

ETE SANITATION AND LANDFILL
5299 BROUGHTON ROAD
TOWN OF GAINESVILLE, WYOMING COUNTY
NEW YORK
NYSDEC SITE #9-64-005

SAMPLING PLAN

PATRICK CONCRETE CONSTRUCTORS, INC.
2 WEST MAIN STREET – SUITE 300
VICTOR, NEW YORK 14564

JUNE 5, 2006

PREFACE

This document describes the anticipated sampling and monitoring measures necessary to ensure worker, community, and environmental health during activities planned for this project. All employees and subcontractors associated with this project must read, understand and agree to follow the contents of this plan. If any activity or situation arises during the course of this project which is not covered in this plan, the employee or subcontractor responsible for that activity will inform the Patrick Construction site safety officer. An amendment covering the planned activity or situation will be added before completion of that activity.

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1.0 Introduction

The purpose of this sampling plan is to detail the collection and analytical methodologies to be used for environmental monitoring of air, water and soil/sediment parameters associated with this project. Environmental samples will be used to identify possible off-site migration of contaminants and to classify different media (i.e., soil and water) as “clean” or “contaminated” for subsequent action. Worker monitoring is described in the site Health and Safety Plan.

1.1 Staffing

In order to carry out the functions described herein, Patrick Concrete Constructors, Inc. (Patrick), will subcontract a dedicated Environmental Field Technician (EFT). The EFT, Mr. Byron Peterson, will be on-site for a approximately 150 days, the expected duration during which environmental monitoring must be conducted, for at least four (4) hours per day.

Mr. Peterson will be responsible for coordinating and performing all field sampling associated with the analytical laboratory. This includes water sampling, surface and near surface soil sampling, containerized waste, and air sampling. Additionally, Mr. Peterson will be responsible for maintaining all field instrumentation and sampling equipment. All sampling data collection and instrument maintenance activities will be recorded in bound logs as a permanent record.

1.2 Analytical Laboratory

All environmental samples will be sent to Paradigm Environmental Services, Inc. (Paradigm) a successful participant in the New York State ELAP program. The Paradigm Quality Assurance Manual is provided in Section 5 of this document.

1.3 Summary Table of Expected Number of Samples

Media	Total Number of Samples*	Location
Air (analyzed/collected)	60/600	Perimeter
Soil/sediment	50	Stockpiles/Excavations
Water	50	Dewatering Area

Note: approximately 10% of samples will be for QC purposes.

2.0 Air Monitoring

This section describes the overall approach to assess whether on-site construction activities have potential to pose a threat to the surrounding community. This plan, also referred to as the Community Air Monitoring Program (CAMP) is contained in the Site Specific Health and Safety Plan in Section 9.3.

By way of clarification, a single real-time TSI Dustrack monitor will be use for perimeter monitoring. The Dustrack will generally be placed in the downwind location except when used to determine upwind (background) levels and activity-specific concentrations.

Particulate samples will be collected as a part of the CAMP on a daily basis from four (4) perimeter locations around the work zone. One sample will be upwind and will serve as the background level. The other three samples will collected from downwind locations. Two of the weekly samples, selected by the Engineer, will be sent for analysis. Additional details are contained in the site Health and Safety Plan, Section 9.3

Under the CAMP, perimeter hydrocarbon emissions (VOC) will be monitored using a real-time photo ionization detector (PID) such as a RAE multi-gas. The action level will be 5 ppm or greater above the upwind (background) reading. Additional information is contained in the site Health and Safety Plan.

3.0 Soil/Sediment Sampling

Soil/sediments excavated from potential contaminated areas will be subjected to confirmatory sampling. The procedures contained herein have been developed to meet Section 02113, Part 3.05 of the project bid specification.

3.1 Sampling Protocol

Soils excavated from within the contaminated soil area will be sampled as follows;

- Grab samples will be collected from the bottom of the excavation at a rate of one sample per 50 linear feet per 50 feet of width.
- Sample jars will be filled using disposable wooden tongue depressors.
- Lengths or widths 10 feet or grater than 50 feet will require an additional sample. Sample location will be evenly spaced within the excavation.
- Areas with staining or other indications of potential contamination will be sampled as agreed upon by the Engineer and Patrick Project Manager.

- Each sample will have a unique identifier assigned and will be logged in a Chain of Custody form.
- Sample containers with preservatives will be glass jars provided by the analytical laboratory, Paradigm Environmental Services (Paradigm). Samples will be cooled immediately upon collection.
- Sample containers will be wiped clean of visible contamination after the lid has been tightened.

Additional details may be found Section 5.0 of this document.

3.2 Analysis

Soil/sediment samples will be analyzed for Extractable Petroleum Hydrocarbons and Volatile Petroleum Hydrocarbons (EPH/VPH) and RCRA metals with a two-day turnaround time. All samples will be sent, on the day they are collected, to Paradigm for analysis. Sample analysis and QA/QC requirements will be per the specifications as stated in the Pre-bid Conference. Additional details may be found in Section of 5.0.

3.3 As Needed Sampling

The Engineer may direct additional excavation and stockpile requirements based on the analytical results obtained above. Confirmatory sampling and analysis will then be conducted as described in 3.1 and 3.2 above.

3.4 Limits of Concern

Parameter	Limits of Concern	Detection Limits, mg/kg
Arsenic	7.5 ppm	<0.5
Copper	25.0 ppm	<1.0
Iron	2,000 ppm	<10
Sodium	7,000 ppm	<100
Zinc	20.0 ppm	<2
Xylenes (total)	1,200 ppb	<10 ug/kg

4.0 Water Sampling

Water collected as a result of dewatering soils/sediments from potential contaminated areas will be subjected to confirmatory sampling. Water collected from equipment and vehicle decontamination will also be subject to procedures described in this section. The procedures contained herein have been developed to meet Section 02113, Part 3.06 of the project bid specification.

4.1 Sampling Protocol

Waters from within the contaminated area will be sampled as follows;

- Grab samples will be collected from below the surface of the water, whether from a tank or pond, and away from the nearest edge.
- All confirmation sampling will be conducted as agreed upon by the Engineer and Patrick Project Manager. A maximum of 50 samples, including approximately 10% for blanks, will be collected.
- Each sample will have a unique identifier assigned and will be logged in a Chain of Custody form.
- Sample containers with preservatives will be glass jars provided by the analytical laboratory, Paradigm. Samples will cooled immediately upon collection.
- Sample containers will be wiped dry after the lid has been tightened.

Additional details may be found Section 5.0 of this document.

4.2 Analysis

Water samples will be analyzed for VPH/EPH and RCRA metals with a two-day turnaround time. All samples will be sent, on the day they are collected, to Paradigm for analysis. Additional details may be found in Section of 5.0.

5.0 Analytical Laboratory Quality Manual

Paradigm's quality assurance program is based on criteria determined by the US Environmental Protection Agency (EPA), the NYS Department of Health Environmental Laboratory Approval Program (ELAP), and the NYS Department of Environmental Conservation (DEC). Within New York State the Department of Health is the official certifying body for laboratories, and as such we follow their requirements for all certifiable analyses. The New York State Department of Health has adopted the NELAC quality systems as the basis for qualifying laboratories wishing to be certified. NELAP is a nationally recognized program whereby laboratories are held to a higher, unified quality standard to ensure consistency and quality among accredited labs. Paradigm is certified by the NYS Department of Health to perform analysis of *Air & Emissions, Solid & Hazardous Waste, Potable Water, and Non-Potable Water*.

Laboratory Audits

As a certified environmental laboratory, Paradigm is subject to routine audits by the NYS Department of Health and NVLAP. This audit is performed in-person by a DOH or NVLAP representative, and covers all aspects of laboratory operations. This includes sample receipt and processing, sample storage, sample analysis, instrument calibration and maintenance, standards and reagent preparation, and record keeping. Deficiencies are noted to the laboratory director in writing, and require documentation of corrective actions taken in response. Failure to correct deficiencies can lead to decertification.

The laboratory is also audited annually by the Quality Assurance Officer. The findings from this audit also require documentation of corrective actions, and the Quality Assurance Officer is responsible for conducting follow-up audits to verify the corrective actions are being implemented. Additionally, the Quality Assurance Officer conducts quarterly audits of projects that have been completed. Where errors are found that affect the reported results, the reports are revised and re-sent to the client with a letter documenting the error and correction.

In addition to lab audits, proficiency samples are sent to Paradigm four times yearly by NYSDOH and also NVLAP. Continuing demonstration of analytical proficiency is required to maintain certification.

QUALITY ASSURANCE PROGRAM - ENVIRONMENTAL CHEMISTRY

Paradigm's quality assurance program is based on criteria determined by the US Environmental Protection Agency (EPA), the NYS Department of Health Environmental Laboratory Approval Program (ELAP), and the NYS Department of Environmental Conservation (DEC). Within New York State the Department of Health is the official certifying body for laboratories, and as such we follow their requirements for all certifiable analyses.

Paradigm is certified by the NYS Department of Health to perform analysis of *Air & Emissions, Solid & Hazardous Waste, Potable Water, and Non-Potable Water.*

Laboratory Audits

As a certified environmental laboratory, Paradigm is subject to a biennial audit by the NYS Department of Health. This audit is performed in-person by a team of DOH representatives, and covers all aspects of laboratory operations. This includes sample receipt and processing, sample storage, sample analysis, instrument calibration and maintenance, standards and reagent preparation, and record keeping. Deficiencies are noted to the laboratory director in writing, and require documentation of corrective actions taken in response. Failure to correct deficiencies can lead to decertification.

The laboratory is also audited annually by the Quality Assurance Officer. The findings from this audit also require documentation of corrective actions, and the Quality Assurance Officer is responsible for conducting follow-up audits to verify the corrective actions are being implemented. Additionally, the Quality Assurance Officer conducts quarterly audits of projects that have been completed. Where errors are found that affect the reported results, the reports are revised and re-sent to the client with a letter documenting the error and correction.

Performance Evaluation Samples

Quarterly, Paradigm Environmental analyzes performance evaluation samples from the NYS Department of Health. Samples are received covering individual parameters and/or parameter groups within the certifying categories. Analytical results are reported and statistically evaluated against the pool of laboratory respondents. Results must fall within acceptance limits to maintain certification for an individual parameter or parameter group.

QUALITY ASSURANCE PROGRAM - ENVIRONMENTAL CHEMISTRY

Quality Control Samples

Good laboratory practices include the regular preparation and analysis of quality control samples. In addition, each regulatory program has specific requirements regarding the frequency and type of QC required. A comprehensive description of the QC required for analysis can be found in our Quality Assurance Manual, The EPA and DOH Methods Manuals, and our standard operating procedures.

The basic elements of laboratory quality control include:

- Method Blanks
- Laboratory Control Samples
- Matrix Spikes
- Duplicates
- Surrogates

Blanks:

Preparation blanks consist of laboratory pure water, or a clean solid matrix, which is subjected to any extractions, digestions or distillations required to prepare samples for analysis. The resulting *blank* sample is then analyzed along side environmental samples under identical conditions. Blanks measure the cleanliness of an analytical system. Blanks are analyzed at a minimum frequency of 1 per 20 environmental samples or with each analytical or preparation batch.

Laboratory Control Samples:

Reference check samples are laboratory pure water, which has been spiked with a known amount of the analyte(s) of interest. Reference checks measure the accuracy of an analytical procedure. Reference check samples are analyzed at a minimum frequency of 1 per 20 environmental samples.

Matrix Spikes:

Matrix spikes are duplicate environmental samples to which a known amount of the analyte(s) of interest have been added. Matrix spikes serve to measure the ability of an analytical system to accurately recover the analyte(s) of interest from the sample matrix. Matrix interferences may be positive or negative, causing false high or low readings respectively. Matrix spikes are analyzed at a minimum frequency of 1 per 20 environmental samples.

QUALITY ASSURANCE PROGRAM - ENVIRONMENTAL CHEMISTRY

Duplicates:

Duplicate analyses measure the precision, or reproducibility, of an analytical system. Duplicates are created from identical portions of an environmental sample which has been split in the lab, and are analyzed at a minimum frequency of 1 per 20 environmental samples. Due to lack of measurable quantities, organics precision is often measure using duplicate matrix spikes.

Surrogates:

Surrogates are spikes which are added to all environmental samples and quality control samples destined for organics analysis. They consist of organic compounds which are similar in nature to the analytes of interest, but are not expected to be found in the environment. Surrogates are added prior to sample preparation, and are used to measure the performance of the analytical system as well as any matrix interferences.

Quality Control Limits

Data concerning quality control is accumulated over time and used to statistically generate acceptance limits. QC recoveries which fall outside these limits, or outside EPA regulatory limits, indicate a problem with the analytical system or the sample matrix. Failure of the analytical system requires immediate suspension of analysis, corrective action, and re-analysis of any affected samples.

Matrix interferences are specific to a sample or group of samples, and are caused by the nature of the sample itself. Matrix interferences can in some cases be eliminated with additional preparatory procedures. For those samples with unavoidable matrix interferences, the data is flagged as a warning to the user.

*New York State Department of Health Environmental Laboratory
Approval Program (ELAP) governs Paradigm Environmental Services'
Laboratory in the following categories:*

Environmental Analyses: Air & Emissions

- Fibers (Asbestos) PCM & TEM
- Purgeable Halocarbons
- Metals I,II, and III
- Purgeable Aromatics
- Polychlorinated Biphenyls
- TO-15

Environmental Analyses: Solid & Hazardous Waste

- Corrosivity (pH)
- Ignitability
- TCLP
- Asbestos
- Lead in Paint
- Lead in Wipes
- Lead in Air Strip
- Purgeable Aromatics
- Purgeable Halocarbons
- Chlorinated Hydrocarbons
- Chlorinated Hydrocarbon Pesticides
- Chlorophenoxy Acid Pesticides
- Metals I, II, III
- Polychlorinated Biphenyls
- Nitroaromatics & Isophorone
- Nitrosamines
- Phthalate Esters
- Haloethers
- Polynuclear Aromatic Hydrocarbons
- Priority Pollutant Phenols

Environmental Analyses: Potable Water

- Drinking Water Bacteriology
- Drinking Water Metals I, III
- pH
- Calcium Hardness



- Specific Conductance

LABORATORY CAPABILITIES (continued)

Environmental Analyses: Non-Potable Water

- Amines
 - Chlorinated Hydrocarbons
- Chlorinated Hydrocarbon Pesticides
- Chlorophenoxy Acid Pesticides
- Waste Water Metals I
- Waste Water Metals II
- Waste Water Metals III
- pH
- Purgeable Aromatics
- Purgeable Halocarbons
- Purgeable Organics
- Nitroaromatics and Isophorone
- Polynuclear Aromatics
- Phthalate Esters
- Benzinides
- Haloethers
- Nitrosoamines
- Polychlorinated Biphenyls
- Priority Pollutant Phenols
- TCLP Additional Compounds
 - Total Hardness
 - Specific Conductance



LABORATORY CERTIFICATIONS

Paradigm Environmental Services maintains the following Environmental Laboratory certifications.

United States Environmental Protection Agency
Lead-Based Paint Activities Certification #NY-01-042003-229

New York State Department of Health (NELAC)
Environmental Analyses/Air and Emissions #10958

New York State Department of Health (NELAC)
Environmental Analyses/Non-Potable Water #10958

New York State Department of Health (NELAC)
Environmental Analyses/Potable Water #10958

New York State Department of Health (NELAC)
Environmental Analyses/Solid and Hazardous Waste #10958

National Voluntary Laboratory Accreditation
Airborne Asbestos Fiber Analysis/Bulk Asbestos Fiber Analysis



ANALYTICAL INSTRUMENTATION

Asbestos Analysis Instrumentation

- (3) **Olympus Compound Microscopes** capable of both Polarized Light and Phase Contrast Microscopy, Model BH-2.
- (3) **Olympus Stereo Microscopes** with 7x-40x Magnification, Model SZ.
- **Thermolyne Muffle Furnace**, Model 48000.
- **JEOL JEM 100CX Electron Microscope with EVEX EDX detector**

Atomic Absorption Instrumentation

- **Perkin-Elmer FIMS-100 mercury analyzer** with AS-90 autosampler.
- **Perkin-Elmer Inductively Coupled Plasma (ICP)**, Model 3300DV With AS-90 autosampler.

Gas Chromatograph: Mass Spectrometry Analysis

- **Agilent Series II Gas Chromatograph**, Model 6890 with **HP MSD**, Model 5973, **Enviroquant Datasystem**, **EST Enchon Purge and Trap**, EST 8100 Autosampler.
- **Agilent Series II Gas Chromatograph**, Model 6890 with **Agilent MSD**, Model 5973, **Agilent 7683 Autosampler**
- **Agilent Series II Gas Chromatograph**, Model 6890 with **Micro ECD**, **Agilent 7683 Autosampler**
- **Thermo Trace GC**, **DSQ Mass Spectrometer**, **Entech 7032A-L Autosampler**, **Entech 7100 Preconcentrator**, **Entech 4600 Dynamic Diluter**, **Entech 3100A Canister Cleaner**, **Barnstead International 3513 Oven**

ANALYTICAL INSTRUMENTATION (continued)

- **Hewlett-Packard (HP) Series II Gas Chromatograph**, Model 5890 with **HP Auto Sampler**, Model 7673A and **Electron Capture Detector**, Model 5971A; **DOS Chemstation**; and **HP Vectra 486 computer**.
- **HP Series II Chromatograph with Chemstation, Model 5890; Flame Ionization Dectector, HP Autosamplers, Model 7673A;**

METHODOLOGIES

Paradigm Environmental Services uses EPA and New York State Department of Health approved methodologies. Listed below is a summary of applied methodologies.

Asbestos Regulations for the Construction Industry, EPA, 29 CFR 1926.1101.

Interim Method for the Determination of Asbestos in Bulk Insulation Samples - EPA publication 600/M4-82-020 December 1982.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020.

Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039.

Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA, 40 CFR Part 136, Appendix A.

New York State Department of Health Environmental Laboratory approval Program Certification Manual.

NIOSH Manual of Analytical Methods, 2nd & 3rd Editions.

Standard Methods for the Examination of Water and Wastewater, 15th, 16th, 17th editions, APHA, AWWA, WPCF.

Test Methods for Evaluating Solid Waste and Physical/Chemical Methods, EPA SW-846, Third Edition, Vol. IA, IB, IC, II.

FIELD SAMPLING EQUIPMENT

Instrument	Manufacturer	Model	Serial No.
Precision Rotometer	Gilmont	No. 12	GF 2260
Soap Film Flowmeters	Gilian	Gilibrator	Various
Anemometer	TSI	Velocity Check	
Organic Vapor Monitor	Thermo Environmental Instruments, Inc.	580 B OVM	580B-27196-228
Water Sampling Pump	ISCO	2910	195M01561
	ISCO	2910	196E01120
	ISCO	GLS	200D02323
PH meter	Hanna	pHep	H198127



STANDARD TURNAROUND TIME

Whenever possible, Standard Turnaround Times will be adhered to. If results are available sooner, they will be relayed to the client at that time.

Asbestos Analyses

Verbal and written results for PCM analyses will be available 72 hours after samples arrive at the Paradigm laboratory. PLM and TEM bulk samples have a standard turn-around time for 3-5 business days, and TEM airs have a standard turn-around of 3 days after receipt at the laboratory.

Inorganic Analyses

Verbal and written results will be available one week after samples arrive at the Paradigm laboratory.

Microbiological Analyses

Verbal and written results will be available 24 to 48 hours after samples arrive at the Paradigm laboratory.

Organic Analyses

Verbal and written results will be available one week after samples arrive at the Paradigm laboratory.

NATHAN BEACH



ORGANICS SUPERVISOR

Mr. Beach holds a Bachelor Degree in Geochemistry from SUNY College at Fredonia, and has served as an assistant chemist in both our organics and inorganics departments from 1997 to 1999.

As an assistant chemist, Mr. Beach's duties included sample preparation for organic analysis by liquid/liquid and solid/liquid extractions, sample preparation for metals analysis by acid digestion, instrumental analysis using ICP, Furnace AA, GC and GC/MS. Mr. Beach was also responsible for assisting with sample receipt duties, as well as maintaining the laboratory sample storage and disposal program.

Mr. Beach became supervisor of the organics laboratory in 1999 and has since been responsible for overseeing the organic prep staff, analysis of samples for VOA and SVOA compounds by GC/MS, reporting of analytical results and quality control for the organic laboratory. Mr. Beach also oversees the activities of two chemists.

Post-Graduate Education:

OSHA 29 CFR, part 1910.129 Hazardous Waste Operations Certification

American Society of Mass Spectrometry

New York State Council of Professional Geologists

BILL BREW

ORGANICS LABORATORY ANALYST

Mr. Brew holds a Bachelor of Science Degree in Chemistry from the Rochester Institute of Technology, and has been employed by Paradigm Environmental Services since 1999. He is an analyst in the organics laboratory. Mr. Brew has several years prior environmental laboratory experience before joining Paradigm Environmental, with both public and private laboratories.

Mr. Brew works under the direction of the Organics Laboratory Supervisor, and is primarily responsible for the instrumental analysis and reporting of samples. He works with both GC and GC/MS methods, for the performance of volatiles, semi-volatiles, petroleum hydrocarbon and PCB testing. He also assists in sample preparation, TCLP extraction and sample log-in.

Mr. Brew has extensive prior experience in metals instrumentation and analysis, and is cross-trained in Paradigm Environmental's metal laboratory for sample analysis by AA and ICP.

GERARD BRIEN

ORGANICS LABORATORY ANALYST

Mr. Brien holds an Associate of Science degree in chemistry from Monroe Community College and has worked in the chemistry field for over thirty years. He is an analyst in the organics laboratory.

Mr. Brien works under the direction of the Organics Laboratory Supervisor, and is primarily responsible for the instrumental analysis and reporting of samples. He works with both GC and GC/MS methods, for the performance of semi-volatiles, petroleum hydrocarbon and PCB testing. He has also been trained in the Inorganics Laboratory and is knowledgeable about sample preparation and mercury analysis.

Mr. Brien has extensive prior experience in research and development at Eastman Kodak Company. His prior work experiences have set the foundation for his current position and have given him a firm grasp of the importance of quality, which has been consistent with Paradigm's high expectations.



ELIZABETH HONCH

ENVIRONMENTAL LOG-IN COORDINATOR

Ms. Honch is responsible for accepting all samples brought to the Environmental Lab at Paradigm Environmental. Ms. Honch must verify the Chains of Custody agree with the samples and notify the clients if there are any discrepancies or lack of clarity. Ms. Honch must also enter all samples into the electronic database and alert analysts when samples arrive with an expedited turn-around.

Additionally, Ms. Honch has been cross-trained on analytical rotation, where she is able to keep her analytical skills sharp and also provide assistance to the analysts when sample load becomes heavy.

Ms. Honch obtained her Bachelor of Science degree in Animal Science from Cornell University in 2001. She has interned in greenhouse production at Longwood Gardens (PA) and also the Bronx Zoo for horticulture. She also developed communication and speaking skills while working at a variety of nature centers as an environmental educator and naturalist.

BRUCE HOOGESTEGER

LABORATORY DIRECTOR/OPERATIONS MANAGER

Mr. Hoogesteger serves as the Technical Director and Operations Manager for Paradigm Environmental Services, Inc. Mr. Hoogesteger earned his Bachelors degree in Chemistry from the University of New Hampshire and his Masters degree in Environmental Management from Washington University in St. Louis.

Mr. Hoogesteger was employed at a national environmental laboratory for eight years. He served as the Organics Laboratory Manager in a 60 person full service environmental laboratory where he was responsible for technical development, QC oversight and project management. The laboratory was fully accredited and actively participated in all major Federal restoration/investigation analytical programs.

Mr. Hoogesteger has over 15 years of experience in the environmental analytical testing field and two years of experience in the food and drug testing field. He has worked extensively with GC, GC/MS, HPLC, and AA instrumentation and has firsthand experience with all major ELAP and EPA programs and methods.

Mr. Hoogesteger's responsibilities at Paradigm include administrative and technical management of the asbestos, inorganic, and organic laboratories. He is responsible for directing method development and validation and for verifying that proper quality control procedures are being followed. Mr. Hoogesteger oversees the Rochester, Buffalo, and Syracuse offices of Paradigm, and directs the asbestos, environmental, and IH staff in all 3 offices.

Post-Graduate Education:

Extranuclear GC/MS Operation and Maintenance; Extranuclear Corporation, Pittsburgh, PA.

GC/MS Troubleshooting and Maintenance; Hewlett-Packard Corporation, Andover, MA.

HPLC Operation and Maintenance; Waters Corporation, Hopkinton, MA.

Total Quality Management; Pace, Inc., Hampton, NH.

Front Line Leadership; Millpore Corporation, Bedford, MA.

Strategic Cost Management; Eastman Kodak, Rochester, NY

JENNIFER LAPLANT

INORGANIC SUPERVISOR

Ms. LaPlant holds a Bachelor of Science Degree in Chemistry from SUNY College at Oswego. While attending Oswego she interned at the City of Oswego Wastewater Treatment facility, where she performed laboratory analysis and gained first hand experience concerning treatment of wastewaters. Ms. LaPlant also participated in a Co-Operative program at Eastman Kodak during her senior year in high school, where she worked as a laboratory assistant involved with asbestos slide preparation and general lab procedures.

Ms. LaPlant has gained invaluable experience working in environmental laboratories in both New York and Connecticut. This experience includes wet chemistry analysis, organics sample preparation, and analysis of volatile organics, PCB's, pesticides and herbicides. She has also participated in the collection and charting of quality control data.

Ms. LaPlant currently serves as the inorganic laboratory supervisor. Her responsibilities include the preparation and analysis of inorganic samples, waste management, quality control for the inorganic laboratory, data analysis and reporting.

AMANDA LEEUWEN

ORGANIC LABORATORY TECHNICIAN

Ms. Leeuwen holds a Bachelor of Arts Degree in Environmental Science from Plattsburgh State University. While attending Plattsburgh Ms. Leeuwen was named to the Dean's List.

Ms. Leeuwen's interest in ecology and environmental science enables her to apply what she has learned at college to her current work at Paradigm. Ms. Leeuwen is the primary technician responsible for extracting solid and aqueous samples for the organic laboratory. She is responsible for coordinating sample preparation for the organic laboratory and prioritizing samples requiring more immediate turn around.

Ms. Leeuwen also participates in an analytical rotation which includes such analyses as pH, flashpoint, TCLP extractions and total coliform. Her attention to detail and willingness to work have made her an asset to the Paradigm team.

BYRON PETERSON

ENVIRONMENTAL FIELD TECHNICIAN

Mr. Peterson is responsible for coordinating the collection of samples from many clients whose analytical needs are on a routine schedule. He ensures all samples are collected properly with regards to the USEPA guidelines. Mr. Peterson is also available to collect samples from non-routine clients when requested. In keeping with sample collection, Mr. Peterson is also responsible for the disposal of unused samples and waste generated through the routine operation of the laboratory.

Mr. Peterson has been employed in a variety of jobs, all of which have placed him in direct contact with or supervision of many people. He is able to interact easily with clients and genuinely endeavors to consistently meet the needs of the client.

CHARLES RILEY

INORGANICS LABORATORY ANALYST

Mr. Riley attended the University of Nebraska at Lincoln, Nebraska and obtained a Bachelor of Science Degree in Environmental and Biological Systems Engineering. Mr. Riley put his education to good work researching air pollution and wastewater treatment of a constructed wetland. He obtained a position with the Lincoln Lancaster County Health Department implementing and enforcing air quality emissions regulations on local industry. After spending several years using his degree in Nebraska, Mr. Riley moved to upstate New York.

Mr. Riley is currently working in the inorganic laboratory, analyzing solid and aqueous samples for mercury content. Mr. Riley is also responsible for digesting and analyzing samples of all matrices for elemental composition, under the guidance of the inorganic laboratory supervisor. Mr. Riley has been able to use his technical education to make the transition into the laboratory an easy adjustment.

REBECCA ROZTOCIL

QUALITY ASSURANCE MANAGER

Ms. Roztocil is the Quality Assurance Manager with Paradigm Environmental Services, Inc. She earned her Bachelor of Science degree in Biochemistry from Nazareth College, of Rochester, New York.

While employed with a privately owned and operated environmental testing firm, Ms. Roztocil acquired experience in testing environmental samples for inorganic contaminants. This includes both metallic and non-metallic analyses. Additionally, she gained experience in flame and furnace atomic absorption, spectroscopy, cold vapor analysis, and inductively coupled plasma atomic emission spectroscopy.

At Paradigm, Ms. Roztocil has developed and organized operational methodologies and Standard Operating Procedures for the Inorganic Laboratory. She has also helped revise the Quality Assurance/Quality Control programs for flame and furnace atomic absorption spectrophotometry, and ICP atomic emission spectroscopy. In addition, Ms. Roztocil has trained technicians in inorganic analyses.

Ms. Roztocil is multifunctional within the Paradigm Laboratory. She has been cross-trained in organic sample preparation techniques for semivolatiles, petroleum hydrocarbon and PCB methods. Ms. Roztocil is also trained and fully capable at asbestos air sample preparation and Phase Contrast Microscopy (PCM) analysis.

Currently, Ms. Roztocil is responsible for maintaining the integrity of the data reported to clients through the oversight of all quality -related functions of the laboratory. She verifies that all laboratory functions are within conformance to the referenced methods and internal standard operating procedures. She works with the laboratory supervisors to identify and correct problems areas detected through routine QC samples and systems audits, and communicates with the state and accrediting authorities concerning accreditation, audits, and proficiency evaluations.

JOHN SICKLES

ENVIRONMENTAL ANALYST

Mr. Sickles is an Environmental Analyst with Paradigm Environmental Services, Inc. He earned his Bachelor of Science degree in Chemistry from Nazareth College of Rochester.

While employed as an intern at the Monroe County environmental Health Laboratory, Mr. Sickles participated in the preparation and analysis of both potable and non-potable water samples for trihalomethane content in the organic laboratory. He also collected polychlorinated biphenyl (PCB) air samples in the field, and worked in the general chemistry lab, for an Albany based environmental laboratory as a summer job. He is knowledgeable in conventional bench chemistry, as well as biochemistry and instrumental analysis techniques.

At Paradigm, Mr. Sickles' responsibilities include the preparation and analysis of asbestos air samples