethane)
Certified	Yes		NJ	SDW06.02120	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropane (1,2-)
Certified	Yes		NJ	SDW06.02130	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Ethylbenzene
Certified	Yes		NJ	SDW06.02140	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methyl tert-butyl ether
Certified	Yes		NJ	SDW06.02150	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Naphthalene
Certified	Yes		NJ	SDW06.02160	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Styrene
Certified	Yes		NJ	SDW06.02170	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Tetrachloroethane (1,1,2,2-)
Certified	Yes		NJ	SDW06.02180	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Tetrachloroethene
Certified	Yes		NJ	SDW06.02190	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichloroethane (1,1,1-)
Certified	Yes		NJ	SDW06.02200	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichloroethene
Certified	Yes		NJ	SDW06.02210	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Toluene
Certified	Yes		NJ	SDW06.02220	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichlorobenzene (1,2,4-)
Certified	Yes		NJ	SDW06.02230	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloroethene (1,1-)
Certified	Yes		NJ	SDW06.02240	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichloroethane (1,1,2-)
Certified	Yes		NJ	SDW06.02250	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Vinyl chloride
Certified	Yes		NJ	SDW06.02260	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Xylenes (total)
Certified	Yes		NJ	SDW06.03010	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Bromobenzene
Certified	Yes		NJ	SDW06.03020	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Bromochloromethane

KEY: AE = Air and Emissions, ET = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: SDW06 - Organic Parameters, Chromatography/MS

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	SDW06.03030	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Bromomethane
Certified	Yes		NJ	SDW06.03040	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Butyl benzene (n-)
Certified	Yes		NJ	SDW06.03050	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Sec-butylbenzene
Certified	Yes		NJ	SDW06.03060	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Tert-butylbenzene
Certified	Yes		NJ	SDW06.03070	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chloroethane
Certified	Yes		NJ	SDW06.03080	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chloromethane
Certified	Yes		NJ	SDW06.03090	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chlorotoluene (2-)
Certified	Yes		NJ	SDW06.03100	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chlorotoluene (4-)
Certified	No		NJ	SDW06.03110	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dibromo-3-chloropropane (1,2-)
Certified	No		NJ	SDW06.03120	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dibromomethane (1,2-) (EDB)
Certified	Yes		NJ	SDW06.03130	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dibromomethane
Certified	Yes		NJ	SDW06.03140	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichlorodifluoromethane
Certified	Yes		NJ	SDW06.03150	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropane (1,3-)
Certified	Yes		NJ	SDW06.03160	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropane (2,2-)
Certified	Yes		NJ	SDW06.03170	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropane (1,1-)
Certified	Yes		NJ	SDW06.03180	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropene (cis-1,3-)
Certified	Yes		NJ	SDW06.03190	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropene (trans-1,3-)
Certified	Yes		NJ	SDW06.03200	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Hexachlorobutadiene (1,3-)
Certified	Yes		NJ	SDW06.03210	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Isopropylbenzene
Certified	Yes		NJ	SDW06.03220	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Isopropyltoluene (4-)
Certified	Yes		NJ	SDW06.03230	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Propylbenzene (n-)
Certified	Yes		NJ	SDW06.03240	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Tetrahydroethane (1,1,1,2-)
Certified	Yes		NJ	SDW06.03250	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichloroethane (1,2,3-)
Certified	Yes		NJ	SDW06.03260	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichlorofluoromethane
Certified	Yes		NJ	SDW06.03270	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichloropropane (1,1,1,2-)
Certified	Yes		NJ	SDW06.03280	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trimethylbenzene (1,2,4-)
Certified	Yes		NJ	SDW06.03300	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trimethylbenzene (1,3,5-)
Certified	Yes		NJ	SDW06.03310	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Nitrobenzene
Certified	Yes		NJ	SDW06.03410	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Acetone
Certified	Yes		NJ	SDW06.03420	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Acrylonitrile
Certified	Yes		NJ	SDW06.03430	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Allyl chloride
Certified	Yes		NJ	SDW06.03440	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Butanone (2-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SDW06 -- Organic Parameters, Chromatography/MS

Eligible to Report		State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Status	NJ Data						
Certified	Yes	NJ	SDW06.03450	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Carbon disulfide
Certified	Yes	NJ	SDW06.03460	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chloroacetonitrile
Certified	Yes	NJ	SDW06.03470	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chlorobutane (1-)
Certified	Yes	NJ	SDW06.03480	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloro-2-butene (trans-1,4-)
Certified	Yes	NJ	SDW06.03490	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropane (1,1-)
Certified	Yes	NJ	SDW06.03500	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Diethyl ether (Ethyl ether)
Certified	Yes	NJ	SDW06.03510	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Ethyl methacrylate
Certified	Yes	NJ	SDW06.03520	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Hexachlorocyclohexane
Certified	Yes	NJ	SDW06.03530	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Hexanous (2-)
Certified	Yes	NJ	SDW06.03540	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methacrylonitrile
Certified	Yes	NJ	SDW06.03550	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methyl acrylate
Certified	Yes	NJ	SDW06.03560	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methyl iodide
Certified	Yes	NJ	SDW06.03570	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methyl methacrylate
Certified	Yes	NJ	SDW06.03580	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Pentanone (4-methyl-2-)
Certified	Yes	NJ	SDW06.03590	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Nitropropane (2-)
Certified	Yes	NJ	SDW06.03600	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Pentachloroethane
Certified	Yes	NJ	SDW06.03610	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Propionitrile
Certified	Yes	NJ	SDW06.03620	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Tetrahydrofuran

Category: CLP01 -- Multi-Media, Multi-Conc. Inorganics

Eligible to Report		State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Status	NJ Data						
Certified	Yes	NJ	CLP01.06102	NPW	ICP/MS	[EPA ILM05.4]	Antimony
Certified	Yes	NJ	CLP01.08102	NPW	ICP/MS	[EPA ILM05.4]	Arsenic
Certified	Yes	NJ	CLP01.11102	NPW	ICP/MS	[EPA ILM05.4]	Barium
Certified	Yes	NJ	CLP01.14102	NPW	ICP/MS	[EPA ILM05.4]	Beryllium
Certified	Yes	NJ	CLP01.19102	NPW	ICP/MS	[EPA ILM05.4]	Cadmium
Certified	Yes	NJ	CLP01.24102	NPW	ICP/MS	[EPA ILM05.4]	Chromium
Certified	Yes	NJ	CLP01.27102	NPW	ICP/MS	[EPA ILM05.4]	Cobalt
Certified	Yes	NJ	CLP01.30102	NPW	ICP/MS	[EPA ILM05.4]	Copper

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: CLP01 - Multi-Media, Multi-Conc. Inorganics			
Eligible to Report			
Status	NJ Data	State	Code
Certified	Yes	NJ	CLP01.36102
Certified	Yes	NJ	CLP01.41102
Certified	Yes	NJ	CLP01.47102
Certified	Yes	NJ	CLP01.51102
Certified	Yes	NJ	CLP01.54102
Certified	Yes	NJ	CLP01.59102
Certified	Yes	NJ	CLP01.63102
Certified	Yes	NJ	CLP01.66102
Status	NJ Data	State	Code
Certified	Yes	NJ	SHW03.02000
Category: SHW03 - Analyze-Immediately Parameters			
Eligible to Report			
Status	NJ Data	State	Code
Certified	Yes	NJ	SHW03.02000
Category: SHW04 - Inorganic Parameters			
Eligible to Report			
Status	NJ Data	State	Code
Certified	Yes	NJ	SHW04.01000
Certified	Yes	NJ	SHW04.01500
Category: SHW05 - Organic Parameters, Prep. / Screening			
Eligible to Report			
Status	NJ Data	State	Code
Certified	Yes	NJ	SHW05.01000
Certified	Yes	NJ	SHW05.02000
Applied	No	NJ	SHW05.02100
Certified	Yes	NJ	SHW05.07000

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	CLP01.36102	NPW	ICP/MS	[EPA ILM05.4]	Lead
Certified	Yes	NJ	CLP01.41102	NPW	ICP/MS	[EPA ILM05.4]	Manganese
Certified	Yes	NJ	CLP01.47102	NPW	ICP/MS	[EPA ILM05.4]	Nickel
Certified	Yes	NJ	CLP01.51102	NPW	ICP/MS	[EPA ILM05.4]	Selenium
Certified	Yes	NJ	CLP01.54102	NPW	ICP/MS	[EPA ILM05.4]	Silver
Certified	Yes	NJ	CLP01.59102	NPW	ICP/MS	[EPA ILM05.4]	Thallium
Certified	Yes	NJ	CLP01.63102	NPW	ICP/MS	[EPA ILM05.4]	Vanadium
Certified	Yes	NJ	CLP01.66102	NPW	ICP/MS	[EPA ILM05.4]	Zinc

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW03.02000	NPW	Thermometric	[SM 2550 B]	Temperature

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW04.01000	NPW	Acid Digestion/Surface and Groundwater, ICP, FLAA	[SW-846 3005A, Rev. 1, 7/92]	Metals, Total Rec and Dissolved
Certified	Yes	NJ	SHW04.01500	NPW	Acid Digestion/Aqueous Samples, ICP, FLAA	[SW-846 3010A, Rev. 1, 7/92]	Metals, Total

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW05.01000	NPW	Separatory Funnel Extraction	[SW-846 3510C, Rev. 3, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.02000	NPW	Continuous Liquid-Liquid Extraction	[SW-846 3520C, Rev. 3, 12/96]	Semivolatile organics
Applied	No	NJ	SHW05.02100	NPW	Solid Phase Extraction (SPE)	[SW-846 3535, Rev. 0, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.07000	NPW	Purge & Trap Aqueous	[SW-846 5030B, Rev. 2, 12/96]	Volatile organics

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW09 - Miscellaneous Parameters

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW09.06000	NPW	Combustion, Titration	[SW-846 9020B, Rev. 2, 9/94]	Total organic halides (TOX)
Certified	Yes	NJ	SHW09.17000	NPW	Wheatstone Bridge	[SW-846 9050A, Rev. 1, 12/96]	Specific conductance

Category: WFP02 - Inorganic Parameters, Nutrients and Dema

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	WFP02.01000	NPW	Electrometric or Phenolphthalein	[ASTM D1067-92] [SM 2310 B(4A)]	Acidity as CaCO3
Certified	Yes	NJ	WFP02.01500	NPW	Electrometric or Color Titration	[SM 2320 B]	Alkalinity as CaCO3
Applied	No	NJ	WFP02.03000	NPW	Distillation, Titration	[SM 4500-NH3 B, E]	Ammonia
Certified	Yes	NJ	WFP02.04000	NPW	Automated Phenate	[SM 4500-NH3 H]	Ammonia
Certified	Yes	NJ	WFP02.05000	NPW	Dissolved Oxygen Depletion	[SM 5210 B]	Biochemical oxygen demand
Certified	Yes	NJ	WFP02.06000	NPW	ICP	[EPA 200.7] [SM 3120 B]	Boron
Dropped	No	NJ	WFP02.06600	NPW	Ion Chromatography	[EPA 300.0]	Bromate
Certified	Yes	NJ	WFP02.07100	NPW	Ion Chromatography	[EPA 300.0]	Bromide
Certified	Yes	NJ	WFP02.08000	NPW	Digestion, ICP	[EPA 200.7]	Calcium
Certified	Yes	NJ	WFP02.08050	NPW	ICP/MS	[EPA 200.8]	Calcium
Certified	Yes	NJ	WFP02.09500	NPW	Dissolved Oxygen Depletion, Nitrification Inhibition	[SM 5210 B]	Carbonaceous BOD (CBOD)
Certified	Yes	NJ	WFP02.10500	NPW	Spectrophotometric Manual/Auto	[SM 5220 D]	Chemical oxygen demand
Suspended	No	NJ	WFP02.11500	NPW	Titrimetric, Mercuric Nitrate	[SM 4500-Cl C]	Chloride
Certified	Yes	NJ	WFP02.12600	NPW	Ion Chromatography	[EPA 300.0]	Chloride
Dropped	No	NJ	WFP02.12700	NPW	Ion Chromatography	[EPA 300.0]	Chlorate
Applied	No	NJ	WFP02.12800	NPW	Ion Chromatography	[EPA 300.0]	Chlorite
Certified	Yes	NJ	WFP02.13500	NPW	Colorimetric (Platinum-Cobalt)	[SM 2120 B]	Color
Applied	No	NJ	WFP02.14500	NPW	Distillation, Titrimetric	[SM 4500-CN C, D]	Cyanide
Certified	Yes	NJ	WFP02.15000	NPW	Distillation, Spectrophotometric (Manual)	[SM 4500-CN C, E]	Cyanide
Applied	No	NJ	WFP02.16000	NPW	Manual Distillation, Titrimetric/Spectro	[SM 4500-CN C, G]	Cyanide - amenable to Cl2
Applied	No	NJ	WFP02.17500	NPW	Distillation + Colorimetric(Spads)	[SM 4500-F B, D]	Fluoride
Certified	Yes	NJ	WFP02.18100	NPW	Ion Chromatography	[EPA 300.0]	Fluoride
Certified	Yes	NJ	WFP02.20100	NPW	Ca + Mg Carbonates, ICP	[EPA 200.7]	Hardness - total as CaCO3
Certified	Yes	NJ	WFP02.20500	NPW	Digestion, Distillation, Titration	[SM 4500-N Org B or C]	Kjeldahl nitrogen - total

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: WPP02 - Inorganic Parameters, Nutrients and Dema

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Eligible to Report							
Certified	Yes	NJ	WPP02.24000	NPW	Digestion, ICP	[EPA 200.7]	Magnesium
Certified	Yes	NJ	WPP02.26100	NPW	Ion Chromatography	[EPA 300.0]	Nitrate
Applied	No	NJ	WPP02.27000	NPW	Cadmium Reduction, Automated	[EPA 353.2]	Nitrate - nitrite
Applied	No	NJ	WPP02.27500	NPW	Spectrophotometric Auto Hydrazine	[SM 4500-NO3 H]	Nitrate - nitrite
Certified	Yes	NJ	WPP02.28000	NPW	Spectrophotometric, Manual	[SM 4500-NO2 B]	Nitrite
Certified	Yes	NJ	WPP02.28600	NPW	Ion Chromatography	[EPA 300.0]	Nitrite
Dropped	No	NJ	WPP02.29000	NPW	Gravimetric	[EPA 413.1]	Oil & grease - total recov
Certified	Yes	NJ	WPP02.29100	NPW	Gravimetric, Hexane Extractable Material-LL	[EPA 1664A]	Oil & grease - hem-LL
Certified	Yes	NJ	WPP02.29150	NPW	Gravimetric, Hexane Extractable Material-SPE	[EPA 1664A]	Oil & grease - hem-SPE
Certified	Yes	NJ	WPP02.29200	NPW	Gravimetric, Silica Gel Treated-Hem	[EPA 1664A]	Oil & grease - sgt-non polar
Certified	Yes	NJ	WPP02.29250	NPW	Gravimetric, Silica Gel Treated-Hem-SPE	[EPA 1664A]	Oil & grease - non polar
Dropped	No	NJ	WPP02.29260	NPW	Spectrophotometric, Infrared	[EPA 418.1]	Total rec. petroleum hydrocarbons
Certified	Yes	NJ	WPP02.30000	NPW	Combustion or Oxidation	[SM 5310 B, C or D]	Total organic carbon (TOC)
Certified	Yes	NJ	WPP02.30500	NPW	Total Kjeldahl-N Minus Ammonia-N	[EPA 351.1, 2, 3, 4 - 350.1, 2, 3] [SM 4500-NH3 B, C, E, F, G, H]	Organic nitrogen
Certified	Yes	NJ	WPP02.31500	NPW	Ascorbic Acid, Manual Single Reagent	[EPA 300.0]	Orthophosphate
Certified	Yes	NJ	WPP02.32100	NPW	Ion Chromatography	[EPA 420.1]	Orthophosphate
Certified	Yes	NJ	WPP02.32500	NPW	Manual Distillation, Colorimetric 4AAP	[EPA 365.3]	Phenols
Certified	Yes	NJ	WPP02.34000	NPW	Persulfate Digestion + Manual	[EPA 200.7] [SM 3120 B]	Phosphorus (total)
Certified	Yes	NJ	WPP02.36500	NPW	Digestion, ICP	[SM 2540 B]	Potassium
Certified	Yes	NJ	WPP02.38000	NPW	Gravimetric, 103-105 Degrees C	[SM 2540 C]	Residue - total
Certified	Yes	NJ	WPP02.38500	NPW	Gravimetric, 180 Degrees C	[SM 2540 D]	Residue - filterable (TDS)
Certified	Yes	NJ	WPP02.39000	NPW	Gravimetric, 103-105 Degrees C, Post Washing	[SM 2540 F]	Residue - nonfilterable (TSS)
Certified	Yes	NJ	WPP02.39500	NPW	Volumetric (Imhoff Cone) or Gravimetric	[EPA 160.4]	Residue - settleable
Certified	Yes	NJ	WPP02.40000	NPW	Gravimetric, 550 Degrees C	[SM 2540 G]	Residue - volatile
Certified	Yes	NJ	WPP02.40100	NPW	Gravimetric, 500 Degrees C	[SM 2520 C]	Total, fixed, and volatile solids (SQAR)
Applied	No	NJ	WPP02.41000	NPW	Hydrometric (Density Salinity Tables)	[EPA 200.7] [SM 3120 B]	Salinity
Certified	Yes	NJ	WPP02.42500	NPW	0.45u Filtration + ICP	[EPA 200.7] [SM 3120 B]	Silica - dissolved
Certified	Yes	NJ	WPP02.44000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Sodium
Certified	Yes	NJ	WPP02.44050	NPW	ICP/MS	[EPA 200.8]	Sodium
Suspended	No	NJ	WPP02.44500	NPW	Wheatstone Bridge	[EPA 120.1] [SM 2510 B]	Specific conductance
Certified	Yes	NJ	WPP02.45500	NPW	Turbidimetric	[OTHER 426C SM 15th Ed.]	Sulfate
Certified	Yes	NJ	WPP02.46500	NPW			

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: WPP02 -- Inorganic Parameters, Nutrients and Dema									
Eligible to Report									
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description		
Certified	Yes	NJ	WPP02.47100	NPW	Ion Chromatography	[EPA 300.0]	Sulfate		
Certified	Yes	NJ	WPP02.47500	NPW	Titrimetric, Iodine	[SM 4500-S B or F]	Sulfides		
Certified	Yes	NJ	WPP02.48500	NPW	Colorimetric (Methylene Blue)	[SM 5540 C]	Surfactants		
Certified	Yes	NJ	WPP02.50000	NPW	Nephelometric	[EPA 180.1] [SM 2130 B]	Turbidity		
Applied	No	NJ	WPP02.51000	NPW	Electrode	[SM 2710 B]	Specific oxygen uptake		
Category: WPP03 -- Analyze-Immediately Inorganic Parameters									
Eligible to Report									
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description		
Certified	Yes	NJ	WPP03.05000	NPW	Spectrophotometric, DPD	[SM 4500-CI G]	Chlorine		
Certified	Yes	NJ	WPP03.07000	NPW	Winkler, Azide Modification	[SM 4500-O C]	Oxygen (dissolved)		
Certified	Yes	NJ	WPP03.08000	NPW	Electrode	[SM 4500-O G]	Oxygen (dissolved)		
Certified	Yes	NJ	WPP03.09000	NPW	Electrometric	[SM 4500-H B]	pH		
Applied	No	NJ	WPP03.12000	NPW	Titrimetric, Iodine-Iodate	[SM 4500-SO3 B]	Sulfite - SO3		
Certified	Yes	NJ	WPP03.14000	NPW	Thermometric	[SM 2550 B]	Temperature		
Category: WPP04 -- Inorganic Parameters, Metals									
Eligible to Report									
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description		
Applied	No	NJ	WPP04.00800	NPW	Total Recoverable Elements	[EPA 200.2, Rev. 2.8, 5/94]	Sample preparation (Metals)		
Certified	Yes	NJ	WPP04.02000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Aluminum		
Certified	Yes	NJ	WPP04.02100	NPW	ICP/MS	[EPA 200.8]	Aluminum		
Certified	Yes	NJ	WPP04.04500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Antimony		
Certified	Yes	NJ	WPP04.04600	NPW	ICP/MS	[EPA 200.8]	Antimony		
Certified	Yes	NJ	WPP04.05600	NPW	Digestion, ICP	[EPA 200.7] [SM 3120B]	Arsenic		
Certified	Yes	NJ	WPP04.05700	NPW	ICP/MS	[EPA 200.8]	Arsenic		
Certified	Yes	NJ	WPP04.08000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Barium		
Certified	Yes	NJ	WPP04.08200	NPW	ICP/MS	[EPA 200.8]	Barium		
Certified	Yes	NJ	WPP04.11000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Beryllium		

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: WPP04 - Inorganic Parameters, Metals

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	WPP04.11100	NPW	ICP/MS	[EPA 200.8]	Beryllium
Certified	Yes		NJ	WPP04.13500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Cadmium
Certified	Yes		NJ	WPP04.13600	NPW	ICP/MS	[EPA 200.8]	Cadmium
Certified	Yes		NJ	WPP04.15000	NPW	0.45u Filter, Colorimetric DPC	[SM 3500-Cr-D]	Cadmium (VI)
Certified	Yes		NJ	WPP04.18000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Chromium
Certified	Yes		NJ	WPP04.18100	NPW	ICP/MS	[EPA 200.8]	Chromium
Certified	Yes		NJ	WPP04.19500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120B]	Cobalt
Certified	Yes		NJ	WPP04.19600	NPW	ICP/MS	[EPA 200.8]	Cobalt
Certified	Yes		NJ	WPP04.21500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Copper
Certified	Yes		NJ	WPP04.21600	NPW	ICP/MS	[EPA 200.8]	Copper
Certified	Yes		NJ	WPP04.26500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Iron
Applied	No		NJ	WPP04.26550	NPW	ICP/MS	[EPA 200.8]	Iron
Certified	Yes		NJ	WPP04.28000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Lead
Certified	Yes		NJ	WPP04.28100	NPW	ICP/MS	[EPA 200.8]	Lead
Certified	Yes		NJ	WPP04.31000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Manganese
Certified	Yes		NJ	WPP04.31100	NPW	ICP/MS	[EPA 200.8]	Manganese
Certified	Yes		NJ	WPP04.33000	NPW	Manual Cold Vapor	[EPA 245.1] [SM 3112 B]	Mercury
Certified	Yes		NJ	WPP04.35000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Molybdenum
Certified	Yes		NJ	WPP04.35200	NPW	ICP/MS	[EPA 200.8]	Molybdenum
Certified	Yes		NJ	WPP04.37500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Nickel
Certified	Yes		NJ	WPP04.37600	NPW	ICP/MS	[EPA 200.8]	Nickel
Certified	Yes		NJ	WPP04.45500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Selenium
Certified	Yes		NJ	WPP04.45600	NPW	ICP/MS	[EPA 200.8]	Selenium
Certified	Yes		NJ	WPP04.48000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Silver
Certified	Yes		NJ	WPP04.48200	NPW	ICP/MS	[EPA 200.8]	Silver
Certified	Yes		NJ	WPP04.50000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Thallium
Certified	Yes		NJ	WPP04.50100	NPW	ICP/MS	[EPA 200.8]	Thallium
Certified	Yes		NJ	WPP04.51100	NPW	Digestion, ICP	[EPA 200.7]	Tin
Applied	No		NJ	WPP04.51200	NPW	ICP/MS	[EPA 200.8]	Tin
Applied	No		NJ	WPP04.52050	NPW	Digestion, ICP	[EPA 200.7]	Titanium
Certified	Yes		NJ	WPP04.52300	NPW	ICP/MS	[EPA 200.8]	Thorium
Certified	Yes		NJ	WPP04.52500	NPW	ICP/MS	[EPA 200.8]	Uranium

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: WPP04 -- Inorganic Parameters, Metals

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	WPP04.54000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Vanadium
Certified	Yes	NJ	WPP04.54100	NPW	ICP/MS	[EPA 200.8]	Vanadium
Certified	Yes	NJ	WPP04.56500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Zinc
Certified	Yes	NJ	WPP04.56600	NPW	ICP/MS	[EPA 200.8]	Zinc

Category: WPP05 -- Organic Parameters, Chromatography

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	WPP05.01010	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Bromodichloromethane
Certified	Yes	NJ	WPP05.01020	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Bromoform
Certified	Yes	NJ	WPP05.01030	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Bromomethane
Certified	Yes	NJ	WPP05.01040	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Carbon tetrachloride
Certified	Yes	NJ	WPP05.01060	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Chloroethane
Certified	Yes	NJ	WPP05.01070	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Chloroethyl vinyl ether (2-)
Certified	Yes	NJ	WPP05.01080	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Chloroform
Certified	Yes	NJ	WPP05.01090	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Chloromethane
Applied	No	NJ	WPP05.01100	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dibromochloromethane
Certified	Yes	NJ	WPP05.01110	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichlorobenzene (1,2-)
Certified	Yes	NJ	WPP05.01120	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichlorobenzene (1,3-)
Certified	Yes	NJ	WPP05.01130	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichlorobenzene (1,4-)
Certified	Yes	NJ	WPP05.01140	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichlorodifluoromethane
Certified	Yes	NJ	WPP05.01150	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloroethane (1,1-)
Certified	Yes	NJ	WPP05.01160	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloroethane (1,2-)
Certified	Yes	NJ	WPP05.01170	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloroethane (1,2-)
Certified	Yes	NJ	WPP05.01180	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloroethane (1,1-)
Certified	Yes	NJ	WPP05.01190	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloroethene (trans-1,2-)
Certified	Yes	NJ	WPP05.01200	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloropropane (1,2-)
Certified	Yes	NJ	WPP05.01210	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloropropane (cis-1,3-)
Certified	Yes	NJ	WPP05.01220	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloropropane (trans-1,3-)
Certified	Yes	NJ	WPP05.01230	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Methylene chloride (Dichloromethane)
Certified	Yes	NJ	WPP05.01230	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Tetrachloroethane (1,1,2,2-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: WPP05 - Organic Parameters, Chromatography

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description	Eligible to Report	
								Yes	No
Certified	Yes	NJ	WPP05.01240	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Tetrachloroethene		
Certified	Yes	NJ	WPP05.01250	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Trichloroethane (1,1,1-)		
Certified	Yes	NJ	WPP05.01260	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Trichloroethane (1,1,2-)		
Certified	Yes	NJ	WPP05.01270	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Trichloroethane		
Certified	Yes	NJ	WPP05.01280	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Trichlorofluoromethane		
Certified	Yes	NJ	WPP05.01290	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Vinyl chloride		
Certified	Yes	NJ	WPP05.02010	NPW	Purge & Trap, GC (PID)	[EPA 602] [SM 6220 B]	Benzene		
Certified	Yes	NJ	WPP05.02030	NPW	Purge & Trap, GC (PID)	[EPA 602] [SM 6220 B]	Dichlorobenzene (1,2-)		
Certified	Yes	NJ	WPP05.02040	NPW	Purge & Trap, GC (PID)	[EPA 602] [SM 6220 B]	Dichlorobenzene (1,3-)		
Certified	Yes	NJ	WPP05.02050	NPW	Purge & Trap, GC (PID)	[EPA 602] [SM 6220 B]	Dichlorobenzene (1,4-)		
Certified	Yes	NJ	WPP05.02060	NPW	Purge & Trap, GC (PID)	[EPA 602] [SM 6220 B]	Ethylbenzene		
Certified	Yes	NJ	WPP05.02062	NPW	Purge & Trap, GC (PID)	[EPA 602]	Methyl tert-butyl ether		
Certified	Yes	NJ	WPP05.02064	NPW	Purge & Trap, GC (PID)	[EPA 602]	Tert-butyl alcohol		
Certified	Yes	NJ	WPP05.02070	NPW	Purge & Trap, GC (PID)	[EPA 602]	Toluene		
Certified	Yes	NJ	WPP05.02080	NPW	Purge & Trap, GC (PID)	[EPA 602]	Xylenes (total)		
Certified	Yes	NJ	WPP05.09010	NPW	Extract/GC (ECD)	[EPA 608]	Aldrin		
Certified	Yes	NJ	WPP05.09020	NPW	Extract/GC (ECD)	[EPA 608]	Alpha BHC		
Certified	Yes	NJ	WPP05.09030	NPW	Extract/GC (ECD)	[EPA 608]	Beta BHC		
Certified	Yes	NJ	WPP05.09040	NPW	Extract/GC (ECD)	[EPA 608]	Delta BHC		
Certified	Yes	NJ	WPP05.09050	NPW	Extract/GC (ECD)	[EPA 608]	Lindane (gamma BHC)		
Certified	Yes	NJ	WPP05.09060	NPW	Extract/GC (ECD)	[EPA 608]	Chlordane		
Certified	Yes	NJ	WPP05.09070	NPW	Extract/GC (ECD)	[EPA 608]	DDD (4,4')		
Certified	Yes	NJ	WPP05.09080	NPW	Extract/GC (ECD)	[EPA 608]	DDE (4,4')		
Certified	Yes	NJ	WPP05.09090	NPW	Extract/GC (ECD)	[EPA 608]	DDT (4,4')		
Certified	Yes	NJ	WPP05.09100	NPW	Extract/GC (ECD)	[EPA 608]	Dieldrin		
Certified	Yes	NJ	WPP05.09110	NPW	Extract/GC (ECD)	[EPA 608]	Endosulfan I		
Certified	Yes	NJ	WPP05.09120	NPW	Extract/GC (ECD)	[EPA 608]	Endosulfan II		
Certified	Yes	NJ	WPP05.09130	NPW	Extract/GC (ECD)	[EPA 608]	Endosulfan sulfate		
Certified	Yes	NJ	WPP05.09140	NPW	Extract/GC (ECD)	[EPA 608]	Endrin		
Certified	Yes	NJ	WPP05.09150	NPW	Extract/GC (ECD)	[EPA 608]	Endrin aldehyde		
Certified	Yes	NJ	WPP05.09160	NPW	Extract/GC (ECD)	[EPA 608]	Endrin ketone		
Certified	Yes	NJ	WPP05.09170	NPW	Extract/GC (ECD)	[EPA 608]	Heptachlor		

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008



Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST.
Mountainside, NJ 07092

Category: WPP05 - Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	WPP05.09180	NPW	Extract/GC (ECD)	[EPA 608]	Heptachlor epoxide
Certified	Yes	NJ	WPP05.09190	NPW	Extract/GC (ECD)	[EPA 608]	Methoxychlor
Certified	Yes	NJ	WPP05.09200	NPW	Extract/GC (ECD)	[EPA 608]	Toxaphene
Certified	Yes	NJ	WPP05.11010	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1016
Certified	Yes	NJ	WPP05.11020	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1221
Certified	Yes	NJ	WPP05.11030	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1232
Certified	Yes	NJ	WPP05.11040	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1242
Certified	Yes	NJ	WPP05.11050	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1248
Certified	Yes	NJ	WPP05.11060	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1254
Certified	Yes	NJ	WPP05.11070	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1260
Certified	Yes	NJ	WPP05.30010	NPW	Extraction, GC, FID	[OTHER NJ-OQA-QAM-025, Rev. 6]	Petroleum Organics

Category: WPP06 - Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	WPP06.02010	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Benzene
Certified	Yes	NJ	WPP06.02020	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Bromodichloromethane
Certified	Yes	NJ	WPP06.02030	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Bromoform
Certified	Yes	NJ	WPP06.02040	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Bromomethane
Certified	Yes	NJ	WPP06.02050	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Carbon tetrachloride
Certified	Yes	NJ	WPP06.02060	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Chlorobenzene
Certified	Yes	NJ	WPP06.02070	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Chloroethane
Certified	Yes	NJ	WPP06.02080	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Chloroethyl vinyl ether (2-)
Certified	Yes	NJ	WPP06.02090	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Chloroform
Certified	Yes	NJ	WPP06.02100	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Chloromethane
Certified	Yes	NJ	WPP06.02110	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dibromochloromethane
Certified	Yes	NJ	WPP06.02120	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichlorobenzene (1,2-)
Certified	Yes	NJ	WPP06.02130	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichlorobenzene (1,3-)
Certified	Yes	NJ	WPP06.02140	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichlorobenzene (1,4-)
Certified	Yes	NJ	WPP06.02150	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloroethane (1,1-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: WPP06 - Organic Parameters, Chromatography/MS

Status	NJ Data	Eligible to Report	State	Cnde	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	WPP06.02160	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloroethane (1,2-)
Certified	Yes		NJ	WPP06.02170	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloroethane (1,1-)
Certified	Yes		NJ	WPP06.02180	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloroethane (trans-1,2-)
Certified	Yes		NJ	WPP06.02190	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloropropane (1,2-)
Certified	Yes		NJ	WPP06.02200	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloropropene (cis-1,3-)
Certified	Yes		NJ	WPP06.02210	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloropropene (trans-1,3-)
Certified	Yes		NJ	WPP06.02220	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Ethylbenzene
Certified	Yes		NJ	WPP06.02230	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Methylene chloride (Dichloromethane)
Certified	Yes		NJ	WPP06.02232	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Methyl tert-butyl ether
Certified	Yes		NJ	WPP06.02234	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Tert-butyl alcohol
Certified	Yes		NJ	WPP06.02238	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Styrene
Certified	Yes		NJ	WPP06.02240	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Tetrachloroethane (1,1,2,2-)
Certified	Yes		NJ	WPP06.02250	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Tetrachloroethene
Certified	Yes		NJ	WPP06.02260	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Toluene
Certified	Yes		NJ	WPP06.02270	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Trichloroethane (1,1,1-)
Certified	Yes		NJ	WPP06.02280	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Trichloroethane (1,1,2-)
Certified	Yes		NJ	WPP06.02290	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Trichloroethene
Certified	Yes		NJ	WPP06.02300	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Trichlorofluoromethane
Certified	Yes		NJ	WPP06.02310	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Vinyl chloride
Certified	Yes		NJ	WPP06.02312	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Xylenes (total)
Certified	Yes		NJ	WPP06.03010	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Acenaphthene
Certified	Yes		NJ	WPP06.03020	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Acenaphthylene
Certified	Yes		NJ	WPP06.03030	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Anthracene
Certified	Yes		NJ	WPP06.03040	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzo(a)anthracene
Certified	Yes		NJ	WPP06.03050	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzo(b)fluoranthene
Certified	Yes		NJ	WPP06.03060	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzo(k)fluoranthene
Certified	Yes		NJ	WPP06.03070	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzo(a)pyrene
Certified	Yes		NJ	WPP06.03080	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzo(ghi)perylene
Certified	Yes		NJ	WPP06.03090	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Butyl benzyl phthalate
Certified	Yes		NJ	WPP06.03100	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Bis (2-chloroethoxy) ether
Certified	Yes		NJ	WPP06.03110	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Bis (2-chloroethoxy) methane
Certified	Yes		NJ	WPP06.03120	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Bis (2-ethylhexyloxy) phthalate

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008



Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: WPP06 - Organic Parameters, Chromatography/MS

Status	Eligible to Report	NJ Data		State	Code	Matrix	Technique Description	Approved Method	Parameter Description
		Yes	No						
Certified	Yes			NJ	WPP06.03130	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Bis (2-chloroisopropyl) ether
Certified	Yes			NJ	WPP06.03140	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Bromophenyl-phenyl ether (4-)
Certified	Yes			NJ	WPP06.03150	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Chloronaphthalene (2-)
Certified	Yes			NJ	WPP06.03160	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Chlorophenyl-phenyl ether (4-)
Certified	Yes			NJ	WPP06.03170	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Chrysene
Certified	Yes			NJ	WPP06.03180	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dibenzo(a,h)anthracene
Certified	Yes			NJ	WPP06.03190	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Di-n-butyl phthalate
Dropped	No			NJ	WPP06.03200	NPW	Extract, GC/MS	[SM 6410 B]	Dichlorobenzene (1,3-)
Dropped	No			NJ	WPP06.03210	NPW	Extract, GC/MS	[SM 6410 B]	Dichlorobenzene (1,2-)
Dropped	No			NJ	WPP06.03220	NPW	Extract, GC/MS	[SM 6410 B]	Dichlorobenzene (1,4-)
Certified	Yes			NJ	WPP06.03230	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dichlorobenzene (3,3'-)
Certified	Yes			NJ	WPP06.03240	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Diethyl phthalate
Certified	Yes			NJ	WPP06.03250	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dimethyl phthalate
Certified	Yes			NJ	WPP06.03260	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dinitrotoluene (2,4-)
Certified	Yes			NJ	WPP06.03270	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dinitrotoluene (2,6-)
Certified	Yes			NJ	WPP06.03280	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Di-n-octyl phthalate
Certified	Yes			NJ	WPP06.03290	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Fluoranthene
Certified	Yes			NJ	WPP06.03300	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Fluorene
Certified	Yes			NJ	WPP06.03310	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Hexachlorobenzene
Certified	Yes			NJ	WPP06.03320	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Hexachlorobutadiene (1,3-)
Certified	Yes			NJ	WPP06.03330	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Hexachloroethane
Certified	Yes			NJ	WPP06.03340	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Indeno(1,2,3-cd)pyrene
Certified	Yes			NJ	WPP06.03350	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Isophorone
Certified	Yes			NJ	WPP06.03358	NPW	Extract, GC/MS	[EPA 625] [SM 6410B]	Methylnaphthalene (2-)
Certified	Yes			NJ	WPP06.03360	NPW	Extract, GC/MS	[EPA 625]	Naphthalene
Certified	Yes			NJ	WPP06.03366	NPW	Extract, GC/MS	[EPA 625]	Chloroaniline (4-)
Certified	Yes			NJ	WPP06.03367	NPW	Extract, GC/MS	[EPA 625]	Nitroaniline (2-)
Certified	Yes			NJ	WPP06.03368	NPW	Extract, GC/MS	[EPA 625]	Nitroaniline (3-)
Certified	Yes			NJ	WPP06.03369	NPW	Extract, GC/MS	[EPA 625]	Nitroaniline (4-)
Certified	Yes			NJ	WPP06.03370	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Nitrobenzene
Certified	Yes			NJ	WPP06.03380	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	N-Nitroso-di-n-propylamine
Certified	Yes			NJ	WPP06.03390	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Phenanthrene

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: WPP06 - Organic Parameters, Chromatography/MS

Status	Eligible to Report		State	Code	Matrix	Technique Description	Approved Method	Parameter Description
	Yes	NJ Data						
Certified	Yes		NJ	WPP06.03400	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Pyrene
Certified	Yes		NJ	WPP06.03410	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Trichlorobenzene (1,2,4-)
Certified	Yes		NJ	WPP06.03420	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Methyl phenol (4-chloro-3-)
Certified	Yes		NJ	WPP06.03430	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Chlorophenol (2-)
Certified	Yes		NJ	WPP06.03440	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dichlorophenol (2,4-)
Certified	Yes		NJ	WPP06.03450	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dimethylphenol (2,4-)
Certified	Yes		NJ	WPP06.03460	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dinitrophenol (2,4-)
Certified	Yes		NJ	WPP06.03470	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dinitrophenol (2,4,6-)
Certified	Yes		NJ	WPP06.03480	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Nitrophenol (2-)
Certified	Yes		NJ	WPP06.03490	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Nitrophenol (4-)
Certified	Yes		NJ	WPP06.03500	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Pentachlorophenol
Certified	Yes		NJ	WPP06.03510	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Phenol
Certified	Yes		NJ	WPP06.03518	NPW	Extract, GC/MS	[EPA 625]	Trichlorophenol (2,4,5-)
Certified	Yes		NJ	WPP06.03520	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Trichlorophenol (2,4,6-)
Certified	Yes		NJ	WPP06.03530	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzotic acid
Certified	Yes		NJ	WPP06.03540	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Methylphenol (4-)
Certified	Yes		NJ	WPP06.03550	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Acetophenone
Certified	Yes		NJ	WPP06.03560	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Alpha - terpineol
Certified	Yes		NJ	WPP06.03570	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Aniline
Certified	Yes		NJ	WPP06.03580	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzidine
Certified	Yes		NJ	WPP06.03590	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Carbazole
Certified	Yes		NJ	WPP06.03600	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dichloroaniline (2,3-)
Certified	Yes		NJ	WPP06.03610	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Methylphenol (2-)
Certified	Yes		NJ	WPP06.03620	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Decane (n-)
Certified	Yes		NJ	WPP06.03630	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Docosane (n-)
Certified	Yes		NJ	WPP06.03640	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dodecane (n-)
Certified	Yes		NJ	WPP06.03650	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Eicosane (n-)
Certified	Yes		NJ	WPP06.03660	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Hexachlorocyclopentadiene
Certified	Yes		NJ	WPP06.03670	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Hexadecane (n-)
Certified	Yes		NJ	WPP06.03680	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	N-Nitrosodimethylamine
Certified	Yes		NJ	WPP06.03690	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	N-Nitrosodiphenylamine
Certified	Yes		NJ	WPP06.03700	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Octadecane (n-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: WPP06 - Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	WPP06.03710	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Tetradecane (n-)
Certified	Yes	NJ	WPP06.03720	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Pyridine
Certified	Yes	NJ	WPP06.03730	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Methylphenanthrene (1-)

Category: CLP01 - Multi-Media, Multi-Cont. Inorganics

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	CLP01.03003	NPW, SCM	ICP	[EPA ILM05.4]	Aluminum
Certified	Yes	NJ	CLP01.06003	NPW, SCM	ICP	[EPA ILM05.4]	Antimony
Certified	Yes	NJ	CLP01.08003	NPW, SCM	ICP	[EPA ILM05.4]	Arsenic
Certified	Yes	NJ	CLP01.11003	NPW, SCM	ICP	[EPA ILM05.4]	Barium
Certified	Yes	NJ	CLP01.14003	NPW, SCM	ICP	[EPA ILM05.4]	Beryllium
Certified	Yes	NJ	CLP01.19003	NPW, SCM	ICP	[EPA ILM05.4]	Cadmium
Certified	Yes	NJ	CLP01.21003	NPW, SCM	ICP	[EPA ILM05.4]	Calcium
Certified	Yes	NJ	CLP01.24003	NPW, SCM	ICP	[EPA ILM05.4]	Chromium
Certified	Yes	NJ	CLP01.27003	NPW, SCM	ICP	[EPA ILM05.4]	Cobalt
Certified	Yes	NJ	CLP01.30003	NPW, SCM	ICP	[EPA ILM05.4]	Copper
Certified	Yes	NJ	CLP01.33003	NPW, SCM	ICP	[EPA ILM05.4]	Iron
Certified	Yes	NJ	CLP01.36003	NPW, SCM	ICP	[EPA ILM05.4]	Lead
Certified	Yes	NJ	CLP01.38003	NPW, SCM	ICP	[EPA ILM05.4]	Magnesium
Certified	Yes	NJ	CLP01.41003	NPW, SCM	ICP	[EPA ILM05.4]	Manganese
Certified	Yes	NJ	CLP01.42102	NPW, SCM	CVAA, Manual	[EPA ILM05.4]	Mercury
Certified	Yes	NJ	CLP01.47003	NPW, SCM	ICP	[EPA ILM05.4]	Nickel
Certified	Yes	NJ	CLP01.49003	NPW, SCM	ICP	[EPA ILM05.4]	Potassium
Certified	Yes	NJ	CLP01.51003	NPW, SCM	ICP	[EPA ILM05.4]	Selenium
Certified	Yes	NJ	CLP01.54003	NPW, SCM	ICP	[EPA ILM05.4]	Silver
Certified	Yes	NJ	CLP01.56003	NPW, SCM	ICP	[EPA ILM05.4]	Sodium
Certified	Yes	NJ	CLP01.59003	NPW, SCM	ICP	[EPA ILM05.4]	Tballium
Certified	Yes	NJ	CLP01.63003	NPW, SCM	ICP	[EPA ILM05.4]	Vanadium
Certified	Yes	NJ	CLP01.66003	NPW, SCM	ICP	[EPA ILM05.4]	Zinc

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008



Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: CLP01 - Multi-Media, Multi-Conc. Inorganics				Category: CLP02 - Multi-Media, Multi-Conc. Organics					
Status	Eligible to Report	Technique Description	Approved Method	Parameter Description	Status	Eligible to Report	Technique Description	Approved Method	Parameter Description
Certified	Yes	Midi Distillation, Spectrophotometric	[EPA ILM05.4]	Cyanide, Total in Water and Soil / Sediments	Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Aldrin
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Alpha BHC
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Beta BHC
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Delta BHC
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Lindane (gamma BHC)
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Chlordane (alpha)
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Chlordane (gamma)
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	DDD (4,4')
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	DDE (4,4')
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	DDT (4,4')
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Dieldrin
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Endosulfan I
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Endosulfan II
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Endosulfan sulfate
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Endrin
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Endrin aldehyde
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Endrin ketone
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Heptachlor
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Heptachlor epoxide
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Methoxychlor
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	Toxaphene
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	PCB 1016
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	PCB 1221
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	PCB 1232
Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]		Certified	Yes	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	PCB 1242

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: CLP02 - Multi-Media, Multi-Conc. Organics

Status	Eligible to Report	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	CLP02.01273	NPW, SCM	Extraction/GC (BCD)	[EPA SOM01.2 (4/2007)]	PCB 1248
Certified	Yes	NJ	CLP02.01283	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	PCB 1254
Certified	Yes	NJ	CLP02.01293	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.2 (4/2007)]	PCB 1260
Certified	Yes	NJ	CLP02.03023	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Benzene
Certified	Yes	NJ	CLP02.03027	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Bromochloromethane
Certified	Yes	NJ	CLP02.03033	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Chlorobenzene
Certified	Yes	NJ	CLP02.03043	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichlorobenzene (1,2-)
Certified	Yes	NJ	CLP02.03053	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichlorobenzene (1,3-)
Certified	Yes	NJ	CLP02.03063	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichlorobenzene (1,4)
Certified	Yes	NJ	CLP02.03067	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dioxane (1,4-)
Certified	Yes	NJ	CLP02.03073	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Ethylbenzene
Certified	Yes	NJ	CLP02.03083	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Isopropylbenzene
Certified	Yes	NJ	CLP02.03089	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Trichlorobenzene (1,2,3-)
Certified	Yes	NJ	CLP02.03093	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Trichlorobenzene (1,2,4-)
Certified	Yes	NJ	CLP02.03103	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Styrene
Certified	Yes	NJ	CLP02.03113	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Toluene
Certified	Yes	NJ	CLP02.03117	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Xylene (m- + p-)
Certified	Yes	NJ	CLP02.03119	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Xylene (o-)
Certified	Yes	NJ	CLP02.03143	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Bromodichloromethane
Certified	Yes	NJ	CLP02.03153	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Bromoform
Certified	Yes	NJ	CLP02.03163	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Bromomethane
Certified	Yes	NJ	CLP02.03173	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Carbon tetrachloride
Certified	Yes	NJ	CLP02.03183	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Chloroethane
Certified	Yes	NJ	CLP02.03193	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Chloroform
Certified	Yes	NJ	CLP02.03203	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Chloromethane
Certified	Yes	NJ	CLP02.03213	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichloropropene (trans-1,3-)
Certified	Yes	NJ	CLP02.03223	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dibromoethane (1,2-) (EDB)
Certified	Yes	NJ	CLP02.03233	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dibromochloromethane
Certified	Yes	NJ	CLP02.03243	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dibromo-3-chloropropane (1,2-)
Certified	Yes	NJ	CLP02.03253	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichlorodifluoromethane
Certified	Yes	NJ	CLP02.03263	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichloroethane (1,1-)
Certified	Yes	NJ	CLP02.03273	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichloroethane (1,2-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: CLP02 - Multi-Media, Multi-Conc. Organics

Status	Eligible to Report	NJ Data			Matrix	Technique Description	Approved Method	Parameter Description
		Yes	State	Code				
Certified	Yes	NJ	CLP02.03283	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichloroethene (1,1-)	
Certified	Yes	NJ	CLP02.03293	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichloroethene (trans-1,2-)	
Certified	Yes	NJ	CLP02.03303	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichloroethene (cis-1,2-)	
Certified	Yes	NJ	CLP02.03313	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichloropropane (1,2-)	
Certified	Yes	NJ	CLP02.03323	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Dichloropropane (cis-1,3-)	
Certified	Yes	NJ	CLP02.03333	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Methylene chloride (Dichloromethane)	
Certified	Yes	NJ	CLP02.03343	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Tetrachloroethane (1,1,2,2-)	
Certified	Yes	NJ	CLP02.03353	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Tetrachloroethene	
Certified	Yes	NJ	CLP02.03363	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Trichloroethane (1,1,1-)	
Certified	Yes	NJ	CLP02.03373	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Trichloroethane (1,1,2-)	
Certified	Yes	NJ	CLP02.03383	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Trichloroethene	
Certified	Yes	NJ	CLP02.03393	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Trichlorofluoromethane	
Certified	Yes	NJ	CLP02.03403	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Trichloro (1,1,2-) trifluoroethane (1,2,2-)	
Certified	Yes	NJ	CLP02.03413	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Vinyl chloride	
Certified	Yes	NJ	CLP02.03433	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Acetone	
Certified	Yes	NJ	CLP02.03443	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Carbon disulfide	
Certified	Yes	NJ	CLP02.03453	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Cyclohexane	
Certified	Yes	NJ	CLP02.03463	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Butanone (2-)	
Certified	Yes	NJ	CLP02.03473	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Hexanone (2-)	
Certified	Yes	NJ	CLP02.03483	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Methyl acetate	
Certified	Yes	NJ	CLP02.03493	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Methylcyclohexane	
Certified	Yes	NJ	CLP02.03503	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Pentanone (4-methyl-2-)	
Certified	Yes	NJ	CLP02.03513	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.2 (4/2007)]	Tert-butyl methyl ether	
Certified	Yes	NJ	CLP02.04023	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Atrazine	
Certified	Yes	NJ	CLP02.04033	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	N-Nitrosodiphenylamine	
Certified	Yes	NJ	CLP02.04043	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	N-Nitroso-di-n-propylamine	
Certified	Yes	NJ	CLP02.04053	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Carbazole	
Certified	Yes	NJ	CLP02.04063	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Dichlorobenzidine (3,3')	
Certified	Yes	NJ	CLP02.04073	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Chloroaniline (4-)	
Certified	Yes	NJ	CLP02.04083	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Nitroaniline (2-)	
Certified	Yes	NJ	CLP02.04093	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Nitroaniline (3-)	
Certified	Yes	NJ	CLP02.04103	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Nitroaniline (4-)	

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Portable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: CLP02 - Multi-Media, Multi-Conc. Organics

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	CLP02.04123	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Chloronaphthalene (2-)
Certified	Yes		NJ	CLP02.04133	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Hexachlorobenzene
Certified	Yes		NJ	CLP02.04143	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Hexachlorobutadiene (1,3-)
Certified	Yes		NJ	CLP02.04153	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Hexachlorocyclopentadiene
Certified	Yes		NJ	CLP02.04163	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Hexachloroethane
Certified	Yes		NJ	CLP02.04183	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Bis (2-chloroethoxy) methane
Certified	Yes		NJ	CLP02.04193	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Bis (2-chloroisopropyl) ether
Certified	Yes		NJ	CLP02.04203	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Bis (2-chloroethyl) ether
Certified	Yes		NJ	CLP02.04213	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Chlorophenyl-phenyl ether (4-)
Certified	Yes		NJ	CLP02.04223	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Chlorophenyl-phenyl ether (4-)
Certified	Yes		NJ	CLP02.04233	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Nonaromatics and isophorone
Certified	Yes		NJ	CLP02.04243	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Dinitrotoluene (2,4-)
Certified	Yes		NJ	CLP02.04253	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Dinitrotoluene (2,6-)
Certified	Yes		NJ	CLP02.04263	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Isophorone
Certified	Yes		NJ	CLP02.04273	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Nitrobenzene
Certified	Yes		NJ	CLP02.04293	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Butyl benzyl phthalate
Certified	Yes		NJ	CLP02.04303	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Bis (2-ethylhexyl) phthalate
Certified	Yes		NJ	CLP02.04313	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Diethyl phthalate
Certified	Yes		NJ	CLP02.04323	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Dimethyl phthalate
Certified	Yes		NJ	CLP02.04333	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Di-n-butyl phthalate
Certified	Yes		NJ	CLP02.04343	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Di-n-octyl phthalate
Certified	Yes		NJ	CLP02.04363	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Acenaphthene
Certified	Yes		NJ	CLP02.04373	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Acenaphthylene
Certified	Yes		NJ	CLP02.04383	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Benzo(a)anthracene
Certified	Yes		NJ	CLP02.04393	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Benzo(a)pyrene
Certified	Yes		NJ	CLP02.04403	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Benzo(b)fluoranthene
Certified	Yes		NJ	CLP02.04413	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Benzo(g)perylene
Certified	Yes		NJ	CLP02.04423	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Benzo(k)fluoranthene
Certified	Yes		NJ	CLP02.04433	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Chrysene
Certified	Yes		NJ	CLP02.04443	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Dibenzo(a,h)anthracene
Certified	Yes		NJ	CLP02.04453	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Fluoranthene
Certified	Yes		NJ	CLP02.04463	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEPHERD ST
Mountainside, NJ 07092

Category: CLP02 - Multi-Media, Multi-Conc. Organics

Eligible to Report

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	CLP02.04473	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Fluorene
Certified	Yes	NJ	CLP02.04483	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Indeno(1,2,3-cd)pyrene
Certified	Yes	NJ	CLP02.04493	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Methylnaphthalene (2-)
Certified	Yes	NJ	CLP02.04503	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Naphthalene
Certified	Yes	NJ	CLP02.04513	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Phenanthrene
Certified	Yes	NJ	CLP02.04523	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Pyrene
Certified	Yes	NJ	CLP02.04543	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Methyl phenol (4-chloro-3-)
Certified	Yes	NJ	CLP02.04553	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Chlorophenol (2-)
Certified	Yes	NJ	CLP02.04563	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Dichlorophenol (2,4-)
Certified	Yes	NJ	CLP02.04573	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Dimethylphenol (2,4-)
Certified	Yes	NJ	CLP02.04583	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Dinitrophenol (2,4-)
Certified	Yes	NJ	CLP02.04593	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Dinitrophenol (2-methyl-4,6-)
Certified	Yes	NJ	CLP02.04603	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Methylphenol (2-)
Certified	Yes	NJ	CLP02.04613	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Methylphenol (4-)
Certified	Yes	NJ	CLP02.04623	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Nitrophenol (2-)
Certified	Yes	NJ	CLP02.04633	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Nitrophenol (4-)
Certified	Yes	NJ	CLP02.04643	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Peonichlorophenol
Certified	Yes	NJ	CLP02.04653	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Phenol
Certified	Yes	NJ	CLP02.04663	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Trichlorophenol (2,4,5-)
Certified	Yes	NJ	CLP02.04673	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Trichlorophenol (2,4,6-)
Certified	Yes	NJ	CLP02.04693	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Acetophenone
Certified	Yes	NJ	CLP02.04703	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Benzaldehyde
Certified	Yes	NJ	CLP02.04713	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Biphenyl (1,1'-)
Certified	Yes	NJ	CLP02.04723	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Caprolactam
Certified	Yes	NJ	CLP02.04733	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Dibenzofuran
Certified	Yes	NJ	CLP02.04743	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Tetrachlorobenzene (1,2,4,5-)
Certified	Yes	NJ	CLP02.04753	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.2 (4/2007)]	Tetrachlorophenol (2,3,4,6-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

----- Annual Certified Parameters List ----- Effective as of 03/17/2008 until 06/30/2008



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: SHW02 - Characteristics of Hazardous Waste

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	Yes	NJ	SHW02.01000	NPW, SCM	Pensky Martens	[SW-846 1010, Rev. 0, 9/86]	Ignitability
Certified	Yes	Yes	NJ	SHW02.03000	NPW, SCM	Aqueous Waste, Potentiometric	[SW-846 9040B, Rev. 2, 1/95]	Corrosivity - pH waste, >20% water
Certified	Yes	Yes	NJ	SHW02.04000	NPW, SCM	Weight Loss in Acid Media	[SW-846 1110, Rev. 0, 9/86]	Corrosivity toward steel
Certified	Yes	Yes	NJ	SHW02.06900	NPW, SCM	TCLP, Toxicity Procedure, ZHE	[SW-846 1311, Rev. 0, 7/92]	Volatile organics
Certified	Yes	Yes	NJ	SHW02.07000	NPW, SCM	TCLP, Toxicity Procedure, Shaker	[SW-846 1311, Rev. 0, 7/92]	Metals - semi volatile organics
Certified	Yes	Yes	NJ	SHW02.08000	NPW, SCM	Synthetic PPT Leachate Procedure	[SW-846 1312, Rev. 0, 9/94]	Metals - organics
Applied	No	No	NJ	SHW02.09000	NPW, SCM	Multiple Extractions	[SW-846 1320, Rev. 0, 9/86]	Metals - organics

Category: SHW03 - Analyze-Immediately Parameters

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	Yes	NJ	SHW03.01000	NPW, SCM	Aqueous, Electrometric	[SW-846 9040B, Rev. 2, 1/95]	pH

Category: SHW04 - Inorganic Parameters

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	Yes	NJ	SHW04.05000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Aluminum
Certified	Yes	Yes	NJ	SHW04.05500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Aluminum
Certified	Yes	Yes	NJ	SHW04.06500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Antimony
Certified	Yes	Yes	NJ	SHW04.07000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Antimony
Certified	Yes	Yes	NJ	SHW04.09000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Arsenic
Certified	Yes	Yes	NJ	SHW04.09500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Arsenic
Certified	Yes	Yes	NJ	SHW04.11500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Barium
Certified	Yes	Yes	NJ	SHW04.12000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Barium
Certified	Yes	Yes	NJ	SHW04.13500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Beryllium
Certified	Yes	Yes	NJ	SHW04.14000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Beryllium
Certified	Yes	Yes	NJ	SHW04.15100	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Boron
Certified	Yes	Yes	NJ	SHW04.15500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Cadmium
Certified	Yes	Yes	NJ	SHW04.16000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Cadmium

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW04 - Inorganic Parameters

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW04.17500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Calcium
Certified	Yes	NJ	SHW04.17505	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Calcium
Certified	Yes	NJ	SHW04.18500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Chromium
Certified	Yes	NJ	SHW04.19000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Chromium
Certified	Yes	NJ	SHW04.21000	NPW, SCM	Colorimetric	[SW-846 7196A, Rev. 1, 7/92]	Chromium (VI)
Certified	Yes	NJ	SHW04.22500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Cobalt
Certified	Yes	NJ	SHW04.23000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Cobalt
Certified	Yes	NJ	SHW04.24500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Copper
Certified	Yes	NJ	SHW04.25000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Copper
Certified	Yes	NJ	SHW04.26000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Iron
Certified	No	NJ	SHW04.26005	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Iron
Certified	Yes	NJ	SHW04.27500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Lead
Certified	Yes	NJ	SHW04.28000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Lead
Applied	No	NJ	SHW04.29500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Lithium
Certified	Yes	NJ	SHW04.30500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Magnesium
Certified	Yes	NJ	SHW04.30505	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Magnesium
Certified	Yes	NJ	SHW04.31500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Manganese
Certified	Yes	NJ	SHW04.31600	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Manganese
Certified	Yes	NJ	SHW04.33000	NPW, SCM	AA, Mammal Cold Vapor	[SW-846 7470A, Rev. 1, 9/94]	Mercury - liquid waste
Certified	Yes	NJ	SHW04.34000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Molybdenum
Applied	No	NJ	SHW04.34005	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Molybdenum
Certified	Yes	NJ	SHW04.35500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Nickel
Certified	Yes	NJ	SHW04.36000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Potassium
Certified	Yes	NJ	SHW04.38000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Potassium
Certified	Yes	NJ	SHW04.38505	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Selenium
Certified	Yes	NJ	SHW04.39000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Selenium
Certified	Yes	NJ	SHW04.40600	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Silver
Certified	Yes	NJ	SHW04.41000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Silver
Certified	Yes	NJ	SHW04.41500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Sodium
Certified	Yes	NJ	SHW04.43000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Sodium
Certified	Yes	NJ	SHW04.43005	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Sodium
Applied	No	NJ	SHW04.44000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Strontium

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW04 - Inorganic Parameters

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW04.45000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Thallium
Certified	Yes	NJ	SHW04.45500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Thallium
Certified	Yes	NJ	SHW04.47100	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Tin
Applied	No	NJ	SHW04.47105	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Tin
Applied	No	NJ	SHW04.47150	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Tin
Certified	Yes	NJ	SHW04.47500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Titanium
Certified	Yes	NJ	SHW04.47505	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Vanadium
Certified	Yes	NJ	SHW04.49000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Vanadium
Certified	Yes	NJ	SHW04.49500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Zinc
Certified	Yes	NJ	SHW04.49500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Zinc

Category: SHW06 - Organic Parameters, Chromatography

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW06.03010	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Acetone
Certified	Yes	NJ	SHW06.03020	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Acetonitrile
Certified	Yes	NJ	SHW06.03030	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Acrolein
Certified	Yes	NJ	SHW06.03040	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Allyl alcohol
Certified	Yes	NJ	SHW06.03050	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Tert-butyl alcohol
Certified	Yes	NJ	SHW06.03060	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Crotonaldehyde
Certified	Yes	NJ	SHW06.03070	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Dioxane (1,4-)
Certified	Yes	NJ	SHW06.03080	NPW, SCM	GC, Direct Injection, FID	[SW-846 8015B, Rev. 2, 12/96]	Ethylene Oxide
Certified	Yes	NJ	SHW06.03090	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Iso-butyl alcohol
Certified	Yes	NJ	SHW06.03100	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Methyl ethyl ketone
Certified	Yes	NJ	SHW06.03110	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	N-Nitroso-di-n-butylamine
Certified	Yes	NJ	SHW06.03120	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Paraldehyde
Certified	Yes	NJ	SHW06.03130	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Picoline (2-)
Certified	Yes	NJ	SHW06.03140	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Propionitrile
Certified	Yes	NJ	SHW06.03150	NPW, SCM	GC, Direct Injection, FID	[SW-846 8015B, Rev. 2, 12/96]	Pyridine
Certified	Yes	NJ	SHW06.03160	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Toluidine (2-) (2-Methylaniline)
Certified	Yes	NJ	SHW06.04010	NPW, SCM	GC P&T, FID	[SW-846 8015B, Rev. 2, 12/96]	Gasoline range organic

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW06 - Organic Parameters, Chromatography

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	SHW06.04500	NPW, SCM	Extraction, GC, FID	[SW-846 8015B, Rev. 2, 12/96]	Diesel range organic
Applied	No		NJ	SHW06.04511	NPW, SCM	Extraction, GC, FID	[OTHER FL - FRO]	Petroleum Organics
Certified	Yes		NJ	SHW06.04520	NPW, SCM	Extraction, GC, FID	[OTHER NI-OQA-QAM-023, Rev. 6]	Petroleum Organics
Certified	No		NJ	SHW06.05010	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Benzene
Certified	No		NJ	SHW06.05020	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Chlorobenzene
Certified	No		NJ	SHW06.05030	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichlorobenzene (1,2-)
Certified	No		NJ	SHW06.05040	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichlorobenzene (1,3-)
Certified	No		NJ	SHW06.05050	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichlorobenzene (1,4-)
Certified	No		NJ	SHW06.05060	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Ethylbenzene
Certified	No		NJ	SHW06.05066	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Naphthalene
Certified	No		NJ	SHW06.05068	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Styrene
Certified	No		NJ	SHW06.05070	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Toluene
Certified	Yes		NJ	SHW06.05080	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Xylene (o-)
Certified	Yes		NJ	SHW06.05090	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Xylene (m-)
Certified	Yes		NJ	SHW06.05100	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Xylene (p-)
Certified	No		NJ	SHW06.05110	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Bromodichloromethane
Certified	No		NJ	SHW06.05120	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Bromoform
Certified	Yes		NJ	SHW06.05130	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Bromomethane
Certified	No		NJ	SHW06.05140	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Carbon tetrachloride
Certified	Yes		NJ	SHW06.05150	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Chloroethane
Certified	No		NJ	SHW06.05160	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Chloroform
Certified	Yes		NJ	SHW06.05170	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Chloromethane
Certified	Yes		NJ	SHW06.05180	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloropropane (trans-1,3-)
Certified	No		NJ	SHW06.05190	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dibromochloromethane
Certified	Yes		NJ	SHW06.05200	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichlorodifluoromethane
Certified	No		NJ	SHW06.05210	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloroethane (1,1-)
Certified	No		NJ	SHW06.05220	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloroethane (1,2-)
Certified	Yes		NJ	SHW06.05230	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloroethane (1,1-)
Certified	Yes		NJ	SHW06.05240	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloroethene (cis-1,2-)
Certified	Yes		NJ	SHW06.05250	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloroethene (trans-1,2-)
Certified	Yes		NJ	SHW06.05260	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloropropane (1,2-)
Certified	Yes		NJ	SHW06.05270	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloropropane (cis-1,3-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW06 - Organic Parameters, Chromatography

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	No	NJ	SHW06.05280	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Methylene chloride (Dichloromethane)	
Certified	No	NJ	SHW06.05290	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Tetrachloroethane (1,1,2,2-)	
Certified	No	NJ	SHW06.05300	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Tetrachloroethene	
Certified	No	NJ	SHW06.05310	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Trichloroethane (1,1,1-)	
Certified	Yes	NJ	SHW06.05320	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Trichloroethane (1,1,2-)	
Certified	No	NJ	SHW06.05330	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Trichloroethene	
Certified	Yes	NJ	SHW06.05340	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Trichlorofluoromethane	
Certified	Yes	NJ	SHW06.05350	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Vinyl chloride	
Certified	Yes	NJ	SHW06.05360	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Methyl tert-butyl ether	
Certified	Yes	NJ	SHW06.12010	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8081A, Rev. 1, 12/96]	Chloroethyl vinyl ether (2-)	
Certified	Yes	NJ	SHW06.12020	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Aldrin	
Certified	Yes	NJ	SHW06.12030	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Alpha BHC	
Certified	Yes	NJ	SHW06.12040	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Beta BHC	
Certified	Yes	NJ	SHW06.12050	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Delta BHC	
Certified	Yes	NJ	SHW06.12060	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Lindane (gamma BHC)	
Certified	Yes	NJ	SHW06.12070	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Chlordane (technical)	
Certified	Yes	NJ	SHW06.12080	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Chlordane (alpha)	
Certified	Yes	NJ	SHW06.12090	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Chlordane (gamma)	
Certified	Yes	NJ	SHW06.12100	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	DDD (4,4'-)	
Certified	Yes	NJ	SHW06.12110	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	DDE (4,4'-)	
Certified	Yes	NJ	SHW06.12120	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	DDT (4,4'-)	
Certified	Yes	NJ	SHW06.12130	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Dieldrin	
Certified	Yes	NJ	SHW06.12140	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endosulfan I	
Certified	Yes	NJ	SHW06.12150	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endosulfan II	
Certified	Yes	NJ	SHW06.12160	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endosulfan sulfate	
Certified	Yes	NJ	SHW06.12170	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endrin	
Certified	Yes	NJ	SHW06.12180	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endrin aldehyde	
Certified	Yes	NJ	SHW06.12190	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endrin ketone	
Certified	Yes	NJ	SHW06.12200	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Heptachlor	
Certified	Yes	NJ	SHW06.12210	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Heptachlor epoxide	
Applied	No	NJ	SHW06.12212	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Methoxychlor	
							Mirex	

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: SHW06 - Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW06.12220	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Toxaphene
Certified	Yes	NJ	SHW06.13110	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1016
Certified	Yes	NJ	SHW06.13120	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1221
Certified	Yes	NJ	SHW06.13130	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1232
Certified	Yes	NJ	SHW06.13140	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1242
Certified	Yes	NJ	SHW06.13150	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1248
Certified	Yes	NJ	SHW06.13160	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1254
Certified	Yes	NJ	SHW06.13170	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1260
Applied	No	NJ	SHW06.13200	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB Congeners (19)
Applied	No	NJ	SHW06.21010	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Azinphos methyl
Applied	No	NJ	SHW06.21015	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Chloropyrifos
Applied	No	NJ	SHW06.21020	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Demeton (o-)
Applied	No	NJ	SHW06.21030	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Demeton (s-)
Applied	No	NJ	SHW06.21040	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Diazinon
Applied	No	NJ	SHW06.21050	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Disulfoton
Applied	No	NJ	SHW06.21060	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Malathion
Applied	No	NJ	SHW06.21070	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Parathion
Applied	No	NJ	SHW06.21080	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Parathion methyl
Certified	Yes	NJ	SHW06.23010	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Dalapon
Certified	Yes	NJ	SHW06.23020	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Dicamba
Certified	Yes	NJ	SHW06.23030	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Dinoseb
Certified	Yes	NJ	SHW06.23040	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	D (2,4-)
Certified	Yes	NJ	SHW06.23050	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	T (2,4,5-)
Certified	Yes	NJ	SHW06.23060	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	TP (2,4,5-) (Silvex)
Applied	No	NJ	SHW06.23061	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Dichlorobenzoic acid (3,5-)
Applied	No	NJ	SHW06.23062	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Hydroxydicamba (5-)
Applied	No	NJ	SHW06.23063	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	MCPA
Applied	No	NJ	SHW06.23064	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	MCPP
Applied	No	NJ	SHW06.23065	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Nitrophenol (4-)
Applied	No	NJ	SHW06.23066	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Pentachlorophenol
Certified	Yes	NJ	SHW06.23070	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Picloram
Applied	No	NJ	SHW06.23100	NPW, SCM	GC, Headspace, FID	[OTHER J. Chem. Sci. RSK-175]	Ethane

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW06 - Organic Parameters, Chromatography

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No		NJ	SHW06.23105	NPW, SCM	GC, Headspace, FID	OTHER J. Chrom. Sci. RSK-175]	Ethene
Applied	No		NJ	SHW06.23110	NPW, SCM	GC, Headspace, FID	[OTHER J. Chrom. Sci. RSK-175]	Methane
Applied	No		NJ	SHW06.24110	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Acenaphthene
Applied	No		NJ	SHW06.24120	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Acenaphthylene
Applied	No		NJ	SHW06.24130	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Anthracene
Applied	No		NJ	SHW06.24140	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(a)anthracene
Applied	No		NJ	SHW06.24150	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(a)pyrene
Applied	No		NJ	SHW06.24160	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(b)fluoranthene
Applied	No		NJ	SHW06.24170	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(ghi)perylene
Applied	No		NJ	SHW06.24180	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(k)fluoranthene
Applied	No		NJ	SHW06.24190	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Chrysene
Applied	No		NJ	SHW06.24200	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Dibenzo(a,h)anthracene
Applied	No		NJ	SHW06.24210	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Fluoranthene
Applied	No		NJ	SHW06.24220	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Fluorene
Applied	No		NJ	SHW06.24230	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Indeno(1,2,3-cd)pyrene
Applied	No		NJ	SHW06.24240	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Naphthalene
Applied	No		NJ	SHW06.24250	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Phenanthrene
Applied	No		NJ	SHW06.24260	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Pyrene
Certified	Yes		NJ	SHW06.28010	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	HMX
Certified	Yes		NJ	SHW06.28020	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	RDX
Certified	Yes		NJ	SHW06.28030	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Trinitrobenzene (1,3,5-)
Certified	Yes		NJ	SHW06.28040	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Dinitrobenzene (1,3-)
Certified	Yes		NJ	SHW06.28050	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Tetryl
Certified	Yes		NJ	SHW06.28060	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Nitrobenzene
Certified	Yes		NJ	SHW06.28070	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Tritrotohuene (2,4,6-)
Certified	Yes		NJ	SHW06.28080	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Dinitrotohuene (4-amino-2,6-)
Certified	Yes		NJ	SHW06.28090	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Dinitrotohuene (2-amino-4,6-)
Certified	Yes		NJ	SHW06.28100	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Dinitrotohuene (2,4-)
Certified	Yes		NJ	SHW06.28110	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Dinitrotohuene (2,6-)
Certified	Yes		NJ	SHW06.28120	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Nitrotohuene (2-)
Certified	Yes		NJ	SHW06.28130	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Nitrotohuene (3-)
Certified	Yes		NJ	SHW06.28140	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Nitrotohuene (4-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

Category: SHW06 - Organic Parameters, Chromatography

Eligible to Report		Technique Description		Approved Method		Parameter Description	
Status	NJ Data	State	Code	Matrix	Method	Method	Description
Applied	No	NJ	SHW06.29100	NPW, SCM	HPLC, UV Detector	[SW-846 8332, Rev. 0, 12/96]	Nitroglycerine

Category: SHW07 - Organic Parameters, Chromatography/MS

Eligible to Report		Technique Description		Approved Method		Parameter Description	
Status	NJ Data	State	Code	Matrix	Method	Method	Description
Certified	Yes	NJ	SHW07.04010	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Benzene
Certified	Yes	NJ	SHW07.04020	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chlorobenzene
Certified	Yes	NJ	SHW07.04030	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,2-)
Certified	Yes	NJ	SHW07.04040	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,3-)
Certified	Yes	NJ	SHW07.04050	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,4-)
Certified	Yes	NJ	SHW07.04060	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Ethylbenzene
Certified	Yes	NJ	SHW07.04070	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Toluene
Certified	Yes	NJ	SHW07.04080	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Xylenes (total)
Certified	Yes	NJ	SHW07.04090	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromochloromethane
Certified	Yes	NJ	SHW07.04100	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromoform
Certified	Yes	NJ	SHW07.04110	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromomethane
Certified	Yes	NJ	SHW07.04120	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Carbon tetrachloride
Certified	Yes	NJ	SHW07.04130	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroethane
Certified	Yes	NJ	SHW07.04140	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroethyl vinyl ether (2-)
Certified	Yes	NJ	SHW07.04150	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroform
Certified	Yes	NJ	SHW07.04160	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloromethane
Certified	Yes	NJ	SHW07.04180	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropene (trans-1,3-)
Certified	Yes	NJ	SHW07.04185	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromochloromethane
Certified	Yes	NJ	SHW07.04187	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromoethane (1,2-) (EDB)
Certified	Yes	NJ	SHW07.04190	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromo-3-chloropropane (1,2-)
Certified	Yes	NJ	SHW07.04200	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorodifluoromethane
Certified	Yes	NJ	SHW07.04210	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethane (1,1-)
Certified	Yes	NJ	SHW07.04220	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethane (1,2-)
Certified	Yes	NJ	SHW07.04230	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethene (1,1-)
Certified	Yes	NJ					Dichloroethene (trans-1,2-)

KEY: AB = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW07 - Organic Parameters, Chromatography/MS

Status	Eligible to Report	NJ Data	Sinte	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	Yes	NJ	SHW07.04235	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethene (cis-1,2-)
Certified	Yes	Yes	NJ	SHW07.04240	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropane (1,2-)
Certified	Yes	Yes	NJ	SHW07.04250	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropene (cis-1,3-)
Certified	Yes	Yes	NJ	SHW07.04270	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methylene chloride (Dichloromethane)
Certified	Yes	Yes	NJ	SHW07.04280	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethane (1,1,2,2-)
Certified	Yes	Yes	NJ	SHW07.04290	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethene
Certified	Yes	Yes	NJ	SHW07.04300	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethane (1,1,1-)
Certified	Yes	Yes	NJ	SHW07.04310	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethane (1,1,2-)
Certified	Yes	Yes	NJ	SHW07.04320	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethene
Certified	Yes	Yes	NJ	SHW07.04322	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichlorofluoromethane
Certified	Yes	Yes	NJ	SHW07.04325	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloro (1,1,2-) trifluoroethane (1,2,2-)
Certified	Yes	Yes	NJ	SHW07.04327	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Vinyl acetate
Certified	Yes	Yes	NJ	SHW07.04330	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Vinyl chloride
Certified	Yes	Yes	NJ	SHW07.04340	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acetone
Certified	Yes	Yes	NJ	SHW07.04350	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Carbon disulfide
Certified	Yes	Yes	NJ	SHW07.04360	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Butanone (2-)
Certified	Yes	Yes	NJ	SHW07.04370	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Hexanone (2-)
Certified	Yes	Yes	NJ	SHW07.04375	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methyl iodide
Certified	Yes	Yes	NJ	SHW07.04380	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Pentanone (4-methyl-2-)
Certified	Yes	Yes	NJ	SHW07.04390	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methyl tert-butyl ether
Certified	Yes	Yes	NJ	SHW07.04395	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tert-butyl alcohol
Certified	Yes	Yes	NJ	SHW07.04400	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acrolein
Certified	Yes	Yes	NJ	SHW07.04410	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acrylonitrile
Certified	Yes	Yes	NJ	SHW07.04500	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Hexachlorobutadiene (1,3-)
Certified	Yes	Yes	NJ	SHW07.04530	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Hexachloroethane
Certified	Yes	Yes	NJ	SHW07.04540	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260C, Rev. 2, 12/96]	Naphthalene
Certified	Yes	Yes	NJ	SHW07.04550	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Styrene
Certified	Yes	Yes	NJ	SHW07.04560	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethene (1,1,1,2-)
Certified	Yes	Yes	NJ	SHW07.04570	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichlorobenzene (1,2,4-)
Certified	Yes	Yes	NJ	SHW07.04580	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Nitrobenzene
Certified	Yes	Yes	NJ	SHW07.05006	NPW, SCM	GC/MS, Extract or Dir Inf, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitroso-di-n-propylamine

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	SHW07.05010	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitrosodiphenylamine
Certified	Yes		NJ	SHW07.05020	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Diphenylamine
Certified	Yes		NJ	SHW07.05030	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Carbazole
Certified	Yes		NJ	SHW07.05038	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benazidone
Certified	Yes		NJ	SHW07.05040	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorobenzidine (3,3')
Certified	Yes		NJ	SHW07.05048	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Aniline
Certified	Yes		NJ	SHW07.05050	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chloraniline (4-)
Certified	Yes		NJ	SHW07.05060	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitroaniline (2-)
Certified	Yes		NJ	SHW07.05063	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitroaniline (3-)
Certified	Yes		NJ	SHW07.05070	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitroaniline (4-)
Certified	Yes		NJ	SHW07.05080	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chloronaphthalene (2-)
Certified	Yes		NJ	SHW07.05090	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachlorobenzene
Certified	Yes		NJ	SHW07.05100	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachlorobutadiene (1,3-)
Certified	Yes		NJ	SHW07.05110	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachlorocyclopentadiene
Certified	Yes		NJ	SHW07.05120	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachloroethane
Certified	Yes		NJ	SHW07.05130	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Trichlorobenzene (1,2,4-)
Certified	Yes		NJ	SHW07.05132	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-chloroethoxy) methane
Certified	Yes		NJ	SHW07.05140	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-chloroethyl) ether
Certified	Yes		NJ	SHW07.05150	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-chloroisopropyl) ether
Certified	Yes		NJ	SHW07.05160	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chlorophenyl-phenyl ether (4-)
Certified	Yes		NJ	SHW07.05170	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bromophenyl-phenyl ether (4-)
Certified	Yes		NJ	SHW07.05180	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitro toluene (2,4-)
Certified	Yes		NJ	SHW07.05190	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitro toluene (2,6-)
Certified	Yes		NJ	SHW07.05200	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Isochlorone
Certified	Yes		NJ	SHW07.05210	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitrobenzene
Certified	Yes		NJ	SHW07.05220	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Butyl benzyl phthalate
Certified	Yes		NJ	SHW07.05230	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-ethylhexyl) phthalate
Certified	Yes		NJ	SHW07.05240	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dicyclopentadiene
Certified	Yes		NJ	SHW07.05250	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dimethyl phthalate
Certified	Yes		NJ	SHW07.05260	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Di-n-butyl phthalate
Certified	Yes		NJ	SHW07.05270	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Di-n-octyl phthalate
Certified	Yes		NJ					Acenaphthene

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW07 - Organic Parameters, Chromatography/MIS

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	SHW07.05280	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Anthracene
Certified	Yes		NJ	SHW07.05290	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Acenaphthylene
Certified	Yes		NJ	SHW07.05300	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(a)anthracene
Certified	Yes		NJ	SHW07.05310	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(a)pyrene
Certified	Yes		NJ	SHW07.05320	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(b)fluoranthene
Certified	Yes		NJ	SHW07.05330	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(g,h)perylene
Certified	Yes		NJ	SHW07.05340	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(k)fluoranthene
Certified	Yes		NJ	SHW07.05350	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Claystone
Certified	Yes		NJ	SHW07.05360	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dibenzo(a,h)anthracene
Certified	Yes		NJ	SHW07.05370	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Fluoranthene
Certified	Yes		NJ	SHW07.05380	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Fluorene
Certified	Yes		NJ	SHW07.05390	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Indene(1,2,3-cd)pyrene
Certified	Yes		NJ	SHW07.05400	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methyl naphthalene (2-)
Certified	Yes		NJ	SHW07.05410	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Naphthalene
Certified	Yes		NJ	SHW07.05420	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phenanthrene
Certified	Yes		NJ	SHW07.05430	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pyrene
Certified	Yes		NJ	SHW07.05440	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methyl phenol (4-chloro-3-)
Certified	Yes		NJ	SHW07.05450	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chlorophenol (2-)
Certified	Yes		NJ	SHW07.05460	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorophenol (2,4-)
Certified	Yes		NJ	SHW07.05470	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dimethylphenol (2,4-)
Certified	Yes		NJ	SHW07.05480	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitrophenol (2,4-)
Certified	Yes		NJ	SHW07.05490	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitrophenol (2-methyl-4,6-)
Certified	Yes		NJ	SHW07.05500	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylphenol (2-)
Certified	Yes		NJ	SHW07.05510	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylphenol (4-)
Certified	Yes		NJ	SHW07.05520	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitrophenol (2-)
Certified	Yes		NJ	SHW07.05530	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitrophenol (4-)
Certified	Yes		NJ	SHW07.05540	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pentachlorophenol
Certified	Yes		NJ	SHW07.05550	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phenol
Certified	Yes		NJ	SHW07.05560	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Trichlorophenol (2,4,5-)
Certified	Yes		NJ	SHW07.05570	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Trichlorophenol (2,4,6-)
Certified	Yes		NJ	SHW07.05590	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylphenol (3-)
Certified	Yes		NJ	SHW07.05600	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dibenzofuran

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW07 - Organic Parameters, Chromatography/MS

Status	Eligible to Report		State	Code	Matrix	Technique Description	Approved Method	Parameter Description
	Yes	No						
Certified	Yes	No	NJ	SHW07.05691	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorobenzene (1,2-)
Certified	Yes	No	NJ	SHW07.05692	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorobenzene (1,3-)
Certified	Yes	No	NJ	SHW07.05700	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorobenzene (1,4-)
Applied	No	No	NJ	SHW07.05740	NPW, SCM	Extraction, SIM, GC/MS	[ASTM D5739-00]	Petroleum Organics
Certified	Yes	No	NJ	SHW07.05750	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pyridine
Applied	No	No	NJ	SHW07.07584	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(a)anthracene
Applied	No	No	NJ	SHW07.07586	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(a)pyrene
Applied	No	No	NJ	SHW07.07588	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(b)fluoranthene
Applied	No	No	NJ	SHW07.07590	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(k)fluoranthene
Applied	No	No	NJ	SHW07.07594	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dibenz(o,h)anthracene
Applied	No	No	NJ	SHW07.07596	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachlorobenzene
Applied	No	No	NJ	SHW07.07598	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Indeno(1,2,3-cd)pyrene
Applied	No	No	NJ	SHW07.07608	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitrosodimethylamine
Applied	No	No	NJ	SHW07.07616	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pentachlorophenol

Category: SHW09 - Miscellaneous Parameters

Status	Eligible to Report		State	Code	Matrix	Technique Description	Approved Method	Parameter Description
	Yes	No						
Certified	No	No	NJ	SHW09.02000	NPW, SCM	Distillation	[SW-846 9010B, Rev. 2, 12/96]	Cyanide
Certified	Yes	No	NJ	SHW09.03000	NPW, SCM	Distillation	[SW-846 9010B, Rev. 2, 12/96]	Cyanide - amenable to Cl ₂
Applied	No	No	NJ	SHW09.04100	NPW, SCM	Titrimetric/Manual Spectrophotometric	[SW-846 9014, Rev. 0, 12/96]	Cyanide
Certified	Yes	No	NJ	SHW09.05000	NPW, SCM	Colorimetric, Automated	[SW-846 9012A, Rev. 1, 12/96]	Cyanide
Certified	Yes	No	NJ	SHW09.09000	NPW, SCM	Redox Titration	[SW-846 9030B, Rev. 2, 12/96]	Sulfides, acid sol. & insol.
Certified	Yes	No	NJ	SHW09.10000	NPW, SCM	Water Extraction, Distillation	[SW-846 9031, Rev. 0, 7/92]	Sulfides, extractable
Certified	Yes	No	NJ	SHW09.10100	NPW, SCM	Titration	[SW-846 9034, Rev. 0, 12/96]	Sulfides, acid sol. & insol.
Certified	Yes	No	NJ	SHW09.13000	NPW, SCM	Turbidimetric	[SW-846 9038, Rev. 0, 9/86]	Sulfate
Certified	Yes	No	NJ	SHW09.13050	NPW, SCM	Ion Chromatography	[SW-846 9056, Rev. 0, 9/94]	Sulfate
Certified	Yes	No	NJ	SHW09.14000	NPW, SCM	Electrometric	[SW-846 9040B, Rev. 2, 1/95]	pH - waste, >20% water
Certified	Yes	No	NJ	SHW09.15000	NPW, SCM	Wide Range pH Paper	[SW-846 9041A, Rev. 1, 7/92]	pH
Certified	Yes	No	NJ	SHW09.18010	NPW, SCM	Ion Chromatography, Bomb Combustion, Solids	[SW-846 9056, Rev. 0, 9/94]	Inorganic anions

KEY: AB = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW09 - Miscellaneous Parameters

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	NJ	SHW09.19000	NPW, SCM	Infrared Spectrometry or FID	[SW-846 9060, Rev. 0, 9/86]	Total organic carbon (TOC)
Certified	Yes	NJ	NJ	SHW09.21000	NPW, SCM	Colorimetric, Man, 4AAP Distillation	[SW-846 9065, Rev. 0, 9/86]	Phenols
Certified	Yes	NJ	NJ	SHW09.24100	NPW, SCM	Extraction & Gravimetric - LL or SPE	[SW-846 1664A, Rev. 1, 2/99]	Oil & grease - hem
Certified	Yes	NJ	NJ	SHW09.24150	NPW, SCM	Extraction & Gravimetric - LL or SPE	[SW-846 1664A, Rev. 1, 2/99]	Oil & grease - total hem-npw
Certified	Yes	NJ	NJ	SHW09.29150	NPW, SCM	Ion Chromatography	[SW-846 9056, Rev. 0, 12/94]	Nitrite
Certified	Yes	NJ	NJ	SHW09.30150	NPW, SCM	Ion Chromatography	[SW-846 9056, Rev. 0, 12/94]	Nitrate
Certified	Yes	NJ	NJ	SHW09.30250	NPW, SCM	Ion Chromatography	[SW-846 9056, Rev. 0, 12/96]	Bromide
Dropped	No	NJ	NJ	SHW09.32000	NPW, SCM	Colorimetric, Automated (Ferri-CN AAII)	[SW-846 9251, Rev. 0, 9/86]	Chloride
Certified	Yes	NJ	NJ	SHW09.33100	NPW, SCM	Ion Chromatography	[SW-846 9056, Rev. 0, 12/96]	Chloride
Certified	No	NJ	NJ	SHW09.34000	NPW, SCM	Titrimetric, Silver Nitrate	[SW-846 9253, Rev. 0, 9/94]	Chloride
Applied	No	NJ	NJ	SHW09.34100	NPW, SCM	Aqueous, Ion-Selective Electrode	[SW-846 9214, Rev. 0, 12/96]	Fluoride
Certified	Yes	NJ	NJ	SHW09.34150	NPW, SCM	Ion Chromatography	[SW-846 9056, Rev. 0, 12/96]	Fluoride
Certified	Yes	NJ	NJ	SHW09.54150	NPW, SCM	Ion Chromatography	[SW-846 9056, Rev. 0, 12/94]	Orthophosphate

Category: SHW12 - Immunoassay

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	NJ	SHW12.10000	NPW, SCM	Screening	[SW-846 4010, Rev. 1, 12/96]	Immunoassay - pentachlorophenol

Category: SHW02 - Characteristics of Hazardous Waste

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	NJ	SHW02.02100	SCM	Burn Rate	[SW-846 1030, Rev. 0, 12/96]	Ignitability of solids
Applied	No	NJ	NJ	SHW02.10000	SCM	Extraction	[SW-846 1330A, Rev. 1, 7/92]	Metals - oily waste

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW04 - Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	SHW04.02200	SCM	Acid Digestion For AA or ICP, Oil	[SW-846 3031, Rev. 0, 12/96]	Metals
Applied	No	NJ	SHW04.02500	SCM	Dissolution of Oil, Grease & Wax	[SW-846 3040A, Rev. 1, 12/96]	Metals
Certified	Yes	NJ	SHW04.03000	SCM	Acid Digestion, Soil Sediment & Sludge	[SW-846 3050B, Rev. 2, 12/96]	Metals
Certified	Yes	NJ	SHW04.03700	SCM	Chromium VI Digestion	[SW-846 3060A, Rev. 1, 12/96]	Metals
Applied	No	NJ	SHW04.03800	SCM	Field X-Ray Fluorescence	[SW-846 6200, Rev. 0, 1/98]	Triad Metals
Certified	Yes	NJ	SHW04.33500	SCM	AA, Manual Cold Vapor	[SW-846 7471A, Rev. 1, 9/94]	Mercury - solid waste

Category: SHW05 - Organic Parameters, Prep. / Screening

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	SHW05.03000	SCM	Soxhlet Extraction	[SW-846 3540C, Rev. 3, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.04000	SCM	Automatic Soxhlet Extraction	[SW-846 3541, Rev. 0, 9/94]	Semivolatile organics
Certified	Yes	NJ	SHW05.04200	SCM	Pressurized Fluid Extraction	[SW-846 3545, Rev. 0, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.05000	SCM	Ultrasonic Extraction	[SW-846 3550B, Rev. 2, 12/96]	Semivolatile organics
Applied	No	NJ	SHW05.05100	SCM	Supercritical Fluid Ex. TPH	[SW-846 3560, Rev. 0, 12/96]	Semivolatile organics
Applied	No	NJ	SHW05.05200	SCM	Supercritical Fluid Ex. PAH	[SW-846 3561, Rev. 0, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.06000	SCM	Waste Dilution	[SW-846 3580A, Rev. 1, 7/92]	Organics
Applied	No	NJ	SHW05.06100	SCM	Waste Dilution, Volatile organics	[SW-846 3585, Rev. 0, 12/96]	Organics
Certified	Yes	NJ	SHW05.07300	SCM	Closed System Purge & Trap	[SW-846 5035L, Rev. 0, 12/96]	Volatile organics - low conc.
Certified	Yes	NJ	SHW05.07310	SCM	Methanol Exmt, Closed System P & T	[SW-846 5035H, Rev. 0, 12/96]	Volatile organics - high conc.
Certified	Yes	NJ	SHW05.10000	SCM	Cleanup-Alumina	[SW-846 3611B, Rev. 2, 12/96]	Semivolatile organics
Applied	No	NJ	SHW05.11000	SCM	Petroleum Waste, Cleanup Alumina	[SW-846 3620B, Rev. 2, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.12000	SCM	Cleanup-Florisil	[SW-846 3630C, Rev. 3, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.13000	SCM	Cleanup-Silica Gel	[SW-846 3640A, Rev. 1, 9/94]	Semivolatile organics
Certified	Yes	NJ	SHW05.14000	SCM	Cleanup-Gel Permeation	[SW-846 3650B, Rev. 2, 12/96]	Semivolatile organics
Applied	No	NJ	SHW05.15000	SCM	Cleanup-Acid/Base Partition	[SW-846 3660B, Rev. 2, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.16000	SCM	Cleanup-Sulfur Removal	[SW-846 3665A, Rev. 1, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.17000	SCM	Cleanup-Sulfuric Acid/KMnO4	[SW-846 3810, Rev. 0, 9/86]	Semivolatile organics
Applied	No	NJ	SHW05.18000	SCM	Headspace, GC or GC/MS Screen		Volatile organics

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 03/17/2008 until 06/30/2008

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
284 SHEFFIELD ST
Mountainside, NJ 07092

Category: SHW06 - Organic Parameters, Chromatography			
Eligible to Report	State	Code	Matrix
NJ Data	NJ	SHW06.01000	SCM
Yes			
Technique Description			
Field GC			
Approved Method			
[SW-846 3815, Rev. 0, 11/00]			
Parameter Description			
Triad Organics			
Category: SHW07 - Organic Parameters, Chromatography/MS			
Eligible to Report	State	Code	Matrix
NJ Data	NJ	SHW07.03000	SCM
No			
Technique Description			
Field GC/MS			
Approved Method			
[SW-846 8265, Rev. 0, 3/02]			
Parameter Description			
Triad Organics			
Category: SHW09 - Miscellaneous Parameters			
Eligible to Report	State	Code	Matrix
NJ Data	NJ	SHW09.01000	SCM
No			
Technique Description			
Extraction SPE, Infrared Spectrometry			
Extraction, Oils and Solids			
Extraction			
Mix with Water or Calcium Chloride			
Extraction & Gravimetric			
Colorimetric, Field Test Kits			
Soil Screen Test			
Transformer Oil Screen			
Flow-Through Paint Filter, Observation			
Soils, Ammonium Acetate			
Soils, Sodium Acetate			
Soil, Colorimetric Screen			
Approved Method			
[SW-846 8440, Rev. 0, 12/96]			
[SW-846 9013, Rev. 0, 7/92]			
[SW-846 9023, Rev. 0, 12/96]			
[SW-846 9045C, Rev. 3, 1/95]			
[SW-846 9071 B, Rev. 2, 5/99]			
[SW-846 9077, Rev. 0, 9/94]			
[SW-846 9078, Rev. 0, 12/96]			
[SW-846 9079, Rev. 0, 12/96]			
[SW-846 9095, Rev. 0, 9/86]			
[SW-846 9080, Rev. 0, 9/86]			
[SW-846 9081, Rev. 0, 9/86]			
[SW-846 8515, Rev. 0, 12/96]			
Parameter Description			
Total rec. petroleum hydrocarbons			
Cyanide			
Extractable organic halides (EOX)			
pH - soil and waste			
Oil & grease - sludge-ken			
Chlorine - total, petroleum			
Polychlorinated biphenyls (PCBs)			
Polychlorinated biphenyls (PCBs)			
Free liquid			
Cation-exchange capacity			
Cation-exchange capacity			
Trinitrotoluene (2,4,6-)			
Category: SHW12 - Immunoassay			
Eligible to Report	State	Code	Matrix
NJ Data	NJ	SHW12.12000	SCM
No			
Technique Description			
Screening			
Approved Method			
[SW-846 4020, Rev. 0, 12/96]			
Parameter Description			
Immunoassay - polychlorinated biphenyls			

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection
 National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
 Effective as of 03/17/2008 until 06/30/2008



Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC070011
 284 SHEFFIELD ST
 Mountainside, NJ 07092

CHEMTECH
 Nelac Certificate and Parameter List
 Doc Control #: A2040129

Quality Assurance Manual
 Revision #: 19
 Page 168 of 168

Category: SHW12 -- Immunoassay

Eligible to Report

Status	Certified	Yes	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
			NJ	SHW12.13000	SCM	Field Immunoassay	[SW-846 4000, Rev. 0, 12/96]	Triad Immunoassay

Michael M. Costello for J. J. A.

Joseph F. Aiello, Chief

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

---- Annual Certified Parameters List ---- Effective as of 03/17/2008 until 06/30/2008

ATTACHMENT 3

**Chemtech Tables: Recommended Containers, Preservation Techniques,
and Holding Times**

APPENDIX D

Water Sampling and Holding Time Information

Parameter	EPA Method	Standard Method and/or SW 846 Method	Preservation	Container	Holding Time	Minimum Volume
Total Coliform	-----	9221D	0.008% Na ₂ S ₂ O ₃ if residual chlorine present 0.3 mL/125 mL 15% EDTA if > 0.01 mg/L heavy metals	Sterile P or G	30 Hrs. for Drinking Water 6 Hrs. for Waste Water	125 mL
Fecal Coliform	-----	9222B or D	0.008% Na ₂ S ₂ O ₃ if residual chlorine present 0.3 mL/125 mL 15% EDTA if > 0.01 mg/L heavy metals	Sterile P or G	30 Hrs. for Drinking Water 6 Hrs. for Waste Water	125 mL
Escherichia Coli	-----	9222B	0.008% Na ₂ S ₂ O ₃ if residual chlorine present 0.3 mL/125 mL 15% EDTA if > 0.01 mg/L heavy metals	Sterile P or G	30 Hrs. for Drinking Water 6 Hrs. for Waste Water	125 mL
Fecal Streptococci	-----	9230C	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present	Sterile P or G	30 Hrs. for Drinking Water 6 Hrs. for Waste Water	125 mL
Heterotrophic Plate Count	-----	9215B	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present	Sterile P or G	30 Hrs. for Drinking Water 6 Hrs. for Waste Water	125 mL
Pseudomonas Aeruginosa	-----	9213E	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present	Sterile P or G	30 Hrs. for Drinking Water 6 Hrs. for Waste Water	125 mL
Turbidity	180.1	2130B	Cool, 4 deg C	P or G	48 Hrs	100 mL
Nitrate (Chlorinated)	353.2	4500-NO ₃ F	Cool, 4 deg C	P or G	48 Hrs	250 mL
Nitrite	-----	4500-NO ₃ D	Cool, 4 deg C	P or G	48 Hrs	100 mL
Nitrate (Non-chlorinated)	353.2	4500-NO ₃ F	H ₂ SO ₄ to pH<2	P or G	14 Days	250 mL

Fluoride	300	4500 F-B,C S	None	P or G	28 Days	300 mL
Cyanide	335.4	4500-CN C&E	Cool, 4 deg C NaOH pH>12	P or G	14 Days	500 mL
Nitrate	300	-----	Cool, 4 deg C	P or G	48 Hrs	100 mL
Sulfate	300	4500-SO ₄	Cool, 4 deg C	P or G	28 Days	50 mL
Total Dissolved Solids	-----	2540C	Cool, 4 deg C	P or G	7 Days	100 mL
Total Organic Halides		5320B	1N H ₂ SO ₄ to pH<2	P or G	28 Days	50 mL
Calcium	-----	3120B	HNO ₃ to pH<2	P or G	6 Months	100 mL
Calcium-Hardness	200.7	3111B	HNO ₃ to pH<2	P or G	6 Months	100 mL
Alkalinity	-----	2320B	Cool, 4 deg C	P or G	14 Days	100 mL
Bromide	300	-----	None	P or G	28 Days	250 mL
Chloride	300	4500-CL D 4110	None	P or G	28 Days	100 mL
Color	-----	2120B	Cool, 4 deg C	P or G	24 Hrs	100 mL
Foaming Agents (MBAS)	-----	5540C	Cool, 4 deg C	P or G	48 Hrs	250 mL
Odor	-----	2150B	Cool, 4 deg C	G only	24 Hrs	200 mL
Conductivity	-----	2510B	Cool, 4 deg C	P or G	28 Days	100 mL
Silica	200.7	-----	Cool, 4 deg C	P only	7 Days	50 mL
Carbamates	531.1	-----	Cool, 4 deg C 0.08% Na ₂ S ₂ O ₃ if residual chlorine present	G, screw cap Teflon faced silicone septum	14 Days	100 mL mL
Ortho Phosphate	300	4500 P-E	Cool, 4 deg C	P or G	48 Hrs	50 mL
Chloridne, Residual Disinfectant	-----	4500CI-G	None	P or G	Analyze Immediately	200 mL
pH, Hydrogen ion	-----	4500-H-B	None	P or G	Analyze Immediately	25 mL
Temperature	-----	2550B	None	P or G	Analyze Immediately	1000 mL
Volatiles (Regulated)	524.2	-----	Cool, 4 deg C HCl to pH<2	G, screw cap Teflon faced silicone septum	14 Days	60-120 mL
Semivolatile Organic Compounds (Unregulated)	525.2	-----	If residual chlorine is present, add 40 to 50 mg Sodium Thiosulfate. If not chlorinated, add 6N HCl to pH<2 Cool, 4 deg C	G, amber	7 Days for extraction, 30 after extraction	1Liter
Acidity as CaCO ₃	305.1	2310B	Cool, 4 deg C	P or G	14 Days	100 mL
Alkalinity as CaCO ₃	310.1	2320B	Cool, 4 deg C	P or G	14 Days	100 mL
Ammonia	350.2, 350.3	4500-NH ₃ B,E	Cool, 4 deg C, H ₂ SO ₄ to pH<2	P or G	28 Days	400 mL
Biochemical	405.1	-----	Cool, 4 deg C	P or G	48 Hrs.	1000 mL

Oxygen Demand						
Carbonaceous BOD	-----	5210B	Cool, 4 deg C	P or G	48 Hrs.	1000 mL
Cyanide	335.2	9010B, 9012A, 9014	Cool 4 deg C, NaOH to pH>12 0.6 g ascorbic acid if residual chlorine present	P or G	Sulfide absent: 14 Days (Sulfide Present 24 Hrs.)	500 mL
Cyanide, Amenable	335.1	9010B, 9012A, 9014	Cool 4 deg C, NaOH to pH>12 0.6 g ascorbic acid if residual chlorine present	P or G	Sulfide absent: 14 Days (Sulfide Present 24 Hrs.)	500 mL
Acid Soluble & Insoluble Sulfide	-----	9030B	Cool, 4 deg C No Headspace	P or G	7 Days	8 oz.
Total Hardness	130.2 , 200.7	-----	HNO ₃ to pH<2 H ₂ SO ₄ to pH<2	P or G	6 Months	100 mL
Total Kjeldahl Nitrogen	351.3	-----	H ₂ SO ₄ to pH<2	P or G	28 Days	500 mL
Nitrate	300, 353.2	-----	Cool 4 deg c	P or G	48 Hrs.	100 mL
Total Recoverable Oil & Grease	413.1, 166 4A	-----	Cool 4 deg C, HCL or H ₂ SO ₄ to pH<2	G	Petroleum Based 3 Days Non-Petroleum Based 24 hours	1000 mL
Organic Nitrogen	351.1	-----	Cool 4 deg C, H ₂ SO ₄ to pH<2	G	28 Days	500 mL
Orthophosphate	365.2	-----	Filter immediately, Cool 4 deg C	P or G	48 Hrs.	50 mL
Phenols	420.1	-----	Cool 4 deg C, H ₂ SO ₄ to pH<2	G	28 Days	500 mL
Total Phosphorus	365.2	-----	Cool 4 deg C, H ₂ SO ₄ to pH<2	G	28 Days	50 mL
Total-Residue (TS)	160.3	-----	Cool, 4 deg C	P or G	7 Days	100 mL
Residue-filtered (TDS)	160.1	-----	Cool, 4 deg C	P or G	7 Days	100 mL
Residue-non-filtered (TSS)	160.2	-----	Cool, 4 deg C	P or G	7 Days	100 mL
Residue-Settleable (SS)	160.5	-----	Cool, 4 deg C	P or G	48 Hrs.	1000 mL
Residue-Volatile	160.4	-----	Cool, 4 deg C	P or G	7 Days	100 mL
Salinity	-----	2520 C	Cool, 4 deg C	G	28 Days	100 mL
Specific Conductance	120.1	-----	Cool, 4 deg C	P or G	28 Days	100 mL
Sulfate	375.4	-----	Cool, 4 deg C	P or G	28 Days	50ml

Sulfide	376.1	-----	Cool 4 deg C, add zinc plus NaOH to pH>9	P or G	7 Days	50 mL
Surfactants (MBAS)	425.1	-----	Cool, 4 deg C	P or G	48 Hrs.	250 mL
Sulfite (SO3)	377.1	-----	None Required	G, Bottle and Top	analyze immediately	50 mL
Temperature	170.1	-----	None Required	G, Bottle and Top	analyze immediately	1000 mL
Metals	200.7	-----	HNO ₃ to pH<2	P	6 Months	100 mL
Mercury	-----	7470A	Cool, 4 deg C	P or G	28 Days	8 oz.
Purgeable Halocarbons	601	8021B	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present	G, Vial screw cap with center hole Teflon- faced silicone septum	14 Days	40 mL
Aromatic Hydrocarbons	602	8021B	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present 1:1 HCl to pH <2	G, Vial screw cap with center hole Teflon- faced silicone septum	14 Days	40 mL
Organochlorine Pesticides/PCB	608	8081A,8082	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present If aldrin is to be determined bind to pH 5-9.	G, Amber Teflon-lined screw cap	7 days until extraction 40 days after extraction	1000 mL
Volatile Organics	624	8260B	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present 1:1 HCl to pH <2	G, Vial screw cap with center hole Teflon- faced silicone septum	7 days without HCl 14 days with HCl	40 mL
Semivolatile Organics	625	8270C	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present	G, Amber Teflon-lined screw cap	7 days until extraction 40 days after extraction	1000 mL
DRO	-----	8015B	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present	G, Amber Teflon-lined screw cap	7 days until extraction 40 days after extraction	1000 mL
GRO	-----	8015B	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present 1:1 HCl to pH <2	G, Vial screw cap with center hole Teflon- faced silicone septum	7 days without HCl 14 days with HCl	40 mL
Gases	-----	3810	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present 1:1 HCl to pH <2	G, Vial screw cap with center hole Teflon- faced silicone septum	7 days without HCl 14 days with HCl	40 mL
HPLC (Explosive)	-----	8330	Cool, 4 deg C	G, Amber Teflon-lined screw cap	7 days until extraction 40 days after	1000mL

					extraction	
HPLC (Explosive)	-----	8310	Cool, 4 deg C	G, Amber Teflon-lined screw cap	7 days until extraction 40 days after extraction	1000mL
Radiological	-----	-----	HNO ₃ to pH<2	P or G	6 Months	100 mL
Dioxin	-----	8280A	Cool, 4 deg C 0.008% Na ₂ S ₂ O ₃ if residual chlorine present	G, Amber Teflon-lined screw cap	7 days until extraction 40 days after extraction	1000 mL

Container Key: P = Plastic
G = Glass

Soil/Hazardous Waste Sampling and Holding Time Information

Parameter	EPA Method	Standard Method and/or SW 846 Method	Preservation	Container	Holding Time	Minimum Volume
Total Coliform	-----	9131	Cool, 4 deg C	Sterile P or G	6 Hrs	4 oz.
Total Coliform	-----	9132	Cool, 4 deg C	Sterile P or G	6 Hrs	4 oz.
Ignitability	-----	1010	None	P or G	None	8 oz.
Ignitability of Solids		1030	None	P or G	None	8 oz.
Corrosivity pH Waste > 20% water	-----	9040B	Cool, 4 deg C	P	Analyze Immediately	4 oz.
Corrosivity Toward Steel	-----	1110	Cool, 4 deg C	P	14 Days	4 oz.
Reactivity Cyanide	-----	SW-846 7.3.3.2	Cool, 4 deg C	P	14 Days	8 oz.
Reactivity Sulfide	-----	SW-846 7.3.4.2	Cool, 4 deg C	P	14 Days	8 oz.
TCLP Volatile Organics	-----	1311	Cool, 4 deg C	G	14 Days	4 oz.
TCLP Metals, Semivolatiles, Pesticides, and Herbicides	-----	1311	Cool, 4 deg C	G	14 Days	16 oz
PH	-----	9040B	Cool, 4 deg C	P	Analyze Immediately	4 oz.
Temperature	-----	2550	-----	P	Analyze Immediately	4 oz.
Metals	-----	6010B	Cool, 4 deg C	P or G	6 Months	8 oz.
Mercury	245.1	7471A	Cool, 4 deg C	P or G	28 Days	8 oz.
Organochlorine Pesticides	-----	8081A	Cool, 4 deg C	P or G	14 Days	8 oz.
PCB's	-----	8082	Cool, 4 deg C	P or G	14 Days	8 oz.
HPLC (PAH)	-----	8310	Cool, 4 deg C	G, Amber Teflon-lined screw cap	7 days until extraction 40 days after extraction	8oz.
Chlorinated Herbicides	-----	8151A	Cool, 4 deg C	G, wide mouth, teflon liner	14 Days	8 oz.

Volatile Organics	-----	8260B	Cool, 4 deg C Check individual state regulations for proper preservative. NJ requires Methanol, PA requires encore samplers and NY is cool 4 deg C.	G, wide mouth, teflon liner	14 Days	4 oz.
Volatile Organics	-----	8021	Cool, 4 deg C Check individual state regulations for proper preservative. NJ requires Methanol, PA requires encore samplers and NY is cool 4 deg C.	G, wide mouth, teflon liner	14 Days	4 oz.
Semivolatile Organics	-----	8270C	Cool, 4 deg C	Amber Glass	14 Days	8 oz.
Total Cyanide	-----	9013	Cool, 4 deg C	P or G	14 Days	8 oz.
Amenable Cyanide	-----	9213	Cool, 4 deg C	P or G	14 Days	8 oz.
Acid Soluble & Insoluble Sulfide	-----	9030B	Cool, 4 deg C No Headspace	P or G	7 Days	8 oz.
Extractable Sulfide	-----	9031	Cool, 4 deg C Fill top of sample with 2N Zinc Acetate until moistened	P or G	7 Days	8 oz.
Sulfides	-----	9215	Cool, 4 deg C	P or G	7 Days	8 oz.
Sulfate	-----	9035, 9036, 9038	Cool, 4 deg C	P or G	28 Days	8 oz.
pH, Soil and Waste	-----	9045A	Cool, 4 deg C	G	Analyze Immediately	8 oz.
Phenol	-----	9065, 9066, 9067	Cool 4 deg C	G	28 Days	8 oz.
Oil & Grease (Sludge, Sludge-Hem)	-----	9071B	Cool 4 deg C	G	28 Days	8 oz.
Paint Filter Liquids Test	-----	9095A	Cool, 4 deg C	P or G	-----	8 oz.
Nitrate	-----	9210	Cool, 4 deg C	P or G	48 Hrs	8 oz.
Bromide	-----	9211	Cool, 4 deg C	P or G	28 Days	8 oz.
Chloride	-----	9212, 9056, 9253	None	P or G	28 Days	8 oz.
Fluoride	-----	9214	None	P	28 Days	8 oz.
Cation-Exchange Capacity	-----	9080, 9081	None	P	-----	8 oz.
DRO	-----	8015B	Cool, 4 deg C	Amber Glass	14 Days	8 oz.

GRO	-----	8015B	Cool, 4 deg C Check individual state regulations for proper preservative. NJ requires Methanol, PA requires encore samplers and NY is cool 4 deg C.	G, wide mouth, teflon liner	14 Days	4 oz.
Gases	-----	3810	Cool, 4 deg C	Amber Glass	14 Days	8 oz.
Radiological	-----	-----	Cool, 4 deg C	G	6 Months	8 oz.
Dioxin	-----	8280A	Cool, 4 deg C	G	14 Days	8 oz.

CLP Sampling and Holding Time Information

Parameter	EPA Method	Preservation	Container	Holding Time	Minimum Volume
METALS (aqueous)	ILM04.1	HNO ₃ to pH<2, Cool 4deg C	P	180 Days from VTSR	1000ml
CYANIDE (aqueous)	ILM04.1	NaOH to pH>12, Cool 4deg C	P	12 Days from VTSR	1000ml
MERCURY (aqueous)	ILM04.1	HNO ₃ to pH<2, Cool 4deg C	P	26 Days from VTSR	1000ml
VOLATILE ORGANICS (aqueous)	OLM04.2	HCL pH < 2, Cool 4deg C	G	10 Days from VTSR with preservative, 7 Days from VTSR without preservative	40ml
SEMI-VOLATILE ORGANICS (aqueous)	OMLO4.2	Cool 4deg C	G	5 Days from VTSR for extraction 40 Days after extraction	1000ml
PESTICIDES (aqueous)	OLM04.2	Na ₂ S ₂ O ₃ , Cool 4deg C	G	5 Days from VTSR for extraction 14 Days after extraction	1000ml
PCBs (aqueous)	OLM04.2	Na ₂ S ₂ O ₃ , Cool 4deg C	G	5 Days from VTSR for extraction 14 Days after extraction	1000ml
METALS (solid/soils)	ILM04.1	Cool 4deg C	G	180 Days from VTSR	8 oz
*CYANIDE	ILM04.1	Cool 4deg C	G	12 Days from VTSR	8 oz
MERCURY (solid/soils)	ILM04.1	Cool 4deg C	G	26 Days from VTSR	8 oz
VOLATILE ORGANICS (solid/soils)	OLM04.2	Cool 4deg C	G	10 Days from VTSR	4 oz
SEMI-VOLATILE ORGANICS (solid/soils)	OLM04.2	Cool 4deg C	G	10 Days from VTSR for extraction 40 Days after extraction	8 oz
PESTICIDES (solid/soils)	OLM04.2	Cool 4deg C	G	10 Days from VTSR for extraction 40 Days after extraction	8 oz
PCBs (solid/soils)	OLM04.2	Cool 4deg C	G	10 Days from VTSR for extraction 40 Days after extraction	8 oz

*When chlorine is present ascorbic acid is used to remove the interference (0.6 g ascorbic acid)

ATTACHMENT 4

Table 1 – Analytical Laboratory Testing Program

Table 1

Analytical Laboratory Testing Program

At-Grade and Sub-Grade Demolition Phase Environmental Work Plan
 300, 304-308, 320 Andrews Street
 and 25 Evans Street
 Rochester, New York
 (NYSDEC Site #E828144)

Task	Sample Matrix	Parameter	Field Samples	Trip Blanks	MS/MSD	Field Blanks	Analytical Methods	Reporting Levels	Corresponding Standards, Criteria and Guidance (SCG) Values
Section 2.2 of Work Plan (At-Grade and Sub-Grade Building Demolition and Removal)	Solid or Liquid	TCL VOCs and TICs	Up to 5	NA	NA	NA	USEPA 8260	ASP-B	Part 371.3(e) Criteria if liquid, Part 375 Soil Cleanup Objectives if Solid
	Solid or Liquid	TCL SVOCs and TICs	Up to 5	NA	NA	NA	USEPA 8270	ASP-B	Part 371.3(e) Criteria if liquid, Part 375 Soil Cleanup Objectives if Solid
	Solid or Liquid	TAL Metals	Up to 5	NA	NA	NA	USEPA 6010, 7470/7471	ASP-B	Part 371.3(e) Criteria if liquid, Part 375 Soil Cleanup Objectives if Solid
	Solid or Liquid	Cyanide	Up to 5	NA	NA	NA	USEPA 335.4	ASP-B	Part 371.3(e) Criteria if liquid, Part 375 Soil Cleanup Objectives if Solid
	Solid or Liquid	PCBs	Up to 5	NA	NA	NA	USEPA 8082	ASP-B	Part 371.3(e) Criteria if liquid, Part 375 Soil Cleanup Objectives if Solid
	Solid or Liquid	Pesticides	Up to 5	NA	NA	NA	USEPA 8081	ASP-B	Part 371.3(e) Criteria if liquid, Part 375 Soil Cleanup Objectives if Solid
	Solid	TCLP VOCs	Up to 5	NA	NA	NA	USEPA 1311, 8260	ASP-B	Part 371.3(e) TCLP Maximum Constituent Levels
	Solid	TCLP SVOCs	Up to 5	NA	NA	NA	USEPA 1311, 8270	ASP-B	Part 371.3(e) TCLP Maximum Constituent Levels
	Solid	TCLP Metals	Up to 5	NA	NA	NA	USEPA 1311, 6010,7470	ASP-B	Part 371.3(e) TCLP Maximum Constituent Levels
	Solid	TCLP Pesticides	Up to 5	NA	NA	NA	USEPA 1311, 8081	ASP-B	Part 371.3(e) TCLP Maximum Constituent Levels
	Solid	TCLP Herbicides	Up to 5	NA	NA	NA	USEPA 1311, 8151	ASP-B	Part 371.3(e) TCLP Maximum Constituent Levels
	Solid or Liquid	Ignitability	Up to 5	NA	NA	NA	USEPA 1010	ASP-B	Part 371.3(b) Criteria
	Solid or liquid	Reactivity	Up to 5	NA	NA	NA	SW846, 7.3	ASP-B	Part 371.3(d) Criteria
	Solid or liquid	Corrosivity	Up to 5	NA	NA	NA	USEPA 9040	ASP-B	Part 371.3(c) Criteria
Section 2.3 of Work Plan (Post Foundation/Slab Soil Sampling and Analysis)	Soil/Fill	TCL VOCs and TICs	Up to 20	0	2	1	USEPA 8260	ASP-B	Part 375 Soil Cleanup Objectives
	Soil/Fill	TCL SVOCs and TICs	Up to 20	0	2	1	USEPA 8270	ASP-B	Part 375 Soil Cleanup Objectives
	Soil/Fill	TAL Metals	Up to 20	0	2	1	USEPA 6010, 7471	ASP-B	Part 375 Soil Cleanup Objectives
	Soil/Fill	Cyanide	Up to 20	0	2	1	USEPA 335.4	ASP-B	Part 375 Soil Cleanup Objectives
	Soil/Fill	PCBs	Up to 20	0	2	1	USEPA 8082	ASP-B	Part 375 Soil Cleanup Objectives
	Soil/Fill	Pesticides	Up to 20	0	2	1	USEPA 8081	ASP-B	Part 375 Soil Cleanup Objectives

NA = Not Applicable since sample is intended for waste disposal characterization of potentially contaminated solid or liquid materials that may be generated during at-grade and sub-grade demolition activities.

ATTACHMENT 5

Resume of Judy V. Harry of Data Validation Services

JUDY V. HARRY
P. O. Box 208
120 Cobble Creek Rd.
North Creek, NY 12853

Occupation: Data Validator/Environmental Technical Consultant

Years Experience: 31

Education: B.S., Chemistry, Magna cum laude, 1976, Phi Beta Kappa

Certifications: New York State Woman-Owned Business Enterprise (WBE)

Relevant Work History:

Data Validation Services: September 1989 - present

Sole proprietor of Data Validation Services, providing consultation/validation services to regulatory and commercial clients.

These services include the review of analytical laboratory data for compliance with respect to specific protocols, accuracy and defensibility of data, verification of reported values, and evaluation of quality parameters for analytical usability of results. Approved by USEPA, NYSDEC, NJDEP, and NYCDEP as a data validator for projects, including USEPA Superfund, Brownfield, and lead sites, and those contracted through the NYSDEC Division of Hazardous Waste Remediation, Division of Solid Waste, and Division of Water Quality.

Performed validation for compliance with analytical protocols including USEPA OLM, USEPA OLC, USEPA ILM, USEPA DFLM, USEPA SOW3/90, USEPA SOW 7/87 CLP, USEPA SOW 2/88 CLP, USEPA SW846, RCRA, AFCEE, NYS 6 NYCRR Part 360, 40 CFR, Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, including TO-15, 1989/1991/1995/2000 NYSDEC ASPs, and 1987 NYSDEC CLP. Performed validation according to the USEPA National and Regional SOPs and Functional Guidelines, AFCEE requirements, NYSDEC Validation Scope of Work, and NJDEP Division of Hazardous Site Mitigation/Publicly Funded Site Remediation SOPs.

Performed validation for USEPA Superfund Sites including Salem Acres, York Oil, Port Washington L-4 Landfill, Bridgeport Rental and Oil Services, MMR/ OTIS AFB, LCP, and Peter Cooper site; and for USEPA lead sites including SJ&J Piconne, Maska, Bowe System, Jones Sanitation, and Syossett Landfill, involving CLP, RAS, and SAS protocols.

Contracted for NYSDEC Superfund Standby Contracts with LMS Engineers, Camp Dresser & McKee, Malcolm-Pirnie, Ecology & Environment, and EC Jordan, involving samples collected at NYS Superfund Sites and analyzed under the NYSDEC ASP.

Validated data for numerous projects involving air analyses by TO14 or TO-15, including SIMs. Validated data for NYSDEC Phase II remedial investigations, RI/FS projects, and PRP over-site projects for hazardous waste sites. Was the primary contractor for Lawler, Matusky & Skelly Engineers during fifth and sixth round Phase II investigation, reviewing results for TCL/TAL analyses performed according to EPA CLP and 1989 NYSDEC ASP. Provided data validation for NYSDEC Phase II investigations for Gibbs & Hill, Inc, reviewing results from TCL/TAL analyses performed in accordance with the 1989 NYSDEC ASP.

Performed validation services for clients conducting RI/FS activities involving samples of many matrices, including waste, air, sludges, leachates, solids/sediments, aqueous, and biota; clients have included Arcadis Geraghty & Miller, Barton & Loguidice, Benchark, Bergmann Associates, Blasland, Bouck & Lee, Brown and Caldwell, Camp Dresser & McKee, C&S Consulting Engineers, Clough Harbour & Associates, Columbia Analytical Services, C.T. Male, Dames & Moore, Day Engineering, EA Engineering, Ecology & Environment, EC Jordan, Environmental Chemical Corporation, EHRT, ENSR Consulting, ERM-Northeast, Fagan Engineers, Fanning Phillips & Molnar, FluorDaniel GTI, Frontier, Foster Wheeler Environmental Corp, Frontier Technical, Galson Consultants, Geomatrix Consultants, GZA Environmental, Handex of N, H2M Group, IT Corp, Jacaues Whitford, JTM Associates, Leader Environmental, Langan Engineers, Lockwood, Kessler & Bartlett, LMS Engineers, Malcolm-Pirnie, Metcalf & Eddy, NWE&C, O'Brien & Gere Engineers, Parsons Engineering-Science, Plumley Engineering, Prescott Environmental, P. W. Grosser, Rizzo Associates, Roux Associates, Sear Brown Group, SECOR, Shaw Environmental, Stantec, ThermoRemediation Inc., TRC Environmental, Turnkey Environmental Restoration, TVGA Engineering, URS Consultants, Wehran Emcon, Weston, YEC, and private industries.

Validator for investigations at the Knolls Atomic Power Laboratory site. Validator for NYSDEC and NJDEP sites for samples analyzed according to EPA CLP SOPs, with validation performed according to NJDEP validation procedures. Validator for numerous landfill site investigations for TCL/TAL and NYS 6 NYCRR Part 360 analytes.

Provided consultation services to laboratories regarding analytical procedures and protocol interpretation, and to law firms for litigation support.

Provided services to firms involving audits of environmental analytical laboratories to determine analytical capability, particularly for compliance with NYSDEC ASP and AFCEE requirements.

Guest speaker on a panel discussing Data Review/Compliance and Usability, for an analysts workshop for the New York Association of Approved Environmental Laboratories, 1993.

Adirondack Environmental Services: June 1987 - August 1989

Senior mass spectroscopist for AES. Responsible for GC/MS analyses of environmental samples by USEPA and NYSDEC protocols, development of the GC/MS laboratory, initiating the instrumental and computer operations from the point of installation, and for implementing the procedures and methodologies for Contract Laboratory Protocol.

CompuChem Laboratories: May 1982 - January 1987

Managed a GC/MS production laboratory; developed, implemented, and supervised QA/QC criteria at three different levels of review; and was responsible for the development and production of the analysis of environmental and clinical samples. Directed a staff of 23 technical and clerical personnel, and managed the extraction and GC/MS labs and data review operations.

Research Triangle Institute: December 1979 - May 1982

Worked as an analytical research chemist responsible for development of analytical methods for the EPA Federal Register at RTI. This involved analysis of biological and environmental samples for priority pollutants, primarily relating to wastewaters and to human sampling studies. Method development included modification and interfacing of the initially developed Tekmar volatile purge apparatus to GC/MS, development and refinement of methods for entrapment and concentration of the air medium for subsequent volatile analysis, and the analysis and resolution/identification of individual PCB congeners within Aroclor mixtures by capillary column and mass spectra.

Guardsman Chemical Company: February 1977 - November 1979

Performed all quality control functions for the manufacturing plant. Performed research and development on coatings and dyes.

Almay Cosmetics: May 1976 - December 1976

Product evaluation chemist. Responsible for analytical QC of manufactured products.