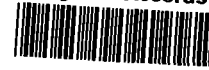


Final Report

EPA Region 5 Records Ctr.



239268

Summary of Removal Actions at Milwaukee Solvay Coke and Gas Co. Site

Volume 1

Report, Tables, and Appendices A thru E

Prepared for

**Water Street Holdings, LLC
311 E. Greenfield Avenue
Milwaukee, WI 53207**

Prepared by:

**Earth Tech, Inc.
1020 N. Broadway, Suite 400
Milwaukee, WI 53202**

March 2005

TABLE OF CONTENTS

	<u>Page</u>
1. INTRODUCTION.....	1-1
1.1 Site Description.....	1-1
1.2 Building and Above Ground Storage Tank Components on the Site.....	1-1
2. THE ADMINISTRATIVE ORDER OF CONSENT	2-1
2.1 Scope	2-1
2.2 Site Concerns	2-1
3. REQUIREMENTS OF THE ADMINISTRATIVE ORDER.....	3-1
3.1 Administrative Requirements to Undertake the Work.....	3-1
3.2 Summary of Work Performed	3-2
3.3 Demonstration of Compliance with the Administrative Order	3-2
4. WORK PLAN IMPLEMENTATION	4-1
4.1 Introduction	4-1
4.2 Initial Work Efforts	4-1
4.3 Site Security, Clean Sweep, and Waste Consolidation Efforts	4-2
4.4 Scrap Metal Salvage and Related Procedures.....	4-2
4.5 Asbestos Abatement Efforts	4-3
4.6 Process System Management	4-3
4.7 Demolition Implementation.....	4-4
5. SUMMARY OF WASTE MANAGEMENT.....	5-1
5.1 Types of Waste Managed at the Site	5-1
5.2 Solids Management	5-2
5.3 Liquids Management.....	5-3
5.4 Waste Quantities	5-3
5.5 Waste Management Documentation	5-3
6. PROJECT COST SUMMARY	6-1
7. SITE CLOSURE.....	7-1
8. CERTIFICATION.....	8-1

LIST OF TABLES

Table

- 1 Summary of Buildings
- 2 Summary of Above Ground Storage Tanks

LIST OF APPENDICES

Appendix

- A Great Lakes Analytical Quality Assurance Program
- B Asbestos Testing Laboratory Certification
- C Spill Events
 - C-1: Spill Event of September 16, 2003
 - C-2: Spill Event of September 17, 2003
 - C-3: Spill Event of November 19, 2003
 - C-4: Spill Event of April 21, 2004
- D Asbestos Building Inspection Reports
 - D-1: Asbestos Building Inspection Report
 - D-2: Supplemental Asbestos Building Inspection Report
- E Waste Management – Waste Characterization and Profile Information
- F Other Waste Disposal Documentation
 - F-1: Onyx Environmental Services
 - F-2: Tires and Belts
 - F-3: Advanced Waste Services
- G Analytical Data
 - G-1: Analytical Data Tank Content Testing
 - G-2: Analytical Test Data Relating to Liquid Discharges to Milwaukee Metropolitan Sewerage District
 - G-3: Asbestos Test Results Clearance Testing
 - G-4: Asbestos Test Results Prior to Clearance
 - G-5: Concealed Asbestos Response Action
- H MMSD Documentation
 - H-1: Notice of Intent to Discharge to MMSD System
 - H-2: Letter to MMSD Allowing the Discharge to Their System
- I Waste Manifests from Waste Management, Inc.
 - I-1: Asbestos Waste Manifests – Waste Management, Inc.
 - I-2: Coal Tar Manifests – Waste Management, Inc.
 - I-3: Other Non-Hazardous Waste Manifests – Waste Management, Inc.

1

Section 1

1. INTRODUCTION

On or about February 14, 2003, an Administrative Order of Consent was executed between Water Street Holdings, LLC, Cliffs Mining Company and Wrecking LLP and the United States Environmental Protection Agency. The Order provides for certain removal actions to be undertaken at the site on a voluntary basis in accordance with its terms.

The Order and the terms of the removal actions are required based on the Comprehensive Environmental Response Compensation and Liability Act of 1980. The Order addresses concerns from above ground facilities at the site. It is based on a Site Assessment Report and work done for US EPA on the site by Tetra Tech EM, Inc. Superfund Technical Assessment Response Team. This report was dated May 2002.

Further information about the Order and its requirements can be obtained by reviewing the document. The pertinent requirements of the Order are summarized in this report along with the way these requirements have been satisfied through implementation of the removal actions.

1.1 Site Description

The site is clearly described in the Administrative Order of Consent. In summary, the site is located at 311 E. Greenfield Avenue in Milwaukee, Wisconsin. The site covers approximately 46 acres. Its largest dimension is north to south with varying widths. It is bounded to the north by E. Greenfield Avenue, to the northeast by railroad tracks, to the east by the Kinnickinnic River, and to the west by railroad tracks.

At the time the Administrative Order was executed, the site was occupied by a former manufactured gas plant and coke production facility. The industrial buildings which comprised this facility occupied an area about ten acres in size on the northwest portion of the site. The northeast and east central side of the property was formerly used for coal storage although at the time the Order was executed, the east portion of the site was a flat vacant tract that contained some large piles of concrete rubble and debris.

The southern portion of the site was vacant but was covered with a number of piles of crushed asphalt, bricks, and debris.

1.2 Building and Above Ground Storage Tank Components on the Site

The site contained a number of structures that comprised the former Milwaukee Solvay Coke and Gas Co. facility. A table that presents the nomenclature used for describing these buildings is presented in Table 1 of Volume 1.

The site also contained numerous Above Ground Storage Tanks (AST's). A table that presents these tanks, their contents as described by the US EPA, approximate tank capacity, and the approximate date of disposition, is presented in Table 2 of Volume 1.

/

Section 2

2. THE ADMINISTRATIVE ORDER OF CONSENT

2.1 Scope

The Administrative Order requires that removal actions be undertaken at the site of the former Milwaukee Solvay Coke and Gas Property located at 311 E. Greenfield Avenue in Milwaukee, Wisconsin. The work required by the order is to “conduct removal actions to abate an imminent and substantial endangerment to the public health, welfare, or the environment that may be presented by the actual or threatened release of hazardous substances at or from the site.”

The work pertains to above ground facilities and management of the remains of what was the former manufactured gas plant and coke manufacturing facility. The scope of work required by the order does not include below ground or offsite concerns.

2.2 Site Concerns

The Administrative Order was in part based on information disclosed in a report prepared by Tetra Tech EM, Inc. Superfund Technical Assessment and Response Team and dated May 2002. This report cited concerns with respect to a number of hazards including:

- **Asbestos Containing Materials (ACM)** – Asbestos was found to be present in many of the structures on the site and was used in many ways. The presence and condition of the asbestos caused concern since much of it was exposed. Loose pieces of asbestos were reportedly also present on the ground surface in areas of the site.
- **Process Wastes Particularly Coal Tar** – The facility formerly functioned as a manufactured gas plant and converted coal into coke. The byproducts were manufactured gas and associated residues and coal tar. The process systems on the site included piping, storage tanks of a large variety of sizes, scrubbers, and similar systems including gasholders. Many of these systems and components contained coal tar residue, some in significant quantities.
- **Process System Components – Tanks and Piping** – The facility had numerous above ground storage tanks (AST's), many of which were in a state of disrepair. Concerns were expressed over the potential for these tanks to leak over a long period of time.
- **Dilapidated Building Conditions** – Many of the structures on the site were noted to be in poor structural condition. Because of the presence of process piping, equipment, and ACM materials, careful demolition of structures was a concern.

These are the principal concerns presented in the Administrative Order, which have been addressed in the removal actions at the site.

/

Section 3

3. REQUIREMENTS OF THE ADMINISTRATIVE ORDER

3.1 Administrative Requirements to Undertake the Work

The Order provided for certain administrative requirements as first steps in compliance. These included naming a Project Contractor, a Project Coordinator, and agency notification of contractors and subcontractors that are principal parties to the project.

The project contractor was designated as Eli Environmental Contractors, Inc. and approved by US EPA on March 12, 2003. Subsequently, during the course of ordinary business, Eli Environmental Contractors was reorganized and renamed to Lake States Industrial Services, Inc. Lake States received approval as project contractor by US EPA on September 2, 2003.

The project coordinator position was designated as Earth Tech, Inc. Approval of the project coordinator position was approved by US EPA on March 12, 2003.

Notification of other Contractors was made periodically to notify the agency of those entities that were proposed for various activities as indicated in the Order. These represent principal contractors and subcontractors for the project. A summary of these approvals is presented below:

- On June 25, 2003, US EPA approved the following Individuals to be subcontractors on the project:
 - ❖ Environmental Associates, Inc. – Mr. Robert Guse
 - ❖ Eagle Disposal, Inc.
 - ❖ Waste Management of Wisconsin
 - ❖ Auburndale Recycling Center
- On August 19, 2003, US EPA approved the designation of Complete Decon, Inc. (CDI) as asbestos abatement contractor for the project.
- On September 2, 2003, US EPA approved submittals for AMI Environmental of Omaha, Nebraska and Clean Harbors Environmental Services, Inc.
- On January 14, 2004, US EPA granted approval of Lake States Industrial Services, Inc. as a new asbestos abatement contractor.
- On February 26, 2004, US EPA approved of Demtech, Inc. to conduct specialty demolition services related to the use of explosives.
- On June 18, 2004, US EPA approved of Chemworks as a facility to manage tar and residue from the frac tank that was used at the site.

3.2 Summary of Work Performed

The Administrative Order describes the work to be performed to satisfy the terms of the Order. The work is summarized below:

- Develop and implement a site specific work plan to implement the removal actions including a proposed timeline.
- Develop and implement a site specific health and safety plan.
- Establish and maintain adequate site security measures.
- Arrange and effect removal of all ACM on exterior and interior structures, and loose ACM on the ground surface.
- Arrange and effect removal of all materials from AST's and associated piping above the ground surface.
- Decontaminate, demolish, and remove AST's and associated piping and other above ground structures which have been contaminated by hazardous substances.
- Excavate and remove residue on the ground surface associated with visibly apparent releases or spills from AST's or piping as defined in the work plan. Surface soils which become contaminated by spills from AST's or piping during removal activities and the contaminated soils in the former AST open pit area as defined in the work plan.
- Excavate and remove waste from the former AST open pit area as defined in the work plan to prevent direct contact and migration of hazardous substances.
- Remove all other hazardous substances inside the buildings or AST's such as residual products in tanks and/or containers and laboratory chemicals.
- Bulk, containerize, and consolidate hazardous and non-hazardous waste as necessary in preparation for disposal at a US EPA approved disposal facility.
- Prepare and submit a summary report of the removal actions.

3.3 Demonstration of Compliance with the Administrative Order

The Administrative Order of Consent contains a number of specific items of work that were outlined in the Order. These items are addressed individually in an effort to demonstrate compliance with these aspects of the Order.

A. Development of a Work Plan

The Order required the development of a work plan for the project. The project contained a series of different work elements that presented a complexity to the project with respect to sequencing of operations in order to fulfill this requirement. Consequently, after some consultation and discussion with US EPA, it

was agreed that the respondents would submit work plan elements on an incremental basis as sequencing and logistical details were established.

The work plan had the following component parts:

- **Chapter 1 – Site Security, Clean Sweep, and Waste Consolidation Work Plan**

This addressed initial phases of work to establish site security. The procedures to be implemented as part of clean sweep operations to accumulate ACM materials across the site, particularly in the industrial building area, were also established. This plan also addressed procedures for waste consolidation that were implemented throughout the project.

This final version of this plan was reviewed and approved by US EPA on April 2, 2003.

- **Chapter 2 – Scrap Metal Salvage and Related Procedures**

A conditional approval of Scrap Metal Salvage Operations was requested. The conditional approval included procedures for designation of roadways to be used for hauling in and around the industrial building areas of the site. It also addressed Best Management Practices and Controls to eliminate or minimize fugitive dust from roadways and work areas.

US EPA granted this conditional approval on May 21, 2003.

- **Chapter 3 – Removal of Bricks for Reclamation**

A request was made to recycle individual bricks at the site. The plan addressed wetting the piles to minimize dust and related emissions. Provisions for supervision were also addressed.

US EPA approved of this procedure on August 26, 2003 in an e-mail response to the request.

- **Chapter 4 – Asbestos Abatement Work Plan**

A significant work effort was undertaken to gather the information required to prepare this work plan element. The initial work done in advance of work plan approval included an assessment of asbestos at the facility that was summarized in two documents:

- ❖ Limited Phase II Asbestos Building Inspection – Submitted by Eli Environmental Contractors, Inc. dated May 21, 2003.
- ❖ Supplemental Asbestos Investigation Summary – Submitted by Environmental Associates, Inc. dated June 17, 2003

Based on these documents, a general assessment of building components and considerations for sequencing and other logistics, several drafts of the Asbestos Abatement Work Plan were prepared based on review and comments.

In an effort to move forward with certain elements of the abatement program, a request was made of US EPA, on August 8, 2003, to approve a limited scope of asbestos abatement of

ACM containing materials, including galbestos panels and non-friable tarpaper pipe wrap along the upper part of the coke ovens. It also addressed the removal of pipe wrap near Tank 23 and the pipe rack west of Building No. 16. This request also addressed the consolidation, management, and disposal of certain transite panels located on the ground surface in orderly stacks. The Conditional Approval of this request was issued on August 15, 2003.

Further revisions and supplements to the final work plan were prepared and submitted to the Agency and US EPA granted approval of the full Asbestos Abatement Work Plan on August 27, 2003.

- **Chapter 5 – Process Waste Systems Removal**

A separate chapter of the work plan dealt with Process Systems Removal and Tank Management. This element of the work plan dealt with the remnants of process piping and the numerous tanks that were present at the site. It also addressed liquids management and handling coal tar present in various quantities at the site. The processes for cleaning tanks and process piping in advance of scrapping were also described.

US EPA granted the approval of this element of the work plan on November 25, 2003.

- **Chapter 6 – Building and Structure Demolition Work Plan**

A separate chapter dealt with the general procedures for Building and Structure Demolition. This dealt with procedures for demolition and management of construction and demolition debris from the site.

US EPA granted the approval of this element of the work plan on November 25, 2003.

These six chapters comprise the work plan submittal to the Agency. Subsequent conditions were encountered in several instances where conditions were encountered that prompted changes or modification to the work plan procedures. This led to several administrative approvals of work plan changes or modifications. In some cases, minor changes to procedures were discussed either in the field or over the phone with the US EPA On Scene Coordinator and approval was verbally issued. Formal authorization was obtained for the following changes that were requested:

- **Demolition Work Plan Modification** - A plan modification was made to the demolition Work Plan to provide for alternate means of demolishing Building No. 17 (a large coal hopper). The plan was amended to demolish the structure using explosives. After removal of galbestos panels, the steel frame of the structure would be salvaged. This plan was reviewed and approved by US EPA on February 26, 2004.
- **Asbestos Abatement Work Plan** – Plan modification approval was granted by US EPA on March 31, 2004. This approval letter discusses the specifics of asbestos abatement procedures in Building No. 11, particularly as it relates to issues on the second floor of the building. Shawn T. Christon submitted the request for approval to US EPA and WDNR in an electronic letter format.
- **Asbestos Abatement Work Plan** – Plan modification approval by US EPA dated April 14, 2004. This approval was granted per the letter request to the Wisconsin Department of Natural Resources, dated

April 14, 2004. This plan modification dealt with management and procedures related to the coke oven doors.

- **Asbestos Abatement Work Plan** – A work plan modification was approved on April 28, 2004. This approval pertains to the coke oven and the abatement procedures. The approval was in the form of e-mail from Mr. Brad Benning of US EPA.
- **Asbestos Abatement Work Plan** - A Plan Modification for Procedures relating to Building No. 9 and the Coke Ovens. The modifications were approved on April 28, 2004 through e-mail from Mr. Brad Benning of US EPA.
- **Process Waste Systems Removal** - On June 18, 2004, a Work Plan Modification was approved via e-mail correspondence to address a change in the manner of managing free liquids and coal tar from Tank No. 14.

B. Health and Safety Plan

A Site Specific Health and Safety Plan was developed for the project as one of the initial aspects of the project. The Site Specific Health and Safety Plan was submitted to US EPA on March 24, 2003. The Site Specific Health and Safety Plan was approved by US EPA in a letter dated April 2, 2003.

C. Quality Assurance and Sampling

Great Lakes Analytical, Inc. of Oak Creek, Wisconsin performed analytical services for the project. The testing that was performed by them included analytical laboratory testing for characterization and acceptance of waste for disposal purposes. All samples were submitted to the laboratories under chain of custody procedures. Appendix A contains the Quality Assurance procedures employed as part of their standard operating procedures.

Bulk asbestos testing was also conducted for purposes of assessment and confirmation and clearance testing. This was done by Micro-Analytical Laboratories of Wauwatosa, Wisconsin and by Environmental Hazard Services, LLC of Richmond, Virginia. The NVLAP laboratory program certifies both laboratories are presented in Appendix B.

D. Post-Removal Site Control

The Administrative Order requires that post-removal site control measures be proposed. This proposal must be consistent with the requirements outlined in 40 CFR section 300.415 (I) and OSWER Directive No. 9360.2-02.

The following proposal is submitted for post- removal site control:

- The owner proposes to maintain security fencing on site. When the site is manned, the gate will be controlled manually. Admittance through the gate will be restricted to those with appropriate reason to be on site. When the site is not manned, the gate will be locked.

E. Monthly Progress Reports

The Administrative Order requires that regular written reports be provided to US EPA as the work progresses. These reports have been provided to US EPA.

F. Final Report

The Administrative Order requires that a final report of removal actions be prepared to summarize the actions taken in response to this Order. The Order also requires that the report be prepared in accordance with the requirements set forth in 40 CFR Section 300.165. The Order also requires that a good faith estimate of total costs incurred in complying with the order be presented. The details of this estimate of total project cost are presented in Section 6 of this report.

The Order also requires that a listing of quantities of types of materials removed off-site or handled on-site, a discussion of removal options considered for those materials, a listing of the ultimate destination of those materials, a presentation of the analytical results of all sampling and analysis performed, and accompanying appendices containing all relevant documentation generated during the removal action. This discussion is presented in Section 5 of this report.

A certification page is included in Section 8 of this report.

G. Record Retention, Documentation, Availability of Information

The Administrative Order requires that the respondents shall preserve all documents and information in their possession relating to work performed under this order for six years following completion of the removal actions required by this order. At the end of the sixth year and at least 60 days before any document or information is destroyed, respondents have agreed to provide notification to US EPA that such documents are available to them for their inspection.

H. Off-Site Shipments

The Order provides that material removed from the site for disposal is sent to a facility in compliance with the US EPA off-site rule, 40 CFR Section 300.440. During the course of the project the vast majority of waste was sent to the Waste Management Metro Recycling and Disposal Facility in Franklin, Wisconsin.

Waste Management of Wisconsin received a letter from Mr. Joseph M. Boyle of US EPA, dated June 17, 2003, acknowledging that the agency has determined that the Metro Recycling and Disposal Facility is acceptable to receive non-hazardous wastes from the facility.

I. Compliance with Other Laws

The Administrative Order contains a section that requires the respondents to comply with all applicable local, state, and federal laws during the course of the removal actions. The work undertaken to complete the removal actions complied with this section of the Order to the best of the knowledge of the respondents and the contractors and the project coordinator.

J. Emergency Response and Notification of Releases

The Administrative Order requires that if any release of hazardous substances occurs, there must be notification as required in accordance with the Order.

During the course of the work, several releases occurred. Copies of the documents relating to these releases are presented in Appendix C of Volume No.1. A summary of these releases is outlined below:

- On September 16, 2003, a release of liquid coal tar occurred, in the area south of the Byproducts Building (Bldg No. 23). The amount of coal tar released was estimated to be less than ten gallons. The accidental release occurred during removal of asbestos wrap from a 1-1/2 inch steel pipe extending from the bottom of decanter tanks. The pipe was removed and an expandable pipe plug was inserted and the leakage stopped.

Response to this incident consisted of removing the released coal tar that had accumulated at the ground surface. The material was collected and properly managed.

The US EPA on scene coordinator was promptly notified of the release. Ms. Amy Walden with the WDNR was notified the following day, as was Mr. Scott Ferguson of the WDNR. Mr. Ferguson visited the site on September 17, 2003. The WDNR assigned an incident number SER0917-2003_02 to this particular release.

- On September 17, 2003, a historical release of possible naphthalene or similar substance was observed during the course of work at the facility. The release appeared to be located near a pipeline west of Building No. 16. The release was estimated to be less than 100 pounds and was found beneath a pile of debris. The release reportedly occurred prior to the removal actions since it was observed beneath a pile of debris that had not been moved during the removal actions until that time.

The response action in this case included the removal of the surficial expression of the historical release.

US EPA and WDNR authorities were notified of the historical release that same day by telephone. Mr. Scott Ferguson of the WDNR visited the site that same day to observe the situation. This spill was assigned an incident number SER0917-2003_03.

- During the course of removal actions, work was being undertaken near Tank No. 13 on November 19, 2003. This tank was a large gasholder in poor structural condition. It contained a large amount of rainwater and snowmelt that had accumulated over time. The tank roof was being removed in an effort to enable tank-cleaning efforts when a vertical standpipe within the tank interior cracked and broke. This caused the free liquid contents of the tank to be released through a partially opened valve in a shallow pit adjacent to the tank. An estimated 73,500 gallons of free liquid from inside the tank was released within a very short period of time. The liquids were observed to pond on a wide area of ground surface and seeped into the ground surface within a short period of time. No free water was observed to have entered any storm drains at the site.

The response to this incident included further draw down of free liquids from the gasholder. Most of the released water that had accumulated in the tank had seeped into the ground around the tank.

This release was promptly reported to US EPA and WDNR authorities. Mr. Scott Ferguson of the WDNR assigned the release an incident number SER1119-2003_02.

- During routine demolition activities near Electrical Substation No. 2, south of Building No.9, three electrical transformers were disturbed and a release of approximately 100 gallons of transformer oil occurred on April 21, 2004. A sample of the transformer oil was obtained and submitted for analytical testing for PCB's shortly after the incident. The results of the tests indicated the transformer oil that was released did not contain PCB's. These same transformers were earlier tested by US EPA during the site assessment activities and the results of the analysis at that time is consistent with the date from the testing taken very shortly after the release.

This release was promptly reported to US EPA and WDNR authorities. The report resulted in WDNR issuing an incident response number SER0421-2004_02.

Corrective action was immediately performed after the release. It was estimated that two cubic yards of impacted soil was removed and placed into a roll off container until the results of the analytical testing was received. This material was later managed appropriately.



Section 4

4. WORK PLAN IMPLEMENTATION

4.1 Introduction

The section of the report summarizes the actions undertaken by the respondents. More details surrounding the activities performed has been presented in regular monthly progress reports already submitted to the agency. There were regular periodic site visits by agency officials from US EPA and WDNR to review the progress of the removal actions. Daily field reports were also prepared as part of the documentation process and are available to US EPA for review upon request. Lastly, a detailed photographic documentation of site activities was performed. This photo documentation is presented along with this Final Report as Volume 3 of the Final Report. It contains well over 1,200 photographs of the site and encompasses a photo history of the removal actions at the site. All of this documentation together provides the US EPA with the required elements of reporting necessary for it to issue a Notice of Completion as described under the Administrative Order.

Lastly, we believe that the documentation presented in this Final Report demonstrates that the work was properly performed under the terms of the Order and the approved project Work Plan, and therefore, the work was consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

4.2 Initial Work Efforts

The initial work efforts began in February 2003. The contractors began to familiarize themselves with the site, the structures, and the scope of work to be accomplished. The initial administrative requirements of the Order were accomplished. These included:

- Designation of Project Coordinator
- Designation of Project Contractor
- Initial Efforts at Development of a Site Specific Work Plan
- Development and Implementation of a Site Specific Health and Safety Plan

There was a significant amount of time spent assessing the logistics of undertaking the required work. The condition of the site is worth noting. The facility had not been used as a manufactured gas plant since approximately December 1982. From then until about the time the Administrative Order was executed, Wrecking, LLP apparently occupied the site. In this interval, there was some removal of salvageable items such as piping, wiring, and the large coal handling equipment that formerly occupied the east side of the site. In at least a few instances, several former structures appear to have been demolished with debris left in place. There also was a large amount of "miscellaneous debris" present in many areas of the site. This debris consisted of crushed concrete piles, crushed piles of brick, piles of crushed asphalt, piles of coal fines, and miscellaneous materials and aged equipment.

The planning of removal actions was further confounded by the extent of overgrowth and vegetation throughout the site, especially in the area of the former industrial buildings. The growth of trees and brush over the years required extensive removal of vegetation on a periodic basis in order to access and view parts of the site. The removal of overgrowth was undertaken on a regular basis.

Many of the structures on the site were in poor condition. Most were difficult to observe without precautionary measures on the inside because they were dimly lit even during midday light. The logistics of dismantlement and removal was constantly changing as the structural conditions were assessed.

With time, work elements were defined to enable accomplishment of certain activities while others were still under planning. This approach was explained to US EPA along with the reasoning, and the agency agreed that the work plan could be submitted on a chapter basis to enable some work efforts to begin while others were being developed. The Agency also allowed conditional approval of certain work elements where discrete activities were defined.

Details concerning timelines and specific activities related to removal actions are documented either in the Daily Field Reports, the Monthly Progress Reports or the Photographic Documentation. All work performed under the removal actions complied with the terms of the approved work plan.

4.3 Site Security, Clean Sweep, and Waste Consolidation Efforts

A request was granted for conditional approval to conduct certain elements of the work efforts related to establishing site security, clean sweep, and waste consolidation efforts. Prior to this a survey of the boundary of the site was conducted to better understand the property lines. A grid system was also laid out to assist in orientation to various areas of the site.

The approved site security measures included the removal of steel containers that comprised the west property line of the site. The containers were ultimately scrapped and a chain link fence was constructed in its place. A second fence line was constructed around the 10-acre area, which comprises the industrial building area. This was done to isolate access to the most physically dangerous area of the property.

The remaining elements of the approval consisted of a procedure used for clean sweep of the site. The process was used initially across the areas outside the industrial building areas to identify and remove hazardous materials lying loosely on the ground surface. The clean sweep was used to pick up pieces of Asbestos Containing Material (ACM) located across the entire site. Laborers traversed areas, within a grid of the site in an organized fashion so that the entire ground surface was checked. Once a grid was completed, it was documented and the process continued in a different grid. The collected material that was mostly pieces of ACM, was double bagged, sealed, and consolidated. The area of waste consolidation was either the interior of Building No.4 or a roll off box designated for ACM materials.

The waste consolidation process also included the collection of loose waste found throughout the site during the course of initial work efforts.

While accessing subsequent areas of the site for access with equipment, to accomplish other removal actions, it was clear that some debris, rubble, and leveling of the ground surface was necessary. This required removal of some debris and re-leveling of debris or coal or coke materials. The clean sweep process was employed prior to and after the re-leveling.

4.4 Scrap Metal Salvage and Related Procedures

A request was granted to allow for salvage of scrap metal from the site. This enabled the removal of the large number of steel containers that comprised the west property line. It also enabled the removal of certain portions of the steel structures around the coke ovens and related structures.

In this conditional approval, a concern was addressed about the layout of a designated roadway system to be used by vehicles on the site. The roadway system was laid out, marked, and maintained to minimize traffic across the industrial building areas. Prior to using this roadway system, the area was clean swept using the approved procedure. A water truck was used very frequently to reduce the amount of fugitive dust from the traffic area. The conditional approval addressed management procedures for minimizing fugitive dust that were utilized during the entire project.

4.5 Asbestos Abatement Efforts

During May 2003, efforts were made to identify the amount of ACM material in each structure on the site. The results of the assessment are summarized in the following documents:

- Limited Phase II Asbestos Building Inspection – Submitted by Eli Environmental Contractors, Inc. dated May 21, 2003.
- Supplemental Asbestos Investigation Summary – Submitted by Environmental Associates, Inc. dated June 17, 2003

Copies of each of these reports are presented in this report in Appendix D.

From this information, a work plan was prepared by the contractor to undertake the asbestos abatement efforts. The development of the plan was a significant undertaking since it addressed elements of concern throughout the facility. Because ACM materials were present as pipe wrap, insulation, transite building panels, galbestos cladding, roofing materials, and window glazing, the procedures and subsequent means and methods of completing the abatement were interrelated to the demolition and conditions of the structures on the site.

The asbestos abatement was accomplished on a structure-by-structure basis. The work was conducted according to the work plan. In most cases, the buildings were isolated with plastic sheeting to enable the development of negative air pressure within the structure. Abatement efforts were then accomplished within this environment. ACM materials were collected and consolidated for waste disposal. The process of abatement required the near continuous use of wetting within structures to mitigate fiber propagation during removal.

In some cases, buildings were clad with materials that contained ACM. In the case where testing indicated the window glazing contained ACM materials, the windows were removed and managed as an ACM material. In some cases, galbestos or transite panels were used as cladding. These were removed to the extent practicable considering safety and logistical concerns. In a few instances, where a safe environment was not available, portions of the buildings were demolished with exterior cladding in place to be removed later from a physical position near the ground surface. These unusual demolition efforts were accomplished with a structural review of the buildings, obtaining a raze permit for the structures from the City of Milwaukee and the consent of the WDNR.

4.6 Process System Management

A large number of storage tanks were located on the site. The tanks varied considerably in size from large gasholders to relatively small tanks with an estimated capacity of about 250 gallons. A summary of tanks managed as part of these removal actions is presented in Table 2.

The facility also contained a large amount of process piping, some of which had been removed over the years prior to implementing the order. The process piping that remained contained a fair amount of coal tar. Where possible, the coal tar was removed and the process piping was salvaged. Where coal tar could not be removed, the piping was cut into segments with the coal tar left in place. The ends of the segments were then crimped and the segments were managed as coal tar waste for disposal purposes.

To manage tanks for purposes of cleaning, a large concrete pad was constructed. Tanks were placed on the pad for cleaning and once they were cleaned they were scrapped.

Many of the smaller tanks could be removed directly to the cleaning pad. However, the larger tanks contained substantial amounts of free liquids that were removed prior to managing the tank. Where the tanks contained significant amounts of coal tar residue in a soft consistency, coal fines were added to thicken the residue so that it could be removed and properly managed. The coal tar was removed and managed appropriately. The large tanks were then cut up, cleaned, and scrapped.

All the work performed as part of the process system management function was performed in accordance with the approved work plan.

4.7 Demolition Implementation

Demolition activities were conducted in accordance with the work plan. Smaller to intermediate size structures were razed using conventional techniques after abatement had been accomplished. In some cases, more extraordinary methods were used to demolish structures. The coal gallery and Building No. 17 were good examples where safety conditions, heights, and the difficulty of using conventional methods resulted in implementing blasting as a method to remove the structures.

The coal gallery was a long precarious structure that was cleaned of coal dust containing some asbestos fiber. The ends of the gallery were disconnected prior to a planned controlled blast, however, the structure fell on its own in an unanticipated fashion to the ground surface. The structure was then dismantled.

Building No. 17, a coal hopper, was the tallest structure on the site. At the very top was a cupola that was clad with galbestos. Safety considerations did not allow the removal of the cupola. Consequently, the structure was demolished using controlled blasting techniques. Once the fall was accomplished, the galbestos panels were removed and the steel framework was salvaged.

The coke ovens contained a large number of cast iron doors and doorframes. The doors were sealed with a rope like material that contained asbestos. The rope was saturated with a fluid injected into the rope so that they could be removed. The door frames were removed and the coke ovens were demolished. The coke ovens consisted substantially of brick and firebrick. The remains of the ovens were heaped into a pile in their former location where they remain.

Several structures on the site were considered to be in a condition that would allow them to be used in the future and therefore, were not planned for demolition at this time. The plans to leave these buildings in place were discussed with US EPA on June 24, 2004, in a site meeting and it was agreed that demolition of these structures did not fall within the intent of the Order. The structures remaining on site at completion of the Order are as follows:

- Building No. 1 – Main Office Building
- Building No. 2 – Guard House
- Building No. 3 – Engineering Building
- Building No. 4 – Receiving Building
- Building No. 5 – Shop Office, Lunchroom, and Warehouse
- Building No. 6 – Transformer Building
- Building No. 16 – Booster House



5. SUMMARY OF WASTE MANAGEMENT

5.1 Types of Waste Managed at the Site

The concerns at the site were varied with respect to the hazards presented by the former facility. The types of waste generated at the facility consisted of the following:

- **Asbestos Containing Materials (ACM)** – Asbestos was a significant waste material generated from the site. It was present as pipe wrap and insulation, cladding in the form of transite and galbestos panels, in window glazing and roofing materials at the site. In some cases it was co-mingled with demolition debris resulting in significant quantities of waste materials being handled as ACM.
- **Coal Tar** – In many cases the former tanks and process pipelines of the facility contained residues of coal tar in various states. In cases where it may have been exposed to the elements, it was in a somewhat dry state. In other situations, such as at the bottom of gasholders, submerged beneath significant quantities of rainwater, the material exhibited a thick viscous character.
- **Construction and Demolition Debris** – Many but not all of the structures were in a dilapidated condition. Those that were demolished underwent salvage efforts and the remains were managed as construction and demolition debris.
- **Other On-site Materials** – The types of materials found on the site at the beginning of the project were very diverse. Abandoned equipment, large piles of earthen material, manufactured products such as bags of mortar, and rubber belts and tires. Other miscellaneous materials consisted of light ballasts, transformers, containerized waste, and collected materials of a wide variety. The site was covered with a thick growth of brush and small trees. These were cut, chipped, and hauled away to be used as mulch.
- **Liquid Wastes** – Many containers on the site were in poor condition and some had very large quantities of watery liquids (attributed from rain and snowmelt accumulation). In some cases, oils were found on the site in containers such as old electrical transformers.

Waste materials were identified, characterized, and tested for disposal purposes. Early in the project, a letter from Mr. Sam Borries of US EPA, was received at Earth Tech via fax on June 23, 2003. In this letter, US EPA designates the Milwaukee Solvay Coke and Gas Site as a former Manufactured Gas Plant. Pursuant to 40 CFR Section 261.24, Manufactured Gas Plant waste is exempt from the Toxicity Characteristic Leaching Procedure to determine whether the MGP waste exhibits the characteristic of toxicity. Furthermore, MGP remediation waste is not a listed hazardous waste. Therefore, it would only be classified as RCRA hazardous waste if it exhibited any one of the ignitable, reactive, or corrosive hazardous characteristics. Consequently characterization testing and material management was based on this determination.

The Order requires a discussion of the removal options considered for waste generated from the site. Much of the waste generated from the site was hazardous materials comprised of coal tar, ACM in various forms, and miscellaneous hazardous materials. In other cases, construction and demolition debris was also generated. Landfilling was the most economical manner of managing these materials and consequently was selected for the majority of materials generated during the Removal Actions. Certain

salvageable items were also generated including steel, iron, and rubber materials. These materials in most cases were recycled rather than landfilled with corresponding economic benefits in most cases.

5.2 Solids Management

Waste materials were identified in the following categories:

- **Construction and Demolition Debris** – Construction and demolition debris was managed as a special waste and removed to the Waste Management, Inc. Metro Landfill Facility in Franklin, Wisconsin. It was managed under Profile Number No. MW 489787.
- **Coal Tar Material** - Coal tar material was characterized and managed as a non-hazardous waste. Where it was soft and almost fluid like, it was frequently mixed with coal fines found on the site to thicken its consistency, placed in a liner container box, and taken to the Waste Management Metro Landfill Facility in Franklin, Wisconsin. It was managed under Profile Number MW 483719.
- **ACM Materials** - ACM was found in many forms from pipe wrap to cladding materials. The material was managed under eight different profiles for friable and non-friable form and commingled materials such as coal dust with asbestos fibers and building debris containing ACM materials. These profiles are numbered A10642, N101333, N10567, N10643, N10012, N10566, N10568, and N7440.
- **Miscellaneous waste materials** were collected in a central location and lab packed where appropriate and removed from the site for disposal by Onyx Environmental Services of Menomonee Falls, Wisconsin. Many of these materials were either present at the site prior to February 2003 in Building No. 4 as a point of collection as they were found.
- **Naphthalene Crystals** – Twenty drums of naphthalene crystals were accumulated in Building No. 4. These materials were managed as Characteristic Hazardous Waste and coded D001 (ignitable). The waste coding was based on knowledge. The materials were sent to Pollution Control Industries in East Chicago, Indiana for management.
- **Tires and Rubber Belts** – Tires and rubber belts were found in many areas of the site. Tires were removed for recycling to the Auburndale Recycling Facility in Auburndale, Wisconsin. The large rubber belts were sent off site for later shipment overseas for recycling purposes.

Appendix E contains waste profile information for Construction and Demolition Debris, Coal Tar, and all ACM managed materials managed by Waste Management, Inc. This Appendix also contains the analytical test results used for characterization purposes where appropriate.

Appendix F contains waste profile and management information for the remaining waste materials. The Hazardous Waste Manifest for the naphthalene crystals is included in this Appendix.

Appendix G to this Final Report contains the results of the remaining Analytical Tests. The type of test and location is briefly summarized in a tabulation sheet in that volume. Volume 2 also contains the results of Bulk Asbestos sampling results. The initial asbestos test results are presented for the two assessment reports, the remaining tests were for subsequent assessment, or clearance purposes.

5.3 Liquids Management

Free liquids were frequently encountered in the variety of tanks that were managed on the site. Representative samples of these free liquids were obtained for analytical testing. The results of these tests were used to apply for a permit to discharge these materials to the Publicly Owned Treatment Works, owned by the Milwaukee Metropolitan Sewerage District. Analytical test data supporting the application to discharge liquids into the MMSD system is presented in Appendix H.

The liquids were removed from the containers and placed in a temporary storage tank. When the tank was near full, a sample of the liquids was tested to see if it met the required parameters for acceptance by the MMSD. Assuming test results were acceptable when compared with the pretreatment standards, the liquids were then pumped into the MMSD system.

The total quantity of liquids managed in this manner is estimated to be about 90,000 gallons.

5.4 Waste Quantities

The project generated significant quantities of waste and recyclable materials. The amount of waste and recyclable materials expressed in tons is presented below:

- Construction and Demolition Debris 402.96 tons
- Coal Tar 1,432.205 tons
- Asbestos Containing Material 4,823.22 tons
- Other Waste Materials – various drummed or packed containers, not all of which was accounted by weight
- Rubber Tires and Belts 51.92 tons
- Recycled Steel and Other Metals 5,821.45 tons

5.5 Waste Management Documentation

Appendix I to this Final Report presents the manifests that document the loads of waste removed from the site to the Waste Management Metro Facility in Franklin, Wisconsin. This includes ACM materials, coal tar, and other types of waste sent to the facility.

6. PROJECT COST SUMMARY

Below is a summary of the costs incurred during the course of executing the Administrative Order of Consent. The project costs have been broken down into the following categories:

- Demolition – This includes contractor costs to furnish all labor and materials to perform demolition work required under the Order less the cost for disposal of material off site.
- Abatement – This includes contractor costs to furnish all labor and materials necessary to accomplish the abatement work under this order less the cost of disposing of ACM waste.
- Disposal of Coal Tar and Process Waste Material – This represents the cost to dispose of Coal Tar Waste.
- Disposal of ACM Material – This represents the cost to dispose of ACM Material.
- Disposal of Other Materials – This includes the cost for disposal of all other materials that were managed as either solid or hazardous waste from the site.
- Other Technical and Administrative Costs – This includes the cost to monitor the security of the site, all labor associated with oversight and report preparation, and maintaining a project office to manage the operation of the project.
- EPA Oversight Costs – This includes the actual and anticipated costs charged by US EPA in their capacity of overseeing the work. Anticipated costs are estimates.
- Salvage Value of Scrap – This includes the salvage value of steel and any other materials recovered from the site.

Demolition	\$1,622,724.42
Abatement	\$1,563,215.58
Disposal of Coal Tar and Process Waste	\$39,325.11
Disposal of ACM	\$114,098.71
Disposal of Other Materials	\$58,266.66
Other Technical and Administrative Costs	\$768,284.99
EPA Oversight Costs (through 2/14/2004)	\$49,052.71
Less Salvage Value of Scrap	\$(721,572.04)
TOTAL PROJECT COST	\$3,493,396.14

7. SITE CLOSURE

On November 8, 2004, representatives of US EPA, the WDNR, and the City of Milwaukee toured the site to observe the conditions at the completion of the project. During the visit, three outstanding items were identified:

- The presence of 20 drums of naphthalene in Building No. 4
- One roll – off box of pipe filled or partially filled with coal tar
- One roll – off box of scrap steel

At the time, all these items were awaiting proper management and disposal or salvage. These items have all been managed according to the Work Plan and have been completely removed from the site.

The respondents to the Administrative Order of Consent have fulfilled their obligations according to the terms and conditions of the Order. The respondents respectfully request that US EPA review the information included in this Final Report and issue the Notice of Completion as provided in the terms of the Order.



8. CERTIFICATION

The Administrative Order of Consent requires a person who supervised or directed the preparation of the report, complete a Certification.

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate, and complete.

Name William F. Kralj
William F. Kralj
Earth Tech, Inc.

Date 3/18/2005

Tables

TABLE 1

Summary of Buildings

**Table No. 1 Summary of Buildings on Milwaukee Solvay
Coke and Gas Site**

Building No.	Description	Status
1	Main Office Building	Building Remains.
2	Guard House	Building Remains
3	Engineering Building	Building Remains
4	Receiving / Machine Shop Building	Building Remains
5	Shop Office, Lunchroom and Warehouse	Building Remains
6	Transformer Building	Building Remains
7	Power House	Demolition Complete
8	Block Garage	Demolition Complete
9	Power / Ammonia / Water Building	Demolition Complete
10	Foreman Office and Pump House	Demolition Complete
11	By Products Compressor Building	Demolition Complete
12	Boiler House	Demolition Complete
13	Mud Mill	Demolition Complete
14	Conveyor Building	Demolition Complete
15	Crusher/Pulverizer Building	Demolition Complete
16	Gas Booster Building	Shell of the Building remains
17	Coal Hopper and Gallery	Demolition Complete
18	Engine House	Demolition Complete
19	Coal Bin and Locker Room	Demolition Complete
20	Quench Car Repair Shed	Demolition Complete
21	Washroom	Demolition Complete
23	Dock Foreman's Office	Demolition Complete
24	Conveyor Building	Demolition Complete
	Coke Ovens	Demolition Complete

TABLE 2

Summary of Above Ground Storage Tanks

Table No. 2 Summary of Above Ground Storage Tanks

Tank ID	Tank Contents	Approximate Tank Capacity As Reported by US EPA	Approximate Date of Disposition
001	Sand	12,100 gallons	December 2003
002	Water / sludge	14,600 gallons	July 2004
003	Tar and Water	13,800 gallons	May 2004
004	None	6,600 gallons	December 2003
005	Oil and Sludge	6,600 gallons	December 2003
006	Residual Dry Mat'l	6,000 gallons	December 2003
007	Coal Tar	8,600 gallons	June 2004
010	Residual Dry Mat'l	6,100 gallons	June 2004
011	None	4,600 gallons	December 2003
012	Tar and Water	33,600 gallons	December 2003
013	Water	340,000 gallons	December 2003
014	Tar	17,800 gallons	August 2004
015	None	250 gallons	December 2003
016	Tar and Water	17,952 gallons	June 2004
017	Tar and Water	17,900 gallons	April 2004
018	None	9,200 gallons	December 2003
019	None	9,200 gallons	December 2003
020	None	29,100 gallons	December 2003
021	None	6,000 gallons	December 2003
022	Tar	15,400 gallons	June 2004
023	Coal Tar	35,900 gallons	December 2003
024	Water and Sludge	14,300 gallons	December 2003
025	Water and Tar	59,500 gallons	May 2004
026	Storage Shed	78,000 gallons	
027	Storage Shed	78,000 gallons	
028	Unknown liquid	8,192 gallons	December 2003
029	Tar and Water	4,500 gallons	August 2004
030	Residual Solid	840 gallons	December 2003
031	Residual Tar	840 gallons	December 2003
032	Unknown	840 gallons	July 2004
033	Coal Tar and Water	14,361 gallons	June 2004
034	Mostly Water	19,400 gallons	May 2004
035	Tar	35,500 gallons	April 2004
036	Tar	35,500 gallons	January 2004
037	Empty	2,600 gallons	March 2004
038	Empty	250 gallons approximately	December 2003
039	Empty	250 gallons approximately	December 2003
040	Empty	250 gallons approximately	December 2003
041	Empty	250 gallons approximately	December 2003
042	Empty	250 gallons approximately	December 2003

APPENDIX A

**Great Lakes Analytical
Quality Assurance Program**

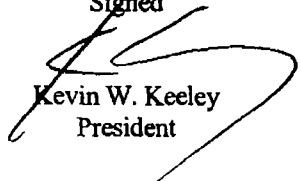
Copy #: QAP-_____

QUALITY ASSURANCE PROGRAM
for the
Volatiles, Semivolatiles, Inorganics,
Sample Management, and Client Service Departments

Great Lakes Analytical
1380 Busch Parkway
Buffalo Grove, IL 60089
(847)808-7766

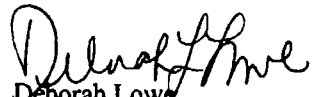
Revision: 7.0
Date: August 5, 2002

Signed



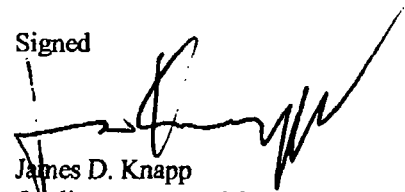
Kevin W. Keeley
President

Signed



Deborah Lowe
Laboratory Director

Signed



James D. Knapp
Quality Assurance Manager

TABLE OF CONTENTS

1. Introduction
 - 1.1 Quality Statement
 - 1.2 Definition
 - 1.3 Scope
 - 1.4 Purpose
 - 1.5 Revisions

2. Organization and Responsibility
 - 2.1 President
 - 2.2 Quality Assurance Manager
 - 2.3 Health & Safety Manager
 - 2.4 Laboratory Director
 - 2.5 Client Services Manager
 - 2.6 Analytical Department Manager
 - 2.7 Project Manager
 - 2.8 Analyst/Extraction Analyst
 - 2.9 Technician
 - 2.10 Assignment of Responsibilities for Absent Individuals

3. Certifications

4. Client Confidentiality, Complaints and Requests
 - 4.1 Client Confidentiality
 - 4.2 Client Complaints
 - 4.3 Client Requests

5. Sampling
 - 5.1 Sampling Containers and Preservation

6. Sample Receipt, Storage, and Tracking
 - 6.1 Chain of Custody
 - 6.2 Laboratory Receipt Documentation
 - 6.3 Sample Integrity Documentation
 - 6.4 Sample Login
 - 6.5 Hazardous Samples
 - 6.6 Sample Storage

TABLE OF CONTENTS (Continued)

6. Sample Receipt, Storage, and Tracking (cont.)
 - 6.7 Sample Shipping & Delivery
 - 6.8 Sample Tracking
7. Standard Operating Procedures
 - 7.1 Format
 - 7.2 Revisions
 - 7.3 Deviations
 - 7.4 Document Control
8. Analytical Quality Control
 - 8.1 Calibration
 - 8.2 Retention Time Windows
 - 8.3 Quantitation
 - 8.4 Method Detection Limit Verification
 - 8.5 Method Blanks and Instrument Checks
 - 8.6 Accuracy
 - 8.7 Precision
 - 8.8 Initial Demonstration of Method Performance (IDMP)
 - 8.9 Surrogates
 - 8.10 Evaluating Quality Control
 - 8.11 Equipment Maintenance and Checks
 - 8.12 Cleaning Procedures
9. Corrective Action
10. Internal Quality Control Checks
11. Internal Audits & Management Review
12. Record keeping, Data Review, and Reporting
 - 12.1 Record Keeping
 - 12.2 Data Review
 - 12.3 Reporting
13. Training & Ethics
 - 13.1 Training
 - 13.2 Ethics Policy

TABLE OF CONTENTS (Continued)

- 14. Materials, Equipment, and Facilities
 - 14.1 Materials
 - 14.2 Organic Analysis
 - 14.3 Inorganic Analysis
 - 14.4 Sample Preparation
 - 14.5 Field Sampling Equipment
 - 14.6 Sample Storage
 - 14.7 Out-of-Control Equipment
 - 14.8 Facilities Equipment
 - 14.9 Housekeeping
- 15. Record Storage and Electronic Data Procedures
- 16. Glossary of Terms
- 17. Great Lakes Analytical Scope of Tests

Bibliography

- Appendix 1. Laboratory Organizational Chart
- Appendix 2. Laboratory Diagram
- Appendix 3. Chain of Custody Report
- Appendix 4. Sample Acceptance Policy
- Appendix 5. Great Lakes Analytical Standard Footnotes
- Appendix 6. Great Lakes Analytical Ethics and Data Integrity Agreement
- Appendix 7. Demonstration of Capability Certification Statement
- Appendix 8. SOP Training Agreement

1. INTRODUCTION

1.1 Quality Statement

Success in the environmental laboratory marketplace is dependent on three factors: quality, service, and price. Of these, quality is the fundamental factor. Quality is the foundation upon which the other two elements are based. If our clients do not have faith in the quality of our measurements then our product has no value to them. Price and service levels become irrelevant. Clearly, providing quality data to our clients must be the highest priority for the staff at Great Lakes Analytical. This commitment to quality starts with the top management of the laboratory. The President communicates this commitment to the analytical staff directly through staff meetings, interviews with new employees, and in the laboratories through daily interactions with the analytical staff. Indirectly, it is communicated to the analytical staff through the goals and objectives set by the President for his managers. Finally this commitment and specific quality criteria are communicated to the staff through this document, the Quality Assurance Program, and through method specific standard operating procedures. At Great Lakes Analytical, service may on occasion, be compromised in the pursuit of quality; but quality is never compromised in the pursuit of service. Our objective is to provide the highest quality data available in the laboratory marketplace, on time, and at an affordable price.

1.2 Definition

A Quality Assurance Program is an organization-wide network designed to assure that data produced within that network conforms to the highest standards set by state and/or federal regulations. The network functions at the management level through company goals and management policies; it functions at the analytical level through standard operating procedures and quality control. These two levels are spanned by data control and the reviewing process. The end result is a data package that is accurate, reproducible, and is presented in such a way as to be most useful to the client.

1.3 Scope

Great Lakes Analytical (GLA) analyzes thousands of environmental and industrial samples every month. Chemical and physical parameters must often be measured on the same sample. As such, the Quality Assurance Program must be able to accommodate the complications implicit in the analysis of many samples of widely varying matrices. Analytical methods employed at Great Lakes Analytical are those approved by the US EPA or state regulatory agencies whenever possible. Source documents for these methods include: the latest approved version of *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846; *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983; *Methods for the Determination of Organic Compounds in Drinking Water*, EPA-600/4-88/039, December 1988; CFR 40 136 Appendix A; *Standard Methods for the Examination of Water and Wastewater*, APHA, 18 ed. 1992; as well as other state and federal publications.

1.4 Purpose

The Quality Assurance Program (QAP) provides a means by which the integrity of data can be verified. Industrial, engineering, and environmental decisions are based on the data produced; therefore, it is essential that clear and extensive verification procedures exist. Accuracy, precision, completeness, and representative results are all aspects of a data package that verify the integrity of the analysis.

The QAP is also a useful historical document. The chronological development of any program relies on the adequate documentation of previous versions. Improvements and modifications can be instituted only if an established frame of reference exists and the comparative efficacy of such changes can be judged.

Lastly, the Quality Assurance Program is the format through which Great Lakes Analytical can express its goals, policies, and commitment toward the generation of data of the highest quality. It expresses how the laboratory will meet those goals through time, resources, and personnel allocations.

1.5 Revisions

The President and the Quality Assurance Manager will meet annually to review the Quality Assurance Program manual. Justification for revisions to this document includes changes in approved test methods, equipment, laboratory personnel, or accreditation requirements. Each time a revision to the QAP is completed, the President, QA Manager, and Laboratory Director review and approve and then distribute the new revision to all analysts and managers. A sign off sheet and/or training will be administered with the QAP. A copy of all the revisions to the QAP is retained for future reference.

2. ORGANIZATION AND RESPONSIBILITY

Great Lakes Analytical has a structure to facilitate communications between the management and analytical levels. This structure ensures that the final data package produced for the client meets or exceeds regulatory standards. The following is a brief description of the major organizational levels (Figure 1 in Appendix).

2.1 President

The President reports directly to the Chief Executive Officer and the Board of Directors and is responsible for the overall financial, operational, and quality performance of the Corporation.

It is the responsibility of the President to ensure that the QAP is fully implemented at all times. The Quality Assurance Manager reports directly to the President and assists him in monitoring the implementation of the QAP. It is the responsibility of the Laboratory Director to implement the QAP. The President mediates any conflicts that may arise in the interpretation of methods or the QAP between these two managers.

It is the responsibility of the President to ensure that the Chemical Hygiene Plan is fully implemented at all times and that a safe workplace and work practices are maintained. The Health and Safety Manager assists the President in this function.

The Vice President of East Coast operations also reports directly to the President.

2.2 Quality Assurance Manager

The Quality Assurance Manager (QA Manager) is responsible for: overseeing and reviewing the Quality Assurance Program; coordinating and monitoring all quality control procedures; implementing data review procedures; internal checks and annual audits; implementing and monitoring a corrective action procedure; ensuring compliance with state and agency certification requirements; QC data reporting; monitoring employee training; providing required QA/QC related training; and interfacing with the external auditors. The QA Manager updates the laboratory on changes to method requirements and procedures, and is responsible for controlling documentation of written procedures and audits. The QA Manager is also responsible for maintaining the laboratory's certifications and keeping abreast of changes in the programs in which the laboratory participates. All of these responsibilities are independent of the laboratory operations. At no time is the Quality Assurance Manager involved with daily operations or generation of client data.

2.3 Health & Safety Manager

The Health and Safety Manager is responsible for overseeing the Health and Safety program. This includes routine internal health and safety audits of the facility as well as management of the Hazardous Waste Program. The Health and Safety Manager is also responsible for reviewing, revising, and providing training for the Chemical Hygiene Plan.

2.4 Laboratory Director

The Laboratory Director is responsible for all aspects of laboratory operations including the implementation of the QAP. This includes the selection and promotion of staff, the purchase of equipment and instrumentation and the interpretation of analytical methods. The Laboratory Director is also responsible for overseeing the activities of the Analytical Department Managers, and the Client Service Manager. Moreover, the Laboratory Director, along with the President, is in charge of hiring and designating an individual as the Quality Assurance Manager.

As the overseer of the managers and through implementation of standardized procedures, the Laboratory Director is able to ensure that sample acceptance criteria are met, that samples are logged into the sample tracking system correctly, and that the productivity and data reported by the laboratory is of the highest quality possible. Moreover, the Laboratory Director plays a crucial role in working with the Client Services department to resolve service problems. This includes ensuring that all client needs are met and setting appropriate priorities for analytical work.

2.5 Client Services Manager

The Client Services Manager (CSM) is responsible for ensuring that our clients receive the highest levels of service available. The Project Managers, Department Managers, Log-In staff and the Drivers assist the CSM in this activity. The CSM works with the QA Manager to ensure that the QAP is implemented in the Login and Project Management areas. The CSM works with the Laboratory Director in setting staffing levels and making major equipment purchases in the department. The CSM also works closely with the Analytical Department Managers to resolve service problems. This includes ensuring that all client needs are met and suggesting appropriate priorities for analytical work.

2.6 Analytical Department Manager

There are two Analytical Department Managers: Inorganics and Organics. The Analytical Department Managers are responsible for the day-to-day operation of their departments. This includes the scheduling of work, technical oversight, staff training, routine purchasing, budgeting, and the implementation of the Quality Assurance Program and the Chemical Hygiene and Laboratory Safety Plan within their department. The Analytical Department Manager also works with the Laboratory Director in establishing staffing levels and making major equipment purchases.

The Department Manager also works closely with the individual analysts in troubleshooting and in developing and validating new methods. The Department Manager also reviews the data generated in their department for SOP and QAP compliance.

2.7 Project Manager

The Project Manager is the primary contact for Great Lakes Analytical's clients. The Project Manager works with the analytical staff and clients in resolving problems originating in login, analytical departments, or administrative areas. The Project Manager works closely with the administrative staff in reviewing reports for typographical errors, and ensuring that client specific

reporting requirements are met. The Project Manager is responsible for keeping clients apprised in the progress of their projects.

2.8 Analyst/Extraction Analyst

An analyst is responsible for all aspects of assigned analytical procedures, including overseeing sample preservation and preparation, performing the analysis, and reporting the results. Included in this is the adherence to all quality control procedures specified in the analytical methods or standard operating procedures and the full documentation of these procedures. **The analyst has the responsibility and authority to stop analysis or withhold a result if quality control objectives are not met or resolved according to applicable standard operating procedures or their manager.** In addition, the analyst is responsible for routine maintenance as well as documentation of that maintenance, of their equipment and for having sufficient supplies for analysis. Furthermore, each analyst is responsible for performing their job functions in compliance with the Chemical Hygiene Plan and for proper disposition or disposal of chemicals and samples.

2.9 Technician

The technicians are responsible for both laboratory and field support. Under the supervision of their manager, they are responsible for proper sample pick-ups, deliveries, and general laboratory support. In addition, they are responsible for bottle preparation in accordance with all quality control procedures and relevant standard operating procedures. Each Technician is responsible for performing their duties in compliance with the Chemical Hygiene Plan and for the proper disposition or disposal of chemicals and samples.

2.10 Assignment of Responsibilities for Absent Individuals

In the absence of the following individuals, the indicated designee will assume the responsibilities:

<u>Position</u>	<u>Designee</u>
President	Laboratory Director (Laboratory Production Issues) Quality Assurance Manager (Laboratory Quality Issues) Health / Safety Manager (Laboratory Health/Safety Issues)
Quality Assurance Manager	President Laboratory Director (in President's absence)
Health and Safety Manger	President Laboratory Director (in President's absence)
Laboratory Director	President Department Manager (in President's absence)
Department Manager	Laboratory Director Quality Assurance Manager (in absence of Lab Director)

3. CERTIFICATION

Great Lakes Analytical has the following certifications:

- Army Corps of Engineers (USACE); HRTW Program. (Re-Certification Pending)
- Illinois Environmental Protection Agency; NELAP Primary Accreditation
- New Jersey Dept of Environmental Protection; NELAP Secondary Accreditation
- Wisconsin Department of Natural Resources

4. CLIENT CONFIDENTIALITY, COMPLAINTS AND REQUESTS

4.1 Client Confidentiality

Great Lakes Analytical strives to keep all performed work confidential. All laboratory data, reports, chain of custody forms (COC), correspondence, invoices and any other information associated with clients and their samples are treated with the highest confidence. Communications via telephone or Email are only made to the client, unless the client has given the laboratory permission to discuss issues with other parties. Electronic transmission of information to clients follows this same philosophy. Moreover, the cover sheets to telefacsimiles of information to clients contain the following confidentiality clause:

“The pages accompanying this facsimile transmission contain information from the firm of Great Lakes Analytical. The pages are confidential or privileged. The information is intended for the use of the individual or entity name on this cover sheet. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the contents of this information is prohibited. If you have received the facsimile in error, please notify us by telephone immediately so that we can arrange for the retrieval of the original documents at no cost to you.”

Upon completion of sending a facsimile, the sender will verify that the phone number and number of pages indicated on the transmission confirmation report is correct, and if not appropriate, corrective actions will be taken. Great Lakes Analytical has also incorporated a “no compete” policy, which states that no employee may work for a competitor while employed with Great Lakes Analytical.

4.2 Client Complaints

Client complaints can come to Great Lakes Analytical through various routes: Log-in personnel, Project Managers, the Client Services Manager, Account Managers, or the Laboratory Director. It is the goal of Great Lakes Analytical to carefully listen to these issues and devise strategies that will prevent these problems from recurring.

When a complaint is received, Great Lakes Analytical’s Corrective Action Process (see Section 9.0) is followed. In the event that the complaint involves laboratory policies, reporting and documentation, or the quality of the laboratory’s calibrations or tests, the QA Manager conducts an internal audit of the area in question. Documentation of complaints, including the receipt problems and actions taken, are recorded on a Corrective Action Form as described in the Corrective Action Process SOP. The corrective actions of the complaints are reviewed and summarized quarterly so that reoccurring problems can be eliminated.

4.3 Client Requests

When the laboratory receives a request for routine analyses, the Project Management staff consults the Laboratory Director and/or the Analytical Department Managers to determine if the work can be accepted. The acceptance of the work is based on current backlog, instrumentation status, and staffing. Moreover, the client’s needs, such as desired turnaround time, required certifications, and reporting limits, are also included in the decision-making. If it is determined that the resources are sufficient, the work is accepted. If it is determined that the laboratory can

not meet the client's needs, the Project Management staff will inform the client of the situation, and offer alternate approved subcontracting laboratories that can perform the work.

When a request for non-routine analyses that is out of the scope of routine laboratory work is received, the person receiving the request must first determine whether the laboratory prior to accepting it can handle it. This is accomplished by consulting with the President, the Laboratory Director and/or the appropriate Analytical Department Managers. Upon receiving approval of all required personnel, the work can be accepted.

If Great Lakes Analytical is not able to provide the client requested analysis, an alternate laboratory will be suggested. This subcontracted laboratory would hold any required certifications or accreditations. All clients are given a list of the tests that are subcontracted and the subcontracting labs that perform the analyses. This list accompanies the Sample Acceptance Policy that is distributed to all clients.

5. SAMPLING

Sampling is an important part of any analysis. The result may be only as useful as the quality of the sampling effort. Great Lakes Analytical performs limited sampling for its clients, but does provide sampling containers and advises clients, if requested, of proper sampling procedures, containers and preservation techniques. The laboratory also has a Sample Acceptance Policy available to all sample collectors (see Appendix 4). Moreover, the laboratory's Schedule of Fees and Services document serves as a reference to the samplers for method-required preservatives, containers, and holdtimes.

5.1 Sampling Containers and Preservation

Containers are purchased in large lots from various commercial sources and are equivalent in terms of construction materials and cleaning protocols, to those listed in "Specifications and Guidance for Contaminant-Free Sample Containers", EPA Document 93963316, December 1992. Containers are prepared in a designated area, labeled with the preservative added, affixed with a sample description label, and stored.

Samples brought to Great Lakes Analytical by clients who have done their own sampling are checked for appropriate preservatives, preserved if necessary, documented and stored upon arrival. Preparation of containers is done by technicians relying on Standard Operating Procedures for Bottle Preparation. Sample containers are provided to clients with the appropriate preservatives as part of the analytical process. SOP's for drinking water sampling procedures are provided to clients upon request.

6. SAMPLE RECEIPT, STORAGE, and TRACKING

6.1 Chain of Custody

The chain of custody (COC) is the documented history of any sample. It begins at the sample site with the sampling personnel, and accompanies the sample through transport to the laboratory, where it is received and stored under the custody of the laboratory. An example of Great Lakes Analytical's COC may be found in Figure 3 in the Appendix. At a minimum, the COC must include: client name, sample identification; location, date and time of collection; collector's name; preservative added; sample type; and any special remarks. The COC form has designated places to document this information (ex, sample identification is documented in the "Field ID, Location" column, special remarks are documented in the "Comments" section, etc.). Consult the Receipt of Samples into the Laboratory SOP for more detailed information on COC procedures and sample receipt.

6.2 Laboratory Receipt Documentation

When the laboratory receives the samples, the personnel in Sample Control check to ensure that all samples listed on the COC are, in fact, present and in satisfactory condition. They sign and date the COC form and store the samples appropriately in an area that is restricted to Great Lakes Analytical staff only. All shipping receipts, transmittal forms, and internal routing and assignment records are retained for future tracking needs.

In the case where samples are brought in by clients without a COC form, Great Lakes will provide a blank form and then a copy of the completed, signed version of the form to the client.

6.3 Sample Integrity Documentation

In addition to ensuring that the sample is fully documented, the Sample Control personnel are responsible for determining and documenting upon receipt if samples arrive at the method specified temperature (usually 4°C or on ice for same day hand delivery), that there is sufficient sample to do the analyses requested, that they are preserved appropriately, and that holding times have not been violated. Method required preservatives, storage, and holdtimes are listed in Great Lakes Analytical's Schedule of Fees and Services document which is used by the staff to confirm this information. Sample Control personnel are also responsible for splitting those samples that have multiple analyses scheduled, and for compositing.

Samples are either accepted or rejected before information is entered in the laboratory information management system (LIMS) for analysis scheduling. Problems with sample integrity or paperwork inconsistencies are reported to the Client Services Manager or the client's Project Manager who will take corrective action. All correspondence pertaining to rejected samples and receipt problems, including missed holdtimes, incorrect preservatives, and/or insufficient volumes, is documented on the COC and/or corrective action form and then retained in the project file. If the client approves analysis of samples that do not meet the method receipt requirements, the affected sample results are qualified on the final report.

6.4 Sample Login

Upon being received by Great Lakes Analytical, each sample container is given a unique, sequential sample number and stored appropriately in cold storage or at room temperature in an orderly fashion to ensure that the analyst may quickly find the appropriate container for their analysis. Each of these unique, sequential sample numbers are generated by the Laboratory Information Management System (LIMS), upon entering the client's name, the general analytical departments associated with the analytical requests, the turnaround status, and whether the sample is in acceptable condition or not. This system is the tool used for tracking and scheduling analyses in the laboratory. After the sample information has been entered into the LIMS and reviewed for accuracy of entry, status and scheduling reports are printed. These reports document such things as date sampled, turnaround time, due dates, and holdtimes. These reports are retained in the project folders. The login procedures are covered in the SOP for Receipt of Samples into the Laboratory.

6.5 Hazardous Samples

Hazardous samples are segregated from other samples and from each other by hazard class. These samples are Red-Tagged to identify them as hazardous to all possible handlers. The Red-Tag is a label, with a written description of the hazard, affixed to the sample container. Examples of the hazardous classes include Flammable, Asbestos, PCB's, Cyanides, and Acids. All hazardous samples are disposed of appropriately. Procedures and requirements for Red-Tagging samples are given in the Chemical Hygiene and Laboratory Safety Plan.

6.6 Sample Storage

Samples are kept in house for at least four weeks after analysis unless the client has made special arrangements. Storage areas are organized numerically in library fashion. Samples that do not require cold storage are maintained on shelving units. Refrigerated storage areas are maintained at 4°C to 0.1°C. All samples are stored away from standards, reagents, food, and other contaminating sources. Samples requiring volatiles analysis are kept in separate refrigerator units within the volatiles laboratory. Moreover, drinking water samples requiring volatiles analysis are segregated from all other samples and organic solvent vapors. The storage of sample extracts and other sample preparation products are stored in refrigerators separate from the sample units. Samples are rotated out of the refrigerated storage and onto the shelving units after the originally requested analyses are completed. Daily temperature records are kept for every refrigeration unit.

Analysts and technicians retrieve the sample container allocated to their analysis from storage, analyze the sample, and return it to the shelf from which it originally came. After four weeks of storage, samples are removed from the shelves and disposed of appropriately, unless otherwise specified by the client. Records are kept of sample disposal dates.

6.7 Sample Shipping & Delivery

In the event that Great Lakes needs to ship samples, the samples are placed in a cooler with enough ice to ensure the maintenance of 4°C. The samples are carefully surrounded by packing to avoid

breakage and a trip blank is enclosed for those samples to be analyzed for volatile organic compounds. The COC is signed over to the courier and attached to the shipping paperwork. Samples are generally shipped overnight express or hand delivered by a Great Lakes Analytical courier to maintain sample integrity.

6.8 Sample Tracking

Documentation procedures followed by the laboratory allow for complete tracking of all procedures and activities to which samples are subjected. The tracking of samples begins in the field with the sampler completing the COC, and is completed with the release of the final report to the client and the subsequent retention of all records and data pertaining to the samples. This document, along with general and method specific SOPs, explains in detail the laboratory's ability to produce all the necessary data, records and information to track samples. The following outlines the tracking:

1. Identity of personnel involved in sampling, preparation and testing (Sections 6 and 12)
2. Documentation of sample preservation (Section 6)
3. Sample identification code, receipt, login, acceptance or rejection (Section 6)
4. Sample storage and tracking (Section 6)
5. Calculations and statistical formulae use (Sections 8.3, 12 and method specific SOPs)
6. Sample analysis (Section 12 and method specific SOPs)
7. Equipment receipt, use, specification, operating conditions, and preventative maintenance (Sections 8.5, 14 and method specific SOPs)
8. Procedures to verify that the report is free from transcription and calculation errors (Section 14)
9. Data handling (Section 14 and method specific SOPs)
10. QC measurements (Section 8 and method specific SOPs)
11. All information necessary to produce unequivocal records that document the laboratory associated with the sample receipt, analysis and reporting (QAP)
12. Procedures that maintain an unequivocal link with the unique field identification and the laboratory identification code assigned each sample (Section 6)

Great Lakes Analytical does not knowingly analyze litigation samples. Everything analyzed at the laboratory could result in litigation. However, if the laboratory were requested to analyze litigation samples, we would develop procedures that would fulfill the requirements, using EPA's Manual for the Certification of Laboratories Analyzing Drinking Water--Criteria and Procedures Quality Assurance (Fourth Edition) as the guidance document.

7. STANDARD OPERATING PROCEDURES

Standard operating procedures are a central element in the QA program at Great Lakes Analytical. The SOP's serve a number of useful and necessary functions. The first is method conformance. Each SOP has been prepared to ensure that all technical and QC requirements of the source document are met or properly amended. SOP's are also useful as training documents. New analysts study the applicable SOP's before receiving training from senior analysts. SOP's are much more specific than source methods which may be applicable to a wide variety of matrices and types of instrumentation. The SOP is specific to the type of matrix commonly encountered, the equipment types available and the procedure followed at GLA. One of the most important aspects of SOP's is as historical documents. Section 17 lists all the SOPs for each approved test method performed at Great Lakes Analytical.

7.1 Format

SOP's serve to consolidate the many different source documents and procedures used by GLA into an easily accessible guide for the analysts. One SOP may be written for multiple methods that contain identical formats except for the procedure sections. In this case, separate procedures will be written for the different analyses or matrices. All Standard Operating Procedures for laboratory methods will include but are not limited to the following sections or reference where they can be found.

Applicability	Sample Management	Safety
Summary	Method Validation	Quality Control
Equipment	Standards and Reagents	Interferences
Procedure	References	Record Keeping
Maintenance and Troubleshooting		
Waste collection, storage, recycling, and disposal procedures		

Each page of the SOPs includes the following:

SOP Number or ID
Revision Number
Date
Current page number of total pages of the document

7.2 Revisions

Annually, or as equipment or accepted methodologies change, Standard Operating Procedures will be revised. Proposed revisions to SOP's or new SOP's will be reviewed and approved by the appropriate managers for that procedure. In the case of analytical method SOPs, the Department Manager, the QA Manager, and the Laboratory Director's approval is required prior to introduction into the laboratory. The effective date for an SOP is the date the designated analyst signs the SOP Training Agreement form (See Appendix 8.). SOPs with revisions made to only one section are given the next decimal point revision number (example: Rev 2.3 would go to 2.4). SOPs with revisions that include an extensive number of changes are given the next numeric integer revision

number (example: Rev 3.5 would go to 4.0). This document also follows the same revision numbering. Requests for revisions are made through the Corrective Action Process form.

7.3 Deviations and Departures

Any deviations or departures from Standard Operating Procedures or approved source methods must follow the Corrective Action Process, which includes prior approval from a department manager, QA Manager, or the Laboratory Director. Deviations are accepted for unique matrix considerations or special non-standard analytical requests by Great Lakes Analytical clients. Departures from and modifications or clarifications to any approved source methods are documented in the method-specific SOPs.

7.4 Document Control

All SOPs are considered controlled documents. The distribution of these documents follows Great Lakes Analytical's Document Control SOP. In short, this procedure requires a unique number assignment to each copy of a controlled document. A log is kept by the QA Manager, which keeps track of who has each copy. As revisions are made to the documents, the outdated versions are collected and destroyed. Original copies of the outdated versions are archived for at least five years for future reference by the laboratory, clients, and state agencies.

8. ANALYTICAL QUALITY CONTROL

Quality control measurements verify the integrity of the analytical results. While the goal of all quality control procedures remains constant, specific quality control procedures vary from method to method, and to some extent, with matrix type. Each analyst is responsible for a thorough understanding of the goals of the Quality Assurance Program, as well as how the program is implemented in each method. The analyst is also responsible for the documentation of all quality control measurements associated with a particular method.

Great Lakes Analytical adheres to the quality control procedures set out in the latest approved version of *EPA SW-846* for the majority of analytical procedures. Great Lakes also adheres to any additional quality control procedures set out in the latest standards of the National Environmental Laboratory Accreditation Program (NELAP). Other method references may include the Illinois Title 35, Wisconsin Department of Natural Resources NR 149, *Code of Federal Regulations* Title 40, and *Standard Methods*, 18th Edition, 1992.

8.1 Calibration

Standard operating procedures contain the laboratory's interpretation of the above-mentioned methodologies. For this document, discussions concerning calibration of analytical procedures are of the general nature. Method-specific SOPs should be consulted for more complete information. All calibration activities are documented using a combination of the raw data and logbooks. For gas chromatograph analyses, the initial calibration date is referenced in the data system's method name used to quantitate the data. Moreover, computer data systems used for analyses generate tabulated calibration forms, which include such information as the date, reference to the source method, analytes, standard concentrations, instrument response, and the equation and correlation coefficient for linear regressions. For those analyses where a data system does not automatically generate this information, the analysts record all the calibration information in method-specific logbooks. Specifics on initial calibration standard concentrations are entered into the data systems, and recorded in various run logs and standard preparation logbooks. The raw data and records of all calibrations (hard copies and electronic) are retained by the laboratory.

8.1.1 Initial Calibration for Organic Analyses

The majority of organic instrumentation is calibrated with internal standards. Some instruments, because of the complex nature of the multi-peak chromatograms produced by the method, necessitate the use of external standard calibration.

Initially, each instrument is calibrated for the method for which it is allocated. Once the operating parameters have been established according to the method, the analyst prepares standard solutions containing all the analytes of interest, any internal standards, and any surrogates that are appropriate for the method.

These standard solutions are prepared at different concentrations. One of the concentrations must be at the reporting limit and the others should define the linear range of the instrument. All of the standard solutions are prepared using Class A volumetric glassware and the

highest quality solvents and stock standards commercially available. The number of standards prepared is determined by the requirements of the particular method.

The standard solutions are introduced into the instrument in the same manner in which the sample or the sample extract would be introduced whether it is by purge and trap or by direct injection. The calibration factor (CF) for those methods that use external standards and the response factor (RF) for those methods that use internal standards are calculated.

Calibration Factors and Response Factors are calculated as follows:

$$\text{Calibration Factor} = \frac{\text{Total Area of Peak}}{\text{Concentration or mass of analyte injected}}$$

$$\text{Response Factor} = \frac{(\text{Area of Analyte})(\text{Conc. of Int. Std.})}{(\text{Area of Int. Std.})(\text{Concentration of Analyte})}$$

The CF's or RF's for each of the concentrations for each of the analytes and surrogates are tabulated. The CF's or RF's for each analyte or surrogate should have a Percent Relative Standard Deviation (% RSD) of less than 20%. The % Relative Standard Deviation is calculated as follows:

$$\%RSD = (SD/x) \times 100$$

Where:

SD = Standard Deviation of initial CF's or RF's for each compound.

x = Mean of initial CF's or RF's for each compound.

If the % RSD is less than 20%, the calibration curve can be considered linear through the origin, and the average CF or RF can be used for quantitation. If the method specifies different criteria (i.e. Method 624), then that criteria will be utilized. If the % RSD is greater than 20%, corrective action is taken. This may involve reanalysis of specific calibration standards, re-preparation of the standards, or instrument maintenance. Some methods allow least squares linear regression to be used for measuring the validity of the initial calibration curve. Linear regressions use the following equation:

$$y = mx + b$$

Where:

y = Instrument response (peak area or height)

m = Slope of the line (also called the coefficient of x)

x = Concentration of the calibration standard

b = The intercept

The regression calculation will generate a correlation coefficient that is a measure of the "goodness of fit" of the regression line to the data. A value of 1.00 indicates a perfect fit.

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

Instrument calibrations are performed when significant changes have occurred on the instrument (ex. change of column), when calibration verification analyses are outside method requirements, or when the analyst deems necessary.

Corrective Action : If method criteria are not met for the calibration, corrective action is performed, and another calibration study is analyzed. At no time are samples or QC analyzed without an acceptable initial calibration in place.

8.1.2 Initial and Continuing Calibration Verifications

The initial calibration curve is further verified by the analysis of an initial calibration verification check standard (ICV). The analyst prepares an ICV from a secondary source or lot number standard solution at a concentration equal to that specified by the method, or if there is no specification in the method, equal to 10% to 50% of the highest standard in the calibration. The ICV is introduced into the instrument in the same manner as the samples and the calibration solutions. Using the calibration factors, response factors, or the linear regression generated from the initial calibration, the quantitated concentration of the analyte(s) in the ICV must be within 15% of the true value for each analyte.

The validity of the calibration curve must be checked daily for most instruments and more frequently for instruments with particularly sensitive detectors that tend to drift. At a minimum, a continuing calibration verification standard (CCV) is analyzed every twelve hours. The analyst prepares the CCV the same as an ICV; however, if the method does not specify the concentration, the CCV is prepared at 25% to 50% of the highest standard in the calibration. The CCV must be within 15% of the true value for each target analyte. If the acceptance criteria specified by the source method is not met, corrective action is performed, and the CCV is reanalyzed. If acceptance criteria are still not met, more corrective action is taken which includes instrument maintenance and recalibration. No samples are analyzed until the initial calibration can be verified with two consecutive and acceptable CCVs. Any samples analyzed after an unacceptable CCV are reanalyzed. Also, since the CCV is prepared from a second source, it is also utilized as the LCS for volatile analyses.

Corrective Action: The check standard must fulfill the above criteria before samples can be analyzed. If the calibration verification is not able to meet the criteria, corrective action must occur. If routine corrective action procedures fail to produce a second consecutive calibration verification (CV), more corrective action must be performed which may include preparing a fresh working standard. If after more vigorous corrective action, two consecutive acceptable CVs are not produced, the initial calibration must be established and verified. Sample data associated with unacceptable CVs may be reported, with qualifiers, under the following scenarios:

- When the acceptance criteria for CVs are exceeded high (i.e. High bias) for an analyte(s), and the associated samples did not contain reportable

levels for the analyte(s), then the non-detects are reported. All samples containing reportable levels of the unacceptable analyte(s) are reanalyzed under an initial calibration that can be verified.

- When the CVs are below the acceptance criteria (i.e. Low bias) for an analyte(s), and the associated samples contained the analyte(s) above the maximum regulatory/client action level, the samples are reported. All samples that did not contain the unacceptable analyte(s) above action levels are reanalyzed under an initial calibration that can be verified.

Some methods have prescribed limits set for the recoveries and concentrations listed above that may be different. It should be noted that individual method specifications would override these general procedures. In addition, there may be calibration procedures prescribed in the method, such as GC/MS tuning with BFB or DFTPP that are not described here in detail but are described in detail in the standard operating procedures for the method.

8.1.3 Calibration for Inorganic Analyses

The majority of inorganic instrumentation is calibrated with external standards. The calibration procedures are much the same for inorganic as they are for organic methods. Please refer to section 8.1.1 above. Most of the calibration procedures require the use of linear regression as a means of measuring the quality of calibration curves. Because of the nature of the technology and the methodology of Inorganics, more samples can be analyzed within a 24-hour period; therefore, inorganic calibration curves are checked on a more frequent basis. Consult the specific method SOP for more detail on calibration procedures for Inorganic analyses.

8.2 Retention Time Windows

Most organic analyses use gas chromatography or liquid chromatography instrumentation. As the key to analyte identification in chromatography, retention time windows must be established for every analyte in a particular method on every column used for that method. These records are kept with the notebooks associated with an instrument for later identification and quantitation of the analytes.

Once the analyst has determined that the instrument is in optimum working order through calibration and calibration verification procedures, the analyst uses a mid-range calibration standard to establish the retention times of the individual analytes in a method. The analyst makes 3 injections of the same standard over a 72-hour period, tabulating the retention times for each analyte for each of the 3 injections. The standard deviation of the retention times is then calculated. The retention time window is defined as the average retention time from the daily check standard plus or minus 3 Standard Deviations.

Other criteria has been established and documented for methods that do not allow practical application of RT Windows. As stated in EPA SW846 Rev. 2 & 2A 1992, Method 8000 section 7.5.2.1 'Plus or minus three standard deviations of the retention times for each standard will be

used to determine the retention time window; however, the experience of the analyst should weigh heavily in the interpretation of chromatograms.”

The study outlined above is performed periodically, but is not used on a daily basis. Instead, the analyst uses single component standards and sample chromatograms that accompany the GC columns to determine the elution order. Then, a default retention time window of 0.05 min is used for peak identification. However, the analyst’s interpretation plays a strong role in determining positive detection of an analyte. The actual retention time of each peak or analyte is updated daily using the starting CCV. (Note: The window used in the HP Chemstation software is much larger than this default of 0.05 min. Using smaller windows in the software creates the possibility of missing positive detects. The analyst reviews each positive detect to make sure the actual retention time is within the 0.05 min. of the retention time found in the starting CCV.)

8.3 Quantitation

Organic compounds analyzed by chromatography are tentatively identified by comparing retention times of the sample and the standard. Under most conditions, tentatively identified compounds must be confirmed on a second column of different affinity. Sample quantitation procedures and calculations are outlined in each method depending on the type of calibration used for the method. Instrumentation parameters are documented in the analysts’ notebooks.

Similarly inorganic analytes are identified and quantitated by comparing the response of the analyte to the response of the standard. Confirmation is not always possible, although some methods, like metals analyses, allow for a secondary check under a different set of instrument operation parameters. All calculation and instrument operating parameters are recorded in the analysts’ notebooks or the SOP.

With all calculations performed in the laboratory, the number of significant figures used is based on the least precise step, and reflects the tolerances of the instrument used.

8.4 Method Detection Limit Verification

The method detection limit (MDL) is determined for each analyte on each instrument allocated to a method on an annual basis. The procedure and requirements for establishing MDL’s is taken from 40 CFR Part 136, Appendix B. The analyst prepares at least seven replicates of solution spiked at up to five times the lowest reproducible calibration standard with all the analytes of interest. Each of these aliquots is subjected to the entire analytical process. The Standard Deviation (SD) of seven replicates is calculated. The method detection limit is calculated as follows:

$$\text{Detection Limit} = t_{(n-1, 1-a = 0.99)} \times \text{SD}$$

where $t_{(n-1, 1-a = 0.99)}$ is Student’s T value that is 3.143 for seven replicates. Great Lakes Analytical establishes three distinct limits for reporting purposes. They are:

Method Detection Limit (MDL) - As explained above, this limit is established by the procedure in 40CFR Part 136 App. B. The calculated MDL cannot be greater than the concentration of the standard, nor can it be < 10% of the concentration of the standard used in the study.

Practical Quantitation Limit (PQL) - The PQL is the level above which quantitative results can be obtained with a specific degree of confidence. The PQL is established at ten times the standard deviation from the MDL study. The procedures for establishing the PQL is taken from "Principles of Environmental Analysis" , *Analytical Chemistry*, Vol. 55, No. 14, December 1983, 2210-2218.

Reporting Limit (RL) - The Reporting limit is a tool used by the laboratory to establish criteria based on laboratory experience or specific client needs. RL's are always established above the MDL but may or may not be above the PQL. RL's are generally set by client Data Quality Objectives (DQO) or the lowest reproducible standard in the calibration curve. In other words, the RL is equal to or less than the concentration of the lowest standard in the analyses' calibration.

8.5 Method Blank and Instrument Checks

With each batch of samples processed for a method, a method blank is carried through the complete analytical procedure to check for any laboratory or materials contamination of target analytes. With the exception of a few compounds for a few analyses, the method blank should quantitate to a value of less than half the PQL (or reported detection limit) for the analytes of interest. The exceptions are enumerated in the specific standard operating procedures. In general, if a method blank does not meet the method specific criteria, the samples within the batch are either reprocessed or the results are qualified. If there are no positive detects in the samples, no corrective action is performed. More specific corrective actions are outlined in each analytical standard operating procedure.

Instrument checks, or instrument blanks, are similar to method blanks except they are not subject to the complete analytical procedure. Instrument blanks are usually made up of water, the extraction solvent, or the method reagents. They are analyzed on a regular basis to check for instrument contamination. If target analytes are detected, corrective action is taken before samples are analyzed. More detailed discussion of frequency and corrective actions can be found in the method specific standard operating procedures.

Corrective Action for Method Blanks: No contamination should be present in the blank above the reporting limit. If contamination is found, samples analyzed after the blank which contain the same contaminates must be reanalyzed to confirm the detects. If the results need to be reported due to client request, a qualifier stating the concentration in the blank is added to the report.

8.6 Accuracy

Accuracy measurements are performed with every analytical batch per matrix type, per sample extraction or preparation procedure. A sample and a blank matrix for the analytical batch is spiked with a known quantity of the analyte(s) and processed in the same manner as the rest of the

analytical batch. All target analytes are included in the spiking solution. The accuracy is measured as a percent recovery. The percent recovery is calculated as follows:

$$\% \text{ Recovery} = \frac{\text{Calculated Spike Conc.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$$

The percent recovery of an analyte must fall within the laboratory generated control limits. See section 8.10.1 for discussion of control limit generation.

8.6.1 Laboratory Control Spikes (LCS)

An LCS is essentially a blank matrix (ex. reagent water, clean sand, wipes) fortified with a known amount of test analyte(s). It is identified in the LIMS as a Blank Spike (BS). The solution used for the spiking is from a source different from that used for calibrating the procedure. For volatiles analysis, the continuing calibration standards also serve as the LCS due to the second-source use. At a minimum, with each matrix-specific batch of samples processed, a LCS is carried through the complete analytical procedure.

Corrective Action: If an LCS (and LCS Dups when needed) does not meet acceptance limits and no target analytes were detected in the associated samples, the sample results are reported with qualifiers. If the associated samples contained analytes of interest that were unacceptable in the LCS, the samples are reanalyzed. However, if the client requests results “as is”, the results are reported and qualified. Not all methods performed at Great Lakes Analytical require the analysis of an LCS (ex. total suspended solids, pH, turbidity). More detailed discussion of acceptance criteria and corrective action can be found in the method specific standard operating procedures.

8.6.2 Matrix Spikes (MS)

An MS is essentially a sample fortified with a known amount of the test analyte(s). The solution used for the spiking is from a source different from that used for calibrating the procedure. At a minimum, with each matrix-specific batch of samples processed, an MS is carried through the complete analytical procedure. Unless specified by the client, samples used for spiking are randomly selected and rotated between different client projects.

Corrective Action: If the MS/MSDs due not meet acceptance limits, the associated samples are reported with qualifiers for those analytes that do not meet limits. If obvious preparation errors are suspected, or if requested by the client, unacceptable MS/MSDs are reanalyzed to prove matrix interference. Not all methods performed at Great Lakes Analytical require the analysis of an MS (ex. total suspended solids, pH, turbidity). More detailed discussion of acceptance criteria and corrective action can be found in the method specific standard operating procedures.

8.7 Precision

Precision measurements are performed with every analytical batch per matrix type, per sample extraction or preparation procedure. Precision is determined by comparing the analyte recoveries of a sample, matrix spike, or LCS with the recoveries of respective duplicated analyses. The precision is measured as a relative percent difference (RPD) between the two duplicated analyses. The RPD is calculated as follows:

$$RPD = \frac{|\text{Conc. of 1}^{\text{st}} \text{ Analysis} - \text{Conc. of Duplicate Analysis}|}{(\text{Conc. of 1}^{\text{st}} \text{ Analysis} + \text{Conc. of Duplicate Analysis})/2} \times 100\%$$

The RPD for a particular analyte must fall within the control limit established for that analyte. For the procedure for establishing control limits, see section 8.10.1.

8.7.1 Duplicates

At a minimum, with each matrix-specific batch of samples processed, a duplicate sample, matrix spike, or LCS is carried through the complete analytical procedure. Duplicate samples are usually analyzed with methods that do not require matrix spike analysis. Duplicate LCS samples are usually analyzed when insufficient sample volume is supplied for the LIMS specified matrix spike sample. The recoveries for the spiked duplicate samples should meet the same laboratory established recovery limits as the accuracy QC samples.

Corrective Action: If the RPD is not within acceptance limits, the corrective actions in Sections 8.6.1 and 8.6.2 is followed for LCS duplicates and MSDs, respectively. More detailed discussion of acceptance criteria and corrective action can be found in the method specific standard operating procedures.

8.8 Initial Demonstration of Method Performance (IDMP)

Before a particular test method is offered to the public, an Initial Demonstration of Method Performance study is performed by the analyst responsible for the test. This study consists of preparing, processing, and analyzing a minimum of four aliquots of a QC Check Sample or fortified blank matrix of known concentration. The source of the spiking solution is a certified vendor used for the LCS spiking solutions. The spike concentration is approximately 10 times the MDL. The average percent recoveries and standard deviations of the study set must meet the method specified criteria. If the criteria are not met for one or more of the test analytes, the analyst must locate and correct the source of the problem, and repeat that portion of the study, which was deemed unacceptable. Once the study has met all the method criteria, the analysis of actual samples begins. The IDMP is repeated for each method when there is a change in analyst, instrument type, or approved test method. Consult the method specific SOPs for more details on IDMPs.

8.9 Surrogates and Internal Standards

In most organic analyses, surrogate compounds are spiked into all environmental and quality control samples. They act as a secondary check on method accuracy performance in that they should meet

established acceptable, matrix-specific recovery limits. Consult the method-specific SOPs for details on the surrogate compounds and acceptance criteria.

Corrective Action: When surrogate standard recoveries fall outside these limits, one sample from each effected project is re-analyzed to confirm a possible matrix effect. If the recoveries confirm, results are reported from the original analysis and a qualifier is added. If the surrogate recoveries fulfill criteria, all affected samples are reanalyzed and results from the re-analyses are reported.

In most organic analyses, internal standards are spiked into all environmental and quality control samples. They are used to construct calibrations (see above). The acceptance criteria in most methods are 50% to 200% of the daily CCV. Consult the method-specific SOPs for details on the internal standard compounds and calculations.

Corrective Action: When recoveries fall outside of the criteria, one sample from each affected project is re-analyzed to confirm a possible matrix effect. If the recoveries confirm, the data is reported from the original analysis and a qualifier is added. If the recoveries of the internal standards fulfill criteria, then all affected samples are reanalyzed and the results from the re-analyses are reported.

8.10 Evaluating Quality Control

In order to assure our clients of the validity of their data, Great Lakes Analytical's analysts have been trained to constantly evaluate the quality of the analytical process. The analytical process is controlled not only by instrument calibration as discussed above, but also by quality control measurements (ex. method blanks, matrix spikes, LCSs, duplicates, surrogates). In order to demonstrate control over a method, Great Lakes Analytical first determines and quantifies normal performance. To do this we have established certain prerequisites for consistent performance. They are:

1. Use of approved analytical methods.
2. Trained and experienced personnel.
3. Proper facilities and equipment.
4. Certified reagents and standards.
5. Frequent maintenance and calibration of the instruments.
6. Knowledgeable management to oversee the analytical process.
7. Successful performance of IDMP and MDL studies by trained analysts.

When an analytical batch is analyzed, control measures are processed concurrently to assist in assessing the quality of the data generated. The analysts use control limits to evaluate the accuracy and precision in the analytical process. Control limits are developed through the development of control charts.

8.10.1 Control Limits and Charts

In order to evaluate the quality of the data generated, acceptance limits, or control limits, are generated by the laboratory for each method, matrix, and analytical range. When a new method is put into use, or when there are insufficient data points, the control limits are established from those published in the source method or the Quality Control section of the guidance document. After a minimum of 20 data points (ex. 20 matrix spike recoveries) have been collected, the control limits for precision and accuracy are determined by constructing control charts.

The first step in generating control limits is determining if the chosen points are a good representation of the data generated by the method. A statistical outlier test (Grubb's Test) is used to "disqualify" data points. Once an acceptable set of at least 20 data points is obtained, the standard deviation and average of the data set is calculated. With these values, the control and warning limits are developed. For accuracy measurements, warning limits are set at two standard deviation units above (upper limit) and below (lower limit) the average. Control limits are set at three standard deviation units above (upper limit) and below (lower limit) the average. For precision measurements, the warning limit is two standard deviation units above the zero point, and the control limit is three standard deviations above the zero point. The "units" refer to percent recovery for accuracy, and relative percent difference for precision. From this statistically generated data, a graphical control chart can be generated. All 20 points are plotted on a graph, where the y-axis equals percent recovery (for accuracy measurements) or relative percent difference (for precision measurements), and the x-axis equal to data point ID. The corresponding average and limit lines can also be plotted. Separate control limits are established for each matrix and each QC parameter for each method. All of the control charts/limits include all the above information as well as a title, identification of the SOP and method used, the analyte measured, units of measure, spike concentration, date of analyses, sample ID, and the analysts identification. QC charting and limits are updated on an annual basis.

Limits are established for all analyses performed. All acceptance limits are kept electronically on the LIMS, and hardcopies are maintained in method SOPs.

8.10.2 Exceptions to Laboratory Generated Control Limits

On an annual basis the analysts, Department Managers and Quality Assurance Manager will review the compiled data points to evaluate the limits. Data will be evaluated for how well the limits fit the data using a method such as the Grubbs Test for out-liers. Warning limits may be established inside the calculated control limits to tighten control over an analysis. Great Lakes Analytical will adhere to any control limits set by a certification program in which the lab participates.

8.11 Equipment Maintenance and Checks

Great Lakes Analytical is dedicated to providing our clients with state-of-the-art technology. Instrumentation is purchased with sensitivity, accuracy, efficiency, and dependability as criteria.

All instruments have logbooks in which calibrations, adjustments, routine maintenance, and any repairs are recorded. Calibrations, routine maintenance, and adjustments are part of the analysts' responsibilities. Service contracts are in place for some of the instruments for any major repairs. The highest quality gases, reagents and spare parts are kept on hand to minimize repair time and optimize instrument performance.

Each entry in the instrument logbook includes the date, the analyst, a detailed description of the problem, a detailed explanation of the solution, and a verification that the instrument is functioning properly. In addition, standard operation procedures for organic methods specify and require documentation of routine maintenance procedures like changing of septa in injection ports, changing of gas tanks, and cleaning of detectors. At a minimum, the following records are maintained for each piece of analytical equipment:

Record

Name of equipment
Manufacturer's name and serial number
Dates received and placed in lab
Current location
Condition upon receipt
Manufacturer's instructions
Dates & results of calibrations
Details of maintenance performed
History of damage, malfunction, modification
or repair

Where stored

Maintenance & Run Logs
Maintenance Log
Maintenance Log (QAP —Sec 14)
Maintenance Log
Maintenance Log
Books maintained in each department
Run Logs and raw data files
Maintenance Log (see above for detail)
Maintenance Log

8.11.1 Weights and Balances

The accuracy of the balances used in the laboratory is checked regularly. All balances are placed on stable counter tops. Each balance is checked daily with at least two ASTM type 1 weights spanning its range of use. Every month, all balances are checked with a minimum of two certified ASTM type 1 weights spanning its range of use. The weights used for the monthly check are recalibrated/recertified annually to NIST standards and are used for no other purpose. All balances are serviced annually by a qualified service representative, who supplies the laboratory with a certificate that identifies traceability of the calibration to the NIST standards. All of this information is recorded in logbooks, and the recalibration/recertification certificates are kept on file. Consult the Balance Check SOP for more information.

8.11.2 Ph, Conductivity, and Turbidity Meters

The pH meters used in the laboratory are accurate to ± 0.1 pH units, and have a scale readability of at least 0.1 pH units. The meters automatically compensate for the temperature, and are calibrated with at least two working range buffer solutions before each use. Conductivity meters are also calibrated before each use with a standard that reflects the sample conductivity. These meters do not exceed an error of 1% or one umhos/cm.

Turbidity meters are also calibrated before each use. All of this information is documented in logbooks. Consult pH and Conductivity SOPs for further information.

8.11.3 Thermometers

All thermometers, including liquid-in-glass and digital thermometers, are calibrated on an annual basis with a NIST-traceable thermometer. The NIST thermometer is recalibrated annually by an approved outside service, and the provided certificate of traceability is kept on file. The NIST thermometer has increments of 0.2 °C, and has a range applicable to all method and certification requirements. Also, the NIST traceable thermometer is used for no other purpose than to calibrate other thermometers. All of this information is documented in logbooks. Monitoring method-specific temperatures, including incubators, heating blocks, water baths, and ovens, is documented in method-specific logbooks. More information on this subject can be found in the Thermometer Calibration SOP or method-specific SOPs.

8.11.4 Refrigerators/Freezer Units, Ovens and Incubators

The temperatures of all refrigerator units and freezers used for sample and standard storage are monitored daily. Ovens and incubators are monitored on days of use. All of this equipment has a unique identification number, and is assigned a unique thermometer for monitoring. Refrigerator temperatures are kept between 4°C and 0.1 °C. Specific temperature settings/ranges for ovens and incubators can be found in method specific SOPs.

All of this information is documented in various departmental Daily Temperature Logbooks and method-specific logbooks.

8.11.5 Autopipettors, Dilutors, and Syringes

The laboratory maintains a sufficient inventory of autopipettors and dilutors of differing capacities that fulfill all method requirements. These devices are given unique identification numbers, and the delivery volumes are verified gravimetrically, at a minimum, on a quarterly basis. Consult the Verification of Autopipette Delivery SOP for more detail.

Syringes are purchased from Hamilton Company. Each syringe is traceable to NIST. The laboratory keeps on file an "Accuracy and Precision Statement of Conformance" from Hamilton attesting established accuracy.

8.12 Cleaning Procedures

The following is the general cleaning procedures used for most analytical glassware at Great Lakes Analytical.

1. Rinse with hot tap water.
2. Scrub with detergent.
3. Rinse 3 times with hot tap water.
4. Rinse 3 times with deionized water.
5. Air dry and store.

Specific EPA methods require procedures that may vary from the cleaning procedures listed above. These specific standard operating procedures are posted in the glassware cleaning area and are kept on file with the appropriate analysts and the Quality Assurance Manager.

9. CORRECTIVE ACTION

A Quality Control Program must have corrective actions built into every standard operating procedure. The program is only as effective as the laboratory's ability to adhere to the program. If the level of acceptability set by the method or source document is not met, corrective action must be taken immediately. In short, the corrective action process follows these steps:

1. Identification of the problem, and the anticipated or recommended corrective actions
2. Identification of the individuals responsible for initiating corrective actions
3. Identification of the individuals responsible for investigating the problem
4. Predefined procedures for the treatment of data associated with unacceptable QC
5. Documentation, in writing, of the problem, the corrective action taken, and the final outcome.
6. Final review and approval of the corrective actions by the department managers and QA Manager.
7. Quarterly tracking of corrective action activities by the QA Manager

This process also serves as the medium for requesting SOP revisions. Consult the Corrective Action Process SOP for more complete information.

10. INTERNAL QUALITY CONTROL CHECKS

Great Lakes Analytical utilizes five different organizations to participate in eight Performance Evaluation programs. All are single blind and scheduled throughout the year. The list of programs is as follows:

<u>Organization</u>	<u>Program</u>	<u>Annual Analysis Sets</u>
Environmental Research Associates	Real World Matrix	1
Environmental Research Associates	Drinking Water	1
Environmental Research Associates	RCRA—Soil	1
ERAWater Supply (Equiv. to EPA WS)	Drinking Water	2
ERA Water Pollution (Equiv. To EPA WP)	Waste Water	2
ERA RCRA	RCRA—Soil	2
Wisconsin DNR	Env. Ref. Sample Program	1

Clients are encouraged to submit quality control samples to Great Lakes and on request, arrangements will be made to split samples and subcontract to another laboratory as a confirmatory check.

11. INTERNAL AUDITS & MANAGERIAL REVIEW

Performance audits are done, at a minimum, annually for every analyst. The audit responsibility can be divided between the QA Manager and the Department Manager, with each performing the audits. At no time is an area audited by someone that performs the analysis being audited. Audit forms have been designed for each analysis type to focus on the important documentation and procedural steps.

The auditors review the analyst's notebook for documentation of all quality control measurements, their frequency, and the clarity of the documentation. The notebook must be useful to any person who wishes to inspect the history of the analysis. Analysts must also have equipment logs, repair manuals, and adequate tools to keep instruments calibrated. The analyst's data reporting procedures are also reviewed to ensure that results can be easily traced to a notebook. Also, each staff member is interviewed, which includes asking the staff open-ended questions that pertain the analysis or procedure being performed. Essentially, a complete audit of the method SOPs is performed, which includes comparison to the referenced methodology, qualitative and quantitative procedures, and documentation. All areas of the laboratory are audited, including sample control, organics, inorganics, and project management.

Once the audit is completed, the auditors write-up their findings in a report. The auditors meet with each department manager, and discuss the findings and possible corrective actions. The Department Manager reviews the findings with their respective staff, and develops corrective actions for all deficiencies, along with a timeline for completion. All of the findings and communication is documented through typed documents and Emails. The following is the yearly schedule for internal audits and responses:

<u>Task/Activity</u>	<u>Scheduled Time</u>
Review of Previous Year's Audit	1 st Quarter of the Year
Audit of Organics Dept.	2 nd Quarter of the Year
Audit of Inorganics Dept.	3 rd Quarter of the Year
Audit of Sample Receiving and Proj Management	4 th Quarter of the Year

Audit reports due to Department Manager within 30 days of audit.

Corrective Action plan due to QA Manager within two weeks of audit report.

The QA Manager monitors the progress of the corrective actions, and ensures their completion by the agreed completion date. Successful completion of a corrective action item is documented through training sign-off sheets, hardcopy examples, Emails, actions in the laboratory, or other traceable documentation. If, through an internal audit, it is ever identified that an analysis performed in the laboratory is "defective" or causing inaccurate measurements, the client is informed immediately by telephone, followed by a written notification.

At least monthly, the President holds a managerial meeting to discuss operations and quality assurance issues. This serves as a forum to discuss current quality system issues. All information is documented and retained. Successful completion of a corrective action item is documented

through training sign-off sheets, hardcopy examples, Emails, actions in the laboratory, or other traceable documentation.

Quarterly, the QA Manager charts the general Corrective Action Reports and disperses the findings to the management team. This serves as the discussion topic for one of the monthly meetings. Successful completion of a corrective action item is documented through training sign-off sheets, hardcopy examples, Emails, actions in the laboratory, or other traceable documentation.

Annually the President, QA Manager, and Laboratory Director review the internal and external audit findings, and implement any additional changes necessary to improve the quality system. This meeting takes place annually in the first quarter and is documented.

12. RECORDKEEPING, DATA REVIEW, AND REPORTING

12.1 Record keeping

- 12.1.1. The QA Manager has the responsibility for maintaining a master log of all log books issued to analysts.
- 12.1.2. All logbooks are issued a unique identification number. Log books are labeled with the following information:
 - 12.1.2.1. Log Book Title
 - 12.1.2.2. Identification Number
 - 12.1.2.3. Issue Date
 - 12.1.2.4. End Date
- 12.1.3. When filling out data logbooks with preprinted rows and columns specific to a particular test, all applicable spaces must be filled out. If a space is not used a line will be drawn through it. For un-formatted data log books the following information must be recorded:
 - 12.1.3.1. Client Name
 - 12.1.3.2. Full Sample Number
 - 12.1.3.3. Matrix Type
 - 12.1.3.4. Method
 - 12.1.3.5. Amount of sample used
 - 12.1.3.6. Dilutions complete with units
 - 12.1.3.7. GLA Code Number for standards used
 - 12.1.3.8. Lot Number for solvents/acids (if applicable)
 - 12.1.3.9. Results (if applicable), with units
 - 12.1.3.10. Analysts Initials
 - 12.1.3.11. Date of Analysis
- 12.1.4. All entries into laboratory notebooks must be in pen and be neat and legible. Mistakes will be crossed-out with a single line and initialed and dated. Pencil, whiteout and obliterated errors are unacceptable.
- 12.1.5. Unused or partially used pages must be "Z'd" out, initialed, and dated..
- 12.1.6. All calculations will be shown or represented with a generic calculation at the front of the notebook and/or in the corresponding SOP.
- 12.1.7. For more complex and long bench time tests it is not uncommon for multiple analysts to work on a single batch or page. This may involve analysts on the same shift or a shift-to-shift continuation of the analytical process. Many of the preprinted logbooks incorporate spaces for multiple analysts' initials at various stages in the analytical process. Any time an entry is made by an analyst other than the "signing" analyst it will be accompanied by the analyst's initials and date of the entry.

12.1.8. Completed lab notebooks are to be labeled with the date of the last entry and turned in to the QA Manager. Any unused pages will be “Z’d” out.

12.1.9 All raw data associated with sample and QC analysis includes the laboratory sample identification code, the date of analysis, reference to instrument identification and operating conditions, the analysis type, all calculations, automated or manual, to which the sample data is subjected, and the analyst’s initials or signature.

12.1.9 Electronically maintained records are kept in such a fashion as to indicate any change in the record. This is fulfilled automatically by the data systems. This preserves the “trackability” of the sample.

12.2 Data Review

The review function is one of the most important activities in the laboratory. The ability of the laboratory to provide its clients with valid and error-free data is essential. For every sample that is submitted to the laboratory for analysis, three review steps are conducted prior to submitting the final report to the client: (1)- Review of the information that is entered into the LIMS; (2)- Review of the data generated for each analysis performed on the sample; (3)- Review of the final report generated through the LIMS. If errors or deviations from standard procedures are discovered during a review process, corrective action is performed. This could include correcting entries in the LIMS, qualifying data, and/or the reanalysis of the sample(s). These review steps ensure that the client receives analytical results that are defensible and of high quality. Consult the Reviewing of Data and Reports SOP (GLA-Review-BG) for detailed information on reviewing procedures.

12.3 Reporting

At a minimum the standard laboratory report shall contain the following information:

- A report title with a “Sample Results” column header
- Each report page is printed on Great Lakes Analytical’s letterhead, which includes the laboratory’s name, address, phone number, and accreditation/certification numbers.
- Each report contains a electronic file identification, and the page number of total pages for that specific section
- Client name and address
- Client project manager or contact
- Client sample identification and project name or number
- Laboratory sample number
- Date sampled
- Date received
- Date extracted or digested (if applicable); time of preparation or analysis took place if holdtime is \leq 48 hours.
- Date analyzed
- Method of analysis including EPA method code (if applicable)
- Practical Quantitation Limit or Reporting Limit

- Method Detection Limit (if required)
- Sample results
- Definition of ND
- Elevated reporting limit statement if sample was reported at a dilution
- QC data consisting of Surrogate, LCS and MS/MSD recoveries and control limits (if requested)
- Identification of any unacceptable QC analyses or any other unusual circumstances or observations associated with samples. This is usually in the form of a footnote or qualifier. See Appendix 5 for a list of Great Lakes Analytical's Standard Footnotes. Please note that this list is dynamic, and the most current list of qualifiers resides electronically in the LIMS.
- Signature of the Project Manager (electronic or by hand).
- Copy of the COC.
- For subcontracted work, all of the above is identified on the report.
- The report includes a statement stating that the report cannot be reproduced, except in full, without written approval of the laboratory, where appropriate.
- The report includes a statement stating when applicable, that the sample results relate only to the analytes of interest tested or to the sample as received by the laboratory.
- If Great Lakes Analytical was responsible for sampling, a statement regarding the sampling procedures used is included in the report.
- If specific accreditation or certification requirements are not met, a narrative is added to the report that explains the issue and corrective action taken.

The Project Manager reviews the results, and checks that the analyses performed are appropriate to the client's requests. Related analyses from the same sample are compared for coherence, and the data is compared with previous results from the same source to observe any deviations from established trends. Unusually high results, or those clearly in violation of discharge limits or hazardous waste standards, are reviewed carefully for any reporting unit errors and frequently trigger an examination of the analyst's notebook and instrument printouts to check for calculation errors. The Project Manager verifies that data is flagged as necessary.

The Project Manager generates the report after their final review. Copies of final reports are electronically scanned and backed-up nightly. These reports are then sent to the client via US mail or as an electronic file via Email. The scanned reports are retained for a minimum of 5 years and include client correspondence notes, invoice, and the COC.

Preliminary or "Pending QC" reports are issued to clients when time is critical. In most cases, these reports are delayed by the analysis of the batch QC. The report stipulates that the results could change by the addition of qualifiers to sample results.

Revised reports are issued when laboratory mistakes are discovered, or when a client wants to add to or delete from a report. When laboratory mistakes are discovered, a corrective action form is completed and the issue is corrected, which may include qualifying results, rejected results or re-sampling. If a client requests changes to a report, a written request from the client stating their request is required. All revised reports are documented as such. Any revised reports include all the above information along. These supplemental reports are retained with the rest of the project records.

13. TRAINING & ETHICS

13.1 Training

When reporting for work for the first time, all new employees receive a copy of the Personnel Policy Manual, and, if appropriate for their job function, the Chemical Hygiene and Laboratory Safety Plan, and a copy of the Quality Assurance Program manual. These are his or hers to keep as part of his or her reference materials. The sole responsibility of the new employee is to read and understand the contents of these manuals. Once the new employee has read and understood the contents of the manual, he or she must sign a document that states that he or she agrees to adhere to the requirements prescribed therein. Within the first quarter of employment, each employee receives more extensive training on quality assurance practices and health and safety procedures through viewing of instructional videos and training sessions with the QA Manager. Additionally, new employees are required to enter their initials and signature into the Initials Logbook. The QA Manager may also request a copy of their resume which outlines the employee's qualifications, education, experience and training.

The Personnel Policy Manual contains information about the company's history and objectives, administrative scheduling, benefits, and general administrative policies.

The Chemical Hygiene and Laboratory Safety Plan contains pertinent information about the chemicals to which employees may be exposed and how to properly interact with those chemicals, preventative procedures to avoid emergencies as well as procedures to cope with emergencies like spills, injuries and fire.

The Quality Assurance Program manual contains information about the goals of the Quality Assurance Program and their implementation.

Before new analysts (trainees) are able to perform analyses on samples, they must serve an apprenticeship under a qualified, experienced analyst (trainer). Before working in the laboratory, the trainee reads the corresponding SOP and source method, asking questions of the trainer for clarifications. Once familiar with the requirements of the method, the trainee observes the trainer perform the analysis. Gradually, the trainee helps at various steps in the process in the presence of the trainer. Eventually, the new analyst will perform the entire analysis in the presence of the trainer to ensure adequate proficiency. Once the new analyst has demonstrated proficiency in the analytical procedures and has demonstrated the ability to maintain quality assurance documentation, he or she will submit results for an IDMP study. These analyses are performed independently. The results of these analyses are reviewed by the Department Manager. The results of these QC measurements must fulfill the acceptance criteria specified in the method-specific SOP. If the results are not acceptable, the trainee continues working with the trainer to improve any technique issues. The IDMP is repeated until successful. Once the QC analysis is complete and acceptable, the Department Manager must be satisfied that the new analyst understands the methods he or she will be performing, the quality control parameters, and documentation of any corrective action that may be necessary. Once the manager is satisfied with the trainee's performance, the Demonstration of Capability Certification Statement (see Appendix 7) is signed by both the Department Manager and the Quality Assurance Manager, and the new analyst is capable of assuming responsibility for the

analysis. Regular auditing by quality assurance staff members ensures continued compliance with Quality Assurance requirements. All trained employees perform a blind performance evaluation sample analysis annually. No employee can perform an analysis without completing the above training.

New analysts shall possess a bachelor's degree in a natural or physical science or have completed enough course work in chemistry to equal a major in chemistry. Moreover, experience can offset the educational requirements (such as, one year of experience performing the applicable duties equals one year of education).

New technicians, or analysts-in-training, shall possess a minimum of a high school diploma. All of the above explained training is required, and all work produced by the technician is reviewed and verified by senior analysts or the department manager.

The management team must also fulfill minimum requirements for employment. The laboratory director shall hold a minimum of a bachelor's degree in a natural or physical science or have completed enough course work in chemistry to equal a major in chemistry, have a minimum of two years experience managing a laboratory, and be an employee of the laboratory. Department Managers shall hold a minimum of a bachelor's degree in a natural or physical science or have completed enough course work in chemistry to equal a major in chemistry, have a minimum of one years experience in the analyses pertaining to the applicable fields of testing, and be an employee of the laboratory. The QA Manager shall hold a minimum of a bachelor's degree in a natural or physical science or have completed enough course work in chemistry to equal a major in chemistry, have a minimum of one years experience as an analyst in a laboratory, have documented training in quality assurance and quality control, and be an employee of the laboratory. The management staff must also follow the same procedures as analysts before performing any analyses

All training received by employees is documented on standardized forms. Each employee has a training folder on file with the QA Manager that contains the completed training forms, any other training documentation including initial demonstration data, and a resume outlining their qualifications. For complete instructions on Great Lakes Analytical's training program, consult the Employee Training SOP.

13.2 Ethics Policy

All new employees are required to read, understand and sign Great Lakes Analytical's Ethics and Data Integrity Agreement (see Appendix 6 for more information).

14. MATERIALS, EQUIPMENT AND FACILITIES

14.1 Materials

Great Lakes Analytical uses only standards and reagents of high quality and reliability. The grades, ratings, and /or purities of the chemicals and materials used in the laboratory equal or exceed the source methodology requirements. Information including date received, date opened, storage, and expiration dates for all chemicals is documented by use of labels and logbooks. More detailed information on the documentation of standards, chemicals, reagents, and materials can be found in the Chemical and Reagent Receipt and Tracking SOP.

14.1.1 Standards

All neat and commercially mixed standards and spiking solutions used in the laboratory are traceable to a national standard. Certificates of traceability for each standard are kept on file. The preparation of working and intermediate standards is documented in either the LIMS or Standard Preparation Logbooks. The documentation includes supplier, lot number, concentration, any dilutions made, preparation and expiration date and a unique code to identify the standard. The documentation of the use of the standard is accompanied by the code at every entry in the analyst's notebook so that traceability to the purchased stock or neat standards can occur. For more complete information on standards and preparation, refer to the SOP for Standard Preparation.

14.1.2 Reagents and Gases

Chemicals and reagents used in the laboratory are of reagent grade (AR) or better. The preparation of working and intermediate reagents is documented in Reagent Preparation Logbooks. The documentation includes supplier, lot number, concentration, any dilutions made, preparation and expiration date and a unique code to identify the standard. The documentation of the use of the reagent is accompanied by the code at every entry in the analysis logbooks so that traceability to the purchased chemicals can occur. Gases used for gas chromatographs are of zero grade or better. Gas lines have hydrocarbon and moisture traps inline for further purification.

14.1.3 Sources of Water

There are essentially three types of water used for analysis at Great Lakes Environmental. Volatile analysis methods use commercially purchased drinking water. All other areas use either Type I or Type II water. Type II water is deionized water, and Type II is deionized water processed through a Barnstead E-Pure Water Purification System. Both water sources are checked daily for resistivity values. Type II must have a resistivity value at least 0.5 megaohm-cm (conductivity less than 2.0 umhos/cm) at 25°C. Type I water must have a resistivity value of at least 10 megaohm-cm.

14.1.4 Glassware

The quality of glassware used for analytical procedures meets or exceeds the requirements of the source methods. Volumetric glassware is ASTM Class A. Glassware used for purposes that may cause damage from heat or chemicals is made of borosilicate. Standardized procedures for glassware cleaning can be found in the method-specific SOPs (see also section 8.12 above).

14.2 Organic Analytical Equipment

14.2.1 Gas Chromatography/Mass Spectroscopy (GC/MS)

GC/MS-1 Installed 8/91
Hewlett-Packard 5971 Mass Selective Detector
Hewlett-Packard 5890 II Gas Chromatograph
Restek RTX - 502.2 60M X 0.53 mm column for EPA Method 624, 8260
Tekmar LSC 2000 Purge and Trap
Varian Archon Purge & Trap Autosampler
Hewlett-Packard Chemstation and Enviroquant Target Data Management System

GC/MS-2 Installed 11/91
Hewlett-Packard 5971 Mass Selective Detector
Hewlett-Packard 5890 II Gas Chromatograph
J&W DB5MS 0.32 mm X 30M Column for EPA Method 625, 8270
Hewlett-Packard 7673A Auto-sampler
Hewlett-Packard Chemstation and Enviroquant Target Data Management System

GC/MS-3 Installed 5/94
Hewlett-Packard 5972 Mass Selective Detector
Hewlett-Packard 5890 II Gas Chromatograph
J&W DB 624 0.53 mm X 75 M Column for EPA methods 624, 8260
Tekmar LSC 3000 Purge and Trap
ALS 2016 Auto-Sampler & Auto-Sampler Heater
Hewlett-Packard Chemstation and Enviroquant Target Data Management System

GC/MS-4 Installed 2/02
Hewlett-Packard 5973 Mass Selective Detector
Hewlett-Packard 5890N Gas Chromatograph
J&W DB-VRX--20M X 0.18 mm column for EPA Method 624, 8260
Tekmar LSC 2000 Purge and Trap
Tekmar 2016 Purge & Trap Autosampler
Hewlett-Packard Chemstation and Enviroquant Target Data Management System

GC/MS-5
Hewlett-Packard 5973 Mass Selective Detector
Hewlett-Packard 6890 Plus Gas Chromatograph
J&W DB5MS 30m X 0.25mm column for EPA Method 625, 8270
Hewlett-Packard 7683 Autosampler
Hewlett-Packard Chemstation and Enviroquant Target Data Management System

Installed 6/02

14.2.2 Gas Chromatographs

GC-2
Hewlett-Packard 5890 II Gas Chromatograph
J&W DB5 608 30 M X 0.53 mm column for Methods 8080 and 8150
ECD/ECD Detectors
Hewlett-Packard Chemstation and Enviroquant Target Data Management System
(2) - Hewlett-Packard 7673A Auto-sampler

Installed 12/90

GC-3
Hewlett-Packard 5890 II Gas Chromatograph
Restek 502.2 0.53 mm X 60 M Column for Methods 8021, TPH-Gas, GRO/PVOC
FID/PID Detectors
Tekmar 2000 Purge and Trap
Tekmar ALS 2016 Autosampler
Hewlett-Packard Chemstation and Enviroquant Target Data Management System

Installed 11/91

GC-4
Hewlett-Packard 5890 II Gas Chromatograph
J&W DB-1 60M X 0.32 mm and DB5 0.53 mm X 30 M columns for Methods 8015, 8100, DRO, TPH-Diesel, and Glycols and Industrial Solvents
FID/FID Detectors
MS-DOS Instrumentation Control Software
Hewlett-Packard Chemstation and Enviroquant Target Data Management System
Tekmar SHS 7000 Static Headspace Sampler/ Tekmar SHS 7050 Auto Sampler
Hewlett-Packard 7673 Autosampler
Hewlett-Packard Chemstation and Enviroquant Target Data Management System

Installed 11/91

GC-5
Hewlett-Packard 5890 II Gas Chromatograph
J&W DB624 0.53 mm X 30 M column for Method 8021, TPH-Gasoline and GRO/PVOC
FID/PID Detectors
Tekmar LSC 2000 Purge and Trap
Tekmar ALS 2016 Auto-sampler
Hewlett-Packard Chemstation and Enviroquant Target Data Management System

Installed 6/92

GC-9
Hewlett-Packard 5890 II Gas Chromatograph
2 DB-608 0.53 mm X 30 M columns for EPA 8150, 8080
ECD/ECD Detectors
Hewlett-Packard 7673A Auto-sampler
Hewlett-Packard Chemstation and Enviroquant Target Data Management System

Installed 10/93

GC-12
Hewlett-Packard 5890 Gas Chromatograph
2DB-5 30M X 0.32 mm columns for EPA 8150, 8080
ECD/ECD Detectors
Hewlett-Packard 7673A Autosampler
Hewlett-Packard Chemstation and Enviroquant Target Data Management System

Installed 8/95

14.2.3 High Performance Liquid Chromatographs (HPLC)

HPLC-3
Hewlett-Packard Series 1050 HPLC System includes:
Autosampler w/ carousel, Pump, and UV Detector
Hewlett-Packard 1046A Programmable Fluorescence Detector
Vydac 201TP54 column 250 mm x 4.6 mm id for Method 8310
Hewlett-Packard Chemstation and Enviroquant Target Data Management system

Installed 10/98

HPLC-4
Hewlett-Packard Series 1050 HPLC System includes:
Autosampler w/ carousel, Pump, and UV Detector
Hewlett-Packard 1046A Programmable Fluorescence Detector
Vydac 201TP54 column 250 mm x 4.6 mm id for Method 8310
Hewlett-Packard Chemstation and Enviroquant Target Data Management system

Installed 05/00

14.2.4 Total Organic Halide/Total Organic Carbon (TOX/TOC) Analyzer

Thermo Euroglass TOC1200 Total Organic Carbon Analyzer
Euroglass Data Software

14.3 Inorganic Analytical Instrumentation

14.3.1 Trace Metal Analytical Instrumentation (AA and ICP)

Thermal Jarrel Ash 61E Trace ICP
Thermal Jarrel Ash AS300 Autosampler
Thermal Jarrel Ash ThermoSpec Data Acquisition System

Installed 8/98

Varian SpectrAA-600.DBQ Atomic Absorption Spectrophotometer
Varian VGA 77 Hydride Generator
IBM OS/2 Operating System

Installed 6/94

Varian SpectrAA-600z Atomic Absorption Spectrophotometer
Zeeman Graphite Tube Atomizer-100
Varian PSD97Z Programmable sampling system
IBM OS/2 Operating System
Panasonic KX-P1150 Printer

Installed 6/94

14.3.2 Inorganic Analyzer

Westco SmartChem Discrete Auto-Analyzer

14.3.3 General Chemistry Analytical Instrumentation

Blue M- Stable Therm Gravity Oven

American Scientific Products- DX-68 Drying Ovens

Ney- Model 525 Series II Muffle Furnace

Milton Roy Spectronic 20D UV/Visible Spectrophotometer

Mettler AT-250 Analytical Balance

Parr- Model 1108 Oxygen Bomb

Pensky-Martens Closed Cup Flash Point Tester

Cleveland Open Cup Flash Point Tester

YSI Model 35 Conductivity Meter

Fisher 925 pH/Ion meter

A10 Tekmar Laboratory Mill

Precision Scientific 815 Low Temperature Incubator

Orion 860 Oxygen Meter

Fisher 25 pH Meter

Hach COD Reactor

Orbeco-Hellige Turbidimeter

Lachat Quickchem AE Automated Ion Analyzer

Barnstead E-Pure Water Purification System

Sartorius LC6200S Top Loading Balance

Sartorius PT-600 Top Loading Balances (2)

Ohaus CT600S Top loading Balance

14.4 Sample Preparation

CEM MDS-2100 Microwave Digestion System

Environmental Express Max Fil Pressure Filtration Device

Associated Design Manufacturing 3750-SHWF Hazardous Waste Filtration Unit

Branson 8210 Sonicator Bath

Six-foot fume hood (7)

Heat Systems (Misonics) Dual Horn Sonicator Model XL2020.

Millipore rotary extractor (3)

Millipore TCLP Zero Head Space Extractor (12)

Activated Charcoal Positive Pressure Hood (2).

14.5 Field Sampling Equipment

Isco 2910 Composite Sampler (2)

14.6 Sample Storage

Freezer Storage: Approximately 60 cubic feet in 4 separate, lockable, and temperature-monitored freezers.

Refrigerated Storage: Approximately 231 cubic feet in 7 separate and temperature-monitored refrigerators.

Unrefrigerated Sample Storage: Approximately 393 square feet of shelving for sample storage.

14.7 Out-of-Service Equipment

Any equipment found to give suspect results, or is taken offline from production due to mechanical problems is categorized as "Out-of-Service." If it is determined that the equipment will not be

repaired in the near future, it is moved to the back warehouse, and stored on the “Out-of-Service” equipment shelves. Equipment that is to be repaired for use is labeled as “Out-of-Service” and an entry in the maintenance logbook is made stating the date and status of the equipment. No equipment categorized as “Out-of-Service” is used for analyses until it is proven to be able to fulfill all method requirements, including calibration, verification, and tuning.

14.8 Facility’s Equipment

Great Lakes Analytical's laboratory occupies a 10,000 square foot custom designed facility. There are seven fume hoods used in the laboratory for use when working with chemicals and samples that have hazardous vapors. The ventilation system used in the volatiles department is a separate system to minimize cross contamination from other volatile chemicals used in the laboratory. There is a first aid kit, eye wash station, and chemical spill kits in each department. All gas tanks are chained to the walls of the two warehouse areas. All waste disposal containers are stored in the warehouses, with solvent waste stored in a flammable cabinet. All disposal activities are documented to include the date samples are disposed and the responsible person. Consult the Chemical Hygiene Plan for more detail. See Appendix 2 for a diagram of the laboratory.

14.9 Housekeeping

Each department is responsible for keeping their areas clean and in an orderly fashion. Samples are returned to storage after use, prep areas are cleaned daily, making sure that no residual chemicals or samples are left on the benchtop. Moreover, a cleaning service cleans the floors of the entire laboratory three times a week. Periodically, the laboratory may decide to wipe-sample the benchtops for any contamination that may adversely affect the data quality.

15. Record Storage and Electronic Data Procedures

All records, raw data for calibrations, samples, QC measures, and review forms, reports, logbooks, client correspondence, corrective action reports, performance evaluation sample results, audit reports, obsolete procedures, records pertaining to all suppliers of supplies and support, and any other forms of information generated at Great Lakes Environmental are archived for a minimum of 5 years. All of these records are stored in bankers boxes with labels indicating their contents. All information is stored at an off-site storage facility. Both locations are protected against fire, theft loss, environmental deterioration, and vermin. A management system is in place to control the access of the records. Project Management oversees the check-in and check-out of data from the storage facility. Whenever there is a need for archived data, a request is made to the Project Manager who supplies the requestor with keys to the storage facility. Data taken from storage is then returned by requesting access from Project Management. State and regulatory agencies requesting access to the archived information for the purpose of certification are allowed access to the archived records. The Project Manager controls all archiving activities and the logbook. All the information and records generated by Great Lakes Analytical are retained for 5 years.

In the event that Great Lakes Analytical merges with another business, or goes out of business, the laboratory will send notification to each client. The client will then have an opportunity to instruct the laboratory as to what to do with their analytical records. If they do not respond within one month of the notification, it will be assumed that the records are not desired and will therefore be disposed if alternate storage is not available.

Most of the work performed at Great Lakes Analytical involves the use of automated equipment and computer software. All computer and automated equipment is maintained to ensure proper functioning and provide environmental and operating conditions necessary to maintain the integrity of calibration and test data. Hardcopies of all data generated by automated equipment, data systems and computer software are kept on file and reviewed for completeness. Electronic data is organized on the local area network drive or PC harddrives by use of designated directories and file names (ex., the directory names for raw data are the analysis date; reports are stored by project number).

The computer network system at Great Lakes Analytical is a secure system. Access to all information on the network, including analysis data, reports, invoicing, and accounting data, requires a password. This prevents unauthorized access to, and the unauthorized amendment of, computer records. Write-protected backups of all computer records are performed daily. All of these described procedures preserve the integrity of data, including integrity of data entry or capture, data storage, data transmission, and data processing. For more information on these issues, refer to the SOP for The Maintenance and Administration of the Laboratory Information Management System and the SOP on Data Review.

16. GLOSSARY TERMS

Acceptance limits: The data quality limits specified for analytical method performance.

Accuracy: A measure of the degree of agreement between an observed value generated by a specific procedure and a true value. Accuracy includes a combination of random error (precision) and systematic error (bias) components that are due to sampling and analytical operations.

ASTM: The American Society for Testing and Materials, West Conshohocken, PA, a non-for-profit, voluntary standards development system.

Analyte: A chemical element, chemical compound, or property.

Analyzed reagents (AR): Chemicals analyzed for impurities where the level of impurities is reported in accordance with specifications of the Committee on Analytical Reagents of the American Chemical Society.

Analytical standard: A solution of a compound or a mixture of compounds of known purity in an appropriate solvent used to prepare calibration standards. An analytical standard may be traceable to NIST standard reference materials.

Audit: A thorough, systematic, qualitative examination of a laboratory for compliance with state agency certification requirements, including but not limited to an examination of any of the following: facilities, equipment, personnel, training, procedures, documentation, record keeping, data verification, data validation, data, management, data reporting or any aspect of the laboratory's activities which affect the laboratory's ability to meet the state agency's conditions for accreditation.

Batch: One to 20 environmental samples of the same matrix that are prepared together with the same process and personnel, using the same lot of reagents with a maximum time between the start of processing of the first sample and the start of processing of the last sample being 24 hours.

Bias: The systematic or persistent distortion of a measurement system that causes errors in one direction (the expected sample measurement is different from the true value).

Blind sample: A sub sample for analysis with a composition known to the submitter that is used to test the analyst's, analyst-in-training's, or technician's proficiency in the execution of the measurement system. The analyst, analyst-in-training, or technician may know the identity of the sample but not its composition. The laboratory management may know the identity and composition of the blind sample.

Calibration: initial calibration.

Calibration blank: A volume of distilled or deionized water containing the same reagents, solvents, acids or preservatives contained in the calibration standards. The calibration blank is used to determine the response of the instrument to the zero concentration of an analyte of interest.

Calibration standard: A solution of an analyte or mixture of analyses of known purity in an appropriate solvent used to calibrate the analytical instrument response with respect to analyte concentration.

Certification: accreditation; the issuance by a state agency of certificates of competency to laboratories meeting the minimum standards established by the state agency. Accreditation is not a guarantee of the validity of the data generated by the accredited laboratory.

Certified laboratory: An accredited laboratory.

Confidence interval: The range of values, calculated from an estimate of the mean and standard deviation, which is expected to include the population mean with a stated level of certainty.

Continuing calibration verification (CCV) check: The analysis of a continuing calibration verification check standard to determine the state of calibration of an instrument between recalibrations.

Continuing calibration verification check standard: A solution of an analyte or mixture of analytes of known purity in an appropriate solvent used to perform the continuing calibration verification check. The source of the analyte may be the same as the source of the calibration standards source or it may be a second source.

Controlled access storage: A refrigerator, cooler, rooms or building in which samples are held and from which samples may be removed only by authorized laboratory personnel.

Corrective action: An action taken by the laboratory to eliminate or correct the causes of an existing nonconformance in order to prevent the recurrence of the nonconformance.

Document: Any written or pictorial information describing, defining, specifying, reporting, or certifying any activities, requirements, procedures or results.

Drinking Water: Water used or intended for uses potable water.

Drinking water analyses: analyses performed on water used or intended for use as potable water.

Drinking water sample data: analytical results generated by drinking water analysis.

Environmental analyses: Measurement information results generated through the analyses of environmental samples.

Environmental samples: samples, excluding any laboratory generated quality control samples such as matrix spikes, duplicates, and laboratory control samples, for which the laboratory analytical results will be reported.

Environmental sample data: Measurement data generated through the analysis of environmental samples.

Equipment Blank: An organic-free aqueous solution that is opened in the field, poured appropriately over and through the sample collection device, collected in a sample container and returned to the lab as a sample. Equipment blanks are a check of sampling device cleanliness.

Field Blank: An organic-free aqueous solution that is transferred from one preserved vessel to another at the sampling site. This serves as a check on reagent and environmental contamination.

Initial calibration: The analyses of calibration standards for a series of different specified concentrations of an analyte of interest used to define the linearity and dynamic range of the response of the instrument to an analyte.

Initial calibration verification (ICV): Analysis of an initial calibration verification check standard to determine the state of calibration of an instrument before sample analysis is initiated.

Initial calibration verification check standard: A solution of an analyte or mixture of analytes of known purity in an appropriate solvent used to perform the initial calibration verification check.

Initial demonstration of method performance (IDMP) study: The procedures performed by an analyst that insure that the analyst does not analyze unknown samples via a new or unfamiliar method prior to obtaining experience.

Inorganic: All parameters not included in organic parameters.

Laboratory: A facility that is equipped and used for the testing of samples. A laboratory with a main facility and an annex in the same city as the main facility and within 5 miles of the main facility may be considered one laboratory.

Laboratory control sample: An uncontaminated sample matrix with known quantities of analytes. The analytes shall be obtained from a second source. The laboratory control sample is analyzed exactly like a sample to determine whether the measurement system is performing as expected and to determine whether the laboratory is capable of making accurate and unbiased measurements.

Linear calibration range: Linear dynamic range

Linear dynamic range: The range of concentration over which the analytical system exhibits a linear relationship between the amount of material introduced into the instrument and instrument's response,

Litigation sample: A sample, knowingly analyzed by the laboratory, for possible legal action.

Matrix: The predominant material of which the sample to be analyzed is composed. Sample matrices are:

Aqueous: any aqueous sample other than drinking water, potable water, or saline or estuarine Waters;

Drinking water: water used or intended for use as potable water;

Non-aqueous liquid: any organic fluid with <15% settleable solids;

Saline or estuarine water: any aqueous sample from an ocean or estuary.

Solids: soils, sediments, sludges and other matrices with >15% settleable solids

Chemical waste: a product or by-product of an industrial process that results in a matrix not previously defined.

Matrix spike: an aliquot of matrix fortified (spiked) with known quantities of specific analytes and subjected to the entire analytical procedure in order to determine the effect of the matrix on an approved test method's recovery.

Matrix spike duplicate: a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method.

Method: a procedure or technique for performing an activity (for example preparation and sample analysis).

Method blank: a sample which does not contain an analyte of interest above an acceptable level and which is processed simultaneously with and under the same conditions as samples being analyzed for analytes of interest.

Method detection limit (MDL): the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Megohm-cm: megohm-centimeter

mg: milligram

emhas/cm: microhas per centimeter

Neat compound: an undiluted compound

NIST: the United States Department of Commerce, Technology Administration, National Institute of Standards and Technology (formerly National Bureau of Standards).

Operating condition: the state of the measurement system when samples are analyzed.

Organic: all analytes analyzed by all forms of gas chromatography and high-pressure liquid chromatography (excluding ion chromatography).

Parameter: an analyte

PE: performance evaluation

Performance evaluation program: the aggregate of providing rigorously controlled and standardized samples to a laboratory for analysis, reporting of results, statistical evaluation of the results in comparison to peer laboratories and the collective demographics and results summary of all participating laboratories.

Performance evaluation sample: a sample prepared and supplied by a state agency approved performance evaluation program, whose composition is unknown to the laboratory management, analyst, analyst-in-training, and technician. The performance evaluation sample is provided to test whether the laboratory can produce analytical results within specified performance limits.

Performance evaluation study: a single testing event within a performance evaluation program.

PQL: The Practical Quantitation Limit is the lowest level to be reliably detected within specified limits of precision and accuracy during routine laboratory operating conditions on environmental samples.

Precision: the measure of mutual agreement among individual measurements of a sample, usually under prescribed similar conditions, usually expressed as the standard deviation, variance, or range, in either absolute or relative terms.

Quality assurance: an integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets the requirements of state certification programs.

Quality assurance plan (QAP): a written description of the laboratory's integrated system of activities involving planning, quality control, quality assessment, reporting and quality improvement to ensure that a product or service meets defined standards of quality with a stated level of confidence.

Quality control: the overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users.

Quality control acceptance limits: the statistically determined or approved test method specified limits within which a single measurement, quality control data point, series of measurements or series of quality control data points will fall when the analytical process is producing data of satisfactory quality.

Quality control check sample: an aliquot of method blank fortified with a solution of the analytes of interest of known concentration obtained from an outside source. The quality control check sample is used to check either laboratory or instrument performance.

Quality control procedures: the activities used to measure and monitor the accuracy and reliability of an analytical procedure or method.

Quantitating: the arithmetic process of determining the amount of analyte in a sample.

Reagent Grade: Analytical Reagent (AR) Grade, ACS Reagent Grade and Reagent Grade are synonymous terms for reagents that conform to the current specifications of the Committee on Analytical Reagents of the American Chemical Society.

Replicate: two or more equal aliquots taken from the same sample container and analyzed independently for the same constituent.

Sample tracking: an unbroken trail of accountability that ensures the physical security of samples, data, and records.

Sample duplicate: two equal aliquots taken from the same sample container and analyzed independently for the same constituent.

Second source: a different vendor or manufacturer or different lots from the same vendor or manufacturer.

Spike concentration: a specified amount of an analyte of interest in a matrix spike, laboratory control sample or quality control check sample.

Stable: resistant to displacement or change.

Standard operating procedure (SOP): a written laboratory specific document which details the method of an operation, analysis or action whose techniques and procedures are thoroughly prescribed and which is accepted as the method for performing certain routine or repetitive tasks.

Standard methods: Standard Methods for the Examination of Water and Wastewater, 18th edition, 1992

Statistical outlier test: a mathematical process for determining that an observation is unusually large or small relative to the other values in a data set.

Surrogate: an organic compound which is similar to the analytes of interest in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples.

Test: a technical operation that consists of the determination of one or more characteristics or performances of a given product, material, equipment, organism, physical phenomenon, process or service according to a specified procedure.

Traceability: the property of a result of a measurement whereby it can be related to appropriate standards, usually international or national standards, through an unbroken chain of comparisons.

Trip Blank: An organic-free aqueous solution that is transported to the sampling site and returned to the laboratory without being opened to serve as a check on contamination originating from sample transport, shipping and site conditions.

True value: the accepted or actual value of the quantity being measured.

USEPA: the United States Environmental Protection Agency.

USEPA Water Pollution (WP) Performance Evaluation Study: a performance evaluation program sponsored by the USEPA in which participation may be established by contracting the Illinois Environmental Protection Agency, Bureau of Water, Compliance Assurance, PO Box 19276, Springfield, Illinois 62794-9276

USEPA Water Supply (WS) Performance Evaluation Study: a performance evaluation program sponsored by the USEPA in which participation may be established by contacting the Illinois Environmental Protection Agency, Division of Springfield, Illinois 62794-9276

Validation: confirmation by examination and provision of objective that the particular requirements for a specific intended use are fulfilled. Validation is the process of examining a sample result to determine conformance with users' needs.

Verification: confirmation by examination of and provision of objective evidence that specified requirements has been fulfilled.

17. GREAT LAKES ANALYTICAL'S SCOPE OF TESTS AND PROCEDURES

MASS SPECTROSCOPY

<u>Test Category</u>	<u>Source Method</u>	<u>GLA SOP Code</u>
Volatile Organics by GC/MS	624/8260B	GLA-8260-BG
Semi-Volatile Organics by GC/MS	625/8270C	GLA-8270-BG

CHROMATOGRAPHY

Halogenated Volatile Organics	601/8021B/502.2	GLA-8021-BG
Industrial Solvents	8015B	GLA-8015IS-BG
Aromatic Volatile Organics	602/8021B/502.2	GLA-8021-BG GLA-502.2-BG
Polychlorinated Biphenyl's (PCB's) in Oil	608/8082	GLA-8082-BG
Organochlorine Pesticides & PCB's	608/8081A & 8082	GLA-8082-BG
Chlorinated Hydrocarbons	8121	GLA-8270-BG
Chlorinated Herbicides	8151A	GLA-8151-BG
Polynuclear Aromatic Hydrocarbons: By HPLC	610/8310	GLA-8310-BG
Ethylene Glycol	8015	GLA-8015EG-BG
Semivolatile Extraction & Cleanup Procedures	3500B/3510C/3550B 3580A/3620B/3640A 3660B/3665A	GLA-3500-BG
Toxicity Characteristic Leaching Procedure	1311	GLA-1311-BG (plus the analysis SOP)
Synthetic Precipitation Leaching Procedure	1312	GLA-1312-BG (plus the analysis SOP)

LEAKING UNDERGROUND STORAGE TANK (LUST) ANALYSES

Gasoline Range Organics	WDNR-GRO	GLA-GRO-BG
Diesel Range Organics	WDNR-DRO	GLA-DRO-BG
Total Recoverable Petroleum Hydrocarbons	WDNR-418.1, 9073	GLA-418.1-BG
Total Petroleum Hydrocarbons as Gas or Diesel	8015/CA METHOD	GLA-8015G-BG GLA-8015D-BG

METALS ANALYSIS

The following are the metals routinely analyzed:

Aluminum	Cadmium	Lead	Nickel	Titanium
Antimony	Calcium	Lithium	Potassium	Thallium
Arsenic	Chromium	Magnesium	Selenium	Tin
Barium	Cobalt	Manganese	Silver	Zinc
Beryllium	Copper	Molybdenum	Sodium	
Boron	Iron	Mercury	Strontium	

<u>Test Category</u>	<u>Source Method</u>	<u>GLA SOP Code</u>
Mercury in Liquids and Solids	245.1/245.5/SM3112/7470A/7471A	GLA-245.1/5-BG
Metals Analysis by ICP	200.7/SM3020/6010B	GLA-6010-BG
Metal Analysis by GFAA	200.9/SM3113/7000A/3113B	GLA-7000-BG
Digestion Preparation for Liquids	200.7/200.9/SM3030/3015/3010	GLA-3010-BG
Digestion Preparation of Solids	200.7/200.9/SM3030/3050B	GLA-3050-BG

GENERAL CHEMISTRY

Acidity	305.2	GLA-305.2-BG
Alkalinity	310.1	GLA-310.1-BG
Biochemical Oxygen Demand	405.1/SM 5210.B	GLA-405.1-BG
Chemical Oxygen Demand	410.4	GLA-410.4-BG
Chloride	325.3	GLA-325.3-BG
Chlorine Residual	330.3	GLA-330.3-BG
Cyanide (Total, Reactive & Amenable)	9012A/9010B/335.4/SM4500 /7.3.3	GLA-335.4-BG
Fluoride	340.2	GLA-340.2-BG
Ignitability - Flash Point	ASTMD93-85 & 92-85	GLA-FP-BG
Hardness	130.2	GLA-130.2-BG
Ammonia	350.1	GLA-350.1-BG
Nitrate/Nitrite	353.2	GLA-353.2-BG
Total Kjeldahl Nitrogen	351.2	GLA-351.2-BG
Oil & Grease - Liquid	413.3 / 1664/5520	GLA-418.1-BG
Oxygen (dissolved)	360.1	GLA-360.1-BG
Paint Filter test	9095	GLA-9095-BG
pH (corrosivity) - Liquid	9040A/9045B/9041A	GLA-9040-BG
Phenolics (total colorimetric)	9065/420.1	GLA-420.1-BG
Phosphate (ortho) / Phosphorus	365.2	GLA-365.2-BG
Solids (Total, Dissolved, Volatile, Suspended)	160.1/160.2/160.3/160.4	GLA-160-BG
Sulfide (Total and Reactive)	9030/376.1/7.3.4	GLA-9030-BG
Sulfate	375.4	GLA-375.4-BG
Total Organic Halogens (TOX)	9020B	GLA-9020-BG
Total Organic Carbon TOC	415.1/9060/SM5310	GLA-415.1-BG

Bibliography

United States Environmental Protection Agency, 1996. Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods. SW-846, Third Edition. Office of Solid Waste and Emergency Response, Washington, D.C.

United States Environmental Protection Agency, 1983. Methods for the Chemical Analysis of Water and Wastes. EPA 600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, OH.

United States Environmental Protection Agency, 1996. Methods for the Determination of Organic Compounds in Drinking Water. EPA 600/4-88/039, Revision 2.0. Office of Research and Development, Washington, D.C.

American Public Health Association, 1992. Standard Methods for the Examination of Water and Wastewater. 18th Edition. 1015 Fifteenth Street NW, Washington, DC.

United States Environmental Protection Agency, 1997. Manual for the Certification of Laboratories Analyzing Drinking Water. EPA 815-B-97-001, 4th Edition. Office of Water, Ground Water, and Drinking Water, Technical Support Center, Cincinnati, OH.

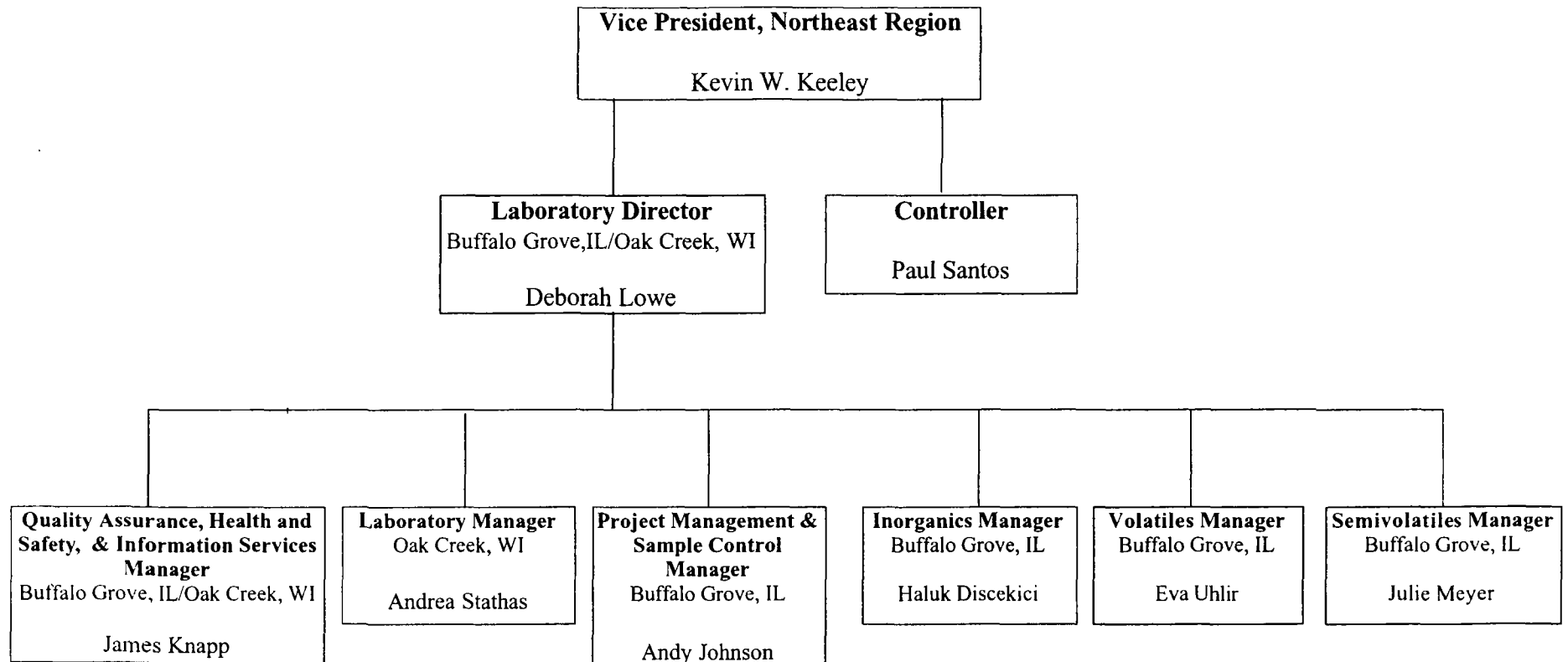
Illinois Environmental Protection Agency, 1998. Accreditation of Laboratories for Drinking Water, Wastewater, and Hazardous Waste Analysis. Title 35, Subtitle A, Chapter II, Part 186. State of Illinois Rules and Regulations, Springfield, IL.

Various standard operating procedures written by Great Lakes Analytical (See Section 17).

APPENDIX

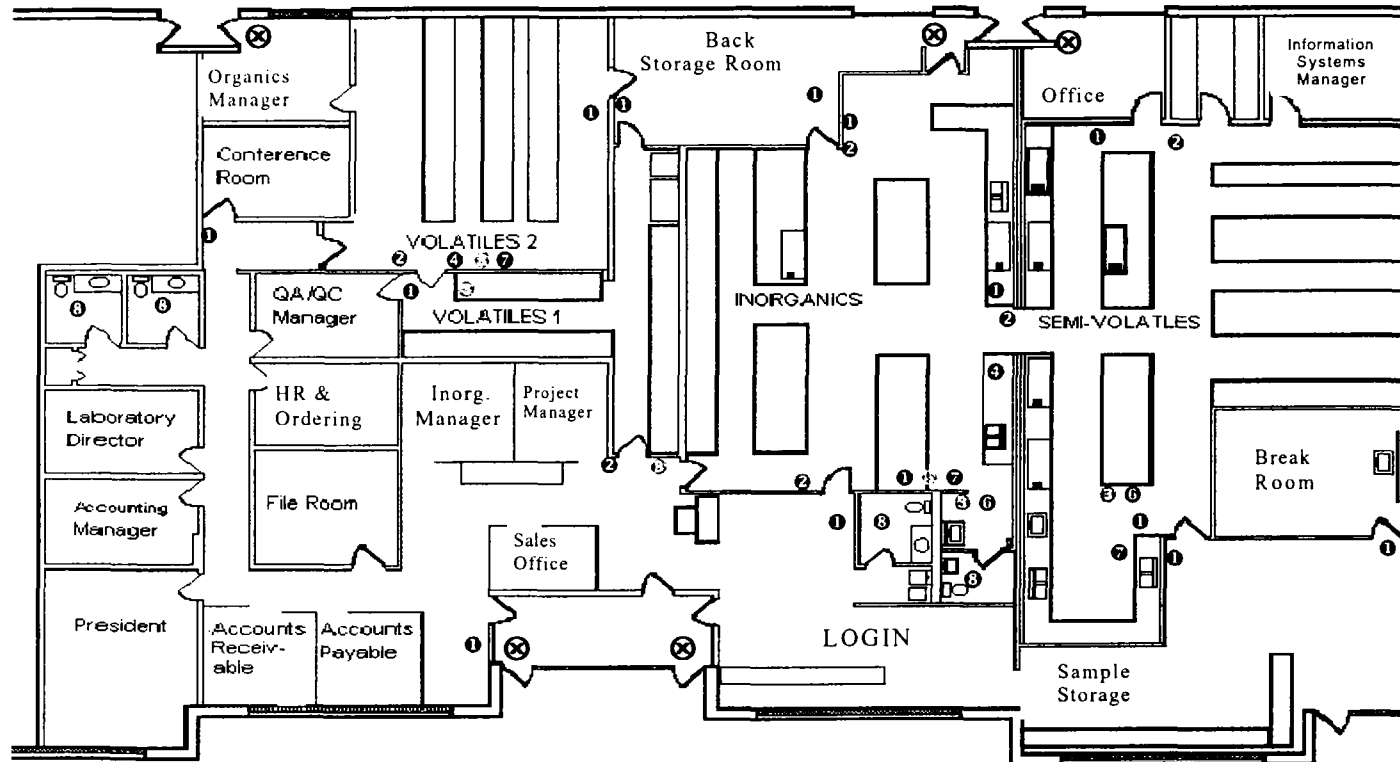
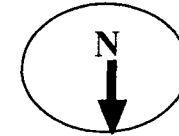
1. Laboratory Organizational Chart
2. Laboratory Diagram
3. Chain of Custody Report
4. Sample Acceptance Policy
5. Great Lakes Analytical Standard Footnotes
6. Great Lakes Analytical's Ethics and Data Integrity Agreement
7. Demonstration of Capability Certification Statement
8. SOP Training Agreement


Appendix 1.
Great Lakes Analytical
Laboratory Organizational Chart (updated 1/7/05)



Appendix 2.

 **Great Lakes Analytical Laboratory Diagram**



- | | | |
|-------------------------------|----------------------------|---|
| ① — Fire Extinguisher | ② — Emergency Alert Button | ⊕ — Eye Wash Station |
| ④ — Spill Control Station | ⊖ — Fire Blank | ⊙ — Shower Station |
| ⑦ — First Aid Kit | ⊗ — Rest Rooms |  — Hoods |
| ⊗ — Exits for Fire Evacuation | | |

Appendix 3. Chain of Custody Report



CHAIN OF CUSTODY REPORT

1380 Busch Parkway
Buffalo Grove, IL 60089-4505
(847) 808-7708
FAX (847) 808-7772

20725 Watertown Road
Brookfield, WI 53501
(414) 708-1030
FAX (414) 798-1066

Client:		Bill To:		TAT: 5 DAY 4 DAY 3 DAY 2 DAY 1 DAY < 24 HRS																																																																																																													
Address:		Address:		DATE RESULTS NEEDED:																																																																																																													
Report to:		State & Program:		TEMPERATURE UPON RECEIPT:																																																																																																													
Phone #: () Fax #: ()		Phone #: () Fax #: ()		AIR BILL NO.:																																																																																																													
Project:		DATE COLLECTED TIME COLLECTED SAMPLE METHOD PRESERVATIVES NO CONTAINERS TYPE CONTAINERS		SAMPLE CONTROL CHECKED RECORDED ANALYZED RELEASED GOOD CLOSURE																																																																																																													
Sampler:						<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">#</th> <th style="width: 25%;">FIELD ID, LOCATION</th> <th style="width: 5%;">DATE COLLECTED</th> <th style="width: 5%;">TIME COLLECTED</th> <th style="width: 5%;">SAMPLE METHOD</th> <th style="width: 5%;">PRESERVATIVES</th> <th style="width: 5%;">NO CONTAINERS</th> <th style="width: 5%;">TYPE CONTAINERS</th> <th style="width: 5%;">SAMPLE CONTROL</th> <th style="width: 10%;">LABORATORY ID NUMBER</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>		#	FIELD ID, LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE METHOD	PRESERVATIVES	NO CONTAINERS	TYPE CONTAINERS	SAMPLE CONTROL	LABORATORY ID NUMBER	1										2										3										4										5										6										7										8										9										10					
#	FIELD ID, LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE METHOD	PRESERVATIVES			NO CONTAINERS	TYPE CONTAINERS	SAMPLE CONTROL	LABORATORY ID NUMBER																																																																																																						
1																																																																																																																	
2																																																																																																																	
3																																																																																																																	
4																																																																																																																	
5																																																																																																																	
6																																																																																																																	
7																																																																																																																	
8																																																																																																																	
9																																																																																																																	
10																																																																																																																	
PO/Quote #:																																																																																																																	
RELINQUISHED		RECEIVED		RELINQUISHED																																																																																																													
RELINQUISHED		RECEIVED		RELINQUISHED																																																																																																													
COMMENTS																																																																																																																	
				PAGE OF																																																																																																													

Appendix 4. Sample Acceptance Policy

All samples received by Great Lakes Analytical for testing must include the following to ensure complete sample tracking and fulfillment of method specific requirements:

- Some form of chain of custody (COC) report must accompany each sample or group of samples received by the laboratory. This report must include, at a minimum: sample identification; location; date and time of collection; collector's name; preservative added; sample matrix type; and any special remarks/requests. If a COC is not available at the time of sampling, notes need to be kept in the field, and then transferred onto a COC provided at the laboratory.
- All sample containers must have a label that reflects the sample's unique identification and any preservative in the container. Documentation on the label must be in indelible ink.
- The containers used for sampling should be appropriate for the analysis requested for the sample based on method requirements.
- Samples should be received by the laboratory with the maximum possible amount of the holding time left for testing.
- An adequate volume of sample must be submitted for the analyses requested.
- Samples must be preserved in the field using method specified bottles and preservatives and an effort must be made to cool the samples immediately after sampling and during transport to the laboratory.

Samples received by the laboratory that do not include the above information or show signs of damage or contamination are kept in a "hold" status until the receipt issues are resolved. Failure to meet the above requirements may result in data that is qualified.

Appendix 5. Great Lakes Analytical Footnotes

A	The concentration of the analyte detected in the sample is characteristic of a laboratory artifact.
ANR	The sample did not react to acid.
AReac	The sample reacted to acid.
B	The method blank associated with this sample contains [Custom Value] of this analyte.
BNR	The sample did not react to base.
BReac	The sample reacted to base.
E	This result is estimated. The analysis gave a final result that is above the calibration range.
Fail	Sample flowed.
	The recovery of one or more analytes in the matrix QC (MS/MSD) associated with this sample is above the laboratory's established acceptance criteria. Refer to the included QC reports for more detail.
G1	
G11	This analysis was subcontracted to [Custom Value].
G12	The reporting limits have been elevated due to low sample volume.
	The recovery of this analyte in the check standard is below the method specified acceptance criteria.
G13	
	The recovery of this analyte in the check standard is above the method specified acceptance criteria.
G14	
	The relative percent difference (RPD) of one or more analytes in the matrix QC (MS/MSD) associated with this sample is above the laboratory's established acceptance limits. Refer to the included QC reports for more detail.
G15	
	The percent recovery of the internal standard used to quantitate this analyte is below the method specified limits.
G16	
	The percent recovery of the internal standard used to quantitate this analyte is above the method specified limits.
G17	
	The recovery for this surrogate is outside the laboratory acceptance limits due to sample dilution.
G18	
	The relative percent difference (RPD) of one or more analytes in the laboratory control QC (BS/BSD) associated with this sample is above the laboratory's established acceptance limits. Refer to the included QC reports for more detail.
G19	
	The recovery of one or more analytes in the matrix QC (MS/MSD) associated with this sample is below the laboratory's established acceptance criteria. Refer to the included QC reports for more detail.
G2	
	This analyte was initially analyzed within holdtime; however, reanalysis at a dilution was performed outside the method specified holdtime.
G20	
	This analyte was initially analyzed within holdtime; however, due to instrument interference, the sample was reanalyzed outside the method specified holdtime to confirm the interference.
G21	
	The relative percent difference (RPD) of one or more analytes in the laboratory duplicate associated with this sample is above the acceptance limits. Refer to the included QC reports for more detail.
G22	
G23	The sample was diluted due to the presence of high concentrations of non-target analytes.
	The recovery of one or more analytes in the laboratory control QC (BS/BSD) associated with this sample is above the laboratory's established acceptance criteria. Refer to the included QC reports for more detail.
G3	

The recovery of one or more analytes in the laboratory control QC (BS/BSD) associated with this sample is below the laboratory's established acceptance criteria. Refer to the included QC reports for more detail.

G4

G5 This sample was received past the method specified holdtime.

Appendix 5. (cont.)

Great Lakes Analytical Footnotes

G6 This sample was extracted past the method specified holdtime.

G7 This sample was analyzed past the method specified holdtime.

G8 This sample was received without the proper preservatives required by the method.

I1 The reporting limit is elevated for this analyte due to background contamination detected in the method blank.

I2 The sample was prepared using less than the method required sample amount.

I3 The oxygen depletion does not meet the method criteria for optimal results.

I4 The amount of sample used to perform the leaching procedure was less than the method specified amount. The method was scaled down to match the amount of sample used.

J The reported concentration for this analyte is an estimated value. The reported concentration is above the method detection limit, but below the limit of quantitation.

Nodor There is no odor to this sample.

NReac The sample did not react to water.

O10 The check standard that corresponds to this sample met the SW846 method requirements. However, it should be noted that the recovery for this individual compound in the check standard was above 115%.

O11 The check standard that corresponds to this sample met the SW846 method requirements. However, it should be noted that the recovery for this individual compound in the check standard was below 85%.

O2 One or more internal standard recoveries were below the method specified acceptance criteria.

O3 One or more internal standard recoveries were above the method specified acceptance criteria.

O4 The recovery for this analyte is below the laboratory's established acceptance criteria.

O5 The recovery for this analyte is above the laboratory's established acceptance criteria.

O6 The sample was received below the required minimum weight of 20 grams.

O7 The sample was received above the required maximum weight of 35 grams.

O8 The sample was received in an unweighed jar.

O9 The pH of this volatile sample was checked prior to analysis and was found to be above the method specified pH of 2.

Odor This sample has an odor similar to [Custom Value].

Pass No sample flowed.

QC The result for one or more quality control measurements associated with this sample did not meet the laboratory and/or source method acceptance criteria.

React The sample reacted when water was added.

T1 Gas Pattern

T10 Diesel Range

T11 Motor Oil Range

T12 Early Elevated Baseline

T13 Several Large Peaks

T14 Single Large Peak

T15 Late Elevated Baseline

T2 Late Peaks

T3 Elevated Baseline

- T4 Gas Range
- T5 Non-Characteristic Gas Pattern
- T6 Early Peaks
- T7 Late Gas Range
- T8 Diesel Pattern

Appendix 5. (cont.)
Great Lakes Analytical Footnotes

- T9 Non-Characteristic Diesel Pattern
All identifications are tentative based upon spectral comparison to the EPA NIST library.
Concentrations are estimates based on a response factor of 1. Positive identification
between isomers cannot be made without retention time standards.
- TICS

Appendix 6.

Great Lakes Analytical ETHICS AND DATA INTEGRITY AGREEMENT

I, _____ (print name), state that I understand the high standards of integrity required of me with regard to the duties I perform and the data I report in connection with my employment at Great Lakes Analytical. I understand that the company's mission is:

We are a client driven environmental testing laboratory producing superior quality data in a timely manner. By providing our services to environmental decision makers we help ensure a cleaner environment.

We are committed to professional development, a safe workplace, and ethical practices. We work to maximize the potential of our staff and the strength of our team.

I understand that it is critical for our long-term success that every employee aligns with all company core values.

I agree that in the performance of my duties for Great Lakes Analytical and its clients, I shall conform to the following ethics standards and will report immediately to the Quality Assurance Manager and the appropriate supervisor any information concerning misrepresentation of analytical data that includes, but is not limited to:

- Altering an instrument computer or clock for the purposes of backdating results;
- Altering the contents of logbooks and/or data sheets to misrepresent data;
- Misrepresentation of an analyst's identity;
- Changing raw data documents with correction fluid;
- Preparation and submittal of 'fake' data packages;
- Illegal calibration techniques such as peak shaving, setting fraudulent integrator parameters, use of computer macros that alter QC results;
- Changing reported results without proper documentation and approval;
- Altering injection volumes for calibration and misrepresenting the true values;
- Failure to comply with standard operating procedures or methods in order to take 'short cuts' that may affect analytical results;
- Any attempt to misrepresent data or events as they actually occur in the course of data production, review, or reporting;
- Disposing of or deleting electronic data files or hardcopy of raw data which have not been archived.
- Engaging in any practice that ultimately misrepresents data or narratives in any way.

I will not knowingly participate in any such activity and will not tolerate unethical practices by others. I understand that confidentiality will be strictly enforced by Great Lakes Analytical when dealing with these matters. As a further extension of my commitment to this program, I am responsible for seeking approval from my Supervisor to report results that may deviate from standard operating procedures, methods, or industry standard practices. This approval shall be documented through the Corrective Action Program (See SOP; GLA QA CAP-BG). Any such reporting of data will include a laboratory narrative or report flags.

I will not perform work in the laboratory under commercial, financial, or other pressures which might adversely affect the quality of my work.

If I am unsure of how to properly handle data generated by me, I am responsible for seeking advice and approval from the Quality Assurance Manager or the appropriate supervisor. I agree to inform the Quality Assurance Manager and the appropriate supervisor of any accidental reporting of non-authentic data by others or myself within 24 hours of discovery.

I understand that if I knowingly participate in any such prohibited activity, I will be subject to serious disciplinary action that may include immediate termination by Great Lakes Analytical. I also understand that I face individual suspension and debarment from all Federal programs should I be convicted of such practices. I understand that suspension and debarment from all Federal programs affects my ability to work in the environmental field, as well as, any other professions where government funding or loans may be involved. I understand the most serious consequence of unethical conduct can be imprisonment if convicted.

My signature affirms my understanding of the consequences of violating this *'ETHICS AND DATA INTEGRITY AGREEMENT'* and my commitment to its intent. My signature further affirms that I have received formal training on this topic.

(Signature)

(Date)

Return to the Human Resources Department for placement in each personnel file.

Appendix 7

Demonstration of Capability Certification Statement

Date:_____

Analyst Name :_____

Matrix:_____

Method:_____ SOP Code & Rev #:_____ Class of Analytes:_____

We, the undersigned, certify that:

1. The analysts identified above, using the cited test method(s), which is in use at this facility for the analyses of samples under the National Environmental Laboratory Accreditation Program, have met the Demonstration of Capability.
2. The test method(s) was performed by the analyst(s) identified on this certification.
3. A copy of the test method(s) and the laboratory-specific SOPs are available for all personnel on-site.
4. The data associated with the demonstration capability are true, accurate, complete and self-explanatory.
5. All raw data (including a copy of this certification form) necessary to reconstruct and validate these analyses have been retained at the facility, and that the associated information is well-organized and available for review by authorized assessors.

Technical Director's Name & Title

Signature

Date

Quality Assurance Manager's Name

Signature

Date

Appendix 8.
SOP Training Agreement

SOP:

Revision # :

Employee: _____

By signing this form, I am acknowledging that I have read the SOP designated above. I understand the requirements and protocols presented in the document. When asked to perform this procedure, I agree to follow the instructions incorporated in the SOP. If at any time I am unable to perform the procedure as written, I must discuss an alternative action with a member of the Management Team. Once an alternative action is agreed upon, I understand that a Corrective Action Form and/or a Request for SOP Revision must be submitted to the Quality Assurance Manager.

Signature

Effective Date: _____

By initialing the revisions below, I understand and agree to follow the changes. I understand that acceptance of the above statement includes the revisions below.

<u>Revision #</u>	<u>Acceptance Initials</u>	<u>Effective Date</u>
_____	_____	_____

APPENDIX B

Asbestos Testing Laboratory Certification

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page: 1 of 1

BULK ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101882-0

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 White Pine Road

Richmond, VA 23237

Ms. Irma Faszewski

Phone: 804-275-4788 Fax: 804-275-4907

E-Mail: managerqac@leadlab.com

URL: <http://www.leadlab.com>

NVLAP Code

Designation

18/A01

EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

December 31, 2005

Effective through

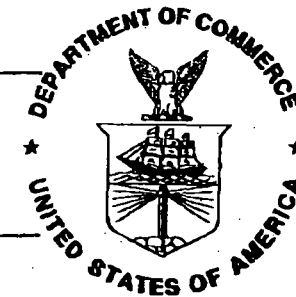
For the National Institute of Standards and Technology

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

ISO/IEC 17025:1999
ISO 9002:1994

Certificate of Accreditation



ENVIRONMENTAL HAZARDS SERVICES, L.L.C.
RICHMOND, VA

*is recognized by the National Voluntary Laboratory Accreditation Program
for satisfactory compliance with criteria set forth in NIST Handbook 150:2001,
all requirements of ISO/IEC 17025:1999, and relevant requirements of ISO 9002:1994.
Accreditation is awarded for specific services, listed on the Scope of Accreditation, for:*

BULK ASBESTOS FIBER ANALYSIS

December 31, 2005

Effective through

A handwritten signature in black ink, appearing to read "J. P. W. [unclear]".

For the National Institute of Standards and Technology
NVLAP Lab Code: 101882-0

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page: 1 of 1

BULK ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101247-0

MICRO ANALYTICAL, INC.

11521 W. North Ave.

Milwaukee, WI 53226

Mr. Jon Yakish

Phone: 414-771-0855 Fax: 414-771-6570

NVLAP Code

Designation

18/A01

EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

December 31, 2004

Effective through

A handwritten signature in black ink, appearing to read "Jon P. Mahoney".

For the National Institute of Standards and Technology

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]



ISO/IEC 17025:1999
ISO 9002:1994

Certificate of Accreditation

MICRO ANALYTICAL, INC.
MILWAUKEE, WI

*is recognized by the National Voluntary Laboratory Accreditation Program
for satisfactory compliance with criteria set forth in NIST Handbook 150:2001,
all requirements of ISO/IEC 17025:1999, and relevant requirements of ISO 9002:1994.
Accreditation is awarded for specific services, listed on the Scope of Accreditation, for:*

BULK ASBESTOS FIBER ANALYSIS

December 31, 2004

Effective through

A handwritten signature in black ink, appearing to read "William R. Mahoney".

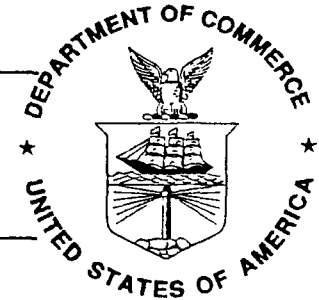
*For the National Institute of Standards and Technology
NVLAP Lab Code: 101247-0*

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

ISO/IEC 17025:1999
ISO 9002:1994

Certificate of Accreditation



MICRO ANALYTICAL, INC.
MILWAUKEE, WI

*is recognized by the National Voluntary Laboratory Accreditation Program
for satisfactory compliance with criteria set forth in NIST Handbook 150:2001,
all requirements of ISO/IEC 17025:1999, and relevant requirements of ISO 9002:1994.
Accreditation is awarded for specific services, listed on the Scope of Accreditation, for:*

BULK ASBESTOS FIBER ANALYSIS

December 31, 2005

Effective through

A handwritten signature in black ink, appearing to read "William P. Walsh".

*For the National Institute of Standards and Technology
NVLAP Lab Code: 101247-0*

APPENDIX C

Spill Events

- **C-1: Spill Event of September 16, 2003**
- **C2: Spill Event of September 17, 2003**
- **C3: Spill Event of November 19, 2003**
- **C4: Spill Event of April 21, 2004**

APPENDIX C-1

Spill Event of September 16, 2003

Phase I, Former Solvay Coke and Gas Site
Milwaukee, WI
SPCC Plan (August 2003)

REPORTABLE SPILL/RELEASE FORM

Former Solvay Coke and Gas Site
311 E. Greenfield Avenue
Milwaukee, WI
Lat. N43° 00' 49" Long. W87° 54' 23"

Name of Reporter: Thomas Jacobson Phone Number of Reporter: 914-788-7447

Position: Project Safety & Health

Date of Spill: 9/16/2003 Time: 4:00 PM Est. Quantity: < 10 Gallons

Location: South of By Products Building Tank # 23

Material: LIQUID COAL TAR

Cause of Discharge:
REMOVAL OF ASBESTOS WRAP FROM 1 1/2" STEEL PIPE
COMING FROM BOTTOM OF DEKANTER TANKS

Media Impacted (soil/groundwater)
- SOIL -

Hazards to Human Health/Environment: Ø

Weather Conditions: Sunny 75°

Corrective Action Taken:
REMOVED PIPE - INSERTED EXPANDABLE PIPE
PLUG - LEAK STOPPED

Phase I, Former Solvay Coke and Gas Site
Milwaukee, WI
SPCC Plan (August 2003)

Describe the Handling/Storage and Disposal of any Recovered Material:

COAL TAR ADSORBED TO COAL DUST. BARN BUILT
AROUND LEAKING PIPE. MATERIAL LEFT IN PLACE.

Releases:

Did the spill/release cause air pollution? N (y/n) Est. Amt. _____

Did it enter a storm sewer? N (y/n) Est. Amt. _____

Did it enter a sanitary sewer? N (y/n) Est. Amt. _____

If yes to one or both above, list persons contacted:

Name	Time	Agency	Phone #
Bill Koelz	4:00 PM	EARTH TECH	714-225-5115
Sam BERTIS	11:30 AM	US2PD	Fax 312-353-9176 TEL 312-802-5336

Other Comments:

Thomas Jacobsen [Signature] 9/17/2003
 Name (printed) Signature Date

cc: Tom Short, Golden Marina Causeway LLC
SPCC Binder

APPENDIX C-2

Spill Event of September 17, 2003

Phase I, Former Solvay Coke and Gas Site
Milwaukee, WI
SPCC Plan (August 2003)

REPORTABLE SPILL/RELEASE FORM

Former Solvay Coke and Gas Site
311 E. Greenfield Avenue
Milwaukee, WI
Lat. N43° 00' 49" Long. W87° 54' 23"

Name of Reporter: Tom Jacobson Phone Number of Reporter: 414-788-7447

Position: Project Safety & Health

Date of Spill: 9/17/2003 Time: 11:30 AM Est. Quantity: < 100 lbs

Location: Pipe Line West of Building 16

Material: Napthylens - 1

Cause of Discharge:

Found under Debris - from pipeline - ?
Previous Spill Prior to Start of Project

Media Impacted (soil/groundwater)

Soil - Drip Pot -

Hazards to Human Health/Environment: Ø

Weather Conditions:

78°

Corrective Action Taken:

Clean up & Place on Decon Pad on 6 mil Poly
and cover with Poly -

Phase I, Former Solvay Coke and Gas Site
Milwaukee, WI
SPCC Plan (August 2003)

Describe the Handling/Storage and Disposal of any Recovered Material:

Material will be Drummed for Disposal

Releases:

Did the spill/release cause air pollution? N (y/n) Est. Amt. _____

Did it enter a storm sewer? N (y/n) Est. Amt. _____

Did it enter a sanitary sewer? N (y/n) Est. Amt. _____

If yes to one or both above, list persons contacted:

Name	Time	Agency	Phone #
Bill Koaly	11:30 AM	EARTH TECH	725-5115
SAM PERLIS	11:45 AM	USEPA	312-802-5336

Other Comments:

Thomas Jacobsen [Signature] 09/17/2003
 Name (printed) Signature Date

cc: Tom Short, Golden Marina Causeway LLC
SPCC Binder

APPENDIX C-3

Spill Event of November 19, 2003

414-263-8463

Phase I, Former Solvay Coke and Gas Site
Milwaukee, WI
SPCC Plan (August 2003)

REPORTABLE SPILL/RELEASE FORM

Former Solvay Coke and Gas Site
311 E. Greenfield Avenue
Milwaukee, WI
Lat. N43° 00' 49" Long. W87° 54' 23"

Name of Reporter: THOMAS JORDAN Phone Number of Reporter: 414-645-0635

Position: PROJECT MANAGER

Date of Spill: 11/19/2003 Time: 9:50 AM Est. Quantity: 73,540 GALLONS

Location: 4762446.797 N 476048.283 E 311 EAST GREENFIELD, MILWAUKEE 53204

Material: RAIN WATER COLLECTED INSIDE GAS HOLDER -

Cause of Discharge:

DISMANTLING ROOF OF TANK IN PREPARATION FOR TANK
CLEANING. TANK #13

Media Impacted (soil/groundwater)

SOIL

Hazards to Human Health/Environment: NONE KNOWN AT THIS TIME

Weather Conditions: SUNNY 54° WIND WEST 15 MPH

Corrective Action Taken:

TOOK SAMPLE OF WATER FOR RUSH ANALYSIS -
WATER ABSORBED INTO THE GROUND

Phase I, Former Solvay Coke and Gas Site
Milwaukee, WI
SPCC Plan (August 2003)

Describe the Handling/Storage and Disposal of any Recovered Material:

No material recovered

Releases:

Did the spill/release cause air pollution? NO (y/n) Est. Amt. _____

Did it enter a storm sewer? NO (y/n) Est. Amt. _____

Did it enter a sanitary sewer? NO (y/n) Est. Amt. _____

If yes to one or both above, list persons contacted:

Name	Time	Agency	Phone #
Bill KRALJ	9:50 AM	EARTH TECH	414-225-5115
SOM BORRIS	VIA	EARTH TECH	US EPA
WDNR	12:50	SPILL LINE	800-943-0003
Scott Ferguson	2:00 PM	WDNR	414-263-8500

Other Comments:

WDNR INCIDENT # SER 11192003 02

THOMAS JACOBSEN [Signature] 11/19/2003
Name (printed) Signature Date

cc: Tom Short, Golden Marina Causeway LLC
SPCC Binder



311 East Greenfield Avenue
Milwaukee, Wisconsin 53204
Office: 414-645-0635
Fax: 414-645-0645
lakestates@sbcglobal.net

FAX

DATE: 11/21/2003

Bill Kenz
TO: *Scott Fubben*

FROM: *Tom J.*

FAX: *263-8483*

PHONE:

PAGES: *11*

RE: *SPILL @ 311 EAST GREENFIELD*

COMMENTS:

11/20/2003 THU 21:26 FAX 4145709461 Great Lakes Analytical

002/011



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

21 November 2003

Tom Jacobson
Lake States Industrial Service
311 E. Greenfield Ave.
Milwaukee, WI 53204
RE: MSCG Pre Treatment List

Enclosed are the results of analyses for samples received by the laboratory on 11/19/03. If you have any questions concerning this report, please feel free to contact me.

Sincerely,
Great Lakes Analytical

Andrea Stathas
Project Manager

11/20/2003 THU 21:26 FAX 4145709461 Great Lakes Analytical

003/011



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 670-9460 FAX (414) 570-8461

Lake States Industrial Service 311 E. Greenfield Ave. Milwaukee WI, 53204	Project: MSCG Pre Treatment List Project Number: [none] Project Manager: Tom Jacobson	Reported: 11/21/03 09:30
---	---	-----------------------------

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Tank 13 Spill	W311185-01	Water	11/19/03 13:30	11/19/03 14:40

Great Lakes Analytical—Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Lake States Industrial Service 311 E. Greenfield Ave. Milwaukee WI, 53204	Project: MSCQ Pre Treatment List Project Number: [none] Project Manager: Tom Jacobson	Reported: 11/21/03 09:30
---	---	-----------------------------

Volatile Organic Compounds by EPA Method 624
Great Lakes Analytical—Buffalo Grove

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Tank 13 Spill (W311185-01) Water Sampled: 11/19/03 13:30 Received: 11/19/03 14:40									
Acrolein	ND	50.0	ug/l	1	3110438	11/20/03	11/20/03	EPA 624/8260B	A-01
Bromomethane	ND	10.0	"	"	"	"	"	"	"
Chloromethane	ND	10.0	"	"	"	"	"	"	"
Surrogate: Dibromofluoromethane		108 %	75.8-127	"	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4		75.6 %	62.5-145	"	"	"	"	"	"
Surrogate: Toluene-d8		104 %	76.6-130	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene		99.8 %	68.9-123	"	"	"	"	"	"

Great Lakes Analytical—Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andreas Stathas

Andreas Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9400 FAX (414) 570-9461

Lake States Industrial Service 311 E. Greenfield Ave. Milwaukee WI, 53204	Project: MSCG Pre Treatment List Project Number: [none] Project Manager: Tom Jacobson	Reported: 11/21/03 09:30
---	---	-----------------------------

**Volatile Organic Compounds by EPA Method 624 - Quality Control
Great Lakes Analytical—Buffalo Grove**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%RBC Limit	RPD	RPD Limit	Notes
Batch 3110438 - EPA 5030B (P/T)										
Blank (3110438-BLK1)				Prepared & Analyzed: 11/20/03						
Acrolein	ND	50.0	ug/l							
Acrylonitrile	ND	50.0	"							
Benzene	ND	5.00	"							
Bromodichloromethane	ND	5.00	"							
Bromoform	ND	5.00	"							
Bromomethane	ND	10.0	"							
Carbon tetrachloride	ND	5.00	"							
Chlorobenzene	ND	5.00	"							
Chlorodibromomethane	ND	5.00	"							
Chloroethane	ND	5.00	"							
2-Chloroethylvinyl ether	ND	100	"							
Chloroform	ND	5.00	"							
Chloromethane	ND	10.0	"							
1,2-Dichlorobenzene	ND	5.00	"							
1,3-Dichlorobenzene	ND	5.00	"							
1,4-Dichlorobenzene	ND	5.00	"							
1,1-Dichloroethane	ND	5.00	"							
1,2-Dichloroethane	ND	5.00	"							
1,1-Dichloroethene	ND	5.00	"							
cis-1,2-Dichloroethene	ND	5.00	"							
trans-1,2-Dichloroethene	ND	5.00	"							
1,2-Dichloropropane	ND	5.00	"							
cis-1,3-Dichloropropene	ND	5.00	"							
trans-1,3-Dichloropropene	ND	5.00	"							
Ethylbenzene	ND	5.00	"							
Methylene chloride	ND	5.00	"							
Styrene	ND	5.00	"							
1,1,2,2-Tetrachloroethane	ND	5.00	"							
Tetrachloroethene	ND	5.00	"							
Toluene	ND	5.00	"							
1,1,1-Trichloroethane	ND	5.00	"							
1,1,2-Trichloroethane	ND	5.00	"							
Trichloroethene	ND	5.00	"							
Trichlorofluoromethane	ND	5.00	"							
Vinyl chloride	ND	5.00	"							

Great Lakes Analytical—Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andreas Stathas

Andreas Stathas, Project Manager

11/20/2003 THU 21:27 FAX 4145709461 Great Lakes Analytical

006/011



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Lake States Industrial Service 311 E. Greenfield Ave. Milwaukee WI, 53204	Project: MSCG Prc Treatment List Project Number: [none] Project Manager: Tom Jacobson	Reported: 11/21/03 09:30
---	---	-----------------------------

Volatile Organic Compounds by EPA Method 624 - Quality Control
Great Lakes Analytical—Buffalo Grove

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3110438 - EPA 5030B (P/T)										
Blank (3110438-BLK1)										
Prepared & Analyzed: 11/20/03										
Surrogate: Dibromofluoromethane	54.9		ug/l	50.0		110	75.8-127			
Surrogate: 1,2-Dichloroethane-d4	43.8		"	50.0		87.6	62.5-145			
Surrogate: Toluene-d8	52.9		"	50.0		106	76.6-130			
Surrogate: 4-Bromofluorobenzene	51.7		"	50.0		103	68.9-123			
LCS (3110438-BS1)										
Prepared & Analyzed: 11/20/03										
Benzene	41.0	5.00	ug/l	50.0		82.0	61.3-142			
Bromodichloromethane	40.0	5.00	"	50.0		80.0	65.9-162			
Bromoform	44.8	5.00	"	50.0		89.6	30.2-176			
Bromomethane	41.0	10.0	"	50.0		82.0	33.8-161			
Carbon tetrachloride	42.4	5.00	"	50.0		84.8	40.3-164			
Chlorobenzene	45.4	5.00	"	50.0		90.8	79.9-132			
Chlorodibromomethane	47.1	5.00	"	50.0		94.2	54-159			
Chloroethane	54.6	5.00	"	50.0		109	37.1-163			
2-Chloroethylvinyl ether	ND	100	"	50.0			80-120			
Chloroform	41.9	5.00	"	50.0		83.8	78.6-132			
Chloromethane	37.7	10.0	"	50.0		75.4	34.3-158			
1,2-Dichlorobenzene	48.6	5.00	"	50.0		97.2	78.6-139			
1,3-Dichlorobenzene	50.3	5.00	"	50.0		101	79.1-136			
1,4-Dichlorobenzene	43.9	5.00	"	50.0		87.8	78.2-129			
1,1-Dichloroethane	41.3	5.00	"	50.0		82.6	58.2-134			
1,2-Dichloroethane	38.6	5.00	"	50.0		77.2	73-136			
1,1-Dichloroethene	40.1	5.00	"	50.0		80.2	58-136			
cis-1,2-Dichloroethene	42.6	5.00	"	50.0		85.2	76.3-135			
trans-1,2-Dichloroethene	43.8	5.00	"	50.0		87.6	58.3-137			
1,2-Dichloropropane	40.4	5.00	"	50.0		80.8	65.9-147			
cis-1,3-Dichloropropene	38.0	5.00	"	50.0		76.0	61-165			
trans-1,3-Dichloropropene	36.5	5.00	"	50.0		73.0	59.4-166			
Ethylbenzene	47.2	5.00	"	50.0		94.4	78.4-130			
Methylene chloride	43.7	5.00	"	50.0		87.4	52.2-142			
Styrene	45.7	5.00	"	50.0		91.4	69.2-144			
1,1,2,2-Tetrachloroethane	43.3	5.00	"	50.0		86.6	40.3-164			
Tetrachloroethene	50.5	5.00	"	50.0		101	44.9-165			
Toluene	41.7	5.00	"	50.0		83.4	77.4-131			
1,1,1-Trichloroethane	42.1	5.00	"	50.0		84.2	66.6-143			
1,1,2-Trichloroethane	38.8	5.00	"	50.0		77.6	74.8-147			

Great Lakes Analytical—Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas

Andrea Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Lake States Industrial Service 311 E. Greenfield Ave. Milwaukee WI, 53204	Project: MSCG Pre Treatment List Project Number: [none] Project Manager: Tom Jacobson	Reported: 11/21/03 09:30
---	---	-----------------------------

Volatile Organic Compounds by EPA Method 624 - Quality Control
Great Lakes Analytical - Buffalo Grove

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Batch 3110438 - EPA 5030B (P/T)										
LCS (3110438-BS1)										
Prepared & Analyzed: 11/20/03										
Trichloroethane	47.3	5.00	ug/l	50.0		94.6	46.7-169			
Trichlorofluoromethane	47.7	5.00	"	50.0		95.4	36-164			
Vinyl chloride	41.9	5.00	"	50.0		83.8	51.5-146			
Surrogate: Dibromofluoromethane	49.9		"	50.0		99.8	75.8-127			
Surrogate: 1,2-Dichloroethane-d4	34.8		"	50.0		69.6	62.5-145			
Surrogate: Toluene-d8	48.4		"	50.0		96.8	76.6-130			
Surrogate: 4-Bromofluorobenzene	48.7		"	50.0		97.4	68.9-123			
Matrix Spike (3110438-MS1)										
Source: W311185-01 Prepared & Analyzed: 11/20/03										
Benzene	96.9	5.00	ug/l	50.0		194	39.3-165			H
Bromodichloromethane	47.0	5.00	"	50.0		94.0	39.8-186			
Bromoform	42.2	5.00	"	50.0		104	28.1-169			
Bromomethane	41.5	10.0	"	50.0	ND	83.0	33.2-164			
Carbon tetrachloride	51.1	5.00	"	50.0		102	10-181			
Chlorobenzene	52.4	5.00	"	50.0		105	56.1-150			
Chlorodibromomethane	52.4	5.00	"	50.0		105	49-137			
Chloroethane	54.1	5.00	"	50.0		108	36.1-168			
2-Chloroethyvinyl ether	ND	100	"	50.0			80-120			L
Chloroform	48.5	5.00	"	50.0		97.0	67.5-142			
Chloromethane	40.0	10.0	"	50.0	ND	80.0	23.5-167			
1,2-Dichlorobenzene	51.5	5.00	"	50.0		103	68.3-135			
1,3-Dichlorobenzene	50.9	5.00	"	50.0		102	62.8-136			
1,4-Dichlorobenzene	45.0	5.00	"	50.0		90.0	62.1-130			
1,1-Dichloroethane	49.6	5.00	"	50.0		99.2	46.7-142			
1,2-Dichloroethane	46.6	5.00	"	50.0		93.2	60.6-151			
1,1-Dichloroethene	47.6	5.00	"	50.0		95.2	38.7-142			
cis-1,2-Dichloroethane	49.8	5.00	"	50.0		99.6	49.2-155			
trans-1,2-Dichloroethane	50.7	5.00	"	50.0		101	48-137			
1,2-Dichloropropane	49.9	5.00	"	50.0		99.8	44.6-171			
cis-1,3-Dichloropropane	44.9	5.00	"	50.0		89.8	28.6-195			
trans-1,3-Dichloropropane	45.0	5.00	"	50.0		90.0	40.6-176			
Ethylbenzene	58.6	5.00	"	50.0		117	56.1-144			
Methylene chloride	56.7	5.00	"	50.0		113	41.9-154			
Styrene	56.0	5.00	"	50.0		112	31.1-169			
1,1,2,2-Tetrachloroethane	51.0	5.00	"	50.0		102	43.9-186			
Tetrachloroethane	55.4	5.00	"	50.0		111	29.1-160			

Great Lakes Analytical - Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas

Andrea Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Lake States Industrial Service 311 E. Greenfield Ave. Milwaukee WI, 53204	Project: MSCO Pre Treatment List Project Number: [none] Project Manager: Tom Jacobson	Reported: 11/21/03 09:30
---	---	-----------------------------

Volatile Organic Compounds by EPA Method 624 - Quality Control
Great Lakes Analytical—Buffalo Grove

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%RGC Limit	RPD	RPD Limit	Notes
Batch 3110438 - EPA 5030B (P/T)										
Matrix Spike (3110438-MSI)										
		Source: W311185-01			Prepared & Analyzed: 11/20/03					
Toluene	90.8	5.00	ug/l	50.0		182	56.2-152			H
1,1,1-Trichloroethane	49.5	5.00	"	50.0		99.0	42.2-152			
1,1,2-Trichloroethane	46.0	5.00	"	50.0		92.0	69.5-155			
Trichloroethene	55.3	5.00	"	50.0		111	13.5-180			
Trichlorofluoromethane	46.7	5.00	"	50.0		93.4	12-173			
Vinyl chloride	43.1	5.00	"	50.0		86.2	21.5-165			
Surrogate: Dibromofluoromethane	50.1		"	50.0		100	75.8-127			
Surrogate: 1,2-Dichloroethane-d4	38.4		"	50.0		76.8	62.5-143			
Surrogate: Toluene-d8	50.0		"	50.0		100	76.6-130			
Surrogate: 4-Bromofluorobenzene	52.2		"	50.0		104	68.9-123			
Matrix Spike Dup (3110438-MSD1)										
		Source: W311185-01			Prepared & Analyzed: 11/20/03					
Benzene	91.0	5.00	ug/l	50.0		182	39.3-165	6.28	38.2	H
Bromodichloromethane	46.5	5.00	"	50.0		93.0	39.8-186	1.07	34.2	
Bromoform	52.8	5.00	"	50.0		106	28.1-169	1.14	35.5	
Bromomethane	41.2	10.0	"	50.0	ND	82.4	33.2-164	0.726	33.8	
Carbon tetrachloride	48.6	5.00	"	50.0		97.6	10-181	4.60	37.5	
Chlorobenzene	50.3	5.00	"	50.0		101	56.1-150	4.09	17.5	
Chlorodibromomethane	52.4	5.00	"	50.0		105	49-157	0.00	29	
Chloroethane	49.5	5.00	"	50.0		99.0	36.1-168	8.88	46	
2-Chloroethyvinyl ether	ND	100	"	50.0			80-120		20	L
Chloroform	47.5	5.00	"	50.0		95.0	67.5-142	2.08	17.5	
Chloromethane	58.0	10.0	"	50.0	ND	76.0	23.3-167	5.13	33.8	
1,2-Dichlorobenzene	51.7	5.00	"	50.0		103	68.3-135	0.388	14.8	
1,3-Dichlorobenzene	49.7	5.00	"	50.0		99.4	62.8-136	2.39	15.7	
1,4-Dichlorobenzene	44.3	5.00	"	50.0		88.6	62.1-130	1.57	15.2	
1,1-Dichloroethane	48.9	5.00	"	50.0		97.8	46.7-142	1.42	19.9	
1,2-Dichloroethene	47.3	5.00	"	50.0		94.6	60.6-151	1.49	16.9	
1,1-Dichloroethene	47.1	5.00	"	50.0		94.2	38.7-142	1.06	23.5	
cis-1,2-Dichloroethene	49.2	5.00	"	50.0		98.4	49.2-155	1.21	18.6	
trans-1,2-Dichloroethene	49.8	5.00	"	50.0		99.6	48-137	1.79	20.1	
1,2-Dichloropropane	47.5	5.00	"	50.0		95.0	44.6-171	4.93	32.4	
cis-1,3-Dichloropropane	44.6	5.00	"	50.0		89.2	28.6-195	0.670	43.0	
trans-1,3-Dichloropropane	44.4	5.00	"	50.0		88.8	40.6-176	1.34	39	
Ethylbenzene	57.0	5.00	"	50.0		114	56.1-144	2.77	24	
Methylene chloride	55.4	5.00	"	50.0		111	41.9-134	2.72	23.8	

Great Lakes Analytical—Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas

Andrea Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalake.com
(414) 570-9460 FAX (414) 570-9461

Lake States Industrial Service
311 E. Greenfield Ave.
Milwaukee WI, 53204

Project: MSCG Pre Treatment List
Project Number: [none]
Project Manager: Tom Jacobson

Reported:
11/21/03 09:30

Volatile Organic Compounds by EPA Method 624 - Quality Control
Great Lakes Analytical--Buffalo Grove

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	-------------	-----	-----------	-------

Batch 3110438 - EPA 5030B (P/T)

Matrix Spike Dup (3110438-MSD1)		Source: W311189-01		Prepared & Analyzed: 11/20/03					
Styrene	54.3	5.00	ug/l	50.0	109	31.1-169	3.08	46.4	
1,1,2,2-Tetrachloroethane	51.4	5.00	"	50.0	103	43.9-186	0.781	33.3	
Tetrachloroethene	53.2	5.00	"	50.0	106	29.1-160	4.05	32.3	
Toluene	84.1	5.00	"	50.0	168	56.2-152	7.66	28.6	H
1,1,1-Trichloroethane	48.7	5.00	"	50.0	97.4	42.3-152	1.63	20.1	
1,1,2-Trichloroethane	46.7	5.00	"	50.0	93.4	69.9-155	1.51	29.2	
Trichloroethene	53.2	5.00	"	50.0	106	13.5-180	3.87	34.1	
Trichlorofluoromethane	46.3	5.00	"	50.0	92.6	12-173	0.160	39.7	
Vinyl chloride	41.4	5.00	"	50.0	82.8	21.5-165	4.02	54.1	
Surrogate: Dibromofluoromethane	49.0		"	50.0	98.0	75.8-127			
Surrogate: 1,2-Dichloroethane-d4	42.8		"	50.0	85.6	62.5-145			
Surrogate: Toluene-d8	51.4		"	50.0	103	76.6-130			
Surrogate: 4-Bromofluorobenzene	52.2		"	50.0	104	68.9-123			

Great Lakes Analytical--Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andra Stathas

Andra Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Lake States Industrial Service
311 E. Greenfield Ave.
Milwaukee WI, 53204

Project: MSCO Pre Treatment List
Project Number: [none]
Project Manager: Tim Jacobson

Reported:
11/21/03 09:30

Notes and Definitions

- A-01 this analyte was quantitated using an open scan.
- QC The result for one or more quality control measurements associated with this sample did not meet the laboratory and/or source method acceptance criteria.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- L This quality control measurement is below the laboratory established limit.
- H This quality control measurement is above the laboratory established limit.

Great Lakes Analytical—Buffalo Grove Wisconsin DNR Certification Lab ID: 999917160

Great Lakes Analytical—Buffalo Grove NELAP Primary Accreditation: Illinois #100261

Great Lakes Analytical—Buffalo Grove NELAP Secondary Accreditation: New Jersey #IL001

Great Lakes Analytical—Oak Creek, WI Wisconsin DNR Certification Lab ID: 341000330

Great Lakes Analytical—Oak Creek, WI NELAP Primary Accreditation: Illinois #100307

Note: For analyses that require NELAP accreditation, all analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

Great Lakes Analytical—Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas, Project Manager



CHAIN OF CUSTODY REPORT

1380 Busch Parkway
Buffalo Grove, IL 60089-4505
(847) 808-7768
FAX (847) 808-7772

140 E. Ryan Road
Oak Creek, WI 53154
(414) 570-9480
FAX (414) 570-9461

Client: LAKE STATES INDUSTRIAL SERVICES Bill To: - SOME
Address: 311 EAST GREENFIELD AVE Address:
MILWAUKEE WI 53224

TAT: STD. 4 DAY 3 DAY 2 DAY 1 DAY **24 HRS**
 YES - TAT is critical
 NO - TAT is not critical
 Receipt: Ice Refrigerator Temp. Upon Receipt:

Report to: TOM J Phone #: (741) 645-0635 State & Program: Phone #: ()
 E-mail: Fax #: (741) 645-0635

Deliverable Package: STD Other Delivery Method: Client Shipped Courier

Project Name: MSEG	Project #/PON:	Sampler: ROBERT R. GUSE (EAT)	FIELD ID, LOCATION:	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	# of Bottles Preservative Used						TOTAL # OF BOTTLES	ANALYSIS TYPE	LABORATORY ID NUMBER
							ANCH	AN/SDA	KCI	AN/CO	AN/SDA	ANCH			
1			TANK 13 SPILL	11/19/03	13:30	W		1				17		W311185-01	
2															
3															
4															
5															
6															
7															
8															
9															
10															

RELINQUISHED	11/19/03	RECEIVED	11/19/03	RELINQUISHED	DATE	RECEIVED	DATE
	13:30		13:30		TIME		TIME
RELINQUISHED	DATE	RECEIVED	DATE	RELINQUISHED	DATE	RECEIVED	DATE
	TIME		TIME		TIME		TIME

COMMENTS: * P.T.L. = PRE-TREATMENT LIST (ENCLOSED)
 (SEE DAVE KRUEGER)

PAGE OF

11/21/2003 10:50 14146450645
 LAKE STATES INDUSTRIAL
 11/20/2003 THU 21:29 FAX 4145709461 Great Lakes Analytical
 PAGE 11
 011/011

Daily Field Report

Owner: Solvay Coke Holdings

Report No.: _____

Page 1 of 2Project: Milwaukee Solvay Coke and Gas

Date: Nov. 19, 2003, Wednesday

Project: No 72534.01

Weather: Pt. Cldy _____

Temp.(EF): High 54 Low 40 Rain: NoneContractor(s) LSISContractor Super(s) Hans Geyer,**Number and Function of Contractors' Personnel, Hours Worked (Identify Subcontractors Separately)**

Contractor	No. of People	Major Constr. Equip. Description	Size/Capacity	No.	No. in Use
LSIS	2	Skidsteer	Cat 236/Cat 246	2	1
Brickyard Inc.	—	Dumptruck	GMC Topkick	1	-
		Water truck		1	1
		Backhoe w/mobile shear, MSD 100R	Liebherr 954	1	1
		Backhoe w/grapppler	Liebherr 944	1	
		Semi w/ 60 cy trailer		1	-
		Manlift	JLP 600S	1	1
		Small excavator	Mini Giant H45	1	-
		Air compressor	Sullair 250	1	1

Daily Notations:**Tank Management: LSIS:****Tank T# 013:** Setup for hotwork/firewatch with extinguishers and water truck.

Resumed flame cutting the top of the tank and removing it.

Note: 9:50 AM: Tank #013 spill/release:

As the LSIS crew was removing the south half of the tank top an unknown stand pipe on the south side/inside of the tank was struck and broke off. Rain water in the tank drained out of a partially open valve in a valve pit outside the south side of the tank. The water ponded on the ground around the tank. This writer immediately called Earth Tech P.M., Bill Kralj, and informed him of the spill/release. Bill Kralj notified Sam Bories, USEPA of the release. LSIS spill plan coordinator, Tom Jacobson, took water samples in the valve pit, the point of the release. A P.I.D. was used on the released water. No detection was noted. This writer took photos of the spill.

None of the water was recovered. The ponded water percolated into the ground over the course of 3-4 hours. The released water did not enter the K.K. River, storm, or sanitary sewers. No visual signs that sludge or coal tar was released from the tank. Approximately 6-10 inches of water remains in the tank above approximately 6- inches of coal tar/sludge that remains on the tank bottom. The stand pipe broke off at a flange joint in the water portion not the sludge/coal tar portion of the tank. 1:00PM: Bob Guse, E.A.I., sampled the water at the source of the release in the valve pit.

Tom Jacobson filled out the Reportable spill/Release form. Tom Jacobson said he called the WDNR Spill Hotline and Scott Ferguson, WDNR, was also notified.

See Attached Reportable Spill/Release Report, WDNR Incident #SER 1119200302.

Tank # 013: LSIS:

After the release the crew completed cutting and removing the north half of the tank. The clean steel was loaded into a Sadoff trailer. Next they began cutting down the inner and outer tank sidewalls to within 20- inches of the water surface. Tom Jacobson is ask for EPA approval to remediate the tank. He said he does not want to use it as a coal tar, coal fines, and coke mixing facility after the release and the condition of the process pipe valve at the point of release.

Decontamination Pad: LSIS:

Removed accumulated rain water from the decon pad and sump so that Porta Painting can etch and epoxy coat the pad.

Site Activities: Asbestos Abatement:

Work Area #2, Bldg. 20: The galbestos siding and roof has been removed by C.D.I.. The ACM is wrapped and duct taped in 25 individual bundles. The galbestos bundles have been placed in two poly sheeting lined roll off containers by LSIS.

Work Area between the east side of coke ovens and Bldg's # 9 & 10: Two poly wrapped and ducted bundles of ACM transite siding are near Bldg. #10. These transite bundles will be taken to W.M. Metro at a later date.

Demolition:

No demolition activities this week.

Note: One load of clean steel in the Sadoff trailer was taken offsite to Sadoff in Fond du Lac, Wi.. All steel was from the outer sidewalls and tank super structure on Tank # 013.

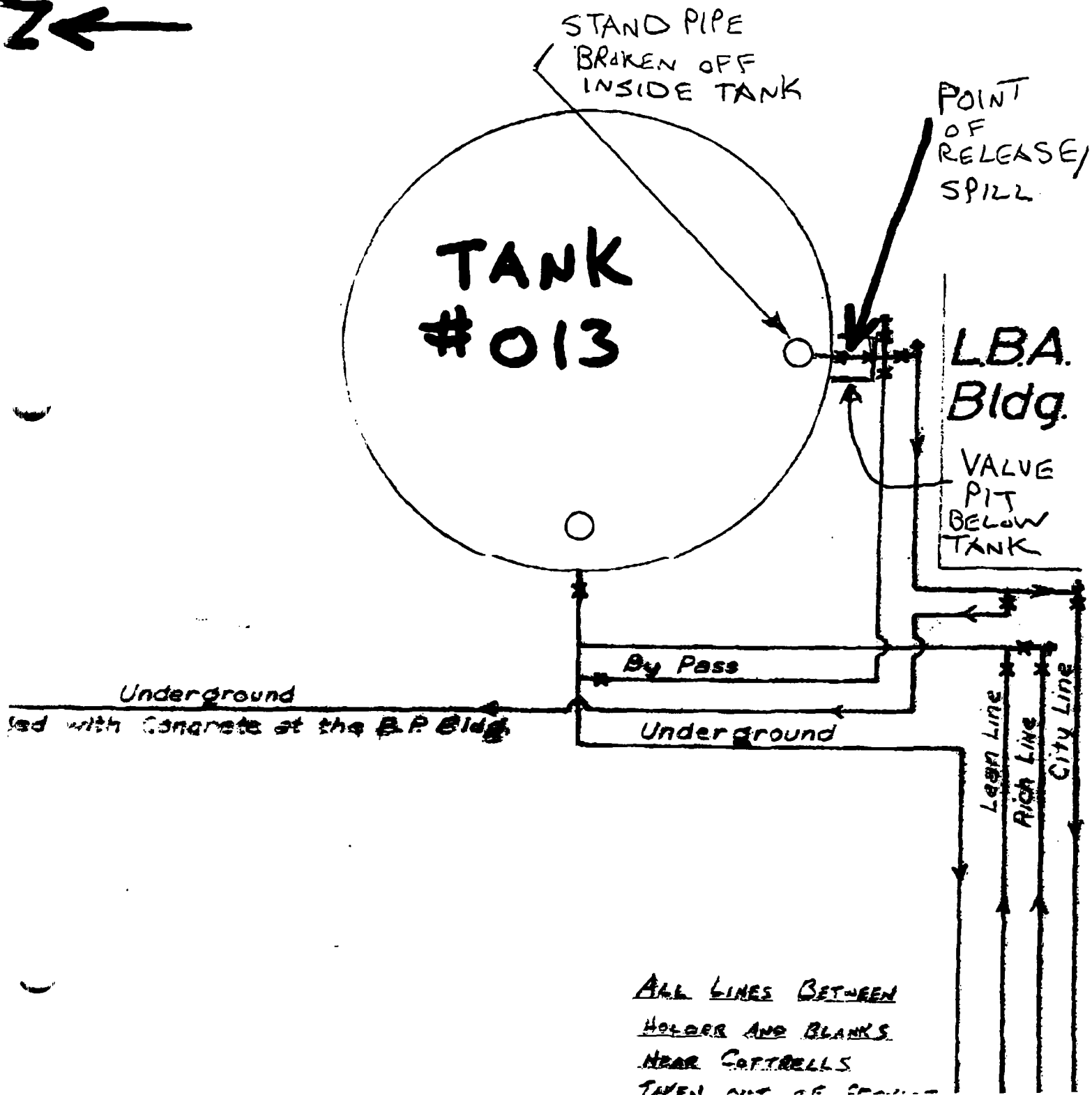
Visitors:

Jody Halvorsen- C.D.I.

Bob Guse- E.A.I.

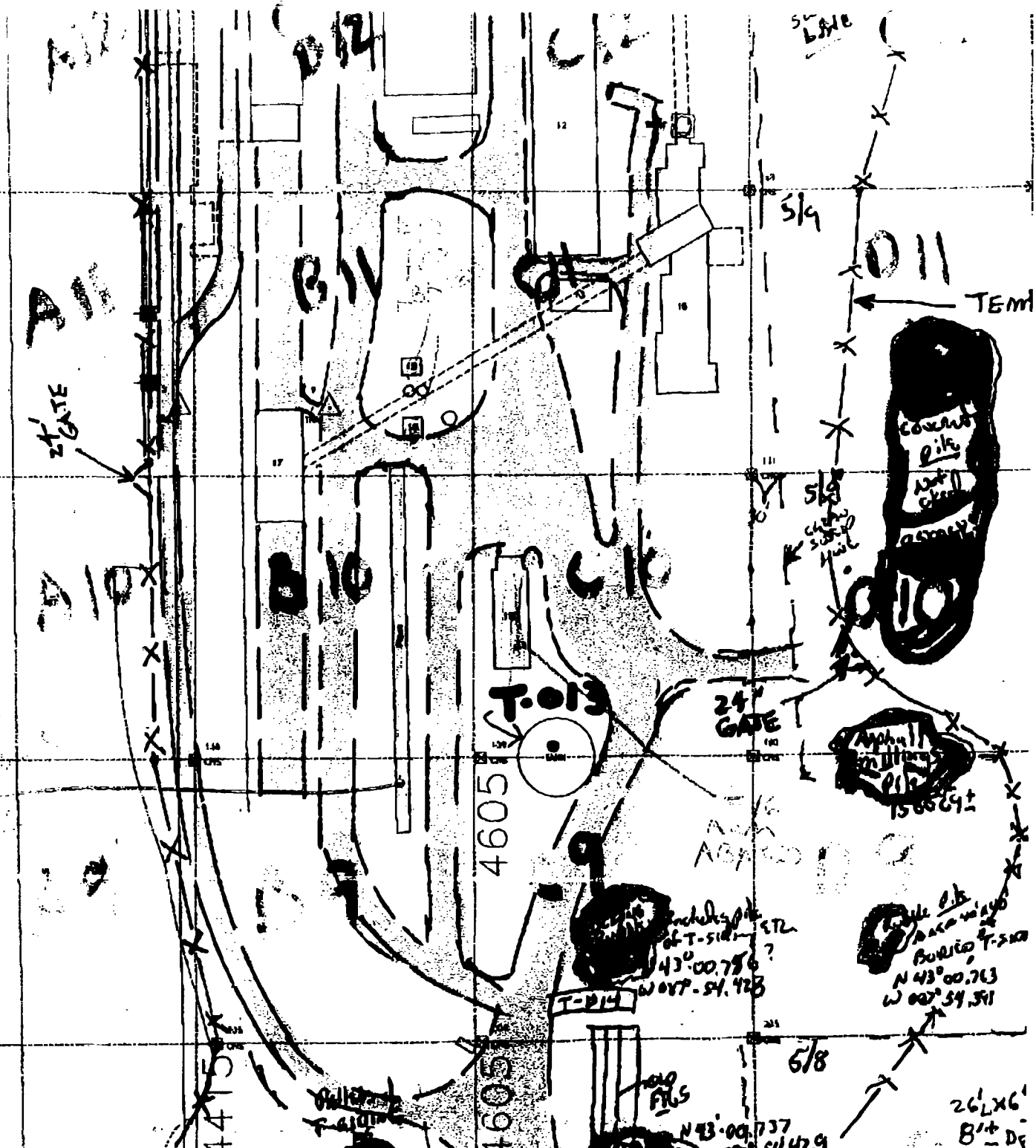
Signature: _____





N
←

12
4800
11
4600
10
4400
9
4200



COVERED
PILE
NOT
CHECK
ASSEMBLY

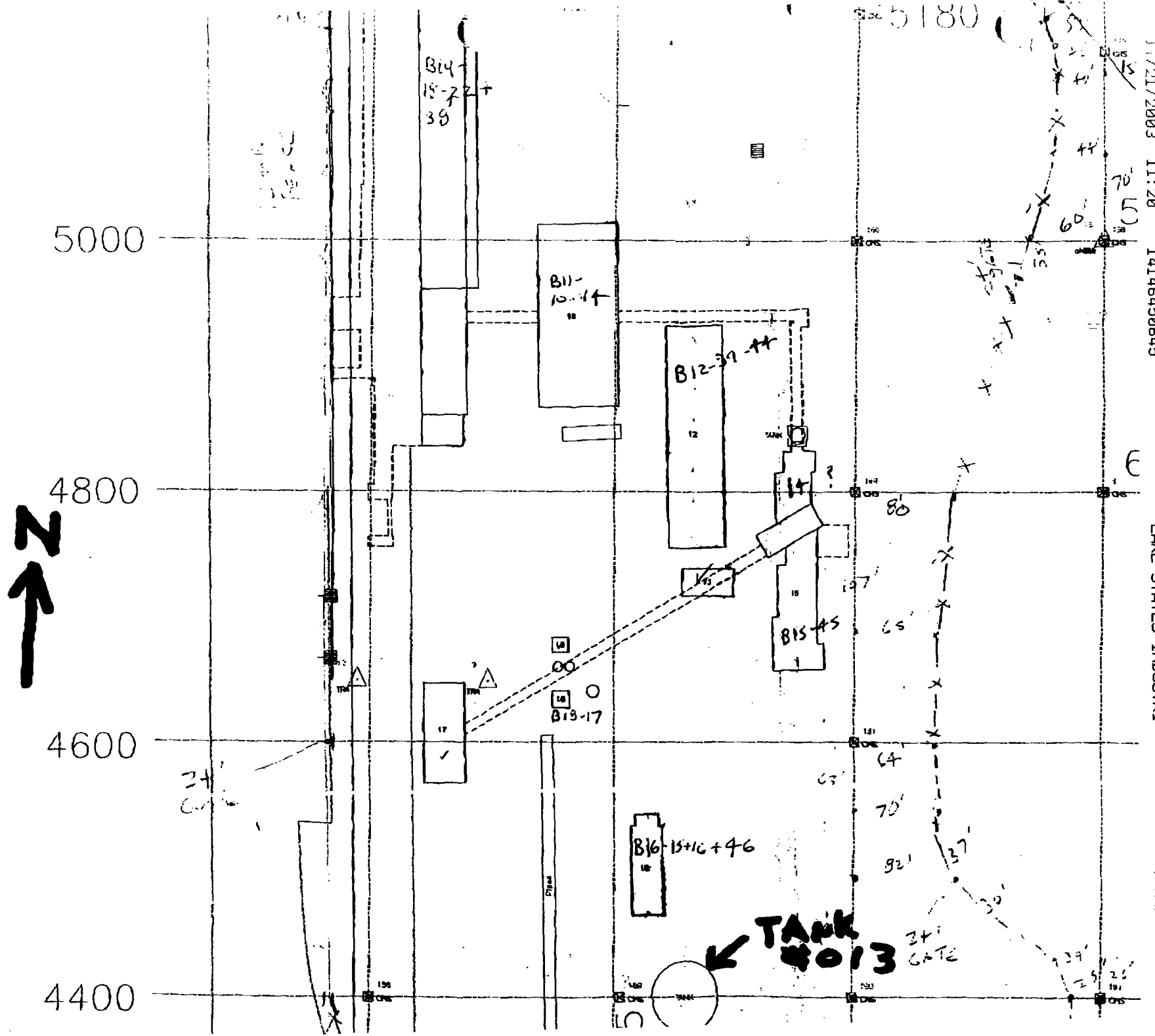
ANCHOR
PILE
156524

ANCHOR PILE
OF T-514
N 43° 00' 75" E
W 007' - 54.423

ANCHOR PILE
OF T-514
N 43° 00' 75" E
W 007' - 54.423

ANCHOR PILE
N 43° 00' 75" E
W 007' - 54.423

26' X 6'
B14 - D6





311 East Greenfield Avenue
Milwaukee, Wisconsin 53204
Office: 414-645-0635
Fax: 414-645-0645
lakestates@sbcglobal.net

FAX

DATE:

TO: Scott Ferguson
Bill Kauts

FROM: Tom J.

FAX: 263-8483
225-8111

PHONE:

PAGES: 8

RE: SP, 11 @ 311 Greenfield

COMMENTS: 8270 / SEMI Vol Results

11/22/2003 11:50
11/21/2003 FRI 4:51

14146450645

LAKE STATES INDUSTRI

PAGE 02

001/007



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@gjalabs.com
(414) 570-9460 FAX (414) 570-9461

FAX TRANSMISSION COVER SHEET

*Great Lakes Analytical will be closed Thursday November 27th and
Friday, November 28th for the Thanksgiving Holiday*

ATTENTION: Tom Jordan

COMPANY: Lake States

FAX #: _____

THIS IS PAGE ONE OF 6 PAGES

FROM: Andr

DATE: 11/21

FAXED BY: _____

TELEPHONE NUMBER: (414) 570-9460 FAX: (414) 570-9461

NOTES REMARKS

Draft results of 8270/semi volatiles
QC not complete

The pages accompanying this facsimile transmission contain information from the firm of Great Lakes Analytical. The pages are confidential or privileged. The information is intended for the use of the individual or entity name on this cover sheet. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the contents of this information is prohibited. If you have received the facsimile in error, please notify us by telephone immediately so that we can arrange for the retrieval of the original documents at no cost to you.

A COPY OF THIS FACSIMILE

WILL / WILL NOT

BE MAILED.

11/21/2003 FRI 4:51 FAX 4145709461 Great Lakes Analytical

002/007

11/21/03 15:24 FAX 847 808 7772

GREAT LAKES ANALYTICAL - GLA-OC

001



1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7706 FAX (847) 808-777

21 November 2003

Andrea Stathas
Great Lakes Analytical—Oak Creek
140 E. Ryan Road
Oak Creek, WI 53154
RE: MSCG Pre Treatment List

Enclosed are the results of analyses for samples received by the laboratory on 11/19/03. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Great Lakes Analytical

DRAFT REPORT
DATA SUBJECT TO CHANGE

11/21/2003 FRI 4:51 FAX 4145709461 Great Lakes Analytical

003/007

11/21/03 15:24 FAX 847 808 7772

GREAT LAKES ANALYTICAL - GLA-OC

002



1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7766 FAX (847) 808-7772

Great Lakes Analytical—Oak Creek 140 E. Ryan Road Oak Creek, WI 53154	Project: MSCG Pre Treatment List Project Number: W311185 Project Manager: Andrea Stribas	Reported: 11/21/03 15:17
---	--	-----------------------------

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DRAFT: W311185-01	B311919-01	Water	11/19/03 13:30	11/19/03 17:20

DRAFT REPORT

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7768 FAX (847) 808-777

Great Lakes Analytical—Oak Creek
140 E. Ryan Road
Oak Creek, WI 53154

Project: MRCG Pro Treatment List
Project Number: W311185
Project Manager: Andrea Stathis

Reported:
11/21/03 15:17

DRAFT: Base/Neutrals and Acids by EPA Method 625
Great Lakes Analytical—Buffalo Grove

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	N
		Limit								
DRAFT: W311185-01 (B311319-01) Water Sampled: 11/19/03 13:30 Received: 11/19/03 17:30										
Benz (a) anthracene	ND	10.0		ug/l	1	3110424	11/19/03	11/21/03	EPA 625/8270C	
Benzo (a) pyrene	ND	10.0		"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	20.0		"	"	"	"	"	"	
Fluoranthene	ND	10.0		"	"	"	"	"	"	
Hexachlorobenzene	ND	10.0		"	"	"	"	"	"	
Phenanthrene	ND	10.0		"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10.0		"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		4.84 %		10-110		"	"	"	"	L
Surrogate: Phenol-d5		4.19 %		10-110		"	"	"	"	L
Surrogate: Nitrobenzene-d5		18.5 %		31.4-110		"	"	"	"	L
Surrogate: 2-Fluorodiphenyl		18.5 %		10-110		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		17.7 %		10-110		"	"	"	"	
Surrogate: p-Terphenyl-d14		17.4 %		10-147		"	"	"	"	

DRAFT REPORT

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

11/21/03 15:25 FAX 847 808 7772

GREAT LAKES ANALYTICAL - GLA-OC

004



1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7766 FAX (847) 808-7777

Great Lakes Analytical--Oak Creek
140 E. Ryan Road
Oak Creek, WI 53154

Project: MCOG Pre Treatment List
Project Number: W311185
Project Manager: Andrea Stathas

Reported
11/21/03 15:17

DRAFT: Tentatively Identified Compounds by GC/MS EPA Method 8270

Great Lakes Analytical--Buffalo Grove

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	N
DRAFT: W311185-01 (B311319-01) Water Sampled: 11/19/03 13:30 Received: 11/19/03 17:29									
1,2,4,5-Tetrachlorobenzene	ND	100	ug/l	1	3110424	11/19/03	11/21/03	EPA 8270C	
3,3'-Dichlorobenzidine	ND	100	"	"	"	"	"	"	
Pentachlorobenzene	ND	100	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14		17.4 %	23-98						L
Surrogate: 2,4,6-Tribromophenol		17.7 %	10-159						L
Surrogate: 2-Fluorobiphenyl		18.5 %	31-86						L
Surrogate: Nitrobenzene-d5		18.5 %	29-89						L
Surrogate: Phenol-d6		4.19 %	10-83						L
Surrogate: 2-Fluorophenol		4.84 %	10-124						L

DRAFT REPORT

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

11/21/03 13:25 FAX 847 808 7772

GREAT LAKES ANALYTICAL → GLA-OC

005



1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7766 FAX (847) 808-7777

Great Lakes Analytical—Oak Creek
140 E. Ryan Road
Oak Creek, WI 53154

Project: MFCG Pre Treatment List
Project Number: W311185
Project Manager: Andrea Stathas

Reported:
11/21/03 15:17

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

Great Lakes Analytical—Buffalo Grove Wisconsin DNR Certification Lab ID: 999917160

Great Lakes Analytical—Buffalo Grove NELAP Primary Accreditation: Illinois #100261

Great Lakes Analytical—Buffalo Grove NELAP Secondary Accreditation: New Jersey #IL001

Great Lakes Analytical—Oak Creek, WI Wisconsin DNR Certification Lab ID: 341000330

Great Lakes Analytical—Oak Creek, WI NELAP Primary Accreditation: Illinois #100307

Note: All analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

DRAFT REPORT

The results in this report apply to the samples analyzed in accordance with the custody document. This analytical report must be reproduced in its entirety.



CHAIN OF CUSTODY REPORT

1380 Busch Parkway
 Buffalo Grove, IL 80089-4505
 (847) 808-7766
 FAX (847) 808-7772

140 E. Ryan Road
 Oak Creek, WI 53154
 (414) 570-9460
 FAX (414) 570-9461

11/22/2003 11:50 14146450645 LAKE STATES INDUSTRI
 11/21/2003 FRI 4:52 FAX 4145709461 Great Lakes Analytical
 007/007 PAGE 08

Client: LAKZ STATES Industrial Service		Bill To: - SOME		TAT: STD 4 DAY 3 DAY 2 DAY 1 DAY 24 HRS			
Address: 311 EAST GREENFIELD AVE		Address:		<input type="checkbox"/> YES - TAT is critical <input type="checkbox"/> NO - TAT is not critical DATE RECEIVED NEEDED			
Milw WI 53204				Received: <input checked="" type="checkbox"/> Ice <input type="checkbox"/> ambient <input type="checkbox"/> refrigerator Temp. Upon Receipt:			
Report to: Tom J	Phone #: (414) 645-0635	State & Program:	Phone #: ()	Deliverable Package: <input type="checkbox"/> STD <input type="checkbox"/> Other Delivery Method: <input checked="" type="checkbox"/> GLA <input type="checkbox"/> Client <input type="checkbox"/> Shipped <input type="checkbox"/> Courier			
E-mail:	Fax #: (414) 645-0645		Fax #: (414) 242-6554				
Project Name: MSEG							
Project #/PO#:							
Sampler: Robert R. Guse (ERT)							
FIELD ID, LOCATION		DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	# of Bottles Preservative Used	ANALYSIS TYPE	LABORATORY ID NUMBER
1) TANK 13 SPILL		11/19/03	13:30	W	1		W311185-01
2) PID:							
3) PID:							
4) PID:							
5) PID:							
6) PID:							
7) PID:							
8) PID:							
9) PID:							
10) PID:							
RELINQUISHED Robert R. Guse 11/19/03 13:45		RECEIVED	DATE	RECEIVED	DATE	RECEIVED	DATE
RELINQUISHED		RECEIVED	DATE	RECEIVED	DATE	RECEIVED	DATE
TIME		TIME	TIME	TIME	TIME	TIME	TIME
COMMENTS: * P.T.L. = PRE-TREATMENT LIST (ENCLOSED)							
						PAGE	OF

(SEE DAVE KRUEGER)

APPENDIX C-4
Spill Event of April 21, 2004

Phase I, Former Solvay Coke and Gas Site
Milwaukee, WI
SPCC Plan (April 2004)

REPORTABLE SPILL/RELEASE FORM

Former Solvay Coke and Gas Site
311 E. Greenfield Avenue
Milwaukee, WI
Lat. N43° 00' 49" Long. W87° 54' 23"

Name of Reporter: Alison Tuzzolino Phone Number of Reporter: 414-807-2799

Position: _____

Date of Spill: 4/21/04 Time: 9:00 am Est. Quantity: ~100 gallons

Location: Electric substation #2 So. of #9

Material: oil Transformer oil

Cause of Discharge:

Transformers disturbed during demolition

Media Impacted (soil/groundwater)

soil

Hazards to Human Health/Environment: none

Weather Conditions: cloudy 55°

Corrective Action Taken:

Excavated 2 yds of soil and placed poly lined roll off container, will be held until test results
All spilled material recovered

Phase I, Former Solvay Coke and Gas Site
Milwaukee, WI
SPCC Plan (April 2004)

Describe the Handling/Storage and Disposal of any Recovered Material:

Material Placed in 30y³ Roll-off container.
will be recycled + manifested into W/M - METRO landfill

Releases:

Did the spill/release cause air pollution? N (y/n) Est. Amt. _____

Did it enter a storm sewer? N (y/n) Est. Amt. _____

Did it enter a sanitary sewer? N (y/n) Est. Amt. _____

If yes to one or both above, list persons contacted:

Name	Time	Agency	Phone #
SAM PEARSON	2:40 PM	EPA REGION 5	312-353-9176
Bill Hoj	12:00 noon	EarthTech	414-222-5115
DOR SPILLING	3:30	WDNR	
Scott Ferguson	4:30	WDNR	414-263-8685

Other Comments:

Tom Jordan _____ 04/21/04
Name (printed) Signature Date

cc: Tom Short, Golden Marina Causeway LLC
SPCC Binder



ENVIRONMENTAL ASSOCIATES, INC.

P.O. Box 136 ▪ Thiensville, Wisconsin 53092

OFFICE: 262.242.1088 ▪ TOLL FREE: 800.494.4645 ▪ FAX: 262.242.6554 ▪ www.eadwi.com

April 28, 2004

Mr. Tom Jacobson
Lake States Industrial Services
311 E. Greenfield Avenue
Milwaukee, Wisconsin 53204

Re: Transformer Oil Spill, April 21, 2004, Former Solvay Coke and Gas Site, 311 E.
Greenfield Avenue, Milwaukee, Wisconsin

Dear Mr. Jacobson:

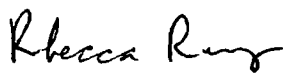
The purpose of this correspondence is to transmit the analytical results associated with a spill that occurred on April 21, 2004 at the above referenced property. On April 21, 2004 Lake States Industrial Services notified Environmental Associates, Inc. that three (3) 51-gallon Allis Chalmers transformers (Serial Numbers 2445764, 2445766, 2445768) located outside of building #4 tipped over, spilling approximately 100 gallons of transformer oil onto the ground.

On April 21, 2004 Environmental Associates personnel collected one composite oil sample (Transformer-1) from the three transformers as directed by Lake States Industrial Services. The sample was submitted under chain of custody to Great Lakes Analytical for polychlorinated biphenyl (PCB) analysis. Analytical results are summarized in Table 1, Attachment A and presented in Attachment B.

According to 40 CFR 761, PCB materials which appear at concentrations less than 50 ppm are not a TSCA (Toxic Substances Control Act) regulated waste. PCBs were not detected, above laboratory method of detection limits, in transformer oil sample Transformer-1. Although this spill is not considered a TSCA regulated waste, this spill should be reported as required by the SPCC Plan.

We hope this information meets your needs. If you have any questions or comments concerning this report, please feel free to contact us at your convenience.

Sincerely,
Environmental Associates, Inc.


Rebecca Rewey
Staff Engineer

cc: File

ATTACHMENT A

Table 1: Transformer Oil Analytical Results - PCBs
Former Solvay Coke and Gas Site, 300 E. Greenfield, Milwaukee, Wisconsin

Parameter	Units	TSCA Limit	Date	Transformer-1
PCBs				
PCB - 1016	ppm	50	4/21/04	ND
PCB - 1221	ppm	50	4/21/04	ND
PCB - 1232	ppm	50	4/21/04	ND
PCB - 1242	ppm	50	4/21/04	ND
PCB - 1248	ppm	50	4/21/04	ND
PCB - 1254	ppm	50	4/21/04	ND
PCB - 1260	ppm	50	4/21/04	ND

Notes:

ppm = parts per million

TSCA = Toxic Substances Control Act

ND = Not Detected above Laboratory Method of Detection Limits

ATTACHMENT B



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

27 April 2004

Becky Rewey
Environmental Associates, Inc.
P.O. Box 136
Thiensville, WI 53092
RE: Fmr Solvay Coke & Gas

Enclosed are the results of analyses for samples received by the laboratory on 04/21/04. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Great Lakes Analytical

Andrea Stathas
Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Environmental Associates, Inc. P.O. Box 136 Thiensville, WI 53092	Project: Fmr Solvay Coke & Gas Project Number: [none] Project Manager: Becky Rewey	Reported: 04/27/04 11:42
---	--	-----------------------------

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Transformer-1	W404240-01	Waste (L)	04/21/04 12:20	04/21/04 12:55

Great Lakes Analytical--Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Environmental Associates, Inc. P.O. Box 136 Thiensville, WI 53092	Project: Fmr Solvay Coke & Gas Project Number: [none] Project Manager: Becky Rewey	Reported: 04/27/04 11:42
---	--	-----------------------------

**Polychlorinated Biphenyls by EPA Method 8082
Great Lakes Analytical--Buffalo Grove**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Transformer-1 (W404240-01) Waste (L)		Sampled: 04/21/04 12:20		Received: 04/21/04 12:55		QC			
PCB-1016	ND	7210	ng/kg	1	4040540	04/22/04	04/23/04	EPA 8082	
PCB-1221	ND	7210	"	"	"	"	"	"	
PCB-1232	ND	7210	"	"	"	"	"	"	
PCB-1242	ND	7210	"	"	"	"	"	"	
PCB-1248	ND	7210	"	"	"	"	"	"	
PCB-1254	ND	7210	"	"	"	"	"	"	
PCB-1260	ND	7210	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		162 %		23.7-146	"	"	"	"	H
Surrogate: Decachlorobiphenyl		143 %		10-160	"	"	"	"	

Great Lakes Analytical--Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Environmental Associates, Inc.
P.O. Box 136
Thiensville, WI 53092

Project: Fmr Solvay Coke & Gas
Project Number: [none]
Project Manager: Becky Rewcy

Reported:
04/27/04 11:42

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control
Great Lakes Analytical—Buffalo Grove

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4040540 - EPA 3580A (Dilution)										
Blank (4040540-BLK1)										
Prepared: 04/22/04 Analyzed: 04/24/04										
PCB-1016	ND	7500	ug/kg							
PCB-1221	ND	7500	"							
PCB-1232	ND	7500	"							
PCB-1242	ND	7500	"							
PCB-1248	ND	7500	"							
PCB-1254	ND	7500	"							
PCB-1260	ND	7500	"							
Surrogate: Tetrachloro-meta-xylene	1380		"	1040		133	23.7-146			
Surrogate: Decachlorobiphenyl	1020		"	1040		98.1	10-160			
LCS (4040540-BS1)										
Prepared: 04/22/04 Analyzed: 04/24/04										
PCB-1016	6900	750	ug/kg	5000		138	24.8-167			
PCB-1260	5900	750	"	5000		118	19.6-158			
Surrogate: Tetrachloro-meta-xylene	1360		"	1040		131	23.7-146			
Surrogate: Decachlorobiphenyl	1130		"	1040		109	10-160			
Matrix Spike (4040540-MS1)										
Source: B404397-01 Prepared: 04/22/04 Analyzed: 04/24/04										
PCB-1016	8960	7280	ug/kg	4850	ND	185	10-131			H
PCB-1260	2230	728	"	4850	ND	46.0	10-129			
Surrogate: Tetrachloro-meta-xylene	841		"	1010		83.3	23.7-146			
Surrogate: Decachlorobiphenyl	920		"	1010		91.1	10-160			
Matrix Spike Dup (4040540-MSD1)										
Source: B404397-01 Prepared: 04/22/04 Analyzed: 04/24/04										
PCB-1016	12700	7350	ug/kg	4900	ND	259	10-131	34.5	40	H
PCB-1260	2500	735	"	4900	ND	51.0	10-129	11.4	40	
Surrogate: Tetrachloro-meta-xylene	850		"	1020		83.3	23.7-146			
Surrogate: Decachlorobiphenyl	993		"	1020		97.4	10-160			

Great Lakes Analytical—Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Environmental Associates, Inc.
P.O. Box 136
Thiensville, WI 53092

Project: Fmr Solvay Coke & Gas
Project Number: [none]
Project Manager: Becky Rewey

Reported:
04/27/04 11:42

Notes and Definitions

QC The result for one or more quality control measurements associated with this sample did not meet the laboratory and/or source method acceptance criteria.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

L This quality control measurement is below the laboratory established limit.

H This quality control measurement is above the laboratory established limit.

Great Lakes Analytical--Buffalo Grove Wisconsin DNR Certification Lab ID: 999917160

Great Lakes Analytical--Buffalo Grove NELAP Primary Accreditation: Illinois #100261

Great Lakes Analytical--Buffalo Grove NELAP Secondary Accreditation: New Jersey #IL001

Great Lakes Analytical--Oak Creek, WI Wisconsin DNR Certification Lab ID: 341000330

Great Lakes Analytical--Oak Creek, WI NELAP Primary Accreditation: Illinois #100307

Note: For analyses that require NELAP accreditation, all analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

Great Lakes Analytical--Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas, Project Manager

APPENDIX D

Asbestos Building Inspection Reports

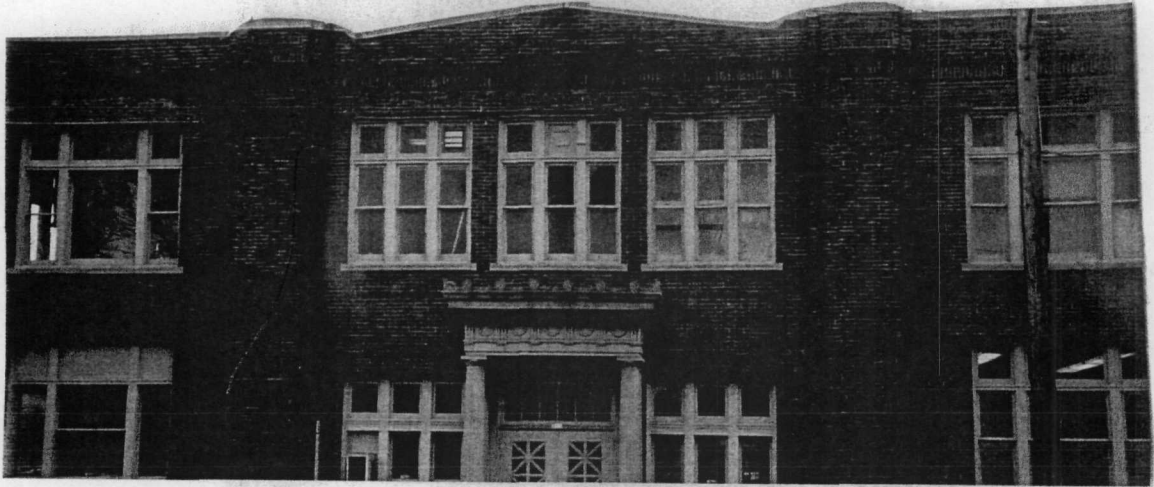
- **D-1: Asbestos Building Inspection Report**
- **D-2: Supplemental Asbestos Building Inspection Report**

APPENDIX D-1

Asbestos Building Inspection Report

Golden Marina Causeway LLC

311 East Greenfield Avenue
Milwaukee, Wisconsin 53202



Milwaukee Solvay Coke and Gas Site

311 East Greenfield Avenue
Milwaukee, Wisconsin 53204

Limited Phase II

Asbestos Building Inspection

Including Polarized Light Microscopy Sample Analysis
And Asbestos Abatement Bid Specification

Submitted By:

Eli Environmental Contractors Inc.

304 East Florida Street
Milwaukee, Wisconsin 53204

May 21, 2003

Golden Marina Causeway LLC

311 East Greenfield Avenue
Milwaukee, Wisconsin 53202

Milwaukee Solvay Coke and Gas Site

311 East Greenfield Avenue
Milwaukee, Wisconsin 53204

Limited Phase II

Asbestos Building Inspection

Including Polarized Light Microscopy Sample Analysis
And Asbestos Abatement Bid Specification

Submitted By:

Eli Environmental Contractors Inc.

304 East Florida Street
Milwaukee, Wisconsin 53204

May 21, 2003

TABLE OF CONTENTS

Section 1 *Inspection Assessment by Building Material*

Type 1 *Thermal Systems Insulation*

Type 2 *Plaster and Drywall Systems*

Type 3 *Ceiling Systems*

Type 4 *Flooring*

Type 5 *Miscellaneous Materials*

Summary of Additional Suspect Materials

Section 2 *Material Photographs and Descriptions*

Section 3 *Laboratory Analysis of Bulk Samples*

Section 4 *Sample Chain of Custody*

Section 5 *Asbestos Abatement Phase Maps*

Section 6 *Preliminary Work Plan*

Section 7 *Department of Natural Resources Notice*

Section 8 *City of Milwaukee Permit Application*

Section 9 *Clean Sweep Work Plan*

Section 10 *Asbestos Bid Specification*

Asbestos Inspection General Limitations

This section describes limitations of the asbestos building inspection and materials that were sampled and analyzed throughout the facility. Each material found to contain, or assumed to contain asbestos, was identified by type and general location. Quantities and assumptions were based on field and visual estimates only. Some access to buildings at the site is restricted for fall protection or building instability. Any contractor using information provided in this research of representative materials shall have the responsibility to verify all estimates. Limited, but destructive methods were used to collect and access asbestos containing building materials.: This limited visual inspection and limited sample collection by destructive or minimally destructive methods does meet the scope or sample quantities of an asbestos inspection to renovate or demolish a structure.

According to OSHA, NESHAPS, Wisconsin DNR, DHFS, or other regulations any materials not included in this report shall be sampled and analyzed prior to destruction or disturbance.

Listed below are general notes and limitations that should be taken into consideration when reviewing the findings of any asbestos inspection report:

- 1. Only visible and accessible suspect asbestos containing materials are identified in this inspection report. Limited destructive means were used to investigate any area and some invasive methods were applied to various buildings on this industrial facility. Only known accessible asbestos containing thermal pipe, vessel, duct and fitting insulation are sampled. Fiberglass, plastic, rubber, wood and metal products are not suspect. Some corrugated steel on site is a coated layered product frequently called "Galbestos" is widely used on the site, as a result all similar panels are assumed to be this type of material.*
- 2. Multiple samples of all friable and suspect ACM were obtained for each observed and classified homogeneous material type (previous inspection analysis reports were not available).*
- 3. Throughout the site, fiberglass thermal pipe insulation exists, and mineral wool is frequently used on external and internal pipe runs. All Mudded fittings on joints, tees, valves, and cleanouts are assumed to be positive and although mineral wool is negative, black felt paper over-wrap is also positive.*
- 4. Due to past experience and inability to sample, assume that all fire doors have an asbestos core in them, until proven otherwise.*
- 5. Due to past experience and inability to sample, assume that all equipment gaskets, chalking, adhesives, grouts, mortars, and joint compounds contain asbestos, until proven otherwise. Many stored items such as transite, electrical insulators, gaskets, and ropes, are assumed to contain asbestos.*

6. *At the time of the inspection, heating systems were inoperable condition. Refractory materials, internal insulation, and firebrick inside any vessels or boilers are inaccessible for the purposes of this inspection. Prior to dismantling and or removal, any mechanical internal suspect materials should be sampled for asbestos. **Some process machines were sampled and findings included here are to identify risks associated with dismantling or sale, Other equipment such as lab appliances, small furnaces in Quality Control, are not building materials, but they are included in the scope to prepare buildings for destruction or renovation.***
7. *Roofing, and "built up roofs" in particular are difficult to sample safely or without destruction of the roof integrity or warranty, due to this fact, no samples were collected for any roofing materials that may be present. Caution should be taken if these roofs are ever replaced or if underlying felts and flashing are to be disturbed. Roofing contractors are frequently required to obtain specialized asbestos certifications to provide safe services. Demolition projects may require notification and wet methods to comply with regulations that permit non friable asbestos (as in roofing) to be disposed as normal construction debris. **Assume all built up roofing has asbestos within any of several layers or flashing. Construction dates from the 1800's to the 1970's indicate the presence of asbestos. "Galbestos" (Asbestos coated steel) roofs and walls are assumed throughout the site.***
8. *Throughout the facility many renovations and additions have been undertaken. Carpet and new floor tile that exists may have been laid over old vinyl asbestos floor tile and mastic that contains asbestos. Caution should be taken prior to any renovation or operation and maintenance activities that may disturb concealed building products, or building materials inaccessible during this inspection.*

This inspection process and methods were deigned to meet the objectives of a construction or demolition project.

Section 1 Inspection Assessment by Building Material

Type 1 Thermal Systems Insulation

This homogenous material consists of pipe insulation, mudded fitting insulation as found applied to pipe joints, tees, valves, and hangers. It also includes Boiler and Heating ventilation and air conditioning components such as ducts and tanks. The visual inspection was limited to open areas or some explorations above drop ceilings and with the use of some destructive or invasive exploration of the floors and walls, limited by structural hazards such as damaged roofs, walls, stairs or floors.

Samples were collected: 03/24/03 to 04/29/03

Sample ID Bldg #&Sequence	Description	Location	Asbestos Yes or No	% and Type
1-08	Pipe Insulation (Aircell <6")	Basement	Yes	80 % Chrysotile Asbestos
1-09	Pipe Insulation (Mag >6")	Basement	Yes	80 % Chrysotile Asbestos
1-10	Mudded Fitting	Boiler Room	Yes	20 % Chrysotile Asbestos
1-15	Boiler Jacket	Boiler Room	Yes	80 % Chrysotile Asbestos
1-14	Jacket/ Mud on Water valve/meter	Basement	Yes	5 % Chrysotile and 2% Amosite Asbestos
20-47	Cloth Curtain	Pilot Production Line (Building 20)	Yes	15 % Chrysotile Asbestos
20-48	Drum Oven Insulation	Pilot Production Line (Building 20)	Yes	5 % Chrysotile Asbestos
20-49	Vertical Oven Jacket	Pilot Production Line (Building 20)	Yes	80% Chrysotile and 5% Amosite Asbestos
20-50	"Galbestos" Building Metal Siding	Pilot Production Line (Building 20)	Yes	5 % Chrysotile Asbestos
7-54	Black Paper Wrap on exterior Pipe Insulation	All Exterior TSI (White non- asbestos mineral wool inside)	Yes	20 % Chrysotile Asbestos
9-79	Vertical Pipe Insulation	2 nd Floor	Yes	7% Chrysotile and 40% Amosite Asbestos
19-100	Stored Asbestos Block	Building 19	Yes	2% Chrysotile and 8% Amosite Asbestos
40-101	Red Firebrick	Coke Ovens- Tunnel	No	No Asbestos Detected
40-102	Gray Firebrick	Coke Ovens- Tunnel	No	No Asbestos Detected
40-103	Gray Firebrick	Coke Ovens- Tunnel	No	No Asbestos Detected

Sample ID Bldg #&Sequence	Description	Location	Asbestos Yes or No	% and Type
40-76	Firebrick/debris	Coke Oven Roof	No	No Asbestos Detected
40-77	Firebrick	Coke Oven Roof Patch Material	No	No Asbestos Detected
9-78	White Book Tile	Building 9 South	No	No Asbestos Detected
10-70	Window Glazing	Building 10	Yes	3 % Chrysotile Asbestos
10A-72	Electrical Insulator (Transite Type)	Building 10A	No	No Asbestos Detected
10A-73	Transite	Building 10A	Yes	15 % Chrysotile Asbestos
10A-74	Window Glazing	Building 10A	Yes	2 % Chrysotile Asbestos
10A-75	Blackboard/Green- board	Building 10A	No	No Asbestos Detected
40-80	Orange Firebrick	Coke Ovens (East Side Interior)	No	No Asbestos Detected
40-81	Red Firebrick	Coke Ovens (East Side Interior)	No	No Asbestos Detected
40-82	White Firebrick	Coke Ovens (East Side Interior)	No	No Asbestos Detected
40-83	Gray Mortar Firebrick	Coke Ovens (East Side Interior)	No	No Asbestos Detected
40-84	Pipe Insulation (Aircell >6")	Coke Oven Tunnel West Side	Yes	85 % Chrysotile Asbestos
40-85	Insulation Batt (Blanket)	Coke Oven Tunnel West Side	Yes	85 % Chrysotile Asbestos
40-86	Pipe Insulation Black Paper Cover	Coke Oven Tunnel West Side	Yes	20 % Chrysotile Asbestos
40-87	Boiler/Duct Gasket (Mud on Steel)	Coke Oven Tunnel West Side	Yes	80 % Chrysotile Asbestos
40-88	Firebrick Mortar (White)	West Coke Ovens	No	No Asbestos Detected
40-89	Firebrick East (Gray)	20 new ovens	No	No Asbestos Detected
40-90	Interior Firebrick East side	Middle 40	No	No Asbestos Detected
40-91	Quarry Tile	West Slope	No	No Asbestos Detected
40-92	Quarry Tile Mortar	West Slope	No	No Asbestos Detected

Searches through archive process specifications concerning the coke ovens indicates that pipework from the ovens to the collectors are patched into the masonry using asbestos containing mud or mortar. This material was not sampled during the inspection, but would affect one hundred or more penetrations (40 + 50 + 20 newer ovens).

Type 2 Plaster and Drywall Systems

This homogenous material group consists of the interior surfaces of walls and ceilings. Original building plasters are analyzed and drywall systems or wall board and drywall compounds if present are explored. This material does not usually contain asbestos, but some early sprayed on or trowled on plasters may contain trace amounts of asbestos fibers. Drywall compound on rare occasions may also contain asbestos. Acoustical plaster, often applied to ceilings may contain asbestos, as well as stucco or decorative plasters.

Samples were collected: 03/24/03 to 04/29/03

Sample Analysis Results Table

Sample ID	Description	Location	Asbestos Yes or No	% and Type
1-11	Boiler Room Ceiling Plaster	Basement	No	None Detected
1-16	Wall Plaster	2 nd Floor	No	None Detected
1-17	Wall Plaster	2 nd Floor	No	None Detected
1-18	Wall Plaster	2 nd Floor	No	None Detected
1-19	Wall Plaster	2 nd Floor	No	None Detected
1-20	Ceiling Plaster	2 nd Floor	No	None Detected
1-21	Ceiling Plaster	2 nd Floor	No	None Detected
1-22	Ceiling Plaster	2 nd Floor	No	None Detected
1-25	Plaster	Guard Shack	No	None Detected
4-26	Plaster on Red Book Tile	Ceiling	No	None Detected
4-27	Plaster on Red Book Tile	Ceiling	No	None Detected
3-37	Ceiling Plaster	Ground Floor	No	None Detected
3-38	Wall Plaster	Ground Floor	No	None Detected
3-40	Ceiling Plaster	2 nd Floor	Yes Trace	< 1% Chrysotile Asbestos
3-41	Wall Plaster	2 nd Floor	No	None Detected
3-46	Beam Plaster	2 nd Floor	No	None Detected
23-62	Wall Plaster	Ground Floor	No	None Detected
23-63	Drywall/Plaster(no compound)	Ground Floor	Not Analyzed	Non Suspect
23-63	Plaster Top Coat	Ground Floor	No	None Detected
23-64	Plaster Substrate	Ground Floor	No	None Detected
10-71	Plaster	Interior 10	No	None Detected

Type 3 Ceiling Systems

This homogenous material group includes the drop ceiling systems that are suspended, glued, fitted in tracks, or stapled in place. Common dimensions are 12" x 12", 2' x 2', 2' x 4' and metal pan ceilings have many dimensions. Surfaces vary widely from shallow and deep fissures, to random or pattern holes and textures. Stapled and track ceilings are usually not disturbed in this type of inspection because they cannot be reassembled without great difficulty. The adhesive mastics used to apply these materials may also contain asbestos and are discussed in the miscellaneous materials section (Type 5).

Samples were collected: 03/24/03 to 04/29/03

Sample Analysis Results Table

Sample ID	Description	Location	Asbestos Yes or No	% and Type
1-23	12' x 12' fissured in White Ceiling Tile Interlock Style	2 nd Floor	No	None Detected
1-24	12' x 12' fissured in White Ceiling Tile Interlock Style	2 nd Floor	No	None Detected

Type 4 Flooring

This homogenous material consists of vinyl flooring and resilient flooring products that are applied to the structural floor material such as wood or concrete. Vinyl flooring products include floor tiles which are often 9" x 9" or 12" x 12" but come in other smaller or larger sizes. Sheet vinyl may also contain an asbestos paper backing and comes in a variety of roll widths.

Both of these vinyl flooring groups are applied using adhesive mastics which come in yellow, black, brown and white colors, any of which may contain asbestos

Samples were collected: 03/24/03 to 04/29/03

Sample Analysis Results Table

Sample ID	Description	Location	Asbestos Yes or No	% and Type
1-12	Mastic 9" x 9" Vinyl Tiles Black	Basement	No	None Detected
1-13	9" x 9" Vinyl Tiles Green/Gray	Basement	No	10% Chrysotile in Vinyl Tile
4-34	Sheet Vinyl	Office	Yes	25% Chrysotile
3-36a	Green 9" x 9" Vinyl Tile	Ground Floor	Yes	3% Chrysotile
3-36b	Mastic Black - Green 9" x 9" Vinyl Tile	Ground Floor	No	None Detected
3-39	Sheet Vinyl	2 nd Floor	Yes	20% Chrysotile

Type 5 Miscellaneous Materials

This homogenous material consists of other asbestos containing building products such as "Transite" panels or pipes which is a material made of cement and asbestos. Lab table tops and blackboards as well as theater wiring insulation or gloves and welding curtains are also included in this category.

Samples were collected: 03/24/03 to 04/29/03

Sample Analysis Results Table

Sample ID	Description	Location	Asbestos Yes or No	% and Type
1-06	Window Glazing	Exterior Sashes	No	No Asbestos Detected
1-07	Window Glazing	Exterior Sashes	Not Analyzed	Condition- non friable
4-28	Electrical Insulator (Floor Debris)	Ground Floor	Yes	30% Chrysotile Asbestos
4-29	Window Glazing	Metal Sashes	Yes	2% Chrysotile Asbestos
4-30	Window Glazing	Wood Sashes	No	No Asbestos Detected
4-31	Gasket/Craft Stored and Benches	Benches	Yes	70% Chrysotile
4-32	Gasket/Craft Stored and Benches	2 nd Level	Yes	75% Chrysotile
4-33	Table Top	2 nd Level Bench	No	No Asbestos Detected
4-35	Window Glazing	Guard Shack	No	No Asbestos Detected
3-42	Hot Pad Small furnace (Table-top)	2 nd Floor	Yes	85% Chrysotile
3-43	Transite Wall Office Partition	1 st Floor	Yes	20% Chrysotile
3-44	Table Top (Lab)	2 nd Floor	Yes	20% Chrysotile
3-45	Rope (Stored Roll)	2 nd Floor	Yes	80% Chrysotile
7-51	Mud used in conduit penetration	Building 7- non friable	Yes	20% Chrysotile
7-52	Transite (exterior siding sandwich)	Building 7	Yes	20% Chrysotile
7-53	Tarpaper roll (stored roll)	Building 7	Yes	10% Chrysotile
6-55	Thermal Cable Wrap	Building 6	Yes	< 1% Chrysotile and 10% Amosite
6-56	>1" OD Electrical Cable (Cloth Wrap)	Building 6	Yes	90% Chrysotile
23-61	Soil Accumulated on floor	Building 23	No	No Asbestos Detected
9-78	Gray Floor Leveler	Building 9 2 nd Floor	No	No Asbestos Detected

Sample ID	Description	Location	Asbestos Yes or No	% and Type
9-80	Lower Roof Deck- Black Built-up	Building 9 Annex	No	No Asbestos Detected
11-66	White Book Tile	Building 11	No	No Asbestos Detected
11-67	Red Book Tile	Building 11	No	No Asbestos Detected
11-68	Window Glazing	Building 11	No	No Asbestos Detected
11-69	Roofing (Ground Debris)	Exterior Building 11	Yes	90% Chrysotile

**All sheet metal (corrugated type) will be considered "galbestos" and asbestos containing.
All glazing is considered asbestos, as are all gaskets, all tar papers, and all layered or
built-up-roofs, and flashing materials.**

Asbestos Inventories Abatement Cluster A
Building #1 Office

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
1-Grd	Office	2450		108			<10 SF Glazing
1-2	Office	2450					
Basement	Mechanical	2450	232	543		480	208 SF Vinyl Tile (No Mastic)

Building #3 Engineering

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
3-Grd	Offices	2400	45	85			182 SF Partitions 2400 SF Tile
3-2	Lab	2400				* **	110 SF Lab Table Tops 492 SF Sheet Vinyl
Basement	Mechanical		215	197		50	

*Trace Asbestos in Beam Plaster to be Point Counted

** Stored Materials: Gaskets, Ropes

Building #2 Watchman House

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
2-Grd	Watchman	143					

Asbestos Inventories Abatement Cluster B

Building #4 Receiving, Machine Shop, Stores, & Electrical Dept.

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
4-1	Machine & Stores	6786	40	550			Elect Insul, Stored Tubes,
4-2	Mezz & Loft	2000		95			180 SF Clean-up (Friable)
8-1	Trough Bldg			30			

Building #5 Oil House, Blacksmith, Carpenters, Wash Room & Pipe Fitters

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
5-1	Blacksmith, Oil, Carp, Pipe	5071		126			200 SF Sheet Vinyl

Building #7 & 8 Riggers & Lime

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
7,8	Riggers, Garage	2050	40	40			450 SF Transite Siding

Asbestos Inventories Abatement Cluster C

Building #8 Transformer House

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
6	Transformer House	736		24' Cable			80 SF Transite Finn 48 SF Transite Elect. Panels >1"

Building #9 AC Building

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
9	AC	9000	1325 *	105		950	347 SF Transite Elect. Panels >1"

* Primarily Large Diameter Pipe

Asbestos Inventories Abatement Cluster D

Building # 20 Pilot Line & Repair

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
20	Pilot & Repair	3000	75	25		175	Curtains, Drum Oven 75 SF, Elect.Pnls Table

Building # 21 Washroom & Showers

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
21	Showers	1500		75		120	
21-Roof	Overhead		60	12			

Building # 23 Remote

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
23	Wash	700					1000 SF Transite Siding

Building # 10 Foreman's Office

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
10	Foreman & Attached*	300		20			3030 SF Roof/Sides

* 350 SF Galbestos Roof, Electrical Insulator panels = 5 small

Asbestos Inventories Abatement Cluster E

Building # 11 BP Building

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
11-1	BP	9200	768	160		30	*
11-2	BP	9200	400	55	8		Glazing
11-B	5 Trenches 144 Ft each					Unk	Expose & Clean

* Approx 2500 SF Galbestos Siding (Upper)

Building # 12 Boiler House

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Cubic Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
12-	Boiler House		1200			*140 CY= 3800 CF	Glazing

* 35 Cubic Yards per Unit

Asbestos Inventories Abatement Cluster F

Building # 13

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
13	Mud Mill	700					Galbestos

Building # 14 and 15

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
14	Breeze	1000				1000 Tank	Verify
15	Pulverize	3200					Galbestos

Building # 17

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
17		3000					Verify Galbestos

Building #19

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
19	Coal Bin	4000					10075 SF Galbestos 4000 Transite

Asbestos Inventories Abatement Cluster G

Building # Galleries

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
M	Conveyor	3000					9600 Gal
S	Conveyor	3500		225			11200 Gal
J	Conveyor	1000					3200 Gal
H	Conveyor	1250					4000 Gal
Total		8750	225 Verify				28000 Gal

Asbestos Inventories Abatement Cluster H

Building # Galleries

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
H-16	Stores	2000					4000 Gal
H-24	Remote	150					250 Gal
Total		2150	Verify				4250 Gal

Asbestos Inventories Abatement Cluster I

Building # Coke Ovens

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
40	20 New	4000		320 Rope		40 CF	
40	#4	8000		640 Rope		80 CF	
40	#3	8000		640 Rope		80 CF	
Total		20000	1600 Rope			200 CF	

Quantities for Lump Sum Bids

Solvay Site Summary (as of 5/21/03)

Abatement Cluster & Building Number	Total Square Footage	Sheet Vinyl and Vinyl Tile & (Mastic)	Linear Feet of Pipe Insulation	Square Feet of Thermal Insulation	Square Feet of Misc. Asbestos
A-1 Office	5000	208	775	480	218
A-2 Watch	143				
A-3 Eng	4800	2892	545	50	292
B-4 Machine	8786		685		180
B-5 Blacksm	5071	200	126		
B-7 Rigger	2050		80		450
B-8 Garage			30		
C-6 Transf	736		24		128
C-9 AC	9000		1430	950	347
D-20 Pilot	3000		100	175	75
D-21 Wash	1500		147	120	
D-23 Remote	700				1000
D-10 Foreman	300		20		3030
E-11 BP	18400		1413		
E-12 Boiler	8200		1200	3800 CF	
F-13 Mud Mill	700				
F-14 Breeze	1000			1000 Tank	
F-15 Pulver	3200				
F-17- Coal 1	4000				
F-19 Coal 2	4000				14075
G-M	3000				9600 Gal
G-S	3500		225		11200 Gal
G-J	1000				3200 Gal
G-H	1250				4000 Gal
H-16	2000				4000 Gal
H-24	150				250 Gal
I-40 -20 New	4000		320 Rope	40 CF	
I-40 -#4	8000		640 Rope	80 CF	
I-40 -#3	8000		640 Rope	80 CF	
Grand Total	111500	3300	8400	2775	52045
			3800 Cubic Feet E 12 200 Cubic Feet Oven/Collector penetration		

Section 2

Material Photographs and Descriptions

Section 2 Material Photographs and Descriptions

Location: Building #1

Description: North Entrance to Main Office



Location: Building #1

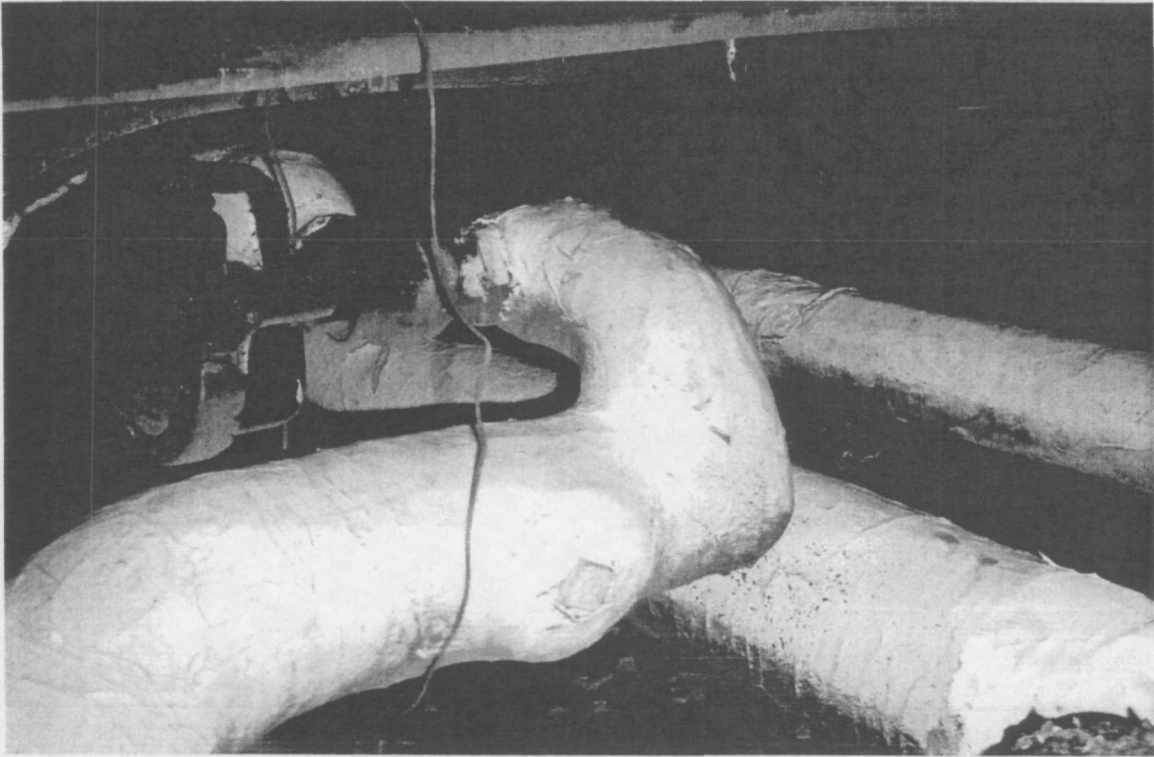
Description: Basement Vinyl Tile (non-asb mastic)



Section 2 3 and 4 Material Photographs and Descriptions

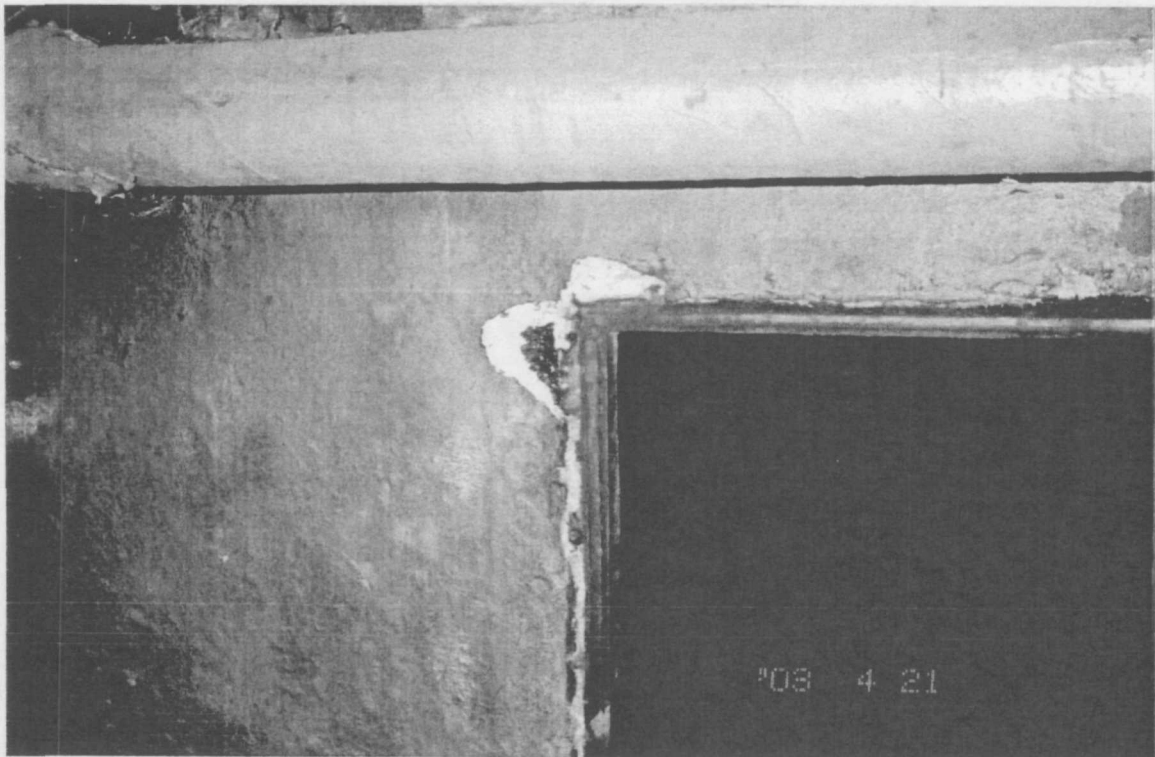
Location: Building #1

Description: Basement asbestos pipe insulation.



Location: Building #1

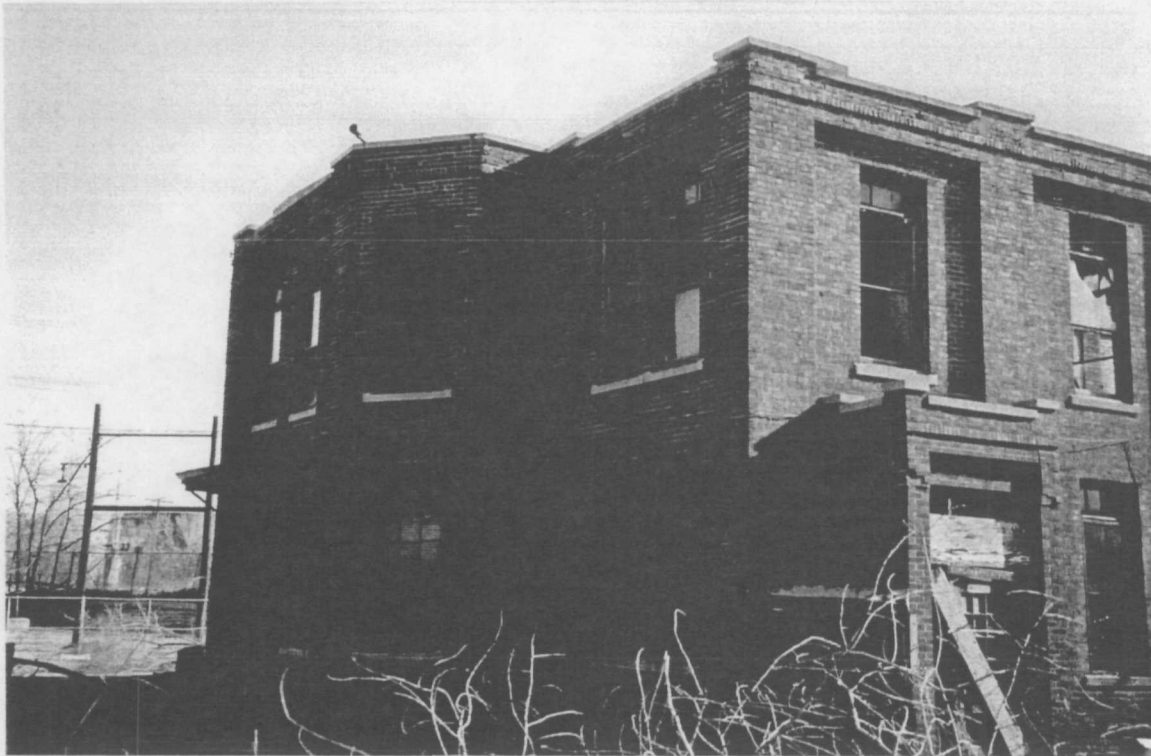
Description: Basement Boiler/Handler Jacket.



Section 2 5 and 6 Material Photographs and Descriptions

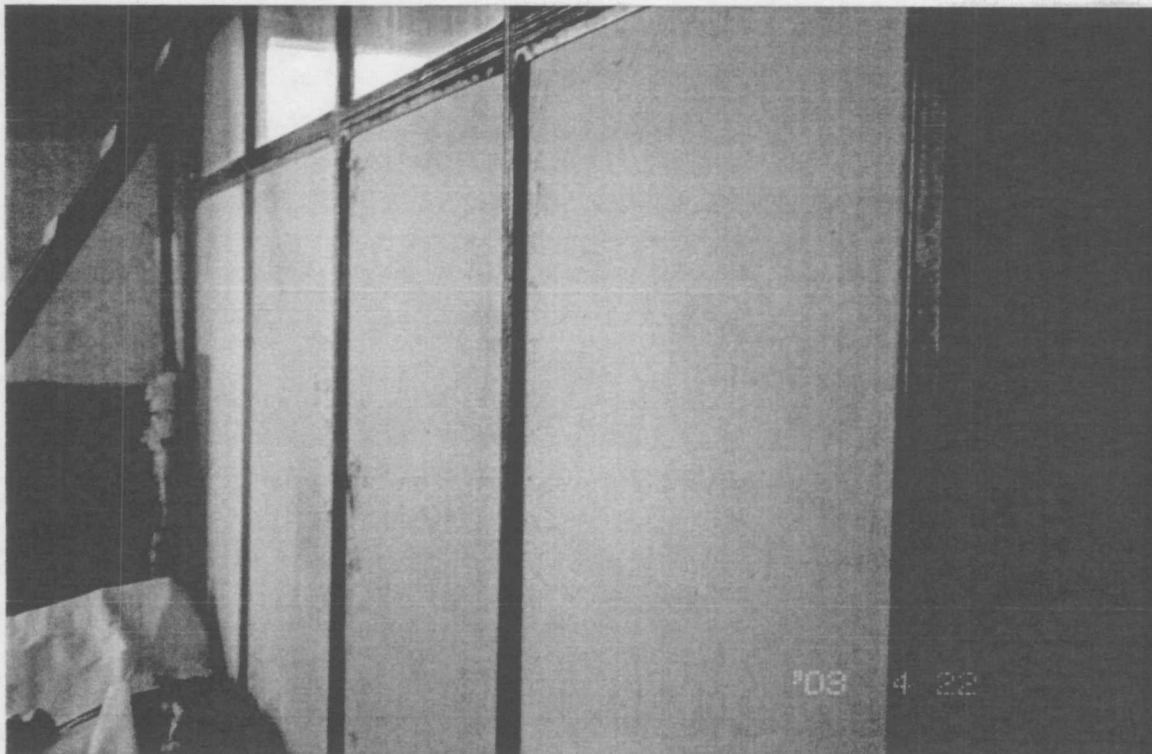
Location: Building #3

Description: Engineering and Lab Building.



Location: Building #3

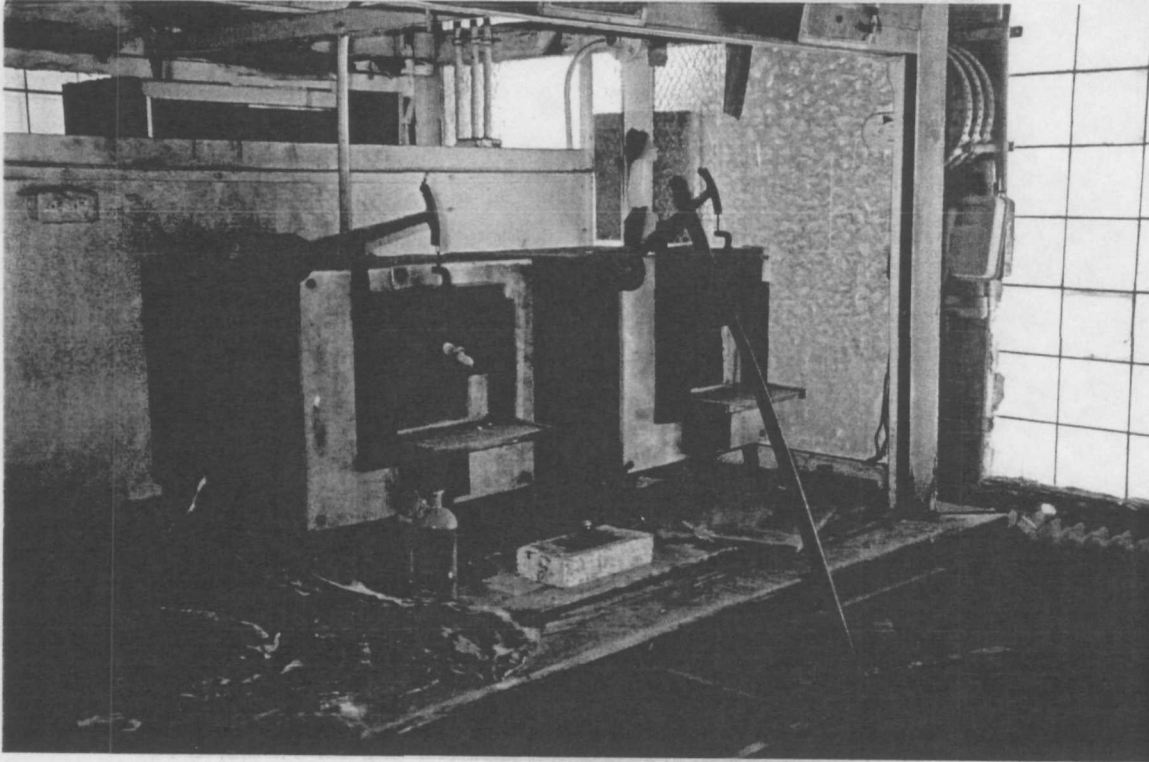
Description: Transite partition walls.



Section 2 7 and 8 Material Photographs and Descriptions

Location: Building #3

Description: Lab furnace and transite hood.



Location: Building #3

Description: 1st Floor Asbestos Vinyl Tile.



Section 2 9 and 10 Material Photographs and Descriptions
Location: Building #4 Description: North Entrance to Receiving.



Location: Building #4 Description: Oil House foreground, Building 5 beyond.



Section 2 11 and 12 Material Photographs and Descriptions

Location: Building #20

Description: Pilot production and repair shop.



Location: Building #20

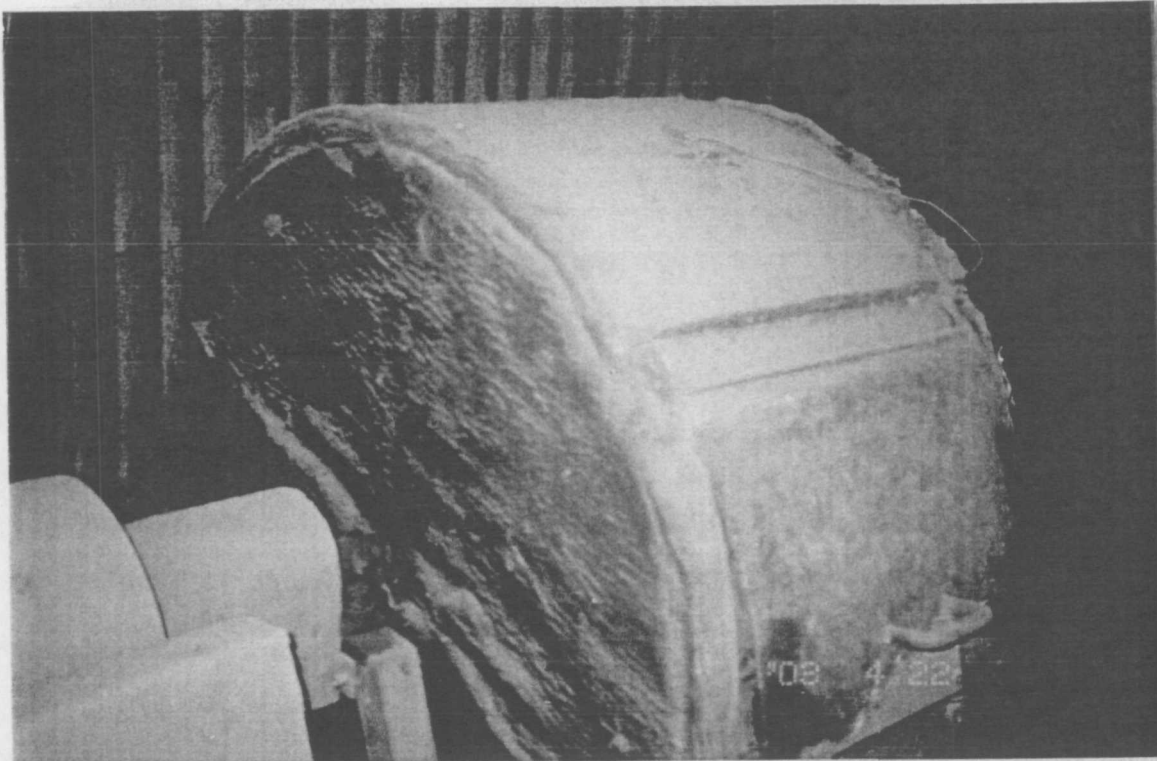
Description: Asbestos insulated locker.



Section 2 13 and 14 Material Photographs and Descriptions

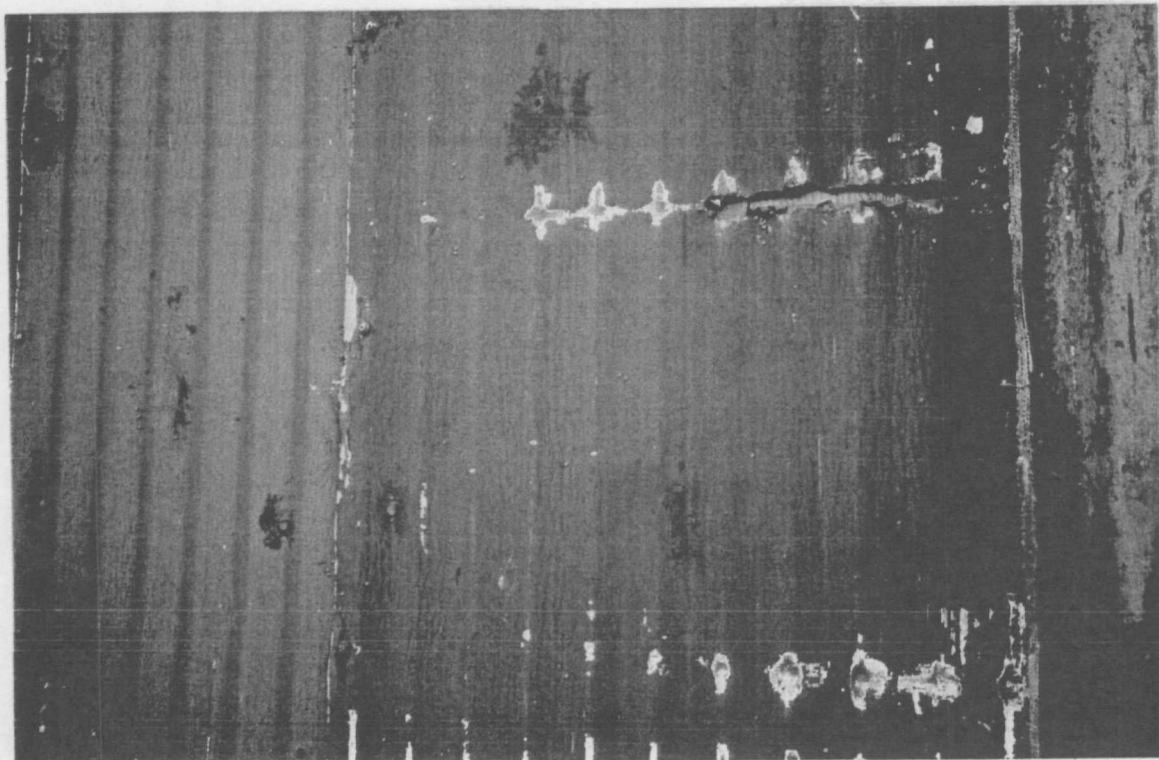
Location: Building #20

Description: Drum oven with asbestos jacket.



Location: Building #20

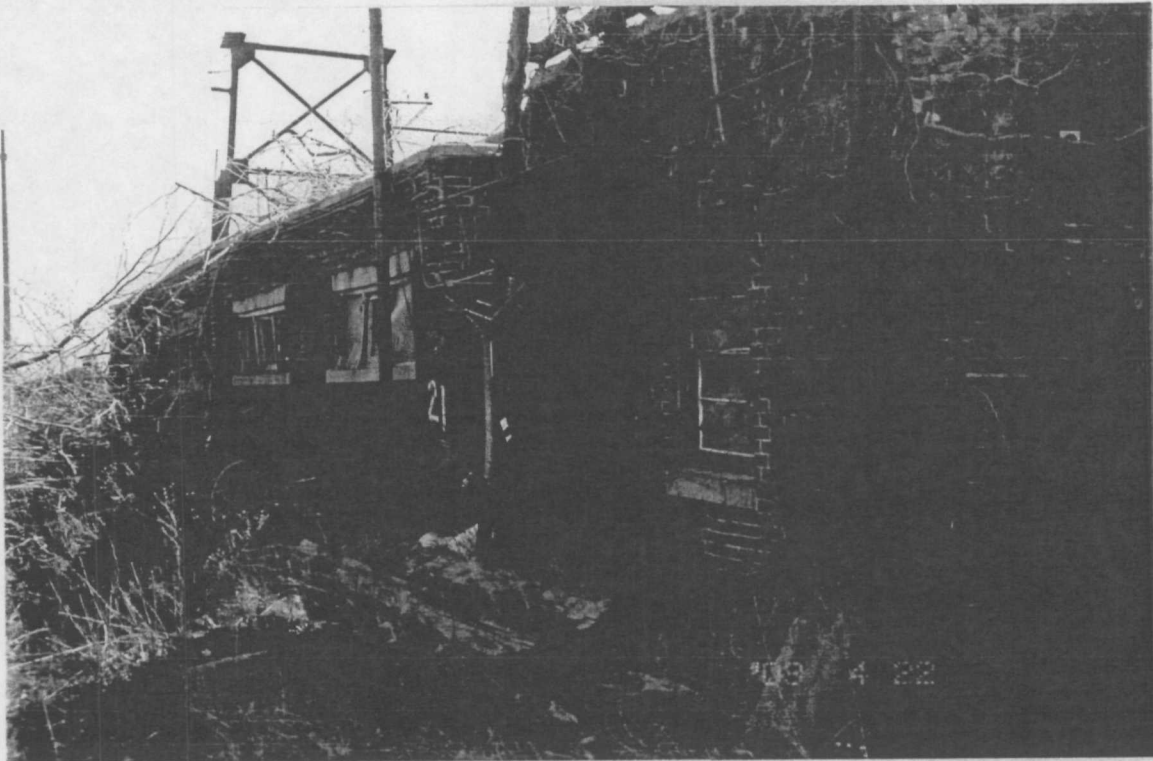
Description: Galbestos Siding.



Section 2 15 and 16 Material Photographs and Descriptions

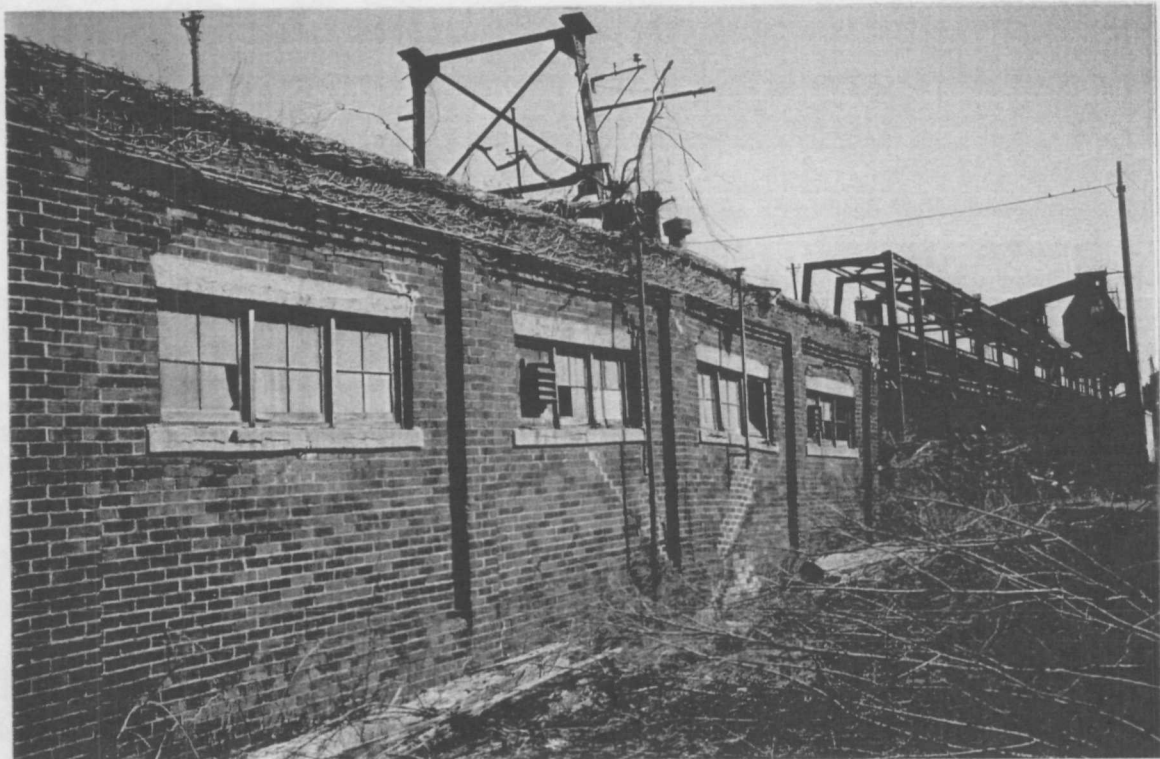
Location: Building #21

Description: North and South shower facility.



Location: Building #21

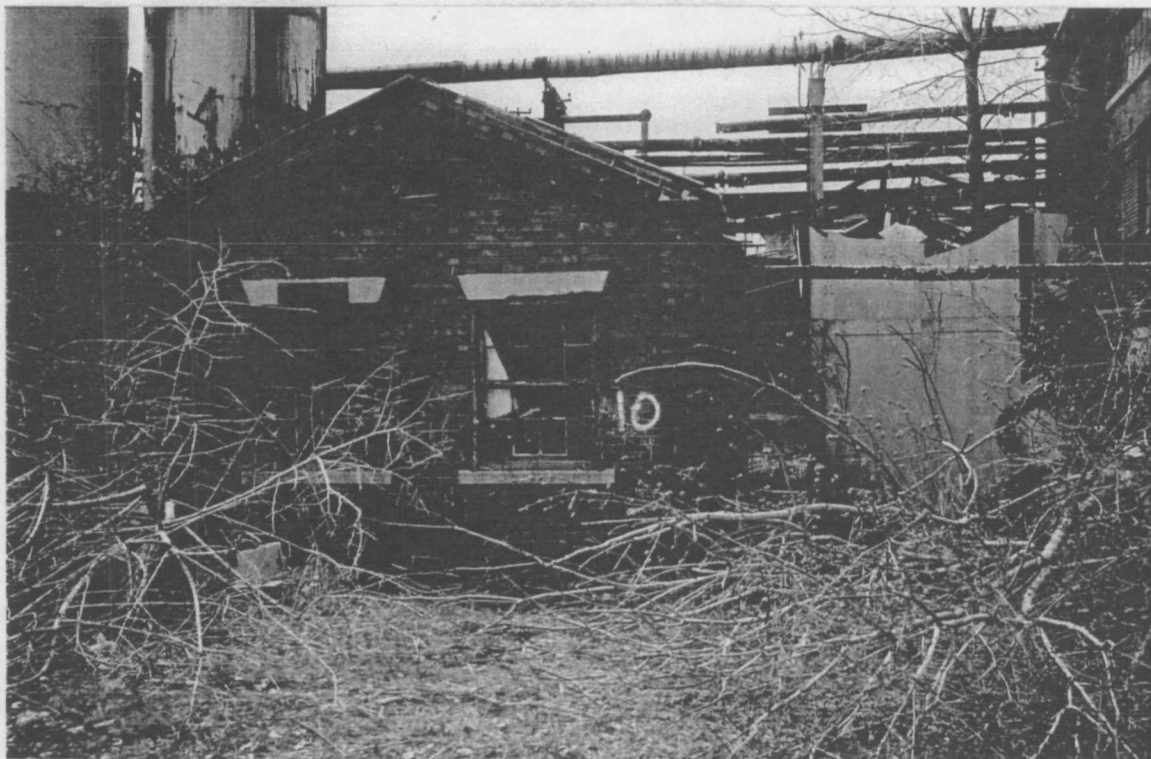
Description: Overhead pipes and asbestos glazing.



Section 2 17 and 18 Material Photographs and Descriptions

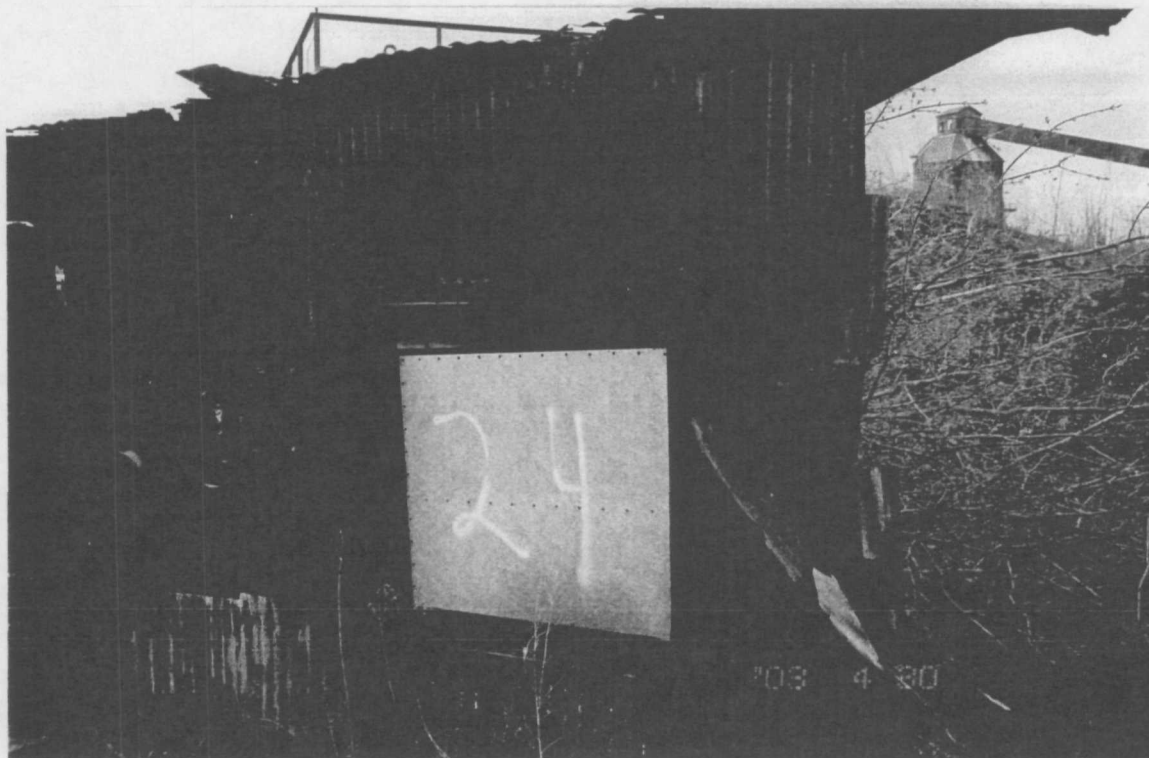
Location: Building #10

Description: Asbestos roof and adjacent transite.



Location: Building #24

Description: Galbestos siding and roofing.



Section 2 19 and 20 Material Photographs and Descriptions

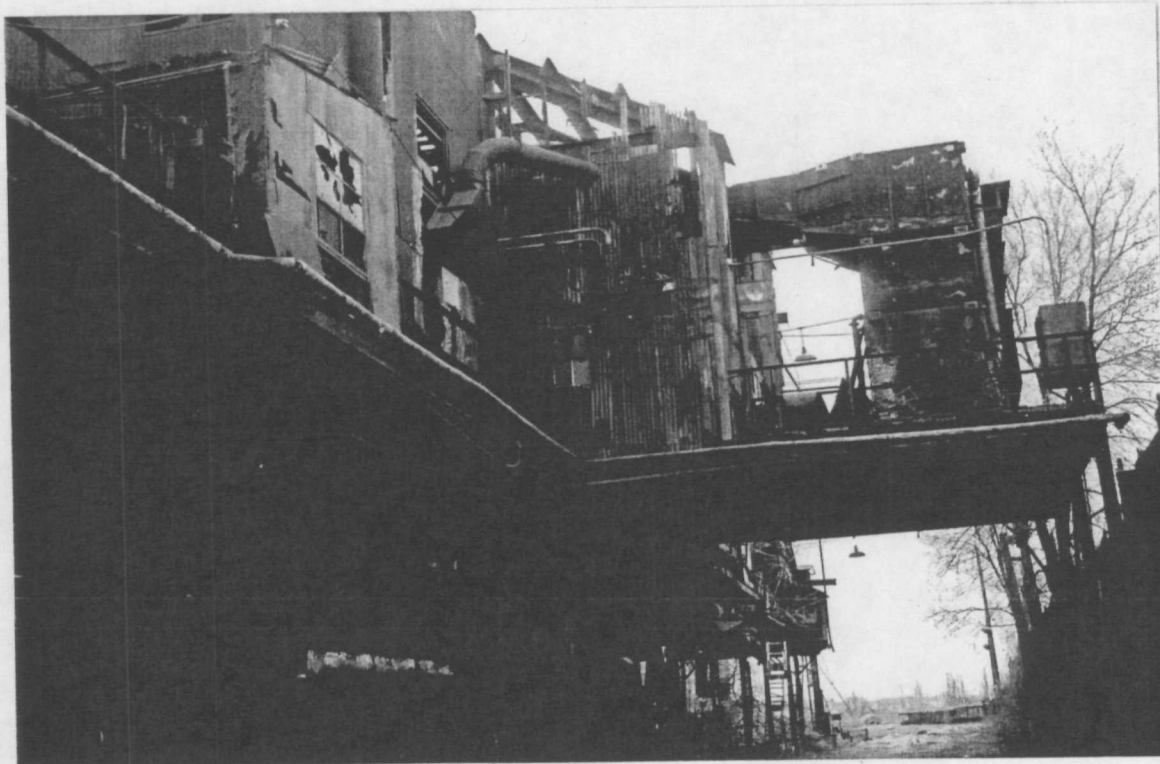
Location: Building #23

Description: Transite walls and galbestos roof.



Location: Building #19

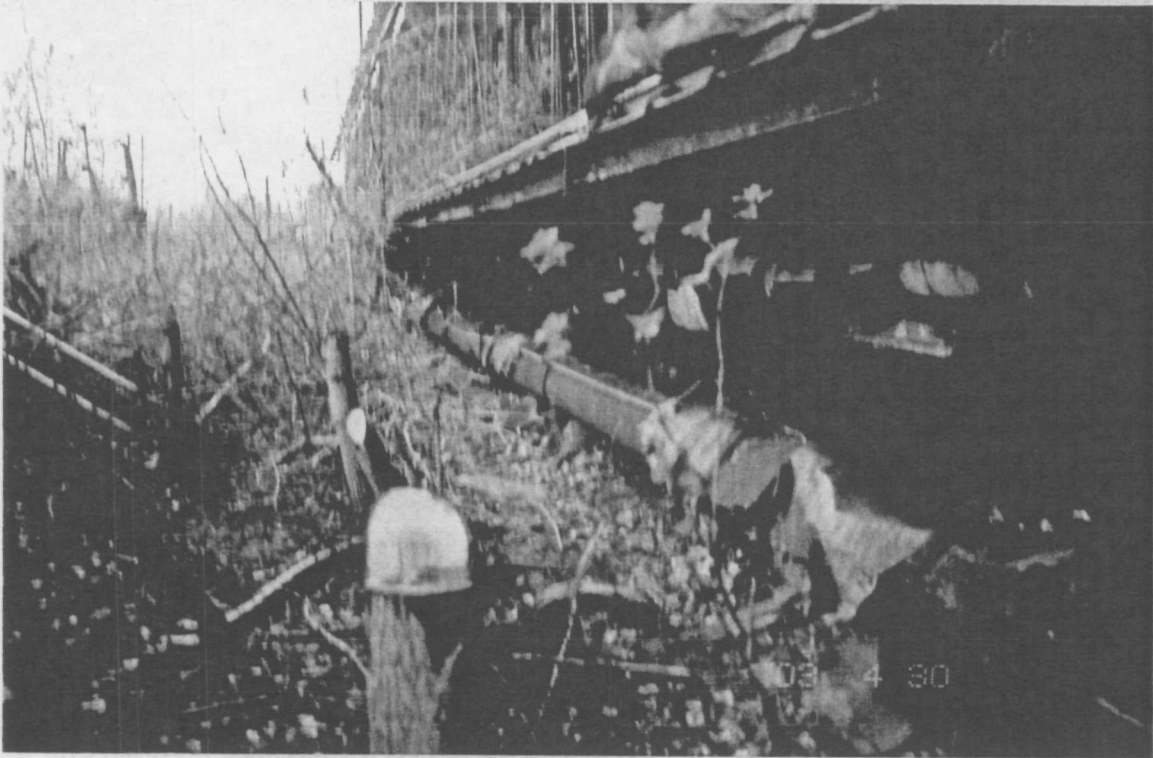
Description: Galbestos siding and roofing.



Section 2 21 and 22 Material Photographs and Descriptions

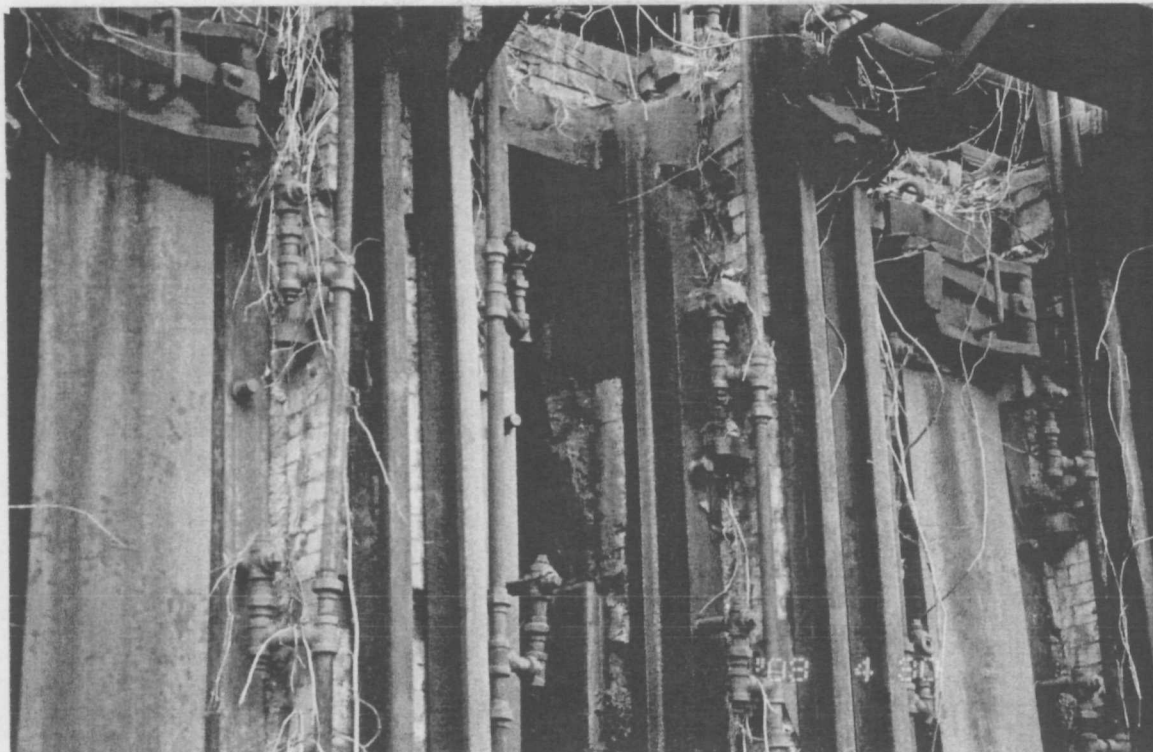
Location: Building #Coke Ovens

Description: Pipes with asbestos jacket.



Location: Building # Coke Ovens.

Description: Asbestos rope door gaskets.



Section 2 23 and 24 Material Photographs and Descriptions

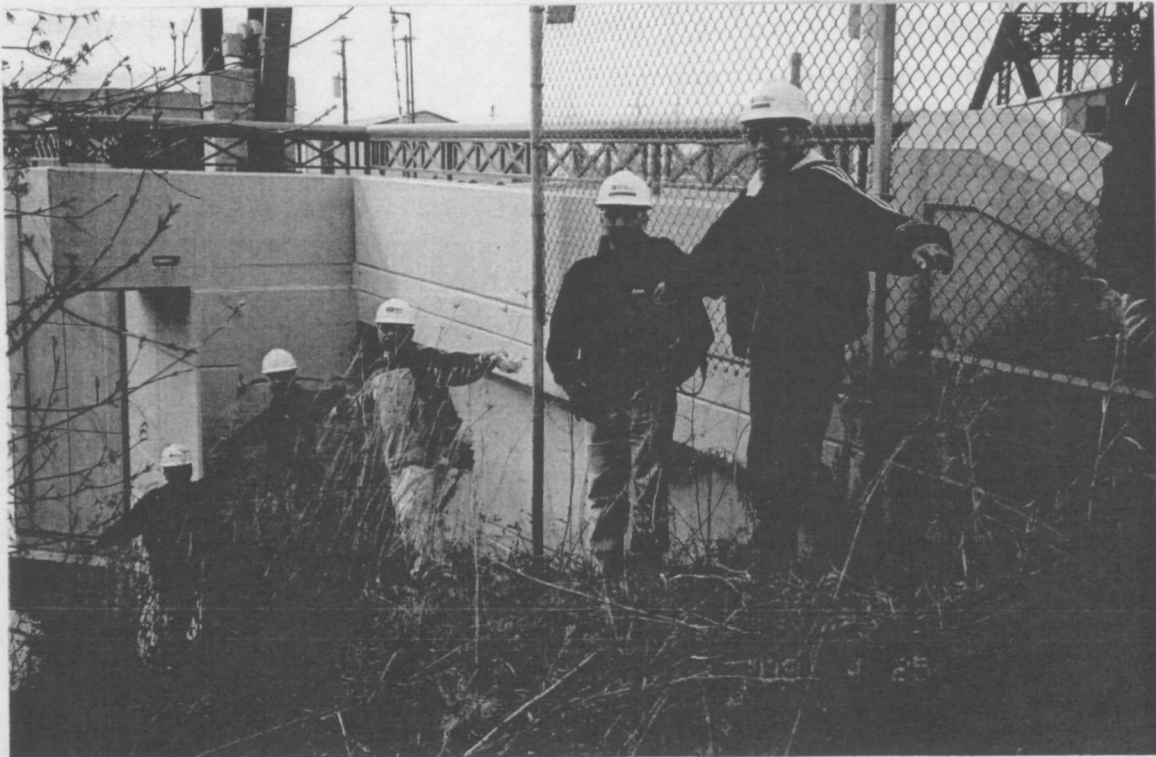
Location: South Open Lands.

Description: Urban soils and debris piles.



Location: South Boundary.

Description: Arm in Arm Clean Sweep.



Section 2 25 and 26 Material Photographs and Descriptions

Location: West Coke Ovens.

Description: Mudded asbestos duct seal.



Location: South Buildings.

Description: Transite panels stacked.



Section 3

Laboratory Analysis of Bulk Samples

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: ELI
304 E. Florida Street
Milwaukee, WI 53204

DATE OF RECEIPT: 24 APR 2003
DATE OF ANALYSIS: 27 APR 2003
DATE OF REPORT: 28 APR 2003

CLIENT NUMBER: 51-5548 D
EHS PROJECT #: 04-03-3279
PROJECT: Golden Marina Causeway; 311 E. Greenfield Ave.; Milwaukee, WI

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	GMC-06/ Gray Powder	NAD	100% Non-Fibrous
02	GMC-08/ Gray Fib.	80% Chrysotile 80% Total Asbestos	10% Cellulose 10% Non-Fibrous
03	GMC-09/ White Powder; Fib.	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
04	GMC-10/ Gray Powder; Fib.	20% Chrysotile 20% Total Asbestos	40% Fibrous Glass 40% Non-Fibrous
05	GMC-11/ Gray Gran.	NAD	2% Synthetic 98% Non-Fibrous
06	GMC-12/ Black Fib.	NAD	90% Cellulose 10% Non-Fibrous
07	GMC-13/ Gray Vinyl	10% Chrysotile 10% Total Asbestos	90% Non-Fibrous
08	GMC-14/ Gray Powder; Fib.	5% Chrysotile 2% Amosite 7% Total Asbestos	23% Fibrous Glass 70% Non-Fibrous
09	GMC-15/ Black Tar-Like; Gray Powder; Fib.	80% Chrysotile 80% Total Asbestos	10% Fibrous Glass 10% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: ELI
304 E. Florida Street
Milwaukee, WI 53204

DATE OF RECEIPT: 24 APR 2003
DATE OF ANALYSIS: 26 APR 2003
DATE OF REPORT: 28 APR 2003

CLIENT NUMBER: 51-5548 D
EHS PROJECT #: 04-03-3277
PROJECT: Golden Marina Causeway; 311 E. Greenfield Ave.; Milwaukee, WI

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	GMC-16/ Gray Gran.	NAD	2% Synthetic 98% Non-Fibrous
02	GMC-17/ Gray Gran.	NAD	2% Synthetic 98% Non-Fibrous
03	GMC-18/ Gray Gran.	NAD	2% Synthetic 98% Non-Fibrous
04	GMC-19/ Gray Gran.	NAD	100% Non-Fibrous
05	GMC-20/ Gray Gran.	NAD	100% Non-Fibrous
06	GMC-21/ Gray Gran.	NAD	100% Non-Fibrous
07	GMC-22/ Gray Gran.	NAD	100% Non-Fibrous
08	GMC-23/ White Fib.	NAD	90% Fibrous Glass 10% Non-Fibrous
09	GMC-24/ White Fib.	NAD	90% Fibrous Glass 10% Non-Fibrous
10	GMC-25/ White Powder; Brown Fib.	NAD	10% Cellulose 90% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7489 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: ELI
304 E. Florida Street
Milwaukee, WI 53204

DATE OF RECEIPT: 07 MAY 2003
DATE OF ANALYSIS: 08 MAY 2003
DATE OF REPORT: 08 MAY 2003

CLIENT NUMBER: 51-5548 D
EHS PROJECT #: 05-03-0838
PROJECT: Golden Marina Causenay

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	4GMC-26/ Brick Red/Gray/Pale Tan Brittle	NAD	100% Non-Fibrous
02	4GMC-27/ Brick Red/Gray/Pale Tan Brittle	NAD	100% Non-Fibrous
03	4GMC-28/ Dk. Brown Brittle	30% Chrysotile 30% Total Asbestos	70% Non-Fibrous
04	4GMC-29/ Pale Gray/Gray Brittle	2% Chrysotile * 2% Total Asbestos *Present in pale gray (main) layer.	2% Cellulose 96% Non-Fibrous
05	4GMC-30/ Off-White Brittle	NAD	1% Cellulose 7% Talc 92% Non-Fibrous
06	4GMC-31/ Gray Fib.	70% Chrysotile 70% Total Asbestos	30% Non-Fibrous
07	4GMC-32/ Gray Fib.	75% Chrysotile 75% Total Asbestos	25% Non-Fibrous
08	4GMC-33/ Brown Vinyl-Like; Tan Fib.; Dk. Brown Brittle	NAD	30% Cellulose 2% Hair 68% Non-Fibrous
09	4GMC-34/ Tan Vinyl-Like; Off-White/Black Fib.	25% Chrysotile * 25% Total Asbestos *Present in fibrous backing.	10% Cellulose 65% Non-Fibrous
10	4GMC-35/ Off-White/Beige/Dk. Gray Brittle	NAD	1% Cellulose 5% Talc 94% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: ELI
304 E. Florida Street
Milwaukee, WI 53204

DATE OF RECEIPT: 24 APR 2003
DATE OF ANALYSIS: 26 APR 2003
DATE OF REPORT: 28 APR 2003

CLIENT NUMBER: 51-5548 D
EHS PROJECT #: 04-03-3276
PROJECT: Golden Marina Causeway

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01A	GMC-36(a)-Tile/ Green Vinyl	3% Chrysotile 3% Total Asbestos	97% Non-Fibrous
01B	GMC-36(b)-Mastic/ Black Adhes.	NAD	5% Cellulose 95% Non-Fibrous
02	GMC-37/ Gray Gran.	NAD	100% Non-Fibrous
03	GMC-38/ Gray Gran.	NAD	100% Non-Fibrous
04	GMC-39/ Gray Linoleum; Gray Fib.	20% Chrysotile 20% Total Asbestos	5% Cellulose 75% Non-Fibrous
05	GMC-40/ Gray Gran.; White Skim-Coat	Trace, <1% Chrysotile <1% Total Asbestos	3% Synthetic 97% Non-Fibrous
06	GMC-41/ Gray Gran.	NAD	5% Synthetic 95% Non-Fibrous
07	GMC-42/ Gray Fib.	85% Chrysotile 85% Total Asbestos	10% Cellulose 5% Non-Fibrous
08	GMC-43/ Gray Cementitious	20% Chrysotile 20% Total Asbestos	80% Non-Fibrous
09	GMC-44/ Gray Cementitious	20% Chrysotile 20% Total Asbestos	80% Non-Fibrous
10	GMC-45/ White Fib.	80% Chrysotile 80% Total Asbestos	15% Cellulose 5% Non-Fibrous
11	GMC-46/ Gray Gran.	NAD	2% Synthetic 98% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237
804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: ELI
304 E. Florida Street
Milwaukee, WI 53204

DATE OF RECEIPT: 24 APR 2003
DATE OF ANALYSIS: 27 APR 2003
DATE OF REPORT: 28 APR 2003

CLIENT NUMBER: 51-5548 D
EHS PROJECT #: 04-03-3278
PROJECT: Golden Marina Causeway

<u>EHS SAMPLE #</u>	<u>CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION</u>	<u>% ASBESTOS</u>	<u>OTHER MATERIALS</u>
01	37/ White Fib.	15% Chrysotile 15% Total Asbestos	80% Cellulose 5% Non-Fibrous
02	48/ Brown Fib.; Black Tar-Like	5% Chrysotile 5% Total Asbestos	85% Cellulose 10% Non-Fibrous
03	49/ White Powder; Fib.	80% Chrysotile 5% Amosite 85% Total Asbestos	15% Non-Fibrous
4	50/ Black Adhes.	5% Chrysotile 5% Total Asbestos	95% Non-Fibrous

QC SAMPLE: M2-1998-2

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Feng Jiang, M.S.

Reviewed By Authorized Signatory: _____

Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: ELI
 904 E. Florida Street
 Milwaukee, WI 53204

DATE OF RECEIPT: 07 MAY 2003
DATE OF ANALYSIS: 08 MAY 2003
DATE OF REPORT: 09 MAY 2003

CLIENT NUMBER: 51-5548 D
EHS PROJECT #: 05-03-0839
PROJECT:

EHS SAMPLE #	CLIENT SAMPLE # LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	51/ Black Tar-Like	20% Chrysotile 20% Total Asbestos	80% Non-Fibrous
02	52/ Gray Cementitious	20% Chrysotile 20% Total Asbestos	80% Non-Fibrous
03	53/ Black Fib.	10% Chrysotile 10% Total Asbestos	80% Cellulose 10% Non-Fibrous
04	54/ Black Tar-Like	20% Chrysotile 20% Total Asbestos	20% Cellulose 60% Non-Fibrous
05	55/ Gray Fib.	Trace, <1% Chrysotile 10% Amosite 10% Total Asbestos	90% Non-Fibrous
06	56/ Gray Fib.	90% Chrysotile 90% Total Asbestos	10% Non-Fibrous

QC SAMPLE: M1-1998-2


QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Feng Jiang, M.S.

Reviewed By Authorized Signatory:


 Howard Varner, Laboratory Director
 Irma Paszewski, Quality Assurance Coordinator
 David Xu, MS, Senior Chemist
 Feng Jiang, MS, Senior Geologist
 Michael A. Mueller, Quality Assurance Manager

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7468 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: ELI
304 E. Florida Street
Milwaukee, WI 53204

DATE OF RECEIPT: 07 MAY 2003
DATE OF ANALYSIS: 08 MAY 2003
DATE OF REPORT: 08 MAY 2003

CLIENT NUMBER: 51-5548 D
EHS PROJECT #: 05-03-0897
PROJECT: Golden Marina Causenay

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	23GMC-61/ Pale Gray Brittle; Powdery	NAD	1% Cellulose 99% Non-Fibrous
02	23GMC-62/ Gray/Off-White Cementitious; Beige Brittle	NAD	100% Non-Fibrous
03	23GMC-63/ Off-White/Green Brittle; Tan Fib.	NAD	20% Cellulose 80% Non-Fibrous
04	23GMC-63/ Gray/Beige Brittle	NAD	100% Non-Fibrous
05	23GMC-64/ Gray Cementitious	NAD	100% Non-Fibrous
06	23GMC-78/ Gray Cementitious; Gray Brittle	NAD	100% Non-Fibrous
07	23GMC-79/ Off-White Fib.	7% Chrysotile 40% Amosite 47% Total Asbestos	3% Cellulose 50% Non-Fibrous
08	23GMC-80/ Black Brittle; Black Fib.	NAD	20% Cellulose 20% Fibrous Glass 60% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7489 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: ELI
304 E. Florida Street
Milwaukee, WI 53204

DATE OF RECEIPT: 07 MAY 2003
DATE OF ANALYSIS: 08 MAY 2003
DATE OF REPORT: 09 MAY 2003

CLIENT NUMBER: 51-5548 D
EHS PROJECT #: 05-03-0840
PROJECT: Golden Marina Causeway

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	11GMC-66/ White Powder	NAD	2% Cellulose 98% Non-Fibrous
02	11GMC-67/ Red Gran.	NAD	100% Non-Fibrous
03	11GMC-68/ Gray Powder	NAD	100% Non-Fibrous
04	11GMC-69/ Black Fib.	90% Chrysotile 90% Total Asbestos	5% Cellulose 5% Non-Fibrous
05	100/ Gray Powder; Fib.	2% Chrysotile 8% Amosite 10% Total Asbestos	90% Non-Fibrous
06	101/ Red Gran.	NAD	100% Non-Fibrous
07	102/ Gray Gran.	NAD	100% Non-Fibrous
08	103/ Gray Gran.	NAD	100% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7460 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: ELI
304 E. Florida Street
Milwaukee, WI 53204

DATE OF RECEIPT: 07 MAY 2003
DATE OF ANALYSIS: 08 MAY 2003
DATE OF REPORT: 08 MAY 2003

CLIENT NUMBER: 51-5548 D
EHS PROJECT #: 05-03-0835
PROJECT: Golden Marina Causenay

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	10GMC-70/ Beige Gran.	3% Chrysotile 3% Total Asbestos	97% Non-Fibrous
02	10GMC-71/ Gray Gran.	NAD	100% Non-Fibrous
03	10AGMC-72/ Gray Cementitious	NAD	100% Non-Fibrous
04	10AGMC-73/ Gray Cementitious; Fib.	15% Chrysotile 15% Total Asbestos	85% Non-Fibrous
05	10AGMC-74/ White Chalky	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous
06	10AGMC-75/ Brown Fib.	NAD	98% Cellulose 2% Non-Fibrous
07	40GMC-76/ Brown Gran.	NAD	2% Cellulose 98% Non-Fibrous
08	40GMC-77/ Gray Cementitious	NAD	100% Non-Fibrous
09	9GMC-78/ White Chalky	NAD	2% Cellulose 98% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: ELI
304 E. Florida Street
Milwaukee, WI 53204

DATE OF RECEIPT: 07 MAY 2003
DATE OF ANALYSIS: 08 MAY 2003
DATE OF REPORT: 08 MAY 2003

CLIENT NUMBER: 51-5548 D
EHS PROJECT #: 05-03-0836
PROJECT: Golden Marina Causeway

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	80/ Red Gran.	NAD	100% Non-Fibrous
02	81/ Red Gran.	NAD	100% Non-Fibrous
03	82/ Red Gran.	NAD	100% Non-Fibrous
04	83/ Gray Gran.	NAD	100% Non-Fibrous
05	84/ Gray Fib.	85% Chrysotile 85% Total Asbestos	10% Cellulose 5% Non-Fibrous
06	85/ Brown Fib.	85% Chrysotile 85% Total Asbestos	10% Cellulose 5% Non-Fibrous
07	86/ Black Fib.	20% Chrysotile 20% Total Asbestos	60% Cellulose 20% Non-Fibrous
08	87/ Gray Fib.	80% Chrysotile 80% Total Asbestos	15% Cellulose 5% Non-Fibrous
09	88/ Gray Gran.	NAD	100% Non-Fibrous
10	89/ Gray Gran.	NAD	100% Non-Fibrous
11	90/ Brown Gran.	NAD	100% Non-Fibrous
12	91/ Red Gran.	NAD	100% Non-Fibrous
13	92/ Gray Gran.	NAD	100% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 51-5548 D
FHS PROJECT #: 04-03-3279
OBJECT: Golden Marina Causeway; 311 E. Greenfield Ave.; Milwaukee, WI

QC SAMPLE: M2-1998-2
QC BLANK: SRM 1866 Fiberglass
REPORTING LIMIT: 1% Asbestos
METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *
ANALYST: Feng Jiang, M.S.

Reviewed By Authorized Signatory: 

Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
SCF = suspected ceramic fibers

plm1.dot/07JAN2002/ lmb

-- PAGE 02 of 02 -- END OF REPORT --

Section 4

Sample Chain of Custody Forms

ENVIRONMENTAL HAZARDS SERVICES, L L C.

7469 Whitepine Road Richmond, Virginia 23237 Phone (804) 275-4788 Fax (804) 275-4907

CHAIN OF CUSTODY FORM

Company Name: ELI COMPANIES LLC Date: 3/24/03
 Address: 304 E. FLORIDA ST. Contact Name: KEVIN O'CONNOR
 City, State, Zip: MILWAUKEE, WI Sampler Name: _____
 EHS Client Account #: _____ Project #: GOLDEN MARINA CAUSEWAY
 Phone #: 414-788-7447 Fax #: 414-223-3061 311 E. GREENFIELD AVE
 P.O. #: _____ MILWAUKEE, WI

Sample Number	Sample Date & Time	Asbestos					Lead						Other Metals (Specify metals below)				Indoor Air Quality				Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Respirable (NIOSH 0600) <input type="checkbox"/>		Comments			
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wine * (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile					Biocassette	Slide		Surface Swab	Surface Tape	Bulk
1 GMC-06	4/21/03	X																									EXTERNAL	WINDOW GLAZING NW
1 GMC-07	"	X																									EXTERNAL	WINDOW GLAZING NE
1 GMC-08	4/21/03	X																									BASEMENT	TSI < 6" AIRREN
1 GMC-09	4/21/03	X																									BASEMENT	TSI 76" MAG-
1 GMC-10	4/21/03	X																									BASEMENT	TSI < 6" MUD
1 GMC-11	4/21/03	X																									BASEMENT	BR - PLASTER
1 GMC-12	4/21/03	X																									BASEMENT	9'x9' UAT & MASTIC
1 GMC-13	4/21/03	X																									BASEMENT	9'x9' UAT & MASTIC
1 GMC-14	4/21/03	X																									BASEMENT	WATER VALVE MUD
1 GMC-15A	4/21/03	X																									BASEMENT	BOILER JACKET

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

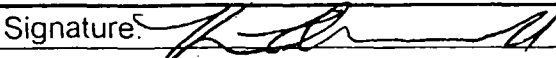
Released by <u>Kevin O'Connor</u>	Signature: <u>[Signature]</u>	Date/Time: <u>4/21/03</u>
Received by _____	Signature: _____	Date/Time _____
Released by _____	Signature: _____	Date/Time _____
Received by _____	Signature: _____	Date/Time _____

CHAIN OF CUSTODY FORM

Company Name: ELI COMPANIES LLC Date: 3/24/03
 Address: 304 E. FLORIDA ST. Contact Name: KEVIN O'CONNOR
 City, State, Zip: MILWAUKEE, WI Sampler Name: _____
 EHS Client Account #: _____ Project #: GOLDEN MARIWA CAUSEWAY
 Phone #: 414-788-7447 Fax #: 414-223-3061 311 E. GREENFIELD AVE.
 P.O. #: _____ MILWAUKEE, WI.

Sample Number	Date & Time	Bulk ID #	PLM Point Crust (PCM) Filter	PLM Point Crust	PLM Gray Iron	TEM AHEB	TEM Charfield	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wipe * (Sec 3)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal	Biocassette	Slide	Surface Swab	Surface Tap	Bulk	Air Volume (L)	Comments
																								OR	
GME-16	4/21	X																						2ND FLOOR	WALL PLASTER
17	"	X																						"	"
18	"	X																						"	"
19	"	X																						"	"
20	"	X																						2ND FLOOR	CEILING PLASTER
21	"	X																						"	"
22	"	X																						"	"
23	"	X																						2ND FLOOR	12" x 12" CEILING TILE
24	"	X																						"	"
25	"	X																						GUARD SHACK	PLASTER

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>Kevin O'Connor</u>	Signature: 	Date/Time: <u>4/21/03</u>
Received by:	Signature: _____	Date/Time: _____
Released by:	Signature: _____	Date/Time: _____
Received by:	Signature: _____	Date/Time: _____

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 Whitapine Road Richmond, Virginia 23237 Phone (804) 275-4788 Fax (804) 275-4907

CHAIN OF CUSTODY FORM

Company Name: ECI COMPANIES LLC Date: 4/21/03
 Address: 304 E FLORIDA ST. Contact Name: _____
 City, State, Zip: MILWAUKEE, WI 53204 Sampler Name: KEVIN O'CONNOR
 EHS Client Account #: _____ Project #: GOLDEN MARINA CAUSEWAY
 Phone #: 414-223-3060 Fax #: 414-223-3061
 P.O. #: _____

Sample Number	Sample Date & Time	Asbestos						Lead					Other Metals <small>(Specify metals below)</small>				Indoor Air Quality					Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Comments				
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wipe * (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Biocassette	Slide	Surface Swab	Surface Tape	Bulk		Air Volume (L) OR Wipe Area (ft ²) OR Scrape Area (cm ²)	Respirable (NIOSH 0500) <input type="checkbox"/>		
4 GMC-26	4/21/03	X																								PLASTER	ON BOOK TILE	
4 GMC-27	"	X																								PLASTER	ON BOOK TILE	
4 GMC-28	"	X																								ELECTRICAL	INSULATOR (FLOOR)	DEBRIS
4 GMC-29	"	X																								EXTERIOR	WINDOW GLAZING	(METAL)
4 GMC-30	"	X																								EXTERIOR	WINDOW GLAZING	(WOOD)
4 GMC-31	"	X																								BENCHES	GASKET STOCK A	
4 GMC-32	"	X																								2ND LEVEL	STORAGE GASKET B	
4 GMC-33	"	X																								2ND LEVEL	TABLE TOP NE	
4 GMC-34	"	X																								1ST FLOOR	OFFICE NE WINDOW	FLOOR
4 GMC-35	"	X																								EXTERIOR	GUARD SHIELD GLAZ	WIND

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>KEVIN O'CONNOR</u>	Signature: <u>[Signature]</u>	Date/Time: <u>4/21/03</u>
Received by:	Signature:	Date/Time:
Released by:	Signature:	Date/Time:
Received by:	Signature:	Date/Time:

CHAIN OF CUSTODY FORM

Company Name: ELI ENVIRONMENTAL INC. Date: 4/22/03
 Address: 304 E. FLORIDA ST Contact Name: _____
 City, State, Zip: MILWAUKEE, WI. 53204 Sampler Name: Kevin O'Connor
 EHS Client Account #: _____ Project #: GREENWATER CAUSEWAY
 Phone #: 414-223-3060 Fax #: 414-223-3061
 P.O. #: _____

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>					Indoor Air Quality					Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Comments		
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wipe* (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile								
3 T.M.C-36	4/22	X																								GROUND - GREEN WATER
37	4/22	X																								GROUND PLASTER CEILING
38	4/22	X																								GROUND WALL PLASTER
39	4/22	X																								2ND FL SHEET VINYL
40	4/22	X																								2ND FL CEILING PLASTER
41	4/22	X																								2ND FL WOOD PLASTER
42	4/22	X																								2ND FL HOT PWD
43	4/22	X																								1ST FLOOR TRANSITE WALL
44	4/22	X																								2ND FLOOR TRANSITE TRAY
45	4/22	X																								2ND FLOOR ROPE 12

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>Kevin O'Connor</u>	Signature: <u>[Signature]</u>	Date/Time: _____
Received by: _____	Signature: _____	Date/Time: _____
Released by: _____	Signature: _____	Date/Time: _____
Received by: _____	Signature: _____	Date/Time: _____

CHAIN OF CUSTODY FORM

Company Name: ELI ENVIRONMENT INC. Date: 4/22/03
 Address: 304 EAST FLORIDA ST Contact Name: _____
 City, State, Zip: MILWAUKEE WI 53204 Sampler Name: KEVIN O'CONNOR
 EHS Client Account #: _____ Project #: GOLDEN MARINA CAUSEWAY
 Phone #: 414-223-3060 Fax #: 414-223-3061
 P.O. #: _____

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>			Indoor Air Quality		Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/> Respirable (NIOSH 0600) <input type="checkbox"/>		Comments					
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wine * (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile		Biocassette	Slide	Surface Swab	Surface Tape	Bulk
3 GMC 46	4/22	X																						2ND FLOOR BEAM PLASTER
20 GMC-47	4/22	X																						REPAIRED CLUTCH CURTAIN
20 GMC-48	4/22																							DRUM OVER MUD/WOOL
20 GMC-49	4/22																							VERTICAL OVER JACKET
20 GMC-50	4/22																							EXTENSION GALVANIZED

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>Kevin O'Connor</u>	Signature: <u>[Signature]</u>	Date/Time: <u>4/22/03</u>
Received by:	Signature: _____	Date/Time: _____
Released by:	Signature: _____	Date/Time: _____
Received by:	Signature: _____	Date/Time: _____

Co PLM

CHAIN OF CUSTODY FORM

Company Name: ELI ENVIKON HAZARDOUS CONTRACTORS INC Date: 4/24/03
 Address: 304 EAST MCARDIA ST. Contact Name: _____
 City, State, Zip: MILWAUKEE, WI 53204 Sampler Name: KENN O'CONNOR
 EHS Client Account #: _____ Project #: _____
 Phone #: 414-223-3000 Fax #: 414-223-3061
 P.O. #: _____

Sample Number	Sample Date & Time	Asbestos						Lead					Other Metals <small>(Specify metals below)</small>				Indoor Air Quality				Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Respirable (NIOSH 0600) <input type="checkbox"/>	
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (AIR)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wipe* (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Biocassette	Slide	Surface Swab	Surface Tape	Bulk	Air Volume (L) OR Wipe Area (ft ²) OR Scrape Area (cm ²)
1 7 GMC-51	4/23	X																					NE-MUD	POTENTIAL FILL
2 7 GMC-52	"	X																					TRANSITE	EXTENSION/JWT SUGAR
3 7 GMC-53	"	X																					ROLL STORM	TRIPMACK
4 7 GMC-54	"	X																					TSI-EXT	BLACK OUTER WRAPS
5 2 GMC-55	"	X																					TSI-INT	CABLE WRAPS
6 6 GMC-56	"	X																					ELECTRICAL	1" CABLE

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>[Signature]</u>	Signature: <u>Kenn O'Connor</u>	Date/Time: <u>4/30/03</u>
Received by: _____	Signature: <u>[Signature]</u>	Date/Time: <u>5-7-03 9:40</u>
Released by: _____	Signature: _____	Date/Time: _____
Received by: _____	Signature: _____	Date/Time: _____

7/30/03

EHS 05-03-0837

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.
7469 Whitepine Road Richmond, Virginia 23237 Phone (804) 275-4788 Fax (804) 275-4907

GPLM

CHAIN OF CUSTODY FORM

Company Name: ELI COMPANIES LLC. Date: 4/29/03
 Address: 311 EAST GREENFIELD Contact Name: _____
 City, State, Zip: MILWAUKEE, WI 53204 Sampler Name: KEVIN O'CONNOR
 EHS Client Account #: _____ Project #: GOLDEN MARLIN CAUSEWAY
 Phone #: 414-223-3060 Fax #: 414-223-3061
 P.O. #: _____

*LAB #	NOTE: No SAMPLER	Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals (Specify metals below)			Indoor Air Quality				Particulate: Total Nuisance (NIOSH 0500)		Comments	
				Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wipe* (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Biocassette	Slide		Surface Swab
*	236MC-60	4/29/03	X																					EXTENSION PLASTER "A" FRAME
	236MC-61	"	X																					INTERIOR SOIL ON FLOOR
	236MC-62	"	X																					INTERIOR PLASTER
	236MC-63	"	X																					INTERIOR DR YOUNG (NO CONDUIT)
**	236MC-64	"	X																					EXTENSION PLASTER (TOP COAT)
	236MC-65	"	X																					EXTENSION PLASTER (SUBSTRATE)
	96MC-78	4/29	X																					INTERIOR FLOOR LEVEL 2ND FL
	96MC-79	4/29	X																					INTERIOR VENT TSI 2ND FLOOR
	96MC-80	4/29	X																					EXTENSION ROOF COLLECTOR

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>KEVIN O'CONNOR</u>	Signature: <u>[Signature]</u>	Date/Time: <u>4/30/03</u>
Received by: _____	Signature: <u>[Signature]</u>	Date/Time: <u>5-7-03 9:40</u>
Released by: _____	Signature: _____	Date/Time: _____
Received by: _____	Signature: _____	Date/Time: _____

FILE No. 714 05/09 '03 08:46 ID: _____ FAX: _____ PAGE 9/15

EHS 05-03-0840

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 Whitepine Road Richmond, Virginia 23237 Phone (804) 275-4788 Fax (804) 275-4907

8PLM

CHAIN OF CUSTODY FORM

Company Name: EDL COMPANIES LLC Date: 4/29/03
 Address: 311 EAST GARDENFIELD Contact Name: _____
 City, State, Zip: MILWAUKEE, WI 53204 Sampler Name: KEVIN O'CONNOR
 EHS Client Account #: _____ Project #: GOLDEN MARINA CAUSEWAY
 Phone #: 414-223-3060 Fax #: 414-223-3061
 P.O. #: _____

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>				Indoor Air Quality			Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Comments				
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (AIR)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wine * (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA B	Welding Fume	Toxic Metal Profile	Biocassette	Slide		Surface Swab	Surface Tape	Bulk	Air Volume (L) OR Wipe Area (ft ²) OR Scrape Area (cm ²)
1	11 GMC-100	4/29/03	X																					INTERIOR	WHITE BOOK TILE
2	11 GMC-67	4/29/03	X																					INTERIOR	RED BOOK TILE
3	11 GMC-68	"	X																					EXTERIOR	WINDOW GLAZING
4	11 GMC-69	"	X																					EXTERIOR	ROOFING (CRNO DEBR)
5	19 GMC 100	4/30	X																					INTERIOR	ASB BLOCK STAIRS
6	40 GMC-101	4/30	X																					INTERIOR	BASE TUNNEL FIRE BRICK
7	40 GMC-102	4/30	X																					INTERIOR	BASE TUNNEL FIRE BRICK
8	40 GMC 103	4/30	X																					INTERIOR	BASE TUNNEL FIRE BRICK

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>KEVIN O'CONNOR</u>	Signature: _____	Date/Time: <u>4/30/03</u>
Received by: _____	Signature: <u>[Signature]</u>	Date/Time: <u>5/7/03 4:00</u>
Released by: _____	Signature: _____	Date/Time: _____
Received by: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Date/Time: _____

AB 5/2/03

EHS 05-03-0835

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 Whitepine Road Richmond, Virginia 23237 Phone (804) 275-4788 Fax (804) 275-4907

GRM

CHAIN OF CUSTODY FORM

Company Name: ELL COMPANIES LLC. Date: 4/29/03
 Address: 311 EAST GREENFIELD Contact Name: _____
 City, State, Zip: MILWAUKEE, WI 53204 Sampler Name: KEVIN O'CONNOR
 EHS Client Account #: _____ Project #: GOLDEN MARINA CAUSEWAY
 Phone #: 414-223-3060 Fax #: 414-223-3061
 P.O. #: _____

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>				Indoor Air Quality				Particulate: Total Nuisance (NIOSH 0600) <input type="checkbox"/>		Comments		
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wipe* (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile						Respirable (NIOSH 0600) <input type="checkbox"/>
10 GMC-70	4/29/03	X																					EXT/INT	WINDOW GLAZING
10 GMC-71	4/29/03	X																					INTERIOR	PLASTER
10A GMC-72	4/29/03	X																					INTERIOR	CURT INSULATION
10A GMC-73	4/29/03	X																					EXT/INT	TRANSIT BLDG
10A GMC-74	4/29/03	X																					EXTENSION	GLAZING
10A GMC-75	4/29/03	X																					INTERIOR	BLACK BOARD (GRN)
40 GMC-76	4/29	X																					EXT/INT	COKE OVEN ROOF
40 GMC-77	4/29	X																					EXT INT	COKE OVEN PATH
9 GMC-78	4/29/03	X																					INTERIOR	WHITE BOOK TILE

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>Kevin O'Connor</u>	Signature: <u>[Signature]</u>	Date/Time: <u>4/30/03</u>
Received by: _____	Signature: <u>[Signature]</u>	Date/Time: <u>5/25/03</u>
Released by: _____	Signature: _____	Date/Time: _____
Received by: _____	Signature: _____	Date/Time: _____

*1-9
GRM*

FILE No. 714 05/09 '03 08:44 ID: _____ FAX: _____ PAGE 3/15

CHAIN OF CUSTODY FORM

Name: ELI COMPANIES LLC.

Date: 4/29/03

Address: 311 EAST GREENFIELD

Contact Name: _____

City, State, Zip: MILWAUKEE, WI 53204

Sampler Name: KEVIN O'CONNOR

EHS Client Account #: _____

Project #: GOLDEN MARINA CAUSEWAY

Phone #: 414-223-3060

Fax #: 414-223-3061

P.O. #: _____

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>				Indoor Air Quality					Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Comments	
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wine * (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Biocassette	Slide	Surface Swab	Surface Tape		Bulk
70 GMC 80	4/30	X																					OVEN WGT	ORANGE FIRE BRICK
81	"	X																					"	RED FIRE BRICK
82	"	X																					"	WHITE/GRAY F.B.
83	"	X																					"	MORTAR GRAY
40 GMC 84	"	X																					OVEN TUNNEL	ALUMINUM
85	"	X																					"	BLANKET
86	"	X																					EXTERNAL	PIPE COVER BLACK
87	"	X																					"	WEST BOILER DOOR BASKET
88	"	X																					"	MORTAR WHITE
89	"	X																					"	CAST NEW 20 F.B.

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: KEVIN O'CONNOR

Signature: 

Date/Time: 4/29/03

Received by: _____

Signature: _____

Date/Time: _____

Released by: _____

Signature: _____

Date/Time: _____

Received by: _____

Signature: _____

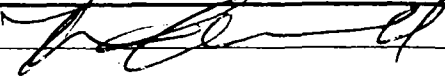
Date/Time: _____

CHAIN OF CUSTODY FORM

Company Name: EUI COMPANIES LLC. Date: 4/29/03
 Address: 311 EAST GARDENFIELD Contact Name: _____
 City, State, Zip: MILWAUKEE, WI 53204 Sampler Name: KEVIN O'CONNOR
 EHS Client Account #: _____ Project #: GOLDEN MARINA CAUSEWAY
 Phone #: 414-223-3060 Fax #: 414-223-3061
 P.O. #: _____

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>				Indoor Air Quality				Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Comments		
		Bulk ID by PLM (PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wine * (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Biocassette	Slide	Surface Swab	Surface Tape		Bulk	Respirable (NIOSH 0600) <input type="checkbox"/>
40 GMC 90	4/30	X																						EAST SLOPE INTERIOR F.B.
40 GMC 91	4/30	X																						WEST SLOPE QUARRY TIE
40 GMC 92	4/30	X																						WEST SLOPE QUARRY MOUNTAIN

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>Kevin O'Connor</u>	Signature: 	Date/Time: <u>4/30/03</u>
Received by:	Signature: _____	Date/Time: _____
Released by:	Signature: _____	Date/Time: _____
Received by:	Signature: _____	Date/Time: _____

Section 5

Asbestos Abatement Cluster Maps

Asbestos Inventories **Abatement Cluster A**

Building #1 Office

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" CD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
1-Grd	Office	2450		108			<10 SF Glazing
1-2	Office	2450					
Basement	Mechanical	2450	232	543		480	208 SF Vinyl Tile (No Mastic)

Building #3 Engineering

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" CD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
3-Grd	Offices	2400	45	85			182 SF Partitions 2400 SF Tile
3-2	Lab	2400					110 SF Lab Table Tops 492 SF Sheet Vinyl
Basement	Mechanical		215	197		50	

*Trace Asbestos in Beam Plaster to be Point Counted

** Stored Materials: Gaskets, Ropes

Building #2 Watchman House

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
2-Grd	Watchman	143					

Asbestos Inventories Abatement Cluster B

Building #4 Receiving, Machine Shop, Stores, & Electrical Dept.

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
4-1	Machine & Stores	6786	40	550			Elect Insul, Stored Tubes,
4-2	Mezz & Loft	2000		95			180 SF Clean-up (Friable)
8-1	Trough Bldg			30			

Building #5 Oil House, Blacksmith, Carpenters, Wash Room & Pipe Fitters

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
5-1	Blacksmith, Oil, Carp, Pipe	5071		128			200 SF Sheet Vinyl

Building #7 & 8 Riggers & Lime

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
7,8	Riggers, Garage	2050	40	40			450 SF Transite Siding

Asbestos Inventories Abatement Cluster C

Building #6 Transformer House

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
6	Transformer House	738		24' Cable			80 SF Transite Firn 48 SF Transite Elect. Panels >1"

Building #9 AC Building

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
9	AC	9000	1325 *	105		950	347 SF Transite Elect. Panels >1"

* Primarily Large Diameter Pipe

Asbestos Inventories Abatement Cluster D

Building # 20 Pilot Line & Repair

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
20	Pilot & Repair	3000	75	25		175	Curtains, Drum Oven 75 SF, Elect. Pnl's Table

Building # 21 Washroom & Showers

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
21	Showers	1500		75		120	
21-Roof	Overhead		60	12			

Building # 23 Remote

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
23	Wash	700					1000 SF Transite Siding

Building # 10 Foreman's Office

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
10	Foreman & Attached*	300		20			3030 SF Roof/Sides

* 350 SF Galbestos Roof, Electrical Insulator panels = 5 small

Asbestos Inventories Apartment Cluster F

Building # 13

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
13	Mud Mill	700					Galbestos

Building # 14 and 15

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
14	Breeze	1000				1000 Tank	Verify
15	Pulverize	3200					Galbestos

Building # 17

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
17		3000					Verify Galbestos

Building #19

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
19	Coal Bin	4000					10075 SF Galbestos 4000 Transite

Asbestos Inventories Abatement Cluster G

Building # Galleries

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
M	Conveyor	3000					9600 Gal
S	Conveyor	3500		225			11200 Gal
J	Conveyor	1000					3200 Gal
H	Conveyor	1250					4000 Gal
Total		8750		225 Verify			28000 Gal

Asbestos Inventories Abatement Cluster H

Bulking # Galleries

Bulking Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
H-16	Stores	2000					4000 Gal
H-24	Remote	150					250 Gal
Total		2150	Verify				4250 Gal

Asbestos Inventories Abatement Cluster I

Building # Coke Ovens

Building Number & Floor	Name or Function	Square Feet	Linear Feet of Pipe Insulation > 6" OD	Linear Feet of Pipe Insulation < 6" OD	Quantity Fittings, Tees, Valves	Square Feet of Thermal Insulation	Flooring or Other Asbestos Square Feet
40	20 New	4000		320 Rope		40 CF	
40	#4	8000		640 Rope		80 CF	
40	#3	8000		640 Rope		80 CF	
Total		20000		1600 Rope		200 CF	

Section 6

Preliminary Work Plan

Eli Environmental Contractors, Inc.

Preliminary PRP Work Plan
For
Milwaukee Solvay Coke and Gas Site
311 East Greenfield Avenue
Milwaukee, Wisconsin

Prepared by
Thomas Jacobson
Project Designer
Eli Environmental Contractors, Inc.
Thursday, February 20, 2003

Outline

1.0 Background	*
2.0 Site mobilization	*
3.0 Sampling activities	*
4.0 Removal Activities	*
5.0 Site Restoration and Project close out	*
6.0 Project Management	*
Appendices	
Appendix A – AOC	*
Appendix B - Site Specific Health and Safety Plan (SSHSP)	*
Appendix C - Project Schedule / Time line	*
Appendix D - Preliminary analytical Data Summary	*
Appendix E - Quality Assurance Project Plan (QAPP)	*

Eli Environmental Contractors, Inc.

Work plan for;

Milwaukee Solvay Coke & Gas Site (MSCG)
311 East Greenfield Avenue
Milwaukee, WI 53204

This scope of work addresses the tasks to be completed under the Removal Action as part of the required work of the AOC. All work outlined below will be substantially completed by either ELI Environmental Contractors, Inc. or an authorized subcontractor of ELI. Some project assistance will be provided from Earth Tech Inc. although their specific efforts are to serve to document the work performed by ELI and to report the progress of work to EPA.

Develop work plans and Timelines for the Project.

1. Develop a work plan (Preliminary) for a "clean sweep" effort across the entire 46 acres of the site for identification and removal of all surficial hazardous materials, especially asbestos containing material. Site security issues will also be addressed as part of this plan. (In conjunction with Earth Tech)
2. Develop a work plan and timeline for the remaining activities necessary to complete the work required under the AOC. (In conjunction with Earth Tech) to be submitted upon Completion of clean Sweep and survey.

1.0 BACKGROUND

- 1.0.1 Introduction
- 1.0.2 Site History
- 1.0.3 Site Description

2.0 MOBILIZATION

2.1 Site safety Plan

- 2.1.1 Development and implementation of Site Specific Health and safety plan (SSHSP). The SSHSP will meet the OSHA requirement of 29 CFR 1910.120. The SSHSP is attached as appendix B.

2.2 Pre-Work Meeting

- 2.2.1 A Pre-work meeting is scheduled is scheduled for Monday March 3rd, 2003 @ 9:00 A.M. The meeting site is 311 East Greenfield Avenue. Milwaukee, WI . 53204. The agenda for the meeting is to discuss details of this work plan. All participants will read and formally acknowledge the provisions of the SSHSP before initiating any work on the site. We will also discuss in detail provisions for site security, mobilization, emergency procedures, delegation of responsibilities, and channels of communications.

2.3 Site Security

- 2.3.1 The entire 48 acre site is bounded by a 6' high fence on 3 sides and the KK waterway on the south. See detailed site map attached as appendix F.
- 2.3.2 Eli will install and maintain electronic pass key site access system for all company personnel and subcontractors allowed onsite. Pass keys will be issued after completing site orientation training per 29 CFR 1926.120, 1926.58 and 1926.1200
- 2.3.3 Site access will be restricted to only personnel trained and approved by Eli Project Manager Thomas Jacobson.
- 2.3.4 The main gate will be monitored by camera from the office during all times of activity on the site. And entry will be denied to all but authorized personnel.
- 2.3.5 These site security measures will be in place on 2/25/2002.

2.4 Site Control Measures

- 2.4.1 Site control which includes the contamination zone definition per 1910.120(d) will be established on completion of the clean sweep activities. The initial contamination zone has been established and is detailed on the site map in appendix F. This site map establishes CZ entry and egress, CZ reduction/decon and safe zones. See SSHSP for detailed description and is to be followed by reference in this work plan.

2.5 Office/Decontamination stations.

- 2.5.1 The project office will be established in the existing building designated on the site map in appendix f. The office will have the following support equipment; 2 incoming telephone lines, 1 fax line, 1 DSL high speed connection, 1 computer/printer w/ high speed modem. 1 fax machine, 1 copier. 1 plan table, 4 work stations. 1 sample preparation area. Base station radio for communication with onsite personnel. A first aid station.
- 2.5.2 Decontamination areas will be located in building # which will have a shower/wash station and decon solutions as described in SSHSP. This plan will followed by reference in this work plan.

2.6 Site Preparation

- 2.6.1 A site survey will be conducted before and during all planned activities and be assessed by one of the below listed personnel as required by Eli Environmental Contractors, Inc. company health and safety program. Thomas Jacobson, Kevin O'Connell, Hans Geyer, Carol Chojnacki (CIH) and Harry Butler P.E. are our competent/qualified persons as required by CFR 1926.. See appendix G for lists.

2.7 Emergency response Contingency Plan

- 2.7.1 The ERCP is discussed in detail in the SSHSP and is to be followed by reference in this work plan.
- 2.7.2 A meeting is scheduled for 3/3/2003 with the Milwaukee Fire Department to review site activities.

2.8 Mobilization Time Estimate

- 2.8.1 Is estimated to take 5 days for complete mobilization. Please see **Appendix C.** for Project Time line.

2.9 Personnel and Equipment Needs

- 2.9.1 The project plans for 1 Project manager, 1 site safety manager, 1 asbestos project manager, 1 demolition project manager, 1 site superintendents, 2 site supervisors/foreman and 10-20 field technicians/heavy equipment operators. This estimate will vary dependant on site activities requirements.
- 2.9.2 The anticipated equipment can be found in appendix H.

3. SAMPLING ACTIVITES

4. REMOVAL ACTIVITIES

4.0.1 Clean up Criteria -

- 4.0.1.1 Asbestos
- 4.0.1.2 Coal Tar
- 4.0.1.3 Heavy Metals
- 4.0.1.4 Mercury
- 4.0.1.5 PAHS/VOCS
- 4.0.1.6 Solid Waste
- 4.0.1.7 Scrap metals

4.0.2 Site Cleanup Activities

4.0.2.1 Site Survey

- Establish Control Points.
- Complete JSA
- Earth Tech will establish control points on the 46 acre property on fixed objects and monuments which will be identified, flagged, painted and protected for the duration of the project by Eli and its subcontractors. These control

points will be used to document approximate locations of all sampling/work activities performed for and after the removal operation.

- All existing structures on the site will be identified and located using the control points so as to have a permanent record of their placement.

4.0.2.1.1 Removal of ACM

- Conduct Survey and Analysis of ACM surface contamination.
- Complete JSA
- Pre-Permit walk through with U.S. EPA On scene coordinator, City of Milwaukee, Department of Neighborhood Services (DNS), Primary contact Environmental Hygienist, and the primary representative of WDNR-Asbestos Section.
- Submit response plan and City of Milwaukee 3-10 day permit for site inspection and pre-cleaning activities.
- Conduct Asbestos inspection per City of Milwaukee Inspection Protocol of February 1998 modeled after EPA/AHERA 40 CFR part 763.
- All Eli personnel conducting the survey will be trained and licensed asbestos inspectors, supervisors, and workers through Wisconsin Department of Health and Human services. The following is a list of personnel responsible for the above work;
- Mr. Kevin O'Connell – Hygienist, Asbestos Inspector. Mr. O'Connell will be directly in charge of sampling scheme, sampling methods, field identification of suspected ACM, over-site of sampling personnel and interface with City of Milwaukee Health department, Wisconsin DNR – Asbestos section for sampling scheme and protocols. Mr. O'Connell will in addition to the above tasks be directly in charge of design and implementation of asbestos removal actions to secure friable and non-friable asbestos containing materials.
- Mr. Juan Martinez – Asbestos Supervisor will assist Mr. O'Connell with sampling duties.
- Mr. Daniel Jacobson – Asbestos Supervisor will assist Mr. O'Connell with sampling duties.
- All sample locations will be identified on maps using establish control points and logged by Earth Tech.
- All areas where ACM is found or believed to be present will be cordoned off using yellow barricade tape and signage stating the following, **“Warning – Asbestos containing materials present. Proper personal protection equipment required beyond this point”**

- All samples collected will be given to Mr. Kevin O'Connell Project manager for cataloging, chain of custody control preparation and delivery to the following Laboratory;
- Micro Analytical Incorporated located at 11521 West North avenue. Milwaukee, WI 53226. EPA Certified NVLAP accredited laboratory.
- Clean up all loose/damaged and exposed ACM to prevent any wind fiber release episodes around site, which were identified in survey conducted earlier. All materials will be recovered and handled per Eli, EPA, WDNR, City of Milwaukee, and O.S.H.A. Protocols and procedures. The recovered materials will be double bagged in 6 mil clear poly with appropriate labeling which will identify contents, generator, and location of recovery from site and then placed in lined roll-off containers, which will then be transported to Emerald Park Landfill, LLC. Located at w124 s10629 South 124th. Muskego, WI. 53150 WDNR License Number 03290 contact person at EPI is Jenny 414-529-1360.

4.0.2.1.2 AST Sampling and removal

- Earth Tech/Eli to conduct survey of leaking tanks onsite.
- Earth Tech/Eli will grab representative samples for profiling spilled coal tar for disposal. Profile and disposal facility will be established prior to clean up.
- Earth Tech/Eli will develop waste management plan upon receipt of waste analysis for use in profiling to recycle and or disposal of coal tar waste.
- Earth Tech/Eli will Sample open tank pit area to determine what procedures need to be followed.

Containment/Recovery of Released Materials

- ACM
- Complete JSA
- Response Action - Clean up all loose/damaged and exposed ACM to prevent any wind fiber release episodes around site, which were identified in survey conducted earlier. All materials will be recovered and handled per Eli, EPA, WDNR, City of Milwaukee, and O.S.H.A. Protocols and procedures. The recovered materials will be double bagged in 6 mil clear poly with appropriate labeling which will identify contents, generator, and location of recovery from site and then placed in lined roll-off containers, which will then be transported to;
- Emerald Park Landfill, LLC. Located at w124 s10629 South 124th. Muskego, WI. 53150 WDNR License Number

03290 contact person at EPI is Jenny 414-529-1360

Secondary Response Action (if and where required)

- Clean up/Excavation (Weather Permitting) of non-friable materials and Asbestos contaminated soils to 6" per DNS/WDNR protocols.
- Coal Tar
- Eli will Repair and or Secure tanks which contain coal tar, fuel oils, and or contaminated rainwater.
- The tanks will be inspected and if practical repaired to assure they will contain there contents until the ambient temperature is above 50 degrees Celsius.
- All leaking tanks, which cannot be repaired, will be moved and placed into containment. The will be staged in containment until the ambient temperature is above 50 degrees Celsius. At which time the tanks will be cleaned.
- In the event the tanks have to be cleaned immediately we will use the following procedure;
- Sample Tanks contents if not already completed.
- Complete JSA
- Assure proper personnel and equipment are available to conduct tank cleaning operations.
- Assure all spill prevention and controls procedures are in place prior to beginning tank cleaning operations.
- Follow Eli tank cleaning protocols.
- Prepare waste generated from cleaning operations for shipment and disposal/recycling per waste management plan.
- Assure transporter is available.
- Once tanks have been cleaned steel will be shipped off site for recycling.
- Earth Tech will conduct over-site to document cleaning and waste management/disposal.

Clean up of Spilled and Leaked coal tar from ground surface.

- Sample and analyze spilled materials
- Prepare JSA
- Consult waste management plan for disposal guidelines
- Clean up spilled materials using tracked loader or tracked hydraulic excavator and place in lined dumpsters or dump trucks in preparation for disposal at EPA landfill facility. Excavate coal tar till visual evidence indicates clean. Confirm with sampling.

- Earth Tech to conduct oversight and documentation of spill clean up.

Contaminated Water in Tanks

- Repair or plug leaks in tanks, which cannot be moved.
- All waters associated with coal tar waste will be assumed contaminated, and managed accordingly.
- At the present time all waters are frozen and will monitored on a daily basis.
- Once the ambient temperature rises to a point at which waters are not frozen, samples will be collected and a waste profile established for collection, treatment and disposal.
- Open Tank pit.
- Investigate tank pit as to its soundness. Assure there is no chance of off site migration of contents.

4.0.2.1.3 Mitigate and control further release

ACM

- Secure all buildings and structures, which contain ACM
- All buildings and or structures which have been identified through site survey to contain damaged friable asbestos containing materials will be secured by Covering all windows and doors with plywood and or reinforced poly to contain accidental wind fiber release of ACM
- Seal all penetrations into buildings and structures.
- Place proper signage on all buildings and structures per EPA/WDNR/DNS/Eli protocols.

Coal Tar

- Monitor and log plugged and repaired tanks to assure no leaking on a daily basis.
- Continue monitoring until weather permits cleaning and disposal of tanks and or pipelines.

Contaminated Water in tanks or Containers Above Ground

- Monitor and log plugged and repaired tanks to assure no leaking on a daily basis.
- Continue monitoring until weather permits cleaning and disposal of tanks and or pipelines.

4.3 Waste Disposal Activities

4.3.1 See appendix J

4.4 Estimated time for removal and disposal activities.

4.4.1 See appendix C

5. SITE RESTORATION/PROJECT CLOSE OUT ACTIVITIES

5.0 In development

6. PROJECT MANAGEMENT

6.0 Responsibilities and functions

6.0.1 See appendix k. for Org chart. Eli Environmental Contractors, Inc. will plan and direct all removal/disposal activities. Earth Tech, Inc. will be project over site/reporting/sampling with direct responsibility for reporting and interface with USEPA OSC, WDNR, and City of Milwaukee. They will assure compliance with EPA AOC.

6.1 Eli Project Management

6.1.1 Thomas Jacobson Eli – In charge of overall project planning and Direction for Eli Environmental Contractors, Inc. including coordination of support from sub-contractors and in charge of maintaining project schedule. All in charge of administering work plan.

6.1.2 Hans Geyer- Site project Manager – Demolition Activities – Administration of daily work plan activities, anticipation of potential problems onsite, scheduling personnel and equipment, administration of SSHSP and assurance of compliance with all local, state and federal regulations related to safety of site personnel.

6.1.3 Kevin O,Connell Eli - Site hygienist, Asbestos Inspector. – Administration of Asbestos sampling plan, Asbestos identification, sampling and removal.

6.1.4 Carol Chojnacki, CIH – Project Hygienist. Administration personnel air monitoring, training and selection of PPE.

6.1.5 Earth Tech PM

6.2 Project Schedule – See Appendix C

6.3 Final Report

6.4 Final Disposal Summary

Eli Environmental Contractors, Inc.

Work plan for;

Milwaukee Solvay Coke & Gas Site (MSCG)
311 East Greenfield Avenue
Milwaukee, WI 53204

This scope of work addresses the tasks to be completed under the Removal Action as part of the required work of the AOC. All work outlined below will be substantially completed by either ELI Environmental Contractors, Inc. or an authorized subcontractor of ELI. Some project assistance will be provided from Earth Tech Inc. although their specific efforts are to serve to document the work performed by ELI and to report the progress of work to EPA.

Develop work plans and Timelines for the Project.

1. Develop a work plan for a "clean sweep" effort across the entire 46 acres of the site for removal of all surficial hazardous materials, especially asbestos containing material. Site security issues will also be addressed as part of this plan. (In conjunction with Earth Tech)
2. Develop a work plan and timeline for the remaining activities necessary to complete the work required under the AOC. (In conjunction with Earth Tech)

Health And Safety Plan

1. Develop and implement a site wide health and safety plan.

Mobilization

Establish field office.

- a. Eli Environmental Contractors, Inc. (Eli) will mobilize field office and occupy one floor of the main office building at MSCG. Our office personnel will include a receptionist/file clerk and project managers. The office will be open from 7:00 am till 5:00 pm Monday through Friday through the substantial duration of the removal action.

Establish and Maintain Site Security

1. Eli will install and maintain electronic pass key system for all personnel and subcontractors allowed onsite. Cards will be issued after completing site orientation training. There will only be one access point on the site for contractors.
2. Site access will be restricted to only trained personnel approved by Eli. All areas on the site will have controlled access zones established and clearly marked by signage.

Eli Environmental Contractors, Inc.

3. All Eli personnel, sub-contractors and visitors must sign and comply with Eli's Site-specific health and safety program (sshsp). There will be no exceptions to this rule.
4. Signage will be placed on all fences to be viewed externally every 150' with the following information;

This is a Contaminated Site
No access permitted to

Milwaukee Solvay Coke & Gas Site
311 East Greenfield Avenue
Milwaukee, WI.

Site Owner: WSH, LLC.

Site Engineer: Earth Tech
Site Contractor: Eli

Emergency Contact: Eli

5. Repair/Replace or install perimeter fence **about 6' feet high** around 46-acre site as approved by U. S. EPA to assure complete control of site access. Areas of concern are the western property line adjacent the railroad tracks. Particular attention will be paid to the coal hoppers strung with razor wire. It is the intent of this action to halt all unauthorized access to this site.
6. Create and implement a site access procedure/log which will track all personnel onsite at any one time 24/7. This will be an appendices to the SSHSP.
7. Install a separate fence around open tank pit area.

Site Survey

1. Establish Control Points.
 - a. Complete JSA
 - b. Earth Tech will establish control points on the 46 acre property on fixed objects and monuments which will be identified, flagged, painted and protected for the duration of the project by Eli and its subcontractors. These control points will be used to document approximate locations of all sampling/work activities performed for and after the removal operation.
 - c. All existing structures on the site will be identified and located using the control points so as to have a permanent record of there placement.

Removal of ACM

1. Conduct Survey and Analysis of ACM surface contamination.
 - a. Complete JSA
 - b. Pre-Permit walk through with U.S. EPA On scene coordinator, City of Milwaukee, Department of Neighborhood Services (DNS), Primary contact Environmental Hygienist, and the primary representative of WDNR-Asbestos Section.
 - c. Submit response plan and City of Milwaukee 3-10 day permit for site inspection and pre-cleaning activities.
 - d. Conduct Asbestos inspection per City of Milwaukee Inspection Protocol of February 1998 modeled after EPA/AHERA 40 CFR part 763.
 - e. All Eli personnel conducting the survey will be trained and licensed asbestos inspectors, supervisors, and workers through Wisconsin Department of Health and Human services. The following is a list of personnel responsible for the above work;
 - i. Mr. Kevin O'Connell – Hygienist, Asbestos Inspector. Mr. O'Connell will be directly in charge of sampling scheme, sampling methods, field identification of suspected ACM, over-site of sampling personnel and interface with City of Milwaukee Health department, Wisconsin DNR – Asbestos section for sampling scheme and protocols. Mr. O'Connell will in addition to the above tasks be directly in charge of design and implementation of asbestos removal actions to secure friable and non-friable asbestos containing materials.
 - ii. Mr. Jaun Martinez – Asbestos Supervisor will assist Mr. O'Connell with sampling duties.
 - iii. Mr. Daniel Jacobson – Asbestos Supervisor will assist Mr. O'Connell with sampling duties.
 - f. All sample locations will be identified on maps using establish control points and logged by Earth Tech.
 - i. All areas where ACM is found or believed to be present will be cordoned off using yellow barricade tape and signage stating the following, **“Warning – Asbestos containing materials present. Proper personal protection equipment required beyond this point”**
 - ii. All samples collected will be given to Mr. Kevin O'Connell Project manager for cataloging, chain of custody control preparation and delivery to the following Laboratory;
 - a. Micro Analytical Incorporated located at 11521 West North avenue. Milwaukee, WI 53226. EPA Certified NVLAP accredited laboratory.
 - g. Clean up all loose/damaged and exposed ACM to prevent any wind fiber release episodes around site, which were identified in survey conducted earlier. All materials will be recovered and handled per Eli, EPA, WDNR, City of Milwaukee, and O.S.H.A. Protocols and procedures. The recovered materials will be double bagged in 6 mil clear poly with appropriate labeling which will identify contents, generator, and location of recovery

Eli Environmental Contractors, Inc.

from site and then placed in lined roll-off containers, which will then be transported to Emerald Park Landfill, LLC. Located at w124 s10629 South 124th. Muskego, WI. 53150 WDNr License Number 03290 contact person at EPI is Jenny 414-529-1360.

AST Sampling and Removal

1. Earth Tech/Eli to conduct survey of leaking tanks onsite.
2. Earth Tech/Eli will grab representative samples for profiling spilled coal tar for disposal. Profile and disposal facility will be established prior to clean up.
3. Earth Tech/Eli will develop waste management plan upon receipt of waste analysis for use in profiling to recycle and or disposal of coal tar waste.
4. Earth Tech/Eli will Sample open tank pit area to determine what procedures need to be followed.

Containment/Recovery of Released Materials

1. ACM
 - a. Complete JSA
 - b. Response Action - Clean up all loose/damaged and exposed ACM to prevent any wind fiber release episodes around site, which were identified in survey conducted earlier. All materials will be recovered and handled per Eli, EPA, WDNr, City of Milwaukee, and O.S.H.A. Protocols and procedures. The recovered materials will be double bagged in 6 mil clear poly with appropriate labeling which will identify contents, generator, and location of recovery from site and then placed in lined roll-off containers, which will then be transported to;
 - i. Emerald Park Landfill, LLC. Located at w124 s10629 South 124th. Muskego, WI. 53150 WDNr License Number 03290 contact person at EPI is Jenny 414-529-1360
 - c. Secondary Response Action (if and where required)
 - i. Clean up/Excavation (Weather Permitting) of non-friable materials and Asbestos contaminated soils to 6" per DNS/WDNR protocols.

Coal Tar

- a. Eli will Repair and or Secure tanks which contain coal tar, fuel oils, and or contaminated rainwater.
- b. The tanks will be inspected and if practical repaired to assure they will contain there contents until the ambient temperature is above 50 degrees Celsius.
- c. All leaking tanks, which cannot be repaired, will be moved and placed into containment. The will be staged in containment until the ambient temperature is above 50 degrees Celsius. At which time the tanks will be cleaned.
- d. In the event the tanks have to be cleaned immediately we will use the following procedure;
 - i. Sample Tanks contents if not already completed.
 - ii. Complete JSA
 - iii. Assure proper personnel and equipment are available to conduct tank cleaning operations.

Eli Environmental Contractors, Inc.

- iv. Assure all spill prevention and controls procedures are in place prior to beginning tank cleaning operations.
- v. Follow Eli tank cleaning protocols.
- vi. Prepare waste generated from cleaning operations for shipment and disposal/recycling per waste management plan.
- vii. Assure transporter is available.
- viii. Once tanks have been cleaned steel will be shipped off site for recycling.
- ix. Earth Tech will conduct over-site to document cleaning and waste management/disposal.

Clean up of Spilled and Leaked coal tar from ground surface.

- ii. Sample and analyze spilled materials
- iii. Prepare JSA
- iv. Consult waste management plan for disposal guidelines
- v. Clean up spilled materials using tracked loader or tracked hydraulic excavator and place in lined dumpsters or dump trucks in preparation for disposal at EPA landfill facility. Excavate coal tar till visual evidence indicates clean. Confirm with sampling.
- vi. Earth Tech to conduct oversight and documentation of spill clean up.

1. Contaminated Water in Tanks

- a. Repair or plug leaks in tanks, which cannot be moved.
- b. All waters associated with coal tar waste will be assumed contaminated, and managed accordingly.
- c. At the present time all waters are frozen and will be monitored on a daily basis.
- d. Once the ambient temperature rises to a point at which waters are not frozen, samples will be collected and a waste profile established for collection, treatment and disposal.

2. Open Tank pit.

- a. Investigate tank pit as to its soundness. Assure there is no chance of off site migration of contents.

Mitigate control further release

1. ACM

- a. Secure all buildings and structures, which contain ACM
 - i. All buildings and or structures which have been identified through site survey to contain damaged friable asbestos containing materials will be secured by Covering all windows and doors with plywood and or reinforced poly to contain accidental wind fiber release of ACM
 - ii. Seal all penetrations into buildings and structures.
 - iii. Place proper signage on all buildings and structures per EPA/WDNR/DNS/Eli protocols.

Eli Environmental Contractors, Inc.

2. Coal Tar
 - a. Monitor and log plugged and repaired tanks to assure no leaking on a daily basis.
 - b. Continue monitoring until weather permits cleaning and disposal of tanks and or pipelines.
3. Contaminated Water in tanks or Containers Above Ground
 - a. Monitor and log plugged and repaired tanks to assure no leaking on a daily basis.
 - b. Continue monitoring until weather permits cleaning and disposal of tanks and or pipelines.

Securing or removal of dangerous structures

1. Buildings
 - a. Earth Tech/Eli will Conduct ACM/ Environmental Survey
 - b. Sample where appropriate
 - c. Develop work plan
 - d. Prepare Job Safety Analysis
 - e. Prepare waste management plan
 - f. Apply for required permits.
 - g. Conduct Pre-Demolition Engineering Survey. (See Attachments)
2. Process Lines and Equipment
 - a. Earth Tech/Eli will Conduct ACM/ Environmental Survey
 - b. Sample where appropriate
 - c. Develop work plan
 - d. Prepare Job Safety Analysis
 - e. Prepare waste management plan
 - f. Permits
 - g. Conduct Pre-Demolition Engineering Survey. (See Attachments)
3. Tanks
 - a. Earth Tech/Eli will Conduct ACM/ Environmental Survey
 - b. Sample
 - c. Develop work plan
 - d. Prepare Job Safety Analysis
 - e. Prepare waste management plan
 - f. Permits
 - g. Clean and dispose of tanks per Eli Tank management plan
4. Debris Piles
 - a. Earth Tech/Eli will Conduct ACM/ Environmental Survey
 - b. Sample
 - c. Develop work plan
 - d. Prepare Job Safety Analysis
 - e. Prepare waste management plan
 - f. Permits

Eli Environmental Contractors, Inc.

- g. Remove and dispose of piles as per work plan
- 5. Open Tank Pit
 - a. Earth Tech/Eli will Conduct ACM/ Environmental Survey
 - b. Sample
 - c. Develop work plan
 - d. Prepare Job Safety Analysis
 - e. Prepare waste management plan
 - f. Permits
 - g. Clean out and close open tank pit.

Document and submit report to EPA

ID	Task Name	Mar 30, '03					Apr 6, '03					Apr 13, '03					Apr 20, '03					Apr 27, '03		
		S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M
1	Develop Site Specific Health and Safety Plan																							
2	Develop Site Specific Work Plan																							
3	Develop SPCC																							
4	Develop ECP																							
5																								
6	Mobilization																							
7	Site Security																							
8	Install Controlled access points																							
9	Repair or Replace Fence																							
10	Site Survey																							
11	Establish Control Points																							
12	Conduct Site Survey & Analysis of ACM/Coal																							
13	Conduct survey of leaking tanks																							
14	Containment of Released Materials																							
15	Clean up of ACM - "Clean Sweep"																							
16	Coal tar																							
17	Contaminated Water																							
18	Mitigate further release																							
19	ACM																							
20	Coal Tar																							
21	Contaminated Waters																							
22	Control and Retrieval of Released Materials																							
23	ACM																							
24	Coal Tar																							
25	Contaminated Waters																							
26	Secure and/or removal of Process Equipment																							
27	Remove elevators																							
28	Secure and/or removal of dangerous structure:																							
29	Remove buildings																							

Project: Milwaukee Solvay Coke & Ga Date: Mon 2/10/03	Task		Rolled Up Task		External Tasks	
	Critical Task		Rolled Up Critical Task		Project Summary	
	Progress		Rolled Up Milestone		Group By Summary	
	Milestone		Rolled Up Progress			
	Summary		Split			

Section 7

DNR Notice

**NOTIFICATION OF DEMOLITION AND/OR RENOVATION
AND APPLICATION FOR PERMIT EXEMPTION**

Please complete this form and return it to the appropriate official. The DNR does not accept FAXed copies of original or revised notifications. This form is authorized under ch. NF 408.04, 410.05 and 447.07, Wis. Adm. Code. Completion of this form is mandatory. Penalties for failure to complete this form include forfeitures of \$10 to \$25,000, fines of up to \$25,000 and imprisonment for up to six months. Personally identifiable information on this form may be matched with other private, state, and federal agencies. This form may be used to meet the notification requirements for the Department of Health and Family Services, Wis. Adm. Code 159.

SHADED AREAS ON THIS FORM ARE FOR DNR USE ONLY.

1. Contractor Project #:		2. Postmark:		3. Date Received:		4. DNR File #:	
5. Type of Notification: <input type="checkbox"/> Original <input checked="" type="checkbox"/> Revised <input type="checkbox"/> Cancellation Emergency Date/Time Notified: _____ Other (Explain): <u>DATES</u>				6. Type of Project: <input type="checkbox"/> Renovation/Abatement <input type="checkbox"/> Emergency Renovation/Abatement <input type="checkbox"/> Planned Renovation/Abatement (Annual) <input checked="" type="checkbox"/> Demolition <input type="checkbox"/> Ordered Demolition <input type="checkbox"/> Fire Training Burn Asbestos Present? (Circle one): <u>XX</u> Yes No			
7. Date (MM/DD/YY) of DNR Required Pre-Project Asbestos Inspection: Start: <u>March 26th, 2003</u> End: <u>May 15th 2003</u>				8. Inspector Certification Information: Name: <u>Kevin O'Connell</u> WI Inspector #: <u>AI1000929</u>			
9. Dates (MM/DD/YY) of Asbestos Abatement: Start: <u>5/7/03</u> End: <u>September 30th, 2003</u> Work Shift(s): <u>1 2 3</u> Weekend: <u>Yes</u>				10. Dates (MM/DD/YY) of Renovation/Demolition: Start: _____ End: <u>October 31st, 2003</u> Work Shift(s): <u>1 2 3</u> Weekend: <u>Yes</u>			
11. Abatement Contractor: Name: <u>Eli Environmental Contractors, Inc.</u> Address: <u>304 East Florida street</u> City, St. Zip: <u>Milwaukee, Wisconsin 53204</u> Contact Person: <u>Tom Jacobson</u> Telephone #: <u>414-788-7447</u>				12. Demolition Contractor: Name: <u>Eli Companies, LLC</u> Address: <u>311 East Greenfield Avenue</u> City, St. Zip: <u>Milwaukee, WI 53204</u> Contact Person: <u>Tom Jacobson</u> Telephone #: <u>414-788-7447</u>			
13. Facility Information: Name: <u>Milwaukee Solvay Coke & Gas Site</u> Address: <u>311 East Greenfield Avenue</u> City, St. Zip: <u>Milwaukee, WI 53204</u> Contact Person: <u>Tom Jacobson</u> Telephone #: <u>414-788-7447</u> Primary Use: <u>Manufactured Gas Plant</u> Age (Yrs): <u>120 +</u> Size (Sq.Ft.): <u>46 Acres</u> Number of Floors: <u>5</u> Number of Apartment Units: <u>N/A</u> County: <u>Milwaukee</u> DNR Region: <u>Southeastern</u> Number of structures to be demolished: <u>28+ Structures</u>				14. Facility Owner: Name: <u>Golden Marina Causeway, LLC.</u> Address: <u>1933 South 1st street</u> City, St. Zip: <u>Milwaukee, WI 53204</u> Contact Person: <u>Tom Short</u> Telephone #: <u>414-788-0026</u>			
15. Waste Disposal Site: Name: <u>Orchard Ridge RDF</u> Address: <u>W124 N9355 Boundary Road</u> City, St. Zip: <u>Menomonee Falls, Wisconsin 53051</u> Contact Person: <u>Dan</u> Telephone #: <u>1-414-253-8620</u> DNR License Number: <u>3360</u>				16. Amount of Asbestos, including: A. Regulated Friable ACM to be removed. B. Category I & II ACM <u>TO BE</u> removed. C. Category I & II ACM <u>NOT</u> removed.			
		Friable ACM <u>TO BE</u> removed		Nonfriable Asbestos Material <u>TO BE</u> removed		Nonfriable Asbestos Material <u>NOT</u> removed before demolition	
Pipes (Linear Feet)		>1000L'		CAT I		CAT II	
Surface Area (Square Feet)		>1000sq'		CAT I		CAT II	
Volume Friable ACM of facility component (Cubic Feet)				CAT I		CAT II	
17. Asbestos Abatement/Demolition Fees - Check or money order must be submitted with notification to DNR Asbestos Coordinator							
Project Type	Quantities to be Abated * Refer to Box 6 and Box 16 to determine fee submittal amount * Make checks payable to WI Dept. of Natural Resources					Check Amount Due	Amount Rec'd By DNR
Demolition	Less than 180 square and 280 linear feet of friable or nonfriable ACM					1	\$50
Renov/Demo	At least 180 sq. or 280 ln. ft. friable ACM but less than 1000 combined feet					1	\$150
Renov/Demo	Combined square & linear feet friable ACM quantities greater than 1000 feet					<input checked="" type="checkbox"/>	\$325

18. Indicate the inspection procedure, including analytical methods, used to detect the presence or absence of the ACM
 Visual and Polarized Light Microscopy building by building and surface areas by zone.

19. Description of the asbestos material involved and its location in the facility to be demolished/renovated:
 To be determined.

20. Description of renovation/abatement and/or demolition work, including specific abatement/demolition method(s) to be used:
 Per Administrative Order of Consent and approval by City of Milwaukee Department of Neighborhood Services.

21. Description of abatement work practices/engineering controls and waste handling procedures, specific to this site, used in preventing ACM emissions:
 To be determined.

22. Description of procedures to be followed if asbestos not previously identified is found or previously nonfriable asbestos becomes crumbled, pulverized or reduced to a powder:
 Stop work - Notify City of Milwaukee health department - Clean up materials

23. If an emergency abatement, complete the following information (attach additional sheets if necessary):
 Date and Hour of Emergency: Date (MM/DD/YY): ____/____/____ Time (12Hr Clock): ____:____ a.m. p.m.
 Description of sudden, unexpected event: _____

 Explanation of how event caused unsafe condition, potential equipment damage or an unreasonable financial burden: _____

24. If an ordered demolition, identify the government agency issuing the order: (Attach a copy of the order.)
 Name: _____ Title: _____
 Authority: _____
 Date of Order (MM/DD/YY): ____/____/____ Date Order to begin (MM/DD/YY): ____/____/____

25. I certify that an individual trained in the provisions of this regulation (40 CFR Part 61, Subpart M) will be on-site during the demolition/renovation and evidence that the required training has been accomplished by this person will be available for inspection during normal business hours.
 Signature: Elyse Bess Riley Title: President Date (MM/DD/YY): 5.6.03

26. I certify that the above submitted information is correct to the best of my knowledge:
 Signature: Elyse Bess Riley Title: President Date (MM/DD/YY): 5.6.03

27. Indicate which of the following agencies/offices were sent their mandatory copy of the demolition/renovation notification. DNR has been delegated notification authority - USEPA no longer requires a copy of the notification. Note: Dry asbestos removal requests must be pre-approved by DNR, prior to required notification.

<input checked="" type="checkbox"/> Department of Natural Resources Asbestos Coordinator, AM7 Bureau of Air Management P.O. Box 7921 Madison, WI 53701-7921	<input type="checkbox"/> Department of Health & Family Services Division of Public Health Asbestos/Lead (Pb) Section P.O. Box 2659 Madison, WI 53701-2659
---	---

Indicate single appropriate DNR Regional office:

<input type="checkbox"/> DNR - South Central Region 3911 Fish Hatchery Road Fitchburg, WI 53711 Phone: (608) 273-5607	<input type="checkbox"/> DNR - West Central Region P.O. Box 4001 Eau Claire, WI 54702-4001 Phone: (715) 839-3700	<input type="checkbox"/> DNR - Northern Region 107 Sulliff Ave. Rhinelander, WI 54501 Phone: (715) 365-8900	<input type="checkbox"/> DNR - Northeast Region 1125 N. Military Ave. Green Bay, WI 54307 Phone: (414) 492-5800	<input type="checkbox"/> DNR - NR/Superior 1401 Tower Ave. Superior, WI 54880 Phone: (715) 392-7988
<input checked="" type="checkbox"/> DNR - Southeast Region P.O. Box 12436 Milwaukee, WI 53212 Phone: (414) 263-8500	<input type="checkbox"/> DNR - WCR/LaCrosse Office 3550 Mormon Coulee Rd., Room 104 LaCrosse, WI 54601 Phone: (608) 785-9978	<input type="checkbox"/> DNR - Northern Region 810 West Maple Street Spooner, WI 54801 Phone: (715) 635-2101	<input type="checkbox"/> DNR - WCR/Wausau Office 5301 Rib Mountain Dr. Wausau, WI 54401 Phone: (715) 359-4522	

NOTIFICATION OF DEMOLITION AND/OR RENOVATION AND APPLICATION FOR PERMIT EXEMPTION

Please complete this form and return it to the appropriate officials. The DNR does not accept FAXed copies of original or revised notifications. This form is authorized under ch. NR 406.04, 410.05 and 447.07, Wis. Adm. Code. Completion of this form is mandatory. Penalties for failure to complete this form include forfeitures of \$10 to \$25,000, fines of up to \$25,000 and imprisonment for up to six months. Personally identifiable information on this form may be matched with other private, state, and federal agencies. This form may be used to meet the notification requirements for the Department of Health and Family Services, Wis. Adm. Code 159.

SHADED AREAS ON THIS FORM ARE FOR DNR USE ONLY.

1. Contractor Project #:	2. Postmark:	3. Date Received:	4. DNR File #:		
5. Type of Notification: <input type="checkbox"/> Original <input type="checkbox"/> Revised <input type="checkbox"/> Cancellation <input type="checkbox"/> Emergency: Date/Hr Notified: _____/_____/_____ <input type="checkbox"/> Other (Explain): _____		6. Type of Project: <input type="checkbox"/> Renovation/Abatement <input type="checkbox"/> Emergency Renovation/Abatement <input type="checkbox"/> Planned Renovation/Abatement (Annual) <input checked="" type="checkbox"/> Demolition <input type="checkbox"/> Ordered Demolition <input type="checkbox"/> Fire Training Burn Asbestos Present? (Circle one): XX Yes No			
7. Date (MM/DD/YY) of DNR Required Pre-Project Asbestos Inspection: Start: <u>March 26th, 2003</u> End: <u>May 15th 2003</u>		8. Inspector Certification Information: Name: <u>Kevin O'Connell</u> WI Inspector #: <u>AI1000929</u>			
9. Dates (MM/DD/YY) of Asbestos Abatement: Start: _____ End: <u>September 30th, 2003</u> Work Shift(s): <u>1 2 3</u> Weekend: <u>Yes</u>		10. Dates (MM/DD/YY) of Renovation/Demolition: Start: _____ End: <u>October 31st, 2003</u> Work Shift(s): <u>1 2 3</u> Weekend: <u>Yes</u>			
11. Abatement Contractor: Name: <u>Eli Environmental Contractors, Inc.</u> Address: <u>304 East Florida street</u> City, St. Zip: <u>Milwaukee, Wisconsin 53204</u> Contact Person: <u>Tom Jacobson</u> Telephone #: <u>414-788-7447</u>		12. Demolition Contractor: Name: <u>Eli Companies, LLC</u> Address: <u>311 East Greenfield Avenue</u> City, St. Zip: <u>Milwaukee, WI 53204</u> Contact Person: <u>Tom Jacobson</u> Telephone #: <u>414-788-7447</u>			
13. Facility Information: Name: <u>Milwaukee Solvay Coke & Gas Site</u> Address: <u>311 East Greenfield Avenue</u> City, St. Zip: <u>Milwaukee, WI 53204</u> Contact Person: <u>Tom Jacobson</u> Telephone #: <u>414-788-7447</u> Prior Use: _____ Present Use: <u>Manufactured Gas Plant</u> Age (Yrs): <u>120 +</u> Size (Sq.Ft.): <u>46 Acres</u> Number of Floors: <u>5</u> Number of Apartment Units: <u>N/A</u> County: <u>Milwaukee</u> DNR Region: <u>Southeastern</u> Number of structures to be demolished: <u>28+ Structures</u>		14. Facility Owner: Name: <u>Golden Marina Causeway, LLC.</u> Address: <u>1933 South 1st street</u> City, St. Zip: <u>Milwaukee, WI 53204</u> Contact Person: <u>Tom Short</u> Telephone #: <u>414-788-0026</u>			
15. Waste Disposal Site: Name: <u>Orchard Ridge RDF</u> Address: <u>W124 N9355 Boundary Road</u> City, St. Zip: <u>Menomonee Falls, Wisconsin 53051</u> Contact Person: <u>Dan</u> Telephone #: <u>1-414-253-8620</u> DNR License Number: <u>3360</u>					
16. Amount of Asbestos, including: A. Regulated Friable ACM to be removed. B. Category I & II ACM <u>TO BE</u> removed. C. Category I & II ACM <u>NOT</u> removed.		Friable ACM <u>TO BE</u> removed	Nonfriable Asbestos Material <u>TO BE</u> removed	Nonfriable Asbestos Material <u>NOT</u> removed before demolition	
		CAT I	CAT II	CAT I	CAT II
Pipes (Linear Feet)	>1000L'				
Surface Area (Square Feet)	>1000sq'				
Volume Friable ACM off facility component (Cubic Feet)					
17. Asbestos Abatement/Demolition Fees - Check or money order must be submitted with notification to DNR Asbestos Coordinator					
Project Type	Quantities to be Abated * Refer to Box 6 and Box 16 to determine fee submittal amount * Make checks payable to WI Dept. of Natural Resources	Check Amount Due	Amount Rec'd By DNR		
Demolition	Less than 160 square and 280 linear feet of friable or nonfriable ACM	[] \$50			
Reno/Demo	At least 180 sq. or 280 lin. ft. friable ACM but less than 1000 combined feet	[] \$150			
Reno/Demo	Combined square & linear feet friable ACM quantities greater than 1000 feet	[X] \$325			

Milwaukee Lead/Asbestos Information Center, Inc.

Kevin O'Connell

Has attended and successfully completed a course entitled

Asbestos Inspector Refresher

May 9, 2002

May 9, 2003

Date of Course


Date of Expiration

AIR0205097002

Milwaukee

Certification Number

Location

			
ASBESTOS INSPECTOR			
Issued By			
STATE OF WISCONSIN			
Dept. of Health & Family Services			
KEVIN H O'CONNELL			
2225 N 81ST ST			
WAUWATOSA WI 53213			
Aii-929	05/09/2003	220 lbs	6' 03"
Training due by: 05/09/2003		05/02/1949	Male

Ada Duffey

Director of Milwaukee Lead/Asbestos Information Center, Inc.

2223 S. Kinnickinnic Ave.

Milwaukee, WI 53207

414-747-0700

Compliance with TSCA Title II and Wisconsin DHFS 159 Accredited by the State of Wisconsin DHFS.

Section 8

City of Milwaukee Permit Application

Eli Environmental Contractors, Inc.

City of Milwaukee
Department of Neighborhood Services
Development Center
P.O. Box 324

FAXED
Time: 5-6-03
Date: 4 pm

Attn: Jim Igowski

RE: Milwaukee Solvay Coke and Gas Site

Dear Jim,

This is to inform you about our 1st Asbestos Activities on the sight. As you may already know we have started the asbestos inspection a little more than a week ago. The inspection documents should be available (1 copy for DNS) mid week next week.

Our original Notice 4500 to the DNR stated that we were to start our clean sweep on April 30, but that day was a total rain out. Friday I sent Saji a fax saying the start date for abatement as well as demolition was "TBA" to be announced. Mark Davis was on site Monday and he asked for a hard copy of the TBA revision.

There is a chance of rain tomorrow, but we are going to start anyway so I will send out the notices this evening, as well as call Saji and Mark.

This 'arm in arm' clean sweep is only a close visual inspection of the perimeter and open lands. We'll wet and bag up any suspect loose debris, mark any suspect piles, and cover as many 200 foot by 200 foot grids as we can in one day. We will have myself, Juan Martinez (Supv) and 5 workers, patrolling 25 foot wide sections of each grid. The grid system has been surveyed, staked, and numbered by Earth Tech for this and other purposes.

For this activity, and per our covenants with David, we said we would have a permit for everything we do at the sight. Since we will not know the true value of abatement until probably the end of May, we thought we would start with a 10 day fee, and switch to a 1% fee when the value is known.

Thank you,



Kevin O'Connell

City of Milwaukee Department of Neighborhood Services
Nuisance & Environmental Health Division
Asbestos Project Work Sheet

Abatement Firm ELI ENVIRONMENTAL CONTRACTORS INC.

(Legal entity: corporation including registered agent, partnership or individual)

Project location 311 EAST GREEN FIELD AVE MILWAUKEE, WI

Project dates and times 5/5/03 TO 5/16/03 Weekend Work Yes No

Amount of asbestos involved (including type and %) UNKNOWN

Name of Project Manager on site & phone number JUAN MARTINEZ 414-788-8856

This work sheet must be completed by the abatement firm and attached to the project plans when submitted with the asbestos project permit application at least 5 working days before the start of abatement. If assistance is required contact the City of Milwaukee Department of Neighborhood Services, Nuisance & Environmental Health Division, 1673 S 9th Street, 3rd floor, Milwaukee, WI 53204. (414)-286-8674, FAX (414)- 286-3386.

Please complete the following:

- 1. Name, title and phone number of facility representative to be contacted to gain entry for inspection.
(If vacant and no owner representative is available list project supervisor and on site phone number.)

Name TOM JACOBSON

Title PROJECT MANAGER Phone # 414-788-7447

- 2. A copy of the pre demolition/renovation asbestos inspection report which includes the name and certification number of the inspector must be available at all times during demolition/renovation activities. If this report is not available on site, provide the name, title and phone number of the appropriate facility representative for the Department of Neighborhood Services follow up.

INSPECTION 50% COMPLETE - 4/29/03 ON SITE
SCHEDULED COMPLETION OF INSPECTION 5/5/03

- 3. Provide plans for each separate floor or work area with the required information for questions 4-11.

- 4. All ACM to be thoroughly wetted before being disturbed?
 Yes No (attach written EPA permission for dry abatement)

- 5. Abatement method: Full containment (NPE System); Critical barrier glovebag;
 Negative pressure glovebag; Mini enclosure; Critical barrier containment;
 Class II exterior; Regulated area (no negative pressure; must provide negative exposure assessment with project plans) other (attach explanation)
If more than one method to be used clearly indicate on the plans.
(Definition guide available from the Department of Neighborhood Services)

X SEE ATTACHED SKETCH

- 6. Decontamination chamber provided?
 Yes (show number of stages and location(s) on plans) No (Attach explanation)

- 7. HEPA ventilators to be provided?
 Yes (Show number and locations on plans)
(manometer may be required to verify -0.02 pressure differential on NPE systems)
 No (If other than negative pressure glove bag or Class II exterior work attach explanation)

- 8. Viewing windows to be provided?
 Yes (Show locations on the plans) No (Attach explanation)

- 9. Respirator to be used: 1/2 face; Full face; PAPR; Air line - pressure demand; Other

- 10. Employees state certified Yes No

Page 2
Asbestos Project Work Sheet

11. Have you been convicted of violating any environmental or public health protection laws, including those related to Federal, State or local asbestos regulations, in the past 24 months? Yes No If YES, please explain

Explanation and comments for questions 4 - 11 THIS EARLY PRE-CONSTRUCTION AND PRE ABATEMENT ASBESTOS RESPONSE ACTION INVOLVES AN 'ARM IN ARM' VISUAL SEARCH FOR ANY SUSPECT MATERIAL IN THE SOUTH AND EAST AREAS OF THE 42 ACRE SITE. EACH 200' x 200' GRID IS SEARCHED IN 25 FOOT SWEEPS (8 PER GRID) - WITH APPROXIMATELY 4' PER MAN FOR VISUAL RESPONSIBILITY. SURFACE SUSPECT WILL BE WETTED & BAGGED & LABELED AND DISPOSED OF WHEN SITE WORK PLANS ARE FINALIZED.

12. Name and phone number of company/persons conducting the air clearance test for the project.

ECI WILL PERFORM AIR MONITORING & CLEARANCE TESTING

Check the appropriate method to be used: PCM TEM

13. Will there be an on-site independent consultant for the asbestos project? Yes No

If yes, please provide the following:

Company name and address _____

Name of on site representative _____

Cell phone/pager number _____

Responsibilities of representative _____

The undersigned agrees to inform the City of Milwaukee, Department of Neighborhood Services immediately of any changes in information supplied on this form. I have knowledge of the City Ordinances currently regulating the permit applied for herein and hereby state that all statements made in the foregoing form are true and correct. I have also read and am familiar with the standards related to asbestos abatement projects adopted by the Commissioner of Neighborhood Services.

NOTE: This permit may be revoked or suspended for failure to comply with any city requirements relating to Asbestos Hazard Control.

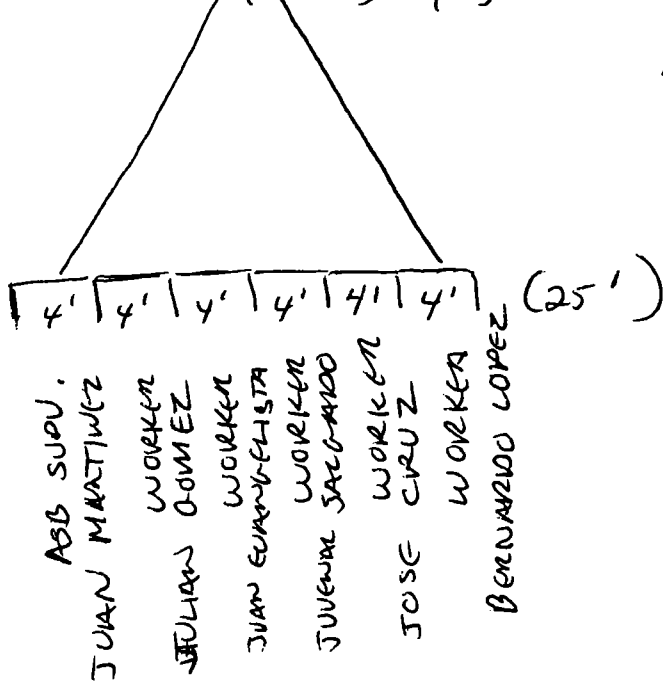
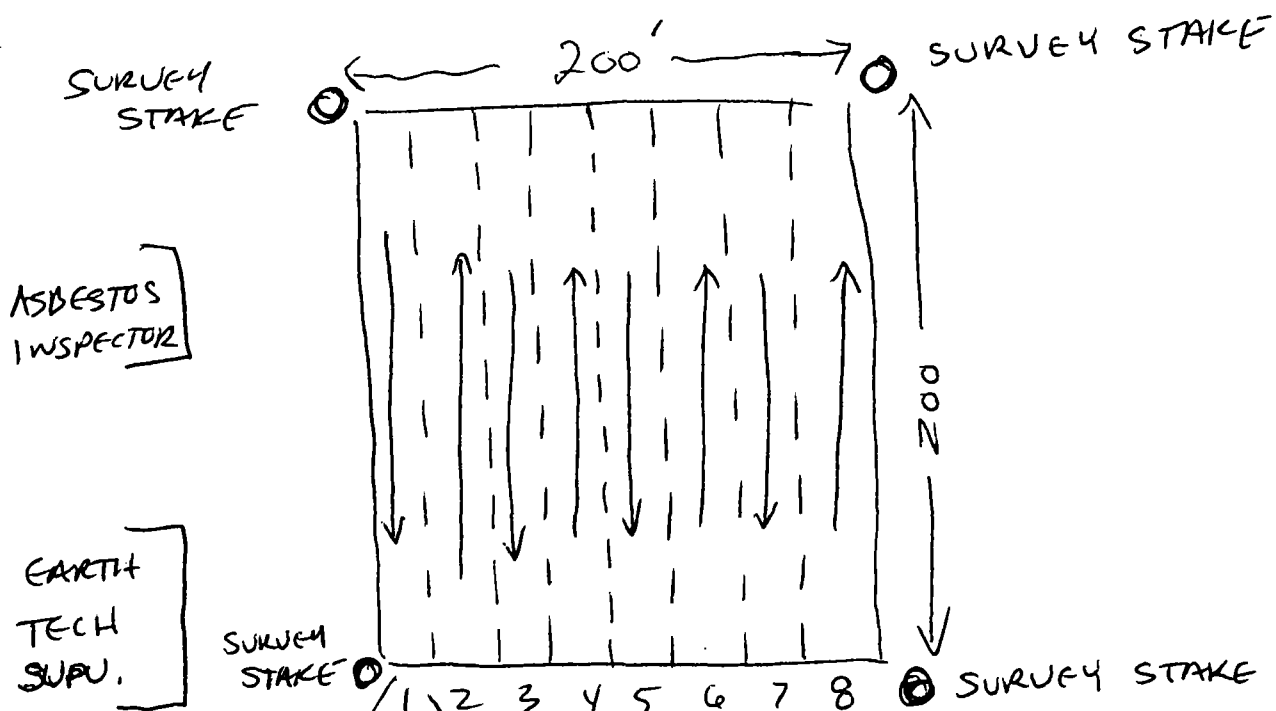
Signature _____ Date _____

Do Not Write Below Line

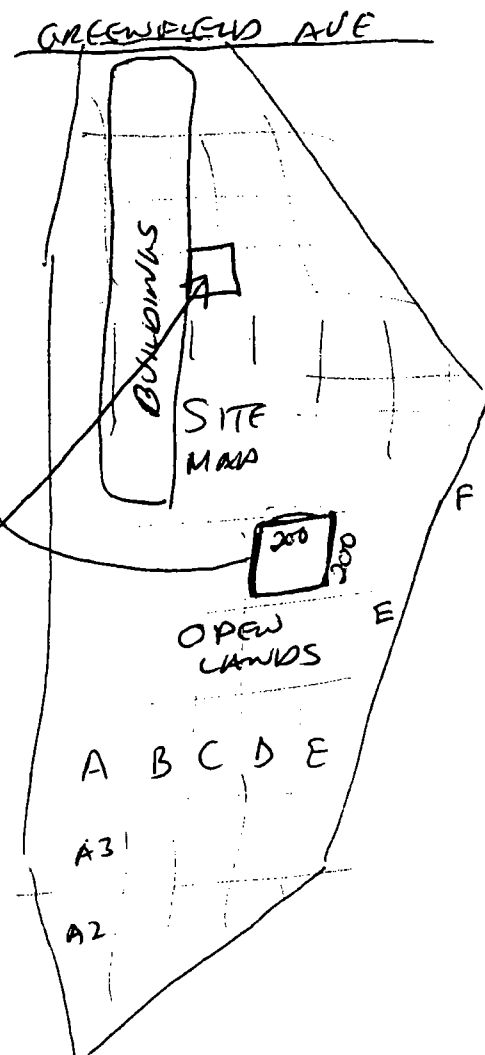
Permit No. _____ Amount _____ Name of Reviewer _____

4/29/03

SOLWAY COKE SWEEP OF OPEN LANDS



CENTRAL SITE DECON STATION BUILDING #5



MEISSNER TIERNEY
FISHER & NICHOLS

S. C.

ATTORNEYS AT LAW

THE MILWAUKEE CENTER

19TH FLOOR

111 EAST KILBOURN AVENUE

MILWAUKEE, WISCONSIN 53202-6622

TELEPHONE (414) 273-1300

FACSIMILE (414) 273-8840

DENNIS L. FISHER
ATTORNEY-AT-LAW

EXTENSION 136
DLF@MTFN.COM

February 6, 2003

Tracy Williams
Deputy Commissioner
Milwaukee Department of Neighborhood Services
841 North Broadway
Milwaukee, WI 53202

Re: 311 East Greenfield Avenue, Tax Key No: 463-9995-200

Dear Tracy:

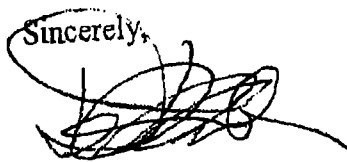
I am writing on behalf of Cliffs Mining Company to provide a status update regarding the above property at 311 East Greenfield Avenue, as well as a small parcel on the north side of the street, 302 East Greenfield Avenue. Both parcels were recently conveyed to Water Street Holdings LLC. The terms of sale included placing some money into an Escrow Account from which arrearred real estate taxes will be paid. Further, Water Street Holdings has taken control and possession of the property. Since the meeting involving Cliffs and Wisconsin Wrecking Company at your offices on December 3, 2002, Wisconsin Wrecking Company has indeed removed equipment, tools, and other items stored in back buildings on the property. Those items have been moved off the premises of 311 East Greenfield Avenue, although some of them temporarily remain in trailers on 302 East Greenfield Avenue. Meanwhile, Water Street Holdings has begun efforts to provide additional security on the premises.

All three (3) parties, Cliffs, Wisconsin Wrecking and Water Street have signed an Administrative Order by Consent with the United States Environmental Protection Agency providing for removal of certain contaminants which exist above ground, including asbestos and coal tar residues in tanks and associated piping. EPA is expected to sign the Order within a few days, and thereafter a work plan will be submitted for review and approval. After the work plan is approved, we anticipate that these cleanup efforts will be underway by early spring.

Tracy Williams
Page 2
February 6, 2003

If you have any further questions, please give me a call. I expect that future status reports will be provided by Water Street or its contractors. If you wish more direct knowledge of on-site conditions, please call Thomas Short, whose office number is 223-3060 and cell phone number is 788-0026, both in area code 414. Thank you for your continued interest.

Sincerely,



Dennis L. Fisher

cc: Thomas McGinn, Esq. (via U.S. Mail)
Thomas Short (via U.S. Mail)
Christopher Jaekels, Esq. (via U.S. Mail)
James Trethewey (via facsimile)
David Crouch (via facsimile)

CMT8335.WPD;1

MICRO ANALYTICAL, INC.
11521 West North Avenue
Milwaukee, WI 53226
(800) 771-9820 (414) 771-0855
Fax: (414) 771-6570

PCM FIBER COUNT REPORT

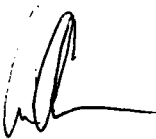
Eli Environmental Contractors
435 South Water Street
Milwaukee WI 53204

Job ID: Solvay - Pre-Tests

Report # 56406

Sampled By: Kevin O'Connell

Date Received: 03/27/03

Analyst: Aaron Engelman 

Date Analyzed: 03/27/03

<u>Sample ID</u>	<u>Fibers/CC</u>	<u>F/100 Flds</u>	<u>Comments</u>			
FB-1		.0		Ltrs		.0
FB-2		.0		Ltrs		.0
S-1	<0.003 13:15 15:15	5.0	Lpm 10.50	Ltrs		1260.0
S-2	<0.003 14:00 16:00	2.0	Lpm 10.50	Ltrs		1260.0
S-3	<0.011 13:20 15:20	5.0	Juan Lpm 2.50	Ltrs		300.0
S-4	0.016 13:30 15:30	10.0	Juan Lpm 2.50	Ltrs		300.0

LOD (Limit of Detection) policy of MicroAnalytical, Inc. is 8.92F/mm2 or 7fbrs/100flds designated with a "<" sign.

AIHA 101057

Micro Analytical, Inc.
 11521 West North Avenue
 Milwaukee, WI 53226
 414-771-0855 * Fax 414-771-6570

Client: ELI Date Sampled: 3/24/03

Job ID: SOLVAY - PRE-TESTS Date/Time Due: 3/27/03

Sample ID	Location/Name	Start	Stop	LPM	Vol
S-1	BACKGROUND OFFICE	1:15 pm		10.5	
	BUILDING BASEMENT		3:15 pm		
S-2	BUILDING 11 SOUTH	2:00 pm		10.5	
	SIDE - BACKGROUND		4:00 pm		
S-3	1ST FLOOR OFFICE	1:20		2.5	
	PERSONAL AIR SAMPLE		3:20		
	JUAN				
S-4	2ND FLOOR OFFICE	1:30	3:30	2.5	
FB-1	FIELD BLANK 1	-	-		
FB-2	" " 2	-	-		

Relinquished by [Signature] Date/Time 3/27/03 Received by [Signature] Date/Time 3/27/03

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Relinquished by _____ Date/Time _____ Received By _____ Date/Time _____

Notes: Call Results # 550-8274 Fax # 223-3061
 Name/Pager # _____ Other _____

Section 9

Clean Sweep Work Plan

Site Security, Clean Sweep and Waste Consolidation Work Plan
For
Milwaukee Solvay Coke and Gas Site
311 East Greenfield Avenue
Milwaukee, Wisconsin

Prepared by
Thomas Jacobson
Project Designer
Eli Environmental Contractors, Inc.
Monday, February 24, 2003

Outline

1.0 Background	*
2.0 Site mobilization	*
3.0 Site Security	*
4.0 Clean Sweep Methodology	*
5.0 Consolidation of Waste	*
Appendices	
Appendix C - Project Schedule / Time line	*

Site Security, Clean Sweep and Waste Consolidation Work Plan

**Milwaukee Solvay Coke & Gas Site (MSCG)
311 East Greenfield Avenue
Milwaukee, WI 53204**

This scope of work addresses preliminary tasks to be completed as initial activities of the required work elements of the Administrative Order of Consent. The purpose of the initial efforts addressed under this plan is to undertake actions to establish site security, and consolidate loose waste material across the entire site and to secure this waste in a safe manner for later management and disposal in accordance with the AOC.

This work plan is the first of two work plan documents. The second document will be submitted separately and will address comprehensive efforts to accomplish all the remaining work necessary to complete the owner's obligations under the Administrative Order of Consent.

All work outlined below will be substantially completed by either ELI Environmental Contractors, Inc. or an authorized subcontractor of ELI. Some project assistance will be provided from Earth Tech Inc. although their specific efforts are to serve to document the work performed by ELI and to report the progress of work to EPA.

1.0 BACKGROUND

The site is situated along the inner harbor of Milwaukee, Wisconsin. The property is 46 acres in size and is bounded by East Greenfield Avenue, Lincoln Memorial Harbor, the Kinnickinnic River and railroad tracks to the west. A document that illustrates the subject site is attached as Figure 1 in Appendix F.

The site has been occupied by a former industrial facility known as Milwaukee Solvay Coke and Gas. The property has been the object of detailed reconnaissance and sampling by Tetra Tech EM, Inc. who prepared a site assessment report to U. S. EPA dated May 1, 2002. The Tetra Tech report is the basis for the removal actions required under the AOC.

The findings and conclusions of the Tetra Tech report are reported in the AOC.

2.0 MOBILIZATION

Site safety Plan

A site specific Site Specific Health and Safety Plan (SSHSP) has been developed for the project. This document will be submitted under separate cover. The

SSHSP will meet the OSHA requirement of 29 CFR 1910.120. All work will be performed in accordance with SSHSP.

Pre-Work Meeting

A Pre-work meeting will be scheduled prior to undertaking any efforts as part of this Clean Sweep, Waste Consolidation and Site Security Work Plan. The meeting will be at 311 East Greenfield Avenue, Milwaukee, WI, 53204. The purpose for the meeting will be to discuss details of this initial work plan. All participants will read and formally acknowledge the provisions of the SSHSP before initiating any work on the site. We will also discuss in detail provisions for site security, mobilization, emergency procedures, delegation of responsibilities, and channels of communications.

3.0 SITE SECURITY

The entire 46-acre site is currently bound by a 6' high fence on 3 sides and the Kinnickinnic River on the south. Currently access to the site is controlled through a locked gate. See the detailed site map attached as Appendix F.

The project office will be established in the existing building designated on the site map in Appendix F. The office will have the following support equipment; 2 incoming telephone lines, 1 fax line, 1 DSL high speed connection, 1 computer/printer w/ high speed modem, 1 fax machine, 1 copier, 1 plan table, 4 work stations and 1 sample preparation area. Base station radio for communication with onsite personnel will also be established. A first aid station will also be established in this area.

ELI will install and maintain an electronic pass key site access system for all company personnel and subcontractors allowed on site. Pass keys will be issued after completing site orientation training per 29 CFR 1926.120, 1926.58 and 1926.1200. Site access will be restricted to only personnel trained and approved by Eli Project Manager Thomas Jacobson. The main gate will be monitored by camera from the office during all times of activity on the site. And entry will be denied to all but authorized personnel. These site security measures will be in place on 2/25/2002.

Site control that includes the contamination zone definition per 1910.120(d) will be established on completion of the clean sweep activities. The initial contamination zone has been established and is detailed on the site map in Appendix F. This site map establishes CZ entry and egress, CZ reduction/decon and safe zones. The SSHSP provides a detailed description and is to be followed by reference in this work plan.

A decontamination area will be located in building #4A which will have a shower/wash station and decon solutions as described in SSHSP.

Site control will be the responsibility of ELI Environmental Contractors. An assessment of compliance with site control measures will be conducted before and during all planned activities by one of the following personnel as required by Eli Environmental Contractors, Inc. SSHSP: Thomas Jacobson, Kevin O'Connell, Hans Geyer, Carol Chojnacki (CIH) and Harry Butler P.E. These individuals are our competent/qualified persons as required by CFR 1926.. See Appendix G for lists.

Project Staffing planned for 1 Project manager, 1 site safety manager, 1 asbestos project manager, 1 demolition project manager, 1 site superintendent, 2 site supervisors/foreman and 10-20 field technicians. This estimate will vary dependant on site activities requirements.

A clean sweep of the entire 46-acre site will be undertaken to remove waste material from outlying areas of the site. The waste will be consolidated within a secure area defined by a new fence line to be constructed around the areas of the site where demolition and other removal activities are proposed. A more detailed description of consolidation areas will come in the comprehensive work plan.

4.0 CLEAN SWEEP METHODOLOGY

The purpose of the clean sweep will be to remove loose waste material lying on the ground surface across the entire site. In the context of this work plan, the term waste is used to describe those materials of concern that are subject to the Removal Action described in the AOC. Such items will include loose asbestos containing materials and tar-like substances found on the site.

Where these materials are found and where they can be manually removed from the ground surface in a safe manner, they will be removed, packaged or containerized as appropriate and stored within a secure area of the site for future characterization, management and disposal. Where these materials are found but cannot be manually removed, they will be identified, located and inventoried as to type and location and will be managed individually at a future date.

Before the clean sweep is performed, a pre-permit walk through with U.S. EPA On scene coordinator, City of Milwaukee, Department of Neighborhood Services (DNS)-Mr. David Krey - Environmental Hygienist, and the primary representative of WDNR-Asbestos Section.

ELI Environmental Contractors will submit a response plan and obtain a City of Milwaukee 3-10 day permit for site inspection and pre-cleaning activities. The Asbestos inspection will be performed in accordance with City of Milwaukee Inspection Protocol of February 1998 modeled after EPA/AHERA 40 CFR part 763.

All Eli personnel conducting the survey will be trained and licensed asbestos inspectors, supervisors, and workers through Wisconsin Department of Health and Human services. The following is a list of personnel responsible for the above work:

Mr. Kevin O'Connell – Hygienist, Asbestos Inspector. Mr. O'Connell will be directly in charge of sampling scheme, sampling methods, field identification of suspected ACM, over-site of sampling personnel and interface with City of Milwaukee Health department, Wisconsin DNR – Asbestos section for sampling scheme and protocols. Mr. O'Connell will in addition to the above tasks be directly in charge of design and implementation of asbestos removal actions to secure friable and non-friable asbestos containing materials.

Mr. Juan Martinez – Asbestos Supervisor will assist Mr. O'Connell.

Mr. Daniel Jacobson – Asbestos Supervisor will assist Mr. O'Connell.

The clean sweep will be done as follows;

Establish basic control point grid system to be used for location identification on GIS map. Begin Shoulder to Shoulder site inspection utilizing certified Asbestos abatement Inspectors, Supervisors, and Workers. All 46 acres will be inspected.

Clean up all loose/damaged and exposed ACM at the ground surface to prevent any wind fiber release episodes around site, which were identified in survey conducted earlier. All materials will be recovered and handled per Eli, EPA, WDNR, City of Milwaukee, and O.S.H.A. Protocols and procedures. The recovered materials will be double bagged in 6-mil clear poly with appropriate labeling which will identify contents, generator, and location of recovery from site and then placed in lined roll-off containers. These materials will later be managed appropriately in accordance with the efforts described in Comprehensive Project Work plan

5.0 CONSOLIDATION OF WASTE

It is anticipated that the majority of waste materials encountered, as part of the clean sweep activities, will be asbestos containing materials. In this instance, consolidated waste materials that are packaged or containerized as described above.

The recovered materials will be double bagged in 6 mil clear polyethylene bags with appropriate labeling which will identify contents, generator, and location of recovery from site and then placed in covered lined roll-off containers, which will

be stored with a securely fenced area for future characterization, sampling and disposal. These future activities will be addressed in the comprehensive work plan submittal.

In areas where ACM is consolidated, the area will be cordoned off using yellow barricade tape and signage stating the following, **“Warning – Asbestos containing materials present. Proper personal protection equipment required beyond this point”**

6.0 PROJECT MANAGEMENT AND REPORTING

Eli Project Management and Principal Staffing

Thomas Jacobson Eli – In charge of overall project planning and Direction for Eli Environmental Contractors, Inc. including coordination of support from sub-contractors and in charge of maintaining project schedule. All in charge of administering work plan.

Hans Geyer- Site project Manager – Demolition Activities – Administration of daily work plan activities, anticipation of potential problems onsite, scheduling personnel and equipment, administration of SSHSP and assurance of compliance with all local, state and federal regulations related to safety of site personnel.

Kevin O,Connell Eli - Site hygienist, Asbestos Inspector. – Administration of Asbestos sampling plan, Asbestos identification, sampling and removal.

Carol Chojnacki, CIH – Project Hygienist. Administration personnel air monitoring, training and selection of PPE.

Project Documentation

Earth tech will perform the documentation and reporting of activities conducted as part of the efforts. The documentation will include a summary of the specific action taken to establish site security. Summary of the clean sweep operations undertaken at the Milwaukee Solvay Coke and Gas facility. Documentation of the activities will include photographs, an inventory of the type and quantity of materials consolidated during the clean sweep process. The location and manner of storage of the materials recovered during the clean sweep will be presented.

The documentation will be presented in a report of removal actions to be presented at the completion of the project. A summary of the work performed will also be presented in the regular monthly reports.

Eli Environmental Contractors, Inc.

Project Schedule

The work to be performed as part of this Site Security, Clean Sweep and Consolidation Plan can be started within about 5 calendar days of authorization, subject to weather conditions and visibility of the ground surface. We anticipate that the site security, clean sweep and waste consolidation issues can be completed within 21 calendar days.

DRAFT

Request For Proposals Asbestos Abatement Services Milwaukee Solvay Coke and Gas Site Milwaukee, Wisconsin

This Request for Proposals is being sent to selected contractors for performance of certain asbestos abatement services associated with remediation and cleanup services at the Milwaukee Solvay Coke and Gas Site in Milwaukee, Wisconsin. The response to these proposals must be received at ELI Environmental Contractors, LLC. by 4:00 pm CDT on Monday, May 12, 2003.

Introduction

The site is currently being cleaned up as part of a Superfund Removal Action agreed upon between the Site Owners and the USEPA in the form of an Administrative Order of Consent addressing this work. The Administrative Order indicates that asbestos containing building materials is a principal issue of concern for removal at the site.

The site is located at 311 East Greenfield Avenue in Milwaukee, Wisconsin. The property covers approximately 46 acres in a primarily industrial and commercial area north of the Kinnickinnic River and west of the Lincoln Memorial Harbor. The site is bordered to the north by East Greenfield Avenue, to the northeast by railroad tracks and a coal storage area, to the east and south by the Kinnickinnic River and to the west by Railroad tracks.

Scope of Work

The scope of work shall include furnishing all labor, equipment and materials necessary to conduct asbestos abatement of aboveground building materials found at the site. The contractor shall submit sufficient such information and in a clear and concise fashion describing the manner and methods to be used for asbestos abatement and protection of workers. Perimeter air monitoring will be necessary and should be described in detail. **(THIS SHOULD BE FLESHED OUT)** The contractor should be aware that the scope of work includes loading properly packaged asbestos removed from structures and placing this material into containers provided by others. Others will provide for disposal of asbestos containing material properly abated by the successful bidder. Others will provide analytical testing services for suspected asbestos containing building materials.

ELI Environmental Contractors, LLC, will make proper notification of appropriate authorities concerning the abatement activities. Consequently, the successful bidder will be expected to provide timely and accurate information to the contractor about the activities to be conducted at the site. This information is important to other parties

including US EPA, Wisconsin DNR, The City of Milwaukee and other parties having an interest in the project. The contractor shall appoint a representative to convey all such information pertaining to his work to the ELI Environmental Contractors, LLC.

Pricing

The proposer's shall submit a fixed price proposal to abate asbestos containing building materials on a per structure basis. **Attached is a list of structures that will require asbestos abatement along with an asbestos survey of the facility.** The price for abatement shall be the full price to conduct the work including all labor, expendable materials and costs associated with the work. The pricing shall be inclusive of all necessary health and safety measures required by appropriate OSHA regulations in undertaking the work.

The notification and reporting requirements to US EPA, Wisconsin DNR and The City of Milwaukee will be performed by others. However, the successful proposer shall submit the appropriate notification and documentation as required by law and regulation concerning the licensing of the proposer to conduct the work..

Regulations

As mentioned previously, the asbestos abatement work is part of a Superfund Removal Action. The work is to be undertaken in accordance with the National Contingency Plan (40 CFR 300), appropriate rules and regulations defined under Federal Laws and Regulations, State of Wisconsin Laws and regulations and City of Milwaukee Laws and Ordinances. In addition, the requirements pertaining to management and execution of the work as indicated in the Administrative Order of Consent are considered the basis for undertaking and completing the work.

APPENDIX D-2

Supplemental Asbestos Building Inspection Report



June 17, 2003

Mr. Hans Geyer
Lake States Industrial Services, Incorporated
311 E. Greenfield Avenue
Milwaukee, Wisconsin 53204

Re: Supplemental Asbestos Investigation Summary – Former Solvay Coke and Gas Plant,
311 E. Greenfield Avenue, Milwaukee, Wisconsin

Dear Mr. Geyer:

The purpose of this correspondence is to summarize our findings of supplemental sampling done at the former Solvay Coke and Gas Plant to confirm asbestos containing materials (ACM) in areas of the site that might have been missed during the initial assessment.

On June 4, 2003 Environmental Associates, Inc. (EAI), along with a technician from ELI Environmental (ELI), collected a total of 46 representative samples of possible ACM areas. Most of these samples were composite floor samples in buildings that had previous insufficient sampling needed to confirm whether ACM had accumulated from building and equipment deterioration. Also sampled were boiler insulation from Building 12 and door insulation and mortar from the ovens on the west area of the site. All sample areas were identified by orange spray paint, and most were photographed to show the area of concern. Pictures are included at the end of this report.

On June 12, 2003, EAI, along with a technician from ELI, took four interior samples from the two suspended galleries that run east-west and north-south from Building 14. These galleries were the only ones competent and stable enough to retrieve samples from.

These 50 samples were submitted to Environmental Hazard Services, L.L.C. (EHS) of Richmond, Virginia immediately after sampling to be analyzed for asbestos. Asbestos was found in 24 of these sample locations. A summary of the samples collected is as follows, with ACM denoted by an asterisk:

***Sample B4-1:** Building #4. Composite floor sample taken from south side of NE building work area.

Sample B4-2: Building #4. Composite floor sample taken from north side of NE building work area.


- *Sample B7-3:** Building #7. Composite floor sample from south end of shed at east side of building.
- *Sample B7-4:** Building #7. Composite floor sample from north end of shed at east side of building..
- *Sample B9-5:** Building #9. Composite floor sample from NW end of building.
- *Sample B9-6:** Building #9. Composite floor sample from NE end of building.
- Sample B9-7:** Building #9. Composite floor sample from SE end of building.
- *Sample B9-8:** Building #9. Composite floor sample from south doorway area.
- Sample B10-9:** Building #10. Composite floor sample of various areas of building.
- *Sample B11-10:** Building #11. Composite floor sample from NE area of 1st floor.
- *Sample B11-11:** Building #11. Composite floor sample from south wall area of 1st floor.
- *Sample B11-12:** Building #11. Composite floor sample of south end area of 2nd floor.
- *Sample B11-13:** Building #11. Composite floor sample of north end area of 2nd floor.
- Sample B11-14:** Building #11. Roof sample.
- Sample B16-15:** Building #16. Composite floor sample from north end area of building.
- Sample B16-16:** Building #16. Composite floor sample from south end area of building.
- *Sample B18-17:** Building #18. Composite floor sample from north and south ends of building.
- Sample B19-18:** Building #19. Composite floor sample from south room, lower level.
- Sample B19-19:** Building #19. Composite floor sample from washroom/lunchroom areas, lower level.
- Sample B19-20:** Building #19. Composite floor sample locker room area south of ovens, lower level.
- Sample B19-21:** Building #19. Composite floor sample, north area of 2nd level.
- Sample B19-22:** Building #19. Composite floor sample, south area of 2nd level.
- Sample B6-23:** Building #6. Composite floor sample from north end area.
- *Sample B7-24:** Composite floor sample from underground area under Building #7.
- *Sample B7-25:** Composite floor sample from underground area under alley between Building #7 and Building #9.
- *Sample B7-26:** Composite floor sample from underground area under Building #9.
- Sample O-New-27:** Door insulation sample from new set of ovens at north end.
- Sample O-New-28:** Brick mortar sample from new set of ovens at north end.
- Sample O-4-29:** Brick mortar sample from #4 section of old ovens.
- Sample O-3-30:** Door insulation sample from #3 section of old ovens.
- Sample O-3-31:** Insulation sample taken from top of oven housing area, #3 section.
- Sample O-New-32:** Insulation sample taken from top of oven housing, new oven area.
- Sample B21-33:** Building #21. Composite floor sample from front room area.
- Sample B21-34:** Building #21. Composite floor sample, women's washroom area.
- Sample B21-35:** Building #21. Composite floor sample, men's washroom area.
- Sample B2-36:** Building #2. Composite floor sample, front of guard shack.
- Sample B2-37:** Building #2. Composite floor sample, rear of guard shack.
- Sample B19-38:** Building #19. West side wall red tile sample.
- *Sample B12-39:** Building #12. Composite floor sample from basement south end area.
- *Sample B12-40:** Building #12. Composite floor sample from middle basement area.
- Sample B12-41:** Building #12. Composite floor sample from basement north end area.

- *Sample B12-42:** Building #12. Composite floor sample from south end of main level.
- *Sample B12-43:** Building #12. Composite floor sample between hoppers on main level.
- *Sample B12-44:** Building #12. Insulation sample from top of boiler.
- Sample B15-45:** Building #15. Composite floor sample from south end of switch-house.
- *Sample B16-46:** Building #16. Composite floor sample from SW room.
- *Sample B14-GNORTH1:** Interior sample from south end of north-south suspended gallery running north out of Building 14.
- *Sample B14-GNORTH2:** North end sample from same gallery above.
- *Sample B14-GWEST1:** Interior sample from east end of east-west suspended gallery running west out of Building 14.
- *Sample B14-GWEST2:** West end sample from same gallery above.

A thorough asbestos investigation was completed on Buildings 1,3,5,8,13 and 17 in a previous inspection, with too few or no samples taken from the remainder of the buildings. The purpose of this report is to supplement the data by providing additional sampling points from those buildings, with sampling also done at the row of ovens at the west side of the site. Laboratory results are enclosed for your review.

If you have any questions in regards to this letter please give us a call.

Sincerely,
Environmental Associates, Inc.



Robert R. Guse
Wisconsin Asbestos Inspector Certification #AII-105804

cc: File
enc: Asbestos Laboratory Results

LABORATORY RESULTS

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Environmental Associates
P.O. Box 136
Thiensville, WI 53092

R E C E I V E D
JUN 16 2003

DATE OF RECEIPT: 05 JUN 2003
DATE OF ANALYSIS: 06 JUN 2003
DATE OF REPORT: 09 JUN 2003

CLIENT NUMBER: 51-1899 D
EHS PROJECT #: 06-03-0545
PROJECT: 03-03855

ENVIRONMENTAL
ASSOCIATES, INC.

<u>EHS SAMPLE #</u>	<u>CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION</u>	<u>% ASBESTOS</u>	<u>OTHER MATERIALS</u>
01	B4-1/ Tan Fib.; Orange Cementitious; Brown Chalky	10% Chrysotile 10% Total Asbestos	10% Cellulose 80% Non-Fibrous
02	B4-2/ Orange Cementitious; Brown Chalky	NAD	100% Non-Fibrous
03	B7-3/ Tan Gran.; Orange Cementitious; Brown Chalky	Trace, <1% Chrysotile <1% Total Asbestos	2% Cellulose 98% Non-Fibrous
04	B7-4/ Brown Fib.; Brown Chalky	Trace, <1% Chrysotile <1% Total Asbestos	35% Chrysotile 65% Non-Fibrous
05	B9-5/ Brown/White Chalky	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous
06	B9-7/ Brown/White Chalky	NAD	100% Non-Fibrous
07	B9-8/ White/Brown Chalky; Tan Gran.	Trace, <1% Chrysotile <1% Total Asbestos	100% Non-Fibrous
08	B10-9/ Beige Paint-Like; Brown Chalky; Gray Powder	NAD	100% Non-Fibrous
09	B11-10/ Beige Brittle; Brown Chalky; Tan Fib.	Trace, <1% Chrysotile <1% Total Asbestos	100% Non-Fibrous
10	B11-11/ Brown Chalky; Tan Fib.	Trace, <1% Chrysotile <1% Total Asbestos	100% Non-Fibrous
11	B11-12/ Brown Chalky; Tan Fib.	15% Chrysotile 15% Total Asbestos	85% Non-Fibrous
12	B11-13/ Brown Chalky; Tan Fib.	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 51-1899 D

EHS PROJECT #: 06-03-0545

PROJECT: 03-03855

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
13	B11-14/ Orange Cementitious; White Chalky	NAD	100% Non-Fibrous
14	B16-15/ Brown Chalky; Fib.	NAD	3% Cellulose 97% Non-Fibrous
15	B16-16/ Brown Chalky; Tan Fib.	NAD	5% Cellulose 95% Non-Fibrous
16	B18-17/ Tan Gran.; Orange Chalky; Fib.; Brown Chalky	Trace, <1% Chrysotile Trace, <1% Amosite <1% Total Asbestos	100% Non-Fibrous
17	B19-18/ Off-White Chalky	NAD	100% Non-Fibrous
18	B19-19/ Beige Brittle; Brown Chalky	NAD	100% Non-Fibrous
19	B19-20/ Beige Brittle; Brown Chalky	NAD	100% Non-Fibrous
20	B19-21/ Brown Chalky	NAD	100% Non-Fibrous
21	B19-22/ Black Chalky	NAD	100% Non-Fibrous
22	B6-23/ Tan/Orange Gran; Brown Chalky	NAD	100% Non-Fibrous
23	B7-24/ Tan Gran.; White Chalky; Fib.; Black Powder	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous
24	B7-25/ White Chalky; Fib.; Brown Chalky	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous
25	B7-26/ Brown Chalky; Orange Chalky; Fib.	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous
26	O-New-27/ Beige Gran.	NAD	100% Non-Fibrous
27	O-New-28/ Rose Gran.	NAD	100% Non-Fibrous
28	O-4-29/ Tan Gran.	NAD	100% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 51-1899 D

FHS PROJECT #: 06-03-0545

PROJECT: 03-03855

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
29	O-3-30/ Orange Gran.	NAD	100% Non-Fibrous
30	O-3-31/ Tan Gran.	NAD	100% Non-Fibrous
31	O-New-32/ Tan Gran.	NAD	100% Non-Fibrous
32	B21-33/ Tan Gran.; Beige Brittle	NAD	100% Non-Fibrous
33	B21-34/ Beige Brittle; Orange/White/Brown Gran.	NAD	100% Non-Fibrous
34	B21-35/ Orange Gran.; Beige Brittle	NAD	100% Non-Fibrous
35	B2-36/ Off-White Chalky	NAD	100% Non-Fibrous
36	B2-37/ Off-White Chalky; Tan Fib.	NAD	2% Fibrous Glass 98% Non-Fibrous
37	B19-38/ Brick/Red Gran.	NAD	100% Non-Fibrous
38	B12-39/ Tan Gran.; Brown Chalky	Trace, <1% Chrysotile <1% Total Asbestos	100% Non-Fibrous
39	B12-40/ Brown Chalky	Trace, <1% Chrysotile Trace, <1% Amosite <1% Total Asbestos	100% Non-Fibrous
40	B12-41/ Tan Gran.	NAD	100% Non-Fibrous
41	B12-42/ Tan Gran.; Brown Chalky; Powder; Tan Fib.	Trace, <1% Chrysotile <1% Total Asbestos	100% Non-Fibrous
42	B12-43/ Tan Gran; Brown Powder	Trace, <1% Chrysotile Trace, <1% Amosite <1% Total Asbestos	100% Non-Fibrous
43	B12-44/ Tan Fib.	15% Chrysotile 15% Total Asbestos	75% Cellulose 10% Non-Fibrous

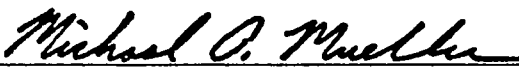
ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 51-1899 D
EHS PROJECT #: 06-03-0545
PROJECT: 03-03855

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
44	B15-45/ Beige Brittle; Brown Powder	NAD	100% Non-Fibrous
45	B14-46/ Black Chalky; Brown Fib.	2% Chrysotile 2% Total Asbestos	5% Cellulose 93% Non-Fibrous
46	B9-56/ White Chalky; Fib.; Brown Fib.	2% Chrysotile 2% Total Asbestos	5% Cellulose 2% Hair 91% Non-Fibrous

QC SAMPLE: M2-1998-1
QC BLANK: SRM 1866 Fiberglass
REPORTING LIMIT: 1% Asbestos
METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *
ANALYST: Melissa Boggs Steiniger

Reviewed By Authorized Signatory:


Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
SCF = suspected ceramic fibers

plm1.dot/07JAN2002/ MR

46 PLM

EHS 06-03-0545

ENVIRONMENTAL HEALTH SERVICES, L.L.C.
 Richmond, Virginia 23237 Phone (804) 275-4788 Fax (804) 275-4907

SAMPLE CONDITION
 Acceptable
 Unacceptable

CHAIN OF CUSTODY FORM

Company Name: ENVIRONMENTAL ASSOCIATES, INC. (EAI) Date: 6/4/03
 Address: 210 N. GREEN BAY ROAD, P.O. BOX 136 Contact Name: ROBERT R. GUSE
 City, State, Zip: THIENSVILLE, WI 53092 Sampler Name: ROBERT R. GUSE
 EHS Client Account #: _____ Project #: 03-03855
 Phone #: 262-242-1088 Fax #: 262-242-6554 SOLVAY COKE & GAS PLANT
 P.O. #: _____ 311 E. GREENFIELD, MILWAUKEE, WI

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>				Indoor Air Quality					Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Comments	
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wine* (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Biocassette	Slide	Surface Swab	Surface Tape		Bulk
1 B4-1	6/4/03	X																					BLDG. 4	N.E. CORNER (S)
2 B4-2		X																					BLDG. 4	N.E. CORNER (N)
3 B7-3		X																					BLDG. 7	EAST SHED (S)
4 B7-4		X																					BLDG. 7	(EAST SHED) (N)
5 B9-5		X																					BLDG. 9	NW END
6 B9-6		X																					BLDG. 9	NE END
7 B9-7		X																					BLDG. 9	SE END
8 B9-8		X																					BLDG. 9	S. DOORWAY
9 B10-9		X																					BLDG. 10	VARIOUS AREAS
10 B11-10		X																					BLDG. 11	NE - 1ST FLOOR

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>ROBERT R. GUSE (EAI)</u>	Signature: <u>Robert R. Guse</u>	Date/Time: <u>6/4/03 15:00</u>
Received by:	Signature:	Date/Time:
Released by:	Signature:	Date/Time:
Received by:	Signature: <u>J. PAINHE</u>	Date/Time: <u>6/5/03 10am</u>

... with permission

CHAIN OF CUSTODY FORM

Company Name: ENVIRONMENTAL ASSOCIATES, INC. (EAI) Date: 6/4/03
 Address: 210 N. GREEN BAY ROAD, P.O. BOX 136 Contact Name: ROBERT R. GUSE
 City, State, Zip: THIENSVILLE, WI 53092 Sampler Name: ROBERT R. GUSE
 EHS Client Account #: _____ Project #: 03-03855
 Phone #: 262-242-1088 Fax #: 262-242-6554 SOLVAY COKE & GAS PLANT
 P.O. #: _____ 311 E. GREENFIELD, MILWAUKEE, WI

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>			Indoor Air Quality					Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Comments		
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wipe* (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Biocassette	Slide	Surface Swab		Surface Tape	Bulk
20 B19-21	6/4/03	X																					BLDG. 19	N. AREA, 2ND LEVEL
21 B19-22		X																					BLDG. 19	S. AREA, 2ND LEVEL
22 B6-23		X																					BLDG. 6	N. END
23 B7-24		X																					BLDG. 7	UNDERGROUND
24 B7-25		X																					BLDG. 7	
25 B7-26		X																					BLDG. 9	↓
26 O-NEW-27		X																					NEW OVENS	N. END OVENS
27 O-NEW-28		X																					NEW OVENS	N. END OVENS
28 O-4-29		X																					# 4 OVENS	
29 O-3-30		X																					# 3 OVENS	

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: <u>ROBERT R. GUSE (EAI)</u>	Signature: <u>Robert R. Guse</u>	Date/Time: <u>6/4/03 15:00</u>
Received by:	Signature:	Date/Time:
Released by:	Signature:	Date/Time:
Received by:	Signature: <u>J. P. ...</u>	Date/Time: <u>6/5/03 10am</u>

CHAIN OF CUSTODY FORM

Company Name: ENVIRONMENTAL ASSOCIATES, INC. (EAI) Date: 6/4/03
 Address: 210 N. GREEN BAY ROAD, P.O. BOX 136 Contact Name: ROBERT R. GUSE
 City, State, Zip: THIENSVILLE, WI 53092 Sampler Name: ROBERT R. GUSE
 EHS Client Account #: _____ Project #: 03-03855
 Phone #: 262-242-1088 Fax #: 262-242-6554 SOLVAY COKE & GAS PLANT
 P.O. #: _____ 311 E. GREENFIELD, MILWAUKEE, WI

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>			Indoor Air Quality					Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Comments		
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Mine * (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Biocassette	Slide	Surface Swab		Surface Tape	Bulk
30 O-3-31	6/4/03	X																					#3 OVENS	
31 O-NEW-32		X																					NEW OVENS	N. END OVENS
32 B21-33		X																					BLDG. 21	FRONT ROOM
33 B21-34		X																					↓	WOMEN'S BATH
34 B21-35		X																					↓	MEN'S BATH
35 B2-36		X																					BLDG. 2	FRONT AREA - GARAGE SHED
36 B2-37		X																					BLDG. 2	REAR " " "
37 B19-38		X																					BLDG. 19	RED TILE, W. WALL
38 B12-39		X																					BLDG. 12	BASEMENT, S. END
39 B12-40		X																					BLDG. 12	MIDDLE BASEMENT

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: ROBERT R. GUSE (EAI) Signature: Robert R. Guse Date/Time: 6/4/03 1530
 Received by: _____ Signature: _____ Date/Time: _____
 Released by: _____ Signature: _____ Date/Time: _____
 Received by: _____ Signature: J. Pa... Date/Time: 6/5/03 10am

CHAIN OF CUSTODY FORM

Company Name: ENVIRONMENTAL ASSOCIATES, INC. (EAI) Date: 6/4/03
 Address: 210 N. GREEN BAY ROAD, P.O. BOX 136 Contact Name: ROBERT R. GUSE
 City, State, Zip: THIENSVILLE, WI 53092 Sampler Name: ROBERT R. GUSE
 EHS Client Account #: _____ Project #: 03-03855
 Phone #: 262-242-1088 Fax #: 262-242-6554 SOLVAY COKE & GAS PLANT
 P.O. #: _____ 311 E. GREENFIELD, MILWAUKEE, WI

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>			Indoor Air Quality					Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/> Respirable (NIOSH 0600) <input type="checkbox"/>		Comments		
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wine * (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Biocassette	Slide	Surface Swab		Surface Tape	Bulk
40 B12-41	6/4/03	X																					BLDG. 12	BASEMENT, N. END
41 B12-42		X																						S. MAIN LEVEL
42 B12-43		X																						HOPPER AREA - MAIN LEVEL
43 B12-44		X																						BOILER INSULATION
44 B15-45		X																					BLDG. 15	S. END SWITCHHOUSE
45 B14-46		X																					BLDG. 14	S. W. ROOM
46 B9-56		X																					BLDG. 9	SEE B9-6
B9-6		X																						
		X																						
		X																						

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Released by: ROBERT R. GUSE (EAI) Signature: Robert R. Guse Date/Time: 6/4/03 15:00
 Received by: _____ Signature: _____ Date/Time: _____
 Released by: _____ Signature: J. Parnett Date/Time: _____
 Received by: _____ Signature: _____ Date/Time: 6/5/03 10am

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Environmental Associates
P.O. Box 136
Thiensville, WI 53092

DATE OF RECEIPT: 13 JUN 2003
DATE OF ANALYSIS: 14 JUN 2003
DATE OF REPORT: 16 JUN 2003

CLIENT NUMBER: 51-1899 D
EHS PROJECT #: 06-08-1643
PROJECT: 03-09855; Former Solvay Coke & Gas Plant; 311 E. Greenfield, Milw., WI

<u>EHS SAMPLE #</u>	<u>CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION</u>	<u>% ASBESTOS</u>	<u>OTHER MATERIALS</u>
01	B14-G North 1/ Brown Fib.	90% Chrysotile 90% Total Asbestos	5% Cellulose 5% Non-Fibrous
02	B14-G North 2/ Brown Fib.	90% Chrysotile 90% Total Asbestos	5% Cellulose 5% Non-Fibrous
03	B14-G West 1/ Black Rubbery; Gray Fib.	20% Chrysotile 2% Amosite 22% Total Asbestos	78% Non-Fibrous
04	B14-G West 2/ Brown Powder; Gray Fib.	20% Chrysotile 2% Amosite 22% Total Asbestos	78% Non-Fibrous

QC SAMPLE: M2-1998-4

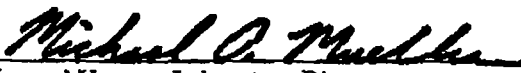
QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Feng Jiang, M.S.

Reviewed By Authorized Signatory:


Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 51-1899 D

EHS PROJECT #: 06-03-1643

PROJECT: 03-03855; Former Solvay Coke & Gas Plant; 311 E. Greenfield, Milw., WI

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 800/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
 SCF = suspected ceramic fibers

plm1.dot/07JAN2002/pd

- PAGE 02 of 02 - END OF REPORT -

U-PLM

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.
7469 Whitepine Road Richmond, Virginia 23237 Phone (804) 275-4788 Fax (804) 275-4907

CHAIN OF CUSTODY FORM

EHS 06-03-1643

Company Name: ENVIRONMENTAL ASSOCIATES, INC. (EAI) Date: 6/12/03
 Address: 310 N. GREEN BAY ROAD, P.O. BOX 136 Contact Name: ROBERT R. GUSE
 City, State, Zip: THIENSVILLE, WI 53092 Sampler Name: ROBERT R. GUSE
 EHS Client Account #: _____ Project #: 03-03855 FORMER
 Phone #: 262-242-1028 Fax #: 262-242-6554 SOLVAY COKE & GAS PLANT
 P.O. #: _____ 311 E. GREENFIELD, MILW., WI

Sample Number	Sample Date & Time	Asbestos					Lead					Other Metals <small>(Specify metals below)</small>			Indoor Air Quality					Particulate: Total Nuisance (NIOSH 0500) <input type="checkbox"/>		Comments			
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	TEM AHERA (Air)	TEM Chatfield (Bulk)	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wine * (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Bioassette	Slide	Surface Swab		Surface Tape	Bulk	Air Volume (L) OR Wipe Area (ft ²) OR Scrape Area (cm ²)
B14-GNORTH 1	6/12/03	X																						6/12/03	E. END OF N/S GALLERY
B14-GNORTH 2	↓	X																						↓	N. " "
B14-GWEST 1	↓	X																						↓	E. END OF E/W GALLERY
B14-1-WEST 2	↓	X																						↓	W. " " "

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

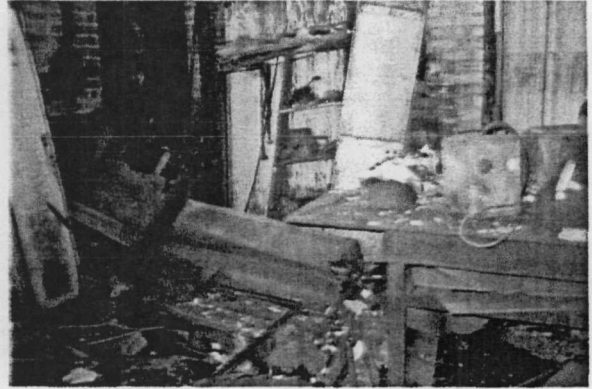
Released by: <u>ROBERT R. GUSE (EAI)</u>	Signature: <u>[Signature]</u>	Date/Time: <u>6/12/03 12:30</u>
Received by:	Signature:	Date/Time:
Released by:	Signature:	Date/Time: <u>6/12/03</u>
Received by:	Signature: <u>[Signature]</u>	Date/Time: <u>6/12/03</u>

PHOTOGRAPHS

Building #4 – Sample B4-1



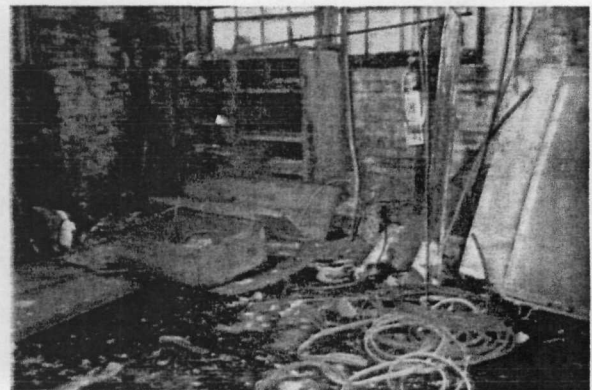
Building #4 – Sample B4-1



Building #4 – Sample B4-2



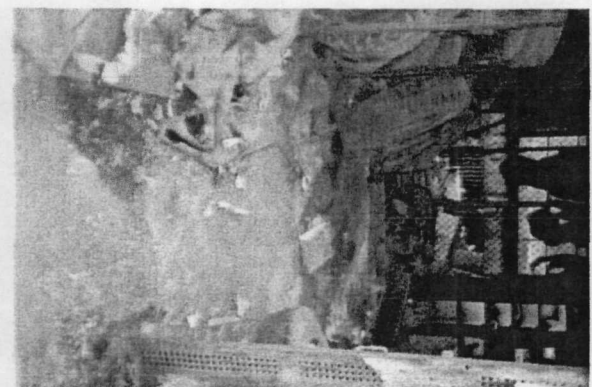
Building #4 – Sample B4-2



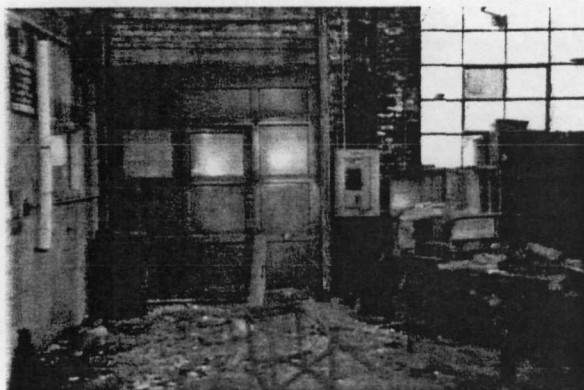
Building #7 – Sample B7-3



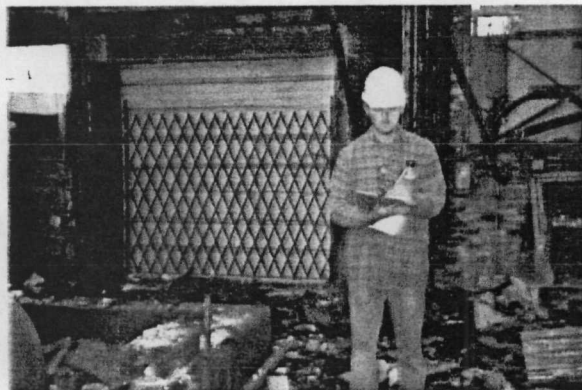
Building #7 – Sample B7-4



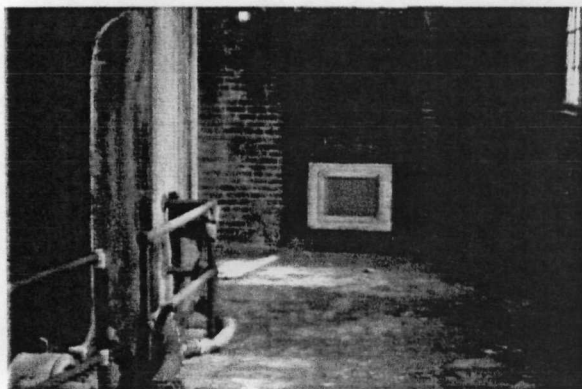
Building #9 – Sample B9-5



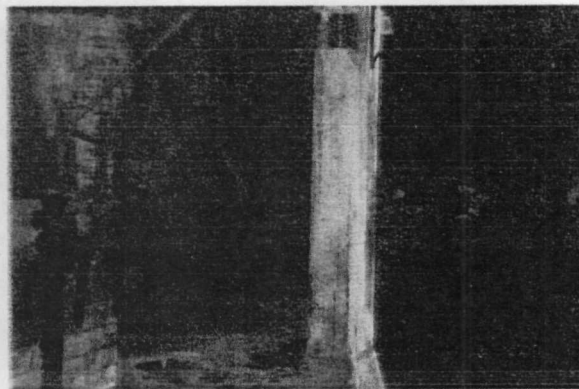
Building #9 – Sample B9-5



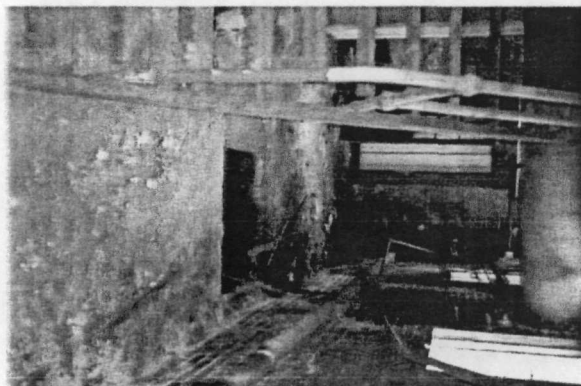
Building #11 – Sample B11-10



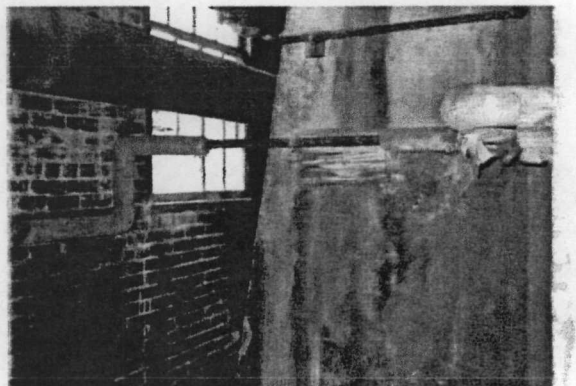
Building #11 – Sample B11-10



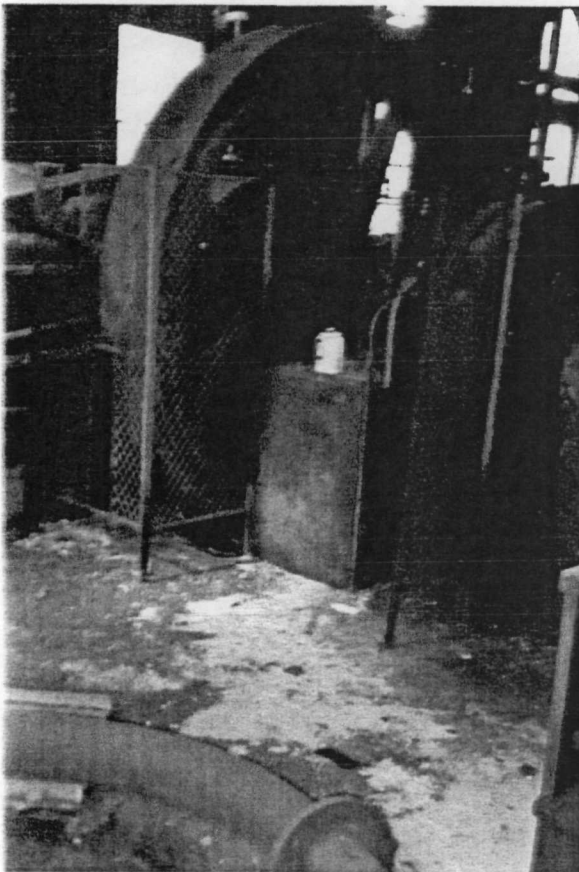
Building #11 – Sample B11-11



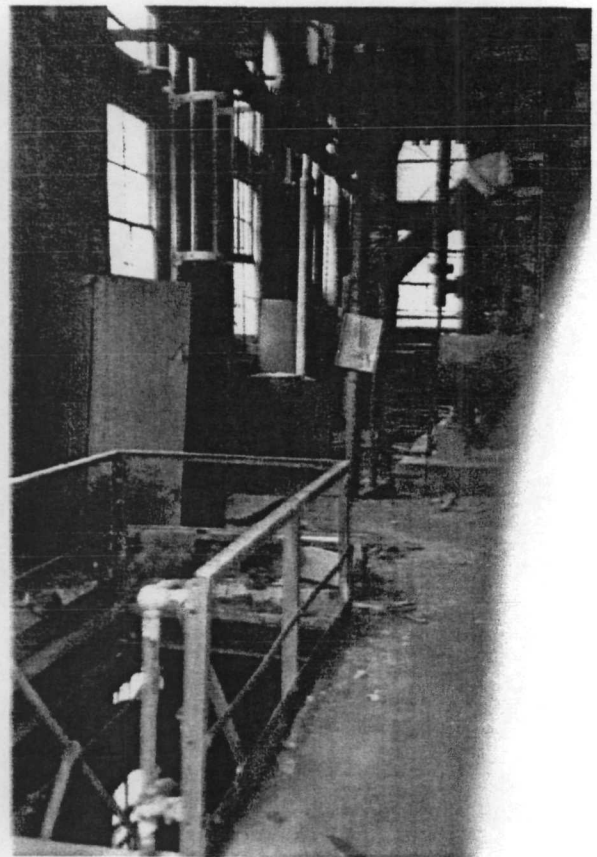
Building #11 – Sample B11-11



Building #11 – Sample B11-12



Building #11 – Sample B11-12



Building #11 – Sample B11-13



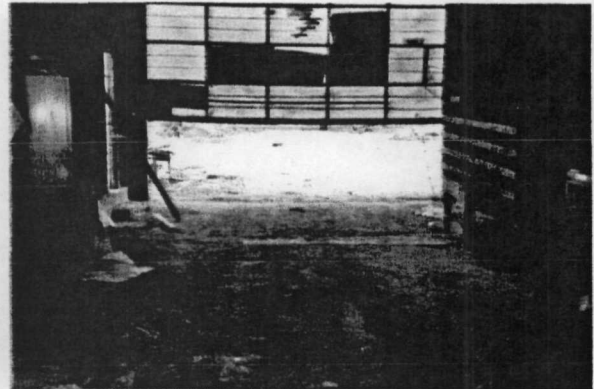
Building #11 – Sample B11-13



Building #16 – Sample B16-16



Building #16 – Sample B16-15



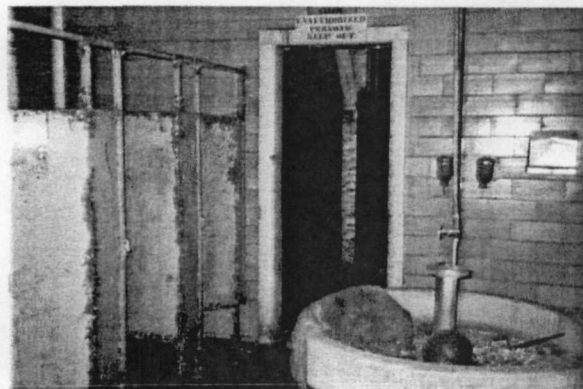
Building #19 – Sample B19-18



Building #19 – Sample B19-18



Building 19 – Sample B19-19



Building #19 – Sample B19-20



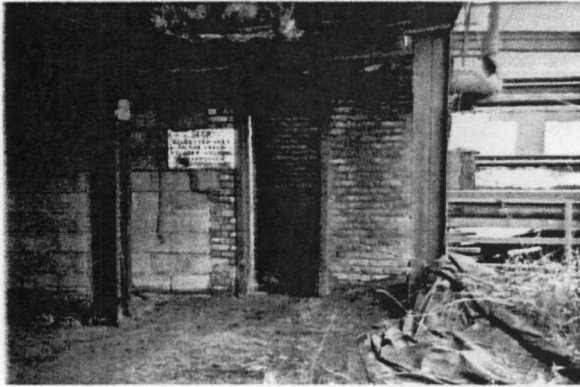
Building #19 – Sample B19-21



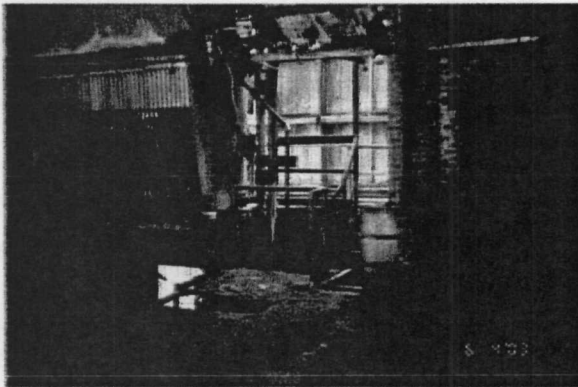
Building #19 – Sample B19-21



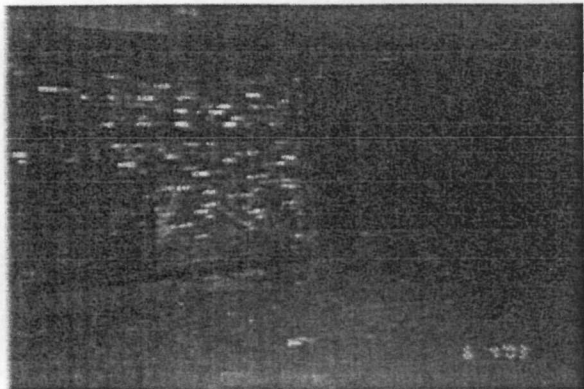
Building #19 – Sample B19-21



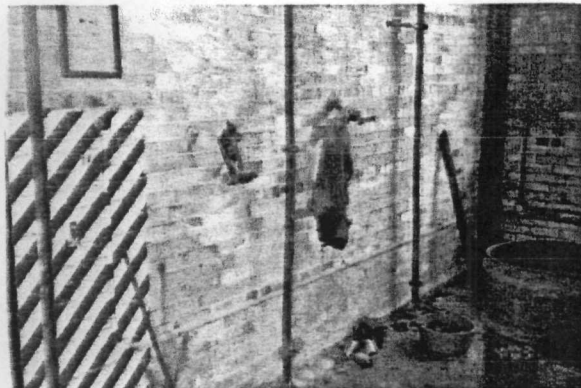
Building #19 – Sample B19-22



Building #19 – Sample B19-22



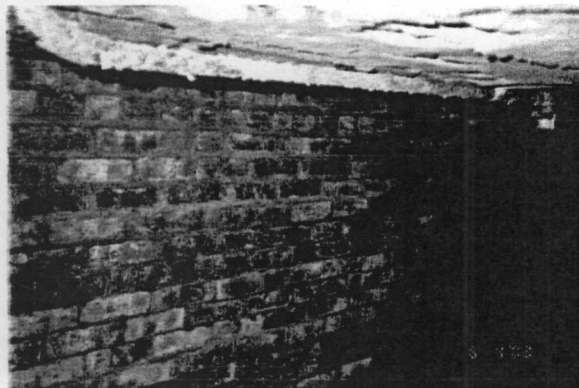
Building #6 – Sample B6-23



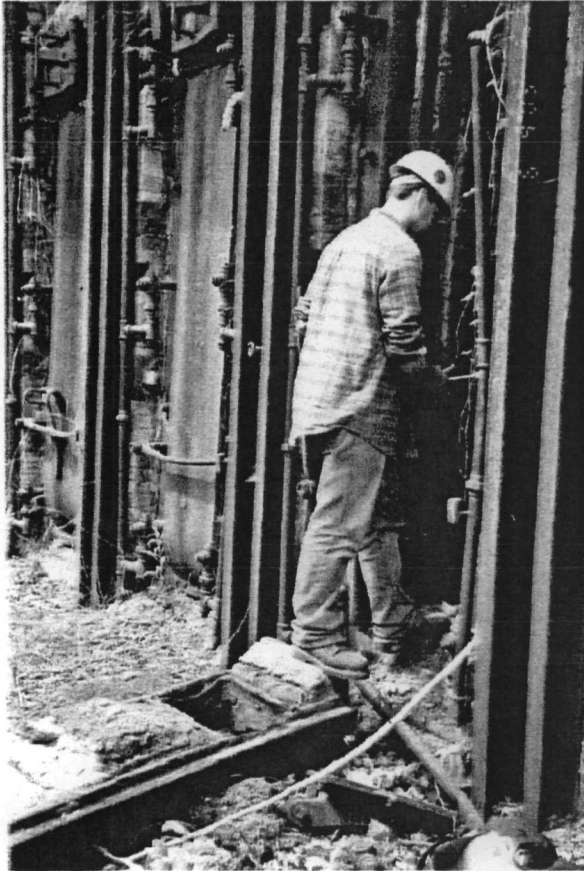
Building #7 – Sample B7-24



Building #7 – Sample B7-25



New Oven Area – Sample O-New-27



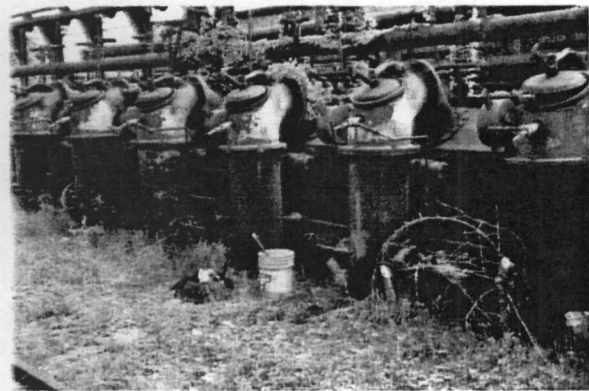
New Oven Area – Sample O-New-28



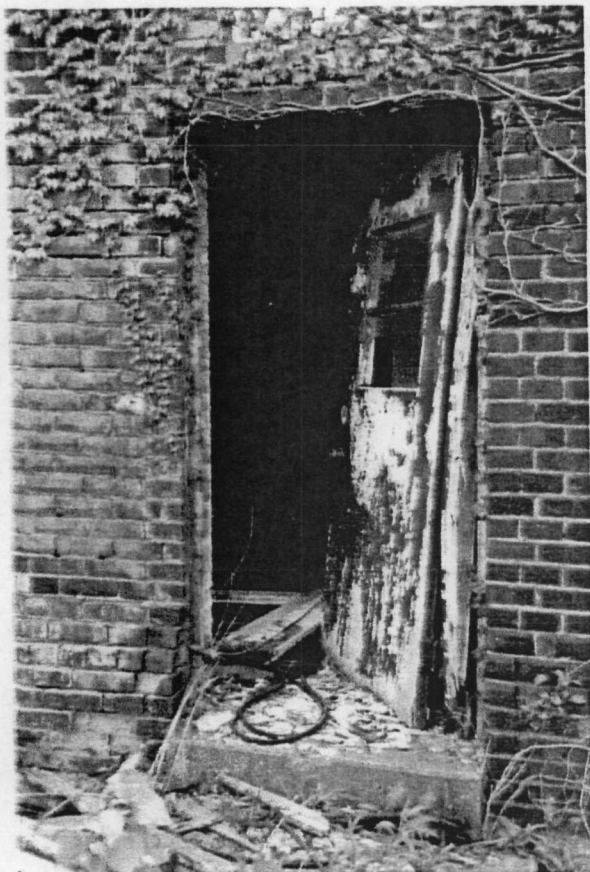
Top of #3 old oven area – Sample O-3-31



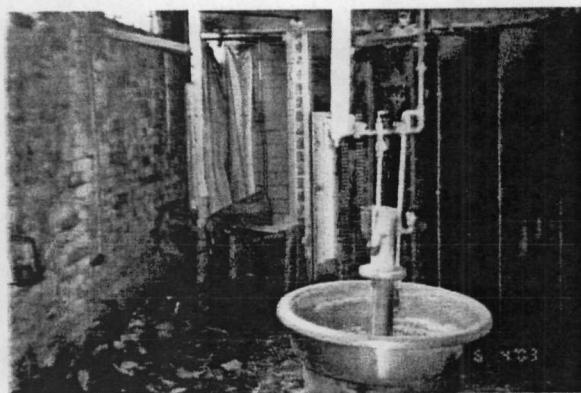
Top of new oven area – Sample O-New-32



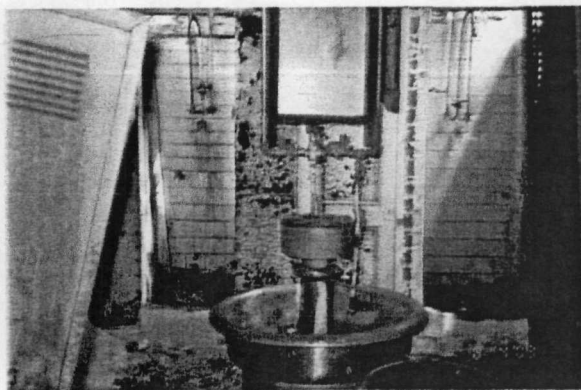
Building #21 – Sample B21-33



Building #21 – Sample B21-34



Building #21 – Sample B21-35



Building #2 – Sample B2-36, B2-37



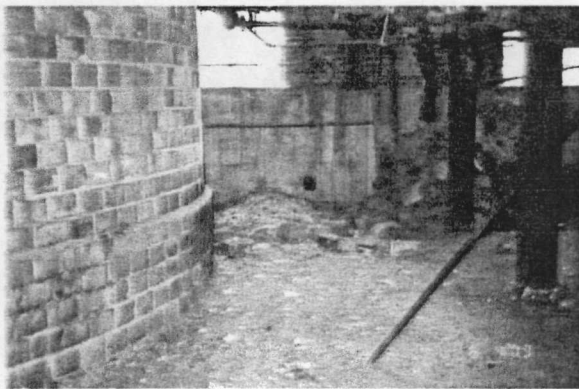
Building #19 – Sample B19-38



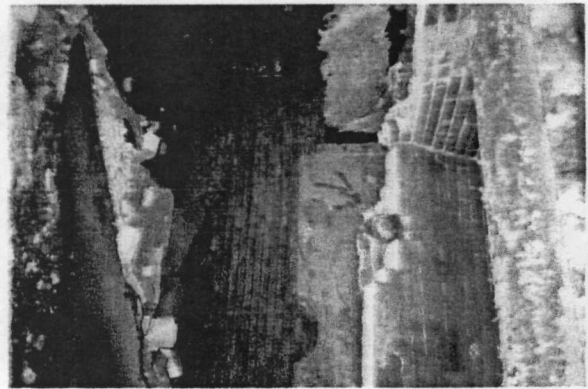
Building #12 – Sample B12-39



Building #12 – Sample B12-40



Building #12 – Sample B12-41



APPENDIX E

Waste Management Waste Characterization and Profile Information



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

RASB 10644
Waste Profile Sheet Code

I. Request For Decision: Initial Renewal
GENERATOR NAME: Milwaukee Solway Coker Gas ADDRESS: 311 East Greenfield Avenue
CITY, STATE: Milwaukee, WI 53204
WASTE NAME(S): Friable Asbestos - NESHAP Notified with coal dust -
PROPOSED MANAGEMENT FACILITY: Metro R20F
PROPOSED INTERMEDIATE TRANSFER FACILITY: N/A TRANSPORTER: WM-Milwaukee
WMNA REQUESTER: Peggy Slind SIGNATURE: [Signature]

II. TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain: _____
If Approved, Complete A,B,C And D Below:

A. Management Method(s): Landfill in accordance with attached "conditions for acceptance and disposal of asbestos waste".

B. Precautions, Conditions, or Limitations on Approval: Check containers to verify compliance with applicable regulations.

C: Decision Expiration Date: 9/3/08

TECH MGR. SIGNATURE: [Signature] NAME (Print) Richard L. Pager DATE: 9/3/03

III WMI MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE: [Signature] NAME (Print) Dennis Drapal DATE: 9/4/03

IV WMI INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE _____ NAME (Print) _____ DATE: _____

FRIABLE ASBESTOS - NESHAP NOTIFIED

1. Requirements for Landfills and Hauling Companies

- a. The asbestos must be sealed in leak-tight containers, or wrapping (\geq 6 mil plastic bags or wrapping).
- b. A loading sign meeting OSHA criteria must be used during loading and unloading (see below).



Danger
Asbestos Dust Hazard
Cancer and Lung Disease Hazard
Authorized Personnel Only

- c. Packages (bags) must display one of the following labels:

CAUTION
Contains Asbestos Fibers
Avoid Opening or Breaking Containers
Breathing Asbestos is Hazardous to Your Health

OR

CAUTION
Contains Asbestos Fibers
Avoid Creating Dust
May Cause Serious Bodily Harm

- d. Individual packages (bags or drums) of friable asbestos must be marked with Asbestos, 2212, RQ and labeled with a Class 9 label.
- e. Containers less than 23 cubic yards must also be marked and labeled in this manner.
- f. Packages must be labeled with the generator's name, and the address of the generating location.
- g. The material must be shipped in such a manner (eg., open top box, compactor box with inspection ports, drums) that will allow verification of proper packaging, labeling, and volume. Open top boxes must be covered with a solid type tarp during shipment.
- h. A Waste Shipment Record must accompany every load, and the volume reported on the Waste Shipment Record must be accurate to within 10% of the volume of the load.
- i. The generator or an authorized (in writing) agent must sign the accompanying paperwork.
- j. The transporter's vehicle must have the following markings on all four (4) sides of the containers (ie. roll-off or lugger box):



OR



orange rectangle

white diamond

Class 9 labels must be placed on these containers on opposite sides of the rear of the container.

- k. Annual training must be provided to all applicable employees.
- l. An EPA or OSHA "DANGER" label should also be displayed on all containers during loading and unloading only.

IF CONDITIONS a - l ARE NOT MET, THE LOAD WILL NOT BE ACCEPTED.

2. Additional procedures for hauling companies.

- a. The division must have a REVP approval to haul asbestos.
- b. The transportation vehicle must carry a Material Safety Data Sheet for asbestos.
- c. The driver must complete and sign the accompanying paperwork before leaving the generator.
- d. A copy of the accompanying paperwork, signed by the transporter, should remain with the generator.
- e. The hauler will retain a copy of the landfill accepted paperwork.

3. Additional procedures for landfills.

- a. The landfill must be licensed or approved to accept asbestos.
- b. All volume discrepancies (\geq 10%) must be resolved prior to acceptance of the load. Any discrepancies which are unresolvable should be reported immediately to the Technical Manager.
- c. If the asbestos is improperly containerized (e.g. ripped bags), the load and accompanying paperwork must be rejected within 24 hours. Written notification of the rejection should be made to both the generator's and the site's NESHAP Administrator.
- d. The accompanying paperwork must be signed after verification of the load. The appropriate copy must be mailed to the generator within 30 days. The paperwork must be retained by the landfill for a minimum of two years.
- e. An area must be "prepared" (see asbestos manual) in the landfill for the asbestos. This area must be separate from the working face, and not within 10 feet of the base, side slope, or top of the final elevation.
- f. Asbestos may not be used for roadways, nor buried adjacent to roadways.
- g. The location, depth, area, and volume must be marked on a map or diagram (3-D grid).
- h. Asbestos must be covered with six (6) inches of compacted, non-asbestos containing material after acceptance.
- i. If construction activity is going to occur in areas of previous asbestos disposal, notification must be made to the appropriate regulatory body 45 days prior to starting.
- j. Upon site closure, identify asbestos acceptance to the regulatory agency, and on the property deed.



MIDWEST

RASB 10644

ASBESTOS WASTE PROFILE SHEET

I. Generator: MILWAUKEE Solway CORP & GAS
 Site Address 311 E. Greenfield Ave Mailing Address SAMA
 City, State & Zip MILWAUKEE, WI 53204 City, State & Zip _____
 Generator Contact Mr. Hans Geyer Title PM Phone 414-645-0635

II. Contractor: COMPLETE DECON INC. Contact Jody / Bob / Lonnie
 Address 4690 E. Second St. Unit 3 Title _____
 City, State & Zip BRANCA, CA 94510 Phone 707-747-4800

III. Hauler: W.M. Milwaukee
 Address W124 N 8925 Boundary Road
 City, State & Zip Menomonee Falls, WI 53051 Phone 262-251-4000

IV. Type of Asbestos Material: (Describe) Pipe lagging, Boiler lagging, Debris with Coal Dust
 Friable Non-Friable Cat I Non-Friable Cat II
 Is this a DOT hazardous material? Yes No If yes, the proper DOT shipping name must be used:
 RQ, Asbestos, 9, NA2212, III
 Removal method(s) (describe) WET methods, Hand Tools
 Specify wetting agent: water other (attach MSDS)

V. Job Type: Renovation Demolition Other (describe) _____
 Please explain "no" responses to the following questions in the space provided below.
 If renovation or demolition, has the agency been notified per 40 CFR 61.145 or applicable state/local regulations? Yes No
 If demolition: Will the asbestos be removed prior to demolition? Yes No
 Please explain "yes" responses to the following questions in the space provided below.
 Associated Material:
 mastic removal? (Attach MSDS, if applicable) Yes No
 asbestos contaminated with ~~solvent~~ COAL DUST Yes No
 asbestos contaminated with Special, RCRA hazardous or TSCA (PCB) waste? Yes No

VI. Waste Volume & Units 850 YD's BULK (Bags) _____ DRUMS _____ OTHER (describe) _____

VII. Disposal approval period requested: From 9-2-03 to 9-2-07

VIII. Disposal approval requested at: A Subtitle D (Non-Hazardous) Landfill A Subtitle C (Hazardous) Landfill

IX. Landfill Site Requested: Metro RDF + Orchard Ridge RDF

X. GENERATOR CERTIFICATION: I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS CONTAINS TRUE AND ACCURATE DESCRIPTIONS OF THIS ASBESTOS WASTE MATERIAL, AND ALL RELEVANT INFORMATION REGARDING KNOWN OR SUSPECTED HAZARDS IN THE POSSESSION OF THE GENERATOR HAS BEEN DISCLOSED. WASTE MANAGEMENT WILL BE NOTIFIED IN WRITING OF ANY CHANGES IN THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS.

SIGNATURE: [Signature] DATE: 9-2-03
 NAME (type or print): L. Whigham TITLE: ADMINISTRATIVE AGENT for Owner



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

RASB 10645
Waste Profile Sheet Code

I. Request For Decision: Initial Renewal

GENERATOR NAME: Milwaukee Salvage Coke + Gas ADDRESS: 311 East Greenfield Avenue

CITY, STATE: Milwaukee, WI 53204

WASTE NAME(S): Non-Friable Asbestos - NESHAP Notified

PROPOSED MANAGEMENT FACILITY: Metro RDF

PROPOSED INTERMEDIATE TRANSFER FACILITY: WIA

TRANSPORTER: WM - Milwaukee

WMNA REQUESTER: Deag Stind SIGNATURE: [Signature]

II. TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain: _____

If Approved, Complete A, B, C And D Below:

A. Management Method(s): Landfill in accordance with attached "conditions for acceptance and disposal of asbestos waste".

B. Precautions, Conditions, or Limitations on Approval: Check containers to verify compliance with applicable regulations.

C. Decision Expiration Date: 9/3/08

TECH MGR. SIGNATURE [Signature] NAME (Print) Richard L. Payer DATE: 9/4/03

III. WMI MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE [Signature] NAME (Print) Demi's Orphal DATE: 9/4/03

IV. WMI INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE _____ NAME (Print) _____ DATE: _____

NON-FRIABLE ASBESTOS - MESHAP NOTIFIED

1. Requirements for Landfills and Hauling Companies

- a. The asbestos must be sealed in leak-tight containers, or wrapping (\geq 6 mil plastic bags or wrapping).
- b. A loading sign meeting OSHA criteria must be used during loading and unloading (see below).

Danger
Asbestos Dust Hazard
Cancer and Lung Disease Hazard
Authorized Personnel Only

- c. The material must be shipped in such a manner (eg., open top box, compactor box with inspection ports, drums) that will allow verification of proper packaging, labeling, and volume. Open top boxes must be covered with a solid type tarp during shipment.
- d. A Waste Shipment Record must accompany every load, and the volume reported on the Waste Shipment Record must be accurate to within 10% of the volume of the load.
- e. The generator or an authorized (in writing) agent must sign the accompanying paperwork.

IF CONDITIONS a - e ARE NOT MET, THE LOAD WILL NOT BE ACCEPTED.

2. Additional procedures for hauling companies.

- a. The transporter must complete and sign the Waste Shipment Record before leaving the generator.
- b. A copy of the Waste Shipment Record, signed by the transporter, should remain with the generator.
- c. The hauler will retain a copy of the landfill accepted Waste Shipment Record.

3. Additional procedures for landfills.

- a. The landfill must be licensed or approved to accept asbestos.
 - b. All volume discrepancies (\geq 10%) must be resolved prior to acceptance of the load. Any discrepancies which are unresolvable should be reported immediately to the Technical Manager.
 - c. The accompanying paperwork must be signed after verification of the load. The appropriate copy must be mailed to the generator within 30 days. The paperwork must be retained by the landfill for a minimum of two years.
 - d. Asbestos may not be used for roadways, nor buried adjacent to roadways.
 - e. The location, depth, area, and volume must be marked on a map or diagram (3-D grid).
 - g. Asbestos must be covered with at least six (6) inches of compacted, non-asbestos containing material after acceptance.
 - h. If construction activity is going to occur in areas of previous asbestos disposal, notification must be made to the appropriate regulatory body 45 days prior to starting.
 - i. Upon site closure, identify asbestos acceptance to the regulatory agency, and on the property deed.
-



RASB 10645

MIDWEST

ASBESTOS WASTE PROFILE SHEET

I. Generator: MILWAUKEE SOLVAY COKE & GAS
 Site Address 311 E. GREENFIELD AVE Mailing Address SAME
 City, State & Zip MILWAUKEE, WI 53204 City, State & Zip _____
 Generator Contact MR. HANS GUYER Title P.M. Phone 414-645-0655

II. Contractor: Complete Dacow Inc. Contact Bob/Jody/Lewis
 Address 4490 E. SECOND ST. UNIT 3 Title _____
 City, State & Zip BENICIA, CA 94510 Phone 707-747-4800

III. Hauler: WM-Milwaukee
 Address W124 N28925 Bendam Road
 City, State & Zip Menomonee Falls, WI 53051 Phone 262-251-4008

IV. Type of Asbestos Material: (Describe) FLOOR TILE MASTIC
 Friable Non-friable Cat I Non-friable Cat II
 Is this a DOT hazardous material? Yes No If yes, the proper DOT shipping name must be used:
 RQ, Asbestos, NA2212, III
 Removal method(s) (describe) WET REMOVAL WITH HAND TOOLS
 Specify wetting agent: water other (attach MSDS)

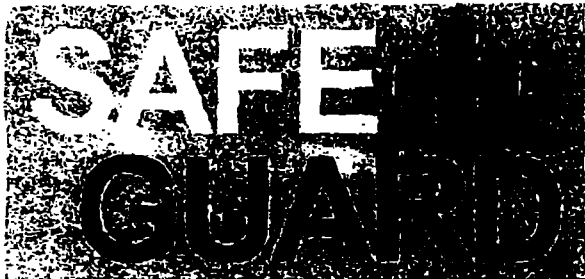
V. Job Type: Renovation Demolition Other (describe) _____
 Please explain "no" responses to the following questions in the space provided below.
 If renovation or demolition, has the agency been notified per 40 CFR 61.145 or applicable state/local regulations? Yes No
 If demolition: Will the asbestos be removed prior to demolition? Yes No
 Please explain "yes" responses to the following questions in the space provided below.
 Associated Material:
 mastic removal? (Attach MSDS, if applicable) Yes No
 asbestos contaminated with soil or gravel? Yes No
 asbestos contaminated with Special, RCRA hazardous or TSCA (PCB) waste? Yes No

VI. Waste Volume & Units _____ BULK (Bags) 10 DRUMS _____ OTHER (describe) _____
 VII. Disposal approval period requested: From 9-2-03 To 9-2-07
 VIII. Disposal approval requested at: A Subtitle D (Non-Hazardous) Landfill _____ A Subtitle C (Hazardous) Landfill
 IX. Landfill Site Requested: Metro RDF + Orchard Ridge RDF

X. GENERATOR CERTIFICATION: I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS CONTAINS TRUE AND ACCURATE DESCRIPTIONS OF THIS ASBESTOS WASTE MATERIAL, AND ALL RELEVANT INFORMATION REGARDING KNOWN OR SUSPECTED HAZARDS IN THE POSSESSION OF THE GENERATOR HAS BEEN DISCLOSED. WASTE MANAGEMENT WILL BE NOTIFIED IN WRITING OF ANY CHANGES IN THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS.

SIGNATURE: [Signature] DATE: 9-2-03
 NAME (type or print): L. Whigham TITLE: ADMINISTRATIVE AGENT for OWNER

Waste Management



Low Odor MASTIC REMOVER

SAFE GUARD LOW ODOR MASTIC REMOVER QUICKLY DISSOLVES FLOOR TILE MASTIC, SPRAY ADHESIVE, AND NATURAL PASTES AND GLUES. SEE SIDE PANEL FOR PRODUCT USAGE AND CAUTIONS.

APPLICATION:

SATURATE MASTIC TO BE REMOVED MANUALLY WITH GARDEN SPRAYER. ALLOW TIME FOR REMOVER TO PENETRATE AND SOFTEN MASTIC. DISLODGE WITH STIFF BROOM AND/OR SQUEEGEE. REPEAT IF NECESSARY. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

FOR INDUSTRIAL USE ONLY

EMPTIED CONTAINER RETAINS PRODUCT RESIDUE AND VAPORS. OBSERVE ALL PRECAUTIONS EVEN AFTER CONTAINER IS EMPTIED. DO NOT CUT, DRILL, OR WELD ON OR NEAR THIS CONTAINER.

D.O.T. SHIPPING NAME: (49 CFR 172.101) COMBUSTIBLE LIQUID, N.O.S. (CONTAINS HYDROCARBON MIXTURE) COMBUSTIBLE LIQUID, NA 1993, PG III

MANUFACTURED FOR:

INLINE DISTRIBUTION
9380 SAN FERNANDO RD.
SUN VALLEY, CA. 91352
(800) 244-7724

CAUTIONS:

COMBUSTIBLE: KEEP AWAY FROM HEAT, SPARKS, FLAME AND SOURCE OF IGNITION. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID BREATHING MIST. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER USING. KEEP CONTAINER CLOSED.

SPECIAL PRECAUTIONS AND CONTROL MEASURES:

RESPIRATORY PROTECTION-WHEN USING PRODUCT IN ENCLOSED AREAS, USE WITH ORGANIC VAPOR CARTRIDGE CCR-OV. VENTILATION-IN ENCLOSED AREAS USE WITH MECHANICAL VENTILATION.

PROTECTIVE GLOVES- RUBBER OR NEOPRENE.

EYE PROTECTION-CHEMICAL GOGGLES.

EXTINGUISH MEDIA- WATER, CARBON DIOXIDE, DRY CHEMICAL HALON.

IN CASE OF SPILL- EXTINGUISH ALL SOURCES OF IGNITION. DIKE AREA WITH ABSORBENT AND/OR CLAY, VERMICULITE. PLACE IN CHEMICAL CONTAINER FOR DISPOSAL.

REFER TO IMPORTANT INFORMATION ON MATERIAL SAFETY DATA SHEET.

HMS RATING 1-2-0-B.

ADHERE TO OSHA AND EPA REGULATIONS WHEN USING THIS PRODUCT.

FIRST AID:

EYE CONTACT-IMMEDIATELY FLUSH EYES FOR 15 MINUTES WITH LARGE AMOUNTS OF WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.

SKIN CONTACT- WASH WITH SOAP AND WATER.

INHALATION-MOVE TO FRESH AIR. IF NECESSARY SUPPORT BREATHING. IF BREATHING DOES NOT RETURN TO NORMAL WITHIN A FEW MINUTES, GET MEDICAL ATTENTION.

INGESTION- DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

NET CONTENTS: 5 Gal.

12/11/2002 15:59

8187685717

INLINE DIST

PAGE 08

MATERIAL SAFETY DATA SHEET



O.C.C.S.

Buena Park, California
(714) 521-1789

PRODUCT NAME: INLINE SAFEGUARD LOW ODOR MASTIC REMOVER

HMIS CODES: H:1 F:2 B:0 P:H

EFFECTIVE DATE: 6/8/99

CHEMTREC EMERGENCY TELEPHONE: 800-424-9300

I. HAZARDOUS INGREDIENTS:

	CAS #	PEL	TLV
Aliphatic Hydrocarbon	64742-47-8	100ppm	100ppm
Aromatic Hydrocarbons	64742-94-5	100ppm	100ppm
Ethylene Glycol Monobutyl Ether*	111-76-2*	25ppm	25ppm skin

All chemical compounds marked with an asterisk () are chemicals subject to the reporting requirements of Section 313 of SARA Title III. You must notify each person to whom this mixture or trade name product is sold."

II. PHYSICAL DATA:

MELTING POINT: NA	SPECIFIC GRAVITY: 0.790
BOILING POINT: 375-520 F	SOLUBILITY IN WATER: Forms Emulsion
VAPOR PRESSURE (mm Hg): ND	EVAPORATION RATE: 2.7
VAPOR DENSITY (Air=1): 5.48	pH: Neutral
ODOR: Mild	
APPEARANCE: Clear Colorless Liquid	

III. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: 150 F	METHOD USED: Tag Closed Cup
AUTOIGNITION TEMPERATURE: 440 F	
FLAMMABLE LIMITS: UPPER: 6.0	LOWER: 1.0
EXTINGUISHING MEDIA: Dry Chemical, Foam, or Carbon Dioxide.	
DO NOT USE WATER, could create floating fire.	

FIRE AND EXPLOSION HAZARDS:

This material may produce a floating fire hazard. Extinguish all nearby sources of ignition. A vapor accumulation would flash and/or explode if ignited. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure.

SPECIAL FIRE FIGHTING PROCEDURES:

Wear goggles and self-contained breathing apparatus. Use water to keep fire-exposed containers cool and to flush spills away from fire. In the case of large fires also cool surrounding equipment and structures with water.

IV. REACTIVITY:

STABILITY: Stable
 CONDITIONS TO AVOID: Heat, Flames and sparks.
 HAZARDOUS POLYMERIZATION: Will not occur
 INCOMPATIBILITY: Strong oxidizing and reducing agents. Reactive metals.
 HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes of carbon oxides and nitrogen oxides on combustion. Thermal decomposition products are highly dependent on the combustion conditions.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: INLINE SAFEGUARD LOW ODOR MASTIC REMOVER

V. ENVIRONMENTAL AND DISPOSAL INFORMATION:

CAUTION: Use appropriate protective and safety equipment. See Section VIII of this Material Safety Data Sheet for handling precautions.

SMALL SPILL: Eliminate possible sources of ignition. Mop up or soak with non-combustible absorbent inorganic material. Transfer to DOT-approved container.

LARGE SPILL: Eliminate possible sources of ignition. Contain by diking with a non-combustible absorbent inorganic material. Prevent runoff from entering sewers, storm drains, surface water, and soil. Transfer contaminated absorbent to a DOT-approved container.

WASTE DISPOSAL INFORMATION: Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures.

NOTE: Comply with all applicable government regulations on spill reporting and handling and disposal of waste. Empty containers can have residues, gases, and mists, and are subject to proper disposal.

VI. HEALTH HAZARD DATA

BREATHED: In high concentrations, anesthetic or narcotic effects. Excessive inhalation of vapor causes nasal and respiratory irritation. A component in very high concentrations causes headache, giddiness, mental confusion, nausea. Breathing high concentrations may result in CENTRAL NERVOUS SYSTEM depression and/or chemical pneumonitis.

SKIN CONTACT: Moderately irritating to the skin. Prolonged and repeated contact can cause defatting and drying of the skin which may result in severe skin irritation and dermatitis.

EYE CONTACT: Component(s) of this product may cause severe irritation with corneal injury which may result in permanent impairment of vision or even blindness.

SWALLOWED: If aspirated (liquid enters lungs), a component may be rapidly absorbed through lungs and may result in injuries to other body systems. Swallowing the liquid may result in vomiting. If vomiting occurs spontaneously, do not allow vomit to be breathed into lungs, as even a small quantity may cause lung damage (chemical pneumonitis and pulmonary edema/hemorrhage).

MEDICAL CONDITIONS AGGRAVATED: Pre-existing skin and respiratory disorders may be aggravated by exposure to this product.

MATERIAL SAFETY DATA SHEET**PRODUCT NAME: INLINE SAFEGUARD LOW ODOR MASTIC REMOVER****SUSPECTED CANCER AGENT:****FEDERAL OSHA**
No**CA OSHA**
No**NTP**
No**IARC**
No

TARGET ORGANS, OTHER THAN THOSE IMPLIED BY ROUTES OF ENTRY (I.E., BREATHED, INCLUDES RESPIRATORY TRACT AND LUNGS) ARE CAPITALIZED.
This product DOES NOT contain chemicals known to the State of California to cause cancer or reproductive toxicity.

VII. FIRST AID:

BREATHED: Remove victim to fresh air at once. If not breathing, give mouth-to-mouth resuscitation. If breathing is difficult, give oxygen. Keep victim warm and at rest. **GET IMMEDIATE MEDICAL ATTENTION.**

SKIN: Wash skin immediately with lots of soap and water. If clothes and shoes are contaminated, remove and wash before reuse. Get medical attention if ill effect or irritation develops.

EYES: Wash eyes immediately with running water for at least 15 minutes. Use fingers to assure that eyelids are separated and that eye is being washed. Lift the lower and upper lid occasionally. **GET IMMEDIATE MEDICAL ATTENTION.**

SWALLOWED: DO NOT INDUCE VOMITING. If victim is conscious, give large amounts of water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Do not attempt to give fluids to unconscious victim. **GET IMMEDIATE MEDICAL ATTENTION.**

NOTE TO PHYSICIAN:

Supportive care: Treatment based on judgment of physician in response to reactions of patient.

VIII. HANDLING PRECAUTIONS:

VENTILATION: Control airborne concentrations below exposure guidelines (Section I) with **MECHANICAL VENTILATION**, if necessary. Local explosion-proof **EXHAUST VENTILATION** may be necessary for some operations.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below exposure guidelines. When respiratory protection is required for certain operations, use a NIOSH-approved canister-type respirator. In confined or poorly ventilated areas or for emergency and other conditions where the exposure guidelines may be greatly exceeded, use an approved positive-pressure, self-contained breathing apparatus.

MATERIAL SAFETY DATA SHEET**PRODUCT NAME: INLINE SAFEGUARD LOW ODOR MASTIC REMOVER**

EYE PROTECTION: Contact lenses should not be used. Contact lenses may increase the severity of the injury. Suggested protection is safety glasses, but where contact with liquid is likely, chemical goggles or face shields are recommended.

SKIN PROTECTION: Impermeable gloves are recommended. When prolonged or frequently repeated contact could occur, use protective clothing. Selection of specific items such as boots, apron, or full-body suit will depend on operation. Wash thoroughly after handling chemicals.

SPECIAL EQUIPMENT: Suitable safety equipment includes safety showers, eye washes, and proper fire extinguishing media.

XI. STORAGE AND HANDLING:

Train all employees on all special handling procedures in this section before they work with this product. Exercise reasonable care and caution. Personnel should avoid breathing vapors and/or mists and getting product in the eyes or on the skin.

DO NOT CONSUME food, drink, or tobacco in areas where they may become contaminated with this material. Keep containers cool, dry, and away from sources of ignition.

DO NOT STORE product in direct sunlight, high temperatures, or below freezing areas. Keep product container tightly closed when not in use. Protect containers from physical damage. Use and store with adequate ventilation.

DO NOT cut, grind, weld or drill on or near this container. Ground all equipment. Wash thoroughly after using.

XI. DOT

PROPER SHIPPING NAME: Combustible Liquid NOS, (Aliphatic Hydrocarbons) NA1993, PG.III

XI. OTHER PRECAUTIONS.

NONE Abbreviations: NA: Not applicable; ND: Not Determined.

THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY, EXPRESS OR IMPLIED, IS MADE.



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

RASB 10133
Waste Profile Sheet Code

I. Request For Decision: X Initial Renewal

GENERATOR NAME: Milwaukee Solway Cake + Gas ADDRESS: 311 East Greenfield Avenue

CITY, STATE: Milwaukee, WI 53204

WASTE NAME(S): Non-Friable Asbestos - NESHAP Notified

PROPOSED MANAGEMENT FACILITY: Metro TDF

PROPOSED INTERMEDIATE TRANSFER FACILITY: N/A TRANSPORTER: WM-Milwaukee

WMNA REQUESTER: Jay Glind SIGNATURE: Jay Glind

II. TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain: _____

If Approved, Complete A,B,C And D Below:

A. Management Method(s): Landfill in accordance with attached "conditions for acceptance and disposal of asbestos waste".

3. Precautions, Conditions, or Limitations on Approval: Check containers to verify compliance with applicable regulations.

C: Decision Expiration Date: 9/3/08

TECH MGR. SIGNATURE: Richard L. Payer NAME (Print) Richard L. Payer DATE: 9/3/03

III. WMI MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE: Dennis Dreghal NAME (Print) Dennis Dreghal DATE: 9/4/03

IV. WMI INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE: _____ NAME (Print) _____ DATE: _____

NON-FRIABLE ASBESTOS - MESHAP NOTIFIED

1. Requirements for Landfills and Hauling Companies

- a. The asbestos must be sealed in leak-tight containers, or wrapping (\geq 6 mil plastic bags or wrapping).
- b. A loading sign meeting OSHA criteria must be used during loading and unloading (see below).

Danger
Asbestos Dust Hazard
Cancer and Lung Disease Hazard
Authorized Personnel Only

- c. The material must be shipped in such a manner (eg., open top box, compactor box with inspection ports, drums) that will allow verification of proper packaging, labeling, and volume. Open top boxes must be covered with a solid type tarp during shipment.
- d. A Waste Shipment Record must accompany every load, and the volume reported on the Waste Shipment Record must be accurate to within 10% of the volume of the load.
- e. The generator or an authorized (in writing) agent must sign the accompanying paperwork.

IF CONDITIONS a - e ARE NOT MET, THE LOAD WILL NOT BE ACCEPTED.

2. Additional procedures for hauling companies.

- a. The transporter must complete and sign the Waste Shipment Record before leaving the generator.
- b. A copy of the Waste Shipment Record, signed by the transporter, should remain with the generator.
- c. The hauler will retain a copy of the landfill accepted Waste Shipment Record.

3. Additional procedures for landfills.

- a. The landfill must be licensed or approved to accept asbestos.
- b. All volume discrepancies (\geq 10%) must be resolved prior to acceptance of the load. Any discrepancies which are unresolvable should be reported immediately to the Technical Manager.
- c. The accompanying paperwork must be signed after verification of the load. The appropriate copy must be mailed to the generator within 30 days. The paperwork must be retained by the landfill for a minimum of two years.
- d. Asbestos may not be used for roadways, nor buried adjacent to roadways.
- e. The location, depth, area, and volume must be marked on a map or diagram (3-D grid).
- g. Asbestos must be covered with at least six (6) inches of compacted, non-asbestos containing material after acceptance.
- h. If construction activity is going to occur in areas of previous asbestos disposal, notification must be made to the appropriate regulatory body 45 days prior to starting.
- i. Upon site closure, identify asbestos acceptance to the regulatory agency, and on the property deed.



MIDWEST

RASB 10133

ASBESTOS WASTE PROFILE SHEET

I. Generator: MILWAUKEE SOLVAY COKE & GAS
 Site Address 311 EAST GREENFIELD AVE. Mailing Address SAMC
 City, State & Zip MILWAUKEE, WI 53204 City, State & Zip _____
 Generator Contact MO. HANS Geyer Title PM Phone 414-645-0635

II. Contractor: Complete Decon Inc Contact Bob / Jody
 Address 4690 E. SECOND ST. UNIT 3 Title _____
 City, State & Zip BENICIA, CA 94510 Phone 707-747-4800

III. Hauler: Waste Management of Milwaukee
 Address W124 N8925 Boundary Road
 City, State & Zip Menomonee Falls WI 53051 Phone 262-251-4000

IV. Type of Asbestos Material: (Describe) Red Brick, Boiler Brick, TRANSITE
 _____ Friable _____ Non-friable Cat I _____ Non-friable Cat II
 Is this a DOT hazardous material? _____ Yes No If yes, the proper DOT shipping name must be used:
 _____ RQ, Asbestos, S, NA2212, III
 Removal method(s) (describe) WET REMOVAL WITH HAND TOOLS
 Specify wetting agent: water _____ other (attach MSDS)

V. Job Type: _____ Renovation Demolition _____ Other (describe) _____
 Please explain "no" responses to the following questions in the space provided below.
 If renovation or demolition, has the agency been notified per 40 CFR 61.145
 or applicable state/local regulations? Yes _____ No
 If demolition: Will the asbestos be removed prior to demolition? Yes _____ No
 Please explain "yes" responses to the following questions in the space provided below.
 Associated Material:
 mastic removal? (Attach MSDS, if applicable) _____ Yes No
 asbestos contaminated with soil or gravel? _____ Yes No
 asbestos contaminated with Special, RCRA hazardous or TSCA (POB) waste? _____ Yes No

VI. Waste Volume & Units 5200 YDS BULK (Bags) _____ DRUMS _____ OTHER (describe) _____
 VII. Disposal approval period requested: From 9-2-03 To 9-2-07
 VIII. Disposal approval requested at: A Subtitle D (Non-Hazardous) Landfill _____ A Subtitle C (Hazardous) Landfill
 IX. Landfill Site Requested: Macro RDF + Orchard Ridge RDF
 X. GENERATOR CERTIFICATION: I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS
 CONTAINS TRUE AND ACCURATE DESCRIPTIONS OF THIS ASBESTOS WASTE MATERIAL, AND ALL RELEVANT INFORMATION
 REGARDING KNOWN OR SUSPECTED HAZARDS IN THE POSSESSION OF THE GENERATOR HAS BEEN DISCLOSED. WASTE
 MANAGEMENT WILL BE NOTIFIED IN WRITING OF ANY CHANGES IN THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED
 DOCUMENTS.

SIGNATURE: [Signature] DATE: 9-2-03
 NAME (type or print): L. Whigham TITLE: ADMINISTRATIVE AGENT for OWNER

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>	
9/10/2003	986527	2005001	WM MILWAUKEE	I0794230	MILWAUKEE SOLVAY CAKE & GA	N10133	773852	NFA	1	60.00	3.950	
9/10/2003	986583	2005001	WM MILWAUKEE	I0794230	MILWAUKEE SOLVAY CAKE & GA	N10133	773851	NFA	1	60.00	4.370	
9/10/2003	986629	2005001	WM MILWAUKEE	I0794230	MILWAUKEE SOLVAY CAKE & GA	N10133	773853	NFA	1	60.00	7.370	
9/24/2003	989961	2005001	WM MILWAUKEE	I0606630	MILWAUKEE SOLVAY CAKE & GA	N10133	773855	NFA	1	60.00	4.450	
Grand Total:										4	240.00	20.140



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

RASB10643
Waste Profile Sheet Code

I. Request For Decision: Initial Renewal

GENERATOR NAME: Milwaukee Salvage Coke + Gas ADDRESS: 311 East Greenfield Avenue

CITY, STATE: Milwaukee, WI 53204

WASTE NAME(S): Non-Friable Asbestos - NESHP Notified

PROPOSED MANAGEMENT FACILITY: Metro JCDF

PROPOSED INTERMEDIATE TRANSFER FACILITY: N/A TRANSPORTER: WM - Milwaukee

WMNA REQUESTER: Jerry Glind SIGNATURE: Jerry Glind

II. TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain: _____

If Approved, Complete A,B,C And D Below:

A. Management Method(s): Landfill in accordance with attached "conditions for acceptance and disposal of asbestos waste".

B. Precautions, Conditions, or Limitations on Approval: Check containers to verify compliance with applicable regulations.

C: Decision Expiration Date: 9/3/08

TECH MGR. SIGNATURE Richard Payer NAME (Print) Richard L. Payer DATE: 9/4/03

III WM MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE Dennis Drepho NAME (Print) Dennis Drepho DATE: 9/4/03

IV WM INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE _____ NAME (Print) _____ DATE: _____

NON-FRIABLE ASBESTOS - MESHAP NOTIFIED

1. Requirements for Landfills and Hauling Companies

- a. The asbestos must be sealed in leak-tight containers, or wrapping (\geq 6 mil plastic bags or wrapping).
- b. A loading sign meeting OSHA criteria must be used during loading and unloading (see below).

Danger
Asbestos Dust Hazard
Cancer and Lung Disease Hazard
Authorized Personnel Only

- c. The material must be shipped in such a manner (eg., open top box, compactor box with inspection ports, drums) that will allow verification of proper packaging, labeling, and volume. Open top boxes must be covered with a solid type tarp during shipment.
- d. A Waste Shipment Record must accompany every load, and the volume reported on the Waste Shipment Record must be accurate to within 10% of the volume of the load.
- e. The generator or an authorized (in writing) agent must sign the accompanying paperwork.

IF CONDITIONS a - e ARE NOT MET, THE LOAD WILL NOT BE ACCEPTED.

2. Additional procedures for hauling companies.

- a. The transporter must complete and sign the Waste Shipment Record before leaving the generator.
- b. A copy of the Waste Shipment Record, signed by the transporter, should remain with the generator.
- c. The hauler will retain a copy of the landfill accepted Waste Shipment Record.

3. Additional procedures for landfills.

- a. The landfill must be licensed or approved to accept asbestos.
- b. All volume discrepancies (\geq 10%) must be resolved prior to acceptance of the load. Any discrepancies which are unresolvable should be reported immediately to the Technical Manager.
- c. The accompanying paperwork must be signed after verification of the load. The appropriate copy must be mailed to the generator within 30 days. The paperwork must be retained by the landfill for a minimum of two years.
- d. Asbestos may not be used for roadways, nor buried adjacent to roadways.
- e. The location, depth, area, and volume must be marked on a map or diagram (3-D grid).
- g. Asbestos must be covered with at least six (6) inches of compacted, non-asbestos containing material after acceptance.
- h. If construction activity is going to occur in areas of previous asbestos disposal, notification must be made to the appropriate regulatory body 45 days prior to starting.
- i. Upon site closure, identify asbestos acceptance to the regulatory agency, and on the property deed.



MIDWEST

RASB 10643

ASBESTOS WASTE PROFILE SHEET

I. Generator: MILWAUKEE Solvay Baker Gas
 Site Address 311 EAST GRANDFIELD AVE. Mailing Address SAME
 City, State & Zip MILWAUKEE, WI 53204 City, State & Zip _____
 Generator Contact HANS BEYER Title Rm Phone 414-645-0635

II. Contractor: Complete Decon Inc. Contact Bob/Jody/Lonnie 707-590-3006
 Address 4690 E. SECOND ST. UNIT 3 Title _____
 City, State & Zip BENICIA, CA 94510 Phone 707-242-4800

III. Hauler: Waste Management of Milwaukee
 Address W124 N8925Baudwin Road
 City, State & Zip Menomonee Falls, WI 53051 Phone 262-251-4000

IV. Type of Asbestos Material: (Describe) Roofing Material, GASKETS, Resilient Floor Covering
 _____ Friable Non-Friable Cat I Non-friable Cat II per Lonnie 9/4/03
 Is this a DOT hazardous material? _____ Yes No If yes, the proper DOT shipping name must be used.
 Removal method(s) (describe) Wet Removal with HAND TOOLS
 Specify wetting agent: water _____ other (attach MSDS)

V. Job Type: _____ Renovation Demolition _____ Other (describe) _____
 Please explain "no" responses to the following questions in the space provided below.
 If renovation or demolition, has the agency been notified per 40 CFR 61.145 or applicable state/local regulations? Yes _____ No
 If demolition: Will the asbestos be removed prior to demolition? Yes _____ No
 Please explain "yes" responses to the following questions in the space provided below.
 Associated Material:
 mastic removal? (Attach MSDS, if applicable) _____ Yes No
 asbestos contaminated with soil or gravel? _____ Yes No
 asbestos contaminated with Special, RCRA hazardous or TSCA (PCB) wastes? _____ Yes No

VI. Waste Volume & Units 4600 yd's BULK (Bags) _____ DRUMS _____ OTHER (describe) _____
 VII. Disposal approval period requested: From 9-2-03 To 9-2-07
 VIII. Disposal approval requested at: A Subtitle D (Non-Hazardous) Landfill _____ A Subtitle C (Hazardous) Landfill
 IX. Landfill Site Requested: Metro RDF + Orchard Ridge RDF
 X. GENERATOR CERTIFICATION: I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS CONTAINS TRUE AND ACCURATE DESCRIPTIONS OF THIS ASBESTOS WASTE MATERIAL, AND ALL RELEVANT INFORMATION REGARDING KNOWN OR SUSPECTED HAZARDS IN THE POSSESSION OF THE GENERATOR HAS BEEN DISCLOSED. WASTE MANAGEMENT WILL BE NOTIFIED IN WRITING OF ANY CHANGES IN THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS.

SIGNATURE: [Signature] DATE: 9-2-03
 NAME (type or print): L. Whigham TITLE: ADMINISTRATIVE AGENT for Decon

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>	
9/4/2003	984852	2005001	WM MILWAUKEE	I0870330	MILWAUKEE SOLVAY CAKE & GA	N10643	774064	NFA	1	60.00	5.115	
9/4/2003	984882	2005001	WM MILWAUKEE	I0981130	MILWAUKEE SOLVAY CAKE & GA	N10643	774065	NFA	1	60.00	4.685	
9/10/2003	986458	2005001	WM MILWAUKEE	407942	MILWAUKEE SOLVAY CAKE & GA	N10643	773952	NFA	1	60.00	8.350	
9/10/2003	986474	2005001	WM MILWAUKEE	I0794230	MILWAUKEE SOLVAY CAKE & GA	N10643	773953	NFA	1	60.00	7.810	
Grand Total:										4	240.00	25.960



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

RASB 10642

Waste Profile Sheet Code

I. Request For Decision: X Initial Renewal

GENERATOR NAME: Milwaukee Solvay Coke & Gas ADDRESS: 311 East Greenfield Avenue

CITY, STATE: Milwaukee, WI 53204

WASTE NAME(S): Friable Asbestos - NESHAP Notified

PROPOSED MANAGEMENT FACILITY: Metro RDF

PROPOSED INTERMEDIATE TRANSFER FACILITY: N/A TRANSPORTER: WM-Milwaukee

WMNA REQUESTER: Deezy Lind SIGNATURE: Deezy Lind

II. TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain:

If Approved, Complete A, B, C And D Below:

A. Management Method(s): Landfill in accordance with attached "conditions for acceptance and disposal of asbestos waste".

B. Precautions, Conditions, or Limitations on Approval: Check containers to verify compliance with applicable regulations.

C: Decision Expiration Date:

9/3/04

TECH MGR. SIGNATURE: Richard Pager NAME (Print) Richard L. Pager DATE: 9/3/03

III. WMI MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations

SITE MGR. SIGNATURE: Dennis Dwyer NAME (Print) Dennis Dwyer DATE: 9/4/03

IV. WMI INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations

SITE MGR. SIGNATURE _____ NAME (Print) _____ DATE: _____

FRIABLE ASBESTOS - NESHAP NOTIFIED

1. Requirements for Landfills and Hauling Companies

- a. The asbestos must be sealed in leak-tight containers, or wrapping (≥ 6 mil plastic bags or wrapping).
- b. A loading sign meeting OSHA criteria must be used during loading and unloading (see below).



Danger
Asbestos Dust Hazard
Cancer and Lung Disease Hazard
Authorized Personnel Only

- c. Packages (bags) must display one of the following labels:

CAUTION
Contains Asbestos Fibers
Avoid Opening or Breaking Containers
Breathing Asbestos is Hazardous to Your Health

OR

CAUTION
Contains Asbestos Fibers
Avoid Creating Dust
May Cause Serious Bodily Harm

- d. Individual packages (bags or drums) of friable asbestos must be marked with Asbestos, 2212, RQ and labeled with a Class 9 label.
- e. Containers less than 23 cubic yards must also be marked and labeled in this manner.
- f. Packages must be labeled with the generator's name, and the address of the generating location.
- g. The material must be shipped in such a manner (eg., open top box, compactor box with inspection ports, drums) that will allow verification of proper packaging, labeling, and volume. Open top boxes must be covered with a solid type tarp during shipment.
- h. A Waste Shipment Record must accompany every load, and the volume reported on the Waste Shipment Record must be accurate to within 10% of the volume of the load.
- i. The generator or an authorized (in writing) agent must sign the accompanying paperwork.
- j. The transporter's vehicle must have the following markings on all four (4) sides of the containers (ie. roll-off or lugger box):



orange rectangle

OR



white diamond

Class 9 labels must be placed on these containers on opposite sides of the rear of the container.

- k. Annual training must be provided to all applicable employees.
 - l. An EPA or OSHA "DANGER" label should also be displayed on all containers during loading and unloading only.
- IF CONDITIONS a - l ARE NOT MET, THE LOAD WILL NOT BE ACCEPTED.**

2. Additional procedures for hauling companies.

- a. The division must have a REVP approval to haul asbestos.
- b. The transportation vehicle must carry a Material Safety Data Sheet for asbestos.
- c. The driver must complete and sign the accompanying paperwork before leaving the generator.
- d. A copy of the accompanying paperwork, signed by the transporter, should remain with the generator.
- e. The hauler will retain a copy of the landfill accepted paperwork.

3. Additional procedures for landfills.

- a. The landfill must be licensed or approved to accept asbestos.
- b. All volume discrepancies ($\geq 10\%$) must be resolved prior to acceptance of the load. Any discrepancies which are unresolvable should be reported immediately to the Technical Manager.
- c. If the asbestos is improperly containerized (e.g. ripped bags), the load and accompanying paperwork must be rejected within 24 hours. Written notification of the rejection should be made to both the generator's and the site's NESHAP Administrator.
- d. The accompanying paperwork must be signed after verification of the load. The appropriate copy must be mailed to the generator within 30 days. The paperwork must be retained by the landfill for a minimum of two years.
- e. An area must be "prepared" (see asbestos manual) in the landfill for the asbestos. This area must be separate from the working face, and not within 10 feet of the base, side slope, or top of the final elevation.
- f. Asbestos may not be used for roadways, nor buried adjacent to roadways.
- g. The location, depth, area, and volume must be marked on a map or diagram (3-D grid).
- h. Asbestos must be covered with six (6) inches of compacted, non-asbestos containing material after acceptance.
- i. If construction activity is going to occur in areas of previous asbestos disposal, notification must be made to the appropriate regulatory body 45 days prior to starting.
- j. Upon site closure, identify asbestos acceptance to the regulatory agency, and on the property deed.



MIDWEST

RASB 10642

ASBESTOS WASTE PROFILE SHEET

I. Generator: Milwaukee Salvage CORK & GAS
Site Address 311 EAST GREENFIELD AVE
City, State & Zip MILWAUKEE, WISCONSIN
Generator Contact HANS GEYER
Mailing Address SAME
City, State & Zip
Title P.M. Phone 414-645-0635

II. Contractor: Complete DRAIN INC.
Address 4690 E. SECOND ST. UNIT 3
City, State & Zip BENICIA, CA 94510
Contact Bob / Judy / Lonnie
Title
Phone 707-247-4800

III. Hauler: W.M. Milwaukee
Address 1224 N 8925 Boundary Road
City, State & Zip Menomonee Falls, WI 53051
Phone 262-251-4000

IV. Type of Asbestos Material: (Describe) RQ ASBESTOS, 9, NA2212, III {Pipelaying}
Friable Non-friable Cat I Non-friable Cat II {Boiler Laying}
Is this a DOT hazardous material? Yes No
Removal method(s) describe: Glove bagging, cherting, Full containment.
Specify wetting agent: water other (attach MSDS)

V. Job Type: Renovation Demolition Other (describe)
Please explain "no" responses to the following questions in the space provided below.
If renovation or demolition, has the agency been notified per 40 CFR 61.145 or applicable state/local regulations?
If demolition: Will the asbestos be removed prior to demolition?
Please explain "yes" responses to the following questions in the space provided below.
Associated Material:
mastic removal? (Attach MSDS, if applicable)
asbestos contaminated with soil or gravel?
asbestos contaminated with Spacial, RCRA hazardous or TSCA (PCB) waste?

VI. Waste Volume & Units 1000 Yds BULK (Bags) DRUMS OTHER (describe)

VII. Disposal approval period requested: From 9-2-03 To 2-2-07

VIII. Disposal approval requested at: X A Subtitle D (Non-Hazardous) Landfill A Subtitle C (Hazardous) Landfill

IX. Landfill Site Requested: Metro RDF + Orchard Ridge RDF

X. GENERATOR CERTIFICATION: I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS CONTAINS TRUE AND ACCURATE DESCRIPTIONS OF THIS ASBESTOS WASTE MATERIAL, AND ALL RELEVANT INFORMATION REGARDING KNOWN OR SUSPECTED HAZARDS IN THE POSSESSION OF THE GENERATOR HAS BEEN DISCLOSED. WASTE MANAGEMENT WILL BE NOTIFIED IN WRITING OF ANY CHANGES IN THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS.

SIGNATURE: [Signature] DATE: 9-2-03
NAME (type or print): L. Whigham TITLE: ADMINISTRATIVE AGENT FOR OWNER

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>	
9/5/2003	985080	0002001	COMPLETE DECON INC	429	MILWAUKEE SOLVAY CAKE & GA	A10642	774063	ASB	1	50.00	4.110	
9/5/2003	985081	0002001	COMPLETE DECON INC	427	MILWAUKEE SOLVAY CAKE & GA	A10642	774062	ASB	1	50.00	3.160	
9/8/2003	985818	0002001	COMPLETE DECON INC	400160	MILWAUKEE SOLVAY CAKE & GA	A10642	773902	ASB	1	60.00	4.000	
9/8/2003	985840	0002001	COMPLETE DECON INC	401	MILWAUKEE SOLVAY CAKE & GA	A10642	773901	ASB	1	88.00	9.380	
9/10/2003	986454	2005001	WM MILWAUKEE	410217	MILWAUKEE SOLVAY CAKE & GA	A10642	773903	ASB	1	60.00	5.100	
9/10/2003	986678	2005001	WM MILWAUKEE	10794230	MILWAUKEE SOLVAY CAKE & GA	A10642	773904	ASB	1	60.00	2.980	
9/22/2003	989362	2005001	WM MILWAUKEE	400160	MILWAUKEE SOLVAY CAKE & GA	A10642	773902	ASB	1	60.00	4.000	
9/24/2003	989881	2005001	WM MILWAUKEE	10794230	MILWAUKEE SOLVAY CAKE & GA	A10642	773905	ASB	1	60.00	8.330	
9/24/2003	990002	2005001	WM MILWAUKEE	10956630	MILWAUKEE SOLVAY CAKE & GA	A10642	773906	ASB	1	60.00	3.720	
Grand Total:										9	548.00	44.780



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

MST-RASB 10567
Waste Profile Sheet Code

Request For Decision: X Initial Renewal

GENERATOR NAME: Golden Marina Causeway LLC ADDRESS: 311 East Greenfield

CITY, STATE: Milwaukee, WI 53204

WASTE NAME(S): Non-Friable Asbestos - NESHAP Notified

PROPOSED MANAGEMENT FACILITY: Metro DDF

PROPOSED INTERMEDIATE TRANSFER FACILITY: N/A TRANSPORTER: WM-Milwaukee

FINANCIAL REQUESTER: Denny Lind SIGNATURE: Denny Lind

TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain: _____

Approved, Complete A,B,C and D Below: _____

Management Method(s): Landfill in accordance with attached "conditions for acceptance and disposal of asbestos waste"

Precautions, Conditions, or Limitations on Approval: Check containers to verify compliance with applicable regulations.

All wetting agents/mastic removers must be approved prior to waste shipment.

Decision Expiration Date: 7/14/04 7.14.05 (wa 8.18.07)

TECH MGR. SIGNATURE Richard Pager NAME (Print) Richard L. Pager DATE: 7/14/03

WMI MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

Approved, State Any additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE Dennis Dnephal NAME (Print) Dennis Dnephal DATE: 7/14/03

WMI INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

Approved, State Any additional Precautions, Conditions, or Limitations: _____

WMI MGR. SIGNATURE _____ NAME (Print) _____ DATE: _____

NON-FRIABLE ASBESTOS - NESHAP NOTIFIED

Requirements for Landfills and Hauling Companies

- a. The asbestos must be sealed in leak-tight containers, or wrapping (\geq 6 mil plastic bags or wrapping).
- b. A loading sign meeting OSHA criteria must be used during loading and unloading (see below).

Danger
Asbestos Dust Hazard
Cancer and Lung Disease Hazard
Authorized Personnel Only

- c. The material must be shipped in such a manner (eg., open top box, compactor box with inspection ports, drums) that will allow verification of proper packaging, labeling, and volume. Open top boxes must be covered with a solid type tarp during shipment.
- d. A Waste Shipment Record must accompany every load, and the volume reported on the Waste Shipment Record must be accurate to within 10% of the volume of the load.
- e. The generator or an authorized (in writing) agent must sign the accompanying paperwork.

IF CONDITIONS a - e ARE NOT MET, THE LOAD WILL NOT BE ACCEPTED.

2. Additional procedures for hauling companies.

- a. The transporter must complete and sign the Waste Shipment Record before leaving the generator.
- b. A copy of the Waste Shipment Record, signed by the transporter, should remain with the generator.
- c. The hauler will retain a copy of the landfill accepted Waste Shipment Record.

3. Additional procedures for landfills.

- a. The landfill must be licensed or approved to accept asbestos.
- b. All volume discrepancies (\geq 10%) must be resolved prior to acceptance of the load. Any discrepancies which are unresolvable should be reported immediately to the Technical Manager.
- c. The accompanying paperwork must be signed after verification of the load. The appropriate copy must be mailed to the generator within 30 days. The paperwork must be retained by the landfill for a minimum of two years.
- d. Asbestos may not be used for roadways, nor buried adjacent to roadways.
- e. The location, depth, area, and volume must be marked on a map or diagram (3-D grid).
- g. Asbestos must be covered with at least six (6) inches of compacted, non-asbestos containing material after acceptance.
- h. If construction activity is going to occur in areas of previous asbestos disposal, notification must be made to the appropriate regulatory body 45 days prior to starting.
- i. Upon site closure, identify asbestos acceptance to the regulatory agency, and on the property deed.



MIDWEST

RASB 10567

ASBESTOS WASTE PROFILE SHEET

I. **Generator:** GOLDEN MARINA CRUISEWAY LLC
 Site Address 311 EAST GREENFIELD Mailing Address _____
 City, State & Zip MIW WI 53204 City, State & Zip _____
 Generator Contact TOM JACOBSON Title MEM Phone 414-645-0640

II. **Contractor:** LOKZ STATES INDUSTRIAL SVC Contact Hans Gyer
 Address 311 EAST GREENFIELD Title V.P.
 City, State & Zip MIW WI 53204 Phone 414-645-0640

III. **Hauler:** WM - LOKZ STATES
 Address _____
 City, State & Zip _____ Phone _____
 (stockpiled)

*IV. **Type of Asbestos Material:** (Describe) ROOFING MATERIALS - BRICK - WOOD - TRANSIT PIPES
 Friable Non-friable Cat I Non-friable Cat II
 Is this a DOT hazardous material? Yes No If yes, the proper DOT shipping name must be used:
 RQ, Asbestos, 9, NA2212, III
 Removal method(s) (describe) MACHINE REMOVAL - WET METHOD
 Specify wetting agent: water other (attach MSDS)

V. **Job Type:** Renovation Demolition Other (describe) SITE CLEANUP
 Please explain "no" responses to the following questions in the space provided below.
 If renovation or demolition, has the agency been notified per 40 CFR 61.145 or applicable state/local regulations? Yes No
 If demolition: Will the asbestos be removed prior to demolition? Yes No
 Please explain "yes" responses to the following questions in the space provided below.
 Associated Material:
 mastic removal? (Attach MSDS, if applicable) Yes No
 asbestos contaminated with soil or gravel? Yes No
 asbestos contaminated with Special, RCRA hazardous or TSCA (PCB) waste? Yes No

VI. **Waste Volume & Units** 74000 YDS BULK (Bags) _____ DRUMS _____ OTHER (describe) _____

*VII. **Disposal approval period requested:** From 7/14/03 To 7/14/04

*VIII. **Disposal approval requested at:** A Subtitle D (Non-Hazardous) Landfill A Subtitle C (Hazardous) Landfill

*IX. **Landfill Site Requested:** Metro RDF + Orchard Ridge RDF

X. **GENERATOR CERTIFICATION:** I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS CONTAINS TRUE AND ACCURATE DESCRIPTIONS OF THIS ASBESTOS WASTE MATERIAL, AND ALL RELEVANT INFORMATION REGARDING KNOWN OR SUSPECTED HAZARDS IN THE POSSESSION OF THE GENERATOR HAS BEEN DISCLOSED. WASTE MANAGEMENT WILL BE NOTIFIED IN WRITING OF ANY CHANGES IN THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS.

SIGNATURE: Tom Stewart DATE: 07/10/2003
 NAME (type or print): Tom Stewart TITLE: MEMBER

* Completed per Tom Jacobson 7/14/03

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>	
12/16/2003	10680	2005001	WM MILWAUKEE	10020630	GOLDEN MARINA CANSEWAY LL	N10567	773668	ENF	1	60.00	4.455	
12/20/2003	11804	2005001	WM MILWAUKEE	10797330	GOLDEN MARINA CANSEWAY LL	N10567	773669	ENF	1	60.00	5.965	
Grand Total:										2	120.00	10.420

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
1/16/2004	17616	2005001	WM MILWAUKEE	I0797330	GOLDEN MARINA CANSEWAY LL	N10567	773670	ENF	1	60.00	9.385
3/3/2004	27715	2005001	WM MILWAUKEE	I0870330	GOLDEN MARINA CANSEWAY LL	N10567	773217	ENF	1	50.00	4.245
3/9/2004	29517	2005001	WM MILWAUKEE	I0978930	GOLDEN MARINA CANSEWAY LL	N10567	773224	ENF	1	60.00	7.675
3/10/2004	29693	2005001	WM MILWAUKEE	I0007530	GOLDEN MARINA CANSEWAY LL	N10567	773226	ENF	1	60.00	2.670
4/5/2004	38584	2005001	WM MILWAUKEE	I0016030	GOLDEN MARINA CANSEWAY LL	N10567	773240	ENF	1	60.00	3.075
5/4/2004	47438	2005001	WM MILWAUKEE	I0910130	GOLDEN MARINA CANSEWAY LL	N10567	772460	ENF	1	60.00	7.020
7/9/2004	66563	2005001	WM MILWAUKEE	I0606730	GOLDEN MARINA CANSEWAY LL	N10567	774043	ENF	1	60.00	3.815
7/9/2004	66615	2005001	WM MILWAUKEE	I0016030	GOLDEN MARINA CANSEWAY LL	N10567	774044	ENF	1	60.00	6.755
7/9/2004	66648	2005001	WM MILWAUKEE	I0910030	GOLDEN MARINA CANSEWAY LL	N10567	774045	ENF	1	60.00	18.145
7/9/2004	66679	2005001	WM MILWAUKEE	I1021730	GOLDEN MARINA CANSEWAY LL	N10567	774047	ENF	1	60.00	18.335
7/19/2004	69598	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N10567	795823	ENF	1	30.00	19.620
8/18/2004	78451	2005001	WM MILWAUKEE	I0910030	GOLDEN MARINA CANSEWAY LL	N10567	774057	ENF	1	60.00	14.935
8/18/2004	78452	2005001	WM MILWAUKEE	I0981130	GOLDEN MARINA CANSEWAY LL	N10567	773214	ENF	1	60.00	8.400
8/18/2004	78563	2005001	WM MILWAUKEE	I0981130	GOLDEN MARINA CANSEWAY LL	N10567	774058	ENF	1	60.00	19.780
11/12/2004	103220	2005001	WM MILWAUKEE	I0015030	GOLDEN MARINA CANSEWAY LL	N10567	792432	ENF	1	60.00	7.830

Grand Total:

15

860.00

151.685



NORTHERN REGION SPECIAL WASTE MANAGEMENT DECISION

METMW 489787
Waste Profile Sheet Code

I. Request For Decision: Initial Renewal High Volume (F.A.P./N/A)

GENERATOR NAME: Golden Marina Causeway LLC ADDRESS: 311 East Greenfield Avenue

CITY, STATE: Milwaukee, WI 53204

WASTE NAME(S): Construction + Demolition - Debris

PROPOSED MANAGEMENT FACILITY: Metro RDF

PROPOSED INTERMEDIATE TRANSFER FACILITY: N/A

TRANSPORTER: Eagle Disposal

WMNA REQUESTER: Tessa Stind SIGNATURE: Tessa Stind

II. TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain:

If Approved, Complete A,B,C And D Below:

A. Management Method(s): LANDFILL (CODISPOSAL)

B. Precautions, Conditions, or Limitations on Approval: Per the sites Special Waste Plan

Waste must not contain free liquids.

C: Decision Expiration Date: 7/14/04

TECH MGR. SIGNATURE: Richard Payer NAME (Print): Richard L. Payer DATE: 7/14/03

III WMI MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations

SITE MGR. SIGNATURE: Dennis Drephal NAME (Print): Dennis Drephal DATE: 7/14/03

IV WMI INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations

SITE MGR. SIGNATURE: _____ NAME (Print): _____ DATE: _____

F. SAMPLING SOURCE (Omit for Type B) (e.g., Drum, Lagoon, Pit, Pond, Tank, Vat) _____

G. REPRESENTATIVE SAMPLE CERTIFICATION (Omit for Type B)

1. Print Sampler's Name: _____ 2. Sample Date: _____

3. Sampler's Title: _____

4. Sampler's Employer (if other than Generator): _____

The sampler's signature certifies that any sample submitted is representative of the waste described above pursuant to 40 CFR 261.20(c) or equivalent rules.

5. Sampler's Signature _____

H. GENERATOR CERTIFICATION

By signing this profile sheet, the Generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulation.
2. This waste does not contain regulated radioactive materials or regulated concentrations of PCB's (Polychlorinated Biphenyls).
3. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and it's epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4-D, or 2, 4, 5-TP (Silvex).
4. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1, 1, 1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1, 1, 2-trichloro-1, 2, 2-trifluoroethane, trichlorofluoromethane, 1, 1-dichloroethylene, and 1, 2-dichloroethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentrations of the individual compounds exceed 1% or 10,000 ppm on a weight to weight basis.
5. This sheet and the attachments contain true and accurate descriptions of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
6. The Generator has read and understands the Contractor's Definition of Special Waste included in Part B.5. of the attached instructions form. All types and amounts of special wastes provided in incidental amounts have been identified in section B.6. of this form.
7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20(c) or equivalent rules.
8. If any changes occur in the character of the waste, the Generator shall notify the Contractor prior to providing the waste to the Contractor.

9. Signature X Tom Short 10. Title MANAGER

11. Name (Type or Print) Tom Short 12. Date 07/10/2003

Note: Omit sections D., E., F., and G., for Type B waste.

Comments:



WASTE MANAGEMENT, INC.

SPECIAL WASTE PLAN

ANALYTICAL TESTING VARIANCE

Generator Golden Marina Gateway

Profile Number M W 489787

Reason for variance from Plan

No testing needed, only profiled
for customer billing purposes

R. Berger
Signature

7/14/03
Date

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
2/19/2004	24783	0001974	LAKE STATES INDUSTRIAL SE	468	GOLDEN MARINA CANSEWAY LL	MW489787	763677	ENF	1	60.00	4.630
2/26/2004	26406	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763680	ENF	1	60.00	5.570
3/9/2004	29461	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763681	ENF	1	60.00	3.960
3/11/2004	30133	0001974	LAKE STATES INDUSTRIAL SE	468	GOLDEN MARINA CANSEWAY LL	MW489787	763683	ENF	1	60.00	3.490
3/22/2004	33623	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763689	ENF	1	60.00	1.120
3/30/2004	36643	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763687	ENF	1	60.00	4.390
4/23/2004	44144	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763690	ENF	1	60.00	14.120
4/23/2004	44391	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763691	ENF	1	60.00	8.540
6/3/2004	55819	0001974	LAKE STATES INDUSTRIAL SE	401	GOLDEN MARINA CANSEWAY LL	MW489787	763684	ENF	1	60.00	11.000
10/20/2004	95582	2005001	WM MILWAUKEE	10796730	GOLDEN MARINA CANSEWAY LL	MW489787	816300	ENF	1	60.00	10.610
10/20/2004	95719	2005001	WM MILWAUKEE	10981030	GOLDEN MARINA CANSEWAY LL	MW489787	816299	ENF	1	60.00	8.800
10/20/2004	95721	2005001	WM MILWAUKEE	10015030	GOLDEN MARINA CANSEWAY LL	MW489787	816298	ENF	1	60.00	21.880
10/20/2004	95839	2005001	WM MILWAUKEE	11021830	GOLDEN MARINA CANSEWAY LL	MW489787	816301	ENF	1	60.00	3.040
10/20/2004	95867	2005001	WM MILWAUKEE	10845430	GOLDEN MARINA CANSEWAY LL	MW489787	816302	ENF	1	60.00	4.225

Grand Total:

14

840.00

105.375

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
7/17/2003	971011	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	671394	ENF	1	60.00	8.880
7/17/2003	971067	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	671396	ENF	1	0.00	5.360
7/17/2003	971134	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	671395	ENF	1	60.00	6.210
7/18/2003	971274	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763734	ENF	1	60.00	6.220
7/18/2003	971402	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763733	ENF	1	60.00	11.190
7/21/2003	971929	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763730	ENF	1	60.00	6.000
7/22/2003	972134	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763729	ENF	1	60.00	6.890
7/22/2003	972136	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763728	ENF	1	60.00	5.730
7/23/2003	972567	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763727	ENF	1	60.00	6.310
7/23/2003	972569	0001974	LAKE STATES INDUSTRIAL SE	409	GOLDEN MARINA CANSEWAY LL	MW489787	763726	ENF	1	60.00	4.610
7/24/2003	973334	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763725	ENF	1	60.00	7.400
7/24/2003	973356	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763731	ENF	1	60.00	6.360
7/25/2003	973412	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763713	ENF	1	60.00	3.930
7/28/2003	973967	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763712	ENF	1	0.00	5.060
7/29/2003	974400	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763711	ENF	1	60.00	6.450
7/30/2003	974801	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763709	ENF	1	60.00	8.310
7/30/2003	974805	0001974	LAKE STATES INDUSTRIAL SE	409	GOLDEN MARINA CANSEWAY LL	MW489787	763710	ENF	1	60.00	5.460
7/31/2003	975215	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763707	ENF	1	60.00	5.380
7/31/2003	975216	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763708	ENF	1	60.00	5.360
8/1/2003	975685	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763706	ENF	1	60.00	6.430
8/1/2003	975770	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763705	ENF	1	60.00	5.845
8/1/2003	975953	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763704	ENF	1	0.00	3.730
8/5/2003	976583	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763703	ENF	1	60.00	5.550
8/5/2003	976586	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763702	ENF	1	60.00	7.020
8/6/2003	976940	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763699	ENF	1	60.00	6.400
8/6/2003	976967	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763701	ENF	1	60.00	4.170
8/6/2003	977033	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763700	ENF	1	60.00	3.620
8/7/2003	977322	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763698	ENF	1	60.00	2.800
8/8/2003	977680	0001974	LAKE STATES INDUSTRIAL SE	401	GOLDEN MARINA CANSEWAY LL	MW489787	763696	ENF	1	60.00	5.800
8/8/2003	977970	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763697	ENF	1	60.00	6.320
8/11/2003	978155	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763695	ENF	1	60.00	6.730
8/11/2003	978158	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763694	ENF	1	60.00	6.080
8/12/2003	978590	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763660	ENF	1	60.00	4.920
8/13/2003	978926	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763661	ENF	1	60.00	8.190
8/25/2003	982052	0001974	LAKE STATES INDUSTRIAL SE	401	GOLDEN MARINA CANSEWAY LL	MW489787	763714	ENF	1	60.00	8.010
8/25/2003	982101	0001974	LAKE STATES INDUSTRIAL SE	401	GOLDEN MARINA CANSEWAY LL	MW489787	76372	ENF	1	60.00	10.160
8/25/2003	982150	0001974	LAKE STATES INDUSTRIAL SE	401	GOLDEN MARINA CANSEWAY LL	MW489787	763720	ENF	1	60.00	7.500
8/25/2003	982217	0001974	LAKE STATES INDUSTRIAL SE	401	GOLDEN MARINA CANSEWAY LL	MW489787	763715	ENF	1	60.00	6.950
8/26/2003	982285	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763662	ENF	1	60.00	5.950
9/3/2003	984183	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763664	ENF	1	60.00	17.640

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
9/3/2003	984251	0001974	LAKE STATES INDUSTRIAL SE	401	GOLDEN MARINA CANSEWAY LL	MW489787	763663	ENF	1	60.00	9.800
9/12/2003	987171	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW489787	763666	ENF	1	60.00	1.760
9/12/2003	987186	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763668	ENF	1	60.00	4.260
9/12/2003	987211	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763665	ENF	1	60.00	3.620
9/12/2003	987232	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW489787	763667	ENF	1	60.00	11.000
9/12/2003	987269	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW489787	763669	ENF	1	60.00	4.360
12/2/2003	6967	0001974	LAKE STATES INDUSTRIAL SE	401	GOLDEN MARINA CANSEWAY LL	MW489787	763670	ENF	1	60.00	7.430

Grand Total:

47

2640.00

303.155



NORTHERN REGION SPECIAL WASTE MANAGEMENT DECISION

MST-MW 483719
Waste Profile Sheet Code

I. Request For Decision: Initial Renewal N/A High Volume (P.A.P./N/A) (Former Solway Coke + Gas)

GENERATOR NAME: Golden Mining Company LLC ADDRESS: 311 East Greenfield Avenue

CITY, STATE: Milwaukee, WI 53204

WASTE NAME(S): Coal Tar

PROPOSED MANAGEMENT FACILITY: Metro RDF

PROPOSED INTERMEDIATE TRANSFER FACILITY: N/A TRANSPORTER: WM-Milw. or Eagle Disposal

WMMA REQUESTER: Peggy Slind SIGNATURE: Peggy Slind

II. TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain: _____

If Approved, Complete A,B,C And D Below:

A. Management Method(s): LANDFILL (CODISPOSAL)

B. Precautions, Conditions, or Limitations on Approval: Per the sites Special Waste Plan
Waste must not contain free liquids.

C: Decision Expiration Date: 12/19/2004

TECH MGR. SIGNATURE: Bruce Tom Haken NAME (Print): Bruce Tom Haken DATE: 12/19/03

III WM MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE: Dennis Drappel NAME (Print): Dennis Drappel DATE: 12/19/03

IV WM INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE: _____ NAME (Print): _____ DATE: _____



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

MET-MW 483719
Waste Profile Sheet Code

I. Request For Decision: X Initial Renewal N/A High Volume (F.A.P./N/A) (Former Solway Coke + Gas)
GENERATOR NAME: Golden Marina Causeway LLC ADDRESS: 311 East Greenfield Avenue
CITY, STATE: Milwaukee, WI 53204
WASTE NAME(S): Coal Tar
PROPOSED MANAGEMENT FACILITY: Metro RDF
PROPOSED INTERMEDIATE
TRANSFER FACILITY: N/A TRANSPORTER: WM-Milw. or Eagle Disposal
WMNA REQUESTER: Peggy Slind SIGNATURE: Peggy Slind

II. TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain:

If Approved, Complete A,B,C
And D Below:

A. Management Method(s):

LANDFILL (CODISPOSAL)

B. Precautions, Conditions, or
Limitations on Approval

Per the sites Special Waste Plan

Waste must not contain free liquids.

C. Decision Expiration Date:

12/19/2004

TECH MGR. SIGNATURE

[Signature]
Richard L. Peger

NAME (Print)

Bruce Ten Haken

Richard L. Peger

DATE:

12/19/03
11/18/04

III WM MANAGEMENT FACILITY SITE MANAGER DECISION (circle one)

APPROVED

DISAPPROVED

If Approved, State Any
Additional Precautions,
Conditions, or Limitations

SITE MGR. SIGNATURE

NAME (Print)

DATE:

IV WM INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one)

APPROVED

DISAPPROVED

If Approved, State Any
Additional Precautions,
Conditions, or Limitations

SITE MGR. SIGNATURE

NAME (Print)

DATE:

F. SAMPLING SOURCE (Omit for Type B) (e.g., Drum, Lagoon, Pit, Pond, Tank, Vat) AST

G. REPRESENTATIVE SAMPLE CERTIFICATION (Omit for Type B)

1. Print Sampler's Name: Rebecca Rowley 2. Sample Date: 12-9-03
3. Sampler's Title: Staff Engineer
4. Sampler's Employer (if other than Generator): Environmental Associates, Inc.
The sampler's signature certifies that any sample submitted is representative of the waste described above pursuant to 40 CFR 261.20(c) or equivalent rules.
5. Sampler's Signature: [Signature]

H. GENERATOR CERTIFICATION

By signing this profile sheet, the Generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulation.
2. This waste does not contain regulated radioactive materials or regulated concentrations of PCB's (Polychlorinated Biphenyls).
3. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and it's epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4-D, or 2, 4, 5-TP (Silvex).
4. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1, 1, 1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1, 1, 2-trichloro-1, 2, 2-trifluoroethane, trichlorofluoromethane 1, 1-dichlorobenzene, and 1, 2-dichloroethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentrations of the individual compounds exceed 1% or 10,000 ppm on a weight to weight basis.
5. This sheet and the attachments contain true and accurate descriptions of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
6. The Generator has read and understands the Contractor's Definition of Special Waste included in Part B.5. of the attached instructions form. All types and amounts of special wastes provided in incidental amounts have been identified in section B.6. of this form.
7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20(c) or equivalent rules.
8. If any changes occur in the character of the waste, the Generator shall notify the Contractor prior to providing the waste to the Contractor.

9. Signature: [Signature] 10. Title: Manager
11. Name (Type or Print): THOMAS S. SHORT 12. Date: 12/18/2003

Note: Omit sections D., E., F., and G., for Type B waste.

Comments:



SPECIAL WASTE PLAN

ANALYTICAL TESTING VARIANCE

Generator Golden Marina Conseway LLC
Profile Number MET-MW-483719

Reason for variance from Plan
Waste is adequately characterized by this testing

[Handwritten Signature]
Signature

12/12/2003
Date



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glslabs.com
(414) 570-9460 FAX (414) 570-9461

16 December 2003

Joe Micheichuck
Environmental Associates, Inc.
P.O. Box 136
Thiensville, WI 53092
RE: Solvay

Enclosed are the results of analyses for samples received by the laboratory on 12/09/03. If you have any questions concerning this report, please feel free to contact me.

Sincerely,
Great Lakes Analytical

Andrea Stathas
Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-8480 FAX (414) 570-8481

Environmental Associates, Inc.
P.O. Box 136
Thiensville, WI 53092

Project: Solvay
Project Number: 03-03855 (005)
Project Manager: Joe Michaelshuck

Reported:
12/16/03 17:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Coal Tar Tank Waste	W312095-01	Soil	12/09/03 14:45	12/09/03 15:40

Great Lakes Analytical--Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas, Project Manager

Page 1 of 7



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Environmental Associates, Inc. P.O. Box 136 Thiensville, WI 53092	Project: Solvay Project Number: 03-03855 (005) Project Manager: Joe Michaeichuk	Reported: 12/16/03 17:05
---	---	-----------------------------

General Chemistry
Great Lakes Analytical—Buffalo Grove

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Cool Tar Tank Waste (W312095-01) Soil Sampled: 12/09/03 14:46 Received: 12/09/03 15:40									
Flashpoint	>220 °F		°F	1	3120412	12/15/03	12/15/03	ASTM D92-83	
pH	6.88		pH Units	"	3120339	12/12/03	12/12/03	EPA 9045C	
Reactive Cyanide	ND	0.194	mg/kg dry	"	3120339	12/12/03	12/12/03	EPA 9014 Ch 7	
Reactive Sulfide	44.6	9.68	"	"	3120340	12/12/03	12/12/03	EPA 9034 Ch 7	QC

Great Lakes Analytical—Oak Creek

The results in this report apply to the samples analysed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9481

Environmental Associates, Inc. P.O. Box 136 Thiensville, WI 53092	Project: Solvay Project Number: 03-03855 (005) Project Manager: Joe Michaelchuck	Reported: 12/16/03 17:03
---	--	-----------------------------

Percent Solids

Great Lakes Analytical--Buffalo Grove

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Coal Tar Tank Waste (W912095-41) Soil Sampled: 12/09/03 14:46 Received: 12/09/03 15:40									
% Solids	67.1	0.200	%	1	3120334	12/12/03	12/16/03	EPA 5035 7.5	

Great Lakes Analytical--Oak Creek

Andrea Stathas, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



140 East Ryan Road
 Oak Creek, Wisconsin 53154

Email: info@glalabs.com
 (414) 570-9480 FAX (414) 570-9481

Environmental Associates, Inc. P.O. Box 136 Thionville, WI 53092	Project: Solvay Project Number: 03-03855 (005) Project Manager: Joe Michaelchuck	Reported: 12/16/03 17:05
--	--	-----------------------------

General Chemistry - Quality Control
Great Lakes Analytical - Buffalo Grove

Analyte	Result	Reporting Limit	Units	Spikes Level	Spikes Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120329 - General Prep WC										
Blank (3120329-BLK1) Prepared & Analyzed: 12/12/03										
Reactive Cyanide	ND	0.130	mg/kg wet							
LCS (3120329-BS1) Prepared & Analyzed: 12/12/03										
Reactive Cyanide	8.41	0.130	ug/kg wet	12.0		70.1	10-132			
Matrix Spike (3120329-MS1) Source: B312198-01 Prepared & Analyzed: 12/12/03										
Reactive Cyanide	10.9	0.160	mg/kg dry	14.3	ND	75.2	10-128			
Matrix Spike Dup (3120329-MSD1) Source: B312198-01 Prepared & Analyzed: 12/12/03										
Reactive Cyanide	8.77	0.160	mg/kg dry	14.4	ND	80.9	10-128	21.7	61.8	
Batch 3120339 - General Prep WC										
LCS (3120339-BS1) Prepared & Analyzed: 12/12/03										
pH	7.03		pH Units	7.00		100	98.6-101.4			
LCS Dup (3120339-BSD1) Prepared & Analyzed: 12/12/03										
pH	7.05		pH Units	7.00		101	98.6-101.4	0.284		1
Duplicate (3120339-DUPL) Source: B512135-01 Prepared & Analyzed: 12/12/03										
pH	7.52		pH Units	7.30				0.266		1
Batch 3120340 - General Prep WC										
Blank (3120340-BLK1) Prepared & Analyzed: 12/12/03										
Reactive Sulfide	ND	6.50	mg/kg wet							

Great Lakes Analytical - Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Statman

Andrea Statman, Project Manager



140 East Ryan Road
 Oak Creek, Wisconsin 53154

Email: info@glalabs.com
 (414) 570-9460 FAX (414) 570-9461

Environmental Associates, Inc.
 P.O. Box 136
 Thiensville, WI 53092

Project: Solvay
 Project Number: 03-03855 (005)
 Project Manager: Joe Michaelchuck

Reported:
 12/16/03 17:05

General Chemistry - Quality Control
Great Lakes Analytical--Buffalo Grove

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%RSC	%REC Limit	RPD	RPD Limit	Notes
Batch 3120340 - General Prep WC										
LCS (3120340-BS1) Prepared & Analyzed: 12/12/03										
Reactive Sulfide	29.0	6.50	mg/kg wet	22.0		114	33.5-117			
Matrix Spike (3120340-MS1) Source: B312198-01 Prepared & Analyzed: 12/12/03										
Reactive Sulfide	12.1	8.01	mg/kg dry	26.7	2.99	34.1	10-130			
Matrix Spike Dup (3120340-MSD1) Source: B312198-01 Prepared & Analyzed: 12/12/03										
Reactive Sulfide	8.97	8.01	mg/kg dry	26.3	2.99	22.7	10-130	29.7	18.7	H
Batch 3120412 - General Prep WC										
Duplicate (3120412-DUP1) Source: B312201-01 Prepared & Analyzed: 12/15/03										
Flashpoint	>220 °F		°F		0.00				20	

Great Lakes Analytical--Oak Creek

Andrea Stathas

Andrea Stathas, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



140 East Ryan Road
 Oak Creek, Wisconsin 53154

Email: info@glalabs.com
 (414) 570-8460 FAX (414) 570-8461

Environmental Associates, Inc. P.O. Box 136 Thiensville, WI 53092	Project: Solvay Project Number: 03-03855 (005) Project Manager: Joe Michaelchuck	Reported: 12/16/03 17:05
---	--	-----------------------------

Percent Solids - Quality Control
Great Lakes Analytical - Buffalo Grove

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Batch 3120334 - General Prep										
Blank (3120334-BLK1)										Prepared: 12/12/03 Analyzed: 12/16/03
% Solids	ND	0.200	%							
Blank (3120334-BLK2)										Prepared: 12/12/03 Analyzed: 12/16/03
% Solids	ND	0.200	%							
Blank (3120334-BLK3)										Prepared: 12/12/03 Analyzed: 12/16/03
% Solids	ND	0.200	%							
Duplicate (3120334-DUP1)										Source: B312199-01 Prepared: 12/12/03 Analyzed: 12/16/03
% Solids	93.1	0.200	%		92.7			0.431	20	
Duplicate (3120334-DUP2)										Source: B312199-02 Prepared: 12/12/03 Analyzed: 12/16/03
% Solids	92.5	0.200	%		92.5			0.00	20	
Duplicate (3120334-DUP3)										Source: B312199-03 Prepared: 12/12/03 Analyzed: 12/16/03
% Solids	91.8	0.200	%		93.7			0.107	20	

Great Lakes Analytical - Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas

Andrea Stathas, Project Manager



140 East Ryan Road
Oak Creek, Wisconsin 53154

Email: info@glalabs.com
(414) 570-9460 FAX (414) 570-9461

Environmental Associates, Inc.
P.O. Box 136
Thiensville, WI 53092

Project: Solvay
Project Number: 03-03855 (005)
Project Manager: Joe Michaelchuck

Reported:
12/16/03 17:05

Notes and Definitions

- >220 >220 *r
- QC The result for one or more quality control measurements associated with this sample did not meet the laboratory and/or source method acceptance criteria.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- L This quality control measurement is below the laboratory established limit.
- H This quality control measurement is above the laboratory established limit.

Great Lakes Analytical--Buffalo Grove Wisconsin DNR Certification Lab ID: 999917160

Great Lakes Analytical--Buffalo Grove NELAP Primary Accreditation: Illinois #100261

Great Lakes Analytical--Buffalo Grove NELAP Secondary Accreditation: New Jersey #IL001

Great Lakes Analytical--Oak Creek, WI Wisconsin DNR Certification Lab ID: 341000330

Great Lakes Analytical--Oak Creek, WI NELAP Primary Accreditation: Illinois #100307

Note: For analyses that require NELAP accreditation, all analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

Great Lakes Analytical--Oak Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andrea Stathas, Project Manager



CHAIN OF CUSTODY REPORT

1380 Busch Parkway
Buffalo Grove, IL 60089-4505
(847) 808-7766
FAX (847) 808-7772

140 E. Ryan Road
Oak Creek, WI 53154
(414) 570-9460
FAX (414) 570-9461

Client: Environmental Associates, Inc. (EAI)		Bill To: Lake States Industrial Services of EAI		TAT: STD. <u>1 DAY</u> 3 DAY 2 DAY 1 DAY < 24 HRS.	
Address: 210 N. Green Bay Rd Thiensville, WI 53092		Address: 311 E. Greenfield Ave Milwaukee, WI 53204		<input type="checkbox"/> YES - TAT is critical <input type="checkbox"/> NO - TAT is not critical DATE REMARKS NEEDED:	
Report to: Joe Michaelchuk E-mail:		Phone #: (262) 242-1088 Fax #: (262) 242-6554		Preserved: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> ambient <input type="checkbox"/> refrigerated Temp. Upon Receipt: <u>70°C</u>	
Project Name: Solvay Coke + Gas		State & Program:		Deliverable Package: <input type="checkbox"/> STD <input type="checkbox"/> Other Delivery Method: <input checked="" type="checkbox"/> GLA <input type="checkbox"/> Client <input type="checkbox"/> Shipped <input type="checkbox"/> Courier	
Project #/PON: 03-03855 (005)		Sampler:		LABORATORY ID NUMBER	
FIELD ID: LOCATION		DATE COLLECTED		TIME COLLECTED	
1) Coal Trc Tank Waste		12/19/03		2:15	
PID:		Soil		22	
2)					
PID:					
3)					
PID:					
4)					
PID:					
5)					
PID:					
6)					
PID:					
7)					
PID:					
8)					
PID:					
9)					
PID:					
10)					
PID:					
RELINQUISHED		RECEIVED		RECEIVED	
12/19/03		12/19/03		12/19/03	
3:50		15:40		15:40	
RELINQUISHED		RECEIVED		RECEIVED	
DATE		DATE		DATE	
TIME		TIME		TIME	
COMMENTS:					
				PAGE 1 OF 1	

12/16/2003 TUE 16:53 [TX/RX NO 5146] 0009

12/16/2003 TUE 4:59 FAX 4145709461 GREAT LAKES ANALYTICAL ENV ASSOC

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>	
12/22/2003	11948	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	763675	ENF	1	60.00	20.630	
12/22/2003	11952	0001974	LAKE STATES INDUSTRIAL SE	468	GOLDEN MARINA CANSEWAY LL	MW483719	763676	ENF	1	60.00	20.600	
12/22/2003	12009	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	773488	ENF	1	60.00	16.400	
12/22/2003	12114	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	773491	ENF	1	60.00	18.560	
Grand Total:										4	240.00	76.190

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
2/20/2004	24894	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW483719	773492	ENF	1	60.00	8.350
2/20/2004	24928	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW483719	773493	ENF	1	60.00	6.530
2/21/2004	25183	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW483719	773494	ENF	1	60.00	9.330
2/21/2004	25190	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW483719	773495	ENF	1	60.00	7.320
2/23/2004	25330	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	773496	ENF	1	60.00	6.350
2/24/2004	25500	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	773497	ENF	1	60.00	6.160
2/24/2004	25547	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	773498	ENF	1	60.00	5.720
2/24/2004	25589	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	773499	ENF	1	60.00	15.560
2/24/2004	25640	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	773500	ENF	1	60.00	17.370
2/24/2004	25697	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	773501	ENF	1	60.00	13.080
2/27/2004	26542	2005001	WM MILWAUKEE	I1021730	GOLDEN MARINA CANSEWAY LL	MW483719	773503	ENF	1	60.00	5.875
3/1/2004	26946	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	773502	ENF	1	60.00	9.360
3/9/2004	29518	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	MW483719	773504	ENF	1	60.00	17.225
3/9/2004	29525	2005001	WM MILWAUKEE	I0606730	GOLDEN MARINA CANSEWAY LL	MW483719	701126	ENF	1	60.00	15.345
3/10/2004	29716	2005001	WM MILWAUKEE	I0797330	GOLDEN MARINA CANSEWAY LL	MW483719	773507	ENF	1	60.00	13.095
3/10/2004	29879	2005001	WM MILWAUKEE	I0797330	GOLDEN MARINA CANSEWAY LL	MW483719	773506	ENF	1	60.00	12.965
4/7/2004	39103	0001974	LAKE STATES INDUSTRIAL SE	401	GOLDEN MARINA CANSEWAY LL	MW483719	773508	ENF	1	60.00	17.600
4/19/2004	42628	2005001	WM MILWAUKEE	I1024930	GOLDEN MARINA CANSEWAY LL	MW483719	637903	ENF	1	60.00	19.675
4/19/2004	42948	0001974	LAKE STATES INDUSTRIAL SE	454	GOLDEN MARINA CANSEWAY LL	MW483719	773510	ENF	1	60.00	16.160
4/20/2004	43318	0001974	LAKE STATES INDUSTRIAL SE	468	GOLDEN MARINA CANSEWAY LL	MW483719	773511	ENF	1	60.00	13.780
4/22/2004	43714	2005001	WM MILWAUKEE	I1021730	GOLDEN MARINA CANSEWAY LL	MW483719	768915	ENF	1	60.00	17.545
4/22/2004	43724	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	MW483719	769225	ENF	1	60.00	20.150
4/22/2004	43731	2005001	WM MILWAUKEE	I0969830	GOLDEN MARINA CANSEWAY LL	MW483719	769244	ENF	1	60.00	16.100
4/22/2004	43734	2005001	WM MILWAUKEE	I1030330	GOLDEN MARINA CANSEWAY LL	MW483719	636603	ENF	1	60.00	16.355
4/22/2004	43736	2005001	WM MILWAUKEE	I0009230	GOLDEN MARINA CANSEWAY LL	MW483719	769245	ENF	1	60.00	20.855
4/22/2004	43781	2005001	WM MILWAUKEE	I1021730	GOLDEN MARINA CANSEWAY LL	MW483719	768916	ENF	1	60.00	19.755
4/22/2004	43783	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	MW483719	769226	ENF	1	60.00	17.860
4/22/2004	43788	2005001	WM MILWAUKEE	I0969830	GOLDEN MARINA CANSEWAY LL	MW483719	769243	ENF	1	60.00	14.520
4/22/2004	43807	2005001	WM MILWAUKEE	I1030330	GOLDEN MARINA CANSEWAY LL	MW483719	797829	ENF	1	60.00	19.925
4/26/2004	44926	2005001	WM MILWAUKEE	I0870330	GOLDEN MARINA CANSEWAY LL	MW483719	783964	ENF	1	60.00	6.645
4/26/2004	44931	2005001	WM MILWAUKEE	I0797330	GOLDEN MARINA CANSEWAY LL	MW483719	783104	ENF	1	60.00	15.495
4/27/2004	45031	2005001	WM MILWAUKEE	I0870330	GOLDEN MARINA CANSEWAY LL	MW483719	768104	ENF	1	60.00	12.835
4/27/2004	45057	2005001	WM MILWAUKEE	I1030330	GOLDEN MARINA CANSEWAY LL	MW483719	769695	ENF	1	60.00	18.065
4/27/2004	45076	2005001	WM MILWAUKEE	I0870330	GOLDEN MARINA CANSEWAY LL	MW483719	750076	ENF	1	60.00	17.145
4/27/2004	45085	2005001	WM MILWAUKEE	I1021730	GOLDEN MARINA CANSEWAY LL	MW483719	768917	ENF	1	60.00	14.155
4/30/2004	46369	2005001	WM MILWAUKEE	I0910030	GOLDEN MARINA CANSEWAY LL	MW483719	769673	ENF	1	60.00	14.055
4/30/2004	46387	2005001	WM MILWAUKEE	I0969830	GOLDEN MARINA CANSEWAY LL	MW483719	784887	ENF	1	60.00	14.000
4/30/2004	46388	2005001	WM MILWAUKEE	I0910130	GOLDEN MARINA CANSEWAY LL	MW483719	797834	ENF	1	60.00	15.540
4/30/2004	46389	2005001	WM MILWAUKEE	I0870330	GOLDEN MARINA CANSEWAY LL	MW483719	768480	ENF	1	60.00	14.705
4/30/2004	46420	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	MW483719	769212	ENF	1	60.00	12.790

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
5/4/2004	47352	2005001	WM MILWAUKEE	10794230	GOLDEN MARINA CANSEWAY LL	MW483719	797835	ENF	1	60.00	15.930
5/4/2004	47362	2005001	WM MILWAUKEE	10796730	GOLDEN MARINA CANSEWAY LL	MW483719	797836	ENF	1	60.00	11.790
5/4/2004	47372	2005001	WM MILWAUKEE	10606630	GOLDEN MARINA CANSEWAY LL	MW483719	797837	ENF	1	60.00	12.145
5/4/2004	47379	2005001	WM MILWAUKEE	10910030	GOLDEN MARINA CANSEWAY LL	MW483719	797838	ENF	1	60.00	14.895
5/4/2004	47380	2005001	WM MILWAUKEE	10870330	GOLDEN MARINA CANSEWAY LL	MW483719	768486	ENF	1	60.00	14.405
5/4/2004	47427	2005001	WM MILWAUKEE	10794230	GOLDEN MARINA CANSEWAY LL	MW483719	797832	ENF	1	60.00	12.160
5/4/2004	47432	2005001	WM MILWAUKEE	10024630	GOLDEN MARINA CANSEWAY LL	MW483719	797833	ENF	1	60.00	14.830
5/6/2004	48147	2005001	WM MILWAUKEE	10024630	GOLDEN MARINA CANSEWAY LL	MW483719	797869	ENF	1	60.00	13.490
5/6/2004	48169	0001974	LAKE STATES INDUSTRIAL SE	429	GOLDEN MARINA CANSEWAY LL	MW483719	7978701	ENF	1	60.00	13.160
5/6/2004	48236	2005001	WM MILWAUKEE	10020630	GOLDEN MARINA CANSEWAY LL	MW483719	797868	ENF	1	60.00	14.675
5/6/2004	48248	2005001	WM MILWAUKEE	10870330	GOLDEN MARINA CANSEWAY LL	MW483719	797865	ENF	1	60.00	13.985
5/6/2004	48267	2005001	WM MILWAUKEE	10794230	GOLDEN MARINA CANSEWAY LL	MW483719	769217	ENF	1	60.00	14.820
5/6/2004	48268	2005001	WM MILWAUKEE	10606730	GOLDEN MARINA CANSEWAY LL	MW483719	797867	ENF	1	60.00	12.685
5/6/2004	48272	2005001	WM MILWAUKEE	10910030	GOLDEN MARINA CANSEWAY LL	MW483719	797864	ENF	1	60.00	15.735
5/7/2004	48827	2005001	WM MILWAUKEE	10969830	GOLDEN MARINA CANSEWAY LL	MW483719	797863	ENF	1	60.00	15.940
5/7/2004	48828	2005001	WM MILWAUKEE	10794230	GOLDEN MARINA CANSEWAY LL	MW483719	783377	ENF	1	60.00	18.740
5/7/2004	48830	2005001	WM MILWAUKEE	400092	GOLDEN MARINA CANSEWAY LL	MW483719	797839	ENF	1	0.00	13.905
5/7/2004	48831	2005001	WM MILWAUKEE	10797330	GOLDEN MARINA CANSEWAY LL	MW483719	797840	ENF	1	60.00	15.295
5/7/2004	48832	2005001	WM MILWAUKEE	10910130	GOLDEN MARINA CANSEWAY LL	MW483719	797842	ENF	1	60.00	16.430
5/7/2004	48834	2005001	WM MILWAUKEE	10015020	GOLDEN MARINA CANSEWAY LL	MW483719	797841	ENF	1	40.00	13.240
5/7/2004	48843	2005001	WM MILWAUKEE	11030330	GOLDEN MARINA CANSEWAY LL	MW483719	797843	ENF	1	60.00	14.465
5/7/2004	48859	2005001	WM MILWAUKEE	10870330	GOLDEN MARINA CANSEWAY LL	MW483719	768482	ENF	1	60.00	14.055
5/7/2004	48862	2005001	WM MILWAUKEE	11024930	GOLDEN MARINA CANSEWAY LL	MW483719	797844	ENF	1	60.00	16.815
5/10/2004	49509	2005001	WM MILWAUKEE	10870330	GOLDEN MARINA CANSEWAY LL	MW483719	797845	ENF	1	60.00	15.255
5/11/2004	49567	2005001	WM MILWAUKEE	11024930	GOLDEN MARINA CANSEWAY LL	MW483719	797846	ENF	1	60.00	17.245
5/11/2004	49572	2005001	WM MILWAUKEE	10870330	GOLDEN MARINA CANSEWAY LL	MW483719	797847	ENF	1	60.00	16.115
5/11/2004	49590	2005001	WM MILWAUKEE	11021730	GOLDEN MARINA CANSEWAY LL	MW483719	797848	ENF	1	60.00	16.165
5/11/2004	49613	2005001	WM MILWAUKEE	11024930	GOLDEN MARINA CANSEWAY LL	MW483719	797849	ENF	1	60.00	14.835
5/11/2004	49641	2005001	WM MILWAUKEE	10794230	GOLDEN MARINA CANSEWAY LL	MW483719	797850	ENF	1	60.00	13.910
5/11/2004	49648	2005001	WM MILWAUKEE	11021730	GOLDEN MARINA CANSEWAY LL	MW483719	797851	ENF	1	60.00	17.665
5/11/2004	49652	2005001	WM MILWAUKEE	10910030	GOLDEN MARINA CANSEWAY LL	MW483719	797852	ENF	1	60.00	12.745
5/12/2004	49944	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW483719	797856	ENF	1	60.00	15.440
5/12/2004	49949	2005001	WM MILWAUKEE	10870330	GOLDEN MARINA CANSEWAY LL	MW483719	797854	ENF	1	60.00	17.065
5/12/2004	49967	2005001	WM MILWAUKEE	11021730	GOLDEN MARINA CANSEWAY LL	MW483719	797855	ENF	1	60.00	15.735
5/12/2004	49972	2005001	WM MILWAUKEE	10910030	GOLDEN MARINA CANSEWAY LL	MW483719	797853	ENF	1	60.00	16.475
5/12/2004	50125	0001974	LAKE STATES INDUSTRIAL SE	427	GOLDEN MARINA CANSEWAY LL	MW483719	797857	ENF	1	60.00	12.280
5/13/2004	50309	2005001	WM MILWAUKEE	11030330	GOLDEN MARINA CANSEWAY LL	MW483719	797858	ENF	1	60.00	15.595
6/15/2004	59047	2005001	WM MILWAUKEE	10910030	GOLDEN MARINA CANSEWAY LL	MW483719	797859	ENF	1	60.00	11.855
7/9/2004	66799	2005001	WM MILWAUKEE	11030320	GOLDEN MARINA CANSEWAY LL	MW483719	797860	ENF	1	40.00	13.185
8/6/2004	75298	2005001	WM MILWAUKEE	10794230	GOLDEN MARINA CANSEWAY LL	MW483719	769253	ENF	1	60.00	13.550

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
8/6/2004	75354	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	MW483719	797861	ENF	1	60.00	12.100
8/11/2004	76619	2005001	WM MILWAUKEE	I0865130	GOLDEN MARINA CANSEWAY LL	MW483719	800414	ENF	1	60.00	18.650
8/11/2004	76677	2005001	WM MILWAUKEE	I1030330	GOLDEN MARINA CANSEWAY LL	MW483719	800416	ENF	1	60.00	17.385
10/20/2004	95880	2005001	WM MILWAUKEE	I0015030	GOLDEN MARINA CANSEWAY LL	MW483719	800422	ENF	1	60.00	21.280
10/20/2004	95889	2005001	WM MILWAUKEE	I1024930	GOLDEN MARINA CANSEWAY LL	MW483719	800419	ENF	1	60.00	25.745
10/20/2004	95911	2005001	WM MILWAUKEE	I0981130	GOLDEN MARINA CANSEWAY LL	MW483719	671232	ENF	1	60.00	20.560
10/21/2004	95921	2005001	WM MILWAUKEE	I0845430	GOLDEN MARINA CANSEWAY LL	MW483719	800423	ENF	1	60.00	13.075
10/21/2004	95922	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	MW483719	800420	ENF	1	60.00	19.390
10/21/2004	95933	2005001	WM MILWAUKEE	I0606730	GOLDEN MARINA CANSEWAY LL	MW483719	784553	ENF	1	60.00	8.845
11/6/2004	101406	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	MW483719	800427	ENF	1	60.00	11.760
11/6/2004	101417	2005001	WM MILWAUKEE	I0013830	GOLDEN MARINA CANSEWAY LL	MW483719	800426	ENF	1	60.00	18.995
11/12/2004	103252	2005001	WM MILWAUKEE	I0007530	GOLDEN MARINA CANSEWAY LL	MW483719	704628	ENF	1	60.00	18.610

Grand Total:

92

5420.00 1350.445



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

MET- RASB 7440

Waste Profile Sheet Code

Request For Decision: Initial Renewal

GENERATOR NAME: Golden Marine Causeway ADDRESS: 311 E. Greenfield Avenue

CITY, STATE: Milwaukee, WI 53204

SITE NAME(S): Non-Friable Asbestos - NESHAP Notified

PROPOSED MANAGEMENT FACILITY: Metro RDF

PROPOSED INTERMEDIATE

TRANSFER FACILITY: N/A

TRANSPORTER: Starline Trucking

WMA REQUESTER: Dee/Sind

SIGNATURE: [Signature]

TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain:

Approved, Complete A,B,C and D Below:

Management Method(s): Landfill in accordance with attached "conditions for acceptance and disposal of asbestos waste".

Precautions, Conditions, or Limitations on Approval

Check containers to verify compliance with applicable regulations.

Decision Expiration Date:

12/31/04

TECH MGR. SIGNATURE [Signature] NAME (Print) Richard L. Pager

DATE: 7/13/04

WMI MANAGEMENT FACILITY SITE MANAGER DECISION (circle one)

APPROVED

DISAPPROVED

Approved, State Any additional Precautions, conditions, or Limitations

ITE MGR. SIGNATURE [Signature]

NAME (Print) G.M. Hornsby

DATE: 7/14/04

WMI INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one)

APPROVED

DISAPPROVED

Approved, State Any additional Precautions, conditions, or Limitations

ITE MGR. SIGNATURE

NAME (Print)

DATE:

NON-FRIABLE ASBESTOS - NESHAP NOTIFIED

1. Requirements for Landfills and Hauling Companies

- a. The asbestos must be sealed in leak-tight containers, or wrapping (\geq 6 mil plastic bags or wrapping).
- b. A loading sign meeting OSHA criteria must be used during loading and unloading (see below).

Danger
Asbestos Dust Hazard
Cancer and Lung Disease Hazard
Authorized Personnel Only

- c. The material must be shipped in such a manner (eg., open top box, compactor box with inspection ports, drums) that will allow verification of proper packaging, labeling, and volume. Open top boxes must be covered with a solid type tarp during shipment.
- d. A Waste Shipment Record must accompany every load, and the volume reported on the Waste Shipment Record must be accurate to within 10% of the volume of the load.
- e. The generator or an authorized (in writing) agent must sign the accompanying paperwork.

IF CONDITIONS a - e ARE NOT MET, THE LOAD WILL NOT BE ACCEPTED.

2. Additional procedures for hauling companies.

- a. The transporter must complete and sign the Waste Shipment Record before leaving the generator.
- b. A copy of the Waste Shipment Record, signed by the transporter, should remain with the generator.
- c. The hauler will retain a copy of the landfill accepted Waste Shipment Record.

3. Additional procedures for landfills.

- a. The landfill must be licensed or approved to accept asbestos.
- b. All volume discrepancies (\geq 10%) must be resolved prior to acceptance of the load. Any discrepancies which are unresolvable should be reported immediately to the Technical Manager.
- c. The accompanying paperwork must be signed after verification of the load. The appropriate copy must be mailed to the generator within 30 days. The paperwork must be retained by the landfill for a minimum of two years.
- d. Asbestos may not be used for roadways, nor buried adjacent to roadways.
- e. The location, depth, area, and volume must be marked on a map or diagram (3-D grid).
- g. Asbestos must be covered with at least six (6) inches of compacted, non-asbestos containing material after acceptance.
- h. If construction activity is going to occur in areas of previous asbestos disposal, notification must be made to the appropriate regulatory body 45 days prior to starting.
- i. Upon site closure, identify asbestos acceptance to the regulatory agency, and on the property deed.

RASB 7440



ASBESTOS WASTE PROFILE SHEET

I. Generator: Golden Marina Causeway
 Site Address: 311 E. Greenfield Av. Mailing Address: same
 City/ State/ Zip: Milwaukee, WI 53204 City/ State/ Zip: _____
 Generator Contact: Tom Jacobsen Sr Title: VP Phone: 44-645-0035

II. Contractor: Lake States Industrial Contact: Tom Jacobsen Sr
 Address: 311 E. Greenfield Av ^{Services} Title: V.P
 City/ State/ Zip: Milwaukee, WI 53204 Phone: 414-788-7447

III. Hauler: Starline Trucking
 Address: P.O. Box 410
 City/ State/ Zip: New Berlin, WI 53151 Phone: 262-786-8280

IV. Type of Asbestos Material: (Describe) Roofing materials, brick, wood, transite pieces

- Friable Non-friable Cat I Non-friable Cat II

Is this a DOT hazardous material? Yes No

RP per phone conversation 7/14/04

If yes, the proper DOT shipping name must be used: RQ Asbestos 9 NA2212 III

Removal Methods: (Describe) Machine load into lined dumptrucks using large amounts of water

Specify wetting agent: water other (attach MSDS)

ASBESTOS WASTE PROFILE SHEET
Page 2

V. Job Type: Renovation Demolition Other (Describe) Site cleanup

Please explain any "no" responses to the following questions in the space provided below:

- 1. If renovation or demolition, has the agency been notified per 40 CFR 61.145 or applicable state/local regulations? yes no
- 2. If demolition, will the asbestos be removed prior to demolition? yes no

Please explain any "yes" responses to the following questions in the space provided below:

- I. Associated Material:
- mastic removal? (Attach MSDS, if applicable) yes no
 - asbestos contaminated with soil or gravel? yes no
 - asbestos contaminated with Special, RCRA hazardous or TSCA (PCB waste)? yes no

VI. Waste Volume and Units: 4000 tons BULK(Bags) DRUMS OTHER _____

VII. Disposal approval period requested: From 7/13/04 To 9/30/04

VIII. Disposal approval requested at: A Subtitle D (Non-Hazardous) Landfill
 A Subtitle C (Hazardous) Landfill

IX. Landfill Site Requested: Metro RDF & Orchard Ridge RDF

X. **Generator Certification:** I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS CONTAINS TRUE AND ACCURATE DESCRIPTIONS OF THIS ASBESTOS WASTE MATERIAL, AND ALL RELEVANT INFORMATION REGARDING KNOWN OR SUSPECTED HAZARDS IN THE POSSESSION OF THE GENERATOR HAS BEEN DISCLOSED. WASTE MANAGEMENT WILL BE NOTIFIED IN WRITING OF ANY CHANGES IN THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS.

SIGNATURE: Alison Tuzzoloni DATE: 7/13/04
NAME (type or print): Alison Tuzzoloni TITLE: Safety & Compliance

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
10/8/2004	92601	0001974	LAKE STATES INDUSTRIAL SE	232	GOLDEN MARINA CANSEWAY LL	N7440A	795655	ENF	1	30.00	20.890
10/8/2004	92603	0001974	LAKE STATES INDUSTRIAL SE	RED	GOLDEN MARINA CANSEWAY LL	N7440A	795652	ENF	1	30.00	20.230
10/9/2004	92642	0001974	LAKE STATES INDUSTRIAL SE	232	GOLDEN MARINA CANSEWAY LL	N7440A	795654	ENF	1	40.00	15.110
10/9/2004	92643	0001974	LAKE STATES INDUSTRIAL SE	230	GOLDEN MARINA CANSEWAY LL	N7440A	795656	ENF	1	40.00	13.880
10/9/2004	92647	0001974	LAKE STATES INDUSTRIAL SE	755	GOLDEN MARINA CANSEWAY LL	N7440A	795657	ENF	1	40.00	15.380
10/9/2004	92688	0001974	LAKE STATES INDUSTRIAL SE	232	GOLDEN MARINA CANSEWAY LL	N7440A	795660	ENF	1	40.00	16.040
10/9/2004	92689	0001974	LAKE STATES INDUSTRIAL SE	230	GOLDEN MARINA CANSEWAY LL	N7440A	795658	ENF	1	40.00	15.620
10/9/2004	92691	0001974	LAKE STATES INDUSTRIAL SE	755	GOLDEN MARINA CANSEWAY LL	N7440A	795659	ENF	1	40.00	16.435
10/9/2004	92731	0001974	LAKE STATES INDUSTRIAL SE	755	GOLDEN MARINA CANSEWAY LL	N7440A	795662	ENF	1	40.00	20.330
10/9/2004	92733	0001974	LAKE STATES INDUSTRIAL SE	232	GOLDEN MARINA CANSEWAY LL	N7440A	795661	ENF	1	40.00	14.590
10/9/2004	92734	0001974	LAKE STATES INDUSTRIAL SE	230	GOLDEN MARINA CANSEWAY LL	N7440A	795663	ENF	1	40.00	16.460

Grand Total:

11

420.00 184.965

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
7/14/2004	67946	0001974	LAKE STATES INDUSTRIAL SE	YELLOW	GOLDEN MARINA CANSEWAY LL	N7440	795801	ENF	1	40.00	22.690
7/14/2004	67952	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795803	ENF	1	40.00	24.340
7/14/2004	67957	0001974	LAKE STATES INDUSTRIAL SE	GRAY	GOLDEN MARINA CANSEWAY LL	N7440	795802	ENF	1	40.00	22.220
7/14/2004	67963	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795804	ENF	1	30.00	21.790
7/14/2004	67965	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795805	ENF	1	30.00	18.690
7/14/2004	67972	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795806	ENF	1	30.00	25.460
7/14/2004	68006	0001974	LAKE STATES INDUSTRIAL SE	64	GOLDEN MARINA CANSEWAY LL	N7440	795807	ENF	1	30.00	21.970
7/14/2004	68012	0001974	LAKE STATES INDUSTRIAL SE	YELLOW	GOLDEN MARINA CANSEWAY LL	N7440	795808	ENF	1	40.00	26.780
7/14/2004	68030	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795809	ENF	1	40.00	27.260
7/14/2004	68034	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795811	ENF	1	30.00	24.500
7/14/2004	68035	0001974	LAKE STATES INDUSTRIAL SE	GRAY	GOLDEN MARINA CANSEWAY LL	N7440	795810	ENF	1	40.00	24.320
7/14/2004	68041	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795812	ENF	1	30.00	23.190
7/14/2004	68052	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795813	ENF	1	30.00	23.670
7/14/2004	68106	0001974	LAKE STATES INDUSTRIAL SE	YELLOW	GOLDEN MARINA CANSEWAY LL	N7440	795815	ENF	1	40.00	28.050
7/14/2004	68113	0001974	LAKE STATES INDUSTRIAL SE	43	GOLDEN MARINA CANSEWAY LL	N7440	795814	ENF	1	30.00	21.730
7/14/2004	68114	0001974	LAKE STATES INDUSTRIAL SE	64	GOLDEN MARINA CANSEWAY LL	N7440	795605	ENF	1	30.00	21.080
7/14/2004	68117	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795816	ENF	1	40.00	24.880
7/14/2004	68127	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795601	ENF	1	30.00	22.360
7/14/2004	68130	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795602	ENF	1	30.00	21.590
7/14/2004	68142	0001974	LAKE STATES INDUSTRIAL SE	GRAY	GOLDEN MARINA CANSEWAY LL	N7440	795603	ENF	1	40.00	21.780
7/14/2004	68148	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795604	ENF	1	30.00	19.090
7/14/2004	68193	0001974	LAKE STATES INDUSTRIAL SE	YELLOW	GOLDEN MARINA CANSEWAY LL	N7440	795606	ENF	1	40.00	25.540
7/14/2004	68199	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795607	ENF	1	40.00	23.760
7/14/2004	68201	0001974	LAKE STATES INDUSTRIAL SE	64	GOLDEN MARINA CANSEWAY LL	N7440	795608	ENF	1	30.00	21.450
7/14/2004	68210	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795609	ENF	1	30.00	23.410
7/14/2004	68217	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795610	ENF	1	30.00	22.470
7/14/2004	68232	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795611	ENF	1	30.00	22.040
7/14/2004	68258	0001974	LAKE STATES INDUSTRIAL SE	GRAY	GOLDEN MARINA CANSEWAY LL	N7440	795612	ENF	1	40.00	23.610
7/14/2004	68267	0001974	LAKE STATES INDUSTRIAL SE	YELLOW	GOLDEN MARINA CANSEWAY LL	N7440	795613	ENF	1	40.00	26.910
7/14/2004	68270	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795614	ENF	1	40.00	24.990
7/14/2004	68284	0001974	LAKE STATES INDUSTRIAL SE	64	GOLDEN MARINA CANSEWAY LL	N7440	795615	ENF	1	30.00	23.630
7/14/2004	68293	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795616	ENF	1	30.00	25.820
7/14/2004	68301	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795617	ENF	1	30.00	23.330
7/14/2004	68310	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795618	ENF	1	30.00	20.270
7/15/2004	68378	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795619	ENF	1	40.00	26.380
7/15/2004	68391	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795620	ENF	1	30.00	25.780
7/15/2004	68392	0001974	LAKE STATES INDUSTRIAL SE	97	GOLDEN MARINA CANSEWAY LL	N7440	795621	ENF	1	30.00	25.530
7/15/2004	68431	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795622	ENF	1	40.00	22.040
7/15/2004	68452	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795623	ENF	1	30.00	22.510
7/15/2004	68455	0001974	LAKE STATES INDUSTRIAL SE	97	GOLDEN MARINA CANSEWAY LL	N7440	795624	ENF	1	30.00	24.360

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
7/15/2004	68493	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795625	ENF	1	40.00	30.490
7/15/2004	68512	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795626	ENF	1	30.00	28.240
7/15/2004	68520	0001974	LAKE STATES INDUSTRIAL SE	97	GOLDEN MARINA CANSEWAY LL	N7440	795627	ENF	1	30.00	28.020
7/15/2004	68553	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795628	ENF	1	40.00	31.410
7/15/2004	68581	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795629	ENF	1	30.00	27.570
7/15/2004	68593	0001974	LAKE STATES INDUSTRIAL SE	97	GOLDEN MARINA CANSEWAY LL	N7440	795630	ENF	1	30.00	30.390
7/15/2004	68643	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795631	ENF	1	40.00	26.230
7/15/2004	68656	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795632	ENF	1	30.00	21.720
7/15/2004	68681	0001974	LAKE STATES INDUSTRIAL SE	97	GOLDEN MARINA CANSEWAY LL	N7440	795633	ENF	1	30.00	19.470
7/15/2004	68736	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795634	ENF	1	40.00	17.770
7/15/2004	68747	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795642	ENF	1	30.00	21.430
7/15/2004	68792	0001974	LAKE STATES INDUSTRIAL SE	97	GOLDEN MARINA CANSEWAY LL	N7440	795641	ENF	1	30.00	22.560
7/15/2004	68814	0001974	LAKE STATES INDUSTRIAL SE	45	GOLDEN MARINA CANSEWAY LL	N7440	795640	ENF	1	40.00	14.930
7/15/2004	68836	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795635	ENF	1	30.00	22.370
7/19/2004	69381	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795819	ENF	1	30.00	14.720
7/19/2004	69413	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795818	ENF	1	30.00	19.850
7/19/2004	69429	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795817	ENF	1	30.00	25.250
7/19/2004	69454	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795643	ENF	1	30.00	24.170
7/19/2004	69486	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795636	ENF	1	30.00	22.960
7/19/2004	69503	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795820	ENF	1	30.00	26.510
7/19/2004	69527	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795821	ENF	1	30.00	20.530
7/19/2004	69570	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795822	ENF	1	30.00	20.540
7/19/2004	69626	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795824	ENF	1	30.00	22.030
7/19/2004	69647	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795825	ENF	1	30.00	22.980
7/19/2004	69675	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795826	ENF	1	30.00	25.730
7/19/2004	69699	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795827	ENF	1	30.00	26.730
7/19/2004	69716	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795828	ENF	1	30.00	24.390
7/19/2004	69751	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795829	ENF	1	30.00	26.760
7/19/2004	69779	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795830	ENF	1	30.00	27.890
7/19/2004	69790	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795831	ENF	1	30.00	25.330
7/20/2004	69862	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795832	ENF	1	30.00	25.610
7/20/2004	69870	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795644	ENF	1	30.00	25.360
7/20/2004	69881	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795833	ENF	1	30.00	24.740
7/20/2004	69886	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795834	ENF	1	30.00	27.520
7/20/2004	69899	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795847	ENF	1	30.00	24.350
7/20/2004	69903	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795846	ENF	1	30.00	26.510
7/20/2004	70004	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795845	ENF	1	30.00	26.700
7/20/2004	70031	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795844	ENF	1	30.00	22.520
7/20/2004	70045	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795843	ENF	1	30.00	25.810
7/20/2004	70080	0001974	LAKE STATES INDUSTRIAL SE	57	GOLDEN MARINA CANSEWAY LL	N7440	795842	ENF	1	30.00	23.850

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
7/20/2004	70091	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795841	ENF	1	30.00	25.730
7/20/2004	70120	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795840	ENF	1	30.00	28.600
7/20/2004	70123	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795839	ENF	1	30.00	28.650
7/20/2004	70160	0001974	LAKE STATES INDUSTRIAL SE	57	GOLDEN MARINA CANSEWAY LL	N7440	795838	ENF	1	30.00	27.310
7/20/2004	70168	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795837	ENF	1	30.00	22.810
7/20/2004	70187	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795836	ENF	1	30.00	28.250
7/20/2004	70193	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795835	ENF	1	30.00	24.840
7/20/2004	70222	0001974	LAKE STATES INDUSTRIAL SE	57	GOLDEN MARINA CANSEWAY LL	N7440	795645	ENF	1	30.00	22.290
7/20/2004	70233	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795848	ENF	1	30.00	25.330
7/20/2004	70243	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795849	ENF	1	30.00	25.870
7/20/2004	70247	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795850	ENF	1	30.00	23.790
7/20/2004	70293	0001974	LAKE STATES INDUSTRIAL SE	57	GOLDEN MARINA CANSEWAY LL	N7440	795852	ENF	1	30.00	24.590
7/20/2004	70295	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795851	ENF	1	30.00	24.120
7/20/2004	70302	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795853	ENF	1	30.00	26.750
7/20/2004	70310	0001974	LAKE STATES INDUSTRIAL SE	44	GOLDEN MARINA CANSEWAY LL	N7440	795855	ENF	1	30.00	21.790
7/20/2004	70312	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795854	ENF	1	30.00	23.100
7/20/2004	70314	0001974	LAKE STATES INDUSTRIAL SE	7	GOLDEN MARINA CANSEWAY LL	N7440	795856	ENF	1	30.00	25.560
7/20/2004	70318	0001974	LAKE STATES INDUSTRIAL SE	68	GOLDEN MARINA CANSEWAY LL	N7440	795857	ENF	1	30.00	24.120
7/21/2004	70391	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795860	ENF	1	30.00	22.840
7/21/2004	70422	0001974	LAKE STATES INDUSTRIAL SE	71	GOLDEN MARINA CANSEWAY LL	N7440	795859	ENF	1	30.00	22.550
7/21/2004	70480	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795858	ENF	1	30.00	18.180
7/21/2004	70498	0001974	LAKE STATES INDUSTRIAL SE	71	GOLDEN MARINA CANSEWAY LL	N7440	795862	ENF	1	30.00	14.530
7/21/2004	70544	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795864	ENF	1	30.00	20.160
7/21/2004	70574	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795861	ENF	1	30.00	17.570
7/21/2004	70577	0001974	LAKE STATES INDUSTRIAL SE	71	GOLDEN MARINA CANSEWAY LL	N7440	795863	ENF	1	30.00	21.630
7/21/2004	70621	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795865	ENF	1	30.00	20.440
7/21/2004	70652	0001974	LAKE STATES INDUSTRIAL SE	97	GOLDEN MARINA CANSEWAY LL	N7440	795869	ENF	1	30.00	21.760
7/21/2004	70654	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795870	ENF	1	30.00	22.770
7/21/2004	70659	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795866	ENF	1	30.00	21.710
7/21/2004	70663	0001974	LAKE STATES INDUSTRIAL SE	71	GOLDEN MARINA CANSEWAY LL	N7440	795867	ENF	1	30.00	22.360
7/21/2004	70669	0001974	LAKE STATES INDUSTRIAL SE	21	GOLDEN MARINA CANSEWAY LL	N7440	795871	ENF	1	40.00	26.390
7/21/2004	70692	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795868	ENF	1	30.00	27.680
7/21/2004	70728	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795872	ENF	1	30.00	22.970
7/21/2004	70730	0001974	LAKE STATES INDUSTRIAL SE	97	GOLDEN MARINA CANSEWAY LL	N7440	795874	ENF	1	30.00	22.770
7/21/2004	70734	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795873	ENF	1	30.00	23.540
7/21/2004	70737	0001974	LAKE STATES INDUSTRIAL SE	71	GOLDEN MARINA CANSEWAY LL	N7440	795876	ENF	1	30.00	23.220
7/21/2004	70746	0001974	LAKE STATES INDUSTRIAL SE	21	GOLDEN MARINA CANSEWAY LL	N7440	795877	ENF	1	40.00	27.030
7/21/2004	70753	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795875	ENF	1	30.00	21.610
7/21/2004	70755	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795878	ENF	1	30.00	24.720
7/23/2004	71263	0001974	LAKE STATES INDUSTRIAL SE	98	GOLDEN MARINA CANSEWAY LL	N7440	795725	ENF	1	30.00	19.650

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
8/2/2004	73636	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795879	ENF	1	30.00	26.540
8/2/2004	73649	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795880	ENF	1	30.00	25.330
8/2/2004	73654	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795883	ENF	1	30.00	24.700
8/2/2004	73693	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795881	ENF	1	30.00	25.500
8/2/2004	73706	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795884	ENF	1	30.00	18.710
8/2/2004	73717	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795887	ENF	1	30.00	21.230
8/2/2004	73744	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795886	ENF	1	30.00	22.900
8/2/2004	73768	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795885	ENF	1	30.00	16.360
8/2/2004	73773	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795888	ENF	1	30.00	13.430
8/2/2004	73775	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795882	ENF	1	30.00	21.190
8/2/2004	73796	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795889	ENF	1	30.00	21.870
8/2/2004	73826	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795891	ENF	1	30.00	20.200
8/2/2004	73839	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795890	ENF	1	30.00	18.910
8/2/2004	73845	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795892	ENF	1	30.00	18.320
8/2/2004	73856	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795893	ENF	1	30.00	24.890
8/2/2004	73880	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795896	ENF	1	30.00	15.890
8/2/2004	73906	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795894	ENF	1	30.00	20.370
8/2/2004	73908	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795895	ENF	1	30.00	17.510
8/2/2004	73918	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795898	ENF	1	30.00	23.740
8/2/2004	73944	0001974	LAKE STATES INDUSTRIAL SE	65	GOLDEN MARINA CANSEWAY LL	N7440	795900	ENF	1	30.00	23.100
8/3/2004	73998	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795899	ENF	1	30.00	24.950
8/3/2004	74003	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795897	ENF	1	30.00	19.300
8/3/2004	74013	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795646	ENF	1	30.00	19.040
8/3/2004	74055	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795650	ENF	1	30.00	22.080
8/3/2004	74063	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795649	ENF	1	30.00	20.190
8/3/2004	74070	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795648	ENF	1	30.00	20.320
8/3/2004	74118	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795647	ENF	1	30.00	24.450
8/3/2004	74135	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795689	ENF	1	30.00	20.000
8/3/2004	74138	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795688	ENF	1	30.00	19.960
8/3/2004	74181	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795987	ENF	1	30.00	21.900
8/3/2004	74195	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795691	ENF	1	30.00	20.660
8/3/2004	74200	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795690	ENF	1	30.00	23.200
8/3/2004	74237	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795694	ENF	1	30.00	26.860
8/3/2004	74259	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795692	ENF	1	30.00	21.290
8/3/2004	74261	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795693	ENF	1	30.00	25.370
8/3/2004	74299	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795697	ENF	1	30.00	27.630
8/3/2004	74333	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795695	ENF	1	30.00	24.510
8/3/2004	74364	0001974	LAKE STATES INDUSTRIAL SE	55	GOLDEN MARINA CANSEWAY LL	N7440	795698	ENF	1	30.00	30.430
8/4/2004	74434	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795699	ENF	1	30.00	20.300
8/4/2004	74444	0001974	LAKE STATES INDUSTRIAL SE	75	GOLDEN MARINA CANSEWAY LL	N7440	795653	ENF	1	30.00	21.670

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
8/4/2004	74447	0001974	LAKE STATES INDUSTRIAL SE	71	GOLDEN MARINA CANSEWAY LL	N7440	795700	ENF	1	30.00	22.590
8/4/2004	74500	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	N7440	795651	ENF	1	30.00	21.710
10/21/2004	96043	2005001	WM MILWAUKEE	10910030	GOLDEN MARINA CANSEWAY LL	N7440	792426	ENF	1	60.00	6.870
11/6/2004	101379	2005001	WM MILWAUKEE	10016030	GOLDEN MARINA CANSEWAY LL	N7440	792430	ENF	1	60.00	19.335
11/6/2004	101414	2005001	WM MILWAUKEE	10016030	GOLDEN MARINA CANSEWAY LL	N7440	792429	ENF	1	60.00	11.995
11/8/2004	101576	2005001	WM MILWAUKEE	10797330	GOLDEN MARINA CANSEWAY LL	N7440	792428	ENF	1	60.00	24.595
11/12/2004	103209	2005001	WM MILWAUKEE	10796730	GOLDEN MARINA CANSEWAY LL	N7440	792431	ENF	1	60.00	21.060

Grand Total:

167

5390.00

3855.745



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

MET-RASB 10568
Waste Profile Sheet Code

Request For Decision: Initial Renewal

GENERATOR NAME: Golden Marina Causeway LLC ADDRESS: 311 East Greenfield

CITY, STATE: Milwaukee, WI 53204

WASTE NAME(S): Non-Friable Asbestos - NESHAP Notified

PROPOSED MANAGEMENT FACILITY: Metro RDF

PROPOSED INTERMEDIATE TRANSFER FACILITY: N/A TRANSPORTER: WM Milwaukee

WMA REQUESTER: Reggie Slind SIGNATURE: Reggie Slind

I. TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain: _____

If Approved, Complete A,B,C And D Below: _____

A. Management Method(s): Landfill in accordance with attached "conditions for acceptance and disposal of asbestos waste".

B. Precautions, Conditions, or Limitations on Approval: Check containers to verify compliance with applicable regulations.

C. Decision Expiration Date: 7/14/04

TECH MGR. SIGNATURE Richard Pager NAME (Print) Richard L. Pager DATE: 7/14/03

III WMI MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED
If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE Dennis Dwyer NAME (Print) Dennis Dwyer DATE: 7/14/03

IV WMI INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED
If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE _____ NAME (Print) _____ DATE: _____

NON-FRIABLE ASBESTOS - NESHAQ NOTIFIED

1. Requirements for Landfills and Hauling Companies

- a. The asbestos must be sealed in leak-tight containers, or wrapping (\geq 6 mil plastic bags or wrapping).
- b. A loading sign meeting OSHA criteria must be used during loading and unloading (see below).

Danger
Asbestos Dust Hazard
Cancer and Lung Disease Hazard
Authorized Personnel Only

- c. The material must be shipped in such a manner (eg., open top box, compactor box with inspection ports, drums) that will allow verification of proper packaging, labeling, and volume. Open top boxes must be covered with a solid type tarp during shipment.
- d. A Waste Shipment Record must accompany every load, and the volume reported on the Waste Shipment Record must be accurate to within 10% of the volume of the load.
- e. The generator or an authorized (in writing) agent must sign the accompanying paperwork.

IF CONDITIONS a - e ARE NOT MET, THE LOAD WILL NOT BE ACCEPTED.

2. Additional procedures for hauling companies.

- a. The transporter must complete and sign the Waste Shipment Record before leaving the generator.
- b. A copy of the Waste Shipment Record, signed by the transporter, should remain with the generator.
- c. The hauler will retain a copy of the landfill accepted Waste Shipment Record.

3. Additional procedures for landfills.

- a. The landfill must be licensed or approved to accept asbestos.
 - b. All volume discrepancies (\geq 10%) must be resolved prior to acceptance of the load. Any discrepancies which are unresolvable should be reported immediately to the Technical Manager.
 - c. The accompanying paperwork must be signed after verification of the load. The appropriate copy must be mailed to the generator within 30 days. The paperwork must be retained by the landfill for a minimum of two years.
 - d. Asbestos may not be used for roadways, nor buried adjacent to roadways.
 - e. The location, depth, area, and volume must be marked on a map or diagram (3-D grid).
 - g. Asbestos must be covered with at least six (6) inches of compacted, non-asbestos containing material after acceptance.
 - h. If construction activity is going to occur in areas of previous asbestos disposal, notification must be made to the appropriate regulatory body 45 days prior to starting.
 - i. Upon site closure, identify asbestos acceptance to the regulatory agency, and on the property deed.
-



MIDWEST

RASB 10568

ASBESTOS WASTE PROFILE SHEET

I. Generator: Goldw Morino Conway LLC
 Site Address 311 East Greenfield Mailing Address -SOME-
 City, State & Zip MIW WI 53204 City, State & Zip _____
 Generator Contact Tom Jacobson Title MEM Phone 414-645-0640

II. Contractor: LOKZ STOKS Industrial Services Inc Contact Hans Eyrer
 Address 311 East Greenfield Title V.P.
 City, State & Zip MIW WI 53204 Phone 414-845-0640

III. Hauler: WM-LOKZ STOKS
 Address _____
 City, State & Zip _____ Phone _____

*IV. Type of Asbestos Material: (Describe) (New) Demolition Debris - Roofing
 _____ Friable _____ Non-friable Cat I _____ Non-friable Cat II
 Is this a DOT hazardous material? _____ Yes _____ No No If yes, the proper DOT shipping name must be used:
RQ, Asbestos, 9, NA2212, III
 Removal method(s) (describe) Machine Removal - Wet Method
 Specify wetting agent: water _____ other (attach MSDS)

V. Job Type: _____ Renovation Demolition _____ Other (describe) _____
 Please explain "no" responses to the following questions in the space provided below.
 If renovation or demolition, has the agency been notified per 40 CFR 61.145 or applicable state/local regulations? Yes _____ No
 If demolition: Will the asbestos be removed prior to demolition? _____ Yes No
 Please explain "yes" responses to the following questions in the space provided below.
 Associated Material:
 mastic removal? (Attach MSDS, if applicable) _____ Yes No
 asbestos contaminated with soil or gravel? _____ Yes No
 asbestos contaminated with Special, RCRA hazardous or TSCA (PCB) waste? _____ Yes No
Roofing Materials will be left in debris

VI. Waste Volume & Units 72000405 BULK (Bags) _____ DRUMS _____ OTHER (describe) _____

*VII. Disposal approval period requested: From 7/14/03 To 7/14/04

*VIII. Disposal approval requested at: A Subtitle D (Non-Hazardous) Landfill _____ A Subtitle C (Hazardous) Landfill

*IX. Landfill Site Requested: Metro RDF + Orchard Ridge RDF

X. GENERATOR CERTIFICATION: I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS CONTAINS TRUE AND ACCURATE DESCRIPTIONS OF THIS ASBESTOS WASTE MATERIAL, AND ALL RELEVANT INFORMATION REGARDING KNOWN OR SUSPECTED HAZARDS IN THE POSSESSION OF THE GENERATOR HAS BEEN DISCLOSED. WASTE MANAGEMENT WILL BE NOTIFIED IN WRITING OF ANY CHANGES IN THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS.

SIGNATURE: Tom Shurt DATE: 07/16/2003
 NAME (type or print): Tom Shurt TITLE: MEMBER

* Completed per Tom Jacobson 7/14/03

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
2/25/2004	25868	2005001	WM MILWAUKEE	11024930	GOLDEN MARINA CANSEWAY LL	N10568	772454	ENF	1	60.00	4.145

Grand Total:
1 60.00 4.145



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

MET-RASB/0566
Waste Profile Sheet Code

I. Request For Decision: X Initial Renewal

GENERATOR NAME: Golden Marina Causeway LLC ADDRESS: 311 East Greenfield Avenue

CITY, STATE: Milwaukee, WI 53204

WASTE NAME(S): Friable Asbestos - NESHAP Notified

PROPOSED MANAGEMENT FACILITY: Metro TDF

PROPOSED INTERMEDIATE TRANSFER FACILITY: N/A TRANSPORTER: WM - Milwaukee

WMNA REQUESTER: Jerry Glind SIGNATURE: Jerry Glind

II. TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain: _____

If Approved, Complete A,B,C And D Below:

A. Management Method(s): Landfill in accordance with attached "conditions for acceptance and disposal of asbestos waste".

3. Precautions, Conditions, or Limitations on Approval
Check containers to verify compliance with applicable regulations.
All wetting agents/mastic removers must be approved prior to waste shipment.

D. Decision Expiration Date: 7/14/04

TECH MGR. SIGNATURE Richard Payer NAME (Print) Richard L. Payer DATE: 7/14/03

III. WMI MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations

SITE MGR. SIGNATURE Dennis O'neal NAME (Print) Dennis O'neal DATE: 7/14/03

IV. WMI INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations

SITE MGR. SIGNATURE _____ NAME (Print) _____ DATE: _____

FRIABLE ASBESTOS - NESHAP NOTIFIED

1. Requirements for Landfills and Hauling Companies

- a. The asbestos must be sealed in leak-tight containers, or wrapping (\geq 6 mil plastic bags or wrapping).
- b. A loading sign meeting OSHA criteria must be used during loading and unloading (see below).

Danger
Asbestos Dust Hazard
Cancer and Lung Disease Hazard
Authorized Personnel Only

- c. Packages (bags) must display one of the following labels:

CAUTION
Contains Asbestos Fibers
Avoid Opening or Breaking Containers
Breathing Asbestos is Hazardous to Your Health

OR

CAUTION
Contains Asbestos Fibers
Avoid Creating Dust
May Cause Serious Bodily Harm

- d. Individual packages (bags or drums) of friable asbestos must be marked with Asbestos, 2212, RQ and labeled with a Class 9 label.
- e. Containers less than 23 cubic yards must also be marked and labeled in this manner.
- f. Packages must be labeled with the generator's name, and the address of the generating location.
- g. The material must be shipped in such a manner (eg., open top box, compactor box with inspection ports, drums) that will allow verification of proper packaging, labeling, and volume. Open top boxes must be covered with a solid type tarp during shipment.
- h. A Waste Shipment Record must accompany every load, and the volume reported on the Waste Shipment Record must be accurate to within 10% of the volume of the load.
- i. The generator or an authorized (in writing) agent must sign the accompanying paperwork.
- j. The transporter's vehicle must have the following markings on all four (4) sides of the containers (ie. roll-off or lugger box):



OR



orange rectangle

white diamond

Class 9 labels be placed on these containers on opposite sides of the rear of the container.

- k. Annual training must be provided to all applicable employees.
- l. An EPA or OSHA "DANGER" label should also be displayed on all containers during loading and unloading only.

IF CONDITIONS a - l ARE NOT MET, THE LOAD WILL NOT BE ACCEPTED.

2. Additional procedures for hauling companies.

- a. The division must have a REVP approval to haul asbestos.
- b. The transportation vehicle must carry a Material Safety Data Sheet for asbestos.
- c. The driver must complete and sign the accompanying paperwork before leaving the generator.
- d. A copy of the accompanying paperwork, signed by the transporter, should remain with the generator.
- e. The hauler will retain a copy of the landfill accepted paperwork.

3. Additional procedures for landfills.

- a. The landfill must be licensed or approved to accept asbestos.
- b. All volume discrepancies (\geq 10%) must be resolved prior to acceptance of the load. Any discrepancies which are unresolvable should be reported immediately to the Technical Manager.
- c. If the asbestos is improperly containerized (e.g. ripped bags), the load and accompanying paperwork must be rejected within 24 hours. Written notification of the rejection should be made to both the generator's and the site's NESHAP Administrator.
- d. The accompanying paperwork must be signed after verification of the load. The appropriate copy must be mailed to the generator within 30 days. The paperwork must be retained by the landfill for a minimum of two years.
- e. An area must be "prepared" (see asbestos manual) in the landfill for the asbestos. This area must be separate from the working face, and not within 10 feet of the base, side slope, or top of the final elevation.
- f. Asbestos may not be used for roadways, nor buried adjacent to roadways.
- g. The location, depth, area, and volume must be marked on a map or diagram (3-D grid).
- h. Asbestos must be covered with six (6) inches of compacted, non-asbestos containing material after acceptance.
- i. If construction activity is going to occur in areas of previous asbestos disposal, notification must be made to the appropriate regulatory body 45 days prior to starting.
- j. Upon site closure, identify asbestos acceptance to the regulatory agency, and on the property deed.



MIDWEST

RASB 10566

ASBESTOS WASTE PROFILE SHEET

I. Generator: Golden Marina Consway LLC
 Site Address 311 EAST GREENFIELD AVE Mailing Address - SAME -
 City, State & Zip MILWAUKEE WI 53204 City, State & Zip _____
 Generator Contact Tom Jacobsen Title _____ Phone _____

II. Contractor: LAKE STATES INDUSTRIAL SERVICES Contact HANS GUYER
 Address 311 EAST GREENFIELD Title V.P.
 City, State & Zip MILW WI 53204 Phone 414-645-0640

III. Hauler: WM
 Address _____
 City, State & Zip _____ Phone _____

IV. Type of Asbestos Material: (Describe) TSI - MAG Black - fittings
 Friable Non-friable Cat I Non-friable Cat II
 Is this a DOT hazardous material? Yes No If yes, the proper DOT shipping name must be used:
RQ, Asbestos, 9NA2212, III
 * Removal method(s) (describe) Full Containment - Wet method
 Specify wetting agent: water other (attach MSDS)

V. Job Type: Renovation Demolition Other (describe) _____
 Please explain "no" responses to the following questions in the space provided below.
 If renovation or demolition, has the agency been notified per 40 CFR 61.145
 or applicable state/local regulations? Yes No
 If demolition: Will the asbestos be removed prior to demolition? Yes No
 Please explain "yes" responses to the following questions in the space provided below.
 Associated Material:
 mastic removal? (Attach MSDS, if applicable) Yes No
 asbestos contaminated with soil or gravel? Yes No
 asbestos contaminated with Special, RCRA hazardous or TSCA (PCB) waste? Yes No

VI. Waste Volume & Units > 1000 yds BULK (Bags) DRUMS OTHER (describe) _____

* VII. Disposal approval period requested: From 7/14/03 To 7/14/04

* VIII. Disposal approval requested at: A Subtitle D (Non-Hazardous) Landfill A Subtitle C (Hazardous) Landfill

* IX. Landfill Site Requested: Metro RRF + Orchard Ridge RRF

X. GENERATOR CERTIFICATION: I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS CONTAINS TRUE AND ACCURATE DESCRIPTIONS OF THIS ASBESTOS WASTE MATERIAL, AND ALL RELEVANT INFORMATION REGARDING KNOWN OR SUSPECTED HAZARDS IN THE POSSESSION OF THE GENERATOR HAS BEEN DISCLOSED. WASTE MANAGEMENT WILL BE NOTIFIED IN WRITING OF ANY CHANGES IN THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS.

SIGNATURE: Tom Short DATE: 07/10/2003
 NAME (type or print): Tom Short TITLE: MEMBER

* Completed per Tom Jacobsen 7/14/03

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
1/27/2004	19574	2005001	WM MILWAUKEE	I1021730	GOLDEN MARINA CANSEWAY LL	A10566	773671	ENF	1	60.00	5.035
1/27/2004	19703	2005001	WM MILWAUKEE	I0845430	GOLDEN MARINA CANSEWAY LL	A10566	773672	ENF	1	60.00	5.955
2/3/2004	21103	2005001	WM MILWAUKEE	I0797330	GOLDEN MARINA CANSEWAY LL	A10566	773673	ENF	1	60.00	4.635
2/3/2004	21111	2005001	WM MILWAUKEE	I0016030	GOLDEN MARINA CANSEWAY LL	A10566	773674	ENF	1	60.00	10.465
2/4/2004	21303	2005001	WM MILWAUKEE	I0870330	GOLDEN MARINA CANSEWAY LL	A10566	773676	ENF	1	60.00	5.035
2/4/2004	21316	2005001	WM MILWAUKEE	I1021230	GOLDEN MARINA CANSEWAY LL	A10566	773675	ENF	1	60.00	6.615
2/11/2004	22729	2005001	WM MILWAUKEE	I1024930	GOLDEN MARINA CANSEWAY LL	A10566	773677	ENF	1	60.00	8.005
2/11/2004	22913	2005001	WM MILWAUKEE	I0870330	GOLDEN MARINA CANSEWAY LL	A10566	773678	ENF	1	60.00	7.045
2/12/2004	23100	2005001	WM MILWAUKEE	I0606730	GOLDEN MARINA CANSEWAY LL	A10566	772435	ENF	1	60.00	3.495
2/17/2004	23995	2005001	WM MILWAUKEE	I0981130	GOLDEN MARINA CANSEWAY LL	A10566	772453	ENF	1	60.00	12.410
3/1/2004	27121	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	A10566	773215	ENF	1	60.00	4.625
3/2/2004	27400	2005001	WM MILWAUKEE	I1024930	GOLDEN MARINA CANSEWAY LL	A10566	773213	ENF	1	60.00	5.605
3/3/2004	27663	2005001	WM MILWAUKEE	I0796730	GOLDEN MARINA CANSEWAY LL	A10566	773216	ENF	1	50.00	7.210
3/10/2004	29573	2005001	WM MILWAUKEE	I0007530	GOLDEN MARINA CANSEWAY LL	A10566	773225	ENF	1	60.00	6.890
3/23/2004	34447	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	A10566	773237	ENF	1	60.00	8.880
4/2/2004	37962	2005001	WM MILWAUKEE	I0870330	GOLDEN MARINA CANSEWAY LL	A10566	773238	ENF	1	60.00	8.405
4/5/2004	38549	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	A10566	773239	ENF	1	60.00	4.550
4/5/2004	38553	2005001	WM MILWAUKEE	I0910130	GOLDEN MARINA CANSEWAY LL	A10566	773241	ENF	1	60.00	6.520
4/19/2004	42605	2005001	WM MILWAUKEE	I0845430	GOLDEN MARINA CANSEWAY LL	A10566	773242	ENF	1	60.00	14.765
5/4/2004	47167	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	A10566	772457	ENF	1	60.00	13.000
5/4/2004	47285	2005001	WM MILWAUKEE	I0870330	GOLDEN MARINA CANSEWAY LL	A10566	773243	ENF	1	60.00	9.235
5/5/2004	47987	2005001	WM MILWAUKEE	I0007530	GOLDEN MARINA CANSEWAY LL	A10566	773250	ENF	1	60.00	8.240
5/11/2004	49565	2005001	WM MILWAUKEE	I1030330	GOLDEN MARINA CANSEWAY LL	A10566	773246	ENF	1	60.00	11.285
5/13/2004	50318	2005001	WM MILWAUKEE	I0024630	GOLDEN MARINA CANSEWAY LL	A10566	741689	ENF	1	60.00	11.090
5/13/2004	50447	2005001	WM MILWAUKEE	I0870330	GOLDEN MARINA CANSEWAY LL	A10566	773249	ENF	1	60.00	5.665
5/13/2004	50461	2005001	WM MILWAUKEE	I1030330	GOLDEN MARINA CANSEWAY LL	A10566	773247	ENF	1	60.00	7.955
5/18/2004	51610	2005001	WM MILWAUKEE	I0286230	GOLDEN MARINA CANSEWAY LL	A10566	773248	ENF	1	60.00	14.965
5/24/2004	53105	2005001	WM MILWAUKEE	I0010330	GOLDEN MARINA CANSEWAY LL	A10566	741690	ENF	1	60.00	13.925
5/24/2004	53115	2005001	WM MILWAUKEE	I0910030	GOLDEN MARINA CANSEWAY LL	A10566	741691	ENF	1	60.00	15.025
6/15/2004	59036	2005001	WM MILWAUKEE	I0016030	GOLDEN MARINA CANSEWAY LL	A10566	774027	ENF	1	60.00	9.645
6/15/2004	59077	2005001	WM MILWAUKEE	I0969830	GOLDEN MARINA CANSEWAY LL	A10566	774026	ENF	1	60.00	13.530
6/15/2004	59097	2005001	WM MILWAUKEE	I1030330	GOLDEN MARINA CANSEWAY LL	A10566	774028	ENF	1	60.00	17.165
7/7/2004	65960	2005001	WM MILWAUKEE	I0981130	GOLDEN MARINA CANSEWAY LL	A10566	774040	ENF	1	60.00	18.800
7/9/2004	66558	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	A10566	774041	ENF	1	60.00	13.130
7/9/2004	66559	2005001	WM MILWAUKEE	I0016030	GOLDEN MARINA CANSEWAY LL	A10566	774041	ENF	1	60.00	12.535
7/9/2004	66674	2005001	WM MILWAUKEE	I0969830	GOLDEN MARINA CANSEWAY LL	A10566	774048	ENF	1	60.00	12.670
7/16/2004	69015	2005001	WM MILWAUKEE	I0797330	GOLDEN MARINA CANSEWAY LL	A10566	774050	ENF	1	60.00	8.445
8/5/2004	74987	2005001	WM MILWAUKEE	I0910130	GOLDEN MARINA CANSEWAY LL	A10566	774051	ENF	1	60.00	17.580
8/5/2004	75004	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	A10566	774052	ENF	1	60.00	7.620
8/5/2004	75028	2005001	WM MILWAUKEE	I0978930	GOLDEN MARINA CANSEWAY LL	A10566	774053	ENF	1	60.00	14.095

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
8/6/2004	75205	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	A10566	774054	ENF	1	60.00	14.920
8/6/2004	75248	2005001	WM MILWAUKEE	I0794230	GOLDEN MARINA CANSEWAY LL	A10566	774055	ENF	1	60.00	16.830

Grand Total:

42

2510.00

423.495



NORTHERN REGION
SPECIAL WASTE MANAGEMENT DECISION

MET-RASB 10012
Waste Profile Sheet Code

I Request For Decision: Initial Renewal

GENERATOR NAME: Golden Marine Coatings ADDRESS: 311 E Greenfield
CITY, STATE: Milwaukee, WI

WASTE NAME(S): Friable Asbestos - NESHAP Notified - coal dust and asbestos

PROPOSED MANAGEMENT FACILITY: Metro RDSF

PROPOSED INTERMEDIATE TRANSFER FACILITY: N/A TRANSPORTER: WM-Milwaukee

WMNA REQUESTER: Peggy Shud SIGNATURE: [Signature]

II TECHNICAL MANAGER DECISION: (circle one) APPROVED DISAPPROVED Check if additional information is attached.

If Disapproved, Explain: _____
If Approved, Complete A,B,C And D Below:

A. Management Method(s): Landfill in accordance with attached "conditions for acceptance and disposal of asbestos waste".

B. Precautions, Conditions, or Limitations on Approval: Check containers to verify compliance with applicable regulations.

C. Decision Expiration Date: 12/9/04

TECH MGR. SIGNATURE [Signature] NAME (Print) Richard L. Pager DATE: 12/9/03

III WM MANAGEMENT FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE [Signature] NAME (Print) Dennis [unclear] DATE: 12/10/03

IV WM INTERMEDIATE TRANSFER FACILITY SITE MANAGER DECISION (circle one) APPROVED DISAPPROVED

If Approved, State Any Additional Precautions, Conditions, or Limitations: _____

SITE MGR. SIGNATURE _____ NAME (Print) _____ DATE: _____

FRIABLE ASBESTOS - NESHAP NOTIFICATION

1. Requirements for Landfills and Hauling Companies

- a. The asbestos must be sealed in leak-tight containers, or wrapping (≥ 6 mil plastic bags or wrapping).
- b. A loading sign meeting OSHA criteria must be used during loading and unloading (see below).



- c. Packages (bags) must display the following label:
 - Danger
 - Asbestos Dust Hazard
 - Cancer and Lung Disease Hazard
 - Authorized Personnel Only

**DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD**

- d. Individual packages (bags or drums) of friable asbestos must be marked with Asbestos, 2212, RQ and labeled with a Class 9 label.
- e. Containers less than 23 cubic yards must also be marked and labeled in this manner.
- f. Packages must be labeled with the generator's name, and the address of the generating location.
- g. The material must be shipped in such a manner (eg., open top box, compactor box with inspection ports, drums) that will allow verification of proper packaging, labeling, and volume. Open top boxes must be covered with a solid type tarp during shipment.
- h. A Waste Shipment Record must accompany every load, and the volume reported on the Waste Shipment Record must be accurate to within 10% of the volume of the load.
- i. The generator or an authorized (in writing) agent must sign the accompanying paperwork.
- j. The transporter's vehicle must have the following markings on all four (4) sides of the containers (ie. roll-off or lugger box):



OR



orange rectangle

white diamond

Class 9 labels must be placed on these containers on opposite sides of the rear of the container.

- k. Annual training must be provided to all applicable employees.
- l. An EPA or OSHA "DANGER" label should also be displayed on all containers during loading and unloading only.

IF CONDITIONS a - l ARE NOT MET, THE LOAD WILL NOT BE ACCEPTED.

2. Additional procedures for hauling companies.

- a. The division must have a REVP approval to haul asbestos.
- b. The transportation vehicle must carry a Material Safety Data Sheet for asbestos.
- c. The driver must complete and sign the accompanying paperwork before leaving the generator.
- d. A copy of the accompanying paperwork, signed by the transporter, should remain with the generator.
- e. The hauler will retain a copy of the landfill accepted paperwork.

3. Additional procedures for landfills.

- a. The landfill must be licensed or approved to accept asbestos.
- b. All volume discrepancies (≥ 10%) must be resolved prior to acceptance of the load. Any discrepancies which are unresolvable should be reported immediately to the Technical Manager.
- c. If the asbestos is improperly containerized (e.g. ripped bags), the load and accompanying paperwork must be rejected within 24 hours. Written notification of the rejection should be made to both the generator's and the site's NESHAP Administrator.
- d. The accompanying paperwork must be signed after verification of the load. The appropriate copy must be mailed to the generator within 30 days. The paperwork must be retained by the landfill for a minimum of two years.
- e. An area must be "prepared" (see asbestos manual) in the landfill for the asbestos. This area must be separate from the working face, and not within 10 feet of the base, side slope, or top of the final elevation.
- f. Asbestos may not be used for roadways, nor buried adjacent to roadways.
- g. The location, depth, area, and volume must be marked on a map or diagram (3-D grid).
- h. Asbestos must be covered with six (6) inches of compacted, non-asbestos containing material after acceptance.
- i. If construction activity is going to occur in areas of previous asbestos disposal, notification must be made to the appropriate regulatory body 45 days prior to starting.
- j. Upon site closure, identify asbestos acceptance to the regulatory agency, and on the property deed.



MIDWEST

RASB 10012

ASBESTOS WASTE PROFILE SHEET

I. Generator: GOLDEN MARINA CASINOS LLC
 Site Address 311 EAST GREENFIELD Mailing Address -SPM 2
 City, State & Zip MILW WI 53204 City, State & Zip _____
 Generator Contact TOM JACOBSON Title P.M. Phone 414-648-0635

II. Contractor: LAKE STATES INDUSTRIAL SERVICES, INC. Contact THOMAS JACOBSON
 Address 311 EAST GREENFIELD AVE Title P.M.
 City, State & Zip MILW WI Phone 414-648-0635

III. Hauler: WM
 Address _____
 City, State & Zip _____ Phone _____

IV. Type of Asbestos Material: (Describe) PULVERIZED COAL
 Friable Non-friable Cat I Non-friable Cat II
 Is this a DOT hazardous material? Yes No If yes, the proper DOT shipping name must be used:
 RQ, Asbestos, 9, NA2212, III
 Removal method(s) (describe) VACUUM
 Specify wetting agent: water other (attach MSDS)

V. Job Type: Renovation Demolition Other (describe) _____
 Please explain "no" responses to the following questions in the space provided below.
 If renovation or demolition, has the agency been notified per 40 CFR 61.145 or applicable state/local regulations? Yes No
 If demolition: Will the asbestos be removed prior to demolition? Yes No
 Please explain "yes" responses to the following questions in the space provided below.
 Associated Material:
 mastic removal? (Attach MSDS, if applicable) Yes No
 asbestos contaminated with soil or gravel? Yes No
 asbestos contaminated with Special, RCRA hazardous or TSCA (PCB) waste? Yes No
CONTAMINATED w/ COAL

VI. Waste Volume & Units 300 y³ BULK (Bags) _____ DRUMS _____ OTHER (describe) _____

VII. Disposal approval period requested: From 12/8/2003 To 5/30/2004

VIII. Disposal approval requested at: A Subtitle D (Non-Hazardous) Landfill A Subtitle C (Hazardous) Landfill

IX. Landfill Site Requested: METRO RDF

X. GENERATOR CERTIFICATION: I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS CONTAINS TRUE AND ACCURATE DESCRIPTIONS OF THIS ASBESTOS WASTE MATERIAL, AND ALL RELEVANT INFORMATION REGARDING KNOWN OR SUSPECTED HAZARDS IN THE POSSESSION OF THE GENERATOR HAS BEEN DISCLOSED. WASTE MANAGEMENT WILL BE NOTIFIED IN WRITING OF ANY CHANGES IN THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS.

SIGNATURE: [Signature] DATE: 12/9/2003
 NAME (type or print): Thomas Jacobson TITLE: P.M.

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>
1/22/2004	18928	2005001	WM MILWAUKEE	10969830	GOLDEN MARINA CANSEWAY LL	A10012	773667	ENF	1	60.00	10.150
3/10/2004	29843	2005001	WM MILWAUKEE	10024630	GOLDEN MARINA CANSEWAY LL	A10012	773228	ENF	1	60.00	2.950
3/10/2004	29876	2005001	WM MILWAUKEE	10969830	GOLDEN MARINA CANSEWAY LL	A10012	773227	ENF	1	60.00	10.820
3/18/2004	32954	2005001	WM MILWAUKEE	10910130	GOLDEN MARINA CANSEWAY LL	A10012	773230	ENF	1	60.00	14.580
3/18/2004	33047	0001974	LAKE STATES INDUSTRIAL SE	468	GOLDEN MARINA CANSEWAY LL	A10012	773229	ASB	1	60.00	12.560
4/19/2004	42630	2005001	WM MILWAUKEE	10956630	GOLDEN MARINA CANSEWAY LL	A10012	773252	ENF	1	60.00	11.330
4/22/2004	43816	2005001	WM MILWAUKEE	10009230	GOLDEN MARINA CANSEWAY LL	A10012	773251	ENF	1	60.00	14.715
8/3/2004	74330	0001974	LAKE STATES INDUSTRIAL SE	73	GOLDEN MARINA CANSEWAY LL	A10012	795696	ASB	1	30.00	24.780

Grand Total:

8

450.00

101.885