

**ENVIRONMENTAL MANAGEMENT PLAN
(REVISED 1/28/00)
424-500 NORTON STREET
ROCHESTER, NEW YORK**

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TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Site History and Environmental Conditions	1
1.2	Proposed Corrective Actions	4
1.3	Statement of Purpose	5
2.0	PLANNED DEVELOPMENT	6
3.0	ENVIRONMENTAL MANAGEMENT PLAN	7
3.1	Environmental Project Monitor	7
3.2	Petroleum/VOC Impacted Media	8
3.2.1	Handling of Petroleum-Impacted Media	8
3.2.2	Analytical Laboratory Testing.....	8
3.2.3	Disposal of Petroleum-Impacted Media	9
3.2.4	Re-use of Petroleum-Impacted Soil/Fill	9
3.3	Ammonia-Impacted Material.....	10
3.3.1	Handling of Ammonia-Impacted Material.....	11
3.3.2	Analytical Laboratory Testing.....	10
3.3.3	Disposal of Ammonia-Impacted Material	11
3.4	Fill Material	11
3.4.1	Handling of Fill material.....	11
3.4.2	Disposal of Fill Material.....	11
3.4.3	Re-use of Fill Material	11
3.5	Unanticipated Material	11
3.6	Free Product and Contaminated Groundwater.....	12
3.6.1	Handling and Disposal.....	12
3.6.2	Analytical Laboratory Testing.....	13
3.7	Health and Safety Plan.....	13
3.8	Dust Suppression	13
3.9	Site Controls	14
4.0	MANAGEMENT OF POTENTIAL FUTURE DISTURBANCES	15

APPENDICES

Appendix A	Figures: Figure EMP-1 - Project Locus Figure EMP-2 - Site Plan - City of Rochester Conceptual Redevelopment Plan Figure EMP-3 - Estimated Areas of VOC, SVOC, Ammonia, or TPH Impact Figure EMP-4 – Approximate Area of Limited Soil Removal
Appendix B	Summary Flow Chart for EMP
Appendix C	Health and Safety Plan
Appendix D	Table I - Soil and Fill Cleanup Objectives

1.0 INTRODUCTION

This site-specific Environmental Management Plan ("EMP") has been prepared on behalf of the City of Rochester for use during the re-development (i.e., construction and subsurface maintenance activities) of the property located at 424-500 Norton Street, City of Rochester, County of Monroe, New York ("Site").

The EMP is intended to be used by developers, construction workers, engineers/architects, maintenance personnel, City of Rochester employees, or other entities involved with the redevelopment of the Site and/or other activities that may result in the disturbance of subsurface media (i.e., soil, fill materials, or groundwater) at the Site. These entities are responsible for implementing, and adhering to, this EMP.

The Site consists of approximately 11.32 acres of vacant land located on the north side of Norton Street and the south side of Bastian Street (refer to Figure EMP-1 included in Appendix A). The majority of the Site (11.2 acres) was formerly used as a minor league baseball stadium, known as Silver Stadium (462-500 Norton Street). In addition to the former stadium (462- 500 Norton Street), a residence and vacant bar (424-426 Norton Street) formerly located southwest of the stadium are also included as part of the Site. These structures have been demolished.

Three known areas of petroleum and/or volatile organic compound (VOC) impacted media (e.g., soil, fill, groundwater) are located in the former southeastern and southwestern parking lots of the former stadium and along the eastern property line of the Site near E.I. DuPont deNemours & Co. Additionally, ammonia impacted media is present along the eastern property line of the Site. Fill material containing elevated concentrations of metals of concern is present throughout the Site. This fill is typically encountered at or near the ground surface (i.e., it is generally characterized as a cinder/slag/soil mixture). Further discussion regarding the Site's historical use and the known environmental conditions are presented in Section 1.1.

1.1 Site History and Environmental Conditions

The stadium was used until the fall of 1996 when the team moved to a new stadium. Since that time, the baseball stadium and stands, concession building, box/ticket offices, a small storage building, and a maintenance building have been demolished. Only a two-story office building and a former souvenir building remain. The 424-426 parcel contained a two family residence and a vacant bar prior to demolition activities at the Site in 1998.

Southeast Portion of Former Silver Stadium Parcel

Intrusive environmental studies conducted in the vicinity of the southeastern parking lot of the Site have included the excavation and observation/monitoring of test pits, the advancement and observation/monitoring of test borings and soil gas points, and the installation and sampling of groundwater monitoring wells. The location of these test pits, test borings and wells are illustrated on Figure EMP-2 in Appendix A. This intrusive work was conducted to characterize environmental conditions at the Site and to delineate the extent of contamination in vicinity of the former southeastern parking lot.

According to analytical laboratory analysis, soil, fill, and groundwater on portions of the Site contain petroleum-related VOCs at concentrations that exceed the New York State Department of Environmental Conservation (NYSDEC) groundwater standards and Spill Technology and Remediation Series (STARS) Memo #1 soil guidance values. This contamination has been characterized as a primarily lightweight petroleum hydrocarbon (most-likely gasoline) with some heavy weight petroleum hydrocarbons such as diesel fuel located primarily within the fill materials in the former southeast parking lot. The groundwater in this area appears to contain dissolved phase hydrocarbons, but small quantities of residual free phase product were observed on a soil sample collected from one of the test borings. The source of the contamination in the former southeastern parking lot is not known; however, it appears to be located on Site, and may possibly be the result of contaminated fill materials brought onto the Site, or due to spills or leaks of petroleum and/or petroleum products onto the parking lot fill materials. The estimated areal extent of VOC, SVOC, and/or TPH impact observed in the southeast portion of the former Silver Stadium parcel is illustrated on Figure EMP-3 included in Appendix A.

Subsurface materials in the southeastern portion of the Site (and generally throughout the Site) include heterogeneous fill materials above native soils, weathered bedrock, and more competent rock. The fill materials within the former parking lot areas consist of a poorly sorted, heterogeneous mixture of dark black cinders, slag, and coal fragments, with lesser amounts of brick fragments, ash, and reworked soils. A sample of fill material that was collected from the former southeastern parking lot for laboratory analysis contained concentrations of copper, iron, lead, mercury, and zinc that exceeded their respective NYSDEC soil cleanup objective. Iron, lead, mercury, and zinc exceeded their respective background value or background range. An additional composite sample collected from test pits located in the western portion of the Site contained concentrations of arsenic, chromium, iron, lead, nickel, and zinc exceeding their respective NYSDEC soil cleanup objective. Lead and Zinc also exceeded their respective eastern USA background range.

Southwestern Portion of Site

Intrusive environmental studies in vicinity of the 424-426 Norton Street parcel and the southwestern portion of the former Silver Stadium parcel have included the excavation and observation/monitoring of test pits, the installation and monitoring of one monitoring well and four sentry monitoring wells, and the installation and observation/monitoring of soil borings (refer to Figure EMP-2 in Appendix A).

Previous environmental studies on the southwestern portion of the Site indicated that soil beneath this portion of the Site is impacted with medium weight petroleum hydrocarbons that could be attributable to kerosene, stoddard solvents, paint thinner, etc. The concentrations of some of the VOCs detected in the soil exceed their respective NYSDEC STARS Memo #1 guidance values. Medium weight petroleum hydrocarbons were also detected in a groundwater sample that was collected from one of the test borings that was advanced in this area. A sheen was detected in one of the sentry wells (SMW-4) in this area of the Site and laboratory analysis indicates that the groundwater contains petroleum hydrocarbon constituents. The estimated areas of VOC and/or TPH impact observed in the southwest portion of the Site is illustrated on Figure EMP-3

included in Appendix A.

The adjacent property west of the 424-426 Norton Street parcel is Cadet Cleaners, a dry cleaning facility (i.e. plant) and formerly a gasoline service station with a long history of underground storage tanks (USTs) containing petroleum products and stoddard solvents. It is possible that this adjacent property is a source of the contamination detected on the 424-426 Norton Street parcel.

Eastern Portion of Site Near E.I. DuPont deNemours & Co.

An E.I. DuPont deNemours & Co. (DuPont) plant is located along the eastern property boundary of the former Silver Stadium Site. This adjoining property was formerly occupied by the Pepsi Cola Rochester Bottling Co. City of Rochester and County of Monroe records reviewed as part of a previous study indicate that this property has a history of storage tank use and that spillage of petroleum and chemical products reportedly occurred at this property.

In August 1998, six test pits were excavated along the eastern property line of the former Silver Stadium parcel in proximity to the adjoining DuPont property (refer to Figure EMP-2 in Appendix A). A DAY representative observed and documented the subsurface conditions encountered, screened selected samples with a photoionization detector (PID) and flame ionization detector (FID), and collected samples for analytical laboratory analysis. Based upon testing, total petroleum hydrocarbons (TPH), ammonia, dieldrin (a pesticide), and other "non-target" petroleum hydrocarbon compounds (e.g., tetradecane; pentadecane, hexatriacontane, etc.) were detected within the soil/fill in a limited area on the former Silver Stadium property near the DuPont plant.

Additional studies were completed in June, 1999 along the eastern property line of the Site by DAY and consultants from Dupont. A soil-gas survey and the advancement of test borings indicated that elevated concentrations of ammonia (up to 9 ppm), and VOCs were also detected along the eastern property line of the former Silver Stadium using an Industrial Scientific tri-gas meter Model LXT310 with an ammonia sensor (or similar), and a PID. In addition, laboratory analysis indicated that the SVOC naphthalene was detected at a concentration that slightly exceeds the NYSDEC STARS Memo #1 guidance values. The concentrations encountered were generally low and do not appear to warrant removal; however, it is anticipated that a passive vent system will be installed in this area of the Site to deter the accumulation of vapors beneath future buildings, parking lots, etc. that are to be constructed in this area of the Site. The impact to the groundwater in this portion of the Site is not known; however, additional studies are planned to evaluate if ammonia has impacted the groundwater. The estimated areas of ammonia and/or VOC impacted soil observed, to date, along the eastern property line of the former Silver Stadium parcel based upon PID readings and ammonia readings are illustrated on Figure EMP-3 included in Appendix A.

Additional information regarding the intrusive activities conducted at the Site is available from the City of Rochester Department of Environmental Services (DES), Division of Environmental Quality (DEQ).

1.2 Corrective Actions

Based on the environmental studies performed to date, and on the anticipated use of the Site as an industrial park, the following corrective actions were developed, some of which have been implemented, to address the impacted media (i.e., soil, fill, and groundwater) at the Site. These corrective actions include:

Southeast Portion of Former Silver Stadium Parcel

Based upon the subsurface studies completed, a limited soil removal was conducted at the Site on June 17, 18, and 21, 1999 by the City in accordance with the NYSDEC-approved *Remediation Work Plan* dated March, 1999 that was prepared by DAY. DAY and Gordon J. Phillips, Inc. were retained by the City to conduct the soil removal. DAY assisted Gordon J. Phillips, Inc. in defining the amount of soil requiring removal using visual observations and real-time monitoring of in-situ and excavated soils using a photoionization detector (PID). This work included the removal of contaminated soil in the former southeastern parking lot at the Site. A total of approximately 2,353 tons of petroleum contaminated soil were removed to an approximate depth of 9.1 feet below the ground surface within an approximate 6,200 square foot area. The extent of the soil removal area is depicted in figure EMP-4. Based upon observations made during the limited soil removal and previous subsurface activities, it appears that the contamination left in place was limited to the weathered bedrock, which is present at the top of the groundwater table at approximately 7-10 feet below the ground surface.

In addition, prior to backfilling the excavation resulting from the limited soil removal, a passive vent system was installed. This system was installed to reduce exposure to future tenants, contractors, construction workers, etc. Also, an additional passive vent system has been installed beneath the building being developed in the area of the Site overlying the area of the limited soil removal. This system was installed to further reduce the migration of contaminants and potential nuisance odors from entering the building.

A qualitative risk assessment was conducted to identify and evaluate potential receptors and preferred migration pathways of the contamination present at the Site. In addition, a qualitative risk assessment using GSI Tier II software, NYSDEC default parameters, and site specific data was also performed. The exposure assessment indicates that the residual contamination present at the Site does not appear to pose an unacceptable risk to human health.

It is planned that a groundwater monitoring program, involving the installation of three new groundwater monitoring wells and the existing monitoring well MW-3, and subsequent annual sampling of these wells, will be implemented on this portion of the Site to document and monitor the concentration of petroleum impact with time.

Southwest Portion of Site

The City of Rochester notified the NYSDEC of the subsurface conditions that exist on this portion of the Site. Since VOC/petroleum impact in this area appears attributable to an off-site source, no remediation on this portion of the Site is anticipated at this time.

However, sentry wells have been installed, and a groundwater monitoring program is being implemented in order to document any future migration of VOCs or petroleum impact onto this portion of the Site. In addition, it is anticipated that a passive vent system will be installed in this portion of the Site. This system will be installed in order to reduce migration of contaminants and potential nuisance odors from the petroleum impacted media.

Eastern Portion of Site Near E.I. DuPont deNemours & Co.

Chemical/petroleum impact in this area appears to be attributable to an off-site source. The concentrations and/or types of impact do not appear to warrant aggressive remediation at this time; however, a passive vent system will be installed in the vicinity of the area to reduce exposure to tenants, contractors, construction workers, etc.

Metal/solid waste impact in this area consists of wood, plastic, brick, cinders, slag, various metal fragments, paint chips, and glass. This material is generally located east of the former stadium, does not appear to be attributable to an off-site source and is most likely attributable to the past placement of waste on the Site. No analysis of the metal content was conducted on this material.

1.3 Statement of Purpose

The purpose of this EMP is to address the handling of: (1) petroleum-impacted soil and fill; (2) ammonia impacted soil/fill (3) fill materials that contain elevated concentrations of metals; and (4) free product and contaminated groundwater that may be encountered during re-development of the Site.

Specifically, this EMP addresses how to identify, characterize, and handle these media during construction and maintenance activities requiring subsurface excavation. The EMP establishes goals, procedures, and appropriate response actions to be used by on-site personnel should petroleum-impacted material, ammonia-impacted material, fill material, or free product and contaminated groundwater be encountered/disturbed during these re-development activities. The EMP also identifies how to dispose of or re-use these materials in accordance with applicable regulations when they are encountered and disturbed.

2.0 PLANNED REDEVELOPMENT

The Site will be re-developed for use as an industrial park. This development will initially include the construction of the water, sewer, street and traffic infrastructure. According to conceptual plans designed on behalf of the City of Rochester, the Site will be subdivided into eight parcels, which will include four parcels on each side of a proposed street that will connect Norton Street to Bastian Street. These conceptual redevelopment plans are illustrated in Figure EMP-2 included in Appendix A. It is anticipated that the City of Rochester may be involved in grading the Site, installing some of the necessary utilities/services, and building the street that will be located on the Site. Each of the eight parcels will then be subsequently developed by private developer(s). [Note: Two of these parcels have been purchased and are currently under development by a private developer.] It is anticipated that each parcel will be improved with a slab on-grade building, asphalt parking area, concrete walkways, lawn areas, etc. These plans for redevelopment are only conceptual, and specific redevelopment plans for the Site have not yet been defined; however, in accordance with City of Rochester zoning requirements, the property will be redeveloped as an industrial park. This EMP addresses infrastructure development activities (e.g., road construction, utility installation, etc.) and infrastructure maintenance and repair. While aspects of this plan are applicable to individual parcels, modifications will be necessary to address site-specific considerations.

As part of the EMP, the actual redevelopment plans must be reviewed in order to evaluate whether modifications to the EMP are necessary. Any modifications must be accepted by the City of Rochester and the appropriate regulatory authorities.

3.0 ENVIRONMENTAL MANAGEMENT PLAN

During re-development, soil/fill trenching will be conducted to install new utilities (e.g., water, sewer, etc.) that will service future buildings. It is also possible that limited amounts of soil/fill will be removed and/or disturbed during installation of parking lots, building foundation, grading, and other miscellaneous site development activities. Based on the intrusive studies performed to date, it is anticipated that some of the soil/fill that is excavated/disturbed during these, and other, site redevelopment activities may contain residual amounts of petroleum products, ammonia, stoddard solvents, and/or elevated concentrations of some heavy metals (e.g., arsenic, lead, etc.). This EMP covers activities associated with the redevelopment of the Site where impacted soils, and free product/contaminated groundwater will be disturbed. Prior to redevelopment activities, site-specific studies are recommended to characterize subsurface conditions and to determine if any modifications to this EMP are necessary.

As indicated in NYCRR Part 360, Section 360-1.15 (b)(8), non-hazardous soil at this Site will not be considered a solid waste if it is excavated during redevelopment and re-used on-site as backfill for excavations containing similar contaminants. However, criteria for re-use established in this EMP (e.g., NYSDEC STARS Memo #1 guidance values, etc.) must be achieved. If the material does not meet appropriate criteria or it will not be re-used, it is considered a solid waste and it must be handled/disposed of accordingly.

This EMP provides options regarding the disposal and/or re-use of petroleum/VOC-impacted media, ammonia impacted media, fill material, and free product/contaminated groundwater. This EMP also provides a protocol for preventing fugitive emissions during disturbance of these materials, and reducing future impacts associated with these materials. The EMP describes the procedures to be implemented in order to manage these materials in accordance with applicable regulations if they are encountered and/or disturbed during development activities. The procedures presented are intended to reduce potential exposure to construction workers and nearby residents during redevelopment; and site workers, site occupants, and nearby workers and residents during future operation and/or occupation of the Site. A Summary Flow Chart included in Appendix B provides recommended handling and disposal options for materials covered by this EMP.

3.1 Environmental Project Monitor

It is recommended that an environmental project monitor be present during construction activities. The environmental project monitor will assist in identifying contaminated soil and/or fill and monitoring/documenting conditions encountered. The environmental project monitor must be on-site during all construction activities when disturbance of contaminated media is anticipated and/or exposure potential is the greatest (e.g., during foundation excavation work, installation of utilities, site grading, etc.)

If VOCs are suspected in the work area through visual and/or olfactory inspection, a PID and/or FID should be used during excavation activities to assist in detecting total VOC vapors on the excavated material. The PID and FID can detect many VOCs typically present in petroleum products/stoddard solvents. If PID and/or FID readings in the air above excavated and/or in-situ material and/or selected samples of the material exceed typical upwind air background measurements by 5.0 parts per million (ppm) or more, it will be presumed that VOC

contamination is present. The environmental project monitor will document information regarding suspect areas that have PID and/or FID readings that show contamination is present. The material exhibiting evidence of contamination will require disposal or treatment, unless analytical laboratory data confirms otherwise.

If ammonia is detected in the work area through olfactory inspection, an Industrial Scientific tri-gas meter Model LXT310 with an ammonia sensor (or similar) should be used during excavation activities to assist in detecting ammonia concentrations on the excavated material. If the meter readings indicate that the concentration of ammonia in the air above excavated and/or in-situ material and/or selected samples of the material exceed typical upwind air background measurements, it will be presumed that ammonia is present. The environmental project monitor will document information regarding suspect areas that ammonia is detected and/or have ammonia odors indicating that ammonia contamination is present. The material exhibiting evidence of contamination will require disposal or treatment, unless analytical laboratory data confirms otherwise.

The environmental project monitor will also use a real time aerosol monitor (RTAM) when fill materials are to be disturbed during redevelopment activities. The RTAM will be used to monitor the air for particulates. The RTAM measurements will be compared to the NYSDEC TAGM 4031, which uses an action limit of 150 microns/liter. If the action limit is exceeded, then site controls could be implemented (e.g., dust suppression, change the way work is being done, upgrade personal protective equipment, etc.) until the particulate levels are below the action level.

3.2 Petroleum/VOC-Impacted Media

During the redevelopment of the Site, petroleum/VOC-impacted media (e.g., fill, soil, etc.) may be encountered. This section of the report defines how to handle and dispose or re-use these media.

3.2.1 Handling of Petroleum/VOC-Impacted Media

Materials that are excavated, disturbed, etc. and appear to contain petroleum-related or VOC compounds (e.g., based on visual and olfactory assessment, PID/FID readings, etc.) must be removed, segregated from non-contaminated media, and be placed on, and covered with, plastic sheeting that is a minimum of 10 mil. thick. The contaminated material's location, appearance, and quantity (if possible) should be documented. The appropriate regulatory authorities (e.g., NYSDEC, Monroe County Department of Health [MCDOH]) and the City of Rochester must be notified regarding any suspect contamination encountered. If contaminated material is to be staged on-site, any disposal, treatment, etc. must be conducted within 60 days, unless otherwise authorized by the NYSDEC.

3.2.2 Analytical Laboratory Testing

If warranted, representative samples of suspected petroleum/VOC-impacted material will be tested for one or more of the following:

- NYSDEC STARS-list VOCs using USEPA Method 8021;
- TPH using New York State Department of Health (NYSDOH) Method 310.13 (i.e., to determine the presence and relative quantity of stoddard solvents and other petroleum-related compounds); and
- Semi-volatile organic compounds (SVOCs) using USEPA Method 8270.

The appropriate regulatory authorities must approve the actual parameters tested for, and the testing completed may also be dependent upon the field observations, PID/FID readings measured, and potential testing requirements of a NYSDEC-approved disposal facility (i.e., landfill). The laboratory testing will also be used to assist in determining whether the petroleum/VOC-impacted material can be re-used on-site or require off-site disposal; and to confirm that the petroleum/VOC-impacted media is non-hazardous.

In order to determine if the petroleum/VOC-impacted soil/fill can be re-used on-site or necessitates off-site disposal, it will be required that the test results be compared to soil guidance values listed in the August, 1992 NYSDEC STARS Memo #1 and/or the January 24, 1994 NYSDEC Technical and Administrative Guidance Memorandum (TAGM) #4046 (refer to Table I included in Appendix D). If test results for representative samples of the petroleum/VOC-impacted material exceed soil guidance values, then the material will require off-site disposal or on-site treatment. If test results for representative samples of the petroleum/VOC-impacted material do not exceed soil guidance values, either initially or after on-site treatment, then the material can be re-used on-site.

3.2.3 Disposal of Petroleum/VOC-Impacted Media

Excavated and/or disturbed petroleum/VOC-impacted material can be disposed of at a landfill that is approved by the NYSDEC. Transporters of petroleum/VOC-impacted media must have the appropriate NYSDEC Part 360 permits and be approved by the disposal facility. In addition, testing must be conducted to characterize the waste prior to disposal. This testing must satisfy the specific requirements of the waste disposal facility.

3.2.4 Re-use of Petroleum/VOC-Impacted Soil/Fill

Excavated and/or disturbed petroleum/VOC-impacted material that has been confirmed via analytical testing not to exceed soil guidance values can be re-used on-site. This material can be re-used in lawn areas, under parking lots, or in architectural berms. This material can not be used in planters, flower beds, etc. If such material is re-used on-site, it must be covered with a minimum one-foot thick layer of uncontaminated soil.

If authorized by the appropriate regulatory authorities, petroleum/VOC-impacted soil can be placed at the Site and treated to reduce petroleum/VOC concentrations to levels below STARS designated guidance values. Following this treatment, the soil can be re-used as desired.

3.3 Ammonia Impacted Material

During redevelopment of the Site, ammonia impacted media (fill, soil, etc.) may be encountered. To date, ammonia impacted soil/fill has been encountered during subsurface activities along the eastern property line of the Site. This section of the report defines how to handle and dispose or re-use the media.

3.3.1 Handling of the Ammonia-Impacted Media

Although it is not anticipated that a building will be constructed in vicinity of the areas where ammonia-impacted soil/fill was identified, it may be encountered during development activities. Ammonia can be identified by a strong pungent odor. If ammonia odors are detected during development activities and the presence of ammonia is confirmed via an Industrial Scientific tri-gas meter Model LXT310 with an ammonia sensor (or similar), field test kits, or analytical laboratory testing this material must be removed, segregated from non-contaminated media, and placed on, and covered with plastic sheeting that is a minimum of 10 mil thick. This material should be stockpiled in an area different than that of the petroleum/VOC impacted soil/fill present in other portions of the Site. The ammonia impacted material's location, appearance, and quantity (if possible) should be documented. The appropriate regulatory authorities (e.g., NYSDEC, Monroe County Department of Health [MCDOH]) and the City of Rochester must be notified regarding any suspected ammonia impacted material encountered. If this material is to be staged on-site, any disposal, treatment, etc. must be conducted within 60 days, unless otherwise authorized by the NYSDEC.

3.3.2 Analytical Laboratory Testing

If warranted, representative samples of suspected ammonia impacted material will be tested for Ammonia-Nitrogen Sludge via USEPA Method 350.2.

The appropriate regulatory authorities must approve the actual parameters tested for, and the testing completed may also be dependent upon the field observation, ammonia readings measured, and potential testing requirements of the NYSDEC approved disposal facility (i.e., landfill).

3.3.3 Disposal of Ammonia Impacted Media

Excavated and/or disturbed ammonia impacted material is to be disposed of at a landfill that is approved by the NYSDEC. Transporters of the impacted media must have the appropriate NYSDEC Part 360 permits and be approved by the disposal facility. In addition, testing must be conducted to characterize the waste prior to disposal. This testing must satisfy the specific requirements of the waste disposal facility.

3.4 Fill Material

During development of the Site, fill material will be encountered. Fill material was observed at most intrusive study points (i.e., test pits, test borings, wells, etc.) that were advanced across the Site. The fill materials primarily consist of reworked soil, with lesser amounts of cinders, slag, coal fragments, brick, ash, etc. A layer of fill material consisting of gravel and cinders with lesser amounts of slag, coal fragments, ash and brick was observed at the surface of the former unpaved parking lots located on the former Silver Stadium parcel. Previous laboratory testing indicates that some of this fill material will contain some heavy metals at concentrations that exceed NYSDEC soil cleanup objectives and/or typical ranges of background concentrations for naturally occurring metals; thus, these fill materials will require special handling to prevent exposure during construction activities. Based on the concentration and type of analytes detected on samples of fill, and on the type of use (i.e., industrial) of the Site, it is expected that the fill can be re-used on-site.

3.4.1 Handling of Fill Material

Excavated fill material that is not impacted with petroleum products that must be removed should be segregated from other material. The fill material's location, appearance, and approximate quantity should be documented.

3.4.2 Disposal of Fill Material

Fill material that cannot be re-used on-site or exhibiting characteristics other than those identified to date will require off-site disposal. The actual disposal facility able to accept the fill may be dependent upon the type of fill. Transporters of fill material must have the appropriate NYSDEC Part 360 permits, and the disposal facility (i.e., landfill) must be approved by the NYSDEC. Based on the test results of samples of fill previously analyzed, it is anticipated that the fill would be disposed of as a non-hazardous waste. If fill is to be disposed of off-site, the disposal facility may require additional characterization testing prior to accepting this fill for disposal.

3.4.3 Re-use of Fill Material

Fill may be re-used on-site with the permission of the appropriate regulatory authorities. Excavated fill that is accepted by these entities could be re-used in lawn areas, under parking lots, or in architectural berms. Fill can not be used in planters, flower beds, etc. Fill that is re-used on-site must be covered with a minimum one-foot thick layer of uncontaminated soil.

3.5 Unanticipated Material

If unanticipated material and/or suspect/suspicious contamination (e.g., drums) are encountered that significantly differs from that described above, or if unusual odors, staining, sheens, fumes, or vapors are encountered from excavated materials, then the construction activities where the material is being disturbed must be discontinued, and the appropriate regulatory authorities and the City of Rochester must be notified. Additionally, non-essential personnel must be evacuated

from the area of the unanticipated material, and the area should be secured to prevent inadvertent exposure to any on-site personnel until the unanticipated material is properly characterized and it has been determined how it should be handled.

Characterization of the unanticipated material in the field will include visual observations and screening with a PID and/or FID by the environmental project monitor. If PID/FID readings and/or visual observations indicate the presence of unanticipated contamination, then the unanticipated fill material must be sampled and further characterized prior to any additional site work being conducted in that area. All sampling and handling of unknown waste materials must be completed utilizing appropriate personnel protective equipment and health and safety procedures.

Recommended analytical testing of unanticipated material may include one or more of the following: VOCs, Toxicity Characteristic Leaching Procedure (TCLP) VOCs and/or metals; total metals, pH, reactivity, and ignitability. The actual parameters tested for must be approved by the appropriate regulatory authorities and may also be dependant upon the field observations, PID readings measured, and potential testing requirements of an approved disposal facility (i.e., landfill).

In order to determine if unanticipated material can be re-used on-site or requires off-site disposal, the analytical test results must be compared to the appropriate NYSDEC clean-up objectives, and background ranges for naturally occurring metals. Specifically, the test results must be compared to the recommended soil clean-up objectives and/or background ranges for naturally occurring metals such as those listed in the January 24, 1994 TAGM #4046. Additionally, the test results may require comparison to NYSDEC Part 371 hazardous waste criteria (refer to Table I included in Appendix D).

If appropriate, unanticipated fill that is adequately characterized can be removed, segregated from other material, and be placed on, and covered with, plastic sheeting. If off-site disposal is warranted, the fill must be disposed of in accordance with applicable regulations within 60 days, unless otherwise authorized by the NYSDEC.

3.6 Free Product and Contaminated Groundwater

Contaminated groundwater and a limited amount of free product (i.e., only observed in one test boring advanced in the southeast parking lot) were encountered while conducting intrusive studies at the Site. This section of the report defines how to handle and dispose or treat these impacted medium. Based on the intrusive studies conducted to date, it appears unlikely that free product will be encountered disturbed, etc. during redevelopment on the Site. However, its handling, disposal, along with that of dissolved-phase groundwater contamination, is included in this EMP.

3.6.1 Handling and Disposal

Free product and/or and contaminated groundwater that is encountered during the development activities must be removed from excavations using pumps and associated hoses. The material can be pumped into a holding tank or vacuum tank truck, and must be disposed off-site in accordance with applicable regulations.

As an alternative, the contaminated water could be treated through an oil/water separator and potentially appropriate filters, and the water could then be discharged to a sanitary sewer system. The appropriate regulatory approval and permitting (e.g., sewer use permit) must be obtained prior to handling the material in this manner. Treated water cannot be discharged unless it meets the sewer use discharge limitations that are established for the Site.

Transporters of free product and/or contaminated groundwater must have the appropriate permits, and the disposal/recycling facility must be approved by the NYSDEC.

3.6.2 Analytical Laboratory Testing

If encountered, samples of contaminated groundwater and/or free product will require analytical testing at a NYSDOH-approved laboratory prior to being disposed, recycled, or discharged to a public sewer system. Additionally, if treated water is discharged to a public sewer system, the POTW (e.g., Monroe County Pure Waters) will require a monitoring program (e.g., monthly sampling and analysis).

It is anticipated that laboratory analysis may include one or more of the following analyses: volatile aromatics, volatile halocarbons, and total petroleum hydrocarbons. The actual parameters tested for must be approved by the appropriate regulatory authorities and the City of Rochester and may also be dependant upon the field observations, PID/FID and/or ammonia readings measured, and potential testing requirements of an approved disposal facility (e.g., POTW).

3.7 Health and Safety Plan

As part of this Work Plan, a site-specific Health and Safety Plan (HASP) has been developed and is included in Appendix C. The HASP must be implemented when work involving the potential disturbance of impacted media (i.e., soil, groundwater, etc.), or fill material is being performed. The purpose of the HASP is to outline the policies and procedures necessary to protect workers and the public from potential environmental hazards posed during redevelopment of the Site. In part, the HASP includes an air monitoring program to be used during the redevelopment activities that disturb fill or petroleum-impacted material, specifies appropriate levels or personal protective equipment, and specifies the actions limits for particulates and ammonia/VOCs in air.

3.8 Dust Suppression

If dust suppression is required during construction activities, the following techniques may be implemented: applying water to haul roads; wetting equipment and excavation faces; spraying water on buckets during excavation and dumping; covering materials that are being hauled; restricting equipment speeds; or other approved methods covering excavated areas and exposed areas of fill and/or petroleum-impacted material. Dust suppression techniques will be utilized until air monitoring indicates that dust levels are within an acceptable range.

3.9 Site Controls

If unanticipated fill materials and/or unanticipated contaminated media are encountered (e.g., fill that is different than that characterized during previous studies), a temporary fence will be placed around these areas in order to restrict access and exposure. Fencing will also be placed around excavations into fill materials, petroleum and/or ammonia impacted materials that are to be left open overnight, over the weekend, or for any other extended periods of time. Excavations may have to be backfilled or otherwise contained to prevent the potential release of odors, vapors, liquids, etc.

During construction activities that involve the excavation or disturbance of impacted media and/or fill material, erosion and siltation control measures will be implemented. These control measures are intended to prevent surface runoff.

4.0 MANAGEMENT OF POTENTIAL FUTURE DISTURBANCE

Subsequent to redevelopment, workers involved with future on-site work (i.e., placing/repairing plantings, new installation/repair of buried utilities, etc.) that have the potential to disturb fill or petroleum-impacted media should be made aware of the potential exposure hazards. Precautions should be implemented to reduce fill and/or soil disturbance and air-borne release of particulates.

Areas where work has been completed should be repaired (e.g., clean soil/fill re-applied, paved, etc.). Property owners and tenants should be provided a copy of this EMP. The tenants and owners of each property will be responsible for assuring that the provisions of this EMP, are followed by contractors, etc. prior to performing intrusive work.

TABLE I
SOIL AND FILL CLEANUP OBJECTIVES
462-500 NORTON STREEET
ROCHESTER, NEW YORK

TYPE OF SOIL/FILL MATERIAL ANALYZED	STARS MEMO #1 Soil Guidance Values for VOCs	NYSDEC TAGM #4046 Soil Cleanup Objectives	NYSDEC Part 371 Hazardous Waste Criteria
Petroleum-impacted soil/fill	X		X
Stoddard solvent-impacted soil/fill		X	X
Unanticipated soil/fill suspected of containing non-petroleum organics or inorganics		X	X
Ammonia impacted soil/fill			X

APPENDIX A

FIGURES

APPENDIX B

SUMMARY FLOW CHART FOR EMP

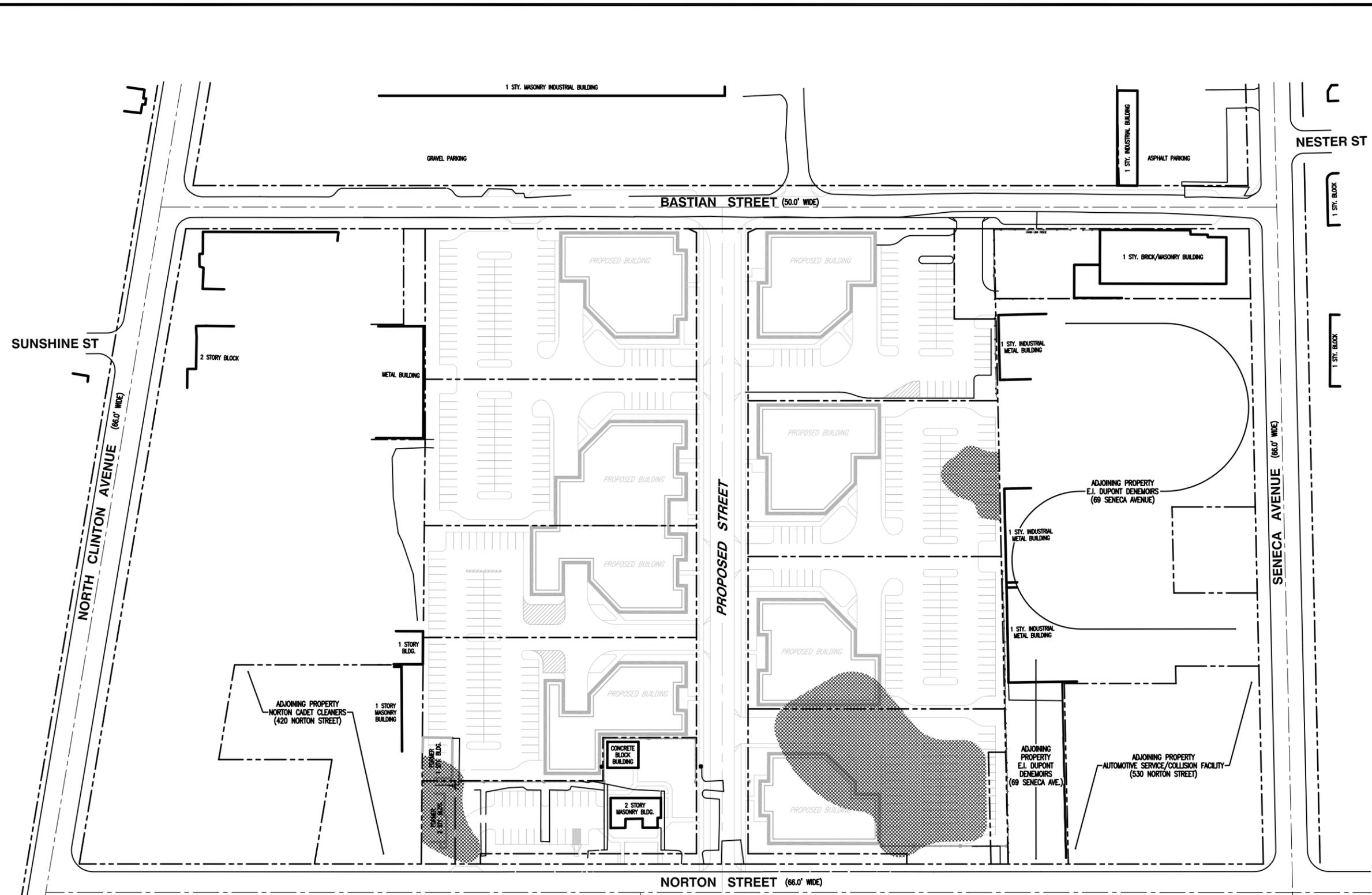
APPENDIX C
HEALTH AND SAFETY PLAN

APPENDIX D

TABLE I - SOIL AND FILL CLEANUP OBJECTIVES

REFERENCE FILES ATTACHED:
 REF1: EMP300
 REF2: REF3
 REF3: REF4
 REF4: REF5
 REF5: REF6
 REF6: REF7
 REF7: REF8
 REF8: REF9
 REF9: REF10

FILENAME: \\bosch\share\chem\1830r-12
 TIME PLOTTED: WED JAN 5 18:10:00 2000



NOTES

- DRAWING ADAPTED FROM A CAD DRAWING FILE BY: FLINT, ALLEN, WHITE & RADLEY CONSULTING ENGINEERS, P.C., ENTITLED "NORTON STREET URBAN RENEWAL DISTRICT, ENHANCED CONCEPT PLAN", DATED MARCH 20, 1998, A DRAWING BY: DAY ENGINEERING, P.C., ENTITLED "TEST PIT, BORING & MONITORING WELL LOCATIONS WITH PEAK PID/FID READINGS", DATED FEBRUARY 6, 1995, AND A DRAWING BY DAY ENGINEERING, P.C. ENTITLED "SOIL GAS POINT, SOIL SAMPLE & TEST PIT LOCATIONS", DATED OCTOBER 30, 1995.
- LOCATIONS TAPED MEASURED FROM EXISTING SITE STRUCTURES AND SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHOD USED.
- NOT ALL AREAS OF IMPACTED MEDIA ARE IDENTIFIED ON THIS DIAGRAM. IT IS POSSIBLE THAT AREAS NOT IDENTIFIED TO DATE WILL BE ENCOUNTERED DURING SITE DEVELOPMENT ACTIVITIES. IF SUCH AREAS ARE ENCOUNTERED THEY SHOULD BE EVALUATED AND HANDLED AS OUTLINED IN THE ENVIRONMENTAL MANAGEMENT PLAN - 424-500 NORTON STREET, ROCHESTER, NEW YORK (EMP).
- FILL MATERIAL POTENTIALLY CONTAINING ELEVATED CONCENTRATIONS OF METALS AND OTHER COMPONENTS IS LOCATED ACROSS THE SITE, AND NOT IDENTIFIED IN THIS FIGURE. THE EMP SHOULD BE REFERENCED WHEN FILL MATERIAL IS ENCOUNTERED.

LEGEND

APPROXIMATE LOCATION OF VOC, SVOC, TPH, AND/OR AMMONIA IMPACTED MEDIA IDENTIFIED TO DATE BASED ON PHOTOIONIZATION DETECTOR OR FLAME IONIZATION DETECTOR METER READINGS, AND/OR ANALYTICAL LABORATORY TEST RESULTS.



DATE	6/18/98
FIELD VERIFIED BY	JAD
DATE	10/9/98
DRAWN BY	RLK
DATE	10/15/98
CHECKED BY	JAD
DATE	10/16/98
APPROVED BY	RLK
DATE ISSUED	10/16/98
SCALE	1" = 60'

DAY ENVIRONMENTAL, INC.
 ENVIRONMENTAL CONSULTANTS
 ROCHESTER, NEW YORK

NO.	REVISIONS	DATE	BY
7			
6			
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1			

DAY ENVIRONMENTAL, INC.
 ENVIRONMENTAL CONSULTANTS
 ROCHESTER, NEW YORK

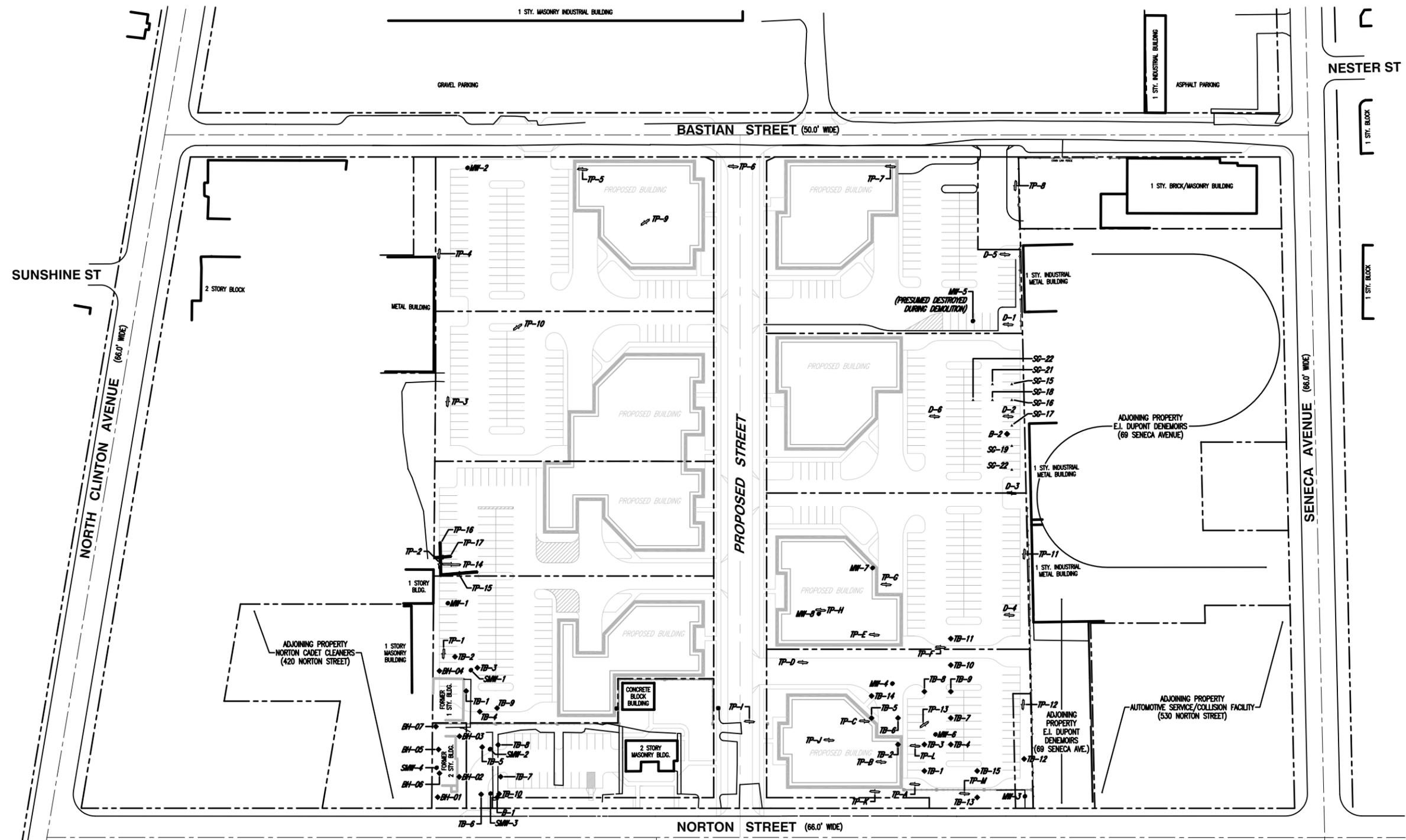
PROJECT TITLE
 424-500 NORTON STREET
 ROCHESTER, NEW YORK

ENVIRONMENTAL MANAGEMENT PLAN
 DRAWING TITLE
 SITE PLAN - APPROXIMATE LOCATION OF VOC, SVOC, TPH, AND/OR AMMONIA IMPACTED MEDIA

PROJECT NO.
 1830R-99
 FIGURE
 EMP-3
 SHEET 1 OF 1

REFERENCE FILES ATTACHED:
 REF1: EMP2000
 REF2: REF1
 REF3: REF2
 REF4: REF3
 REF5: REF4
 REF6: REF5
 REF7: REF6
 REF8: REF7
 REF9: REF8
 REF10: REF9

FILENAME: \\bosch\share\chem\1830r-11
 TIME PLOTTED: WED JAN 5 10:30:00 2000



NOTES

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- LOCATIONS TAPED MEASURED FROM EXISTING SITE STRUCTURES AND SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHOD USED.

LEGEND

- TP-1, TP-4, D-1 TEST PIT LOCATION
- B-1, BH-01, TB-1 TEST BORING LOCATION
- MW-1 GROUNDWATER MONITORING WELL LOCATION
- SMW-1 PROPOSED SENTRY GROUNDWATER MONITORING WELL LOCATION
- SG-15 SOIL GAS/TEST BORING LOCATION



DATE	6/18/98
FIELD VERIFIED BY	JAD
DATE	10/9/98
DRAWN BY	RLM
DATE	10/13/98
CHECKED BY	JAD
DATE	10/14/98
APPROVED BY	RLK
DATE	10/14/98
DATE ISSUED	10/14/98
SCALE	1" = 60'

DAY ENVIRONMENTAL, INC.
 ENVIRONMENTAL CONSULTANTS
 424-500 NORTON STREET
 ROCHESTER, NEW YORK

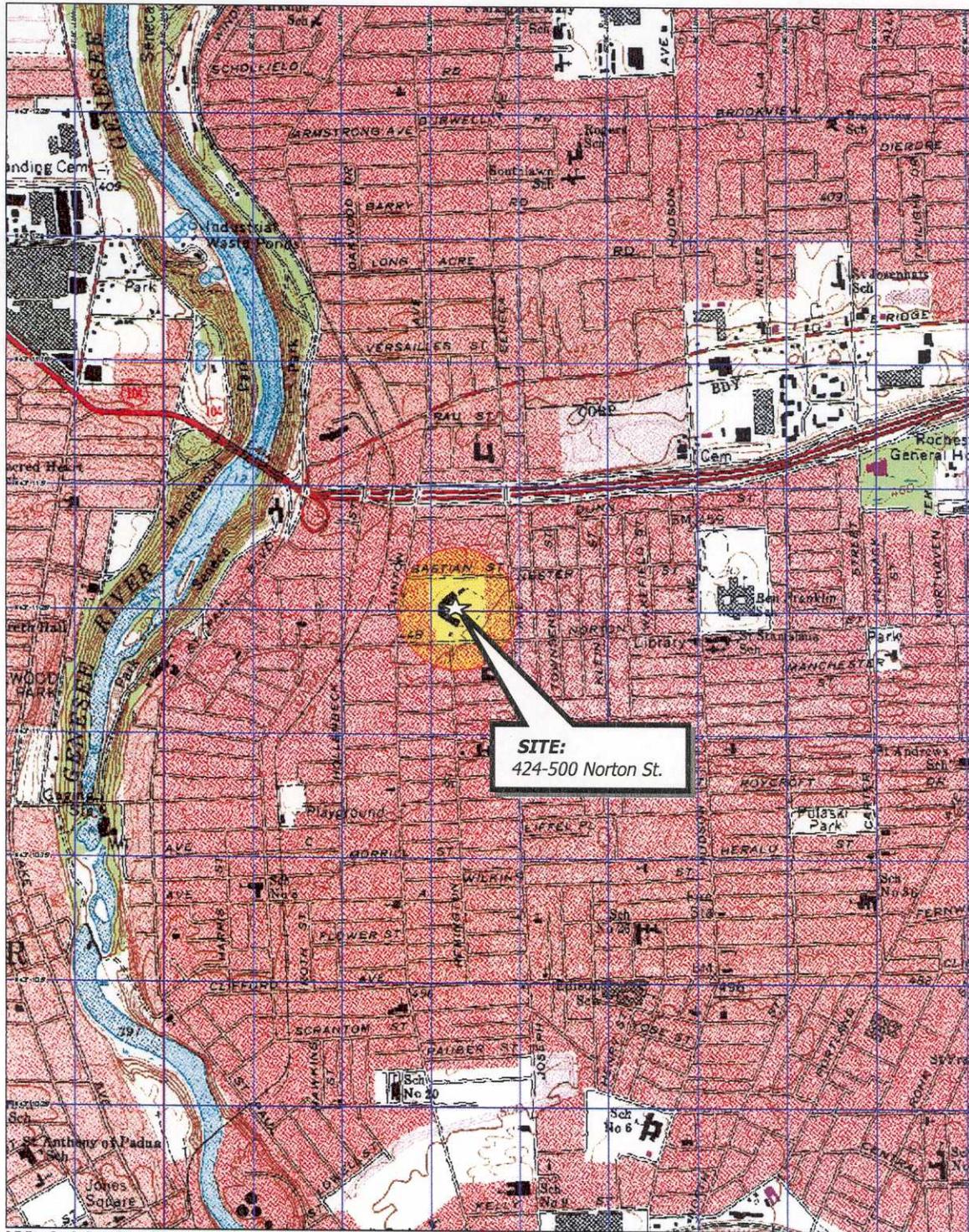
NO.	REVISIONS	DATE	BY
7			
6			
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DAY ENVIRONMENTAL, INC.
 ENVIRONMENTAL CONSULTANTS
 ROCHESTER, NEW YORK

PROJECT TITLE
 424-500 NORTON STREET
 ROCHESTER, NEW YORK

ENVIRONMENTAL MANAGEMENT PLAN
 DRAWING TITLE - SUBSURFACE STUDIES AND
 CONCEPTUAL REDEVELOPMENT

PROJECT NO.
 1830R-99
 FIGURE
 EMP-2
 SHEET 1 OF 1



SITE:
424-500 Norton St.

3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 550 ft Scale: 1:19,200 Detail: 14-0 Datum: NAD27

Drawing Produced From: 3-D TopoQuads, DeLorme Map Co., referencing USGS quad map, Rochester East (NY) 1995. Site Lat/Long: N43d-11.2' - W77d-36.6'

PROJECT NO.
1830R-99

EMP-1

SHEET 1 OF 1

PROJECT TITLE
**424-500 NORTON STREET
ROCHESTER, NEW YORK**

**ENVIRONMENTAL
MANAGEMENT PLAN**

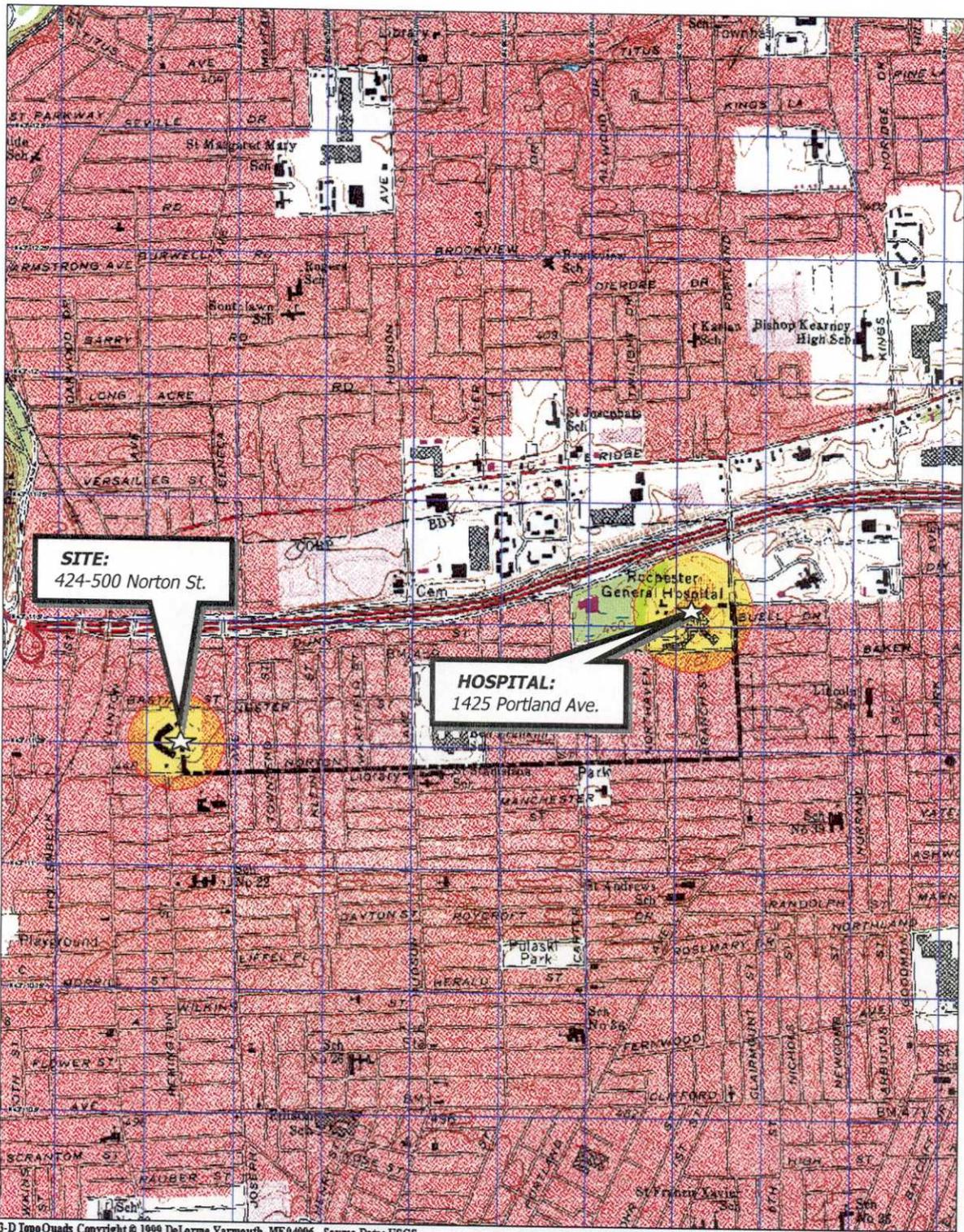
DRAWING TITLE
PROJECT LOCUS MAP

DAY ENVIRONMENTAL, INC.
**ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK**

DATE
1/5/2000

DRAWN BY
RJM

SCALE
1" = 2000'



Drawing Produced From: 3-D TopoQuads, DeLorme Map Co., referencing USGS quad map, Rochester East (NY) 1995. Site Lat/Long: N43d-11.2' - W77d-36.6'

PROJECT NO.
1830R-99

FIG. 1A

SHEET 1 OF 1

PROJECT TITLE
**424-500 NORTON STREET
ROCHESTER, NEW YORK**

**FORMER SILVER STADIUM SITE
ROCHESTER, NEW YORK**

DRAWING TITLE
PROJECT LOCUS MAP

DAY ENVIRONMENTAL, INC.
**ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK**

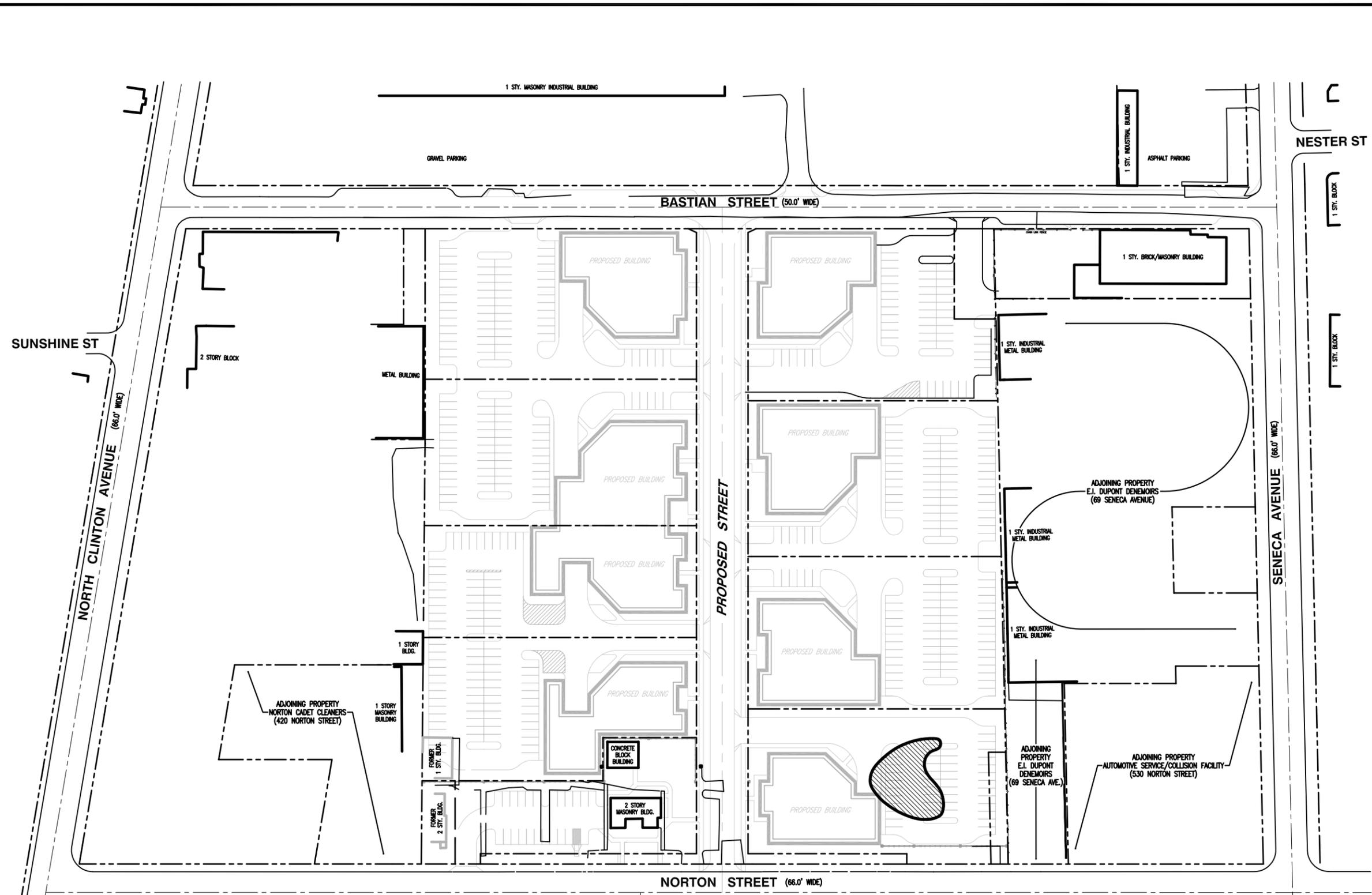
DATE
1/5/2000

DRAWN BY
RJM

SCALE
1" = 2000'

REFERENCE FILES ATTACHED:
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 REF3: REF2
 REF4: REF3
 REF5: REF4
 REF6: REF5
 REF7: REF6
 REF8: REF7
 REF9: REF8
 REF10: REF9

FILENAME: \\beck\sw\chad\1300-4
 TIME PLOTTED: WED JAN 5 09:30:00 2000



NOTES

- DRAWING ADAPTED FROM A CAD DRAWING FILE BY: FLINT, ALLEN, WHITE & RADLEY CONSULTING ENGINEERS, P.C., ENTITLED "NORTON STREET URBAN RENEWAL DISTRICT, ENHANCED CONCEPT PLAN", DATED MARCH 20, 1998, A DRAWING BY: DAY ENGINEERING, P.C., ENTITLED "TEST PIT, BORING & MONITORING WELL LOCATIONS WITH PEAK PID/FID READINGS", DATED FEBRUARY 6, 1995, AND A DRAWING BY DAY ENGINEERING, P.C. ENTITLED "SOIL GAS POINT, SOIL SAMPLE & TEST PIT LOCATIONS", DATED OCTOBER 30, 1995.
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LEGEND



DATE	6/98
FIELD VERIFIED BY	JSB
DATE	1/5/2000
DRAWN BY	RLM
DATE	1/5/2000
CHECKED BY	JSB
DATE	1/5/2000
APPROVED BY	RLK
DATE	1/5/2000
DATE ISSUED	1/5/2000
SCALE	1" = 60'

DAY ENVIRONMENTAL, INC.
 ENVIRONMENTAL CONSULTANTS
 ROCHESTER, NEW YORK

NO.	REVISIONS	DATE	BY
7			
6			
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DAY ENVIRONMENTAL, INC.
 ENVIRONMENTAL CONSULTANTS
 ROCHESTER, NEW YORK

PROJECT TITLE
 424-500 NORTON STREET
 ROCHESTER, NEW YORK

ENVIRONMENTAL MANAGEMENT PLAN
 DRAWING TITLE
 SITE PLAN - APPROXIMATE LOCATION OF LIMITED SOIL REMOVAL AREA

PROJECT NO.
 1830R-99
 FIGURE
 EMP-4
 SHEET 1 OF 1

RECEIVED
JUL 15 1999

Technical Report

prepared for

Day Engineering, P.C.
2144 Brighton Henryetta Rd.
Rochester, NY 14623
Attention: Mr. John Blanchard

Report Date: 07/12/99

Re: Client Project ID: RoCity 1830R-99
York Project No.: 99070053

CT License No. PH-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 EPA I.D. No. CT00106

Report Date: 07/12/99
 Client Project ID: RoCity 1830R-99

York Project No.: 99070053

Day Engineering, P.C.
 2144 Brighton Henryetta Rd.
 Rochester, NY 14623
 Attention: Mr. John Blanchard

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 07/01/99. The project was identified as your project "RoCity 1830R-99".

The analysis was conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

The results of the analysis are summarized in the following table(s).

Analysis Results

Client Sample ID			ROC-S-SG-19-4-6		ROC-S-SG-22-4-5	
York Sample ID			99070053-01		99070053-02	
MATRIX			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Reactivity-Sulfide	SW846 7.3	mg/kg	Not detected	15	Not detected	15
Ammonia Nitrogen-Sludge	EPA 350.2	mg/kg	Not detected	0.50	Not detected	0.50
Carbonyl Compounds	SW846-8260m	ug/kg	---	---	---	---
Acetaldehyde			Not detected	1000	Not detected	1000
Acetone			Not detected	50	Not detected	50
Acrolein			Not detected	100	Not detected	100
Benzaldehyde			Not detected	250	Not detected	250
Butanal			Not detected	500	Not detected	500
Crotonaldehyde			Not detected	500	Not detected	500
Cyclohexanone			Not detected	100	Not detected	100
Decanal			Not detected	500	Not detected	500
2,5-Dimethylbenzaldehyde			Not detected	1000	Not detected	1000
Formaldehyde			Not detected	2500	Not detected	2500
Heptanal			Not detected	500	Not detected	500
Hexanal			Not detected	500	Not detected	500
Isovaleraldehyde			Not detected	1000	Not detected	1000
Nonanal			Not detected	250	Not detected	250
Octanal			Not detected	250	Not detected	250

YORK

Client Sample ID			ROC-S-SG-19-4-6		ROC-S-SG-22-4-5	
York Sample ID			99070053-01		99070053-02	
MATRIX			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Pentanal			Not detected	250	Not detected	250
Propanal			Not detected	380	Not detected	380
m-Tolualdehyde			Not detected	500	Not detected	500
o-Tolualdehyde			Not detected	500	Not detected	500
p-Tolualdehyde			Not detected	500	Not detected	500
Moisture	ASTM	%	12.3	0.1	12.0	0.1
pH	EPA 150.1	units	9.47	---	9.53	---

Client Sample ID			ROC-S-SG-17-6-8	
York Sample ID			99070053-03	
MATRIX			SOIL	
Parameter	Method	Units	Results	MDL
Reactivity-Sulfide	SW846 7.3	mg/kg	Not detected	15
Ammonia Nitrogen-Sludge	EPA 350.2	mg/kg	Not detected	0.50
Carbonyl Compounds	SW846-8260m	ug/kg	---	---
Acetaldehyde			Not detected	1000
Acetone			Not detected	50
Acrolein			Not detected	100
Benzaldehyde			Not detected	250
Butanal			Not detected	500
Crotonaldehyde			Not detected	500
Cyclohexanone			Not detected	100
Decanal			Not detected	500
2,5-Dimethylbenzaldehyde			Not detected	1000
Formaldehyde			Not detected	2500
Heptanal			Not detected	500
Hexanal			Not detected	500
Isovaleraldehyde			Not detected	1000
Nonanal			Not detected	250
Octanal			Not detected	250
Pentanal			Not detected	250
Propanal			Not detected	380
m-Tolualdehyde			Not detected	500
o-Tolualdehyde			Not detected	500
p-Tolualdehyde			Not detected	500
Moisture	ASTM	%	19.4	0.1
pH	EPA 150.1	units	9.30	---

Client Sample ID			ROC-S-SG-21-6-7.5	
York Sample ID			99070053-04	
MATRIX			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 STARS soil	SW846-8260	ug/Kg	---	---
Benzene			Not detected	5.0
Ethylbenzene			Not detected	5.0
Toluene			Not detected	5.0
o-Xylene			Not detected	10
p- & m-Xylenes			Not detected	10

YORK

Client Sample ID			ROC-S-SG-21-6-7.5	
York Sample ID			99070053-04	
MATRIX			SOIL	
Parameter	Method	Units	Results	MDL
Total Xylenes			Not detected	10
Isopropylbenzene			Not detected	5.0
n-Propylbenzene			Not detected	5.0
p-Isopropyltoluene			Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0
n-Butylbenzene			Not detected	5.0
sec-Butylbenzene			Not detected	5.0
tert-Butylbenzene			Not detected	5.0
Naphthalene			Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0
Polynuclear Aromatic Hydroc.(BN)	SW846-8270	ug/kg	---	---
Naphthalene			Not detected	330
Anthracene			Not detected	330
Fluorene			Not detected	330
Phenanthrene			Not detected	330
Pyrene			Not detected	330
Acenaphthene			Not detected	330
Benzo[a]anthracene			Not detected	330
Fluoranthene			Not detected	330
Benzo[b]fluoranthene			Not detected	330
Benzo[k]fluoranthene			Not detected	330
Chrysene			Not detected	330
Benzo[a]pyrene			Not detected	330
Benzo[g,h,i]perylene			Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330
Dibenz[a,h]anthracene			Not detected	330

Units Key:

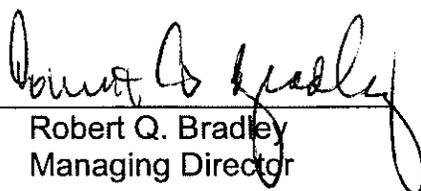
For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes:

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. If dilution factor is reported at the end of the compound list, the MDL is determined by multiplying the MDL times the listed dilution factor.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.

Approved By: _____


 Robert Q. Bradley
 Managing Director

Date: 07/12/99

YORK

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
 Rochester, NY 14608
 (716) 647-2530 • (800) 724-1997
 FAX (716) 647-3311

YORK

CHAIN OF CUSTODY

REPORT TO: **INVOICE TO:**

COMPANY: *Day Environmental, Inc.* LAB PROJECT #

ADDRESS: *2144 BH Tronoye Rd* ADDRESS: *SAME*

CITY: *Rochester* CITY: STATE: ZIP: P.O. #

STATE: *NY* ZIP: *14623* PHONE #

ATT: *J. Blanchard* ATT: PHONE #

PHONE #: *(716) 292-1030 x 125* FAX #

FAX #: *(716) 292-0425* ADDENDUM

PROJECT NAME/SITE NAME: *Roc City 1830R-99*

PROJECT #: *1830R-99*

TURN AROUND TIME (WORKING DAYS) ONE THREE FIVE (STD) OTHER

REPRESENTATIVE:

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINERS NUMBER	REQUESTED ANALYSIS						REMARKS	PARADIGM LAB SAMPLE NUMBER	ANALYTICAL COSTS
							Reactive Sulfide	USEPA Method 350.3	USEPA Method 8315	Moisture	PH	8021STARS			
6/28/99	1413		X	Roc-S-SG-19-4-6	Soil	2	X	X	X	X	X				
6/28/99	1605		X	Roc-S-SG-22-4-5	Soil	2	X	X	X	X					
6/28/99	1108		X	Roc-S-SG-17-6-8	Soil	2	X	X	X	X					
6/28/99	1526		X	Roc-S-SG-21-6-7.5	Soil	1				X					
6/28/99	1526		X	Roc-S-SG-21-6-7.5	Soil	1				X					
6															
7															
8															
9															
10															
11															
12															

REMOVED BY: *[Signature]* DATE/TIME: *7/1/99 445* RECEIVED BY: *[Signature]* DATE/TIME: *7/1/99 145*

RELINQUISHED BY: *[Signature]* DATE/TIME: *7/1/99 445* RECEIVED BY: *[Signature]* DATE/TIME: *7/1/99 145*

RELINQUISHED BY: *[Signature]* DATE/TIME: *7/1/99 445* RECEIVED BY: *[Signature]* DATE/TIME: *7/1/99 145*

CHECK #

AIR BILL NO.

P.I.F.

TOTAL COST

DATE RESULTS REPORTED BY:

DATE/TIME

WHITE COPY-SAMPLE YELLOW COPY-FILE PINK COPY-RELINQUISHER

SUMMARY TABLE
ROCHESTER SENECA SAMPLING 6/99

Sample Name:	8Q-2 25 JUN 99	8Q-8 25 JUN 99	5Q-11 25 JUN 99	5Q-11 25 JUN 99	5Q-12 25 JUN 99	5Q-17 28 JUN 99	
Sample Date:	2-3'	2-3'	6-7.5'	6-7.5'	2-3'	6-8'	
Depth:				DUP			
Analyte	Unit						
Volatiles							
1,2,4-Trimethylbenzene	µG/KG	NR	NR	79.	69.	<24	NR
1,3,5-Trimethylbenzene	µG/KG	NR	NR	43.	42.	<24	NR
Benzene	µG/KG	NR	NR	<24	<24	<24	NR
Ethylbenzene	µG/KG	NR	NR	<24	<24	<24	NR
Isopropylbenzene	µG/KG	NR	NR	<48	<48	<49	NR
m- AND p- Xylenes	µG/KG	NR	NR	<24	<24	<24	NR
Methyl Tertiary Butyl Ether	µG/KG	NR	NR	<240	<240	<24	NR
N-Butylbenza	µG/KG	NR	NR	<24	<24	<24	NR
N-Propylbenzene	µG/KG	NR	NR	<24	<24	<24	NR
o-Xylene	µG/KG	NR	NR	160.	170.	<24	NR
p-Isopropyl toluene	µG/KG	NR	NR	210.	230.	<24	NR
sec-Butylbenzene	µG/KG	NR	NR	110.	110.	<24	NR
tert-Butylbenzene	µG/KG	NR	NR	<24	<24	<24	NR
Toluene	µG/KG	NR	NR				
Semi-Volatiles							
Acenaphthene	µG/KG	NR	NR	<400	510.	<410	NR
Acenaphthylene	µG/KG	NR	NR	<400	<400	<410	NR
Anthracene	µG/KG	NR	NR	<400	<400	<410	NR
Benzo(a)anthracene	µG/KG	NR	NR	<400	<400	<410	NR
Benzo(a)pyrene	µG/KG	NR	NR	<400	<400	<410	NR
Benzo(b)fluoranthene	µG/KG	NR	NR	<400	<400	<410	NR
Benzo(g,h,i)perylene	µG/KG	NR	NR	<400	<400	<410	NR
Benzo(k)fluoranthene	µG/KG	NR	NR	<400	<400	<410	NR
Chrysene	µG/KG	NR	NR	<400	<400	<410	NR
Dibenzo(a,h)anthracene	µG/KG	NR	NR	<400	<400	<410	NR
Fluoranthene	µG/KG	NR	NR	<400	650.	<410	NR
Fluorene	µG/KG	NR	NR	<400	<400	<410	NR
Indeno(1,2,3-cd)Pyrene	µG/KG	NR	NR	820.	800.	<24	NR
Naphthalene	µG/KG	NR	NR	<400	940.	<410	NR
Phenanthrene	µG/KG	NR	NR	<400	<400	<410	NR
Pyrene	µG/KG	NR	NR				
Miscellaneous Parameters							
Ammonia as N	MG/KG	<230	113.	134.	152.	208.	72.
Formaldehyde	µG/KG	2000.	4000.	6000.	4000.	<1000	2000.
pH (Lab)		11.4	8.15	8.05	8.32	7.97	7.41
Sulfide, Reactivity	MG/KG	<120	<120	<120	<120	<120	<120
Moisture Content	% BY WT.	13.0	16.0	17.3	16.2	17.8	19.8

DRAFT

Post-it® Fax Note	7671	Date	9/1/99	# of pages	4
To	John Blanchard	From	Joe Biondolillo		
Co./Dept	Day Environ	Co.	City of Rochester		
Phone #		Phone #	428-4649		
Fax #	292-6425	Fax #	428-6010		

< Less than PQL
NR Analysis Not Requested
Ammonia results obtained from reanalysis beyond hold time following removal of stones/pebbles from the soil matrix.
Report created on August 25, 1999

SUMMARY TABLE
ROCHESTER SENECA SAMPLING 6/99

Page: 2

Sample Name:	80-17	9G-19	90-21	9G-22	
Sample Date:	28JUN99	28JUN99	28JUN99	28JUN99	
Depths:	6-8'	4-7'	6-7'	4-5'	
	DUP				
Analyte	Unit				
Volatiles					
1,2,4-Trimethylbenzene	µG/KG	NR	NR	34.	NR
1,3,5-Trimethylbenzene	µG/KG	NR	NR	<25	NR
Benzene	µG/KG	NR	NR	<25	NR
Ethylbenzene	µG/KG	NR	NR	<25	NR
Isopropylbenzene	µG/KG	NR	NR	<25	NR
m- AND p- Xylenes	µG/KG	NR	NR	<50	NR
Methyl Tertiary Butyl Ether	µG/KG	NR	NR	<25	NR
N-Butylbenzene	µG/KG	NR	NR	<63	NR
N-Propylbenzene	µG/KG	NR	NR	<25	NR
o-Xylene	µG/KG	NR	NR	<25	NR
p-Isopropyltoluene	µG/KG	NR	NR	61.	NR
sec-Butylbenzene	µG/KG	NR	NR	84.	NR
tert-Butylbenzene	µG/KG	NR	NR	31.	NR
Toluene	µG/KG	NR	NR	<25	NR
Semi-Volatiles					
Acenaphthene	µG/KG	NR	NR	<420	NR
Acenaphthylene	µG/KG	NR	NR	<420	NR
Anthracene	µG/KG	NR	NR	<420	NR
Benzo(a)anthracene	µG/KG	NR	NR	<420	NR
Benzo(a)pyrene	µG/KG	NR	NR	<420	NR
Benzo(b)fluoranthene	µG/KG	NR	NR	<420	NR
Benzo(g,h,i)perylene	µG/KG	NR	NR	<420	NR
Benzo(k)fluoranthene	µG/KG	NR	NR	<420	NR
Chrysene	µG/KG	NR	NR	<420	NR
Dibenzo(a,h)anthracene	µG/KG	NR	NR	<420	NR
Fluoranthene	µG/KG	NR	NR	<420	NR
Fluorene	µG/KG	NR	NR	530.	NR
Indeno(1,2,3-cd)Pyrene	µG/KG	NR	NR	<420	NR
Naphthalene	µG/KG	NR	NR	410.	NR
Phenanthrene	µG/KG	NR	NR	<420	NR
Pyrene	µG/KG	NR	NR	<420	NR
Miscellaneous Parameters					
Ammonia as N	MG/KG	<60	<220	NR	<58
Formaldehyde	µG/KG	2000.	<1000	NR	<1000
pH (Lab)		7.76	8.24	NR	8.33
Sulfide, Reactivity	MG/KG	<120	<120	NR	<120
Moisture Content	% BY WT.	18.8	9.48	20.5	13.6

DRAFT

< Less than PQL

NR Analysis Not Requested

Ammonia results obtained from reanalysis beyond hold time following removal of stones/pebbles from the soil matrix.

Report created on August 25, 1999

Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)

Client: Day Environmental **Lab Project No.:** 98-0976
Client Job Site: 500 Norton Street **Lab Sample No.:** 4110
Rochester, NY
Client Job No.: 1668S-98 **Sample Type:** Soil
Field Location: TB-3 (4'-8') **Date Sampled:** 06/09/98
Field ID No.: 1668-S1 **Date Received:** 06/12/98
Date Analyzed: 06/18/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 7.4
Isopropylbenzene	ND< 7.4
n-Propylbenzene	ND< 7.4
1,3,5-Trimethylbenzene	ND< 7.4
tert-Butylbenzene	ND< 7.4
1,2,4-Trimethylbenzene	ND< 7.4
sec-Butylbenzene	ND< 7.4
p-Isopropyltoluene	ND< 7.4
n-Butylbenzene	ND< 7.4
Naphthalene	ND< 18.5

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

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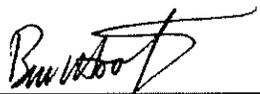
Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client:	<u>Day Environmental</u>	Lab Project No.:	98-0976
		Lab Sample No.:	4111
Client Job Site:	500 Norton Street Rochester, NY	Sample Type:	Soil
Client Job No.:	1668S-98	Date Sampled:	6/9/98
Field Location:	TB-5 (4'-7.5')	Date Received:	6/12/98
Field ID No:	1668-S2	Date Analyzed:	6/17/98

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Petroleum Hydrocarbon	BDL	8,625

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: 

Laboratory Director

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Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: **Day Environmental** Lab Project No: 98-0976
 Client Job Site: 500 Norton Street Lab Sample No: 4111
 Rochester, NY
 Client Job No: 1668S-98 Sample Type: Soil
 Date Sampled: 6/9/98
 Field Location: TB-5 (4'-7.5') Date Received: 6/12/98
 Field ID No: 1668-S2 Date Analyzed: 6/18/98

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 6.4	Benzene	ND< 6.4
Bromomethane	ND< 6.4	Chlorobenzene	ND< 6.4
Bromoform	ND< 6.4	Ethylbenzene	ND< 6.4
Carbon tetrachloride	ND< 6.4	Toluene	ND< 6.4
Chloroethane	ND< 6.4	m,p - Xylene	ND< 6.4
Chloromethane	ND< 6.4	o - Xylene	ND< 6.4
2-Chloroethyl vinyl ether	ND< 6.4	Styrene	ND< 6.4
Chloroform	ND< 6.4	1,3-Dichlorobenzene	ND< 6.4
Dibromochloromethane	ND< 6.4	1,4-Dichlorobenzene	ND< 6.4
1,1-Dichloroethane	ND< 6.4	1,2-Dichlorobenzene	ND< 6.4
1,2-Dichloroethane	ND< 6.4		
1,1-Dichloroethene	ND< 6.4	<u>Ketones & Misc.</u>	
trans-1,2-Dichloroethene	ND< 6.4	Acetone	ND< 31.8
1,2-Dichloropropane	ND< 6.4	Vinyl acetate	ND< 15.9
cis-1,3-Dichloropropene	ND< 6.4	2-Butanone	ND< 15.9
trans-1,3-Dichloropropene	ND< 6.4	4-Methyl-2-pentanone	ND< 15.9
Methylene chloride	ND< 15.9	2-Hexanone	ND< 15.9
1,1,2,2-Tetrachloroethane	ND< 6.4	Carbon disulfide	ND< 15.9
Tetrachloroethene	ND< 6.4		
1,1,1-Trichloroethane	ND< 6.4		
1,1,2-Trichloroethane	ND< 6.4		
Trichloroethene	ND< 6.4		
Vinyl Chloride	ND< 6.4		

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By 
 Laboratory Director

Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)

Client: Day Environmental **Lab Project No.:** 98-0976
Client Job Site: 500 Norton Street **Lab Sample No.:** 4111
Rochester, NY **Sample Type:** Soil
Client Job No.: 1668S-98 **Date Sampled:** 06/09/98
Field Location: TB-5 (4'-7.5') **Date Received:** 06/12/98
Field ID No.: 1668-S2 **Date Analyzed:** 06/18/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 6.4
Isopropylbenzene	ND< 6.4
n-Propylbenzene	ND< 6.4
1,3,5-Trimethylbenzene	ND< 6.4
tert-Butylbenzene	ND< 6.4
1,2,4-Trimethylbenzene	ND< 6.4
sec-Butylbenzene	ND< 6.4
p-Isopropyltoluene	ND< 6.4
n-Butylbenzene	ND< 6.4
Naphthalene	ND< 15.9

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

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Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client: Day Environmental **Lab Project No.:** 98-0976
Lab Sample No.: 4112
Client Job Site: 500 Norton Street
Rochester, NY **Sample Type:** Soil
Client Job No.: 1668S-98 **Date Sampled:** 6/9/98
Field Location: TB-6 (4'-8') **Date Received:** 6/12/98
Field ID No: 1668-S2 **Date Analyzed:** 6/17/98

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Petroleum Hydrocarbon	BDL	8,477

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: 
Laboratory Director

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179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: Day Environmental Lab Project No: 98-0976
 Client Job Site: 500 Norton Street Lab Sample No: 4112
 Rochester, NY
 Client Job No: 1668S-98 Sample Type: Soil
 Field Location: TB-6 (4'-8') Date Sampled: 6/9/98
 Field ID No: 1668-S3 Date Received: 6/12/98
 Date Analyzed: 6/18/98

VOLATILE HALOCARBONS		RESULTS (ug/Kg)	VOLATILE AROMATICS		RESULTS (ug/Kg)
Bromodichloromethane	ND<	6.0	Benzene	ND<	6.0
Bromomethane	ND<	6.0	Chlorobenzene	ND<	6.0
Bromoform	ND<	6.0	Ethylbenzene	ND<	6.0
Carbon tetrachloride	ND<	6.0	Toluene	ND<	6.0
Chloroethane	ND<	6.0	m,p - Xylene	ND<	6.0
Chloromethane	ND<	6.0	o - Xylene	ND<	6.0
2-Chloroethyl vinyl ether	ND<	6.0	Styrene	ND<	6.0
Chloroform	ND<	6.0	1,3-Dichlorobenzene	ND<	6.0
Dibromochloromethane	ND<	6.0	1,4-Dichlorobenzene	ND<	6.0
1,1-Dichloroethane	ND<	6.0	1,2-Dichlorobenzene	ND<	6.0
1,2-Dichloroethane	ND<	6.0			
1,1-Dichloroethene	ND<	6.0	<u>Ketones & Misc.</u>		
trans-1,2-Dichloroethene	ND<	6.0	Acetone	ND<	30.1
1,2-Dichloropropane	ND<	6.0	Vinyl acetate	ND<	15.0
cis-1,3-Dichloropropene	ND<	6.0	2-Butanone	ND<	15.0
trans-1,3-Dichloropropene	ND<	6.0	4-Methyl-2-pentanone	ND<	15.0
Methylene chloride	ND<	15.0	2-Hexanone	ND<	15.0
1,1,2,2-Tetrachloroethane	ND<	6.0	Carbon disulfide	ND<	15.0
Tetrachloroethene	ND<	6.0			
1,1,1-Trichloroethane	ND<	6.0			
1,1,2-Trichloroethane	ND<	6.0			
Trichloroethene	ND<	6.0			
Vinyl Chloride	ND<	6.0			

Analytical Method: EPA 8260 ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By 
 Laboratory Director

Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)

Client: Day Environmental Lab Project No.: 98-0976
Client Job Site: 500 Norton Street Lab Sample No.: 4112
Rochester, NY
Client Job No.: 1668S-98 Sample Type: Soil
Field Location: TB-6 (4'-8') Date Sampled: 06/09/98
Field ID No.: 1668-S3 Date Received: 06/12/98
Date Analyzed: 06/18/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 6.0
isopropylbenzene	ND< 6.0
n-Propylbenzene	ND< 6.0
1,3,5-Trimethylbenzene	ND< 6.0
tert-Butylbenzene	ND< 6.0
1,2,4-Trimethylbenzene	ND< 6.0
sec-Butylbenzene	ND< 6.0
p-Isopropyltoluene	ND< 6.0
n-Butylbenzene	ND< 6.0
Naphthalene	ND< 15.0

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)

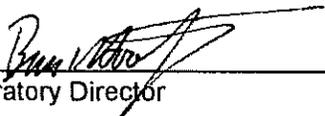
Client:	Day Environmental	Lab Project No.:	98-0976
Client Job Site:	500 Norton Street Rochester, NY	Lab Sample No.:	4113
Client Job No.:	1668S-98	Sample Type:	Soil
Field Location:	TB-8 (4'-7')	Date Sampled:	06/09/98
Field ID No.:	1668-S4	Date Received:	06/12/98
		Date Analyzed:	06/18/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 7.0
Isopropylbenzene	ND< 7.0
n-Propylbenzene	ND< 7.0
1,3,5-Trimethylbenzene	ND< 7.0
tert-Butylbenzene	ND< 7.0
1,2,4-Trimethylbenzene	ND< 7.0
sec-Butylbenzene	ND< 7.0
p-Isopropyltoluene	ND< 7.0
n-Butylbenzene	ND< 7.0
Naphthalene	ND< 17.6

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

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Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: Day Environmental Lab Project No: 98-0976
 Client Job Site: 500 Norton Street Lab Sample No: 4114
 Rochester, NY
 Client Job No: 1668S-98 Sample Type: Soil
 Date Sampled: 6/9/98
 Field Location: TB-10 (4'-8') Date Received: 6/12/98
 Field ID No: 1668-S5 Date Analyzed: 6/18/98

VOLATILE HALOCARBONS		VOLATILE AROMATICS	
	RESULTS (ug/Kg)		RESULTS (ug/Kg)
Bromodichloromethane	ND< 8.3	Benzene	ND< 8.3
Bromomethane	ND< 8.3	Chlorobenzene	ND< 8.3
Bromoform	ND< 8.3	Ethylbenzene	ND< 8.3
Carbon tetrachloride	ND< 8.3	Toluene	ND< 8.3
Chloroethane	ND< 8.3	m,p - Xylene	ND< 8.3
Chloromethane	ND< 8.3	o - Xylene	ND< 8.3
2-Chloroethyl vinyl ether	ND< 8.3	Styrene	ND< 8.3
Chloroform	ND< 8.3	1,3-Dichlorobenzene	ND< 8.3
Dibromochloromethane	ND< 8.3	1,4-Dichlorobenzene	ND< 8.3
1,1-Dichloroethane	ND< 8.3	1,2-Dichlorobenzene	ND< 8.3
1,2-Dichloroethane	ND< 8.3		
1,1-Dichloroethene	ND< 8.3	<u>Ketones & Misc.</u>	
trans-1,2-Dichloroethene	ND< 8.3	Acetone	ND< 41.5
1,2-Dichloropropane	ND< 8.3	Vinyl acetate	ND< 20.8
cis-1,3-Dichloropropene	ND< 8.3	2-Butanone	ND< 20.8
trans-1,3-Dichloropropene	ND< 8.3	4-Methyl-2-pentanone	ND< 20.8
Methylene chloride	ND< 20.8	2-Hexanone	ND< 20.8
1,1,2,2-Tetrachloroethane	ND< 8.3	Carbon disulfide	ND< 20.8
Tetrachloroethene	ND< 8.3		
1,1,1-Trichloroethane	ND< 8.3		
1,1,2-Trichloroethane	ND< 8.3		
Trichloroethene	ND< 8.3		
Vinyl Chloride	ND< 8.3		

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By 
 Laboratory Director

Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)

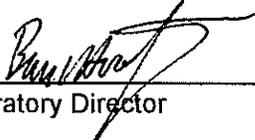
Client: Day Environmental **Lab Project No.:** 98-0976
Client Job Site: 500 Norton Street **Lab Sample No.:** 4114
Rochester, NY **Sample Type:** Soil
Client Job No.: 1668S-98 **Date Sampled:** 06/09/98
Field Location: TB-10 (4'-8') **Date Received:** 06/12/98
Field ID No.: 1668-S5 **Date Analyzed:** 06/18/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 8.3
Isopropylbenzene	ND< 8.3
n-Propylbenzene	ND< 8.3
1,3,5-Trimethylbenzene	ND< 8.3
tert-Butylbenzene	ND< 8.3
1,2,4-Trimethylbenzene	ND< 8.3
sec-Butylbenzene	ND< 8.3
p-Isopropyltoluene	ND< 8.3
n-Butylbenzene	ND< 8.3
Naphthalene	ND< 20.8

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

PARADIGM
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179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: Day Environmental Lab Project No: 98-0976
 Client Job Site: 500 Norton Street Lab Sample No: N/A
 Rochester, NY Sample Type: VOA Soil Blank
 Client Job No: 1668S-98 Date Sampled: N/A
 Field Location: N/A Date Received: N/A
 Field ID No: N/A Date Analyzed: 6/18/98

VOLATILE HALOCARBONS		RESULTS (ug/Kg)	VOLATILE AROMATICS		RESULTS (ug/Kg)
Bromodichloromethane	ND<	2.0	Benzene	ND<	2.0
Bromomethane	ND<	2.0	Chlorobenzene	ND<	2.0
Bromoform	ND<	2.0	Ethylbenzene	ND<	2.0
Carbon tetrachloride	ND<	2.0	Toluene	ND<	2.0
Chloroethane	ND<	2.0	m,p - Xylene	ND<	2.0
Chloromethane	ND<	2.0	o - Xylene	ND<	2.0
2-Chloroethyl vinyl ether	ND<	2.0	Styrene	ND<	2.0
Chloroform	ND<	2.0	1,3-Dichlorobenzene	ND<	2.0
Dibromochloromethane	ND<	2.0	1,4-Dichlorobenzene	ND<	2.0
1,1-Dichloroethane	ND<	2.0	1,2-Dichlorobenzene	ND<	2.0
1,2-Dichloroethane	ND<	2.0			
1,1-Dichloroethene	ND<	2.0	<u>Ketones & Misc.</u>		
trans-1,2-Dichloroethene	ND<	2.0	Acetone	ND<	10.0
1,2-Dichloropropane	ND<	2.0	Vinyl acetate	ND<	5.0
cis-1,3-Dichloropropene	ND<	2.0	2-Butanone	ND<	5.0
trans-1,3-Dichloropropene	ND<	2.0	4-Methyl-2-pentanone	ND<	5.0
Methylene chloride	ND<	5.0	2-Hexanone	ND<	5.0
1,1,2,2-Tetrachloroethane	ND<	2.0	Carbon disulfide	ND<	5.0
Tetrachloroethene	ND<	2.0			
1,1,1-Trichloroethane	ND<	2.0			
1,1,2-Trichloroethane	ND<	2.0			
Trichloroethene	ND<	2.0			
Vinyl Chloride	ND<	2.0			

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By 
 Laboratory Director

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Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client: Day Environmental Lab Project No.: 98-1441R
Client Job Site: RoCity 1668S-98 Lab Sample No.: 5617
Client Job No.: N/A Sample Type: Soil
Field Location: TPA(8.5'-9.5') Date Sampled: 8/7/98
Field ID No: N/A Date Received: 8/21/98
Date Analyzed: 8/24/98

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Light Weight PHC as Gasoline	36,935	8,305
Heavy Weight PHC as Lube Oil	115,494	8,305

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: ND denotes Not Detected.

Approved By: 
Laboratory Director

PARADIGM
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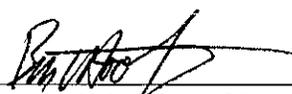
Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client: **Day Environmental** Lab Project No.: 98-1441R
Client Job Site: RoCity 1668S-98 Lab Sample No.: 5618
Client Job No.: N/A Sample Type: Soil
Field Location: TPC(7.0'-7.8') Date Sampled: 8/7/98
Field ID No: N/A Date Received: 8/21/98
Date Analyzed: 8/24/98

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Light Weight PHC as Gasoline	16,373	9,000
Heavy Weight PHC as Lube Oil	51,878	9,000

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: ND denotes Not Detected.

Approved By: 
Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

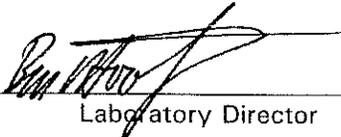
Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client: Day Environmental **Lab Project No.:** 98-1441R
Client Job Site: RoCity 1668S-98 **Lab Sample No.:** 5619
Client Job No.: N/A **Sample Type:** Soil
Field Location: TPE(4.5'-5.3') **Date Sampled:** 8/7/98
Field ID No: N/A **Date Received:** 8/21/98
Date Analyzed: 8/24/98

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Light Weight PHC as Gasoline	ND	8,578
Heavy Weight PHC as Lube Oil	56,921	8,578

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: ND denotes Not Detected.

Approved By: 
Laboratory Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
 Rochester, NY 14608
 (716) 647-2530 • (800) 724-1997
 FAX (716) 647-3311

CHAIN OF CUSTODY

REPORT TO: **INVOICE TO:**

COMPANY: *Day Environmental* COMPANY: *SAME*
 ADDRESS: *2144 Brighton Henrietta Tr Road* ADDRESS: _____
 CITY: *Rochester* CITY: _____ STATE: _____ ZIP: _____
 ATT: *John BLANCHARD* ATT: _____ PHONE#: _____ P.O.#: _____
 PHONE#: *242-1090 ext 125* PHONE#: _____
 FAX#: *242-0425* FAX#: _____ ADDENDUM:

LAB PROJECT # *98-1441R*

PROJECT NAME/SITE NAME: *Rocky 1665-97*

COMMENTS:

PROJECT #: _____ TURN AROUND TIME (WORKING DAYS) ONE THREE FIVE (STD) OTHER: _____
 REPRESENTATIVE: _____

DATE	TIME	COMPOSITE	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINERS NUMBER	REQUESTED ANALYSIS												REMARKS	PARADIGM LAB SAMPLE NUMBER	ANALYTICAL COSTS
						1	2	3	4	5	6	7	8	9	10	11	12			
1	8/7/98	0920	TPA(8.5'-9.5')	Soil	1	X												5376	5017	
2	8/7/98	0945	TPC(7.0'-7.8')	Soil	1	X												5377	5018	
3	8/7/98	1005	TPE(4.5'-5.3')	Soil	1	X												5378	5019	
4	8/7/98	1030	TPG(4'-5')	Soil	1	X												5379		
5	8/7/98	1043	TPI(4'-5')	Soil	1	X												5380		
6	8/7/98	1100	TPK(8.5'-9.3')	Soil	1	X												5381		
7																				
8																				
9																				
10																				
11																				
12																				

RE-LOG FOR PNC 310.0
 per John Blanchard
 08/19/98

RECEIVED BY: *[Signature]* DATE/TIME: *8/11/98 14:47*
 RECEIVED BY: *[Signature]* DATE/TIME: *8/11/98 2:47*
 RECEIVED @ LAB BY: *[Signature]* DATE/TIME: *8/11/98 17:00*
 CARRIER COMPANY: _____
 CHECK # _____ AIR BILL NO. _____ TOTAL COST: *NO*
 DATE RESULTS REPORTED BY: _____ P.I.F. *Charge* DATE/TIME: _____

WHITE COPY-SAMPLE YELLOW COPY-FILE PINK COPY-RELINQUISHER

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Environmental
Services, Inc.

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RECEIVED
 AUG 24 1998

Client: Day Environmental

Lab Project No.: 98-1441

Client Job Site: RoCity

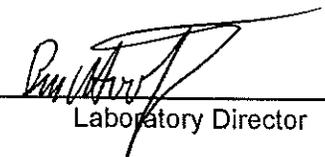
Client Job No.: 1668S-98

Sample Type: Soil
Analytical Method: Walckley Black
Date Sampled: 8/7/98
Date Received: 8/11/98
Date Analyzed: 8/19/98

Lab Sample ID.	Client Sample ID.	Field Location	TOC %
5377	2	TPC (7.0-7.8')	ND<0.1
5378	3	TPE (4.5-5.3')	ND<0.19
5379	4	TPG (4-5')	ND<0.1

ELAP ID No. 10145

Comments: ND denotes Non Detected.

Approved By: 
 Laboratory Director

**PARADIGM
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SERVICES, INC.**

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**Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)**

Client:	<u>Day Environmental</u>	Lab Project No.:	98-1441
Client Job Site:	RO City1668S-98	Lab Sample No.:	5376
Client Job No.:	N/A	Sample Type:	Soil
Field Location:	TPA (8.5'-9.5')	Date Sampled:	08/07/98
Field ID No.:	N/A	Date Received:	08/11/98
		Date Analyzed:	08/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 6.6
Isopropylbenzene	ND < 6.6
n-Propylbenzene	ND < 6.6
1,3,5-Trimethylbenzene	ND < 6.6
tert-Butylbenzene	ND < 6.6
1,2,4-Trimethylbenzene	ND < 6.6
sec-Butylbenzene	ND < 6.6
p-Isopropyltoluene	ND < 6.6
n-Butylbenzene	ND < 6.6
Naphthalene	ND < 16.6

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____


Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)

Client: **Day Environmental** Lab Project No.: 98-1441
Client Job Site: RO City1668S-98 Lab Sample No.: 5377
Client Job No.: N/A Sample Type: Soil
Field Location: TPC (7.0'-7.8') Date Sampled: 08/07/98
Field ID No.: N/A Date Received: 08/11/98
Date Analyzed: 08/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 7.6
Isopropylbenzene	ND < 7.6
n-Propylbenzene	ND < 7.6
1,3,5-Trimethylbenzene	ND < 7.6
tert-Butylbenzene	ND < 7.6
1,2,4-Trimethylbenzene	ND < 7.6
sec-Butylbenzene	ND < 7.6
p-Isopropyltoluene	ND < 7.6
n-Butylbenzene	ND < 7.6
Naphthalene	ND < 19.0

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____


Laboratory Director

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

**Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)**

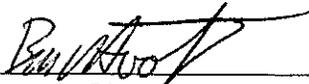
Client: Day Environmental Lab Project No.: 98-1441
Client Job Site: RO City1668S-98 Lab Sample No.: 5378
Client Job No.: N/A Sample Type: Soil
Field Location: TPE (4.5'-5.3') Date Sampled: 08/07/98
Field ID No.: N/A Date Received: 08/11/98
Date Analyzed: 08/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 7.7
Isopropylbenzene	ND < 7.7
n-Propylbenzene	ND < 7.7
1,3,5-Trimethylbenzene	ND < 7.7
tert-Butylbenzene	ND < 7.7
1,2,4-Trimethylbenzene	ND < 7.7
sec-Butylbenzene	ND < 7.7
p-Isopropyltoluene	ND < 7.7
n-Butylbenzene	ND < 7.7
Naphthalene	ND < 19.2

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

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**Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)**

Client:	<u>Day Environmental</u>	Lab Project No.:	98-1441
Client Job Site:	RO City1668S-98	Lab Sample No.:	5379
Client Job No.:	N/A	Sample Type:	Soil
Field Location:	TPG (4'-5')	Date Sampled:	08/07/98
Field ID No.:	N/A	Date Received:	08/11/98
		Date Analyzed:	08/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 8.3
Isopropylbenzene	ND < 8.3
n-Propylbenzene	ND < 8.3
1,3,5-Trimethylbenzene	ND < 8.3
tert-Butylbenzene	ND < 8.3
1,2,4-Trimethylbenzene	ND < 8.3
sec-Butylbenzene	ND < 8.3
p-Isopropyltoluene	ND < 8.3
n-Butylbenzene	ND < 8.3
Naphthalene	ND < 20.8

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

**Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)**

Client:	<u>Day Environmental</u>	Lab Project No.:	98-1441
Client Job Site:	RO City1668S-98	Lab Sample No.:	5380
Client Job No.:	N/A	Sample Type:	Soil
Field Location:	TPI (4'-5')	Date Sampled:	08/07/98
Field ID No.:	N/A	Date Received:	08/11/98
		Date Analyzed:	08/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 5.9
Isopropylbenzene	ND < 5.9
n-Propylbenzene	ND < 5.9
1,3,5-Trimethylbenzene	ND < 5.9
tert-Butylbenzene	ND < 5.9
1,2,4-Trimethylbenzene	ND < 5.9
sec-Butylbenzene	ND < 5.9
p-Isopropyltoluene	ND < 5.9
n-Butylbenzene	ND < 5.9
Naphthalene	ND < 14.7

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: Day Environmental
 Client Job Site: RO City1668S-98
 Client Job No: N/A
 Field Location: TPK (8.5'-9.3')
 Field ID No: N/A

Lab Project No: 98-1441
 Lab Sample No: 5381
 Sample Type: Soil
 Date Sampled: 8/7/98
 Date Received: 8/11/98
 Date Analyzed: 8/14/98

VOLATILE HALOCARBONS		RESULTS (ug/Kg)	VOLATILE AROMATICS		RESULTS (ug/Kg)
Bromodichloromethane	ND <	10.1	Benzene	ND <	10.1
Bromomethane	ND <	10.1	Chlorobenzene	ND <	10.1
Bromoform	ND <	10.1	Ethylbenzene	ND <	10.1
Carbon tetrachloride	ND <	10.1	Toluene	ND <	10.1
Chloroethane	ND <	10.1	m,p - Xylene	ND <	10.1
Chloromethane	ND <	10.1	o - Xylene	ND <	10.1
2-Chloroethyl vinyl ether	ND <	10.1	Styrene	ND <	10.1
Chloroform	ND <	10.1			
Dibromochloromethane	ND <	10.1			
1,1-Dichloroethane	ND <	10.1			
1,2-Dichloroethane	ND <	10.1			
1,1-Dichloroethene	ND <	10.1			
trans-1,2-Dichloroethene	ND <	10.1	<u>Ketones & Misc.</u>		
1,2-Dichloropropane	ND <	10.1	Acetone	ND <	50.4
cis-1,3-Dichloropropene	ND <	10.1	Vinyl acetate	ND <	25.2
trans-1,3-Dichloropropene	ND <	10.1	2-Butanone	ND <	25.2
Methylene chloride	ND <	25.2	4-Methyl-2-pentanone	ND <	25.2
1,1,2,2-Tetrachloroethane	ND <	10.1	2-Hexanone	ND <	25.2
Tetrachloroethene	ND <	10.1	Carbon disulfide	ND <	25.2
1,1,1-Trichloroethane	ND <	10.1			
1,1,2-Trichloroethane	ND <	10.1			
Trichloroethene	ND <	10.1			
Vinyl Chloride	ND <	10.1			

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By


 Laboratory Director

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

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**Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)**

Client: **Day Environmental** Lab Project No.: 98-1441
Lab Sample No.: 5381
Client Job Site: RO City1668S-98 Sample Type: Soil
Client Job No.: N/A Date Sampled: 08/07/98
Field Location: TPK (8.5'-9.3') Date Received: 08/11/98
Field ID No.: N/A Date Analyzed: 08/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 10.1
Isopropylbenzene	ND < 10.1
n-Propylbenzene	ND < 10.1
1,3,5-Trimethylbenzene	ND < 10.1
tert-Butylbenzene	ND < 10.1
1,2,4-Trimethylbenzene	ND < 10.1
sec-Butylbenzene	ND < 10.1
p-Isopropyltoluene	ND < 10.1
n-Butylbenzene	ND < 10.1
Naphthalene	ND < 25.2

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
 Rochester, NY 14608
 (716) 647-2530 • (800) 724-1997
 FAX (716) 647-3311

PROJECT NAME/SITE NAME:
 KOC-14 10035-48

CHAIN OF CUSTODY

REPORT TO: **Day Environmental** INVOICE TO: **SAHLE** LAB PROJECT # **98-1441**

ADDRESS: **2744 Brighton Henrietta Tr Road** CITY: **Rochester** STATE: **NY** ZIP: **14623** P.O.#

ATT: **John BUNNARD** PHONE# **242-1090 ext 125** ATT: **PHONE#** FAX# **242-0425** APPENDUM

COMMENTS:

TURN AROUND TIME (WORKING DAYS) ONE THREE FIVE (STD) OTHER

REPRESENTATIVE: **(Signature)**

DATE	TIME	COMPOSITE	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINERS NUMBER	REQUESTED ANALYSIS										REMARKS	PARADIGM LAB SAMPLE NUMBER	ANALYTICAL COSTS	
						1	2	3	4	5	6	7	8	9	10				11
1	8/7/98		TPA (8.5'-4.5')	Soil	1	X												5376	
2	8/7/98		TPC (2.0'-2.8')	Soil	1	X												5377	
3	8/7/98		TPE (4.5'-5.3)	Soil	1	X												5378	
4	8/7/98		TPG (4'-5')	Soil	1	X												5379	
5	8/7/98		TPI (4'-5')	Soil	1	X												5380	
6	8/7/98		TPK (8.5'-9.3')	Soil	1	X												5381	
7																			
8																			
9																			
10																			
11																			
12																			

RECEIVED BY: **(Signature)** DATE/TIME: **8/11/98 14:47**

RECEIVED BY: **(Signature)** DATE/TIME: **8/11/98 2:17**

RECEIVED BY: **(Signature)** DATE/TIME: **8/11/98 17:00**

RECEIVED BY: **(Signature)** DATE/TIME: **8/11/98 17:00**

RECEIVED @ LAB BY: **(Signature)** DATE/TIME: **8/11/98 17:00**

RECEIVED BY: **(Signature)** DATE/TIME: **8/11/98 17:00**

WHITE COPY-SAMPLE YELLOW COPY-FILE PINK COPY-RELINQUISHER

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

**Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)**

Client:	<u>Day Environmental</u>	Lab Project No.:	98-1439
Client Job Site:	Ro City 16685-98	Lab Sample No.:	5369
Client Job No.:	N/A	Sample Type:	Soil
Field Location:	D2 (5.5'-6.2')	Date Sampled:	08/07/98
Field ID No.:	N/A	Date Received:	08/11/98
		Date Analyzed:	08/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 10.0
Isopropylbenzene	ND < 10.0
n-Propylbenzene	ND < 10.0
1,3,5-Trimethylbenzene	ND < 10.0
tert-Butylbenzene	ND < 10.0
1,2,4-Trimethylbenzene	ND < 10.0
sec-Butylbenzene	ND < 10.0
p-Isopropyltoluene	ND < 10.0
n-Butylbenzene	ND < 10.0
Naphthalene	ND < 25.0

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

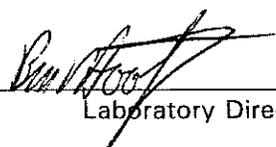
Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client:	<u>Day Environmental</u>	Lab Project No.:	98-1439
Client Job Site:	RoCity 1668S-98	Lab Sample No.:	5369
Client Job No.:	N/A	Sample Type:	Soil
Field Location:	D2(5.5'-6.2')	Date Sampled:	8/7/98
Field ID No:	N/A	Date Received:	8/11/98
		Date Analyzed:	8/16/98

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Medium Weight PHC as Diesel Fuel	26,422	9,892

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: ND denotes Not Detected.

Approved By: 
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

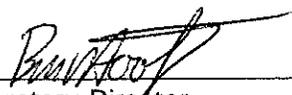
Client:	<u>Day Environmental</u>	Lab Project No:	98-1439
Client Job Site:	Ro City 16685-98	Lab Sample No:	5370
Client Job No:	N/A	Sample Type:	Soil
Field Location:	D4 (2'-3')	Date Sampled:	8/7/98
Field ID No:	N/A	Date Received:	8/11/98
		Date Analyzed:	8/13/98

VOLATILE HALOCARBONS		RESULTS (ug/Kg)	VOLATILE AROMATICS		RESULTS (ug/Kg)
Bromodichloromethane	ND <	6.4	Benzene	ND <	6.4
Bromomethane	ND <	6.4	Chlorobenzene	ND <	6.4
Bromoform	ND <	6.4	Ethylbenzene	ND <	6.4
Carbon tetrachloride	ND <	6.4	Toluene	ND <	6.4
Chloroethane	ND <	6.4	m,p - Xylene	ND <	6.4
Chloromethane	ND <	6.4	o - Xylene	ND <	6.4
2-Chloroethyl vinyl ether	ND <	6.4	Styrene	ND <	6.4
Chloroform	ND <	6.4			
Dibromochloromethane	ND <	6.4			
1,1-Dichloroethane	ND <	6.4	<u>Ketones & Misc.</u>		
1,2-Dichloroethane	ND <	6.4	Acetone	ND <	32.1
1,1-Dichloroethene	ND <	6.4	Vinyl acetate	ND <	16.1
trans-1,2-Dichloroethene	ND <	6.4	2-Butanone	ND <	16.1
1,2-Dichloropropane	ND <	6.4	4-Methyl-2-pentanone	ND <	16.1
cis-1,3-Dichloropropene	ND <	6.4	2-Hexanone	ND <	16.1
trans-1,3-Dichloropropene	ND <	6.4	Carbon disulfide	ND <	16.1
Methylene chloride	ND <	16.1			
1,1,2,2-Tetrachloroethane	ND <	6.4			
Tetrachloroethene	ND <	6.4			
1,1,1-Trichloroethane	ND <	6.4			
1,1,2-Trichloroethane	ND <	6.4			
Trichloroethene	ND <	6.4			
Vinyl Chloride	ND <	6.4			

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By 
 Laboratory Director

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

**Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260 Compounds)**

Client:	<u>Day Environmental</u>	Lab Project No.:	98-1439
Client Job Site:	Ro City 16685-98	Lab Sample No.:	5370
Client Job No.:	N/A	Sample Type:	Soil
Field Location:	D4 (2'-3')	Date Sampled:	08/07/98
Field ID No.:	N/A	Date Received:	08/11/98
		Date Analyzed:	08/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 6.4
Isopropylbenzene	ND < 6.4
n-Propylbenzene	ND < 6.4
1,3,5-Trimethylbenzene	ND < 6.4
tert-Butylbenzene	ND < 6.4
1,2,4-Trimethylbenzene	ND < 6.4
sec-Butylbenzene	ND < 6.4
p-Isopropyltoluene	ND < 6.4
n-Butylbenzene	ND < 6.4
Naphthalene	ND < 16.1

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____


Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

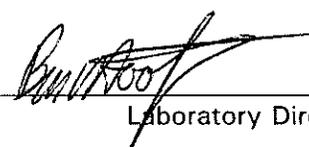
Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client:	Day Environmental	Lab Project No.:	98-1439
Client Job Site:	RoCity 1668S-98	Lab Sample No.:	5370
Client Job No.:	N/A	Sample Type:	Soil
Field Location:	D4(2'-3')	Date Sampled:	8/7/98
Field ID No:	N/A	Date Received:	8/11/98
		Date Analyzed:	8/16/98

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Petroleum Hydrocarbon	ND	8,142

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: ND denotes Not Detected.

Approved By: 
Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental

Lab Project No.: 98-1439

Lab Sample No.: 5371

Client Job Site: RoCity

Sample Type: Soil

Client Part No.: 1668S-98

Date Sampled: 8/7/98

Date Received: 8/11/98

Field Location: D2 (2-3')

Field ID No.: N/A

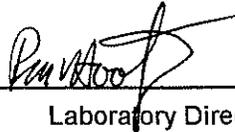
Parameter	Date Analyzed	Analytical Method	Result
Aluminum	8/18/98	EPA 6010A	878 mg/kg
Potassium	8/20/98	EPA 6010A	426 mg/kg
Sodium	8/20/98	EPA 6010A	ND<571 mg/kg
Ammonia-N	8/19/98	EPA 350.3	20.4 mg/kg
pH	8/18/98	EPA 9045	8.07 SU*

ELAP ID No. 10145

*ELAP ID.No. 10958

Comments: ND denotes Non Detected.

Approved By: _____



Laboratory Director

PARADIGM

Environmental Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Pesticides in Solids

Client: Day Environmental **Lab Project No:** 98-1439
Client Job Site: RoCity **Lab Sample No:** 5371
Client Job No: 1668S-98 **Sample Type:** Soil
Field Location: D2 (2-3') **Date Sampled:** 8/7/98
Field ID No: N/A **Date Received:** 8/11/98
Date Analyzed: 8/16/98

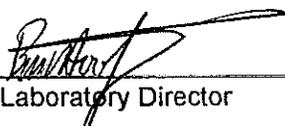
Parameter	Result ug/kg	Reporting Limit ug/kg
alpha-BHC	ND	1.9
gamma-BHC	ND	1.9
beta-BHC	ND	1.9
Heptachlor	ND	1.9
delta-BHC	ND	1.9
Aldrin	ND	1.9
Heptachlor Epoxide	ND	1.9
Chlordane	ND	1.9
Endosulfan I	ND	1.9
4,4'-DDE	ND	1.9
Dieldrin	5.0	1.9
Endrin	ND	3.8
Endosulfan II	ND	3.8
4,4'-DDD	ND	1.9
Methoxychlor	ND	7.5
4,4'-DDT	ND	3.8
Endrin Aldehyde	ND	3.8
Endosulfan Sulfate	ND	3.8
Toxaphene	ND	38

Analytical Method: EPA 8080

ELAP ID. No. 10145

Comments: ND denotes Not Detected

Approved By: _____


Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Polychlorinated Biphenyls Laboratory Analysis Report For Soil/Sludge

Client: Day Environmental Lab Project No.: 98-1439
Client Job Site: RoCity Lab Sample No.: 5371
Client Job No.: 1668S-98 Sample Type: Soil
Field Location: D2 (2-3') Date Sampled: 08/07/98
Field ID No: N/A Date Received: 08/11/98
Date Analyzed: 08/16/98

Polychlorinated Biphenyl	Result (mg/Kg)	Reporting Limit (mg/Kg)
PCB 1016	ND	0.5
PCB 1221	ND	0.5
PCB 1232	ND	0.5
PCB 1242	ND	0.5
PCB 1248	ND	0.5
PCB 1254	ND	0.5
PCB 1260	ND	0.5

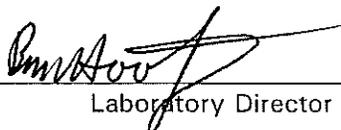
Analytical Method: EPA 8080

ELAP ID. No. 10145

Comments:

ND denotes Not Detected.

Approved By: _____



Laboratory Director

PARADIGM

ENVIRONMENTAL
SERVICES, INC.

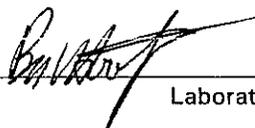
179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Organics Analysis Data Sheet For Tentatively Identified Compounds

Client:	<u>Day Environmental</u>	Lab Project No.:	98-1439
Client Job Site:	RoCity 1668S-98	Lab Sample No.:	5371
Client Job No.:	N/A	Sample Type:	Soil
Field Location:	D2 (2'-3')	Date Sampled:	08/07/98
Field ID No.:	N/A	Date Received:	08/11/98
		Date Analyzed:	08/13/98

	CAS NUMBER	COMPOUND NAME	RT (min)	CONC. (ug/Kg)	Q (%)
1	000629-59-4	Tetradecane	27.77	818	97
2	055000-52-7	2,6,10,14-tetramethyl-Hexadecane	32.24	159	86
3	000629-62-9	Pentadecane	34.85	89.0	97

Approved By



Laboratory Director

PARADIGM

ENVIRONMENTAL
SERVICES, INC.

179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-331

SEMI-VOLATILES LABORATORY REPORT FOR SOIL/SOLIDS

Client: **Day Environmental**
Client Job Site: RoCity 1668S-98

Lab Project No.: 98-1439
Lab Sample No.: 5371
Sample Type: Soil

Client Job No.: N/A
Field Location: D2(2'-3')
Field ID No.: N/A

Sample Date: 8/7/98
Date Received: 8/11/98
Date Analyzed: 8/18/98

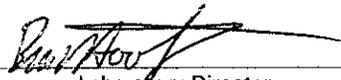
COMPOUND	RESULT (ug/Kg)	COMPOUND	RESULT (ug/Kg)
Benzyl alcohol	ND < 829	Dimethyl phthalate	ND < 829
Bis (2-chloroethyl) ether	ND < 332	2,4-Dinitrophenol	ND < 332
Bis (2-chloroisopropyl) ether	ND < 332	2,4-Dinitrotoluene	ND < 332
2-Chlorophenol	ND < 332	2,6-Dinitrotoluene	ND < 332
1,3-Dichlorobenzene	ND < 332	Fluorene	ND < 332
1,4-Dichlorobenzene	ND < 332	Hexachlorocyclopentadiene	ND < 332
1,2-Dichlorobenzene	ND < 332	2-Nitroaniline	ND < 829
Hexachloroethane	ND < 332	3-Nitroaniline	ND < 829
2-Methylphenol	ND < 332	4-Nitroaniline	ND < 829
4-Methylphenol	ND < 332	4-Nitrophenol	ND < 829
N-Nitrosodimethylamine	ND < 332	2,4,6-Trichlorophenol	ND < 332
N-Nitroso-di-n-propylamine	ND < 332	2,4,5-Trichlorophenol	ND < 829
Phenol	ND < 332	4-Bromophenyl phenyl ether	ND < 332
Benzoic acid	ND < 829	Di-n-butyl phthalate	ND < 332
Bis (2-chloroethoxy) methane	ND < 332	4,6-Dinitro-2-methylphenol	ND < 829
4-Chloroaniline	ND < 332	Fluoranthene	ND < 332
4-Chloro-3-methylphenol	ND < 332	Hexachlorobenzene	ND < 332
2,4-Dichlorophenol	ND < 332	N-Nitrosodiphenylamine	ND < 332
2,6-Dichlorophenol	ND < 332	Pentachlorophenol	ND < 829
2,4-Dimethylphenol	ND < 332	Anthracene	ND < 332
Hexachlorobutadiene	ND < 332	Phenanthrene	ND < 332
Isophorone	ND < 332	Benzidine	ND < 829
2-Methylnaphthalene	ND < 332	Benzo (a) anthracene	ND < 332
Naphthalene	ND < 332	Bis (2-ethylhexyl) phthalate	ND < 332
Nitrobenzene	ND < 332	Butylbenzylphthalate	ND < 332
2-Nitrophenol	ND < 332	Chrysene	ND < 332
1,2,4-Trichlorobenzene	ND < 332	3,3'-Dichlorobenzidine	ND < 332
2-Chloronaphthalene	ND < 332	Pyrene	ND < 332
Acenaphthene	ND < 332	Benzo (b) fluoranthene	ND < 332
Acenaphthylene	ND < 332	Benzo (k) fluoranthene	ND < 332
4-Chlorophenyl phenyl ether	ND < 332	Benzo (g,h,i) perylene	ND < 332
Dibenzofuran	ND < 332	Benzo (a) pyrene	ND < 332
Diethyl phthalate	ND < 332	Dibenz (a,h) anthracene	ND < 332
		Di-n-octylphthalate	ND < 332
		Indeno (1,2,3-cd) pyrene	ND < 332

Analytical Method: EPA 8270

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By: _____


Laboratory Director

PARADIGM

ENVIRONMENTAL
SERVICES, INC.

179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

SEMI-VOLATILES LABORATORY REPORT FOR SOILS Tentatively Identified Compounds

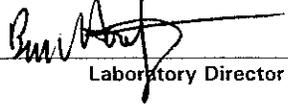
Client:	<u>Day Environmental</u>	Lab Project No.:	98-1439
Client Job Site:	RoCity 1668S-98	Lab Sample No.:	5371
		Sample Type:	Soil
Client Job No.:	N/A	Sample Date:	8/7/98
Field Location:	D2(2'-3')	Date Received:	8/11/98
Field ID No.:	N/A	Date Analyzed:	8/18/98

	CAS Number	COMPOUND NAME	RT (min)	CONC. (ug/kg)
1	00630-06-8	Hexatriacontane	28.22	342
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Analytical Method: EPA 8270

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By: 
Laboratory Director

PARADIGM

Environmental Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental

Lab Project No.: 98-1439

Lab Sample No.: 5372

Client Job Site: RoCity

Sample Type: Soil

Client Part No.: 1668S-98

Date Sampled: 8/7/98

Field Location: TPM (7-7.9)

Date Received: 8/11/98

Field ID No.: N/A

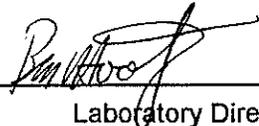
Parameter	Date Analyzed	Analytical Method	Result
Aluminum	8/18/98	EPA 6010A	3310 mg/kg
Potassium	8/20/98	EPA 6010A	1300 mg/kg
Sodium	8/20/98	EPA 6010A	ND<579 mg/kg
Ammonia-N	8/19/98	EPA 350.3	ND<5.79 mg/kg
pH	8/18/98	EPA 9045	8.35 SU*

ELAP ID No. 10145

*ELAP ID. No. 10958

Comments: ND denotes Non Detected.

Approved By: _____



Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

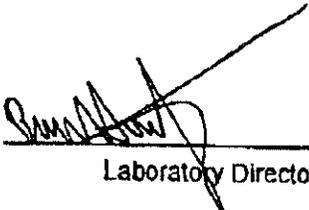
Client: City of Rochester Lab Project No.: 99-1115
Client Job Site: Former Silver Stadium Sample Type: TCLP Extract
Client Job No.: RoCity 1830R-99 Date Sampled: 06/11/1999
Date Received: 06/11/1999
Date Analysed: 06/16/1999

TCLP LEAD ANALYSIS

Lab ID No.	Field ID No.	Field Location	Result (mg/L)	Regulatory Limit (mg/L)
4317	TP-13	N/A	<0.500	5.0

ELAP ID No.: 10958

Comments:

Approved By: 
Laboratory Director

File ID: 991115

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

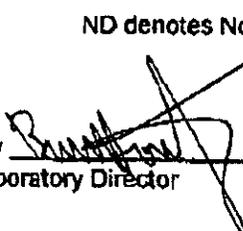
Client: City of Rochester Lab Project No: 99-1115
 Client Job Site: Former Silver Stadium Lab Sample No: 4318
 Client Job No: RoCity 1830R-99 Sample Type: Soil
 Field Location: N. Exc. Date Sampled: 6/11/99
 Field ID No: N/A Date Received: 8/11/99
 Date Analyzed: 6/15/99

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 9.2	Benzene	ND< 9.2
Bromomethane	ND< 9.2	Chlorobenzene	ND< 9.2
Bromoform	ND< 9.2	Ethylbenzene	ND< 9.2
Carbon tetrachloride	ND< 9.2	Toluene	ND< 9.2
Chloroethane	ND< 9.2	m,p - Xylene	31.2
Chloromethane	ND< 9.2	o - Xylene	ND< 9.2
2-Chloroethyl vinyl ether	ND< 9.2	Styrene	ND< 9.2
Chloroform	ND< 9.2		
Dibromochloromethane	ND< 9.2		
1,1-Dichloroethane	ND< 9.2	<u>Ketones & Misc.</u>	
1,2-Dichloroethane	ND< 9.2	Acetone	96.9
1,1-Dichloroethane	ND< 9.2	Vinyl acetate	ND< 23.0
trans-1,2-Dichloroethene	ND< 9.2	2-Butanone	ND< 23.0
1,2-Dichloropropane	ND< 9.2	4-Methyl-2-pentanone	ND< 23.0
cis-1,3-Dichloropropene	ND< 9.2	2-Hexanone	ND< 23.0
trans-1,3-Dichloropropene	ND< 9.2	Carbon disulfide	ND< 23.0
Methylene chloride	ND< 23.0		
1,1,2,2-Tetrachloroethane	ND< 9.2		
Tetrachloroethene	ND< 9.2		
1,1,1-Trichloroethane	ND< 9.2		
1,1,2-Trichloroethane	ND< 9.2		
Trichloroethene	ND< 9.2		
Vinyl Chloride	ND< 9.2		

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By 
 Laboratory Director

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue Rochester, New York 14601 716-647-2530 FAX 716-647-3311

**Volatile Aromatic Analysis Report For Soil/Sludge
(Additional 8260/Compounds)**

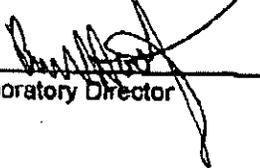
Client: City of Rochester Lab Project No.: 99-1115
Client Job Site: Former Silver Stadium Lab Sample No.: 4318
Client Job No.: RoCity 1830R-99 Sample Type: Soil
Field Location: N. Exc. Date Sampled: 08/11/99
Field ID No.: N/A Date Received: 08/11/99
Date Analyzed: 08/15/99

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 9.2
Isopropylbenzene	ND< 9.2
n-Propylbenzene	26.7
1,3,5-Trimethylbenzene	165.3
tert-Butylbenzene	29.5
1,2,4-Trimethylbenzene	275.8
sec-Butylbenzene	ND< 9.2
p-Isopropyltoluene	ND< 9.2
n-Butylbenzene	ND< 9.2
Naphthalene	88.6

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue Rochester, New York 14609 716-647-2630 FAX 716-647-3311

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: City of Rochester Lab Project No: 99-1115
 Client Job Site: Former Silver Stadium Lab Sample No: 4319
 Client Job No: RoCity 1830R-98 Sample Type: Soil
 Field Location: S. Exc. Date Sampled: 6/11/99
 Field ID No: N/A Date Received: 6/11/99
 Date Analyzed: 6/15/99

VOLATILE HALOCARBONS		VOLATILE AROMATICS	
	RESULTS (ug/Kg)		RESULTS (ug/Kg)
Bromodichloromethane	ND< 10.3	Benzene	ND< 10.3
Bromomethane	ND< 10.3	Chlorobenzene	ND< 10.3
Bromoform	ND< 10.3	Ethylbenzene	ND< 10.3
Carbon tetrachloride	ND< 10.3	Toluene	ND< 10.3
Chloroethane	ND< 10.3	m,p - Xylene	41.3
Chloromethane	ND< 10.3	o - Xylene	ND< 10.3
2-Chloroethyl vinyl ether	ND< 10.3	Styrene	ND< 10.3
Chloroform	ND< 10.3		
Dibromochloromethane	ND< 10.3		
1,1-Dichloroethane	ND< 10.3	<u>Ketones & Misc.</u>	
1,2-Dichloroethane	ND< 10.3	Acetone	100.2
1,1-Dichloroethene	ND< 10.3	Vinyl acetate	ND< 25.8
trans-1,2-Dichloroethene	ND< 10.3	2-Butanone	ND< 25.8
1,2-Dichloropropane	ND< 10.3	4-Methyl-2-pentanone	ND< 25.8
cis-1,3-Dichloropropane	ND< 10.3	2-Hexanone	ND< 25.8
trans-1,3-Dichloropropane	ND< 10.3	Carbon disulfide	ND< 25.8
Methylene chloride	ND< 25.8		
1,1,2,2-Tetrachloroethane	ND< 10.3		
Tetrachloroethene	ND< 10.3		
1,1,1-Trichloroethane	ND< 10.3		
1,1,2-Trichloroethane	ND< 10.3		
Trichloroethene	ND< 10.3		
Vinyl Chloride	ND< 10.3		

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By 
 Laboratory Director

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

**Volatile Aromatic Analysis Report For Soil/Sludge
(Additional B260 Compounds)**

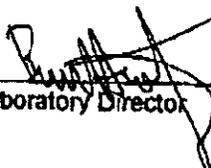
Client: City of Rochester Lab Project No.: 99-1115
Client Job Site: Former Silver Stadium Lab Sample No.: 4319
Client Job No.: RoCity 1830R-89 Sample Type: Soil
Field Location: S. Exc. Date Sampled: 06/11/99
Field ID No.: N/A Date Received: 06/11/99
Date Analyzed: 06/15/99

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 10.3
Isopropylbenzene	22.2
n-Propylbenzene	105.5
1,3,5-Trimethylbenzene	280.3
tert-Butylbenzene	64.6
1,2,4-Trimethylbenzene	590.2
sec-Butylbenzene	11.2
p-Isopropyltoluene	ND< 10.3
n-Butylbenzene	68.3
Naphthalene	334.0

Analytical Method: EPA 8260

NYS ELAP ID No.: 10956

Comments: ND denotes not detected

Approved By: 
Laboratory Director

Volatile Aromatic Analysis Report For Solids (STARS List)

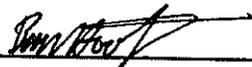
Client:	<u>Day Environmental</u>	Lab Project No.:	99-1139
Client Job Site:	RoCity	Lab Sample No.:	4378
Client Job No.:	1830R-99	Sample Type:	Soil
Field Location:	MEW, NEW, SEW	Date Sampled:	06/18/99
Field ID No.:	N/A	Date Received:	06/18/99
		Date Analyzed:	06/19/99

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 7.6
Benzene	ND< 7.6
Toluene	ND< 7.6
Ethylbenzene	214
m,p-Xylene	17
o-Xylene	ND< 7.6
Isopropylbenzene	61
n-Propylbenzene	324
1,3,5-Trimethylbenzene	804
tert-Butylbenzene	209
1,2,4-Trimethylbenzene	1829
sec-Butylbenzene	39
p-Isopropyltoluene	26
n-Butylbenzene	ND< 7.6
Naphthalene	540

Analytical Method: EPA 8021

NYS ELAP ID No.: 10958

Comments: ND denotes not detected
E = Exceeds instrument calibration range.

Approved By: 
Laboratory Director

**HEALTH AND SAFETY PLAN
(REVISED 1/28/00)**

**424-500 NORTON STREET
ROCHESTER, NEW YORK**

Prepared by: Day Environmental, Inc
2144 Brighton-Henrietta Town Line Road
Rochester, New York 14623

Project No.: 1830R-99

Revised Date: January, 2000

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Site History and Environmental Conditions	1
1.2	Planned Activities Covered by HASP.....	3
2.0	KEY PERSONNEL AND MANAGEMENT	5
2.1	Project Manager	5
2.2	Environmental Project Monitor	5
3.0	SAFETY RESPONSIBILITY	6
4.0	JOB HAZARD ANALYSIS	7
4.1	Chemical Hazards	7
4.2	Physical Hazards	8
4.3	Environmental Hazards	10
	4.3.1 Heat Stress	10
	4.3.2 Exposure to Cold.....	10
5.0	SITE CONTROLS	11
5.1	Site Zones	11
5.2	General	11
6.0	PROTECTIVE EQUIPMENT	12
6.1	Anticipated Protection Levels	12
6.2	Protection Level Descriptions	12
	6.2.1 Level D	12
	6.2.2 Modified Level D.....	12
	6.2.3 Level C.....	12
	6.2.4 Level B.....	13
	6.2.5 Level A	13
6.3	Respiratory Protection	13
7.0	DECONTAMINATION PROCEDURES	14
7.1	Personnel Decontamination.....	14
7.2	Equipment Decontamination	14
7.3	Disposal	14
8.0	AIR MONITORING	15
8.1	Particulate Monitoring	15
8.2	Volatile Organic Compound Monitoring.....	16
8.3	Ammonia Monitoring	16
8.4	Community Air Monitoring Program	16
	8.4.1 Vapor Emission Response Plan.....	16
	8.4.2 Major Vapor Emission	17

8.4.3	Ammonia Emission Response Plan.....	17
8.4.4	Major Ammonia Emission Response Plan.....	18
8.4.5	Major Emission Response Plan	18
9.0	EMERGENCY RESPONSE.....	19
9.1	Emergency Telephone Numbers	19
9.2	Evacuation	19
9.3	Medical Emergency	20
9.4	Contamination Emergency	20
9.5	Fire Emergency	20
9.6	Spill or Air Release	21
9.7	Locating Containerized Waste or Buried Tanks.....	21

ATTACHMENTS

Attachment 1 Analytical Laboratory Data

Attachment 2 Map to Hospital

1.0 INTRODUCTION

This Health and Safety Plan (HASP) outlines the policies and procedures to protect workers and the public from potential environmental hazards posed during re-development of the property located at 424-500 Norton Street, City of Rochester, County of Monroe, New York ("Site"). Construction activities that entail the excavation or disturbance of petroleum-impacted soil or fill material will be conducted in accordance with the Environmental Management Plan and this HASP. In conjunction with this HASP, 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 because of the nature of this work. Conditions may change and unforeseen situations can arise that require deviations from the original HASP.

1.1 Site History and Environmental Conditions

The stadium was used until the fall of 1996 when the team moved to a new stadium. Since that time, the baseball stadium and stands, concession building, box/ticket offices, a small storage building, and a maintenance building have been demolished. Only a two-story office building and a former souvenir building remain. The 424-426 parcel contained a two family residence and a vacant bar prior to demolition activities at the Site in 1998.

Southeast Portion of Former Silver Stadium Parcel

Intrusive environmental studies conducted in the vicinity of the southeastern parking lot of the Site have included the excavation and observation/monitoring of test pits, the advancement and observation/monitoring of test borings and soil gas points, and the installation and sampling of groundwater monitoring wells. The location of these test pits, test borings and wells are illustrated on Figure EMP-2 in Appendix A. This intrusive work was conducted to characterize environmental conditions at the Site and to delineate the extent of contamination in vicinity of the former southeastern parking lot.

According to analytical laboratory analysis, soil, fill, and groundwater on portions of the Site contain petroleum-related VOCs at concentrations that exceed the New York State Department of Environmental Conservation (NYSDEC) groundwater standards and Spill Technology and Remediation Series (STARS) Memo #1 soil guidance values. This contamination has been characterized as a primarily lightweight petroleum hydrocarbon (most-likely gasoline) with some heavy weight petroleum hydrocarbons such as diesel fuel located primarily within the fill materials in the former southeast parking lot. The groundwater in this area appears to contain dissolved phase hydrocarbons, but small quantities of residual free phase product were observed on a soil sample collected from one of the test borings. The source of the contamination in the former southeastern parking lot is not known; however, it appears to be located on Site, and may possibly be

the result of contaminated fill materials brought onto the Site, or due to spills or leaks of petroleum and/or petroleum products onto the parking lot fill materials. The estimated areal extent of VOC, SVOC, and/or TPH impact observed in the southeast portion of the former Silver Stadium parcel is illustrated on Figure EMP-3 included in Appendix A.

Subsurface materials in the southeastern portion of the Site (and generally throughout the Site) include heterogeneous fill materials above native soils, weathered bedrock, and more competent rock. The fill materials within the former parking lot areas consist of a poorly sorted, heterogeneous mixture of dark black cinders, slag, and coal fragments, with lesser amounts of brick fragments, ash, and reworked soils. A sample of fill material that was collected from the former southeastern parking lot for laboratory analysis contained concentrations of copper, iron, lead, mercury, and zinc that exceeded their respective NYSDEC soil cleanup objective. Iron, lead, mercury, and zinc exceeded their respective background value or background range. An additional composite sample collected from test pits located in the western portion of the Site contained concentrations of arsenic, chromium, iron, lead, nickel, and zinc exceeding their respective NYSDEC soil cleanup objective. Lead and Zinc also exceeded their respective eastern USA background range.

Southwestern Portion of Site

Intrusive environmental studies in vicinity of the 424-426 Norton Street parcel and the southwestern portion of the former Silver Stadium parcel have included the excavation and observation/monitoring of test pits, the installation and monitoring of one monitoring well and four sentry monitoring wells, and the installation and observation/monitoring of soil borings (refer to Figure EMP-2 in Appendix A).

Previous environmental studies on the southwestern portion of the Site indicated that soil beneath this portion of the Site is impacted with medium weight petroleum hydrocarbons that could be attributable to kerosene, stoddard solvents, paint thinner, etc. The concentrations of some of the VOCs detected in the soil exceed their respective NYSDEC STARS Memo #1 guidance values. Medium weight petroleum hydrocarbons were also detected in a groundwater sample that was collected from one of the test borings that was advanced in this area. A sheen was detected in one of the sentry wells (SMW-4) in this area of the Site and laboratory analysis indicates that the groundwater contains petroleum hydrocarbon constituents. The estimated areas of VOC and/or TPH impact observed in the southwest portion of the Site is illustrated on Figure EMP-3 included in Appendix A.

The adjacent property west of the 424-426 Norton Street parcel is Cadet Cleaners, a dry cleaning facility (i.e. plant) and formerly a gasoline service station with a long history of underground storage tanks (USTs) containing petroleum products and stoddard solvents. It is possible that this adjacent property is a source of the contamination detected on the 424-426 Norton Street parcel.

Eastern Portion of Site Near E.I. DuPont deNemours & Co.

An E.I. DuPont deNemours & Co. (DuPont) plant is located along the eastern property boundary of the former Silver Stadium Site. This adjoining property was formerly occupied by the Pepsi Cola Rochester Bottling Co. City of Rochester and County of Monroe records reviewed as part of a previous study indicate that this property has a history of storage tank use and that spillage of petroleum and chemical products reportedly occurred at this property.

In August 1998, six test pits were excavated along the eastern property line of the former Silver Stadium parcel in proximity to the adjoining DuPont property (refer to Figure EMP-2 in Appendix A). A DAY representative observed and documented the subsurface conditions encountered, screened selected samples with a photoionization detector (PID) and flame ionization detector (FID), and collected samples for analytical laboratory analysis. Based upon testing, total petroleum hydrocarbons (TPH), ammonia, dieldrin (a pesticide), and other "non-target" petroleum hydrocarbon compounds (e.g., tetradecane; pentadecane, hexatriacontane, etc.) were detected within the soil/fill in a limited area on the former Silver Stadium property near the DuPont plant.

Additional studies were completed in June, 1999 along the eastern property line of the Site by DAY and consultants from Dupont. A soil-gas survey and the advancement of test borings indicated that elevated concentrations of ammonia (up to 9 ppm), and VOCs were also detected along the eastern property line of the former Silver Stadium using an Industrial Scientific tri-gas meter Model LXT310 with an ammonia sensor (or similar), and a PID. In addition, laboratory analysis indicated that the SVOC naphthalene was detected at a concentration that slightly exceeds the NYSDEC STARS Memo #1 guidance values. The concentrations encountered were generally low and do not appear to warrant removal; however, it is anticipated that a passive vent system will be installed in this area of the Site to deter the accumulation of vapors beneath future buildings, parking lots, etc. that are to be constructed in this area of the Site. The impact to the groundwater in this portion of the Site is not known; however, additional studies are planned to evaluate if ammonia has impacted the groundwater. The estimated areas of ammonia and/or VOC impacted soil observed, to date, along the eastern property line of the former Silver Stadium parcel based upon PID readings and ammonia readings are illustrated on Figure EMP-3 included in Appendix A.

Additional information regarding the intrusive activities conducted at the Site is available from the City of Rochester Department of Environmental Services (DES), Division of Environmental Quality (DEQ).

1.2 Planned Activities Covered by HASP

This HASP is to be implemented during the activities where fill material, potentially petroleum/VOC and/or ammonia-impacted media (e.g., soil, groundwater, etc.) can be, or will be, disturbed during redevelopment of the Site.

This HASP can be modified to cover other site activities, when appropriate. This HASP is not intended to cover general health and safety regulations that are associated with normal construction activities. 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 construction activities or site activities.

2.0 KEY PERSONNEL AND MANAGEMENT

The Project Manager and Environmental Project Monitor are responsible for formulating and enforcing health and safety requirements. The aforementioned responsibilities of the project manager and environmental project monitor can be performed by the same individual.

2.1 Project Manager

The project manger has the overall responsibility for the project and to assure that the goals of the Environmental Management Plan (EMP) are attained in a manner consistent with the HASP requirements outlined herein. The project manager will coordinate with the environmental project monitor to ensure that the Environmental Management Plan goals are completed in a manner consistent with the HASP.

2.2 Environmental Project Monitor

The environmental project monitor has responsibility for implementing and administering the HASP and EMP relative to Site activities, and will be in the field full-time while site development activities associated with potentially disturbing petroleum-impacted material and/or fill material are in progress. The environmental project monitor's operational responsibilities will be monitoring, including personal and environmental monitoring, personal protective equipment maintenance, establishing and ensuring compliance with Site control areas and procedures, and assignment of protection levels. The environmental project monitor will be the primary contact in any on-site emergency situation. The environmental project monitor will direct field activities involved with safety and be responsible for stopping work when unacceptable health or safety risks exist. The environmental project monitor is responsible for ensuring that on-site personnel understand and comply with safety requirements. Qualifications of the environmental project monitor include a current certificate for 40-hour OSHA hazardous waste site worker training in accordance with 29 CFR 1910.120 and appropriate in Red Cross CPR/first-aid training.

3.0 SAFETY RESPONSIBILITY

City of Rochester employees, contractors, developers, and their employees, involved with the development of the Site will be responsible for their own safety. The City of Rochester employees, the contractor's employees, and the developer's employees will be required to understand the information contained in this HASP, and must follow the recommendations that are made in this document.

4.0 JOB HAZARD ANALYSIS

There are many hazards associated with construction work, 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 the fill material and impacted media (e.g., petroleum and/or ammonia -impacted soil, groundwater, fill, etc.).

4.1 Chemical Hazards

Chemical substances can enter the unprotected body by inhalation, skin absorption, ingestion, or through a puncture wound (injection). 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 site-specific analytes (i.e., metals), volatile organic compounds (VOCs), and ammonia that have been detected at the Site are presented in the following table. This list also presents the available OSHA permissible exposure limits (PELs), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), as well as the levels that are considered immediately dangerous to life and health (IDLH).

The potential routes of exposure for these analytes and chemicals include inhalation, ingestion, skin absorption and 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 development of the Site include inhalation and skin contact.

If other chemicals are encountered during the re-development activities, this HASP may need to be modified to include those chemicals.

During development activities that involve the removal and/or disturbance of fill material and impacted media, the worker's breathing zone shall be monitored by the environmental project monitor for dusts and particulates using a real-time aerosol monitor (RTAM), for ammonia using an ammonia meter or similar, and for VOCs using a photoionization detector (PID) and/or a Flame Ionization Detector (FID). The RTAM, PID/FID, and ammonia readings can be used to determine the level of personal protective equipment (PPE) required (see Section 8.0).

**EXPOSURE CRITERIA FOR SELECTED
CONSTITUENTS DETECTED AT THE SITE**

CONSTITUENT	OSHA PEL	IDLH
Ethylbenzene	100 ppm	800 ppm
1,1,1,-Trichloroethane	350 ppm	700 ppm
Naphthalene	10 ppm	250 ppm
Benzene	10 ppm	500 ppm
2-Butanone (MEK)	200 ppm	3000 ppm
Isopropyl Benzene (Cumene)	50 ppm	900 ppm
1,3,5,-Trimethylbenzene	--	25 ppm*
m+p-xylene	100 ppm	900 ppm
1,2,.4-Trimethylbenzene	--	25 ppm*
Stoddard Solvent	500 ppm	20,000 mg/m ³
Methyl-tert-butyl-ether	--	40 ppm*
n-Propyl Benzene	--	--
Ammonia	50 ppm	300 ppm
Dieldrin	0.25 mg/m ³	50 mg/m ³
Arsenic	0.5 mg/m ³	5 mg/m ³ (.01 mg/m ³ *)
Chromium	0.5 mg/m ³	25 mg/m ³
Lead	0.05 mg/m ³	100 mg/m ³
Mercury	0.1 mg/m ³ ^	2 mg/m ³

Notes:

- PEL = OSHA Permissible Exposure Limits (TWA for 8-hour day)
- IDLH = Immediate Dangerous to Life or Health Concentration
- = OSHA PEL and/or IDLH not available
- * ACGIH Threshold Limit Value
- ^ OSHA ceiling limit

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 remedial measures and development plans, 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 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 inspected 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., backhoe, drill rig) shall not be operated within 10 feet of high voltage lines.
- 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.

If employees are subjected to noise exceeding an 8-hour time weighted average sound level of 90 d(B)A (decibels on the A-weighted scale), feasible administrative or engineering controls shall be utilized. In addition, whenever employee noise exposures equal or exceed an 8-hour, time weighted average sound level of 85 d(B)A, employers shall administer a continuing, effective hearing conservation program as described in OSHA Regulation 29 CFR Part 1910.95.

Heavy Equipment - Each morning before start-up, heavy equipment will be inspected 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, and irritant plants always pose a hazard when performing outdoor tasks. The environmental project monitor shall make every reasonable effort 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 and 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 environmental project monitor.

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 clearly specified prior to beginning operations.

5.1 Site Zones

In the area where fill material, petroleum/VOC, and/or ammonia-impacted material present a 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 personal and equipment decontamination procedures. This can reduce potential off-site migration of fill material and impacted media. Contaminated equipment or clothing will not be allowed outside the transition zone (e.g., on clean portions of the Site. 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 remedial activities.

5.2 General

The following items will be requirements to protect the health and safety of workers during implementation of construction activities that disturb petroleum contaminated material or fill 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 fill material or impacted soil.
- 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 protection levels anticipated for various tasks to be implemented during re-development activities are presented in Section 8.0.

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 environmental project monitor. 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 in the use of those levels of PPE.

6.2.1 Level D

Level D consists of the following:

- Safety glasses with side shields
- Hard hat
- Steel-toed work boots
- Work gloves
- 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
- Steel-toed work boots
- Work gloves
- 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].

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
 - Steel-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 remedial project. If the need for level B PPE becomes evident, all Site activities will be ceased until Site conditions are further evaluated, and any necessary modifications to the HASP have been approved by the project manager and environmental project monitor. 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 remedial project. If the need for level A PPE becomes evident, all Site activities will be ceased until Site conditions are further evaluated, and any necessary modifications to the HASP have been approved by the project manager and environmental project monitor. 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 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 mg/m³.

No personnel who have facial hair, which interferes with the respirator's 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 on-site 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 development activities that involve disturbing fill material or impacted media 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

Contaminated equipment shall be decontaminated in the transition zone before leaving the Site. Decontamination procedures 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.

7.3 Disposal

Disposable clothing will be treated as contaminated waste and be disposed of properly. Liquids (e.g., decontamination water, etc.) generated by remedial and/or development activities will be disposed of in accordance with applicable regulations.

8.0 AIR MONITORING

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 environmental project monitor.

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

Monitoring Device	Action level	Action/Level of PPE
RTAM particulate meter	< 150 ug/m ³ over an integrated period not to exceed 15 minutes.	Continue working
	> 150 ug/m ³	Cease work, implement dust suppression, change in way work performed, etc. If levels can not be brought below 150 ug/m ³ , then upgrade PPE to Level C.
PID/FID volatile organic compound meter	< 1 ppm in breathing zone, sustained 5 minutes	Level D
	1-5 ppm in breathing zone, sustained 5 minutes	Level D, Monitor air for VOCs using drager tubes
	6-25 ppm in breathing zone, sustained 5 minutes	Level C
	26-250 ppm in breathing zone, sustained 5 minutes	Level B, Stop work, evaluate the use of engineering controls
	>250 ppm in breathing zone	Level A
Ammonia Meter or similar	< 10 ppm in breathing zone, sustained 5 minutes	Level D
	10-50 ppm in breathing zone, sustained 5 minutes	Level D, Monitor for ammonia using an ammonia meter or drager tubes
	50-150 ppm	Level C
	150-300 ppm in breathing zone	Level B, Stop Work, evaluate the use of engineering controls.
	>300 ppm in breathing zone	Level A

8.1 Particulate Monitoring

During implementation of the Environmental Management Plan, air monitoring will include real-time monitoring for particulates using a Miniram PDM-3 real-time aerosol monitor

(RTAM), or similar, at the perimeter of the work zone in accordance with the 1989 NYSDEC TAGM 4031, entitled "Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites". The TAGM uses an action level of 150 ug/m³ over an integrated period not to exceed 15 minutes. If the action level is exceeded, or if visible dust is encountered, then work shall be discontinued until corrective actions are implemented. Corrective actions may include dust suppression, change in the way work is performed, upgrade of personal protective equipment, etc. Readings will be recorded and be available for review.

8.2 Volatile Organic Compound Monitoring

A Minirae 2000 PID (or similar)/ Century OVA 128 GC FID (or similar) will be used to monitor total volatile organic content of the ambient air. The PID/FID will prove useful as a direct reading instrument to aid in determining if current respiratory protection is adequate or needs to be upgraded. The environmental project monitor 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 Ammonia Monitoring

An Industrial Scientific tri-gas meter Model LXT310 with an ammonia sensor, or similar will be used to monitor ammonia content in the ambient air. The ammonia meter will be used to determine if the current respiratory protection is adequate or needs to be upgraded. The environmental project monitor will take measurements before operations begin in an area to determine the amount of ammonia naturally occurring in the air for background levels. If ammonia odors are detected, ammonia levels following that time will be measured with the ammonia meter. Only if the ammonia odor is encountered, will concentrations be monitored in the active work sites and the transition zone.

8.4 Community Air Monitoring Program

The purpose of the Community Air Monitoring Program is to protect the general public from the potential release of volatile organic and/or ammonia vapors. Such a release is not anticipated during the performance of the development work covered by this HASP. The following sections describe the components of the Community Air Program.

8.4.1 VOC Vapor Emission Response Plan

VOCs vapors will be monitored at the downwind perimeter of the work area. VOCs vapors will be monitored daily at two-hour intervals at the work zone and transition zone. The readings will be recorded in a field logbook by the environmental project monitor. If the ambient air concentration of VOC vapors exceeds 5 ppm above background at the perimeter of the work area, activities will be halted and monitoring continued. If the VOC vapor level decreases below 5 ppm above background, work activities will resume. During the work

activities, if the VOC vapor levels are greater than 5 ppm but less than 25 ppm over background at the perimeter of the work area, activities will resume provided the VOC vapor level 200 feet downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm above background.

If the VOC vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown. When work shutdown occurs, downwind air monitoring as directed by the environmental project monitor will be implemented to ensure the VOC emissions do not impact the buildings tenants, or the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section described below.

8.4.2 Major VOC Vapor Emission

If VOC levels greater than 5 ppm above background are identified 200 feet downwind from the work area, half the distance to the nearest residential or commercial structure, or in areas in the immediate vicinity where tenants may be exposed, work activities will be halted. If following the cessation of the work activities, or as the result of an emergency, VOC levels persist above 5 ppm above background then the air quality will be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 foot zone), or in areas in the immediate vicinity where site workers are working. If efforts to abate the emission source are unsuccessful, and if VOC levels of 5 ppm above background or greater persist for more than 30 minutes in the 20 foot zone, then the Major Emission Response Plan described below shall automatically be placed into effect. If VOC vapor levels greater than 10 ppm above background are measured 200 feet downwind from the work area or half the distance to the nearest residential or commercial structure, whichever is less, the Major Emission Response Plan shall immediately be placed into effect.

8.4.3 Ammonia Emission Response Plan

Ammonia vapors will be monitored at the downwind perimeter of the work area. Ammonia vapors shall be monitored daily at two-hour intervals at the work zone and transition zone. The readings shall be recorded in a field logbook by the environmental project monitor. When the ambient air concentration of ammonia vapors exceeds 50 ppm above background at the perimeter of the work area, activities shall be halted and monitoring continued. If the ammonia vapor level decreases below 50 ppm above background, work activities can resume. During the work activities, if the ammonia vapor levels are greater than 50 ppm but less than 25 ppm over background at the perimeter of the work area, activities can resume provided the ammonia vapor level 200 feet downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 50 ppm above background.

If the ammonia vapor level is above 150 ppm at the perimeter of the work area, activities will be shutdown. When work shutdown occurs, downwind air monitoring as directed by the environmental project monitor will be implemented to ensure the ammonia emissions do not impact the buildings tenants, or the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section described below.

8.4.4 Major Ammonia Emission

If ammonia levels greater than 50 ppm above background are identified 200 feet downwind from the work area, half the distance to the nearest residential or commercial structure, or in areas in the immediate vicinity where tenants may be exposed, work activities will be halted.

If following the cessation of the work activities, or as the result of an emergency, ammonia levels persist above 50 ppm above background then the air quality will be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 foot zone), or in areas in the immediate vicinity where site workers are working. If efforts to abate the emission source are unsuccessful, and if ammonia levels of 50 ppm above background or greater persist for more than 30 minutes in the 20 foot zone, then the Major Emission Response Plan described below shall automatically be placed into effect. If ammonia vapor levels greater than 100 ppm above background are measured 200 feet downwind from the work area or half the distance to the nearest residential or commercial structure, whichever is less, the Major Emission Response Plan shall immediately be placed into effect.

8.4.5 Major Emission Response Plan

Upon activation, the following activities will be undertaken:

1. Emergency response contacts listed in Section 9.1 of this HASP will go into effect.
2. Frequent air monitoring will be conducted at 30 minute intervals within the 20 foot zone. If two successive readings below action levels are measured, the air monitoring may be halted or modified by the environmental project monitor.

9.0 EMERGENCY RESPONSE

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
- 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:	275-5151
NYSDEC Spills	226-2466
MCDOH (Richard Elliott, P.E.) After Hours	274-6067 529-0756
City of Rochester Contact Joe Biondolillo (Division of Environmental Quality)	428-6649
Nearest Hospital:	Rochester General Hospital 1425 Portland Avenue Rochester, New York
Hospital Phone Number: Emergency Dept:	338-4000 338-2300
Directions to the Hospital (refer to map in Attachment 2):	Exit Site and turn left onto Norton Street. Follow Norton Street and turn left onto Portland Avenue. Rochester General will be on the left. Follow signs to the Emergency Room.

9.2 Evacuation

Although unlikely, it is possible that a site emergency could require evacuating all personnel from the site. If required, the environmental project monitor will give the appropriate signal for site evacuation. (See also Section 8.0 of this HASP).

All personnel shall exit the site and shall congregate in an area designated by the environmental project monitor. The environmental project monitor shall ensure that all personnel are accounted for. If someone is missing, the environmental project monitor will alert emergency personnel. The appropriate regulatory authorities 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, the site should be shut-down and immediately secured. The appropriate regulatory authorities should be notified immediately. The area in which the injury or illness occurred should not be entered until the cause of the illness or injury is known. The nature of injury or illness should be assessed. If the victim appears to be critically injured, administer first aid and/or CPR as needed. Instantaneous real-time air monitoring should 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 site should 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 regulatory authorities should be notified immediately. The area in which the contamination occurred should not be entered until the arrival of trained personnel who are properly equipped with the appropriate PPE and monitoring instrumentation. (See also Section 8.0 of this HASP).

9.5 Fire Emergency

In the event of a fire on-site, the site should be shut-down and immediately secured. The area in which the fire occurred should not be entered until the cause can be determined. All non-essential site personnel should be evacuated from the site to a safe, secure area. Notify the Fire Department immediately. Advise the Fire Department of the situation and the identify of any hazardous material involved. The appropriate regulatory authorities should 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 should be taken while in this operation. All approaches to the fire should be done from the upwind side if

possible. Distance from on-site personnel to the fire should 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 should be utilized for the Class(s) of fire present on the site. If possible, the fuel source should be cut off or separated from the fire. Care must be taken when performing operations involving the shut-off 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 Fluorprotein 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 should be made against large fires. These should be handled by the Fire Department.

9.6 Spill or Air Release

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

9.7 Locating Containerized Waste or Buried Tanks

In the event that containerized waste (e.g., drums) or buried tanks are located during development activities, the site should be shut-down and immediately secured. The area in which containerized wastes and/or tanks are discovered should not be entered until site safety can be evaluated. All non-essential site personnel should be evacuated from the site to a safe, secure area. The appropriate regulatory authorities should be notified as soon as

possible. The environmental project monitor shall monitor the area as outlined in Section 8.0 of this HASP.

Prior to any handling, containers and/or tanks will be visually assessed by the environmental project monitor to gain as much information as possible about their contents. As a precautionary measure, personnel shall assume that unlabelled containers contain hazardous materials until their contents are characterized. If the material is unknown, Level B protection is mandatory. 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, an environmental contractor will sample, test, remove, and dispose of any containers, tanks, and their contents in accordance with applicable regulations.

ATTACHMENT 1

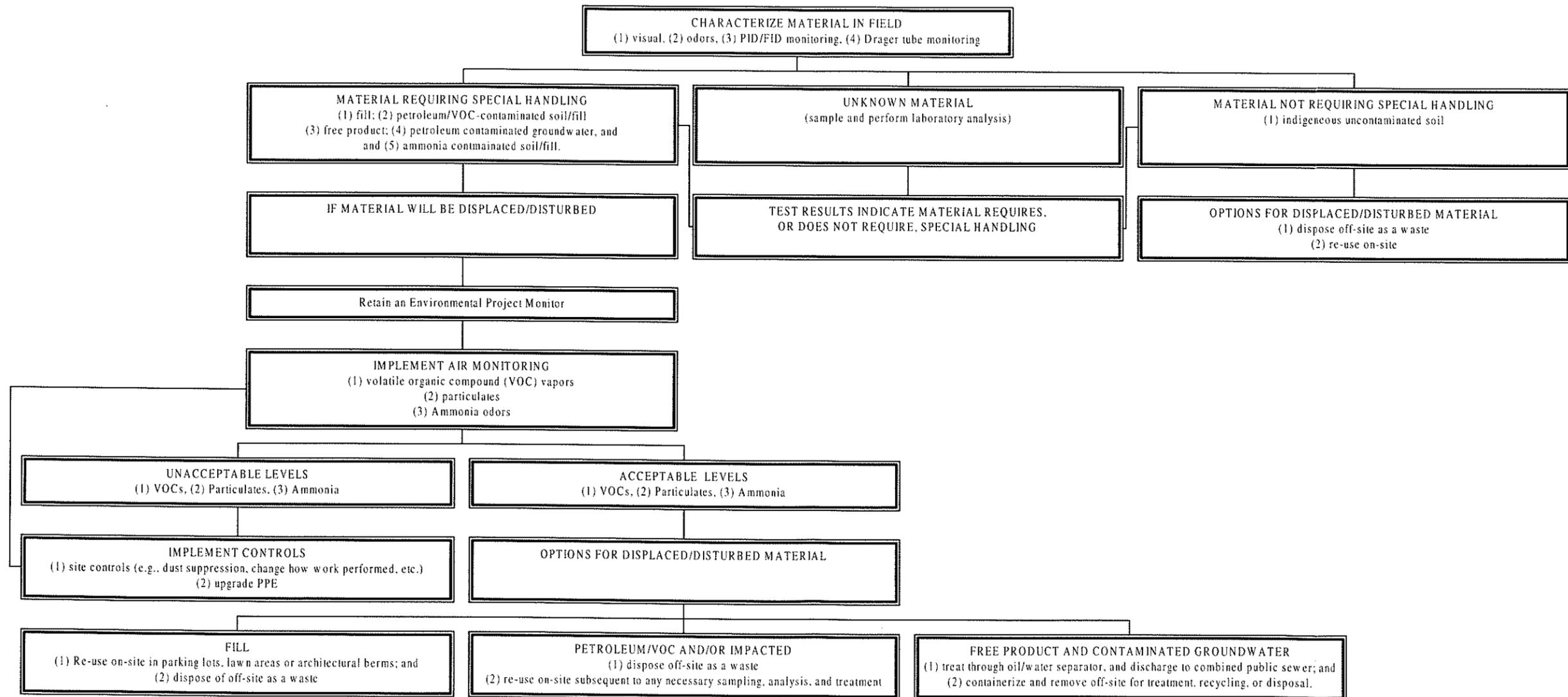
Laboratory Data

Note: Test Pit (TP), Test Boring (TB), and Groundwater (GW) samples from the Site were analyzed as part of studies by Day Environmental, Inc. The location of the test pits, test borings, and wells are depicted on Figure EMP-2 (Site Plan) which is included in Appendix A of the Environmental Management Plan.

ATTACHMENT 2

Map to Hospital

SUMMARY FLOW CHART
 ENVIRONMENTAL MANAGEMENT
 PLAN
 424-500 NORTON STREET
 ROCHESTER, NEW YORK



**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Aromatic Analysis Report For Solids (STARS List)

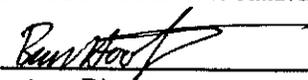
Client:	Day Environmental	Lab Project No.:	99-1148
Client Job Site:	ROCity	Lab Sample No.:	4402
Client Job No.:	1830R-99	Sample Type:	Soil
Field Location:	NEC-3, NEC-1, NEC-2	Date Sampled:	06/21/99
Field ID No.:	N/A	Date Received:	06/21/99
		Date Analyzed:	06/23/99

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 9.1
Benzene	ND< 9.1
Toluene	ND< 9.1
Ethylbenzene	53
m,p-Xylene	98
o-Xylene	ND< 9.1
Isopropylbenzene	41
n-Propylbenzene	245
1,3,5-Trimethylbenzene	403
tert-Butylbenzene	163
1,2,4-Trimethylbenzene	1426 E
sec-Butylbenzene	30
p-Isopropyltoluene	56
n-Butylbenzene	ND< 9.1
Naphthalene	128

Analytical Method: EPA 8021

NYS ELAP ID No.: 10958

Comments: ND denotes not detected
E = Exceeds instrument calibration range.

Approved By: 
Laboratory Director

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	<u>Day Environmental</u>	Lab Project No.:	99-1139
Client Job Site:	RoCity	Lab Sample No.:	4379
Client Job No.:	1830R-99	Sample Type:	Soil
Field Location:	East SW, Mid SW, WSW	Date Sampled:	06/18/99
Field ID No.:	N/A	Date Received:	06/18/99
		Date Analyzed:	06/19/99

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 8.2
Benzene	ND< 8.2
Toluene	ND< 8.2
Ethylbenzene	ND< 8.2
m,p-Xylene	ND< 8.2
o-Xylene	ND< 8.2
Isopropylbenzene	ND< 8.2
n-Propylbenzene	22
1,3,5-Trimethylbenzene	19
tert-Butylbenzene	19
1,2,4-Trimethylbenzene	175
sec-Butylbenzene	ND< 8.2
p-Isopropyltoluene	ND< 8.2
n-Butylbenzene	ND< 8.2
Naphthalene	310

Analytical Method: EPA 8021

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

Volatile Aromatic Analysis Report For Solids (STARS List)

Client: Day Environmental **Lab Project No.:** 99-1139
Client Job Site: RoCity **Lab Sample No.:** 4380
Client Job No.: 1830R-99 **Sample Type:** Soil
Field Location: North WW, Mid WW, South WW **Date Sampled:** 06/18/99
Field ID No.: N/A **Date Received:** 06/18/99
Date Analyzed: 06/19/99

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 6.2
Benzene	ND< 6.2
Toluene	ND< 6.2
Ethylbenzene	ND< 6.2
m,p-Xylene	ND< 6.2
o-Xylene	ND< 6.2
Isopropylbenzene	ND< 6.2
n-Propylbenzene	8.5
1,3,5-Trimethylbenzene	17
tert-Butylbenzene	8.5
1,2,4-Trimethylbenzene	88
sec-Butylbenzene	ND< 6.2
p-Isopropyltoluene	ND< 6.2
n-Butylbenzene	ND< 6.2
Naphthalene	ND< 16

Analytical Method: EPA 8021

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: 
Laboratory Director

PARADIGM

**ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Solids (STARS List)

Client: **Day Environmental**

Lab Project No. 99-1139

Client Job Site: RO City

Lab Sample No. 4379

Client Job No.: 1830R-99

Sample Type: Soil

Field Location: East SW, Mid SW, WSW

Date Sampled: 06/18/99

Field ID No.: N/A

Date Received: 06/18/99

Date Analyzed: 06/18/99

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 320
Acenaphthene	ND< 320
Fluorene	ND< 320
Fluoranthene	ND< 320
Anthracene	ND< 320
Phenanthrene	ND< 320
Benzo (a) anthracene	ND< 320
Chrysene	ND< 320
Pyrene	ND< 320
Benzo (b) fluoranthene	ND< 320
Benzo (k) fluoranthene	ND< 320
Benzo (g,h,i) perylene	ND< 320
Benzo (a) pyrene	ND< 320
Dibenz (a,h) anthracene	ND< 320
Indeno (1,2,3-cd) pyrene	ND< 320

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____


Laboratory Director

PARADIGM

**ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Solids (STARS List)

Client: **Day Environmental**

Lab Project No. 99-1139

Client Job Site: RO City

Lab Sample No. 4378

Client Job No.: 1830R-99

Sample Type: Soil

Field Location: MEW, NEW, SEW

Date Sampled: 06/18/99

Field ID No.: N/A

Date Received: 06/18/99

Date Analyzed: 06/18/99

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 307
Acenaphthene	ND< 307
Fluorene	ND< 307
Fluoranthene	ND< 307
Anthracene	ND< 307
Phenanthrene	ND< 307
Benzo (a) anthracene	ND< 307
Chrysene	ND< 307
Pyrene	ND< 307
Benzo (b) fluoranthene	ND< 307
Benzo (k) fluoranthene	ND< 307
Benzo (g,h,i) perylene	ND< 307
Benzo (a) pyrene	ND< 307
Dibenz (a,h) anthracene	ND< 307
Indeno (1,2,3-cd) pyrene	ND< 307

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____


Laboratory Director

PARADIGM

**ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Solids (STARS List)

Client: **Day Environmental**

Lab Project No. 99-1148

Lab Sample No. 4402

Client Job Site: RoCity
1830R-99

Sample Type: Soil

Client Job No.: 1830R-99

Date Sampled: 06/21/99

Field Location: NEC-1,2,3

Date Received: 06/21/99

Field ID No.: N/A

Date Analyzed: 06/23/99

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 324
Acenaphthene	ND< 324
Fluorene	ND< 324
Fluoranthene	ND< 324
Anthracene	ND< 324
Phenanthrene	ND< 324
Benzo (a) anthracene	ND< 324
Chrysene	ND< 324
Pyrene	ND< 324
Benzo (b) fluoranthene	ND< 324
Benzo (k) fluoranthene	ND< 324
Benzo (g,h,i) perylene	ND< 324
Benzo (a) pyrene	ND< 324
Dibenz (a,h) anthracene	ND< 324
Indeno (1,2,3-cd) pyrene	ND< 324

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____


Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client: Day Environmental **Lab Project No.:** 99-1148
Client Job Site: RoCity **Lab Sample No.:** 4402
Client Job No.: 1830R-99 **Sample Type:** Soil
Field Location: NEC-3, NEC-1, NEC-2 **Date Sampled:** 6/21/99
Field ID No: N/A **Date Received:** 6/21/99
Date Analyzed: 6/21/99

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Medium Weight PHC as Kerosene	6,941	4,505
Heavy Weight PHC as Hydraulic Fluid	38,069	4,505

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: 
Laboratory Director

PARADIGM

**ENVIRONMENTAL
SERVICES, INC.**

179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Solids (STARS List)

Client: **Day Environmental**

Lab Project No. 99-1139

Lab Sample No. 4380

Client Job Site: RO City

Sample Type: Soil

Client Job No.: 1830R-99

Date Sampled: 06/18/99

Field Location: North WW, Mid WW, South WW

Date Received: 06/18/99

Field ID No.: N/A

Date Analyzed: 06/18/99

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 315
Acenaphthene	ND< 315
Fluorene	ND< 315
Fluoranthene	ND< 315
Anthracene	ND< 315
Phenanthrene	ND< 315
Benzo (a) anthracene	ND< 315
Chrysene	ND< 315
Pyrene	ND< 315
Benzo (b) fluoranthene	ND< 315
Benzo (k) fluoranthene	ND< 315
Benzo (g,h,i) perylene	ND< 315
Benzo (a) pyrene	ND< 315
Dibenz (a,h) anthracene	ND< 315
Indeno (1,2,3-cd) pyrene	ND< 315

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____

Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

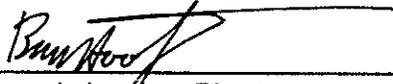
Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client: Day Environmental **Lab Project No.:** 99-1139
Client Job Site: RoCity **Lab Sample No.:** 4378
Client Job No.: 1830R-99 **Sample Type:** Soil
Field Location: MEW,NEW,SEW **Date Sampled:** 6/18/99
Field ID No: N/A **Date Received:** 6/18/99
Date Analyzed: 6/21/99

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Medium Weight PHC as Kerosene	4,603	4,591
Heavy Weight PHC as Hydraulic Fluid	42,601	4,591

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: 
Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

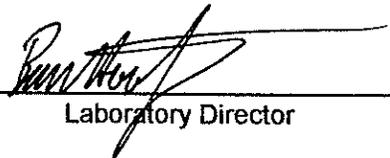
Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client: Day Environmental **Lab Project No.:** 99-1139
Client Job Site: RoCity **Lab Sample No.:** 4379
Client Job No.: 1830R-99 **Sample Type:** Soil
Field Location: East SW, Mid SW, WSW **Date Sampled:** 6/18/99
Field ID No: N/A **Date Received:** 6/18/99
Date Analyzed: 6/21/99

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Medium Weight PHC as Kerosene	6,577	4,820
Heavy Weight PHC as Hydraulic Fluid	34,698	4,820

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: 
Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client: Day Environmental **Lab Project No.:** 99-1139
Client Job Site: RoCity **Lab Sample No.:** 4380
Client Job No.: 1830R-99 **Sample Type:** Soil
Field Location: North WW, Mid WW, South WW **Date Sampled:** 6/18/99
Field ID No: N/A **Date Received:** 6/18/99
Date Analyzed: 6/21/99

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Medium Weight PHC as Kerosene	7,512	4,716
Heavy Weight PHC as Hydraulic Fluid	24,344	4,716

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: _____


Laboratory Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
 Rochester, NY 14608
 (716) 647-2530 • (800) 724-1997
 FAX (716) 647-3311

CHAIN OF CUSTODY

REPORT TO: **ENV** INVOICE TO: **LAB PROJECT # 99-1139**

COMPANY: **Daly Env** COMPANY ADDRESS: **2 Mt B H Townline Rd** CITY: **214023** STATE: **NY** ZIP: **57ME** P.O.#

CITY: **Koch** ATT: **J. B. VanChard** PHONE# **292-1090 X115** FAX# **292-0125** ATTENDUM

PROJECT NAME/SITE NAME: **Co. 14 1830R-99**

COMMENTS: **TPH by 310.13-24 hr TAT 80213 8270 Standard Sealing**

TURN AROUND TIME (WORKING DAYS) ONE THREE FIVE (STD) OTHER

DATE	TIME	COMPOSITE	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINERS NUMBER	REQUESTED ANALYSIS			REMARKS	PARADIGM LAB SAMPLE NUMBER	ANALYTICAL COSTS
						TPH 310.13	80213 STKS	P270 STKS			
1	6/18/99	1350	MEW	So.1	1	X	X	X			
2			NEW			X	X	X		4378	
3			SEW			X	X	X			
4			East SW			X	X	X			
5			Mid SW			X	X	X		4379	
6			WSW			X	X	X			
7			North WW			X	X	X			
8			Mid WW			X	X	X		4380	
9			South WW			X	X	X			
10											
11											
12											

RELINQUISHED BY: **John Kelly** DATE/TIME: **6/18/99** RECEIVED BY: **Shiratake** DATE/TIME: **6/18/99** SAMPLE CONDITION: **TPH 310.13** CHECK #

RELINQUISHED BY: **John Kelly** DATE/TIME: **6/18/99** RECEIVED BY: **Shiratake** DATE/TIME: **6/18/99** CARRIER COMPANY: **TPH 310.13** AIR BILL NO. P.I.F.

RELINQUISHED BY: **John Kelly** DATE/TIME: **6/18/99** RECEIVED @ LAB BY: **Shiratake** DATE/TIME: **6/18/99** CARRIER PHONE # **415-897-1500** DATE RESULTS REPORTED BY: DATE/TIME

WHITE COPY-SAMPLE YELLOW COPY-FILE PINK COPY-RELINQUISHER

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
 Rochester, NY 14608
 (716) 647-2530 • (800) 724-1997
 FAX (716) 647-3311

CHAIN OF CUSTODY

REPORT TO: J. Blanchard / Day / EJV INVOICE TO: LAB PROJECT # 99-1148

COMPANY: J. Blanchard COMPANY ADDRESS: 2144 BH Townline Rd

CITY: Rochester STATE: MA ZIP: 14623

ATT: J. Blanchard PHONE: 292-1090 x125 P.O.#: _____

FAX#: 292-0425 ATTENTION: _____

PROJECT NAME/SITE NAME: 8021, 8270 - Sclay TAT PROJECT # _____

COMMENTS: TPH by 310.13 74 hr TAT TURN AROUND TIME (WORKING DAYS) ONE ONE THREE FIVE (STD) OTHER _____

REPRESENTATIVE: See comments

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINERS NUMBER	REQUESTED ANALYSIS			REMARKS	PARADIGM LAB SAMPLE NUMBER	ANALYTICAL COSTS
							TPH by 310.13	8021 STARS	8270 STARS			
1	6/21/99		X	NEC-3	Soil	1	X	X	X			
2	↓		X	NEC-1	↓	1	X	X	X	341 Compos. K	4402	
3	↓		X	NEC-2	↓	1	X	X	X			
4												
5												
6												
7												
8												
9												
10												
11												
12												

RELINQUISHED BY: [Signature] DATE/TIME: 6/21/99 12:28 RECEIVED BY: [Signature] DATE/TIME: 6/21/99 12:28

RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: _____ DATE/TIME: _____

RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED @ LAB BY: _____ DATE/TIME: _____

TOTAL COST: _____ CHECK # _____

AIR BILL NO. _____ P.I.F. _____

DATE RESULTS REPORTED BY: _____ DATE/TIME: _____

WHITE COPY-SAMPLE YELLOW COPY-FILE PINK COPY-RELINQUISHER

DETECTED VOCS IN SOILS

500 Norton Street
Rochester, New York

(all results in ug/kg or ppb)

Constituent	Soil Sample 500-01 & 500-02	NYSDEC Soil Guidance Value
xylene (m&p)	37	100
isopropylbenzene	62	100
n-propylbenzene	92	100
1,2,4-trimethylbenzene	660	100
1,3,5-trimethylbenzene	860	100

Legend:

* = *Proposed New York State Petroleum Contaminated-Soil
Guidance, STARS Memo #1, 1992*

DETECTED VOCs IN SAMPLE TB-4
(ug/kg or ppb)

VOC	TB-4	NYSDEC STARS Soil Guidance Value
ethylbenzene	267 (J)	100
m,p-xylene	568	100
n-propylbenzene	379	100
1,3,5-trimethylbenzene	671	100
1,2,4-trimethylbenzene	3,061	100
naphthalene	704	200

Notes: J = Estimated Value

TOTAL PETROLEUM HYDROCARBONS (TPH)
(ug/kg or ppb)

Sample No.	Light-Weight Petroleum Hydrocarbon as Gasoline	Heavy-Weight Petroleum Hydrocarbon as Lube Oil
TB-4	16,052	40,812
TB-6	2,367,848	924,550

DETECTED VOCs IN SOILS

462-500 Norton Street
Rochester, New York

(all results in ug/kg or ppb)

Constituent	SS-007	SS-008	NYSDEC Soil Guidance Value
ethylbenzene	1,600	1,900	100
xylene (m&p)	4,900	2,800	100
xylene (o)	ND	3,400	100
isopropylbenzene	470(J)	8,800	100
n-propylbenzene	2,500	12,000	100
p-isopropyltoluene	640(J)	1,700	100
1,2,4-trimethylbenzene	20,000	28,000	100
1,3,5-trimethylbenzene	6,800	30,000	100
sec-butylbenzene	300(J)	730(J)	100

Legend:

- ND = Not Detected
- J = Estimated
- * = *Proposed New York State Petroleum Contaminated-Soil Guidance, STARS Memo #1, 1992*

**DETECTED VOLATILE ORGANIC COMPOUNDS
ON SOIL SAMPLES**

**424-426 NORTON STREET
ROCHESTER, NEW YORK**

PARTS PER BILLION (PPB)

DETECTED COMPOUNDS	SOIL SAMPLE AND LOCATION			NYSDEC RECOMMENDED CLEANUP OBJECTIVE (1)	NYSDEC TCLP ALTERNATIVE GUIDANCE VALUE (2)
	1524-01 BH-02(4-8")	1524-02 BH-06(6-7.8")	1524-03 BH-07(4-6")		
acetone	ND	44.9	73.2	200	NA
isopropylbenzene	19.8	56.5	40.1	NA	100
n-propylbenzene	36.6	130.8	106.8	NA	100
1,3,5-trimethylbenzene	ND	9.7	11.3	NA	100
tert-butylbenzene	ND	48.9	165.3	NA	100
1,2,4-trimethylbenzene	473.2	159.7	1,277 E	NA	100
sec-butylbenzene	219.9	113.5	249.9	NA	100
p-isopropyltoluene	16.4	13.9	15.3	NA	100
n-butylbenzene	138.2	74.3	ND	NA	100
naphthalene	ND	18.9	ND	13,000	200

ND = Not detected above laboratory detection limits.

NA = Not available.

PPB = Parts per billion.

E = Estimated concentration.

(1) = Recommended Soil Cleanup Objective; January 24, 1994 NYSDEC TAGM #4046.

(2) = TCLP Alternative Guidance Value; August, 1992 NYSDEC STARS Memo #1.

DETECTED BASE NEUTRAL SEMI-VOCs IN SOILS

462-500 Norton Street
Rochester, New York

(all results in ug/kg or ppb)

Constituent	SS-006	*NYSDEC Soil Guidance Value
benzo(a)anthracene	260(J)	0.04
benzo(k)fluoranthene	240(J)	0.04
benzo(b)fluoranthene	320(J)	0.04
benzo(a)pyrene	280(J)	0.04
chrysene	300(J)	0.04
indeno(1,2,3-cd)pyrene	180(J)	0.04
phenanthrene	310(J)	1,000
pyrene	480	1,000
fluoranthene	330(J)	1,000
benzo (g,h,i) perylene	220(J)	0.04

Legend:

J = Estimated
* = Proposed New York State Petroleum Contaminated-Soil Guidance, STARS Memo #1, 1992

DETECTED TAL METALS IN SOILS

462-500 Norton Street
Rochester, New York

(all results in ug/g or ppm)

Constituent	*SS-006	*SS-008/009 (Composite)	**NYSDEC Soil Guidance Value or Cleanup Objective	**Eastern USA Background
aluminum	5,610	7,400	SB	33,000
arsenic	4.3	8.77	7.5 or SB	3-12
barium	55.4	98.7	300 or SB	15-600
calcium	4,490	17,200	SB	130-35,000
chromium	9.61	13.7	10 or SB	1.5-40
cobalt	5.59	6.11	30 or SB	2.5-60
copper	45.6	16	25 or SB	1-50
iron	11,100	20,600	2,000 or SB	2,000-550,000
lead	280	89.6	30 or SB(1)	4-61 (1)
magnesium	2,640	4,150	SB	100-5,000
manganese	135	139	SB	5-5,000
mercury	0.416	ND	0.1	0.001-0.2
nickel	11	15.7	13 or SB	0.5-25
potassium	582	527	SB	8,500-43,000
selenium	0.866	1.85	2 or SB	0.1-3.9
sodium	124	523	SB	6,000-8,000
vanadium	10.9	19.1	150 or SB	1-300
zinc	120	91.1	20 or SB	9-50

Legend: SB = Site Background
 ND = Not Detected
 * = See GTC Laboratory Report for QA/QC Discussion
 ** = *Determination of Soil Cleanup Objectives and Cleanup Levels, 1992*
 (1) = *Determination of Soil Cleanup Objectives and Cleanup Levels, 1994*
 Recommended soil cleanup levels are Site Background
 Average background levels in metropolitan areas range from 200-500 ppm.

DETECTED TCLP METALS IN SOILS

462-500 Norton Street
Rochester, New York

(all results in mg/l or ppm)

Constituent	SS-008/009 (Composite)	*USEPA Regulatory Level
lead	0.305	5.0

Legend:

* = Federal Register, Part 261, Vol. 55, No. 126

DETECTED VOCs IN GROUNDWATER

462-500 NORTON STREET
ROCHESTER, NEW YORK

(all results in ug/l or ppb)

Constituent	MW-1		MW-2		MW-3		MW-4		MW-5		*NYSDEC Groundwater Standard or Guidance Value
	12/12/94	6/15/95	12/12/94	6/15/95	12/12/94	6/15/94	12/12/94	6/15/95	12/12/94	6/15/95	
1,1,1-trichloroethane	6.4	ND	16	12	ND	ND	ND	ND	ND	ND	5
2-butanone (MEK)	ND	ND	ND	ND	12	ND	13	50	ND	ND	50
methyl-tert-butyl ether	ND	ND	ND	ND	8.6	ND	ND	ND	ND	ND	NL
naphthalene	ND	ND	ND	ND	38	ND	22	160	ND	ND	10
benzene	ND	ND	ND	ND	ND	ND	7.2	36	ND	ND	0.7
ethylbenzene	ND	ND	ND	ND	ND	ND	40	89	ND	ND	5
total xylene (o+m+p)	ND	ND	ND	ND	ND	ND	55	140	ND	ND	5
isopropylbenzene	ND	ND	ND	ND	ND	ND	6.4	47	ND	ND	5
n-propylbenzene	ND	ND	ND	ND	ND	ND	15	140	ND	ND	5
1,3,5-trimethylbenzene	ND	ND	ND	ND	ND	ND	39	190	ND	ND	5
1,2,4-trimethylbenzene	ND	ND	ND	ND	ND	ND	60	500	ND	ND	5

Legend:

- ND = Not detected above detection limit
- NL = Not listed
- * = TOGs 1.1.1 Ambient Water Quality Standards and Guidance Values, 1993

DETECTED TAL METALS IN GROUNDWATER

462-500 Norton Street
Rochester, New York

(all results in ug/l or ppb)

Constituent	MW-1	MW-2	MW-3	MW-4	MW-5	*NYSDEC Groundwater Standard or Guidance Value
aluminum	2,350	4,950	7,080	3,310	581	100
iron	2,480	6,520	10,700	5,710	983	300
magnesium	ND	42,900	175,000	97,700	54,000	35,000
manganese	ND	ND	1,400	ND	311	300
sodium	134,000	52,000	120,000	588,000	177,000	20,000

Legend:

ND = Not detected above detection limit
* = TOGs 1.1.1 Ambient Water Quality Standards and Guidance Values, 1993

DETECTED VOLATILE ORGANIC COMPOUNDS
ON WATER SAMPLE 1524-04

424-426 NORTON STREET
ROCHESTER, NEW YORK

PARTS PER BILLION (PPB)

DETECTED COMPOUNDS	1524-04 AT BH-06 (water)	NYSDEC STANDARD (1)
isopropyltoluene	3.2	5
n-propylbenzene	2.7	5
tert-butylbenzene	2.4	5
1,2,4-trimethylbenzene	3.0	5
sec-butylbenzene	4.3	5

PPB = Parts per billion.

(1) = Groundwater standards/guidance values; October, 1993 NYSDEC
TOGS 1.1.1.

Table I

**Summary of Petroleum Hydrocarbons in Soil Samples
424-500 Norton Street (Southeast Parking Lot)
Rochester, New York**

DETECTED COMPOUND	TPA	TPC	TPE
Light weight PHC as Gasoline (1)	38,935	16,373	ND
Heavy Weight PHC as Lube Oil (1)	115,494	51,878	56,921

(1) = NYSDEC and NYSDOH do not have specific guidelines for Total Petroleum Hydrocarbons. All concentrations are in parts per billion (ppb).

Table II

DETECTED CONSTITUENTS IN SOIL/FILL SAMPLES
 EASTERN PROPERTY LINE AND SOUTHEASTERN PARKING LOT
 500 NORTON STREET
 ROCHESTER, NY

PARAMETER	ANALYTICAL METHOD	TPD2 (2'-3')	TPM (7'-7.9')*
Aluminum	EPA 6010A	878 mg/kg	3,310 mg/kg
Potassium	EPA 6010A	426 mg/kg	1,300 mg/kg
Sodium	EPA 6010A	ND	ND
Ammonia-N	EPA 350.3	20.4 mg/kg	ND
pH	EPA 9045	8.07 SU	8.35 SU

* =Represents background sample at the Site.

SU =Standard Units

Table III

HISTORICAL
GROUNDWATER TEST RESULTS
VOLATILE ORGANIC COMPOUNDS

424-500 NORTON STREET
ROCHESTER, NEW YORK

Constituent	NYSDEC Groundwater Standard or Guidance Value (1)	Well Location (Date Sampled)												
		MW-03 (12/13/94)	MW-03 (6/15/94)	MW-03 (1/25/96)	MW-03 (4/26/96)	MW-03 (8/3/98)	MW-04 (12/13/94)	MW-04 (6/15/95)	MW-04 (1/25/96)	MW-04 (4/26/96)	MW-04 (8/3/98)	MW-06 (8/3/98)	MW-07 (8/3/98)	MW-08 (8/3/98)
Methyl-tert-butyl-ether	NL	8.6	ND	7.1	3.6	6.5	ND	ND	NA	NA	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	1.9	1.8	ND	40	89	NA	NA	5.0	8.9	ND	ND
Isopropylbenzene	5	ND	ND	1.1	2.8	ND	6.4	47	ND	ND	35	ND	ND	ND
Naphthalene	10	38	ND	ND	ND	ND	22	160	71	65	25	7.3 (9.9*)	ND	ND
n-Propylbenzene	5	ND	ND	1.0	1.5	ND	15	140	81	110	89	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	1.4	4.9	ND	60	500	260	470	110	18	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	39	190	34	69	8.4	20	ND	ND
o+m-p-Xylene	5	ND	ND	ND	ND	ND	55	140	140	350	ND	25	ND	ND
2-butanone (MEK)	50	12	ND	ND	ND	ND	13	50	NA	NA	ND	ND	ND	ND
Benzene	0.7	ND	ND	8.9	8.9	ND	7.2	36	17	19	17	34	ND	ND
n-butylbenzene	5	ND	ND	9.0	9.7	ND	ND	ND	18	32	ND	ND	ND	ND
Total Volatiles Detected	NL	58.6	--	30.4	33.2	6.5	257.6	1352	648	1115	289.4	115.8	--	--

NL = Not Listed.

ND = Not Detected above laboratory detection limits.

(1) TOGs 1.1.1 Ambient Water Quality Standards and Guidance Values, 1993.

* = denotes concentration detected through semi-volatile analysis.

All concentrations are in parts per billion (ppb).

Total Petroleum Hydrocarbons were detected in MW-3 (8/3/98) and MW-4 (8/3/98) at concentrations of 1200 ppb and 1800 ppb, respectively.

NA = Not applicable.

DETECTED VOCS IN SOILS

500 Norton Street
Rochester, New York

(all results in ug/kg or ppb)

Constituent	Soil Sample 500-01 & 500-02	NYSDEC Soil Guidance Value
xylene (m&p)	37	100
isopropylbenzene	62	100
n-propylbenzene	92	100
1,2,4-trimethylbenzene	660	100
1,3,5-trimethylbenzene	860	100

Legend:

* = *Proposed New York State Petroleum Contaminated-Soil
Guidance, STARS Memo #1, 1992*

DETECTED VOCs IN SAMPLE TB-4
(ug/kg or ppb)

VOC	TB-4	NYSDEC STARS Soil Guidance Value
ethylbenzene	267 (J)	100
m,p-xylene	568	100
n-propylbenzene	379	100
1,3,5-trimethylbenzene	671	100
1,2,4-trimethylbenzene	3,061	100
naphthalene	704	200

Notes: J = Estimated Value

TOTAL PETROLEUM HYDROCARBONS (TPH)
(ug/kg or ppb)

Sample No.	Light-Weight Petroleum Hydrocarbon as Gasoline	Heavy-Weight Petroleum Hydrocarbon as Lube Oil
TB-4	16,052	40,812
TB-6	2,367,848	924,550

DETECTED VOCS IN SOILS

462-500 Norton Street
Rochester, New York

(all results in ug/kg or ppb)

Constituent	SS-007	SS-008	NYSDEC Soil Guidance Value
ethylbenzene	1,600	1,900	100
xylene (m&p)	4,900	2,800	100
xylene (o)	ND	3,400	100
isopropylbenzene	470(J)	8,800	100
n-propylbenzene	2,500	12,000	100
p-isopropyltoluene	640(J)	1,700	100
1,2,4-trimethylbenzene	20,000	28,000	100
1,3,5-trimethylbenzene	6,800	30,000	100
sec-butylbenzene	300(J)	730(J)	100

Legend:

- ND = Not Detected
- J = Estimated
- * = *Proposed New York State Petroleum Contaminated-Soil Guidance, STARS Memo #1, 1992*

**DETECTED VOLATILE ORGANIC COMPOUNDS
ON SOIL SAMPLES**

**424-426 NORTON STREET
ROCHESTER, NEW YORK**

PARTS PER BILLION (PPB)

DETECTED COMPOUNDS	SOIL SAMPLE AND LOCATION			NYSDEC RECOMMENDED CLEANUP OBJECTIVE (1)	NYSDEC TCLP ALTERNATIVE GUIDANCE VALUE (2)
	1524-01 BH-02(4-8')	1524-02 BH-06(6-7.8')	1524-03 BH-07(4-6')		
acetone	ND	44.9	73.2	200	NA
isopropylbenzene	19.8	56.5	40.1	NA	100
n-propylbenzene	36.6	130.8	106.8	NA	100
1,3,5-trimethylbenzene	ND	9.7	11.3	NA	100
tert-butylbenzene	ND	48.9	165.3	NA	100
1,2,4-trimethylbenzene	473.2	159.7	1,277 E	NA	100
sec-butylbenzene	219.9	113.5	249.9	NA	100
p-isopropyltoluene	16.4	13.9	15.3	NA	100
n-butylbenzene	138.2	74.3	ND	NA	100
naphthalene	ND	18.9	ND	13,000	200

ND = Not detected above laboratory detection limits.

NA = Not available.

PPB = Parts per billion.

E = Estimated concentration.

(1) = Recommended Soil Cleanup Objective; January 24, 1994 NYSDEC TAGM #4046.

(2) = TCLP Alternative Guidance Value; August, 1992 NYSDEC STARS Memo #1.

DETECTED BASE NEUTRAL SEMI-VOCs IN SOILS

462-500 Norton Street
Rochester, New York

(all results in ug/kg or ppb)

Constituent	SS-006	*NYSDEC Soil Guidance Value
benzo(a)anthracene	260(J)	0.04
benzo(k)fluoranthene	240(J)	0.04
benzo(b)fluoranthene	320(J)	0.04
benzo(a)pyrene	280(J)	0.04
chrysene	300(J)	0.04
indeno(1,2,3-cd)pyrene	180(J)	0.04
phenanthrene	310(J)	1,000
pyrene	480	1,000
fluoranthene	330(J)	1,000
benzo (g,h,i) perylene	220(J)	0.04

Legend:

J = Estimated
* = Proposed New York State Petroleum Contaminated-Soil Guidance, STARS Memo #1, 1992

DETECTED TAL METALS IN SOILS

462-500 Norton Street
Rochester, New York

(all results in ug/g or ppm)

Constituent	*SS-006	*SS-008/009 (Composite)	**NYSDEC Soil Guidance Value or Cleanup Objective	**Eastern USA Background
aluminum	5,610	7,400	SB	33,000
arsenic	4.3	8.77	7.5 or SB	3-12
barium	55.4	98.7	300 or SB	15-600
calcium	4,490	17,200	SB	130-35,000
chromium	9.61	13.7	10 or SB	1.5-40
cobalt	5.59	6.11	30 or SB	2.5-60
copper	45.6	16	25 or SB	1-50
iron	11,100	20,600	2,000 or SB	2,000-550,000
lead	280	89.6	30 or SB	4-61
magnesium	2,640	4,150	SB	100-5,000
manganese	135	139	SB	5-5,000
mercury	0.416	ND	0.1	0.001-0.2
nickel	11	15.7	13 or SB	0.5-25
potassium	582	527	SB	8,500-43,000
selenium	0.866	1.83	2 or SB	0.1-3.9
sodium	124	523	SB	6,000-8,000
vanadium	10.9	19.1	150 or SB	1-300
zinc	120	91.1	20 or SB	9-50

ir/br
200-500 ppm
check these

Legend: SB = Site Background
 ND = Not Detected
 * = See GTC Laboratory Report for QA/QC Discussion
 ** = Determination of Soil Cleanup Objectives and Cleanup Levels, 1992

DETECTED TCLP METALS IN SOILS

462-500 Norton Street
Rochester, New York

(all results in mg/l or ppm)

Constituent	SS-008/009 (Composite)	*USEPA Regulatory Level
lead	0.305	5.0

Legend:

* = Federal Register, Part 261, Vol. 55, No. 126

DETECTED VOCs IN GROUNDWATER

462-500 NORTON STREET
ROCHESTER, NEW YORK

(all results in ug/l or ppb)

Constituent	MW-1		MW-2		MW-3		MW-4		MW-5		*NYSDEC Groundwater Standard or Guidance Value
	12/12/94	6/15/95	12/12/94	6/15/95	12/12/94	6/15/94	12/12/94	6/15/95	12/12/94	6/15/95	
	1,1,1-trichloroethane	6.4	ND	16	12	ND	ND	ND	ND	ND	
2-butanone (MEK)	ND	ND	ND	ND	12	ND	13	50	ND	ND	50
methyl-tert-butyl ether	ND	ND	ND	ND	8.6	ND	ND	ND	ND	ND	NL
naphthalene	ND	ND	ND	ND	38	ND	22	160	ND	ND	10
benzene	ND	ND	ND	ND	ND	ND	7.2	36	ND	ND	0.7
ethylbenzene	ND	ND	ND	ND	ND	ND	40	89	ND	ND	5
total xylene (o+m+p)	ND	ND	ND	ND	ND	ND	55	140	ND	ND	5
isopropylbenzene	ND	ND	ND	ND	ND	ND	6.4	47	ND	ND	5
n-propylbenzene	ND	ND	ND	ND	ND	ND	15	140	ND	ND	5
1,3,5-trimethylbenzene	ND	ND	ND	ND	ND	ND	39	190	ND	ND	5
1,2,4-trimethylbenzene	ND	ND	ND	ND	ND	ND	60	500	ND	ND	5

Legend:

- ND = Not detected above detection limit
- NL = Not listed
- * = TOGs 1.1.1 Ambient Water Quality Standards and Guidance Values, 1993

DETECTED TAL METALS IN GROUNDWATER

462-500 Norton Street
Rochester, New York

(all results in ug/l or ppb)

Constituent	MW-1	MW-2	MW-3	MW-4	MW-5	*NYSDEC Groundwater Standard or Guidance Value
aluminum	2,350	4,950	7,080	3,310	581	100
iron	2,480	6,520	10,700	5,710	983	300
magnesium	ND	42,900	175,000	97,700	54,000	35,000
manganese	ND	ND	1,400	ND	311	300
sodium	134,000	52,000	120,000	588,000	177,000	20,000

Legend:

ND = Not detected above detection limit
* = TOGs 1.1.1 Ambient Water Quality Standards and Guidance Values, 1993

DETECTED VOLATILE ORGANIC COMPOUNDS
ON WATER SAMPLE 1524-04

424-426 NORTON STREET
ROCHESTER, NEW YORK

PARTS PER BILLION (PPB)

DETECTED COMPOUNDS	1524-04 AT BH-06 (water)	NYSDEC STANDARD (1)
isopropyltoluene	3.2	5
n-propylbenzene	2.7	5
tert-butylbenzene	2.4	5
1,2,4-trimethylbenzene	3.0	5
sec-butylbenzene	4.3	5

PPB = Parts per billion.

(1) = Groundwater standards/guidance values; October, 1993 NYSDEC
TOGS 1.1.1.